



# White Paper: Maintaining a Cisco Unity System (with Microsoft Exchange as the Message Store)

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## Introduction

Cisco Unity is a suite of software that includes Cisco Unity, Microsoft Windows 2000 Server, Microsoft Exchange 2000 or Exchange 5.5, Active Directory, Microsoft SQL Server 2000 or MSDE 2000, and Microsoft Message Queuing (MSMQ). Optional third-party software, such as virus scanning, backup, remote access, and security software, can also be installed on the Cisco Unity server. Additionally, Cisco Unity runs on standard PC hardware and related hardware drivers.

All of the software and hardware associated with the Cisco Unity server requires maintenance to ensure high availability. Degradation in any piece of the installed software can affect server performance. If you plan regular maintenance, you can reduce the likelihood of unplanned downtime.

This document contains information on the following topics:



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

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- [Scheduling Maintenance Tasks](#), page 2
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- [Appendix—Exiting and Starting the Cisco Unity Software and Server](#), page 15

## Scheduling Maintenance Tasks

The frequency of scheduled maintenance depends on your particular environment, taking into account such issues as system size, configuration, and traffic levels. At a minimum, we recommend that you do scheduled maintenance as indicated in [Table 1](#). If you already do the following tasks more frequently than we recommend, use your schedule rather than our recommendations.

**Table 1** *Maintenance Tasks and How Often to Perform Them*

Task	Daily	Monthly	Other
Forward unaddressed messages to the appropriate recipients. See the <a href="#">“Forwarding Unaddressed Messages to the Appropriate Recipients”</a> section on page 4.			Continually
Scan for viruses. See the <a href="#">“Scanning for Viruses”</a> section on page 11.	X		
Back up the Cisco Unity server. See the <a href="#">“Backing Up and Restoring Data”</a> section on page 12.	X		
Upgrade virus-scanning definitions. See the <a href="#">“Updating Virus-Scanning Definitions”</a> section on page 12.			Whenever new definitions become available
<i>Exchange</i> : Check for mailboxes that are over their limit. See the <a href="#">“Checking for Mailboxes that Are Over Their Size Limit”</a> section on page 5.		X	

**Table 1** Maintenance Tasks and How Often to Perform Them (continued)

Task	Daily	Monthly	Other
Install the latest Cisco Unity-qualified service packs and security hot fixes. See the <a href="#">“Installing Microsoft Service Packs and Updates”</a> section on page 5.		X	
<i>Exchange 5.5 and Exchange 2000:</i> Free unused space in the Exchange database by using the Eseutil utility. Refer to Article ID Q192185, “How to Defragment with the Eseutil Utility” at <a href="http://support.microsoft.com">http://support.microsoft.com</a> .			Every six months
<i>Exchange 5.5:</i> Run the Exchange Optimizer. Refer to Article ID Q266051, “The ‘Understanding the Microsoft Exchange Server Performance Optimizer’ White Paper Is Available” at <a href="http://support.microsoft.com">http://support.microsoft.com</a> .			Whenever you add 100 or more subscribers
Install new hardware and drivers. See the <a href="#">“Installing New Hardware and Drivers”</a> section on page 6.			As required
Update the system clock. See the <a href="#">“Updating the System Clock”</a> section on page 6.		X	
Restart the Cisco Unity server. See the <a href="#">“Restarting the Cisco Unity Server”</a> section on page 7.			According to your current schedule for restarting servers or as needed

## Performing Scheduled Maintenance on the Cisco Unity Server

See the following sections for detailed information on scheduled maintenance tasks:

- [Forwarding Unaddressed Messages to the Appropriate Recipients](#), page 4
- [Checking for Mailboxes that Are Over Their Size Limit](#), page 5
- [Installing Microsoft Service Packs and Updates](#), page 5
- [Installing New Hardware and Drivers](#), page 6

- [Updating the System Clock, page 6](#)
- [Restarting the Cisco Unity Server, page 7](#)

## Forwarding Unaddressed Messages to the Appropriate Recipients

In some situations, messages left in Cisco Unity are not associated with a specific recipient, and so they must be screened and routed to the appropriate subscriber or call handler. A subscriber should be assigned the responsibility of reviewing messages frequently in the following lists and handlers:

- [Unaddressed Messages Distribution List](#)
- [Operator Call Handler](#)
- [Example Interview](#)

### Unaddressed Messages Distribution List

Messages that cannot be delivered because the network or a home Exchange server assigned to a subscriber goes down, or because the subscriber mailbox is full, are forwarded to the Unaddressed Messages distribution list. By default, this distribution list contains the Example Administrator as its only member. To route these messages properly:

- Ensure that the Unaddressed Messages distribution list has at least one member (such as the operator) who will monitor the mailbox and handle messages that cannot be delivered. (When Cisco Unity is installed, the Example Administrator account is set as the only member of the Unaddressed Messages distribution list.) See the procedure, [To add subscribers to the Unaddressed Messages distribution list, page 4](#).
- Ensure that at least one member of the Unaddressed Messages distribution list does not have a mailbox limit on receiving messages. If a particular Cisco Unity subscriber and everyone on the Unaddressed Messages distribution list are all at the mailbox limit, and if that subscriber receives another message, the new message will be lost because it cannot be delivered to anyone.

### To add subscribers to the Unaddressed Messages distribution list

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- Step 1** In the Cisco Unity Administrator, go to any **Subscribers > Public Distribution Lists** page.
  - Step 2** Click the Find icon.
  - Step 3** Double-click the Unaddressed Messages distribution list.
  - Step 4** Change settings as appropriate, and then click the Save icon.
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## Operator Call Handler

When a caller to Cisco Unity dials the operator and no operator is available, the caller can leave a message, depending on the call transfer settings for the Operator call handler. By default, messages left in the Operator call handler are sent to the Unaddressed Messages distribution list.

## Example Interview

The Example Interview gathers information about callers and who they are trying to reach, by asking basic questions and recording the answers. The answers are then routed by default to the Example Administrator. If you want these messages to be routed to another recipient, choose a subscriber (such as the operator) or a distribution list as the recipient. For information on interview handlers, refer to the “Interview Handler Settings” chapter in the *Cisco Unity System Administration Guide*. Cisco Unity documentation is available on Cisco.com at [http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_unity/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/index.htm).

## Checking for Mailboxes that Are Over Their Size Limit

If you set limits on the maximum size of subscribers’ Exchange mailboxes as recommended in the “[Setting a Maximum Size for Exchange Mailboxes](#)” section on page 8, you should regularly run the Cisco Unity Storage Usage report to determine which users have exceeded mailbox limits. Refer to the “Reports”

chapter in the *Cisco Unity System Administration Guide*. Cisco Unity documentation is available on Cisco.com at [http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_unity/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/index.htm).

## Installing Microsoft Service Packs and Updates

Microsoft frequently provides updates for Windows 2000, Exchange, SQL Server 2000/MSDE 2000, Internet Explorer, and Microsoft Internet Information Server (IIS). These updates (referred to by a variety of names, including security updates, critical updates, patches, and hot fixes) are limited to changes that fix specific problems. They do not include general defect fixes or new functionality. Cisco TAC provides support for a Cisco Unity system on which these updates have been installed.

Microsoft also occasionally releases service packs, which contain fixes generated since the general product release, including most fixes that were released as updates. Because the service pack scope is broad, each service pack must be thoroughly tested to ensure that changes do not adversely affect Cisco Unity. Cisco TAC does not support new service packs until they have been qualified for use with Cisco Unity.

Do not install a service pack that has not been qualified, or Cisco TAC will not help you resolve problems until you uninstall it.

For information on which service packs have been qualified for use with Cisco Unity, refer to *Cisco Unity System Requirements, and Supported Hardware and Software*, available on Cisco.com at [http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_unity/sysreq/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/sysreq/index.htm).

## Installing New Hardware and Drivers

Cisco Unity servers that you purchase from Cisco Systems are configured for a specific hardware setup. Do not add or change any hardware on the server, except to add voice cards, memory, a tape drive, an external modem, or a rail kit.

## Updating the System Clock

If the Cisco Unity server is connected to the network, we recommend that you configure an authoritative time server to ensure that all computers in the organization use a common time. Refer to Article ID Q216734, “How to Configure an Authoritative Time Server in Windows 2000” at <http://support.microsoft.com>.

If the Cisco Unity server is not connected to the network, we recommend that you check the system clock monthly to ensure that the time is accurate to within a minute. To change the time, use the Date/Time Control Panel (**Settings > Control Panel > Date/Time** on the Windows Start menu).

### Do Not Update the Clock While Changing Data

Do not change the time on the system clock while you are changing values by using the Cisco Unity Administrator, or you may encounter inconsistencies in the data.

### Failover Systems

On a Cisco Unity system that includes failover, the system clocks on the two servers must not differ by a greater period of time than the value of the File Replication Interval field in the Failover Monitor. If the system clocks differ by more than the file replication interval, recently recorded names, greetings, and messages may be deleted instead of replicated.

### Perception of Delayed Messages

When the system clock on the Cisco Unity server is slow by a significant amount, subscribers may believe that Cisco Unity is delaying message delivery.

## Restarting the Cisco Unity Server

Depending on how your network is configured, Cisco Unity services may rely on the availability of a number of other servers on the network, as follows:

- The Exchange server that homes the Unity System mailbox
- The Exchange server(s) that home Cisco Unity subscriber mailboxes
- Exchange bridgehead servers
- The domain controller for the domain that the Cisco Unity server belongs to

- The Active Directory global catalog server
- The Cisco CallManager server (if Cisco Unity is integrated with Cisco CallManager)
- The Cisco Unity secondary server, for Cisco Unity failover systems

The availability of each of these servers, the network connection to these servers, and the corresponding components on the Cisco Unity server may each affect Cisco Unity services.

If you restart servers or network devices on a regular schedule, include Cisco Unity servers in this schedule. See the [“Exiting and Starting the Cisco Unity Software and Server”](#) section on page 15.

## Configuring Exchange for Maintenance Tasks

On any Exchange server that is the home server for Cisco Unity subscribers, do the following tasks:

- [Setting a Maximum Size for Exchange Mailboxes](#)
- [Turning Circular Logging Off](#)

## Setting a Maximum Size for Exchange Mailboxes

Voice messages are large (up to 400 KB/minute, depending on the codec Cisco Unity is using). If you allow all Cisco Unity subscribers to save every voice message they ever receive, the hard disk where messages are stored can quickly run out of space. To prevent this from happening, you can set limits on the size of subscribers’ Exchange mailboxes.

### Exchange 2000

To set limits for all users in Exchange 2000

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- Step 1** On the Windows Start menu, click **Programs > Microsoft Exchange > System Manager**.

- Step 2** In the left pane, expand **Servers**, expand the appropriate server, and expand the storage group.
  - Step 3** Right-click **Mailbox Store**, and click **Properties**.
  - Step 4** Click the **Limits** tab.
  - Step 5** In the Storage Limits section, specify values as appropriate. For more information, refer to the Exchange System Manager online Help.
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If you want to set different limits for individual users (for example, set no limit for the company president), do the following procedure.

#### To set limits for individual users in Exchange 2000

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- Step 1** On the Windows Start menu, click **Programs > Microsoft Exchange > Active Directory Users and Computers**.
  - Step 2** In the left pane, expand the server.
  - Step 3** In the left pane, click the folder in which the user appears (by default, the folder is named Users).
  - Step 4** In the right pane, right-click the user's name, and click **Properties**.
  - Step 5** Click the **Exchange General** tab.
  - Step 6** Click **Storage Limits**.
  - Step 7** In the Storage Limits dialog box, uncheck the **Use Mailbox Store Defaults** check box.
  - Step 8** Specify values as appropriate. For more information, refer to the Active Directory Users and Computers online Help.
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## Exchange 5.5

#### To set limits for all users in Exchange 5.5

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- Step 1** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Administrator**.

- Step 2** In the left pane, expand the site, expand **Configuration**, expand **Servers**, and expand the appropriate server name.
  - Step 3** In the left pane, click **Private Information Store**.
  - Step 4** On the Exchange Administrator menu, click **File > Properties**.
  - Step 5** On the General tab, specify values in the Storage Limits section as appropriate. Refer to the Exchange Administrator online Help for more information.
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If you want to set different limits for individual users (for example, set no limit for the company president), do the following procedure.

#### To set limits for individual users in Exchange 5.5

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- Step 1** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Administrator**.
  - Step 2** In the left pane, expand the site and click **Recipients**.
  - Step 3** In the right pane, double-click the mailbox whose limit you want to change.
  - Step 4** Click the **Limits** tab.
  - Step 5** In the Use Information Store Defaults section, uncheck the **Use Information Store Defaults** check box.
  - Step 6** Specify values as appropriate. Refer to the Exchange Administrator online Help for more information.
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## Turning Circular Logging Off

When a new message arrives, it is saved in a transaction log and then copied from the log to the message store when system resources are available. If the message store is corrupted or destroyed, you can restore the last backup of the message store and then apply the contents of the transaction log to the restored message store. (This assumes that the transaction log is stored in a different location than the message store and was not destroyed along with the message store.)

After you back up the message store by using Exchange-aware backup software, the backup software clears the transaction logs. At this point, the backup reflects the current state of the message store, so the transaction logs are no longer required to restore the message store.

You can configure logging in one of two ways: either the existing logs are overwritten when hard disk space runs low, or the existing logs are never overwritten. Overwriting the existing logs when hard disk space runs low is known as circular logging.

**Caution**

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If you turn circular logging on and hard disk space runs low, the newest transaction log entries (which contain the newest messages) overwrite the oldest log entries (the oldest messages). When log entries are overwritten, you cannot use the transaction logs to restore messages that were received after the last backup. If disk space is very low and if the system is very busy, this can happen in less than a day.

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We strongly recommend that you do the following:

- Turn circular logging off.

Circular logging is turned off by default in Exchange 2000, but is turned on by default in Exchange 5.5.

- Use Exchange-aware backup software to back up the message store.
- Carefully watch the amount of available space on the hard disk or in the partition where logs are stored, and free up disk space when the amount of available space gets too low.

**To turn circular logging off for Exchange 5.5**

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- Step 1** In the left pane of Microsoft Exchange Administrator, select the server.
- Step 2** On the Exchange Administrator File menu, click **Properties**.
- Step 3** Click the **Advanced** tab.
- Step 4** In the Database Circular Logging section, uncheck the **Information Store** check box.

If you also want to turn circular logging off for the directory, you can also uncheck the **Directory** check box.

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## Scanning for Viruses

### Selecting Virus-Scanning Software

For a list of the virus-scanning software that has been qualified for use with Cisco Unity, refer to the System Requirements document for your version of Cisco Unity. This document is available on Cisco.com at [http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_unity/sysreq/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/sysreq/index.htm).

### Scheduling Virus Scanning

Schedule virus scanning to occur daily. Ideally, virus scanning should occur when the server is least busy so that it does not interfere with Cisco Unity voice messaging functions.

### Updating Virus-Scanning Definitions

Your virus-scanning software should be configured to alert you every week or two to check the manufacturer's web site for new virus-scanning definitions. If you already have a policy for updating these definitions on the other computers on your network, follow the same policy for the Cisco Unity server. If you do not already have a policy, download and install the new definitions on the Cisco Unity server whenever the software prompts you.

# Hardening the Cisco Unity Server

For information on best practice recommendations for “hardening” a Cisco Unity server to make the server less susceptible to unwanted or unauthorized access and viruses, refer to *White Paper: Security Best Practices for Cisco Unity 3.0*, [http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_unity/whitpaper/security.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/whitpaper/security.htm).

## Backing Up and Restoring Data

The software installed on a Cisco Unity server includes Windows 2000 Server, SQL Server 2000 or MSDE 2000, and, for some configurations, Exchange 5.5 or Exchange 2000. There are a number of suitable backup software products that are tailored to back up this software and the accompanying data.

The main considerations for backing up and restoring a Cisco Unity server (and the Exchange server(s), if Cisco Unity subscribers are homed on separate Exchange servers) are the same as the considerations for backing up and restoring any other system. Differences between SQL Server 2000 and MSDE 2000 are not important, and neither are the service packs and hot fixes that are installed on the Cisco Unity server.

## The Basic Elements of Backup Software

Backup software generally provides a main product that performs most backup operations, and includes the ability to back up and restore over the network. For network backups, an add-on known as a remote agent typically would be installed on the Cisco Unity server, and the main backup software would be installed on a separate server on the LAN or WAN.

Agents deal with unique aspects of backing up certain applications, for example, Exchange or SQL Server. These agents work with the backup mechanisms that Microsoft built into Exchange or SQL Server, so you can, for example, back up open database files.

# Issues To Consider When Developing a Backup and Restore Plan

## Operating System Files

We recommend that you use the NTFS file system for all partitions on a Cisco Unity server. Any backup software will readily handle this file system. Most Cisco Unity files are backed up when you back up the operating system files. To back up the Exchange database, the SQL Server database, and the associated log files while Cisco Unity is running (and, therefore, while the Exchange and SQL Server files are open), you need agents for Exchange and SQL Server.

## Active Directory and System Volume (SYSVOL)

SYSVOL is a replicated data set that contains the policies and scripts that are used by Active Directory. No unique Cisco Unity considerations exist with regards to SYSVOL and its backup. The main backup software manages SYSVOL backup and restoration.

## Cisco Unity Files

Cisco Unity data includes, among other things, call handlers, integration files, registry settings, recorded greetings, recorded voice names, and routing rules. These files are backed up by the main backup software as part of the file system or SYSVOL backup.

In addition, a Cisco Unity Disaster Recovery Tool is being developed for backing up and restoring Cisco Unity-specific files. This tool can be used to restore Cisco Unity onto a new server that does not match the original.

## Exchange

Most enterprise backup software provides an agent for backing up Exchange data. This agent is necessary to fully back up Exchange regardless of where Exchange or the backup software is installed: whether it is on the Cisco Unity server or on a separate server.

Microsoft recommends that you use the options for backing up open Exchange files with great caution. In particular, Microsoft recommends that open file features should not be used to back up either the privately created M:\ partition or any .DAT files because of possible data corruption. We encourage you to follow this cautionary advice when you develop your backup strategy.

For more information, refer to the documentation for your backup software.

## SQL Server or MSDE

Most enterprise backup software provides an agent for backing up SQL Server and MSDE data. This agent is necessary to fully back up SQL Server and MSDE regardless of where the backup software is installed: whether it is on the Cisco Unity server or on a separate server.

Microsoft recommends that you use the options for backing up open SQL Server or MSDE files with great caution. We encourage you to follow this cautionary advice when you develop your backup strategy.

SQL Server flat files (.LDF and .MDF) should generally be excluded from file system backup. Whether you include them depends on how you plan to restore data in the event of a disaster.

Cisco Unity backs up its own SQL Server or MSDE database by using the SQL Server internal backup mechanism, just as backup software does. However, this backup is stored on the Cisco Unity server, so it cannot be used to restore the system if something happens to the server or the server's hard disk. This backup is used only for diagnostic and troubleshooting purposes and is not intended as a replacement for backup software.

For more information on backing up SQL Server or MSDE data, refer to the documentation for your backup software.

## Recommendations for Backup

Back up the Cisco Unity server according to the normal and incremental frequency requirements of the site disaster recovery plan. Whenever possible:

- Back up during off-peak usage hours.
- Exit the Cisco Unity software before starting the backup.
- Stop Exchange and SQL Server/MSDE services before starting the backup.

These recommendations are often not possible or practical, but following them ensures the fastest, most reliable backup.

For the best backups of Exchange and SQL Server/MSDE data, use the corresponding agents provided by the backup software. Avoid using open file managers or features unless considered necessary as part of the site disaster recovery plan. Also avoid backing up SQL Server/MSDE flat files unless doing so is considered necessary as part of the site disaster recovery plan.

## Support for Backup

Backing up Cisco Unity does not require any custom settings in any of the Cisco Unity-supported backup software. If you have questions about how to use or troubleshoot a supported Cisco Unity backup program, contact the software manufacturer.

# Appendix

## Exiting and Starting the Cisco Unity Software and Server

### Exiting the Cisco Unity Software

This section provides two procedures for exiting the software: from the Cisco Unity server and from another computer.



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**Caution**

Do not use `Kill av*.*` to exit the Cisco Unity software. `Kill av*.*` does not stop all Cisco Unity services, and may cause problems with upgrades from Cisco Unity version 2.x to version 3.x.

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#### To exit the Cisco Unity software from the Cisco Unity server

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- Step 1** If the system uses the automated attendant, route all calls to the operator.
- Step 2** Log on to Windows as a Cisco Unity administrator.

- Step 3** Right-click the **Cisco Unity** icon in the status area of the taskbar.  
(If the Cisco Unity icon is not in the taskbar, browse to the CommServer directory and double-click **AvCsTrayStatus.exe**.)
- Step 4** Click **Stop Cisco Unity**. Cisco Unity stops running when all calls are finished. An “X” then appears in the Cisco Unity icon.
- Step 5** Press **Ctrl-Alt-Delete**, then lock or log off Windows to prevent access by unauthorized users.
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#### To exit the Cisco Unity software from another computer

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- Step 1** If the system uses the automated attendant, route all calls to the operator.
- Step 2** Start Internet Explorer, and go to **http://<Cisco Unity server name>/status**. If prompted, enter the name and password of a Cisco Unity administrator.
- Step 3** In the Cisco Unity Status Monitor, under Shutting Down Cisco Unity, choose a method:
- Cisco Unity stops running after all calls are finished.
  - Cisco Unity interrupts calls in progress with a voice message, disconnects all calls, then stops running.
- Step 4** Click **Shut Down**.
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## Shutting Down or Restarting the Cisco Unity Server



### Note

Restarting the Cisco Unity server may result in delayed message notification and message waiting indication until MAPI logon to all subscriber mailboxes has been completed. Depending on the size of the subscriber database, it could take several hours to complete the MAPI logon.

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If the Cisco Unity system is integrated with Cisco CallManager, has an expansion chassis, or is set up for failover, consider the following before shutting down or restarting the Cisco Unity server:

<b>Cisco Unity integrated with Cisco CallManager</b>	If Cisco Unity is integrated with Cisco CallManager, either alone or as part of a dual-switch integration, ensure that CallManager is running before you restart Cisco Unity or ports will not register.
<b>Expansion chassis connected to the Cisco Unity server</b>	When both the expansion chassis and the Cisco Unity server are turned off, turn on the expansion chassis before you turn on the server. Otherwise, the server may not detect the voice cards in the expansion chassis.
<b>Cisco Unity failover</b>	<ul style="list-style-type: none"> <li>• When both servers are running and the active server is shut down, the inactive server becomes active.</li> <li>• When neither server is running, the first server started becomes the active server.</li> <li>• When the secondary server is active and configured for automatic failback, and the primary server is also running, the secondary server attempts failback on the failback schedule.</li> </ul>

### To shut down or restart the Cisco Unity server

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- Step 1** Exit the Cisco Unity software, if it is running, by using a procedure in the [“Exiting the Cisco Unity Software”](#) section on page 15.
- Step 2** On the Windows Start menu, click **Shut Down**.
- Step 3** Click **Shut Down** or **Restart**.

During a restart, the Cisco Unity software starts automatically.

When Cisco Unity starts successfully, three tones play and a check mark appears in the Cisco Unity icon in the status area of the taskbar.

When Cisco Unity does not start successfully, two tones play and an “X” appears in the Cisco Unity icon in the status area of the taskbar.

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## Starting the Cisco Unity Software

This section provides two procedures for starting the software: from the Cisco Unity server and from another computer.

Cisco Unity is a Windows service that is configured to start automatically when you turn on or restart the server. Do one of the following procedures only if you exited the Cisco Unity software but did not restart the server.

Exchange must be running before you start the Cisco Unity software, whether or not Exchange is installed on the Cisco Unity server:

<b>Exchange on the Cisco Unity server</b>	If you exited Exchange manually but did not restart the Cisco Unity server, start Exchange first. (Exchange starts automatically when you turn on or restart the server.)
<b>Exchange on another server</b>	Exchange must be running on the Exchange server that Cisco Unity connects with.

If Exchange stops for any reason while Cisco Unity is running, Cisco Unity will continue to take messages.

### To start the Cisco Unity software from the Cisco Unity server

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- Step 1** Log on to Windows as a Cisco Unity administrator.
  - Step 2** Right-click the **Cisco Unity** icon in the status area of the taskbar.  
(If the Cisco Unity icon is not in the taskbar, browse to the CommServer directory and double-click **AvCsTrayStatus.exe**.)
  - Step 3** Click **Start Cisco Unity**.  
When Cisco Unity starts successfully, three tones play and a check mark appears in the Cisco Unity icon.  
When Cisco Unity does not start successfully, two tones play and an “X” appears in the Cisco Unity icon.
  - Step 4** Press **Ctrl-Alt-Delete**, then lock or log off Windows to prevent access by unauthorized users.

- Step 5** If the system uses the automated attendant and you routed calls to the operator before you exited the Cisco Unity software, reroute calls to Cisco Unity.
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### To start the Cisco Unity software from another computer

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- Step 1** Start Internet Explorer, and go to **http://<Cisco Unity server name>/status**. If prompted, enter the name and password of a Cisco Unity administrator.
- Step 2** In the Cisco Unity Status Monitor, click the **System Status** icon (the first icon), at the top of the page.
- Step 3** Click **Start**.
- Step 4** If the system uses the automated attendant and you routed calls to the operator before you exited the Cisco Unity software, reroute calls to Cisco Unity.
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*White Paper: Maintaining a Cisco Unity System (with Microsoft Exchange as the Message Store)*  
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