



# Introduction

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In this chapter you will find basic information that will help you prepare for troubleshooting Cisco Unity. Refer to the following sections:

- [Troubleshooting Preparation, page 1-1](#)—This section includes instructions for setting up for a diagnostic test.
- [Reporting Problems to Cisco TAC, page 1-4](#)—This section explains what information you will need to interact with the Cisco Technical Assistance Center, including instructions for obtaining logs and traces and enabling Miu diagnostics.
- [Disaster Recovery of the Cisco Unity Server, page 1-15](#)—This section contains instructions for restoring the Cisco Unity server in the event of a major system corruption or hardware problem.

## Troubleshooting Preparation

Problems with external and internal calls, message notification calls, and message waiting indicators can be caused by the phone system, by Cisco Unity, or by both, and are therefore difficult to diagnose. Several of the procedures for resolving problems use the single-line test, in which the phone lines connected to Cisco Unity are tested one at a time.

Most phone systems provide documentation on the codes that perform transfers, recalls, and other call progress functions. Have the phone system documentation available while performing the procedures in this section.

## Setting Up For a Diagnostic Test (Cisco CallManager Integration Only)

To perform diagnostic tests you need three test extensions. Phone 1 is assigned to the Unity Example Subscriber. Phones 2 and 3 are set up only in CallManager and do not need to have a Cisco Unity subscriber assigned. All three extensions must be in the same calling search space as Cisco Unity.

### To set up the test configuration

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- Step 1** Set up two test extensions (Phone 1 and Phone 2) on the same phone system that Cisco Unity is connected to.
  - Step 2** Set Phone 1 to forward calls to the Cisco Unity pilot number when calls are not answered.
  - Step 3** In the Cisco Unity Administrator, click **Subscribers > Subscribers > Profile** for the Example Subscriber.
  - Step 4** In the Extension field, enter the extension of Phone 1.
  - Step 5** Click the **Save** icon.
  - Step 6** In the navigation bar, click **Call Transfer** to go to **Subscribers > Subscribers > Call Transfer** for Example Subscriber.
  - Step 7** Under Transfer Incoming Calls, click **Yes, Ring Subscriber's Extension**, and confirm that the extension number is for Phone 1.
  - Step 8** Under Transfer Type, click **Release to Switch**.
  - Step 9** Click the **Save** icon.
  - Step 10** Click **Messages** for Example Subscriber.
  - Step 11** Under Message Waiting Indicators (MWIs), check **Use MWI for Message Notification**.
  - Step 12** In the Extension field, enter **x**.
  - Step 13** Click the **Save** icon.
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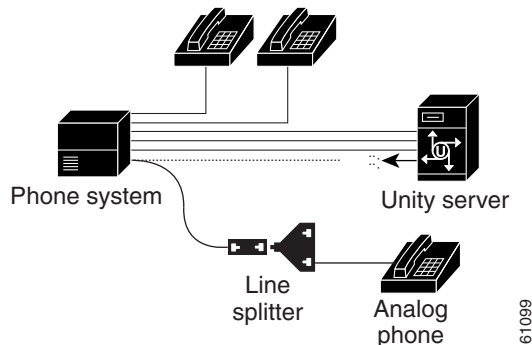
## Setting Up for a Single-Line Test (Circuit-Switched Phone System Integrations Only)

To perform diagnostic tests, you need a lineman test set or an analog phone with a ringer. Additional equipment and the method you use to set up for a single-line test depend on the type of voice cards in the Cisco Unity server.

### To set up a Dialogic D/120 card for single-line testing

These voice cards support two lines per jack, so you need a line splitter to test individual lines.

- Step 1** Determine which line you are having trouble with, and unplug it from the voice card.

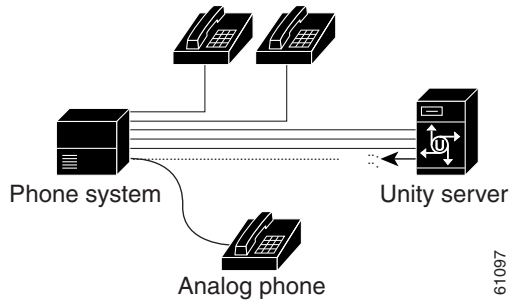


- Step 2** Plug that line into a line splitter.
- Step 3** Plug the test phone into the jack on the line splitter corresponding to the port you are having trouble with. The inner pair of wires correspond to the first port, and the outer pair of wires correspond to the second port.

### To set up a Dialogic D/41E-series card for single-line testing

This voice card supports only one line per jack.

- Step 1** Determine which line you are having trouble with, and unplug it from the voice card.



**Step 2** Plug that line into the test phone.

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## Reporting Problems to Cisco TAC

When you report a problem to the Cisco Technical Assistance Center (TAC), you will be asked to provide information about your system and about the problem. This section provides procedures for gathering the system information and problem descriptions that may be requested. The more data that can be gathered and communicated about a problem, the more likely it is that the problem will be diagnosed and fixed quickly.

## System Information

Have the following system information ready when you call:

- Cisco Unity version number currently in use. To locate the version number perform the procedure, [To determine the Cisco Unity version in use](#).
- AVCisco TSP version number currently in use. To locate the version number, perform the procedure, [To determine the TSP version in use](#).
- RealSpeak TTS version number currently in use. To locate the version number, perform the procedure, [To determine the RealSpeak version in use](#).
- Build number(s) of any software releases or upgrades installed.
- Number, type, and speed of processors.

- Memory and pagefile size.
- Hard disk size and free space.
- Number and type of voice ports installed.
- Phone system integration, including the manufacturer, model, and version number (if applicable).
- Cisco Unity switch.ini file version number currently in use. To locate the version number, perform the procedure, [To determine the switch.ini version in use](#).
- Other telephony software or hardware installed, such as fax, UniModem, or pcAnywhere.
- Which Windows 2000 and Exchange service packs are installed.
- Number of subscribers in the Cisco Unity and Exchange databases.
- Size of the Exchange database file.
- Approximate normal Cisco Unity server CPU utilization. (For example, does the Windows task manager often show 100 percent CPU utilization, or is it usually less than 80 percent?)

#### To determine the Cisco Unity version in use

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- Step 1** In the Cisco Unity Administrator, go to the **System > Configuration > Software Versions** page. The Cisco Unity version number is displayed in the Cisco Unity Version field.
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#### To determine the TSP version in use

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- Step 1** Navigate to the WinNT\System32 directory.
- Step 2** Right-click the **Avskinny.tsp** file, and select **Properties**.
- Step 3** In the Properties window, click the **Version** tab.
- Step 4** The File Version value is the TSP version number currently in use.
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**To determine the switch.ini version in use**

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- Step 1** Navigate to the CommServer directory (the default location is C:\CommServer).
- Step 2** Double-click **Editswitch.exe**.
- Step 3** Click **Edit this Switch Configuration**.
- Step 4** The switch.ini file version number is displayed in the title bar of the window.
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**To determine the RealSpeak version in use**

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- Step 1** Browse to the CommServer\RealSpeak\Api\Lib directory.
- Step 2** Right-click the file **Lhstts.dll**, and click **Properties**.
- Step 3** Click the **Version** tab.
- Step 4** In the Items list, click **Product Version**. The DLL version is displayed in the Value window and corresponds to the following RealSpeak versions:
- 2.1.0.0 = RealSpeak version 2.0(1)
  - 2.11.0.0 = RealSpeak version 2.1(1)
  - 2.12.0.0 = RealSpeak version 3.0(0)
  - 2.13.0.0 = RealSpeak version 3.0(1)
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## Problem Description

Be prepared to give a complete description of the problem including:

- Symptoms such as lost ports, Event log errors, or Dr. Watson errors
- Problem frequency under normal load conditions (for example, every call, once per hour, or once only)
- Problem frequency when specific attempts are made to reproduce it
- Detailed sequence of steps to reproduce the problem
- Date and time of last known occurrence of the problem

- Which digits were entered by the caller (for example, menu selections or subscriber extensions, or the extension of the caller and/or called port), if known
- Which port(s) were affected by the problem, if known
- Applicable logs and traces (see the following “[Logs and Traces](#)” section for more information on how to obtain log and trace files)

## Logs and Traces

For problems in the Miu or TSP, Cisco TAC may ask for logs and traces before the problem can be diagnosed and fixed. Miu diagnostic logs, along with Event log and/or Dr. Watson logs, if available, are usually sufficient for the initial phase of diagnosing a problem. TSP traces are typically not required unless Cisco TAC determines that the problem is happening at a level below the Miu.



### Caution

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Diagnostic traces that are set before a Cisco Unity software upgrade are not preserved and must be reset after the upgrade.

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Refer to the following sections for details about third-party logs and traces:

- [Dr. Watson Logs, page 1-8](#)
- [Event Log Traces, page 1-8](#)

Most Cisco Unity components such as the Miu, Arbitrator, Notifier, Conversations, or SA can write diagnostic information to a log file. Diagnostic output of the problem occurring is critical to determining what caused the problem. If the problem seldom occurs, such as only once a day, it can be difficult to find the actual occurrence of the problem in the diagnostic log. Refer to the following sections for details about Cisco Unity diagnostic traces:

- [MIU Diagnostics, page 1-9](#)
- [TSP Traces, page 1-12](#)

## Dr. Watson Logs

Dr. Watson is a program invoked by Windows 2000 when a serious problem occurs that is not handled by Cisco Unity. When Dr. Watson is invoked, a dialog box appears containing an error message, for example, “Dr. Watson encountering an error in the AvCsMgr.exe process.” Dr. Watson errors may occur in other processes such as tapisrv.exe, or dlgc\_srv.exe.

### To obtain a Dr. Watson log

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- Step 1** If a Dr. Watson error occurs, make a copy of the file `\winnt\drwtsn32.log`.
  - Step 2** Before you attempt to reproduce the problem, from a command prompt, enter `drwtsn32` and press **ENTER**.
  - Step 3** Set Number of Instructions to **50**.
  - Step 4** Specify the number of errors to record in the Number of Errors to Save field. The default is **10**.
  - Step 5** In the Dump Symbol Table box, confirm that the **Dump All Thread Contexts**, **Append to Existing Log File**, **Visual Notification**, and **Create Crash Dump File** boxes are checked.
  - Step 6** Click **OK** to close the dialog box.
  - Step 7** Reproduce the problem.
  - Step 8** Repeat [Step 1](#).
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## Event Log Traces

The Event log is used by Windows applications to report errors or warnings. The Miu reports serious failures to the Event log, for example, “Component Miu: thread <XXX> had a failure on port <YYY> in AvWav.”

### To obtain an Event log trace

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- Step 1** From the Windows Start Menu click **Programs > Administrative Tools > Event Viewer**.
- Step 2** Go to the **Application log**.

- Step 3** Look for failure messages in the Application log. These can include errors from the Miu or AvWav, as well as errors from other Cisco Unity components or Exchange errors.
  - Step 4** If failure messages are present in the Application log, go to the **Event Viewer Action** menu.
  - Step 5** Choose **Save as Type CSV (Comma Delimited) \*.csv** and click **Save**. Do not save the raw Event log data in a \*.evt file.
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## MIU Diagnostics

Enable the Miu diagnostics when you are obtaining traces for an Miu problem. Enable any other diagnostics that seem appropriate (see [Table 1-1](#)). For example, if there are AvWav errors in the Event log, enable the AvWav diagnostics. However, keep in mind that running additional diagnostics can affect system performance and hard drive space.

### To enable Miu diagnostics

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- Step 1** On the Windows Start menu, click **Programs > Unity > Unity Diagnostic Tool**.
- Step 2** On the Cisco Unity Diagnostic Viewer screen, click the **Configure Micro Traces** icon.
- Step 3** Check the check boxes for all traces beginning with **MIU**.
- Step 4** On the Cisco Unity Diagnostic Viewer screen, click **Start New Log Files**.
- Step 5** Reproduce the problem.
- Step 6** To view the log files, click **Processes > AvCsMgr**, and then click the **Current** log file.
- Step 7** The selected log file is formatted and displayed in the right pane.
- Step 8** To export or save a copy of the log file, click **Action > Export list**.
- Step 9** Name the file and save it to a location of your choice in .txt or .csv format.
- Step 10** To turn off the traces set in [Step 3](#), on the Cisco Unity Diagnostic Viewer screen, click the **Disable All Traces** icon.

- Step 11** In the Disable All Traces Wizard screen, check the **Disable All Traces** check box, and click **Finish**.

**Table 1-1** Diagnostic Traces by Problem Type

Type of Problem	Trace	Purpose
Miu	MiuGeneral 0-4 SystemConfig 10-12 MiuCall 15	Should be enabled at all times.
	MiuGeneral 12	Enables diagnostics for messages that the Miu receives from TAPI.
	MiuGeneral 16	Enables diagnostics for the Miu internal synchronization.
	MiuIO 11	Enables high-level diagnostics for play and record operations.
	MiuMethods 14	Enables diagnostics for the Miu line object.
	MiuMethods 18	Enables diagnostics for the Miu interface to TAPI.
	MiuIO 14	Enables diagnostics for wave operations at a lower level by tracing each call from the Miu into the AvWav component.
Determining which call had the problem	MiuCall 14	Enables diagnostics for each portion of CallInfo, for example, CallerID and CalledID.  Always enable this diagnostic if the problem takes a long time to reproduce.
	MiuGeneral 14	Enables diagnostics for all digits, which can help determine on which call the user entered a particular string of digits.  Always enable this diagnostic if the problem takes a long time to reproduce.

**Table 1-1 Diagnostic Traces by Problem Type (continued)**

<b>Type of Problem</b>	<b>Trace</b>	<b>Purpose</b>
AMIS	Notifier 13, 19, 24, 26, and 28 Conv AMIS 28 AMIS frames CDE 10, 14, 18	Enables diagnostics for AMIS messages.
AvWav	MiuIO 15-23	Enables all AvWav traces. Note that enabling AvWav traces will often use a lot of disk space.
Message notification	MiuMethods 10, 12	Enables diagnostics for the portion of the Miu that is called when new calls are generated.
MWIs	MiuIntegration 12, 14	Enables diagnostics that trace MWI requests.
	MiuMethods 10	Enables diagnostics for the portion of the Miu that is called when MWI requests are made.
	MiuMethods 20, 22	Enables diagnostics for the integration components of an analog or serial integration.
	Notifier 12, 20, 21	Enables additional diagnostics for MWI requests.
Problems related to digits, such as digits missed when entered by callers	MiuGeneral 14	Enables diagnostics for new digits received from TAPI.
	MiuIntegration 10, 11	Enables diagnostics for integration digits for an analog or serial integration.
Extension remapping	MiuCall 15	Enables diagnostics for extension remapping.
	MiuGeneral 10	Enables diagnostics for Miu initialization.
	MiuIntegration 10	Enables verification of extension number information before it is mapped.

**Table 1-1 Diagnostic Traces by Problem Type (continued)**

Type of Problem	Trace	Purpose
Call routing	MiuIntegration 13	Enables diagnostics indicating if a call did not receive any CallInfo from TAPI or the integration.
	MiuCall 14	Enables diagnostics for each piece of CallInfo, such as Caller ID or Forwarding ID.
	MiuMethods 20, 22	Enables diagnostics for an analog or serial integration.
	MiuIntegrations 10, 11	Enables diagnostics for integration digits for an analog or serial integration.
Miu failed to initialize, or initialized but did not find any ports available	MiuGeneral 10	Enables diagnostics for the Miu initialization sequence.
	MiuMethods 10	Enables diagnostics for the portion of the Miu that is called when initialization requests are made.
Reports	ReportCrunch 00, 01, 02, 10, 11, 12 ReportExtractor 00, 01, 02, 10, 11, 12 ReportPostprocess 00, 01, 02, 10, 11, 12 ReportPreprocess 00, 01, 02, 10, 11, 12 ReportPump 00, 01, 02, 10, 11, 12 ReportRunrep 00, 01, 02, 10, 11, 12	Enables diagnostics for reports.

## TSP Traces

TSP traces of a problem are normally not needed. However, if Cisco TAC determines that TSP traces are needed, they will ask you to provide them. Do the applicable procedure, depending on the TSP.

### To obtain Dialogic analog or Libra TSP traces

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- Step 1** Exit Cisco Unity, if it is running.
  - Step 2** Open a command prompt window and browse to the CommServer directory.

- Step 3** At the command prompt, enter **kill tapisrv** and press **Enter**.
- Step 4** Browse to the System32 directory. Copy the **TSP(s)** and **Wave Driver** files in this directory to a temporary location for later retrieval.
- Step 5** Browse to one of the following directories, based on your system configuration:

**CommServer\Dialogic\Debug** For Dialogic analog systems.

**LibraTspSetup\Debug** For Libra systems.

Locate the Debug TSP(s) and Wave Driver files for your system. For Dialogic analog systems, the Debug TSP file is **D41mt.tsp**. For Libra, the Debug TSP files needed are **D41mt.tsp**, **Dlglibra.tsp**, and **Dlgarb.tsp**. The Wave Driver for both Dialogic and Libra systems is **Dlgwave.dll**.

- Step 6** Copy the **Debug TSP(s)** and **Debug Wave Driver** files you located in [Step 5](#) to the System32 directory.



**Caution**

The debug version of the Dialogic TSP can have a significant impact on system performance. We recommend that this debug TSP be used only while actively reproducing the problem during a period of light system usage.

- Step 7** Go to the Services applet, and set the AvCsGateway process to **Manual Startup**.
- Step 8** Restart the Cisco Unity server.
- Step 9** Log on and go to a command prompt window.
- Step 10** Browse to the CommServer\Dialogic\Debug directory.
- Step 11** Enter **dbmon > dbmon.txt** to begin tracing the TSP. The output will go to the Dbmon.txt file.
- Step 12** Go to the Services applet, and start the **AvCsGateway** process.
- Step 13** Reproduce the problem.
- Step 14** After the problem has been reproduced, press **Ctrl-C** to stop Dbmon.
- Step 15** Copy the **dbmon.txt**. Send the file to Cisco TAC.
- Step 16** Replace the debug versions of the TSP(s) and Wave Driver with the original files that you copied into a temporary location in [Step 4](#).

- Step 17** Go to the Services applet, and set the AvCsGateway process to **Automatic Startup**.
- Step 18** For the changes to take effect, restart the Cisco Unity server.
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### To obtain Skinny TSP traces

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- Step 1** Confirm that the clocks on Cisco Unity and CallManager are synchronized.
- Step 2** Enable tracing on the CallManager system.
- Step 3** On the Windows Start menu, click **Programs > Unity > Unity Diagnostic Tool**.
- Step 4** On the Cisco Unity Diagnostic Viewer screen, click the **Configure Micro Traces** icon.
- Step 5** Check the check boxes for all **SkinnyTSP** traces except 23 - KeepAlive Messages.
- Step 6** On the Cisco Unity Diagnostic Viewer screen, click **Start New Log Files**.
- Step 7** Reproduce the problem.
- Step 8** To view the log files, click **Processes > AvSkinnyTsp**, and then click the **Current** log file.
- Step 9** The selected log file is formatted and displayed in the right pane.
- Step 10** To save a copy of the log file, click **Action > Export list**.
- Step 11** Name the file and save it to a location of your choice in .txt or .csv format.
- Step 12** To turn off the traces set in [Step 5](#), on the Cisco Unity Diagnostic Viewer screen, click the **Disable All Traces** icon.
- Step 13** In the Disable All Traces Wizard screen, check the **Disable All Traces** check box, and click **Finish**.
- Step 14** Send a copy of the TSP log files to Cisco TAC, along with the Miu diagnostic log and the CallManager trace file.
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# Disaster Recovery of the Cisco Unity Server

The following procedures, done in the order listed, are recommended for restoring the entire Cisco Unity server in the event of a disaster, such as major system corruption or unrecoverable hardware problems. The procedures contain instructions for recovery by using Backup Exec, a data management program from the VERITAS Software Corporation. If Cisco Unity is installed on a domain controller or a domain controller/global catalog server, you need to take additional steps to restore Exchange, SQL, and the Active Directory. Refer to the Microsoft website for information about restoring Exchange, SQL, and the Active Directory.

Customized Cisco Unity call routing rules are not included in backup file sets. If you need to restore the Cisco Unity server, recreate custom call routing rules manually by using the Cisco Unity Administrator. For more information, see the “Overview: Call Routing Tables” section in the “Call Routing” chapter of the *Cisco Unity System Administration Guide*, available on Cisco.com at [http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_unity/unity31/sag/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/unity31/sag/index.htm).

## To prepare the Cisco Unity server for recovery

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- Step 1** Reinstall Windows and Exchange with all current service packs required by Cisco Unity.
  - Step 2** Install the tape drive and associated drivers on the Cisco Unity server.
  - Step 3** If you are running Exchange 5.5, disable circular logging. If you are running Exchange 2000, circular logging is already disabled by default.
  - Step 4** Continue with the next procedure, [To restore the Cisco Unity server](#).
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## To restore the Cisco Unity server

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- Step 1** Restore Exchange and SQL files by using Microsoft procedures. See the Microsoft web site for details.
- Step 2** Install your backup software package on the Cisco Unity server, including the Agents for Microsoft Exchange and SQL. For assistance with Backup Exec, contact the VERITAS Software Corporation.

- Step 3** Click **OK** to disregard any error messages that inform you that SQL is not running.
- Step 4** On the Start menu, click **Programs > VERITAS Backup Exec**.
- Step 5** Insert the backup tape in the tape drive.
- Step 6** Click the **Devices** tab at the bottom of the window.
- Step 7** Expand the tree in the left pane, and click your tape drive device. A tape name appears in the right pane. If a tape name does not appear in the right pane, right-click the tape drive device and then click **Inventory**.
- Step 8** In the right pane, right-click the tape name and click **Catalog**.
- Step 9** Click **Run Now**.
- Step 10** On the toolbar, click **Restore**.
- Step 11** In the left pane, select the components on the Cisco Unity server to restore. Include the following selections:
- The Cisco Unity server, including the drives on which Cisco Unity and Windows 2000 are installed (the default is drive C), and any drives containing Exchange transaction logs or databases
  - Microsoft Exchange Directory
  - Microsoft Exchange Information Store
  - Microsoft Exchange Mailboxes (assuming that user mailboxes are associated with the local Cisco Unity server)
  - MS SQL Server
  - System State
- Step 12** Click the **General** tab.
- Step 13** Enter a job name.
- Step 14** Under Options, check the **Restore Security** and **Preserve Tree** check boxes.
- Step 15** In the Device list, click the tape drive.
- Step 16** Click the **Advanced** tab.
- Step 17** Click **Restore Over Existing Files**.
- Step 18** Click the **Exchange** tab.
- Step 19** Uncheck the **No Loss Restore (Do Not Delete Existing Log Files)** check box.
- Step 20** Check the **Restore Public Folder** and **Restore Private Mailboxes** check boxes.

- Step 21** Click **Run Now**.
- Step 22** If prompted, click **Yes** to overwrite the Exchange Directory.
- Step 23** Click the **Activity Monitor** tab at the bottom of the window if you want to watch the restore job as it progresses.
- Step 24** Click **Respond OK** to any warning dialog boxes that are displayed after the restore is complete.
- Do not restart the Cisco Unity server at this time.
- Step 25** Close **Backup Exec**.
- Step 26** Continue with the next procedure, [To restore the Microsoft Exchange Message Transfer Agent](#).
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### To restore the Microsoft Exchange Message Transfer Agent

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- Step 1** On the Windows Start menu, click **Settings > Control Panel > Services**.
- Step 2** In the list, click the **Microsoft Exchange Message Transfer Agent** service. If the status is Started, click **Stop**.
- Step 3** Insert the **Microsoft Exchange** compact disc 1 into the Cisco Unity server CD-ROM drive.
- Step 4** Open **Windows Explorer**.
- Step 5** From the Exchange compact disc, copy the contents of the folder `\setup\i386\bootenv` to `<drive>\Exchsrvr\mtadata`, where `<drive>` is the drive on which Exchange is installed on the Cisco Unity server.
- Step 6** Click **Yes to All** to replace all existing files.
- Step 7** Select all the files in the folder `\Exchsrvr\mtadata`.
- Step 8** Right-click the selection and then click **Properties**.
- Step 9** Uncheck the **Read-Only** check box.
- Step 10** Click **OK**.
- Step 11** Continue with the next procedure, [To rebuild the information store](#).
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### To rebuild the information store

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- Step 1** In the Services dialog box, start the **Microsoft Exchange Directory** and **Microsoft System Attendant** services, if they are not started.
- Step 2** Start the **Microsoft Exchange Information Store** service, then stop it.
- Step 3** Open a Command Prompt window, change to the drive on which Exchange is installed, and enter **cd \Exchsrvr\bin** to change directories.
- Step 4** Run the following utilities:
- **isinteg -patch**
  - **isinteg -pri -test mailbox,message,folder**
  - **isinteg -pub -test mailbox,message,folder**
  - **mtacheck**
- Optionally, run **isinteg -pri -fix -test alltests** and **isinteg -pub -fix -test alltests**. These optional commands check the information store and correct errors. If the information store is large, the commands will take a long time to complete. If you need to restore the Cisco Unity server quickly, you may want to skip the optional commands. The restore should work fine without running them, but it is a good idea to run them if you have time.
- Step 5** Close the **Command Prompt** window.
- Step 6** Restart the Cisco Unity server. After the server restarts, you may see a Dr. Watson notification and a message box alerting you that there are errors in the System Event Log. This is expected. Cisco Unity may not restart at this point. If Cisco Unity does not start, continue with [Step 7](#).
- Step 7** Open a **Command Prompt** window, change to the drive on which Exchange is installed, and enter **cd \Exchsrvr\bin** to change directories.
- Step 8** Run the following utilities again:
- **isinteg -patch**
  - **isinteg -pri -test mailbox,message,folder**
  - **isinteg -pub -test mailbox,message,folder**
- Optionally, run **isinteg -pri -fix -test alltests** and **isinteg -pub -fix -test alltests**.
- Step 9** Close the **Command Prompt** window.

- Step 10** Continue with the next procedure, [To run Consistency Adjuster](#).
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### To run Consistency Adjuster

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- Step 1** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Administrator**.
- Step 2** In the tree in the left pane, click the Cisco Unity server. If necessary, expand the Configuration and Servers containers under the Cisco Unity Site to display the Cisco Unity server name.
- Step 3** In the right pane, double-click **Directory Service**.
- Step 4** In the Directory Service Properties dialog box, click **Check Now**.
- Step 5** In the dialog box that appears, click **OK**.
- Step 6** Click **OK** to close the Directory Service Properties dialog box.
- Step 7** Close the **Exchange Administrator**.
- Step 8** Restart the Cisco Unity server. If Cisco Unity does not start after completion of all procedures in this “[Disaster Recovery of the Cisco Unity Server](#)” section, perform the procedures again.
- Step 9** If Cisco Unity still does not start, perform the procedures in the following “[Disaster Recovery Process Troubleshooting](#)” section.
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## Disaster Recovery Process Troubleshooting

### To check Microsoft Internet Information Server permissions

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- Step 1** Start the **Internet Service Manager**.
- Step 2** On the Start menu click **Programs > Administrative Tools > Internet Service Manager**.
- Step 3** In the left pane, browse to the Default Web Site container for Internet Information Server.

- Step 4** Perform [Step 5](#) through [Step 12](#) for each of the following objects: **SAWeb, SAHelp, Status, and AvXml**.
  - Step 5** Right-click the object and then click **Properties**.
  - Step 6** Click the **Virtual Directory** tab.
  - Step 7** Under Execute Permissions, click **Script Only**.
  - Step 8** Click the **Directory Security** tab.
  - Step 9** Under Anonymous Access and Authentication Control, click **Edit**.
  - Step 10** Confirm that the **Anonymous Access** box is unchecked.
  - Step 11** Click **OK**.
  - Step 12** Click **OK** to close the Properties dialog box.
  - Step 13** After confirming that the SAWeb, SAHelp, Status, and AvXml objects have the appropriate permissions, close the **Internet Service Manager**. If you made any changes, click **Yes** when prompted to save the console settings.
  - Step 14** If you made any changes, restart the Cisco Unity server.
  - Step 15** If Cisco Unity does not start, or if you did not make any changes, follow the steps in the next procedure, [To prepare for reregistering components \(optional\)](#).
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#### To prepare for reregistering components (optional)

In this procedure, you create a simple batch file to use in the procedure that follows. If you prefer not to create a batch file, you can skip directly to the procedure, [To reregister components](#).

Because there are so many DLLs, it is helpful to create a simple batch file to register the DLLs, instead of using the Windows Run dialog box to run Regsvr32.exe.

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- Step 1** Start a text editor.
  - Step 2** Enter  

```
for %*%x in (\commserver\components\*.dll) do regsvr32 %*%x
```
  - Step 3** Save the file in the \CommServer\Components directory as **reg.bat** (or any name that has .bat as the extension).

**Step 4** Open a **Command Prompt** window, change to the drive on which Cisco Unity is installed (the default is C:\CommServer), and enter **cd \commserver\components** to change directories.

**Step 5** Enter **reg** to run the batch file.

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### To reregister components

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**Step 1** On the drive on which Cisco Unity is installed (the default is C:\CommServer), run **Regsvr32.exe** or the batch file(s) you created in the previous procedure, on each of the following DLLs in the order listed:

- All the DLLs in the \CommServer\Components directory
- All the DLLs that do not have the letters “Ps” in their filenames in the \CommServer\Orderedcoms directory
- The remaining DLLs in the \CommServer\Orderedcoms directory in this order:
  - AvPropertySetPsSvr.dll
  - AlCommonPsSvr.dll
  - MalCommonPsSvr.dll
  - AvDohPsSvr.dll

**Step 2** Restart the Cisco Unity server. If the Cisco Unity server still does not start, contact Cisco TAC.

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