



Installing CiscoWorks Auto Update Server 1.1

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Preface v

Audience **v**

Conventions **v**

Product Documentation **vi**

Related Documentation **viii**

Obtaining Documentation **x**

 Cisco.com **x**

 Documentation CD-ROM **x**

 Ordering Documentation **xi**

 Documentation Feedback **xi**

Obtaining Technical Assistance **xii**

 Cisco.com **xii**

 Technical Assistance Center **xii**

 Cisco TAC Website **xiii**

 Cisco TAC Escalation Center **xiv**

Obtaining Additional Publications and Information **xiv**

CHAPTER 1

Product Overview 1-1

AUS Product Overview **1-2**

AUS 1.1 Requirements **1-2**

Windows 2000 and Solaris Server Requirements **1-3**

Windows 2000 and Solaris Client Requirements **1-4**

Enabling Java Console **1-5**

Supported Devices **1-5**

CHAPTER 2

Installing and Uninstalling AUS 2-1

- Installation Overview 2-1
- Procedures for Windows 2000 2-2
 - Installing, Reinstalling or Upgrading AUS on Windows 2000 2-2
 - Exporting the AUS Database to Another Windows 2000 Server 2-4
 - Uninstalling AUS on Windows 2000 2-5
- Procedures for Solaris 2-6
 - Installing and Reinstalling AUS on Solaris 2-6
 - Exporting the AUS Database to Another Solaris 2-8
 - Uninstalling AUS on Solaris 2-9

CHAPTER 3

Verifying Installation 3-1

- Logging into the CiscoWorks Server Desktop 3-1
- Verifying AUS Installation 3-3

APPENDIX A

Troubleshooting A-1

- Understanding AUS Installation Error Messages A-1
- Viewing AUS Process Status A-2
- Changing AUS Process Status A-3
 - Restarting Processes from the Desktop A-3
 - Restarting Processes from the Server A-3
- Calling the Technical Assistance Center (TAC) A-4

INDEX



Preface

This guide describes how to install and set up the Auto Update Server 1.1 (AUS). It contains information on installing, setting up, and troubleshooting the installation.

Audience

This guide is for network administrators, network operators, or information technology (IT) professionals.

Conventions

This document uses the following conventions:

Item	Convention
Commands and keywords	boldface font
Variables for which you supply values	<i>italic font</i>
Displayed session and system information	screen font
Information you enter	boldface screen font
Variables you enter	<i>italic screen font</i>
Menu items and button names	boldface font

Item	Convention
Selecting a menu item in paragraphs	Option > Network Preferences
Selecting a menu item in tables	Option > Network Preferences

**Note**

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

**Caution**

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

Product Documentation

**Note**

We sometimes update the printed and electronic documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

Table 1 describes the product documentation that is available.

Table 1 Product Documentation

Document Title	Available Formats
<i>Release Notes for Auto Update Server 1.1</i>	<ul style="list-style-type: none"> • Printed document that was included with the product. • On Cisco.com: <ol style="list-style-type: none"> a. Log into Cisco.com. b. Select Products & Services > Network Management CiscoWorks > CiscoWorks Auto Update Server Software > Technical Documentation > Release Notes.
<i>Quick Start Guide for VPN/Security Management Services 2.2</i>	<ul style="list-style-type: none"> • Printed document that was included with the product. • On Cisco.com: <ol style="list-style-type: none"> a. Log into Cisco.com. b. Select Products & Services > Network Management CiscoWorks > CiscoWorks VPN/Security Management Solution > Technical Documentation > Quick Start.
<i>Installing Auto Update Server 1.1</i>	<ul style="list-style-type: none"> • PDF on the product CD-ROM. • On Cisco.com: <ol style="list-style-type: none"> a. Log into Cisco.com. b. Select Products & Services > Network Management CiscoWorks > CiscoWorks Auto Update Server Software > Technical Documentation > Installation Guides Books. • Printed document available by order (part number DOC-7815480=).¹

Table 1 Product Documentation (continued)

Document Title	Available Formats
<i>Using Auto Update Server 1.1</i>	<ul style="list-style-type: none"> • PDF on the product CD-ROM. • On Cisco.com: <ul style="list-style-type: none"> a. Log into Cisco.com. b. Select Products & Services > Network Management CiscoWorks > CiscoWorks Auto Update Server Software > Technical Documentation > User Guide Books. • Printed document available by order (part number DOC-7815481=).¹
<i>Supported Devices for Auto Update Server 1.1</i>	<ol style="list-style-type: none"> 1. Log into Cisco.com. 2. Select Products & Services > Network Management CiscoWorks > CiscoWorks Auto Update Server Software > Technical Documentation > Device Support Tables.
Context-sensitive online help	<ul style="list-style-type: none"> • Select an option from the navigation tree, then click Help. • Click the Help button in the dialog box.

1. See the “Obtaining Documentation” section on page x.

Related Documentation



Note

We sometimes update the printed and electronic documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

Table 2 describes the additional documentation that is available.

Table 2 Related Documentation

Document Title	Available Formats
<i>User Guide for Common Services 2.2</i>	<ul style="list-style-type: none"> • PDF on the product CD-ROM. • On Cisco.com: <ul style="list-style-type: none"> a. Log into Cisco.com. b. Select Products & Services > Network Management CiscoWorks > CiscoWorks Common Services Software > Technical Documentation > User Guide Books. • Printed document available by order (part number DOC-7815301=).¹
<i>Using Management Center for Firewalls 1.1.2</i>	<ul style="list-style-type: none"> • PDF on the product CD-ROM. • On Cisco.com: <ul style="list-style-type: none"> a. Log into Cisco.com. b. Select Products & Services > Network Management CiscoWorks > CiscoWorks Management Center for Firewalls > Technical Documentation > User Guide Books. • Printed document available by order (part number DOC-7815634=).¹
<i>Using Management Center for VPN Routers 1.1</i>	<ul style="list-style-type: none"> • PDF on the product CD-ROM. • On Cisco.com: <ul style="list-style-type: none"> a. Log into Cisco.com. b. Select Products & Services > Network Management CiscoWorks > CiscoWorks Management Center for VPN Routers > Technical Documentation > User Guide Books. • Printed document available by order (part number DOC-7815441=).¹

1. See the “Obtaining Documentation” section on page x.

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_inpk/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 using the response card (if present) behind the front cover of your document or 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/1e31/learning_recommended_training_list.html



Product Overview

The CiscoWorks Auto Update Server (AUS) 1.1 is a web-based interface for upgrading device configuration files and software images on PIX Firewalls that use the auto update feature.

AUS is designed to interoperate with the Management Center for PIX Firewalls (PIX MC). See the PIX MC documentation for information on using PIX MC with AUS.

AUS also supports Management Center for VPN Routers (Router MC) with the addition of the CNS Event Gateway feature in AUS 1.1.

These topics help you understand AUS:

- AUS Product Overview, page 1-2
- AUS 1.1 Requirements, page 1-2
- Windows 2000 and Solaris Server Requirements, page 1-3
- Windows 2000 and Solaris Client Requirements, page 1-4
- Enabling Java Console, page 1-5
- Supported Devices, page 1-5

AUS Product Overview

The Auto Update Server (AUS) is a tool for upgrading PIX Firewall images, PDM images, and PIX Firewall configuration files.



Note

PIX Firewalls are referred to as firewalls throughout this manual.

A network management server cannot directly initiate communication to devices that acquire their interface addresses using DHCP because their IP addresses are not known ahead of time. Furthermore, these devices might not be running, or they might be behind firewalls and NAT boundaries when the management system needs to make changes.

These device use the auto update feature to connect to AUS at periodic intervals. The device gives AUS its current state and device information. AUS responds to the device by providing a list of versions for the software images and configuration files that the device should be running. The device compares the file versions with the versions it is running. If the versions are different, the device downloads the new versions from the URLs provided by AUS. After the device is up-to-date with the new file versions, it sends AUS its state and device information again.

AUS 1.1 includes a new CNS Event Gateway feature that operates in conjunction with Router MC. The CNS Event Gateway feature allows Router MC to manage local or remote IOS devices with dynamically assigned addresses. After bootstrapping these devices (see *Using Auto Update Server 1.1*), IOS devices contact AUS and provide their IP addresses and interface names. Then, Router MC polls AUS for this information, which it uses to contact the IOS devices and update IOS configurations.

AUS 1.1 Requirements

CiscoWorks Common Services 2.2 is required for AUS 1.1 to function. You must install CiscoWorks Common Services 2.2 first, then install AUS 1.1.

Windows 2000 and Solaris Server Requirements

Table 1-1 shows the server requirements for installing AUS on Windows 2000 and Solaris systems.

Table 1-1 Windows 2000 and Solaris Server Requirements

Item	Windows 2000	Solaris
Platform	IBM PC-compatible computer with 1-GHz or faster Pentium processor.	One of the following Sun systems: <ul style="list-style-type: none"> • Sun UltraSPARC 60 MB with 440 MHz or faster processor. • Sun UltraSPARCIII (Sun Blade 2000 Workstation or Sun Fire 280R Workgroup Server).
Additional Hardware	<ul style="list-style-type: none"> • CD-ROM drive. • 100BaseT or faster connection. • Color monitor with video card capable of 16-bit. 	
Memory (RAM)	<ul style="list-style-type: none"> • 1 GB minimum. 	
Available disk drive space	<ul style="list-style-type: none"> • 9 GB minimum on the drive on which you install the product. • 2 GB virtual memory. • NTFS filesystem recommended. 	<ul style="list-style-type: none"> • 9 GB on the partition on which you install the product (default is /opt). • Swap space equal to double the amount of memory (RAM). For example, if your system has 256 MB of RAM, you need 512 MB of swap space.
Software	<ul style="list-style-type: none"> • Windows 2000 Server, Professional, or Advanced Server¹ with Service Pack 3. 	Solaris 2.8.

1. Support for Advanced Server requires turning off Terminal Services.

Windows 2000 and Solaris Client Requirements

You can access all product features from a client that fulfills the hardware, software, and browser requirements shown in Table 1-2.

Table 1-2 Windows Operating Systems and Solaris Client Requirements

Item	Windows Operating Systems	Solaris
Platform	IBM PC-compatible computer with 300-MHz or faster Pentium processor.	One of the following: <ul style="list-style-type: none"> • Sun SPARCstation. • Sun Ultra 10.
Additional Hardware	Color monitor with video card set to 24 bits color depth.	Color monitor with video card set to 24 bits color depth.
Software	Windows 2000 Server, Windows 2000 Professional Edition, or Windows XP with Service Pack 1 ¹ .	Solaris 2.8 ² .
Available disk drive space	400 MB virtual memory.	
Available memory	256 MB minimum.	
Java	Sun Java plug-in 1.3.1-b24.	
Browser	<ul style="list-style-type: none"> • Internet Explorer 6.0 with Service Pack 1. • Netscape Navigator 4.79. 	Netscape Navigator 4.76.

1. Service Pack 1a is not supported because it does not include JVM support.
2. If Java Console is not listed in View, you must enable it. See Enabling Java Console, page 1-5.

Enabling Java Console

-
- Step 1** From the browser window, select **Tools > Internet Options > Advanced**.
 - Step 2** In the Java VM section, select the Java Console option.
 - Step 3** Restart Internet Explorer.
-

Supported Devices

The supported devices table is located on cisco.com at:

http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/cw2000/cw2000_b/vpnman/vms_2_1/pix/sup_dev/index.htm. <When a new URL is known, this book's custodian must replace the preceding, obsoleted URL.>



Installing and Uninstalling AUS

This chapter contains:

- Installation Overview, page 2-1
- Procedures for Windows 2000, page 2-2
- Procedures for Solaris, page 2-6

Installation Overview

For AUS to function properly, you must install CiscoWorks Common Services 2.2 on your server first. CiscoWorks Common Services provides the components that AUS needs, including necessary software libraries and packages. For more information, see *Quick Start Guide for the VPN/Security Management Solution*.

AUS works closely with PIX MC to update configuration files on PIX Firewalls that operate in auto update mode. However, AUS does not have to be installed on the same system as PIX MC to operate. In fact, because of their different features and roles, it is recommended that you install AUS and PIX MC on separate servers to maintain efficient network security. Typically, AUS is installed on a server in the demilitarized zone (DMZ) and PIX MC is installed on a server in the Network Operations Center.

To deploy AUS behind a network address translation (NAT) boundary in either the enterprise network or the enterprise DMZ, the PIX MC devices that AUS manages must all be on the same side of the NAT boundary (all inside or all outside). For example, you can deploy AUS in the DMZ behind a NAT boundary and manage devices that were deployed only on the Internet; however, you cannot deploy AUS in the DMZ behind a NAT boundary with some devices using private addresses on the inside of the boundary and some outside of the boundary.

Procedures for Windows 2000

This section contains:

- Installing, Reinstalling or Upgrading AUS on Windows 2000, page 2-2
- Exporting the AUS Database to Another Windows 2000 Server, page 2-4
- Uninstalling AUS on Windows 2000, page 2-5

Installing, Reinstalling or Upgrading AUS on Windows 2000

You install, reinstall, or upgrade AUS from a CD-ROM. The installation takes approximately 10 minutes.

Before You Begin

- Make sure your server meets the requirements described in Windows 2000 and Solaris Server Requirements, page 1-3.
- Verify that CiscoWorks Common Services 2.2 is installed as described in *Quick Start Guide for the VPN/Security Management Solution* or *Installing CiscoWorks Common Services on Windows 2000 and Solaris*.

Step 1 Log in as the local administrator to the system on which CiscoWorks Common Services is installed.

Step 2 If you are installing AUS, go to Step 3.

If you are reinstalling AUS or performing an upgrade from AUS 1.0 to 1.1, back up the database by selecting **VPN/Security Management Solution > Administration > Common Services > Backup Database**. See CiscoWorks Common Services online help for more information.

**Caution**

We recommend that you make a backup of the database before starting the reinstallation or upgrade as an additional precautionary measure.

- Step 3** Insert the CiscoWorks VMS Management and Monitoring Centers 2.2 Startup Disk into the CD-ROM drive.
- If autorun is enabled in your system, the Installer window opens immediately.
 - If autorun is not enabled in your system:
 - Select **Start > Run...**
The Run window opens.
 - Enter the following and click **OK**:
`e:\autorun.exe`
where *e* is your CD-ROM drive.
The AUS Installer window opens.
- Step 4** Click **Install**. To stop the installation, click **Cancel**.
- Step 5** Select the checkbox next to Auto Update Server 1.1 and click **Next**.
- Step 6** Click **Install**.
- Step 7** Follow the prompts in the installation script. Note the following important considerations that will affect your responses to the prompts:
- If you try to install AUS on an unsupported version of a platform or incorrect service pack, a message appears. You can continue the installation, but you must update your platform or service pack before using the product. To receive support from Cisco, AUS must be installed on a supported platform with the correct service pack.
 - If your server lacks disk space or memory, exit the installation when prompted, then ask your administrator for assistance.
 - Because AUS is intended for deployment in a DMZ that can be accessed from the Internet, we recommend that you change the database password when prompted for maximum security.

- Step 8** When the installation is complete, click **Finish** to exit the installer.
- Step 9** Prepare the client system for use. See the CiscoWorks Common Services documentation for details.
-

Troubleshooting the Installation

- If errors occurred during the installation, review the installation log to determine the cause of the errors. The log is located in the root directory on the drive where the operating system is installed. By default, this is c:\Ciscoworks_setupxxx.log, where XXX is a three-digit number.
- Each installation creates a new log file. For example, the first installation creates the log file C:\cw2000_in001.log; a subsequent installation would create the log file C:\cw2000_in002.log, and so on. Review the most recent log file for error messages.
- For more troubleshooting information, see Appendix A, “Troubleshooting.”

Exporting the AUS Database to Another Windows 2000 Server

You can install AUS on another server and export the existing database to the new server. You can transfer the database only to a server of the same platform type. For example, if AUS is installed on a Windows 2000 platform, you can export the database only to another Windows 2000 platform.

- Step 1** Log in as the local administrator to the server on which CiscoWorks Common Services is installed.
- Step 2** To back up the database, select **VPN/Security Management Solution > Administration > Common Services > Backup Database**. See CiscoWorks Common Services online help for more information.
- Step 3** Install AUS on the new Windows 2000 server. See Installing, Reinstalling or Upgrading AUS on Windows 2000, page 2-2 for details.
- Step 4** Copy your backed-up database files to the new Windows 2000 server.

- Step 5** Log in as the local administrator to the server on which you just installed AUS.
- Step 6** To restore the database, select **VPN/Security Management Solution > Administration > Common Services > Restore Database**. See CiscoWorks Common Services online help for more information.
-

Uninstalling AUS on Windows 2000

Uninstallation removes all AUS files and related settings. Uninstallation takes approximately 5 minutes.



Caution

You must use the uninstallation program to remove AUS. *Do not remove AUS or its components manually.* If you do so, any remaining VMS components might not function properly.

- Step 1** Do one of the following:
- Select **Start > Programs > CiscoWorks > Uninstall CiscoWorks**.
 - Select **Start > Settings > Control Panel > Add/Remove Programs**, then highlight **CiscoWorks**. To begin the uninstallation, click **Change/Remove**.

The Uninstallation window lists all of the installed components.



Caution

By default, all CiscoWorks Common Services packages are uninstalled. To keep specific tools installed, you *must deselect* the check boxes next to those tools.

- Step 2** Deselect all check boxes except Auto Update Server.
- Step 3** Click **Next**.
- Components selected for uninstallation are displayed. Auto Update Server should be listed as a component to be uninstalled. If it is not listed, click **Back** and select Auto Update Server.

Step 4 Click **Next**.

Additional messages indicate the progress of the uninstallation. The final message indicates that the uninstallation is complete.

Step 5 To finish, click **OK**.

Procedures for Solaris

This section contains:

- Installing and Reinstalling AUS on Solaris, page 2-6
- Exporting the AUS Database to Another Solaris, page 2-8
- Uninstalling AUS on Solaris, page 2-9

Installing and Reinstalling AUS on Solaris

You can install and reinstall AUS from a local or remote Solaris system. Whichever method you choose, the AUS installation is the same. Only the steps you take to mount the CD or image differ.



Caution

Network inconsistencies might cause installation errors if you are installing from a remote mount point.

AUS installation takes approximately 5 minutes to complete on a Solaris system with the minimum required hardware.

Before You Begin

- Make sure your server and client meet the requirements described in AUS 1.1 Requirements, page 1-2.
- Verify that CiscoWorks Common Services 2.2 is installed as described in *Quick Start Guide for the VPN/Security Management Solution* or *Installing CiscoWorks Common Services on Windows 2000 and Solaris*.

Step 1 As root, mount the CiscoWorks VMS Management and Monitoring Centers 2.2 Startup Disk on your local or remote system.

Step 2 Run the installation program.

- For a local installation, enter:

```
# cd /cdrom/cdrom0/  
# ./setup.sh
```

- For a remote installation, enter:

```
# cd remotedir  
# ./setup.sh
```

where *remotedir* is the remote location where the CD-ROM is mounted.

Step 3 When prompted to read the license agreement, press **Enter**. Continue to press Enter until the following prompt appears:

```
Do you accept all the terms of the preceeding License agreement? (y/n)  
[y]
```

Step 4 Press **Enter** to accept the terms of the license agreement.

Step 5 Follow the prompts in the installation script. Note the following important considerations that will affect your responses to the prompts:

- If you try to install AUS on an unsupported version of a platform or incorrect service pack, a message appears. You can continue the installation, but you must update your platform or service pack before using the product. To receive support from Cisco, AUS must be installed on a supported platform with the correct service pack.
- If your server lacks disk space or memory, exit the installation when prompted, then ask your administrator for assistance.
- Because AUS is intended for deployment in a DMZ that can be accessed from the Internet, we recommend that you change the database password when prompted for maximum security.

Step 6 When the installation has finished, unmount the CD-ROM.

Step 7 Prepare the client system for use. See the CiscoWorks Common Services documentation for details.

Troubleshooting the Installation

If errors occurred during installation, review the installation log file `/var/tmp/ciscoinstall.log` to determine the cause of the errors. Each installation is appended to this file. For additional troubleshooting information, See Appendix A, “Troubleshooting.”

Exporting the AUS Database to Another Solaris

You can install AUS on another server and export the existing database to the new server. You can transfer the database only to a server of the same platform type. For example, if you have AUS installed on a Solaris platform, you can export the database only to another Solaris platform.

-
- Step 1** As root, log in to the Solaris server on which AUS is installed.
 - Step 2** To back up the database, select **VPN/Security Management Solution > Administration > Common Services > Backup Database**. See CiscoWorks Common Services online help for more information.
 - Step 3** Install AUS on the new Solaris server. See Installing and Reinstalling AUS on Solaris, page 2-6 for details.
 - Step 4** Copy your backed-up database file to the new Solaris server.
 - Step 5** Log in as the local administrator to the server on which you just installed AUS.
 - Step 6** To restore the database, select **VPN/Security Management Solution > Administration > Common Services > Restore Database**. See CiscoWorks Common Services online help for more information.
-

Uninstalling AUS on Solaris

Use the **uninstall** script to remove AUS files and settings.

**Caution**

You must use the **uninstall** script to remove the product. If you try to remove AUS or its components manually, any remaining VMS components might not function properly.

Step 1 As root, enter the following commands to start the uninstall script:

```
# cd /  
# /opt/CSCOPx/bin  
# ./uninstall.sh
```

where */opt/CSCOPx* is the default installation directory.

Step 2 Follow the prompts in the uninstallation script. When the uninstallation script is complete, a message appears:

```
All files were deleted successfully.
```

Step 3 Check */etc/syslog.conf* for syslog changes.

Step 4 Check */etc/services* to ensure that port assignments for the CiscoWorks applications were removed.

Step 5 Check */etc/inetd.conf* to ensure that the CiscoWorks tftp entry was removed.

Troubleshooting the Uninstallation

If errors occurred during uninstallation, review the uninstallation log file */var/tmp/ciscouninstall.log* to determine the cause of the errors. Each uninstallation is appended to this file. For additional troubleshooting information, See Appendix A, “Troubleshooting.”



Verifying Installation

The purpose of this chapter is to help you verify AUS installation.

This chapter contains:

- Logging into the CiscoWorks Server Desktop, page 3-1
- Verifying AUS Installation, page 3-3

Logging into the CiscoWorks Server Desktop

Before you begin, make sure that your browser is configured correctly for CiscoWorks. See the *Installing CiscoWorks Common Services* for details, if needed.

The CiscoWorks Server desktop is the interface for CiscoWorks network management tools, including AUS.

Step 1 To access the CiscoWorks server from your browser, enter *one* of the following:

- **http://<qualified domain name of the server>:1741**
- **http://<IP address of the server>:1741**

The CiscoWorks login page appears (Figure 3-1).

Figure 3-1 CiscoWorks Login page



Step 2 To log in, enter the reserved username **admin** in both the Name and Password fields of the Login Manager.

Step 3 Click **Connect** or press **Enter**. You are now logged in.

**Caution**

When the system is installed initially, “admin” is the default password. To prevent all users from accessing privileged tools, change the password for “admin” immediately after installation.

Step 4 Change the password using **Server Configuration>Setup>Security>Modify My Profile**.

For more information, see *Installing CiscoWorks Common Services*.

**Note**

Login sessions time out after 2 hours of inactivity. If the session times out, you are prompted to log in again.

Verifying AUS Installation

You can verify that you successfully installed AUS.

Step 1 Log in to the CiscoWorks Server, then select **VPN/Security Management Solution**. Below that entry, you should see the AUS tool icon (Figure 3-2).

Step 2 From the CiscoWorks server desktop, select **Server Configuration>Administration>Package Options** (Figure 3-3).

Step 3 Scroll through the alphabetical list of package names to see the installed options. You will see AUS listed in alphabetical order in lowercase letters.

Figure 3-2 AUS Tool Icon



Figure 3-3 Package Options





Troubleshooting

This appendix provides troubleshooting information for AUS installation. It contains:

- Understanding AUS Installation Error Messages, page A-1
- Viewing AUS Process Status, page A-2
- Changing AUS Process Status, page A-3
- Calling the Technical Assistance Center (TAC), page A-4

Understanding AUS Installation Error Messages

Table A-1 shows installation error messages, their probable causes, and possible solutions.

Table A-1 *Installation Error Messages*

Error Message	Probable Cause	Possible Solution
Cannot find required component Core.	CiscoWorks Common Services is not installed.	Install CiscoWorks Common Services.

Viewing AUS Process Status

Any CiscoWorks user can view the status of any process by selecting **Server Configuration > Administration > Process Management > Process Status** from the CiscoWorks Server navigation tree. AUS runs on the Tomcat server, so you can verify that AUS is running properly by making sure that the Tomcat server is running.

**Note**

From the browser, only users with administrator privileges can start and stop processes. From the server, only users with local administrator privileges can start and stop processes.

Step 1 Log into the CiscoWorks Server. See Logging into the CiscoWorks Server Desktop, page 3-1.

The CiscoWorks Server desktop appears.

Step 2 Select **Server Configuration > Administration > Process Management > Process Status**.


Step 3 Check the status of:

- Apache—Make sure that the web server is running properly.
 - SqlCoreDB—Make sure that the SQL database is running properly.
 - Tomcat—Make sure that the java servlets that comprise the AUS user interface are running properly.
-

Changing AUS Process Status

If any process is not running, you can restart it from the desktop or from the server.

Restarting Processes from the Desktop

-
- Step 1** To restart processes from the desktop, do one of the following:
- Select **Server Configuration > Administration > Process Management > Start Process**.
 - Enter **pdexec <Process Name>** from the command line, at the prompt.
- Step 2** From the Start Process page, select **System** to start all processes, or select the specific process to start.
-  **Note** If you select specific processes, the process dependencies are not started automatically.
-
- Step 3** Wait 5 minutes for the processes to start.
- Step 4** If the problem persists, restart all processes from the server.
-

Restarting Processes from the Server

To restart processes from the server, you must first stop them, then start them again. The steps to take depend on whether you are on a Windows 2000 or Solaris server:

- For Windows 2000 servers:
 - To stop all processes, enter **net stop crmdmgtd**.
 - To start processes, enter **net start crmdmgtd**.

- For Solaris servers:
 - To stop all processes, enter `/etc/init.d/dmgttd stop`.
 - To start all processes, enter `/etc/init.d/dmgttd start`.

**Note**

If stopping and starting all processes does not correct the problem you are trying to solve, contact your system administrator.

Calling the Technical Assistance Center (TAC)

If you had problems while installing AUS, do the following before calling TAC:

- Make sure the system hardware and software requirements are met.
- Make sure the disk space is not full.
- Make sure the CD-ROM drive is not defective: mount the CD-ROM remotely on a different machine and try again to install AUS.

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>

TAC representatives might ask you to send them the installation or tomcat log file:

- For Windows 2000:
 - `c:\program files\CSCOpX\mdc\log\autoupdate.log`
 - `c:\program files\CSCOpX\mdc\tomcat\logs\stdout.log`
- For Solaris:
 - `/opt/CSCOpX/mdc/log/autoupdate.log`
 - `/opt/CSCOpX/mdc/tomcat/logs/stdout.log`

**Tip**

To create a report, select **Server Configuration > Diagnostics > Collect Server Information** from the CiscoWorks Server navigation tree. Then email the generated report to TAC as described in the “Technical Assistance Center” section on page Boilerplate.



INDEX

A

additional requirements for installation

hardware

client 1-4

server 1-3

software

client browser 1-4

client operating system 1-4

server operating system 1-3

audience for this document v

B

browser requirements for client 1-4

C

cautions

regarding

admin password, changing 3-3

CiscoWorks Common Services packages
during uninstall 2-5

network inconsistencies and remote
installation on Solaris 2-6

uninstalling AUS on Solaris 2-9

uninstalling AUS on Windows 2000 2-5

significance of vi

CiscoWorks Server

CiscoWorks login screen (figure) 3-2

desktop, logging into 3-1

client requirements 1-4

browser 1-4

disk drive space 1-4

hardware, additional 1-4

Java Plug-in 1-4

memory 1-4

platform 1-4

table of 1-4

D

disk drive

space requirements on

client 1-4

server 1-3

documentation vi

audience for this v

related to this product viii

typographical conventions in v

-
- E
- error messages A-1
-
- H
- hardware requirements
- client
 - additional 1-4
 - platform 1-4
 - server, additional 1-3
- help
- (see also troubleshooting) A-1
 - TAC
 - things to do before calling A-4
-
- I
- installing AUS 2-1
- error messages (table) A-1
 - on Solaris 2-6
 - AUS database, exporting to another server 2-8
 - procedure 2-6
 - tips for 2-8
 - on Windows 2000 2-2
 - AUS database, exporting to another server 2-4
 - procedure 2-2
 - tips for 2-4
 - prerequisites (see prerequisites) 1-2
 - process overview 2-1
 - uninstalling (see uninstalling) 2-5
 - verifying installation 3-1
 - admin password, caution regarding 3-3
 - logging into CiscoWorks Server desktop 3-1
 - procedure 3-3
-
- J
- Java console, enabling 1-5
- Java Plug-in, client requirement 1-4
-
- L
- logging into the CiscoWorks Server desktop 3-1
-
- M
- memory (RAM) requirements
- client 1-4
 - server 1-3
-
- O
- operating system requirements
- client 1-4
 - server 1-3

overview of AUS 1-2

P

package options, verifying 3-3

platform requirements

client 1-4

server 1-3

prerequisites 1-2

client 1-4

browser software 1-4

disk drive space 1-4

hardware, additional 1-4

Java Plug-in 1-4

memory 1-4

platform 1-4

software 1-4

table of 1-4

Java console, enabling 1-5

server 1-3

disk drive space 1-3

hardware, additional 1-3

memory (RAM) 1-3

platform 1-3

software 1-3

table of 1-4

process status

changing

restarting from the desktop A-3

restarting from the server A-3

viewing A-2

R

RAM requirements

client 1-4

server 1-3

requirements (see prerequisites) 1-2

S

server requirements

disk drive space 1-3

hardware, additional 1-3

memory (RAM) 1-3

operating system 1-3

platform 1-3

software 1-3

table of 1-3

software requirements

browser on client 1-4

operating systems

client 1-4

server 1-3

supported devices 1-5

system requirements (see prerequisites) 1-2

T

TAC (Technical Assistance Center)

things to do before calling **A-4**

technical support

(see also troubleshooting) **A-1**

TAC

things to do before calling **A-4**

tips on

installing AUS

on Solaris **2-8**

on Windows 2000 **2-4**

uninstalling AUS on Solaris **2-9**

troubleshooting **A-1**

error messages **A-1**

installation

on Solaris **2-8**

on Windows 2000 **2-4**

process status

changing **A-3**

viewing **A-2**

things to do before calling TAC **A-4**

uninstallation on Solaris **2-9**

typographical conventions in this document **v**

cautions regarding **2-9**

procedure **2-9**

on Windows 2000 **2-5**

cautions regarding **2-5**

procedure **2-5**

U

uninstalling AUS

on Solaris **2-9**