



Release Notes for Cisco Security Agent for Cisco Unity, Release 1.1(3)

Published June 7, 2004

These release notes provide download, installation, and upgrade instructions, and information on new and changed functionality, and caveats for Cisco Security Agent for Cisco Unity, Release 1.1(3).

Cisco Security Agent for Cisco Unity software is available on the Cisco Unity Crypto Software Download page at <http://www.cisco.com/cgi-bin/tablebuild.pl/unity3d>.

Contents

These release notes contain the following sections:

- [Introduction, page 2](#)
- [System Requirements and Supported Software, page 3](#)
- [Determining the Software Version, page 3](#)
- [Notes on Using Cisco Security Agent for Cisco Unity, page 4](#)
- [Downloading Cisco Security Agent for Cisco Unity 1.1\(3\), page 6](#)
- [Installing Cisco Security Agent for Cisco Unity 1.1\(3\), page 7](#)
- [Upgrading to Cisco Security Agent for Cisco Unity 1.1\(3\), page 8](#)
- [Disabling and Re-enabling the Cisco Security Agent Service, page 8](#)
- [Uninstalling Cisco Security Agent for Cisco Unity, page 9](#)
- [New and Changed Functionality—Release 1.1\(3\), page 10](#)
- [Caveats, page 10](#)
- [Troubleshooting, page 12](#)
- [Cisco Unity Documentation, page 13](#)
- [Obtaining Documentation, page 14](#)
- [Documentation Feedback, page 14](#)



Corporate Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

Copyright © 2004 Cisco Systems, Inc. All rights reserved.

- [Obtaining Technical Assistance, page 15](#)
- [Obtaining Additional Publications and Information, page 16](#)

Introduction

Cisco Security Agent for Cisco Unity is a standalone Cisco Security Agent that is provided free of charge by Cisco Systems for use with Cisco Unity servers that meet the system requirements specified in the “[System Requirements and Supported Software](#)” section on [page 3](#). The agent provides intrusion prevention, malicious mobile code protection, operating system integrity assurance, and audit log consolidation based on a tested set of security rules (policies). It controls system operations by allowing or denying selected system actions before system resources are accessed. This process occurs transparently and does not significantly affect overall system performance.



Caution

Cisco Security Agent for Cisco Unity should not be viewed as providing complete security for Cisco Unity servers. Instead, it should be viewed as an additional line of defense that enhances security when used with other defenses such as virus-scanning software and a firewall.

The agent was created by using CiscoWorks Management Center for Cisco Security Agents and is based on the following Management Center for Cisco Security Agents version 4.0.2, build 629 policies:

- Required Windows System Module
- Common Security Module
- Common Web Server Security Module
- Restrictive MS IIS Module
- Server Module
- User Authentication Auditing Module
- Virus Scanner Module
- Restrictive SQL Server Module

Cisco Security Agent for Cisco Unity version 1.1(3) also includes the Unity Base Group Exceptions policy, which allows normal Cisco Unity operations that the other policies would not allow.

To add, change, delete, or view policies included in Cisco Security Agent for Cisco Unity, run CiscoWorks Management Center for Cisco Security Agents, and import the file CiscoUnity-CSA-4.0.2.629-1.1.3.export. The file is available at <http://www.cisco.com/cgi-bin/tablebuild.pl/unity3d>. (To use CiscoWorks Management Center for Cisco Security Agents, you also need to order part CSA-IPT-UPGRADE-K9.)

For more information on CiscoWorks Management Center for Cisco Security Agents and on Cisco Security Agent, refer to <http://www.cisco.com/en/US/products/sw/cscowork/ps5212/index.html>.

System Requirements and Supported Software

Software Requirements

- Cisco Unity version 4.0(1) or later running on the Cisco Unity server.
- Microsoft Windows 2000 Server in English or Windows 2000 Advanced Server in English running on the Cisco Unity server. Other language versions are not supported.
- If the message store is installed on the Cisco Unity server, Microsoft Exchange 2000 for the message store.
- If the message store is not installed on the Cisco Unity server, IBM Lotus Domino, Microsoft Exchange 2003, or Microsoft Exchange 2000 for the message store.

**Note**

If you install Cisco Security Agent for Cisco Unity on a server running Windows in Japanese, the display of some non-ASCII characters will be corrupted.

Supported Optional Software

Only the following optional software has been qualified for use on a Cisco Unity server that is running Cisco Security Agent for Cisco Unity:

- Adobe Acrobat Reader, version 4 and later.
- McAfee NetShield for Microsoft Windows NT and Windows 2000, version 4.5 and later.
- Trend Micro ScanMail for Microsoft Exchange 2000, version 5 and later.
- Trend Micro ServerProtect for Microsoft Windows, version 5.5
- VERITAS Backup Exec for Microsoft Windows NT and Windows 2000, version 8.5 and later.
- VERITAS NetBackup version 4.5 and later.
- Windows Automatic Update. It must be configured not to automatically download updates to the Cisco Unity server.
- WinZip, version 7 and later.

Other optional software that is supported on the Cisco Unity server is not supported when the server is running Cisco Security Agent for Cisco Unity.

Determining the Software Version

This section contains procedures for determining the version in use for the following software:

- [Cisco Security Agent, page 4](#)
- [Policy for Cisco Security Agent for Cisco Unity, page 4](#)

Cisco Security Agent

To Determine the Cisco Security Agent Version in Use

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\Cisco Systems, Inc.\System Info\CSA Agent\Version.

Step 4 Close Regedit.

Policy for Cisco Security Agent for Cisco Unity

To Determine the Policy Version in Use for Cisco Security Agent for Cisco Unity

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\Cisco Systems, Inc.\System Info\Unity-CSA Policy\Version.

Step 4 Close Regedit.

Notes on Using Cisco Security Agent for Cisco Unity

The following sections contain information on using Cisco Security Agent for Cisco Unity:

- [Cisco Security Agent Service Must Be Disabled for Specific Tasks, page 5](#)
- [Cisco Security Agent Taskbar Icon Available Only for First Windows Logon, page 5](#)

- [Locations in Which Cisco Security Agent Logs Events, page 6](#)
- [Web Browsing from the Cisco Unity Server, page 6](#)

Cisco Security Agent Service Must Be Disabled for Specific Tasks

The Cisco Security Agent service must be disabled and stopped in the following situations:

- Before you use any Cisco Unity tool in:
 - Cisco Unity Tools Depot.
 - The CommServer\Utilities directory.
 - The CommServer\TechTools directory.
- Before you use any Cisco Unity tool that you download from CiscoUnityTools.com.
- Before you install any software on the Cisco Unity server.
- Before you run the Configure Cisco Unity Failover wizard.
- Before you upgrade any software, including Cisco Unity, on the Cisco Unity server. This also applies to automatic upgrades (for example, installing service packs by using group policy objects or custom scripts). Cisco Security Agent for Cisco Unity allows supported virus-scanning applications to automatically download and install upgrades to virus-scanning components.
- Before you add, change, or delete values in the Windows registry.
- Before you change Windows system or boot files.



Caution

Do not stop the Cisco Security Agent service by using the net stop command or the Cisco Security Agent icon in the taskbar. These methods are not supported.



Caution

When you disable and stop the Cisco Security Agent service, you must re-enable and start it before it can monitor the Cisco Unity server again.

For instructions on disabling and re-enabling the service, see the [“Disabling and Re-enabling the Cisco Security Agent Service”](#) section on page 8.

Cisco Security Agent Taskbar Icon Available Only for First Windows Logon

If two people log on to Windows on the Cisco Unity server—one at the server and the other by using Windows Terminal Services, or both by using Terminal Services—only the first person to log on will have access to the Cisco Security Agent icon.

Locations in Which Cisco Security Agent Logs Events

Cisco Security Agent logs events in the following three locations:

Windows application event log	Events that are generated by Cisco Security Agent have an event source of CSAgent.
Securitylog.txt	<p>Cisco Security Agent logs one event per line. We recommend that each administrator who logs on to the Cisco Unity server add a shortcut for Securitylog.txt to the Windows desktop. The file is located in the <InstallDirectory>\Cisco\CSAgent\Log directory.</p> <p>The data in the file is in comma-separated-value format. In general, there should not be many entries in the file, so you should be able to read it in a text editor, for example, Notepad. (You might want to turn off word wrap.) If there are a lot of entries, you can view the data more easily if you copy the file to a computer on which a spreadsheet application is installed, change the filename extension from .txt to .csv, and open the file in the spreadsheet application.</p>
CSA Control Panel	To display the CSA Control Panel, double-click the Cisco Security Agent taskbar icon, and click the Messages tab. Only events that have occurred since you logged on to Windows appear in the CSA Control Panel.

Web Browsing from the Cisco Unity Server



Caution

Do not use the Cisco Unity server for web browsing, or you may inadvertently download malicious content. Some Cisco Security Agent protections for Internet Explorer were removed from Cisco Security Agent for Cisco Unity to allow the Cisco Unity Administrator to function properly.

Downloading Cisco Security Agent for Cisco Unity 1.1(3)

To Download Cisco Security Agent for Cisco Unity 1.1(3)

- Step 1** Confirm that the computer you are using has up to 20 MB of hard-disk space for the download file and the installed files.
- Step 2** On a computer with a high-speed Internet connection, go to the Cisco Unity Crypto Software Download page at <http://www.cisco.com/cgi-bin/tablebuild.pl/unity3d>.



Note To access the software download page, you must be logged on to Cisco.com as a registered user.

- Step 3** Click **CiscoUnity-CSA-4.0.2.629-1.1.3-K9.exe**.
- Step 4** Follow the on-screen prompts to complete the download.
- Step 5** If you plan to install Cisco Security Agent for Cisco Unity from a compact disc, burn the CD.

Installing Cisco Security Agent for Cisco Unity 1.1(3)


Note

If you are upgrading Cisco Security Agent for Cisco Unity to version 1.1(3), see the “[Upgrading to Cisco Security Agent for Cisco Unity 1.1\(3\)](#)” section on page 8.

We recommend that you install Cisco Security Agent for Cisco Unity after regular business hours because the installation will affect Cisco Unity performance. In addition, when the installation completes, you must restart the Cisco Unity server for Cisco Security Agent for Cisco Unity to start working.


Caution

Do not install Cisco Security Agent for Cisco Unity by using Windows Terminal Services, or the installation will fail.

To Install Cisco Security Agent for Cisco Unity 1.1(3)

- Step 1** Log on to the Cisco Unity server by using an account that is a member of the Administrators group or the Local Administrators group.
- Step 2** Confirm that the server has at least 20 MB of hard disk space available for the download file and the installed files.
- Step 3** If Cisco IDS Host Sensor or another intrusion-detection application is installed on the Cisco Unity server, uninstall the application before installing Cisco Security Agent for Cisco Unity. Refer to the Cisco IDS Host Sensor or other applicable documentation.
- Step 4** If Windows Automatic Update is configured to automatically download updates from the Microsoft website, disable it.
- Step 5** If virus-scanning software is installed on the Cisco Unity server, disable and stop the scanning services:
 - a. On the Windows Start menu, click **Programs > Administrative Tools > Services**.
 - b. In the right pane, double-click the name of the first virus-scanning service.
 - c. On the General tab, in the Startup Type list, click **Disabled**. This prevents the service from starting when you restart the server.
 - d. Click **Stop** to stop the service immediately.
 - e. Click **OK** to close the Properties dialog box.
 - f. Repeat Step b through Step e for each of the remaining virus-scanning services.
 - g. When the services have been disabled, close the Services MMC.
- Step 6** In Windows Explorer, browse to the directory to which you downloaded the Cisco Security Agent for Cisco Unity file, and double-click **CiscoUnity-CSA-4.0.2.629-1.1.3-K9.exe**.
- Step 7** Follow the on-screen prompts.


Caution

Do not change any of the default values, or the Cisco Security Agent may not function properly.

- Step 8** When the installation completes, click **Yes, I Want to Restart My Computer Now**, and click **Finish**.
Cisco Security Agent for Cisco Unity begins to work as soon as you restart the Cisco Unity server. You do not need to configure the application.
- Step 9** If virus-scanning software is installed on the Cisco Unity server, re-enable and start the scanning services:
- a. On the Windows Start menu, click **Programs > Administrative Tools > Services**.
 - b. In the right pane, double-click the name of the first virus-scanning service.
 - c. On the General tab, in the Startup Type list, click **Automatic** to re-enable the service.
 - d. Click **Start** to start the service.
 - e. Click **OK** to close the Properties dialog box.
 - f. Repeat Step **b** through Step **e** for each of the remaining virus-scanning services.
 - g. When the services have been disabled, close the Services MMC.
-

Upgrading to Cisco Security Agent for Cisco Unity 1.1(3)

Use the task list in this section to upgrade to version 1.1(3) of the Cisco Security Agent for Cisco Unity. The tasks refer to sections in these release notes.

Upgrade Task List

1. Download the software. See the [“Downloading Cisco Security Agent for Cisco Unity 1.1\(3\)”](#) section on page 6.
2. Disable the Cisco Security Agent service. See the procedure [“To Disable and Stop the Cisco Security Agent Service”](#) in the [“Disabling and Re-enabling the Cisco Security Agent Service”](#) section on page 8.
3. Uninstall the previous version. See the [“Uninstalling Cisco Security Agent for Cisco Unity”](#) section on page 9.
4. Install version 1.1(3). See the [“Installing Cisco Security Agent for Cisco Unity 1.1\(3\)”](#) section on page 7. When the installation is complete, the Cisco Security Agent service is enabled automatically.

Disabling and Re-enabling the Cisco Security Agent Service

The Cisco Security Agent service must be disabled and stopped before you install or upgrade any software on the Cisco Unity server. (For information on other situations in which you must disable the Cisco Security Agent service, see the [“Cisco Security Agent Service Must Be Disabled for Specific Tasks”](#) section on page 5.)



Caution

When you disable and stop the Cisco Security Agent service, you must re-enable and start it before it can monitor the Cisco Unity server again.

**Caution**

Do not stop the Cisco Security Agent service by using the net stop command or the Cisco Security Agent icon in the taskbar. These methods are not supported.

To Disable and Stop the Cisco Security Agent Service

-
- Step 1** On the Windows Start menu, click **Programs > Administrative Tools > Services**.
 - Step 2** In the right pane, double-click **Cisco Security Agent**.
 - Step 3** On the General tab, in the Startup Type list, click **Disabled**. This prevents the service from starting when you restart the server.
 - Step 4** Click **Stop** to stop the service immediately.
 - Step 5** Click **OK** to close the Cisco Security Agent Properties dialog box.
 - Step 6** When the service has been disabled, close the Services MMC.
-

To Re-enable and Start the Cisco Security Agent Service

-
- Step 1** On the Windows Start menu, click **Programs > Administrative Tools > Services**.
 - Step 2** In the right pane, double-click **Cisco Security Agent**.
 - Step 3** On the General tab, in the Startup Type list, click **Automatic** to re-enable the service.
 - Step 4** Click **Start** to start the service.
 - Step 5** Click **OK** to close the Cisco Security Agent Properties dialog box.
 - Step 6** When the service has been re-enabled, close the Services MMC.
-

Uninstalling Cisco Security Agent for Cisco Unity

To Uninstall Cisco Security Agent for Cisco Unity

-
- Step 1** Right-click the **Cisco Security Agent** icon in the Windows taskbar, and click **Suspend Security**.
If the icon does not appear in the taskbar, on the Windows Start menu, click **Programs > Administrative Tools > Services**, and stop the **Cisco Security Agent** service.
 - Step 2** On the Windows Start menu, click **Programs > Cisco Systems > Uninstall Cisco Security Agent**.
 - Step 3** Click **Yes** to confirm that you want to uninstall Cisco Security Agent for Cisco Unity.
 - Step 4** Click **Yes** again to restart the Cisco Unity server.
-

New and Changed Functionality—Release 1.1(3)

This section contains information about new and changed functionality for Cisco Security Agent for Cisco Unity, Release 1.1(3) only. Refer to the release notes of the applicable version for information about new and changed functionality in earlier versions of Cisco Security Agent for Cisco Unity. Release notes for all versions of Cisco Security Agent for Cisco Unity are available on Cisco.com at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_release_notes_list.html.

Version 1.1(3) Compiled with Cisco Security Agent Version 4.0.2.629

Cisco Security Agent for Cisco Unity is compiled with Cisco Security Agent version 4.0.2, build 629.

Caveats

This section describes Severity 1, 2, and select Severity 3 caveats.

If you have an account with Cisco.com, you can use Bug Toolkit to find more information on the caveats in this section, in addition to caveats of any severity for any release. Bug Toolkit is available at the website http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl.

Note that this section contains caveat information for Cisco Security Agent for Cisco Unity version 1.1(3), and for Cisco Security Agent versions 4.0.1, build 539 through 4.0.2, build 628 that may affect Cisco Security Agent for Cisco Unity. For caveat information for earlier versions of Cisco Security Agent for Cisco Unity, refer to the applicable release notes. Release notes for all versions of Cisco Security Agent for Cisco Unity are available at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_release_notes_list.html.

Open Caveats—Release 1.1(3)

Table 1 Cisco Security Agent for Cisco Unity, Release 1.1(3), Open Caveats

Caveat Number	Severity	Description
CSCee13192	3	<p>Symptom</p> <p>The Cisco Unity system will start to have network type problems including users not able to access their mailboxes and the following errors in the event log.</p> <p>Error 1</p> <p>Thread 0x000013A8 had a Failure on Port 10 in AvWav</p> <p>File: e:\views\Unity4.0.1.55\un_Miu\UnityAvWav\STRMIO.CPP(217) Method: StreamIoRead Failure: call to IStream:Read with error(80040115). For more information, click: http://www.CiscoUnitySupport.com/find.php</p> <p>Error 2</p> <p>An unexpected error has occurred while a subscriber is on the phone with Unity. This can potentially result in the subscriber hearing the failsafe conversation. Technical details are - MarkMessageRead returned [0x80040115] on line 154 of file e:\views\Unity4.0.1.55\un_Conv1\AvConvSubscriber\AvConvSubMsgPlaySvr\AvSValidMsgStreams.cpp. For more information, click: http://www.CiscoUnitySupport.com/find.php</p> <p>The key error is 80040115, which is a MAPI error indicating some type of network problem. Once the symptom starts occurring, it affects ~5-10% of all calls. On one system, Cisco Unity deadlocked but this may not be related.</p> <p>Condition</p> <p>This has been observed on heavily loaded Unity systems with CSA installed, running on 4-processor boxes with hyperthreading turned on.</p> <p>Workaround</p> <p>Disable hyperthreading in the BIOS on the Cisco Unity server.</p>
CSCee63515	3	<p>csacontrol.exe crashes:</p> <p>The agent software failed to compile the configuration sent from the central server).</p> <p>Process exception: Exception in CSAControl.exe: CSAControl.exe caused an EXCEPTION_ACCESS_VIOLATION in module ntdll.dll at 001B:77F50342 (minidump in C:\Program Files\Cisco\CSAgent\log\CSAControl.dmp)</p> <p>This had related event Process exception: Exception in CSAControl.exe: CrashHandler caught exception while processing an application exception</p>

Resolved Caveats—Release 1.1(3)

Table 2 Cisco Security Agent for Cisco Unity, Release 1.1(3), Resolved Caveats

Caveat Number	Severity	Description
CSCec86495	2	Crash detected with CSA Registry Driver
CSCed14125	2	CSA causes Unity server to blue screen (resolved with Cisco Unity-CM TSP version 7.0(4))
CSCed71018	3	File Access Control rule enforced after Agent stopped
CSCee16695	3	Event_queue table has millions of events not flushing automatically
CSCee30027	2	Cannot access the HELP section of the CSA MC
CSCok06055	2	If agent kit is deleted, new installed agents not in a group

Troubleshooting

The following sections contain information on troubleshooting Cisco Security Agent for Cisco Unity:

- [Problems with Cisco Unity or Errors from Cisco Security Agent, page 12](#)
- [Second Attempt to Install Software Fails Without a Warning, page 13](#)

Problems with Cisco Unity or Errors from Cisco Security Agent

Do the procedure in this section, if you encounter any of the following problems after installing Cisco Security Agent for Cisco Unity:

- Problems with Cisco Unity that cannot otherwise be explained.
- Cisco Security Agent errors in the Windows event log or in the Cisco Security Agent log file, <Drive>:\Program Files\Cisco\CSAgent\log\securitylog.txt.
- Cisco Security Agent error messages displayed on the screen.

If you cannot determine the cause of a Cisco Security Agent log entry or error message, contact Cisco TAC.

To Troubleshoot Problems with Cisco Unity or Errors from Cisco Security Agent

-
- Step 1** In the Windows taskbar, right-click the **Cisco Security Agent** icon, and click **Suspend Security**.
 - Step 2** Perform the operation that caused the error message.
 - Step 3** In the Windows taskbar, right-click the **Cisco Security Agent** icon, and click **Resume Security**.
 - Step 4** Perform the operation that caused the error message.

- Step 5** If the operation completes successfully with the Cisco Security Agent suspended and continues to fail with the Cisco Security Agent enabled, confirm that all of the software running on the Cisco Unity server is listed as supported in the “[System Requirements and Supported Software](#)” section on page 3.
- If unsupported software is installed on the server, remove the unsupported software and repeat this procedure.
- Step 6** If you are unable to resolve the problem, contact Cisco TAC and send them the Cisco Security Agent log file, <Drive>:\Program Files\Cisco\CSAgent\log\securitylog.txt.
-

Second Attempt to Install Software Fails Without a Warning

In the following case, an attempt to install software will fail without a warning:

1. You tried to install software without first disabling and stopping the Cisco Security Agent service.
2. Cisco Security Agent displayed the message
“Cisco Security Agent: A problem was detected, press one of the action buttons below.
Are you installing/uninstalling software? If not, this operation is suspicious.”
3. You clicked **No**.
4. You disabled and stopped the Cisco Security Agent service.
5. You tried again to install the software installation, but nothing happened.

When you clicked No in Step 3., your answer was cached in memory. The cache is cleared automatically after an hour. To clear the cache immediately so you can install the software now, do the following procedure.

To Clear the Cisco Security Agent Memory Cache So You Can Install Software

- Step 1** In the Windows taskbar, double-click the **Cisco Security Agent** icon.
- Step 2** Click the **Advanced** tab.
- Step 3** Click **Clear**.
- Step 4** Close the Cisco Security Agent Control Panel.
- Step 5** Before you retry installing software on the server, disable the Cisco Security Agent service. See the procedure “[To Disable and Stop the Cisco Security Agent Service](#)” section on page 9.
- Step 6** After you install the software, re-enable the Cisco Security Agent service. See the procedure “[To Re-enable and Start the Cisco Security Agent Service](#)” section on page 9.
-

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 at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/about/aboutdoc.htm.

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain 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 at this URL:

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

You can access the Cisco website at this URL:

<http://www.cisco.com>

You can access international Cisco websites at this URL:

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

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 Ordering tool:
<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, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

You can send comments about technical documentation 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

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

Cisco Technical Support Website

The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, 365 days a year at this URL:

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

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

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

Submitting a Service Request

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

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

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

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

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553 2447

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

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

Definitions of Service Request Severity

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

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

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

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

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

Obtaining Additional Publications and Information

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

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:
<http://www.cisco.com/go/marketplace/>
- 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://cisco.com/univercd/cc/td/doc/pcat/>
- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:
<http://www.ciscopress.com>
- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:
<http://www.cisco.com/packet>
- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. 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/ipj>
- World-class networking training is available from Cisco. You can view current offerings at this URL:
<http://www.cisco.com/en/US/learning/index.html>

CCVP, the Cisco logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networking Academy, Network Registrar, *Packet*, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0705R)

Copyright © 2004 Cisco Systems, Inc. All rights reserved.

