Cisco Unity Bridge Installation Guide

Release 2.1
Published April 25, 2003

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Cisco Unity Bridge 2.1 Installation Guide

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Preface

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Audience and Use

The *Cisco Unity Bridge Installation Guide* is intended for installers of the Cisco Unity™ Bridge. If you are installing the Bridge in a Cisco Unity Unified Messaging configuration, you need a working knowledge of Microsoft Exchange and Microsoft Windows 2000 Server.

The *Cisco Unity Bridge Installation Guide* contains instructions for installing the Bridge, which acts as a networking gateway between Cisco Unity and an Avaya Octel system on an Octel analog network. You install the Bridge after you install the Cisco Unity server, and the Bridge must be installed on a separate and dedicated platform.

The "Overview of Mandatory Tasks for Installing the Cisco Unity Bridge" chapter contains a high-level task list that references detailed instructions in the *Cisco Unity Bridge Installation Guide* and in other Cisco Unity Bridge documentation. Follow the documentation to install the Cisco Unity Bridge correctly.

Documentation Conventions

Table 1 Cisco Unity Bridge Installation Guide Conventions

Convention	Description
boldfaced text	Boldfaced text is used for: • Key and button names. (Example: Click **OK.**) • Information that you enter. (Example: Enter **Administrator** in the User Name box.)
< > (angle brackets)	Angle brackets are used around parameters for which you supply a value. (Example: In the Command Prompt window, enter **ping <IP address>**.)
- (hyphen)	Hyphens separate keys that must be pressed simultaneously. (Example: Press **Ctrl-Alt-Delete.)**
> (right angle bracket)	A right angle bracket is used to separate selections that you make: • On menus. (Example: On the Windows Start menu, click **Settings > Control Panel > Phone and Modem Options**.) • In the navigation bar of the Cisco Unity Administrator. (Example: Go to the **System > Configuration > Settings** page.)

The *Cisco Unity Bridge Installation Guide* also uses the following conventions:

Note Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the document.

Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Warning **IMPORTANT SAFETY INSTRUCTIONS**

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 that accompanied this device.

Note: SAVE THESE INSTRUCTIONS

Note: This documentation is to be used in conjunction with the specific product installation guide that shipped with the product. Please refer to the Installation Guide, Configuration Guide, or other enclosed additional documentation for further details.

Waarschuwing **BELANGRIJKE VEILIGHEIDSINSTRUCTIES**

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 de standaard praktijken om ongelukken te voorkomen. Voor een vertaling van de waarschuwingen die in deze publicatie verschijnen, dient u de vertaalde veiligheidswaarschuwingen te raadplegen die bij dit apparaat worden geleverd.

Opmerking BEWAAR DEZE INSTRUCTIES.

Opmerking Deze documentatie dient gebruikt te worden in combinatie met de installatiehandleiding voor het specifieke product die bij het product wordt geleverd. Raadpleeg de installatiehandleiding, configuratiehandleiding of andere verdere ingesloten documentatie voor meer informatie.

Varoitus **TÄRKEITÄ TURVALLISUUTEEN LIITTYVIÄ OHJEITA**

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 asiakirjassa esitettyjen varoitusten käännökset löydät laitteen mukana toimitetuista ohjeista.

Huomautus SÄILYTÄ NÄMÄ OHJEET

Huomautus Tämä asiakirja on tarkoitettu käytettäväksi yhdessä tuotteen mukana tulleen asennusoppaan kanssa. Katso lisätietoja asennusoppaasta, kokoonpano-oppaasta ja muista mukana toimitetuista asiakirjoista.

Attention **IMPORTANTES INFORMATIONS DE SÉCURITÉ**

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 les consignes de sécurité traduites qui accompagnent cet appareil.

Remarque CONSERVEZ CES INFORMATIONS

Remarque Cette documentation doit être utilisée avec le guide spécifique d'installation du produit qui accompagne ce dernier. Veuillez vous reporter au Guide d'installation, au Guide de configuration, ou à toute autre documentation jointe pour de plus amples renseignements.

Warnung **WICHTIGE SICHERHEITSANWEISUNGEN**

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 sind im Lieferumfang des Geräts enthalten.

Hinweis BEWAHREN SIE DIESE SICHERHEITSANWEISUNGEN AUF

Hinweis Dieses Handbuch ist zum Gebrauch in Verbindung mit dem Installationshandbuch für Ihr Gerät bestimmt, das dem Gerät beiliegt. Entnehmen Sie bitte alle weiteren Informationen dem Handbuch (Installations- oder Konfigurationshandbuch o. Ä.) für Ihr spezifisches Gerät.

Figyelem! **FONTOS BIZTONSÁGI ELÕÍRÁSOK**

Ez a figyelmezetõ jel veszélyre utal. Sérülésveszélyt rejtõ helyzetben van. Mielõtt bármely berendezésen munkát végezte, legyen figyelemmel az elektromos áramkörök okozta kockázatokra, és ismerkedjen meg a szokásos balesetvédelmi eljárásokkal. A kiadványban szereplõ figyelmeztetések fordítása a készülékhez mellékelt biztonsági figyelmeztetések között található.

Megjegyzés ÕRIZZE MEG EZEKET AZ UTASÍTÁSOKAT!

Megjegyzés Ezt a dokumentációt a készülékhez mellékelt üzembe helyezési útmutatóval együtt kell használni. További tudnivalók a mellékelt Üzembe helyezési útmutatóban (Installation Guide), Konfigurációs útmutatóban (Configuration Guide) vagy más dokumentumban találhatók.

Avvertenza **IMPORTANTI ISTRUZIONI SULLA SICUREZZA**

Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di intervenire su qualsiasi apparecchiatura, occorre essere al corrente dei pericoli relativi ai circuiti elettrici e conoscere le procedure standard per la prevenzione di incidenti. Per le traduzioni delle avvertenze riportate in questo documento, vedere le avvertenze di sicurezza che accompagnano questo dispositivo.

Nota CONSERVARE QUESTE ISTRUZIONI

Nota La presente documentazione va usata congiuntamente alla guida di installazione specifica spedita con il prodotto. Per maggiori informazioni, consultare la Guida all'installazione, la Guida alla configurazione o altra documentazione acclusa.

Advarsel VIKTIGE SIKKERHETSINSTRUKSJONER

Dette varselssymbolet betyr fare. Du befinner deg i en situasjon som kan forårsake personskade. Før du utfører arbeid med utstyret, bør du være oppmerksom på farene som er forbundet med elektriske kretssystemer, og du bør være kjent med vanlig praksis for å unngå ulykker. For å se oversettelser av advarslene i denne publikasjonen, se de oversatte sikkerhetsvarslene som følger med denne enheten.

Merk TA VARE PÅ DISSE INSTRUKSJONENE

Merk Denne dokumentasjonen skal brukes i forbindelse med den spesifikke installasjonsveiledningen som fulgte med produktet. Vennligst se installasjonsveiledningen, konfigureringsveiledningen eller annen vedlagt tilleggsdokumentasjon for detaljer.

Aviso INSTRUÇÕES IMPORTANTES DE SEGURANÇA

Este símbolo de aviso significa perigo. O utilizador encontra-se numa situação que poderá ser causadora de lesões corporais. Antes de iniciar a utilização de qualquer equipamento, tenha em atenção os perigos envolvidos no manuseamento de circuitos eléctricos e familiarize-se com as práticas habituais de prevenção de acidentes. Para ver traduções dos avisos incluídos nesta publicação, consulte os avisos de segurança traduzidos que acompanham este dispositivo.

Nota GUARDE ESTAS INSTRUÇÕES

Nota Esta documentação destina-se a ser utilizada em conjunto com o manual de instalação incluído com o produto específico. Consulte o manual de instalação, o manual de configuração ou outra documentação adicional inclusa, para obter mais informações.

¡Advertencia! INSTRUCCIONES IMPORTANTES DE SEGURIDAD

Este símbolo de aviso indica peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos de la corriente eléctrica y familiarícese con los procedimientos estándar de prevención de accidentes. Vea las traducciones de las advertencias que acompañan a este dispositivo.

Nota GUARDE ESTAS INSTRUCCIONES

Nota Esta documentación está pensada para ser utilizada con la guía de instalación del producto que lo acompaña. Si necesita más detalles, consulte la Guía de instalación, la Guía de configuración o cualquier documentación adicional adjunta.

Varning! VIKTIGA SÄKERHETSANVISNINGAR

Denna varningssignal 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 vanliga förfaranden för att förebygga olyckor. Se översättningarna av de varningsmeddelanden som finns i denna publikation, och se de översatta säkerhetsvarningarna som medföljer denna anordning.

OBS! SPARA DESSA ANVISNINGAR

OBS! Denna dokumentation ska användas i samband med den specifika produktinstallationshandbok som medföljde produkten. Se installationshandboken, konfigurationshandboken eller annan bifogad ytterligare dokumentation för närmare detaljer.

Предупреждение ВАЖНЫЕ СВЕДЕНИЯ ПО БЕЗОПАСНОСТИ

Этот символ предупреждает о наличии опасности. При неправильных действиях возможно получение травм. Перед началом работы с любым оборудованием необходимо ознакомиться с ситуациями, в которых возможно поражение электротоком, и со стандартными действиями для предотвращения несчастных случаев. Переведенный текст предупреждений содержится в соответствующем документе, поставляемом вместе с устройством.

Примечание СОХРАНЯЙТЕ ЭТУ ИНСТРУКЦИЮ
Примечание Эта инструкция должна использоваться вместе с руководством по установке конкретного изделия, входящим в комплект поставки. Дополнительные сведения см. в руководстве по установке, руководстве по настройке и другой документации, поставляемой с изделием.

警告 有关安全的重要说明

这个警告符号指有危险。您所处的环境可能使身体受伤。操作设备前必须意识到电流的危险性，务必熟悉操作标准，以防发生事故。如果需要了解本说明中出现的警告符号的译文，请参阅本装置所附之安全警告译文。

注意 保存这些说明
注意 本文件应与本产品附带的具体安装说明一并阅读。如欲了解详情，请参阅《安装说明》、《配置说明》或所附的其他文件。

警告 安全上の重要な注意事項

「危険」の意味です。人身事故を予防するための注意事項が記述されています。装置の取り扱い作業を行うときは、電気回路の危険性に注意し、一般的な事故防止対策に留意してください。このマニュアルに記載されている警告の各国語版は、装置に付属の「Translated Safety Warnings」を参照してください。

注 これらの注意事項を保管しておいてください。
注 この資料は、製品に付属のインストレーション ガイドと併用してください。詳細は、インストレーション ガイド、コンフィギュレーション ガイド、または添付されているその他のマニュアルを参照してください。

Cisco Unity Documentation

For descriptions and URLs of Cisco Unity documentation on Cisco.com, refer to *About Cisco Unity Documentation*. The document is shipped with Cisco Unity and is available on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_pre_installation_guides_list.html.

Obtaining Documentation

Cisco provides several ways to obtain documentation, technical assistance, and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation on the World Wide Web at this URL:

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

You can access the Cisco website at this URL:

http://www.cisco.com

International Cisco websites can be accessed from this URL:

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

Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which may have shipped with your product. The Documentation CD-ROM is updated regularly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual or quarterly subscription.

Registered Cisco.com users can order a single Documentation CD-ROM (product number DOC-CONDOCCD=) through the Cisco Ordering tool:

http://www.cisco.com/en/US/partner/ordering/ordering_place_order_ordering_tool_launch.html

All users can order monthly or quarterly subscriptions through the online Subscription Store:

http://www.cisco.com/go/subscription

Ordering Documentation

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpck/pdi.htm

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:

  http://www.cisco.com/en/US/partner/ordering/index.shtml

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

You can submit comments electronically on Cisco.com. On the Cisco Documentation home page, click **Feedback** at the top of the page.

You can e-mail your comments to bug-doc@cisco.com.

You can submit comments by writing to the following address:

Cisco Systems
Attn: Customer Document Ordering
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com, which includes the Cisco Technical Assistance Center (TAC) website, as a starting point for all technical assistance. Customers and partners can obtain online documentation, troubleshooting tips, and sample configurations from the Cisco TAC website. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC website, including TAC tools and utilities.

Cisco.com

Cisco.com offers a suite of interactive, networked services that let you access Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com provides a broad range of features and services to help you with these tasks:

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages
- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

To obtain customized information and service, you can self-register on Cisco.com at this URL:

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

Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available: the Cisco TAC website and the Cisco TAC Escalation Center. The type of support that you choose depends on the priority of the problem and the conditions stated in service contracts, when applicable.

We categorize Cisco TAC inquiries according to urgency:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration. There is little or no impact to your business operations.
- Priority level 3 (P3)—Operational performance of the network is impaired, but most business operations remain functional. You and Cisco are willing to commit resources during normal business hours to restore service to satisfactory levels.

- Priority level 2 (P2)—Operation of an existing network is severely degraded, or significant aspects of your business operations are negatively impacted by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.
- Priority level 1 (P1)—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.

Cisco TAC Website

The Cisco TAC website provides online documents and tools to help troubleshoot and resolve technical issues with Cisco products and technologies. To access the Cisco TAC website, go to this URL:

http://www.cisco.com/tac

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC website. Some services on the Cisco TAC website require a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:

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

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC website, you can open a case online at this URL:

http://www.cisco.com/tac/caseopen

If you have Internet access, we recommend that you open P3 and P4 cases online so that you can fully describe the situation and attach any necessary files.

Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

Before calling, please check with your network operations center to determine the Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.

Obtaining Additional Publications and Information

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

- The *Cisco Product Catalog* describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the *Cisco Product Catalog* at this URL:

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

- Cisco Press publishes a wide range of networking publications. Cisco suggests these titles for new and experienced users: *Internetworking Terms and Acronyms Dictionary, Internetworking Technology Handbook, Internetworking Troubleshooting Guide,* and the *Internetworking Design Guide.* For current Cisco Press titles and other information, go to Cisco Press online at this URL:

  http://www.ciscopress.com

- *Packet* magazine is the Cisco quarterly publication that provides the latest networking trends, technology breakthroughs, and Cisco products and solutions to help industry professionals get the most from their networking investment. Included are networking deployment and troubleshooting tips, configuration examples, customer case studies, tutorials and training, certification information, and links to numerous in-depth online resources. You can access *Packet* magazine at this URL:

  http://www.cisco.com/go/packet

- iQ Magazine is the Cisco bimonthly publication that delivers the latest information about Internet business strategies for executives. You can access iQ Magazine at this URL:

  http://www.cisco.com/go/iqmagazine

- 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/en/US/about/ac123/ac147/about_cisco_the_internet_protocol_journal.html

- Training—Cisco offers world-class networking training. Current offerings in network training are listed at this URL:

  http://www.cisco.com/en/US/learning/le31/learning_recommended_training_list.html

Overview of Mandatory Tasks for Installing the Cisco Unity Bridge

Use the following high-level task list to install the Cisco Unity Bridge correctly. The tasks reference detailed instructions in the *Cisco Unity Bridge Installation Guide*, and in other Cisco Unity Bridge documentation as noted. Follow the documentation for a successful installation.

Some of the tasks apply only to specific situations, and are noted as such. If a task does not apply to your situation, skip it.

1. Extend the Active Directory schema so that information about Bridge delivery locations can be stored in Active Directory. This task is necessary only if you did not already modify the Active Directory schema to support Bridge Networking during the Cisco Unity installation. Refer to the "Extending the Active Directory Schema" section in the "Bridge Networking" chapter of the *Cisco Unity Bridge Networking Guide*. The guide is available on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_installation_and_configuration_guide_books_list.html.
2. Verify system requirements for the Bridge server. Refer to *Cisco Unity Bridge 2.1 System Requirements, and Supported Hardware and Software* on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_pre_installation_guides_list.html.
3. *If the Bridge server was not purchased from Cisco, or if the Bridge server was purchased from Cisco and you did not use the Platform Configuration discs (revision 11 or later) to install Windows 2000 Server:* Go to http://www.cisco.com/cgi-bin/tablebuild.pl/unity-40 (the Cisco Unity 4.0 Software Download page on the Cisco Software Center website), and download the file **CiscoUnity4.0-ServicePacks-ENG-CD1.exe**. You will use the file to install Windows 2000 Server Service Pack 3 and Internet Explorer 6.0 Service Pack 1 in Task 6.
4. Install the voice-fax card(s), and set up the Bridge server. See the "Setting Up the Hardware" chapter.
5. Install Windows 2000 Server, and set up the logical drive, if applicable. See the "Installing the Operating System" chapter.
6. Configure the operating system, install required software components, and set up the Bridge server in the Windows networking environment. See the "Customizing the Cisco Unity Bridge Platform" chapter.
7. Install Bridge software. See the "Installing Cisco Unity Bridge Software" chapter.
8. Install any optional software. See the "Installing Optional Software" chapter.
9. Create an emergency repair disk. Refer to Windows 2000 Help.

10. If you are installing a new Cisco Unity system and a new Bridge simultaneously, return to the applicable task list in the "Mandatory Tasks for Installing Cisco Unity" chapter of the *Cisco Unity Installation Guide* to continue installing the Cisco Unity system and the Bridge correctly. The guide is available on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_installation_guides_books_list.html.

    If you are adding the Bridge to an existing Cisco Unity system, set up Cisco Unity and the Bridge for networking. Refer to the "Task List: Setting Up Cisco Unity and the Bridge for Networking" section in the "Bridge Networking" chapter of the *Cisco Unity Bridge Networking Guide*. The guide is available on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_installation_and_configuration_guide_books_list.html.

CHAPTER 2

Setting Up the Hardware

In this chapter, you do the following tasks in the order listed:

1. Install voice-fax cards. See the "Installing the Voice-Fax Card(s)" section on page 2-2.
2. Set up the Cisco Unity Bridge computer. See the "Setting Up the Cisco Unity Bridge Computer" section on page 2-4.

When you are finished with this chapter, return to "Overview of Mandatory Tasks for Installing the Cisco Unity Bridge" to continue installing the Cisco Unity Bridge correctly.

Note The tasks in the overview list reference detailed instructions in the *Cisco Unity Bridge Installation Guide* and in other Cisco Unity Bridge documentation. Follow the documentation for a successful installation.

Installing the Voice-Fax Card(s)

Note that voice-fax cards must be installed in the same computer or in the same expansion chassis. If all the voice-fax cards do not fit in the Bridge computer, then you must install all of them in an expansion chassis.

For information on the Brooktrout TR114+P4L and TR114+uP4L cards, see the "Brooktrout Technology TR114+P4L and TR114+uP4L PCI Voice-Fax Cards" appendix.

Warning **This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means of security.**

Warning **Read the installation instructions before connecting the system to the power source.**

Warning **Before working on a system that has an on/off switch, turn OFF the power and unplug the power cord.**

Warning **This equipment must be grounded. Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available.**

Warning **There is the danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.**

Warning **To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:**

- **This unit should be mounted at the bottom of the rack if it is the only unit in the rack.**
- **When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.**
- **If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.**

Warning **Before opening the chassis, disconnect the telephone-network cables to avoid contact with telephone-network voltages.**

Warning **Do not work on the system or connect or disconnect cables during periods of lightning activity.**

Warning **To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.**

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

Warning **This equipment is to be installed and maintained by service personnel only as defined by AS/NZS 3260 Clause 1.2.14.3 Service Personnel.**

Warning **The safety cover is an integral part of the product. Do not operate the unit without the safety cover installed. Operating the unit without the cover in place will invalidate the safety approvals and pose a risk of fire and electrical hazards.**

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.**

To Install TR114+P4L or TR114+uP4L Cards in the Bridge Server or in an Expansion Chassis

Step 1 Shut down the Bridge server, if it is on, and the PCI expansion chassis, if applicable.

Step 2 Attach an antistatic wrist strap, and ground yourself to the Bridge server.

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.**

Step 3 If you are not using a PCI expansion chassis, skip to Step 4.

If you are using a PCI expansion chassis, install the host card in any slot.

Step 4 Insert each voice-fax card firmly into its slot in the Bridge computer or in the PCI expansion chassis, and fasten each card to the back plate with a screw.

Setting Up the Cisco Unity Bridge Computer

Cisco recommends that you connect the Bridge computer to a dedicated uninterruptible power supply.

To Set Up the Bridge Computer

Step 1 Place the Bridge computer near the phone system and a network connection, in a dry, cool area that is free of dust.

Step 2 Attach peripheral devices—such as an external modem or expansion chassis—to the Bridge computer. Follow the manufacturer installation and test instructions.

Caution Do not attach the network cable to the computer until you have installed Windows 2000 Server Service Pack 3. Service Pack 3 includes the Microsoft Internet Information Services Cumulative Hot Fix 301625. The *Cisco Unity Bridge Installation Guide* alerts you when to install the service pack and when to connect to the network later in the installation process.

Step 3 Connect the Bridge computer to the phone system.

For pinout information, see the "Brooktrout Technology TR114+P4L and TR114+uP4L PCI Voice-Fax Cards" appendix.

Step 4 On the phone system, create a hunt group for the analog extensions used for the Bridge so that incoming calls will be sent to any available Bridge analog port. To dedicate Bridge analog ports to handle only outgoing calls, do not include the ports in the hunt group.

Installing the Operating System

In this chapter, you do the following tasks in the order listed:

1. Install Windows 2000 Server. See the "Installing Windows 2000 Server" section on page 3-1.
2. *If the Cisco Unity Bridge server was not purchased from Cisco:* Set up a logical drive for the Bridge software. See the "Setting Up the Logical Drive for the Bridge Software (If the Bridge Server Was Not Purchased from Cisco)" section on page 3-4. (Note that a Bridge server purchased from Cisco was shipped with Platform Configuration discs that automatically set up the logical drive when you use the discs to install Windows 2000 Server.)

When you are finished with this chapter, return to "Overview of Mandatory Tasks for Installing the Cisco Unity Bridge" to continue installing the Cisco Unity Bridge correctly.

Note The tasks in the overview list reference detailed instructions in the *Cisco Unity Bridge Installation Guide* and in other Cisco Unity Bridge documentation. Follow the documentation for a successful installation.

Installing Windows 2000 Server

The compact discs you use to install Windows 2000 Server depend on whether the Bridge server was purchased from Cisco:

Server purchased from Cisco	Use the Platform Configuration discs that are shipped with the Bridge server. See the "Using Platform Configuration Discs for a Bridge Server Purchased from Cisco" section on page 3-1.
Server not purchased from Cisco	Use the manufacturer's guided system-setup utility and a retail Windows 2000 Server disc. See the "Using the Manufacturer's Guided System-Setup Utility and a Retail Windows 2000 Disc for a Bridge Server Not Purchased from Cisco" section on page 3-2.

Using Platform Configuration Discs for a Bridge Server Purchased from Cisco

A Bridge server purchased from Cisco is shipped with Platform Configuration discs that contain a utility to install Windows 2000 Server by restoring an image that is customized for the platform. The image includes the required Windows 2000 components, subcomponents, and service packs.

Installing Windows 2000 Server by using the Platform Configuration discs reduces installation time and ensures that the required operating system and components, drivers, and service packs are installed and configured correctly. In addition, the logical drive for the Bridge software is automatically set up.

Caution Do not attach the network cable to the server until Windows 2000 Server Service Pack 3 is installed. The *Cisco Unity Bridge Installation Guide* alerts you when to attach the network cable to the server.

To Install Windows 2000 Server by Using the Platform Configuration Discs

Step 1 Start the Bridge server, and insert Cisco Unity Platform Configuration CD 2 in the CD-ROM drive.

Step 2 When the main menu appears, press **Enter** to start the installation program.

Step 3 Follow the on-screen prompts until you are prompted to select a licensing mode.

Step 4 Click **Per Seat**, and click **Next**.

Step 5 Enter a name for the Bridge server (netBIOS name). Use only alphabetical characters from A to Z and a to z, and numerical characters from 0 to 9. Cisco recommends that the name be 15 characters or fewer.

Step 6 Specify and confirm a password, then click **Next**.

Step 7 Follow the on-screen prompts until the Network Settings dialog box appears.

Step 8 Click **Typical Settings**, and click **Next**.

Step 9 In the Workgroup or Computer Domain dialog box, click **No, This Computer Is Not on a Network, or Is on a Network Without a Domain**.

If the Workgroup or Computer Domain box is empty, enter a workgroup name. The *Cisco Unity Bridge Installation Guide* alerts you when to, optionally, join a domain later in the installation.

Step 10 Click **Next**.

Step 11 Follow the on-screen prompts to complete the installation.

Step 12 When the Windows 2000 Configure Your Server dialog box appears, click **I Will Configure This Server Later**, and click **Next**.

Step 13 Uncheck the **Show This Screen at Startup** check box, and close the window.

Using the Manufacturer's Guided System-Setup Utility and a Retail Windows 2000 Disc for a Bridge Server Not Purchased from Cisco

The server manufacturer provides a disc that contains utilities for several setup tasks, including guiding the installation of Windows 2000 Server from a retail disc. Use the manufacturer disc when the Bridge server was not purchased from Cisco.

The following discs are provided by server manufacturers:

Dell	Dell Server Assistant
IBM	IBM ServerGuide

Installing Windows 2000 Server by using the manufacturer's guided system-setup utility ensures that the operating system and the drivers are installed and configured correctly.

Caution Do not attach the network cable to the server until Windows 2000 Server Service Pack 3 is installed. The *Cisco Unity Bridge Installation Guide* alerts you when to install the service pack and when to connect to the network later in the installation process.

To Install Windows 2000 Server by Using the Manufacturer's Guided System-Setup Utility and a Retail Windows 2000 Disc

Step 1 Start the Bridge server, and insert the manufacturer disc in the CD-ROM drive.

Step 2 Follow the on-screen prompts to install Windows 2000 Server from a retail disc.

Step 3 When applicable, make the following choices:

- Specify a partition size of **8 GB** for the operating system.
- If you are installing Windows 2000 Server on the same partition where an operating system is already installed, select and delete that partition.
- Format the operating system partition by using the **NTFS** file system.
- Specify **Per Seat** for the licensing mode.
- When you enter a name for the Bridge server (netBIOS name), use only alphabetical characters from A to Z and a to z, and numerical characters from 0 to 9. Cisco recommends that the name be 15 characters or fewer.
- Do not join a domain. Instead, specify a workgroup. The *Cisco Unity Bridge Installation Guide* alerts you when to connect to the network and, optionally, when to join a domain later in the installation.
- If you are prompted to specify Windows 2000 components to install, select the following required components:
  - Internet Information Server
  - Terminal Services
- If you are prompted to specify a Windows 2000 service pack to install, specify Windows 2000 Server Service Pack 3.

Note If you do not install all the required Windows 2000 components and the service pack while installing the operating system, the *Cisco Unity Bridge Installation Guide* alerts you when to install them later in the installation.

Step 4 When the Windows 2000 Configure Your Server dialog box appears, click **I Will Configure This Server Later**.

Step 5 Uncheck the **Show This Screen at Startup** check box, and close the window.

Setting Up the Logical Drive for the Bridge Software (If the Bridge Server Was Not Purchased from Cisco)

If the Bridge server was purchased from Cisco, skip this section. When you installed Windows 2000 Server by using the Platform Configuration discs that were shipped with the server, the logical drive was automatically set up.

When you install the operating system by using the procedure in the "Installing Windows 2000 Server" section on page 3-1, the first 8 GB of the logical disk is used for the system partition, and is given the drive letter C. To set up the logical drive for the Bridge software, you create an extended partition on the logical disk (by using the remaining space on the logical disk), then create the logical drive in the partition.

To Set Up the Logical Drive for the Bridge Software

Step 1 Log on to Windows as a member of the Administrators group.

Step 2 On the Windows Start menu, click **Programs > Administrative Tools > Computer Management**.

Step 3 In the console tree under Storage, click **Disk Management**.

Step 4 Right-click the unallocated region of the logical disk, and click **Create Partition**.

Step 5 On the Create Partition wizard Welcome screen, click **Next**.

Step 6 Click **Extended Partition**, and click **Next**. (Do not click Primary Partition.)

Step 7 Specify to use the remaining disk space, and click **Next**.

Step 8 Verify the settings, and click **Finish**.

Step 9 In the Disk Management utility, right-click the new partition, and click **Create Logical Drive**.

Step 10 On the Create Partition Wizard welcome screen, click **Next**.

Step 11 Click **Logical Drive**, and click **Next**.

Step 12 Specify to use the maximum disk space, and click **Next**.

Step 13 Assign a drive letter, and click **Next**.

Step 14 Specify to use the NTFS file system format, and click **Next**.

Step 15 Verify the settings, and click **Finish**.

Customizing the Cisco Unity Bridge Platform

In this chapter, you do the following tasks in the order listed:

1. Extract files from the Service Packs CD that you downloaded from Cisco.com, and install Windows 2000 Server Service Pack 3. See the "Installing Windows 2000 Server Service Pack 3" section on page 4-2.
2. Disable the Found New Hardware wizard, if applicable. See the "Disabling the Found New Hardware Wizard for the Voice-Fax Cards (Selected Systems Only)" section on page 4-2.
3. Connect the Bridge Server to the network. See the "Connecting the Bridge Server to the Network" section on page 4-3.
4. *If the Bridge server was not purchased from Cisco:* Install Internet Explorer version 6 and Service Pack 1. See the "Installing Internet Explorer 6 Service Pack 1" section on page 4-3.
5. Remove the NNTP and SMTP services. See the "Removing the NNTP and SMTP Services" section on page 4-3.
6. *If the Bridge server was not purchased from Cisco:* Change Windows Explorer settings so all files and folders are visible during troubleshooting. See the "Changing Folder Settings in Windows Explorer" section on page 4-4.
7. Assign a static IP address to the Bridge server, or reserve an address in DHCP. See the "Assigning a Static IP Address or Reserving an Address in DHCP" section on page 4-5.
8. Verify the IP address and the network connection. See the "Verifying the IP Address and the Network Connection" section on page 4-5.
9. Add the Bridge server to an existing domain or configure the Network identification full computer name (FQDN) on the Bridge server. See the "Adding the Cisco Unity Bridge Server to an Existing Domain or Configuring the Server When Not Joining a Domain" section on page 4-6.

When you are finished with this chapter, return to "Overview of Mandatory Tasks for Installing the Cisco Unity Bridge" to continue installing the Cisco Unity Bridge correctly.

Note The tasks in the overview list reference detailed instructions in the *Cisco Unity Bridge Installation Guide* and in other Cisco Unity Bridge documentation. Follow the documentation for a successful installation.

Installing Windows 2000 Server Service Pack 3

If the Bridge server was purchased from Cisco and you installed Windows 2000 Server by using the Platform Configuration discs (revision 11 or later) that were shipped with the server, skip this section. Windows 2000 Server Service Pack 3 is already installed.

If the Bridge server was not purchased from Cisco, do the two procedures in this section in the order listed. Note that in the first procedure you are extracting files for Windows 2000 Server Service Pack 3 and for Internet Explorer 6 Service Pack 1. The *Cisco Unity Bridge Installation Guide* alerts you when to install Internet Explorer 6 Service Pack 1 later in the installation.

To Extract Files from the Service Packs CD

Step 1 Browse to the location where you saved the file CiscoUnity4.0-ServicePacks-ENU-CD1.exe (in Task 3 of "Overview of Mandatory Tasks for Installing the Cisco Unity Bridge").

Step 2 Double-click the file.

Step 3 In WinZip, specify a directory to which the files will be extracted.

Step 4 When you are done extracting the files, delete **CiscoUnity4.0-ServicePacks-ENU-CD1.exe** to free disk space.

To Install Windows 2000 Server Service Pack 3

Step 1 Disable virus-scanning software, if applicable.

Step 2 In the directory to which you extracted CiscoUnity4.0-ServicePacks-ENU-CD1.exe, browse to the **Win2K_SP3\I386\Update** directory, and double-click **Update.exe**.

Step 3 Follow the on-screen prompts to complete the installation.

Step 4 Restart the server.

Step 5 Re-enable virus-scanning software, if applicable.

Disabling the Found New Hardware Wizard for the Voice-Fax Cards (Selected Systems Only)

Do this section if one of the following conditions is true:

- The Bridge server was purchased from Cisco and you installed Windows 2000 Server by using the Platform Configuration discs (revision 11 or later) that were shipped with the server.
- The Bridge server was not purchased from Cisco and you installed Windows 2000 Server by using the manufacturer's guided system-setup utility before the voice-fax cards were installed.

Each time you restart the Bridge server, the Found New Hardware wizard may appear and report that the voice-fax cards are new hardware, even though the cards are properly installed and configured. You do the following procedure to prevent the Found New Hardware wizard from reporting the voice-fax cards as new hardware. The procedure will not prevent the Found New Hardware wizard from finding and reporting other new hardware.

To Disable the Found New Hardware Wizard for the Voice-Fax Cards

Step 1 On the Found New Hardware wizard Welcome page, click **Next**.

Step 2 Click **Search for a Suitable Driver for My Device (Recommended)**, and click **Next**.

Step 3 Check the **Floppy Disk Drives** and **CD-ROM Drives** check boxes, and click **Next**.

Step 4 Click **Disable the Device**.

Step 5 Click **Finish**.

Connecting the Bridge Server to the Network

To Connect the Bridge Server to the Network

Attach the network cable(s) to the Bridge server.

Installing Internet Explorer 6 Service Pack 1

If the Bridge server was purchased from Cisco and you installed Windows 2000 Server by using the Platform Configuration discs (revision 11 or later) that were shipped with the server, skip this section. Internet Explorer 6 Service Pack 1 is already installed.

If the Bridge server was not purchased from Cisco, do the following procedure.

To Install Internet Explorer 6 Service Pack 1

Step 1 In the directory to which you extracted CiscoUnity4.0-ServicePacks-ENU-CD1.exe, browse to the **IE6SP1** directory, and double-click **IE6Setup.exe**.

Step 2 Follow the on-screen prompts to complete the installation.

Removing the NNTP and SMTP Services

The Bridge does not work with the NNTP and SMTP services installed. If the Bridge server was purchased from Cisco and you installed Windows 2000 Server by using the Platform Configuration discs (revision 11 or later) that were shipped with the server, the NNTP and SMTP services were installed automatically. The services may also have been installed if you installed Windows 2000 Server by using the guided system-setup utility provided by the server manufacturer.

To Remove the NNTP and SMTP Services

Step 1 On the Windows Start menu, click **Settings > Control Panel > Add/Remove Programs**.

Step 2 Click **Add/Remove Windows Components**.

Step 3 Click **Internet Information Services (IIS)** (but do not uncheck the check box), and click **Details**.

Step 4 In the Internet Information Services (IIS) dialog box, uncheck the **NNTP Service** and **SMTP Service** check boxes.

Step 5 Click **OK**.

Step 6 Click **Next**.

Step 7 Click **Finish**.

Step 8 Close the Add/Remove Programs dialog box and Control Panel.

Changing Folder Settings in Windows Explorer

If the Bridge server was purchased from Cisco and you installed Windows 2000 Server by using the Platform Configuration discs (revision 11 or later) that were shipped with the server, skip this section. All files and folders are already visible in Windows Explorer.

If the Bridge server was not purchased from Cisco, you change folder settings so that all files and folders—including system files—are visible in Windows Explorer during troubleshooting. If you do not do the following procedure now, Cisco TAC may ask you to do it later.

To Change Folder Settings in Windows Explorer

Step 1 On the Windows desktop, double-click **My Computer**.

Step 2 Click **Tools > Folder Options**.

Step 3 Click the **View** tab.

Step 4 Click **Show Hidden Files and Folders**.

Step 5 Uncheck the **Hide File Extensions for Known File Types** check box.

Step 6 Uncheck the **Hide Protected Operating System Files** check box, and click **Yes** to confirm.

Step 7 Click **Apply**.

Step 8 Click **Like Current Folder**, and click **Yes** to confirm.

Step 9 Click **OK**.

Assigning a Static IP Address or Reserving an Address in DHCP

The Bridge server must have an IP address. If you installed Windows 2000 Server by using the Platform Configuration discs (revision 11 or later) that are shipped with a Bridge server purchased from Cisco and you connected the server to a network that has a Dynamic Host Configuration Protocol (DHCP) server, the Bridge server is configured to automatically obtain an IP address from the DHCP server. Cisco strongly recommends that you change this configuration in one of the following ways:

- Assign the Bridge server a static IP address by using the procedure "To Assign a Static IP Address to the Bridge Server" in this section.
- Reserve an IP address in DHCP. For information, refer to Windows Help.

When selecting an IP address for the Bridge server, note the following considerations:

- Do not select an address accessible from the Internet. Doing so can expose the Bridge server to unwanted intrusion from the Internet, even when the server is hardened.
- Do not select an address that puts the Bridge server on the opposite side of a firewall from the Microsoft Exchange server(s) on which Cisco Unity Voice Connectors(s) for Exchange are or will be installed.

To Assign a Static IP Address to the Bridge Server

Step 1 On the Windows Start menu, click **Settings > Control Panel > Network and Dial-Up Connections > Local Area Connection**.

Step 2 Click **Properties**.

Step 3 In the Components Checked Are Used by This Connection list, check the **Internet Protocol (TCP/IP)** check box.

Step 4 Click **Internet Protocol (TCP/IP)** (but do not uncheck the check box), and click **Properties**.

Step 5 Enter applicable values. For more information, refer to Windows 2000 Server Help.

Step 6 Click **OK**.

Step 7 Restart the server.

Verifying the IP Address and the Network Connection

Whether you assigned a static IP address or reserved an address in DHCP, verify the IP address and the network connection.

To Verify the IP Address and the Network Connection

Step 1 On the Windows Start menu, click **Programs > Accessories > Command Prompt**.

Step 2 In the Command Prompt window, enter **ipconfig /all**, and press **Enter**.

Step 3 Verify the IP address of the Bridge server.

Step 4 Find the IP address of a router or server on the same network segment as the Bridge server. If no routers or servers are listed, either you did not specify a default gateway when you assigned a static IP address in the "Assigning a Static IP Address or Reserving an Address in DHCP" section on page 4-5, or the Bridge server is not connected to the network.

Step 5 Ping the router or other server whose IP address you found in Step 4. In the Command Prompt window, enter **ping <IP address>**, and press **Enter**.

If the device sends a reply, the Bridge server has a valid IP address.

If the device does not reply, there may be a variety of causes. Some of the most common problems include:

- The assigned static IP address or the address reserved in DHCP conflicts with the IP address of another computer on the network.
- For a static IP address, the subnet mask is incorrect.
- The Bridge server has a problem contacting the DHCP server.

Verify the network settings. If needed, troubleshoot any problem as you would a network connectivity problem.

Adding the Cisco Unity Bridge Server to an Existing Domain or Configuring the Server When Not Joining a Domain

The Bridge server can be either a member server or a member of a workgroup. This section contains procedures for adding the Bridge server to a domain and for configuring the network identification full computer name on the Bridge server. Do the procedure that is applicable to your installation.

Caution Do not make the Bridge server a domain controller.

To Add the Bridge Server to an Existing Domain

Step 1 On the Windows Start menu, click **Settings > Control Panel > System**.

Step 2 Click the **Network Identification** tab.

Step 3 Click **Properties**.

Step 4 In the Identification Changes dialog box, click **Domain**, and enter the name of the domain that you want to join.

Step 5 Click **OK**.

Step 6 In the Domain Username and Password dialog box, enter the name and password of an account that has permission to add computers to the domain.

Step 7 Click **OK** three times to save the change and close the dialog boxes.

Step 8 When prompted to restart the server, click **Yes**.

To Configure the Network Identification Full Computer Name (FQDN) on the Bridge Server

Step 1 On the Windows Start menu, click **Settings > Control Panel > System**.

Step 2 Click the **Network Identification** tab.

Step 3 Click **Properties**.

Step 4 In the Identification Changes dialog box, click **More**.

Step 5 Enter a value for **Primary DNS Suffix of This Computer**.

Step 6 Click **OK** three times to save the change and close the dialog boxes.

Step 7 When prompted to restart the server, click **Yes**.

Installing Cisco Unity Bridge Software

In this chapter, you do the following tasks in the order listed:

1. Install Bridge software. See the "Installing Bridge Software" section on page 5-1.
2. *Optional:* Add password protection to the Bridge Administrator. See the "Adding Password Protection to the Bridge Administrator (Optional)" section on page 5-2.

When you are finished with this chapter, return to "Overview of Mandatory Tasks for Installing the Cisco Unity Bridge" to continue installing the Cisco Unity Bridge correctly.

Note The tasks in the overview list reference detailed instructions in the *Cisco Unity Bridge Installation Guide* and in other Cisco Unity Bridge documentation. Follow the documentation for a successful installation.

Installing Bridge Software

To Install Bridge Software

Step 1 Log on to the Bridge server by using the Windows 2000 Server Administrator account.

Step 2 On the Cisco Unity Bridge disc or from the location to which you saved the downloaded Bridge files, browse to the **Install** directory, and double-click **Setup.exe**.

Step 3 Click **Next**.

Step 4 In the Choose Destination Location dialog box, change the installation directory, if applicable, then click **Next**. Note that you install the Bridge software on the logical drive, not on drive C.

Step 5 Select the country that matches the country version of the voice-fax card(s) in the Bridge server or expansion chassis, then click **Next**.

Step 6 If a device driver service was previously installed for the voice-fax card(s), a message asks if you want to overwrite the existing service. Click **Yes** twice.

Step 7 Click **Next**.

Step 8 If prompted, remove the Cisco Unity Bridge disc from the CD-ROM drive.

Step 9 Click **OK** to restart the server.

Adding Password Protection to the Bridge Administrator (Optional)

Although the Bridge server itself is password protected, you may also want to add password protection to the Bridge Administrator, which is the Web administrator that allows you to access the Bridge via an intranet and remotely.

To Add Password Protection to the Bridge Administrator

Step 1 Log on to the Bridge server platform by using the Administrator account.

Step 2 On the Windows Start menu, click **Programs > Administrative Tools > Internet Service Manager**.

Step 3 In the tree, click the server name.

Step 4 Right-click **Default Web Site**, and select **Properties**.

Step 5 Click the **Directory Security** tab. In the Anonymous Access and Authentication section, click **Edit**.

Step 6 Select **Integrated Windows Authentication**, and uncheck the **Anonymous Access** check box.

Step 7 Click **OK** twice, and close the Internet Service Manager.

Step 8 In Windows Explorer, browse to the **Starfish\Asp** directory.

Step 9 Right-click the **Starfish\Asp** directory, and select **Properties**.

Step 10 Click the **Security** tab.

Step 11 Select **Everyone**. Uncheck the **Allow Inheritable Permissions From Parent** check box, and click **Remove**.

Step 12 Click **Add** to add users or groups to the Access Control List (ACL). Click **OK** when finished.

Step 13 In the Permissions list, select **Full Control** for the person(s) you want to have access.

Step 14 Click **OK** and close Windows Explorer.

Installing Optional Software

In this chapter, you do the following tasks in the order listed:

1. Install recommended third-party service packs and updates, if applicable. See the "Installing Recommended Service Packs and Updates" section on page 6-1.
2. Install Symantec pcAnywhere, if applicable, and follow the recommended configuration. See the "Installing pcAnywhere" section on page 6-1.
3. Install virus-scanning software, if applicable. See the "Installing Virus-Scanning Software" section on page 6-3.

When you are finished with this chapter, return to "Overview of Mandatory Tasks for Installing the Cisco Unity Bridge" to continue installing the Cisco Unity Bridge correctly.

Note The tasks in the overview list reference detailed instructions in the *Cisco Unity Bridge Installation Guide* and in other Cisco Unity Bridge documentation. Follow the documentation for a successful installation.

Installing Recommended Service Packs and Updates

For information on recommended third-party service packs and updates, refer to *Compatibility Matrix: Required and Recommended Third-Party Service Packs*, at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_pre_installation _guides_list.html.

Cisco recommends that you install all third-party service packs and updates that are qualified for use with the Bridge. If you have not already installed such service packs and updates, do so now.

Installing pcAnywhere

For supported versions of Symantec pcAnywhere, refer to *Cisco Unity Bridge 2.1 System Requirements, and Supported Hardware and Software* on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_pre_installation_guides_list.html.

Follow the manufacturer instructions to install pcAnywhere. See also the "Recommended Configuration for pcAnywhere" section, below.

The remote-access software can be installed on the Bridge server in addition to Windows Terminal Services (which is the default remote-access software for the Bridge server and is included with Windows 2000 Server). Use an external modem with pcAnywhere.

Recommended Configuration for pcAnywhere

Cisco recommends that you do the following three procedures to configure pcAnywhere to avoid video problems, screen-refresh problems, and a possible problem with the server not responding after pcAnywhere disconnects.

To Configure pcAnywhere So That It Does Not Start Automatically When You Restart the Server

Step 1 On the Windows Start menu, click **Programs > Symantec pcAnywhere**.

Step 2 In the pcAnywhere toolbar, click **Hosts**.

Step 3 Right-click the **Modem** icon or the host that is configured for a modem, and click **Properties**.

Step 4 In the pcAnywhere Host Properties dialog box, click the **Settings** tab.

Step 5 In the Host Startup section, uncheck the **Launch with Windows** check box.

Step 6 Click **OK** to close the pcAnywhere Host Properties dialog box.

Step 7 Exit pcAnywhere.

To avoid a pcAnywhere video problem, Cisco recommends that you change the pcAnywhere video mode. (The problem is described in Symantec Knowledge Base article 2001040615242112.)

To Change the pcAnywhere Video Mode to Compatibility

Step 1 On the Windows Start menu, click **Programs > Symantec pcAnywhere**.

Step 2 On the pcAnywhere Tools menu, click **Options**.

Step 3 On the Host Operation tab, under Video Mode Selection, click **Compatibility**.

Step 4 Click **OK**.

Step 5 Close pcAnywhere.

To avoid a pcAnywhere problem with slow or partial screen refreshes on multiprocessor host computers, and a possible problem in which the host computer stops responding when pcAnywhere disconnects, Cisco recommends that you add a registry entry that sets pcAnywhere to run on one or more specific processors. (The problem is described in Symantec Knowledge Base article 199861984643.)

Be aware that setting pcAnywhere to run on a specific processor may affect performance on the Bridge server if someone uses pcAnywhere to access the server during peak hours.

To Set pcAnywhere to Run on One or More Specific Processors

Step 1 Start Regedit.

Caution Changing the wrong registry key or entering an incorrect value can cause the server to malfunction. Before you edit the registry, confirm that you know how to restore it if a problem occurs. (Refer to the "Restoring" topics in Registry Editor Help.) If you have any questions about changing registry key settings, contact Cisco TAC.

Step 2 If you do not have a current backup of the registry, click **Registry > Export Registry File**, and save the registry settings to a file.

Step 3 Expand the key HKEY_LOCAL_MACHINE\SOFTWARE\Symantec\pcANYWHERE\CurrentVersion\Host.

Step 4 Add a DWORD value named **ProcessorMask**, and set the value depending on which processor you want to use (for example, to make pcAnywhere run on the second processor only, set ProcessorMask to 2):

0	All processors
1	First processor
2	Second processor
4	Third processor
8	Fourth processor

To allow pcAnywhere to run on more than one processor, set the value of ProcessorMask to the sum of the corresponding values. (For example, to make pcAnywhere run on the third and fourth processors, set ProcessorMask to 12 [4 + 8]).

Step 5 Either stop and restart the pcAnywhere host service or restart the Bridge server.

Installing Virus-Scanning Software

For information on which virus-scanning software is currently supported, refer to *Cisco Unity Bridge 2.1 System Requirements, and Supported Hardware and Software* on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_pre_installation_guides_list.html.

Follow the manufacturer instructions to install virus-scanning software.

Brooktrout Technology TR114+P4L and TR114+uP4L PCI Voice-Fax Cards

The TR114+P4L and TR114+uP4L voice-fax cards provide four loop-start lines for inbound or outbound messages. The cards are installed in the Bridge server, and both types of cards can be installed in the same Bridge server.

The TR114+P4L and TR114+uP4L cards have one RJ-45 receptacle serving all four ports. The line cord that ships with most cards has an RJ-45 connector on one end and four single-pair RJ-11 connectors on the other end. For the United Kingdom and for Hong Kong, the line cord that ships with the cards has an RJ-45 connector on one end and four single-pair BT-431A connectors on the other end.

Universal PCI (uPCI) is the ability to plug a TR114+uP4L card into either a 3.3-volt or 5-volt bus slot in a server chassis. A uPCI card is physically keyed for both 3.3-volt and 5-volt bus signaling, and has a second notch in the PCI edge connector on the card.

The TBR-21-compliant TR114+P4L and TR114+uP4L cards are qualified for use in Europe, and other country-specific TR114+P4L and TR114+uP4L cards have also been qualified. For a complete list of qualified cards, refer to the "Supported Voice-Fax Cards" section of *Cisco Unity Bridge 2.1 System Requirements, and Supported Hardware and Software,* available on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_pre_installation_guides_list.html.

Figure A-1 shows the top and side views of theTR114+P4L card, Figure A-2 shows the top and side views of the TR114+uP4L card, and Figure A-3 shows the connection pinouts and back plate for both cards.

Figure A-1 TR114+P4L Top and Side Views

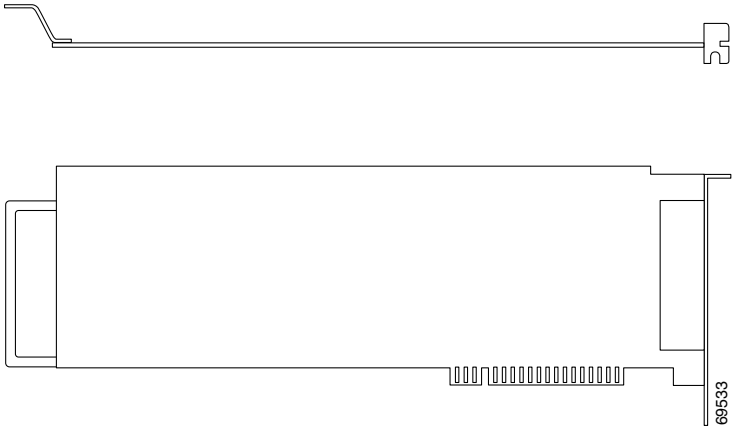


Figure A-2 TR114+uP4L Top and Side Views

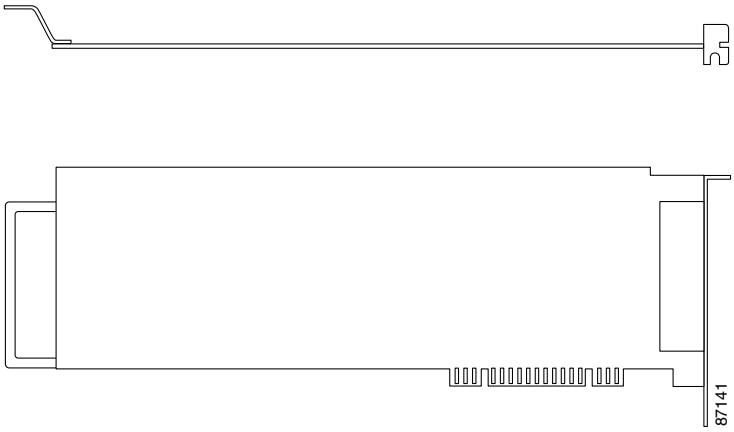
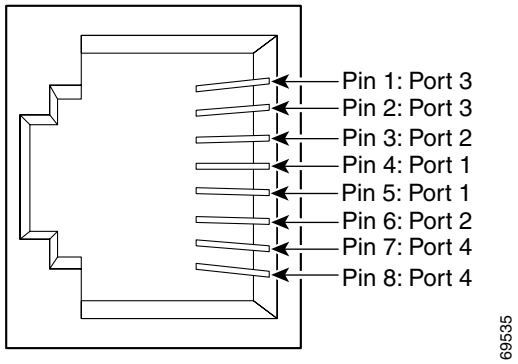
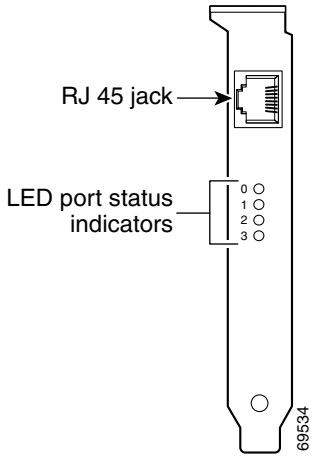


Figure A-3 TR114+P4L and TR114+uP4L Connection Pinouts and Back Plate





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