



Cisco Unity 3.1 System Requirements, and Supported Hardware and Software

Revised October 1, 2004

This document lists requirements, supported hardware and software, and other necessary information for installing a Cisco Unity version 3.1 system. It is divided into two parts: “[PART 1: Cisco Unity 3.1 System Requirements](#)” and “[PART 2: Cisco Unity 3.1 Supported Hardware and Software](#).”

(For requirements, and supported hardware and software for the Cisco Unity Bridge, refer to *Cisco Unity Bridge System Requirements, and Supported Hardware and Software* at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_pre_installation_guides_list.html.)

PART 1: Cisco Unity 3.1 System Requirements

- [Hardware Requirements, page 2](#)
- [Software Requirements, page 2](#)
- [Windows 2000, Exchange, and Network Requirements for Cisco Unity Configurations, page 5](#)
- [Requirements for Using Exchange Clustering, page 7](#)
- [Requirements for Using Exchange 2000 and Exchange 5.5 Together, page 7](#)
- [Cisco Unity Failover Requirements, page 7](#)
- [Requirements for Upgrading from Cisco Unity Version 2.x to 3.1, page 8](#)
- [Security Recommendations, page 8](#)
- [Cisco Unity Configurations, page 9](#)
- [PART 2: Cisco Unity 3.1 Supported Hardware and Software, page 10](#)



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

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

Hardware Requirements

- A Cisco Unity system key that enables the applicable integration, number of voice ports, and other options.
- A server that meets Cisco Unity specifications. Refer to the *Cisco Unity Supported Platforms List* at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_data_sheets_list.html.


Caution

Cisco TAC does not provide any assistance for installing, customizing, or troubleshooting Cisco Unity on a platform that is not on the *Cisco Unity Supported Platforms List*.

- Voice cards that are approved for use with Cisco Unity. (If you are integrating Cisco Unity with Cisco CallManager, the integration does not require voice cards.) See the “[Supported Voice Cards](#)” section on page 13 and the “[Supported Circuit-Switched Phone System Integrations](#)” section on page 11.

Some voice cards that were supported with earlier versions of Cisco Unity are no longer supported. If you are upgrading from Cisco Unity version 2.x to version 3.1 and the existing server contains unsupported voice cards, you must replace those cards to upgrade to version 3.1.

If you are installing a Cisco Unity system outside the United States and you are connecting it directly to the PSTN by using an analog loop, you may need to install inline telco filters on the Intel Dialogic voice cards to filter tax impulse signals. For more information, refer to the Intel Dialogic documentation and regulatory notices that ship with the voice cards.

- The necessary cables, line splitters, and adapters to connect the voice cards to the phone system. For information about the cables and other components required for each type of circuit-switched phone system integration, see the “[Supported Circuit-Switched Phone System Integrations](#)” section on page 11.

If you are installing cards that have H.100 connectors, you need to connect the cards by using an H.100 cable that has at least as many connectors as you have cards (you must connect all cards by using a single cable) but no more than five extra connectors.

Software Requirements

Software Requirements—Cisco Unity Server

- The applicable version of Microsoft Windows 2000:
 - Windows 2000 Server (in English, French, or German) is required on Cisco Unity Platform Overlay 1, 2, and 3 servers. (Platform overlays are defined in the *Cisco Unity Supported Platforms List* at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_data_sheets_list.html.)
Note that Windows 2000 Server is included with Cisco Unity Platform Overlay 1, 2, and 3 servers purchased from Cisco. If the server is not purchased from Cisco, the customer also must purchase Windows 2000 Server.
 - Windows 2000 Advanced Server (in English, German, French, or Japanese) is required for a new installation of Cisco Unity on a Platform Overlay 4 or 5 server. It is also required for an existing Cisco Unity site that is purchasing an additional Cisco Unity Platform Overlay 4 or 5

server or that is replacing a Cisco Unity server with a new Platform Overlay 4 or 5 server. (Platform overlays are defined in the *Cisco Unity Supported Platforms List* at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_data_sheets_list.html.)

Note that Windows 2000 Advanced Server is included with Cisco Unity Platform Overlay 4 and 5 servers purchased from Cisco. If the server is not purchased from Cisco, the customer also must purchase Windows 2000 Advanced Server.

Windows 2000 Advanced Server is also supported (not required) on Cisco Unity Platform Overlay 1, 2, and 3 servers. Cisco Unity is not qualified for use on Windows 2000 Professional, Windows 2000 Datacenter Server, or any edition of Windows Server 2003.

(You are not required to upgrade existing Platform Overlay 4 and 5 servers to Windows 2000 Advanced Server, but you may want to upgrade for performance reasons as described in the tech note *Cisco Unity Virtual Memory Usage Troubleshooting and Workaround*. The tech note is available at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_tech_notes_list.html.)

- Windows 2000 Service Pack 3.
- Windows 2000 Additional Localizations, if you plan to use Windows 2000 in a language other than English.
- The IIS hot fix described in Microsoft Security Bulletin MS03-007 and Microsoft Knowledge Base article 815021. The hot fix is required and enforced by Cisco Unity Setup for Cisco Unity 3.1(6), and required but not enforced for Cisco Unity 3.1(5) and earlier.
- The IIS hot fix described in Microsoft Security Bulletin MS03-026 and Microsoft Knowledge Base article 823980. The hot fix is required but not enforced by Cisco Unity Setup.
- Microsoft Exchange. You may also need to purchase Client Access Licenses (CALs), depending on the Cisco Unity configuration.

Cisco Unity ships with the Voice Mail Run-Time editions of Exchange 2000 Server, Exchange 2000 Enterprise Server, and Exchange Server version 5.5. They are full versions of Exchange and can be used for any Cisco Unity configuration.

With the Voice Mail Run-Time Edition, if you are installing Cisco Unity in the Voice Messaging Only configuration (so that Exchange contains only voice messages, and subscribers access messages by using only a phone or the Cisco Unity Visual Messaging Interface), you do not need to purchase CALs. If you are installing Cisco Unity in either Unified Messaging configuration, you need CALs for all Cisco Unity subscribers. However, if you are adding Cisco Unity to an existing Exchange deployment, you probably already have the necessary CALs.

The following Exchange editions are supported:

- Voice Mail Run-Time Edition of Exchange 2000 Server.
- Exchange 2000 Server. (Exchange 2000 Conferencing Server is not supported on the Cisco Unity server but is supported when installed on the network.)
- Exchange 2000 Enterprise Server.
- Voice Mail Run-Time Edition of Exchange Server version 5.5.
- Exchange Server (Standard Edition) version 5.5. (Exchange 5.5 Enterprise Edition is not supported on the Cisco Unity server but is supported when installed on the network.)

**Caution**

Cisco Unity 3.1 does not support Exchange 2003. This means that you cannot run Exchange 2003 Forestprep to begin an upgrade to Exchange 2003, you cannot have an Exchange 2003 server in the same Active Directory forest as a Cisco Unity server, and you cannot home Cisco Unity subscribers in Exchange 2003. Before you run Exchange 2003 Forestprep, you must first upgrade Cisco Unity to version 4.0(3) or later. Otherwise, the changes that Forestprep makes to Active Directory will cause Cisco Unity to stop functioning.

- The applicable Exchange service pack, depending on the Exchange version:
 - Exchange 2000 Service Pack 2, whether you are installing Exchange 2000 on the Cisco Unity server or connecting to Exchange 2000 on another server.
 - Exchange 5.5 Service Pack 4, whether you are installing Exchange 5.5 on the Cisco Unity server or connecting to Exchange 5.5 on another server.
- Microsoft SQL Server:
 - On a system with more than 32 voice ports, Microsoft SQL Server 2000 Standard Edition.
 - On a system with 32 or fewer voice ports, Microsoft SQL Server 2000 Desktop Engine (MSDE 2000).

Other editions of SQL Server and MSDE are not supported.

**Note**

A system that is using Cisco Unity failover requires SQL Server 2000 regardless of the number of voice ports.

- SQL Server 2000 Service Pack 3 (required both for a system running SQL Server 2000 and for a system running MSDE 2000). The service pack is included on the Cisco Unity Service Packs CDs, which are available on the Cisco Unity 3.1 Software Download page at <http://www.cisco.com/cgi-bin/tablebuild.pl/unity-31>.
This requirement was added in January 2003 in response to the W32.Slammer worm, so for Cisco Unity 3.1(5) and earlier, the Cisco Unity installation program does not enforce the requirement. For more information on the W32.Slammer worm, refer to the tech note *Cisco Unity 3.x and 4.0 Are Vulnerable to W32.Slammer Worm* at http://www.cisco.com/warp/public/788/AVVID/unity3_4_slamworm.html.
- Microsoft Internet Explorer version 5.5. (Internet Explorer 6.0 and Service Pack 1 are also supported but must be acquired separately.)
- Internet Explorer 5.5 Service Pack 2. (The service pack is automatically installed when you install Internet Explorer 5.5 from the Cisco Unity disc set.)
- MSXML3.
- MSXML3 Service Pack 1. (The service pack is automatically installed when you install MSXML3 from the Cisco Unity disc set.)
- Cisco Unity.
- If you are integrating Cisco Unity with Cisco CallManager, a version of the Cisco Unity-CM TSP that is compatible with the version of Cisco Unity that you are installing and the version of Cisco CallManager that is currently installed. Refer to *Compatibility Matrix: Cisco Unity, the Cisco Unity-CM TSP, Cisco CallManager, and Cisco CallManager Express* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/cmptblty/svpckmx.htm.
- One of the following remote-administration applications is required for Cisco TAC support:

- Microsoft Windows Terminal Services. (Terminal Services is the default remote-access software for the Cisco Unity server and is included with Windows 2000.)
- Symantec pcAnywhere version 10.0 or later. (Use an external modem with pcAnywhere.)

Software Requirements—Subscriber Workstations

- An operating system that is compatible with the version of Cisco Unity that you are installing. Refer to *Compatibility Matrix: Cisco Unity and the Software on Subscriber Workstations* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/cmptblty/clientmx.htm. A compatible operating system is required:
 - For installing the Cisco Unity server in a Unified Messaging configuration and for subscribers to access voice messages by using ViewMail for Microsoft Outlook.
 - For subscribers to access the Cisco Unity Administrator and the ActiveAssistant.
- A messaging client that is compatible with the version of Cisco Unity that you are installing. Refer to *Compatibility Matrix: Cisco Unity and the Software on Subscriber Workstations* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/cmptblty/clientmx.htm. A compatible messaging client is required for installing the Cisco Unity server in a Unified Messaging configuration and for subscribers to access voice messages by using ViewMail for Microsoft Outlook.
- An Internet browser that is compatible with the version of Cisco Unity that you are installing. Refer to *Compatibility Matrix: Cisco Unity and the Software on Subscriber Workstations* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/cmptblty/clientmx.htm. A compatible browser is required:
 - For subscribers to access the Cisco Unity Visual Messaging Interface (VMI).
 - For subscribers to access the Cisco Unity Administrator.

Windows 2000, Exchange, and Network Requirements for Cisco Unity Configurations

Voice Messaging Only

A traditional standalone system, often referred to as POV (plain old voice mail). The system may or may not have a network connection.

Windows 2000 domain requirement	The Cisco Unity server is a domain controller or domain controller/global catalog server in its own domain, or the server is a member server, domain controller, or domain controller/global catalog server in an existing domain.
Exchange requirement	Exchange may be installed either on the Cisco Unity server or on a separate server. In either case, Exchange must be in its own organization/site.

Network requirement	<p>Minimum 10 Mbps with minimal network access, if any, when all of the following conditions are true:</p> <ul style="list-style-type: none"> • Exchange is installed on the Cisco Unity server. • Cisco Unity is integrated only with a circuit-switched phone system. • All mailboxes are homed on the Cisco Unity server. <p>Recommended minimum 100 Mbps connection, when any of the following conditions are true:</p> <ul style="list-style-type: none"> • Cisco Unity is integrated with Cisco CallManager. • Failover is configured. • Exchange is not installed on the Cisco Unity server. • Any mailboxes are homed on another Exchange server.
----------------------------	--

Unified Messaging with One Exchange Server

Cisco Unity provides unified messaging. The Cisco Unity server is the only Exchange server in the site.

Windows 2000 domain requirement	The Cisco Unity server is a domain controller or domain controller/global catalog server in its own domain, or the server is a member server, domain controller, or domain controller/global catalog server in an existing domain.
Exchange requirement	Exchange is installed on the Cisco Unity server in its own organization/site.
Network requirement	Recommended minimum 100 Mbps connection.

Unified Messaging in an Existing Exchange Site

Cisco Unity provides unified messaging with Exchange mailboxes located on other Exchange servers in the organization/site.

Windows 2000 domain requirement	The Cisco Unity server typically is a member server in an existing domain.
Exchange requirement	The Cisco Unity server services Exchange mailboxes in an existing Exchange organization. The Cisco Unity server services only one Exchange 2000 routing group or one Exchange 5.5 site. Exchange may be installed on the Cisco Unity server but is not required.
Network requirements	<p>Recommended minimum 100 Mbps connection.</p> <p>If failover is configured, recommended 100 Mbps connection between the Cisco Unity servers.</p>

For information about the characteristics of the Cisco Unity configurations, see the [“Cisco Unity Configurations” section on page 9](#).

Requirements for Using Exchange Clustering

When Cisco Unity will service subscribers in an Exchange cluster:

- Exchange 2000 clustering must be used. (Exchange 5.5 clustering is not supported.)
- Do not install Cisco Unity on a server in an Exchange cluster.
- Use only two-node clusters for active/passive clustering.
- Do not install a Cisco Unity Voice Connector on a server in an Exchange cluster.

Requirements for Using Exchange 2000 and Exchange 5.5 Together

When Cisco Unity subscribers will be homed on both Exchange 2000 and Exchange 5.5, set up Exchange 2000 and Exchange 5.5 for mixed-mode messaging before you install Cisco Unity:

- The Exchange 2000 servers must be installed into one of the existing Exchange 5.5 sites.
- The Exchange version of the Active Directory connector must be installed.
- A recipient connection agreement must be set up to replicate data between the Exchange 5.5 directory and Active Directory.

Cisco Unity Failover Requirements

- The primary and secondary servers must both be qualified for Cisco Unity. See the sections in [“PART 1: Cisco Unity 3.1 System Requirements”](#) of this document.
- Both Cisco Unity servers must have the same platform overlay.
- Both Cisco Unity servers must be member servers of the same domain (they cannot be domain controllers). Do not install Active Directory on either Cisco Unity server.
- If the Cisco Unity server names are longer than 15 characters, the first 15 characters of the server names must not be identical for the primary and secondary servers.
- Both Cisco Unity servers must be connected to the same message store.
- The only Exchange software installed on the Cisco Unity servers is the administration software. All other Exchange services (including subscriber mailboxes) are on a computer other than the Cisco Unity servers. Messages must not be stored on the Cisco Unity servers. (This separation allows the availability of messages when either the primary or secondary server is not functioning.)
- SQL Server 2000 Standard Edition must be installed on both Cisco Unity servers. (MSDE 2000 is not supported on either server with Cisco Unity failover.)
- One Cisco Unity server is designated the primary server, and the other Cisco Unity server is designated the secondary server.
- For Cisco Unity 3.1(2) and 3.1(3) only, the system clocks on both servers must not vary by more time than the value of the File Replication Interval field in the Failover Monitor. (If the system clocks vary by more than the setting, recently recorded names, greetings, and messages may not be replicated correctly.) For servers with Windows 2000, we recommend that you set up the Time

server in Windows to synchronize the system clocks by using the **net time** command. Refer to Article ID Q216734, “How to Configure an Authoritative Time Server in Windows 2000,” on the Microsoft website at <http://support.microsoft.com>.

- Both Cisco Unity servers must have the same enabled features and configurations.
- Both Cisco Unity servers must be connected to the network and have a reliable connection of 100 Mbps minimum. There is no option for installing failover without a network connection.
- Failover can be used with any supported Cisco Unity configuration except with one that has no network connection.
- Both Cisco Unity servers must have static or reserved IP addresses (for example, DHCP reservation). The IP addresses must not change in uncontrolled fashion. If DHCP is configured with a long lease duration, you can let DHCP assign the IP address. If DHCP is configured with a short lease duration, assign a static IP address, or use DHCP reservations.
- Cisco Unity and SQL Server 2000 must be installed on both the primary and secondary servers with the same domain account.
- MSSQLSERVER and SQLSERVERAGENT services on both Cisco Unity servers must be configured to use the same domain account that is a member of the Local Administrators group on both servers. These services cannot be configured to run as Local System. SQLSERVERAGENT on the primary server must be able to log on to SQL Server on the secondary server by using Windows NT authentication.

Requirements for Upgrading from Cisco Unity Version 2.x to 3.1

- All of the requirements for a Cisco Unity 3.1 system.



Caution

Requirements for Cisco Unity version 3.1 are different from requirements for version 2.x. The system must meet Cisco Unity 3.1 standards to receive support from Cisco TAC.

- A Cisco Unity system at version 2.3(4.104) or later. Upgrades from earlier versions are not supported. (If your system is at an earlier version, you must reinstall all software. In addition, if your system is at version 2.2 or earlier, you need a new system key.)
- Remove ActiveFax. ActiveFax is no longer supported, either on the Cisco Unity server or on a separate server.
- A network connection or a high-capacity removable storage device, so you can save subscriber and other information exported from the existing Cisco Unity 2.x system and import that information into the 3.1 system.

Security Recommendations

Because Cisco Unity uses Microsoft Internet Information Server (IIS) and other Windows components, it is susceptible to the same security attacks as any Microsoft Web server or application server.

Refer to Microsoft recommendations and guidelines to secure the Cisco Unity server behind a firewall.

Also refer to *White Paper: Security Best Practices for Cisco Unity 3.0* at

http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_technical_reference_list.html.

Cisco Unity servers are vulnerable to the types of attacks described in Microsoft Security Bulletin MS02-045 on the Microsoft TechNet website. We strongly recommend that you download and install the patch from the Microsoft website.

Cisco Unity Configurations

There are three configurations for installing a Cisco Unity system. The following lists describe the characteristics of each type of configuration.

Voice Messaging Only

- The Cisco Unity server handles only voice messages.
- When the Cisco Unity server is connected to the network:
 - Cisco Unity can be integrated with Cisco CallManager.
 - Cisco Unity administration can be performed over the network.
 - Subscribers have access to the Cisco Unity ActiveAssistant.
 - Exchange can be installed either on the Cisco Unity server or on a separate server.
 - The server has access to network utilities, such as virus checking and backup.
- Subscribers check messages by phone.
- E-mail attributes, if any, and voice-mail attributes on subscriber accounts must be administered separately.

Unified Messaging with One Exchange Server

- The Cisco Unity server handles voice and e-mail messages.
- The Cisco Unity server is connected to the network, so it has access to Active Directory and to network utilities, such as virus checking and backup.
- Subscribers check messages by using the phone or an e-mail client.
- Cisco Unity administration may be performed over the network.
- Subscribers have access to the Cisco Unity ActiveAssistant.
- Voice-mail and e-mail attributes on subscriber accounts may be administered from a single location by using the Cisco Unity Administrator.

Unified Messaging in an Existing Exchange Site

- The Cisco Unity server handles only voice messages. Messages are stored on other Exchange servers.
- The Cisco Unity server is connected to the network, so it has access to Active Directory and to network utilities, such as virus checking and backup.
- Subscribers check messages by using the phone or an e-mail client.
- Cisco Unity administration may be performed over the network.

- Subscribers have access to the Cisco Unity ActiveAssistant.
- Voice-mail and e-mail attributes on subscriber accounts may be administered from a single location by using the Cisco Unity Administrator.

PART 2: Cisco Unity 3.1 Supported Hardware and Software

- [Compatibility Information, page 10](#)
- [Supported Phone System Integrations, page 11](#)
- [Supported Voice Cards, page 13](#)
- [Supported AMIS-Compliant Voice Messaging Systems, page 14](#)
- [Supported Cisco Gateways for Use with AMIS, page 15](#)
- [Additional Supported Hardware, page 16](#)
- [Unsupported Configurations, page 16](#)
- [Supported Fax Server Software, page 17](#)
- [Supported Virus-Scanning Software, page 17](#)
- [Additional Supported Software, page 18](#)
- [Unsupported Third-Party Software, page 19](#)
- [PART 1: Cisco Unity 3.1 System Requirements, page 1](#)

Compatibility Information

Refer to the following documents on Cisco.com for compatibility information:

- *Compatibility Matrix: Cisco Unity and the Software on Subscriber Workstations* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/cmptblty/clientmx.htm.
- *Compatibility Matrix: Cisco Unity, the Cisco Unity-CM TSP, Cisco CallManager, and Cisco CallManager Express* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/cmptblty/tspmtrx.htm.
- *Compatibility Information: Cisco Unity Networking Options* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/sysreq/netrq.htm.
- *Recommended and Supported Service Packs and Updates for Use with Cisco Unity and the Cisco Unity Bridge* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/cmptblty/msupdate.htm.

Supported Phone System Integrations

Cisco Unity integrates with qualified IP phone systems (see the following section, “[Supported IP Phone System Integrations](#)”) and with qualified circuit-switched phone systems (see the “[Supported Circuit-Switched Phone System Integrations](#)” section on page 11). Cisco Unity also supports a dual phone system integration (one IP phone system and one circuit-switched phone system).

Phone configuration files (.ini files) for recently qualified phone system integrations that are not yet available on Cisco Unity discs can be downloaded from the Other Cisco Unity Components Software Download page at <http://www.cisco.com/cgi-bin/tablebuild.pl/unity>.

Supported IP Phone System Integrations

- Cisco CallManager 4.1
- Cisco CallManager 4.0
- Cisco CallManager 3.3
- Cisco CallManager 3.2
- Cisco CallManager 3.1
- Cisco CallManager 3.0

Supported Circuit-Switched Phone System Integrations

Table 1 Supported Circuit-Switched Phone System Integrations

Phone System	Integration Type	Supported Voice Cards	Required Components
Alcatel 4400	DTMF	All except D/240PCI-T1. See the “ Supported Voice Cards ” section on page 13.	<ul style="list-style-type: none"> • Analog cables
Avaya Definity G3	DTMF	All except D/240PCI-T1. See the “ Supported Voice Cards ” section on page 13.	<ul style="list-style-type: none"> • Analog cables
Avaya Definity Gx	Serial	All except D/240PCI-T1. See the “ Supported Voice Cards ” section on page 13.	<ul style="list-style-type: none"> • PBXLink boxes • RS-232 serial cables • Digital cables • Analog cables
Avaya Definity ProLogix	DTMF	All except D/240PCI-T1. See the “ Supported Voice Cards ” section on page 13.	<ul style="list-style-type: none"> • Analog cables

Table 1 Supported Circuit-Switched Phone System Integrations (continued)

Phone System	Integration Type	Supported Voice Cards	Required Components
Centrex (Avaya 1AESS, Avaya 5ESS, and Nortel DMS100)	Serial (SMDI)	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> RS-232 serial cable External integration modem Analog cables <i>Failover only:</i> 9-pin modem data splitter
ECI Coral III	Serial	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> RS-232 serial cable Analog cables <i>Failover only:</i> 9-pin modem data splitter
Ericsson MD-110	Serial	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> RS-232 serial cable Analog cables <i>Failover only:</i> 9-pin modem data splitter
Fujitsu 9600	Serial	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> RS-232 serial cable Analog cables <i>Failover only:</i> 9-pin modem data splitter
Intecom E14 Millennium	Serial	Intel Dialogic D/240PCI-T1 (24-port T1 card) only. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> RS-232 serial cable T1 cables
Matra 6500	DTMF	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> Analog cables
Mitel SX-200	DTMF (ONS)	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> Analog cables
Mitel SX-2000	DTMF (ONS)	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> Analog cables

Table 1 Supported Circuit-Switched Phone System Integrations (continued)

Phone System	Integration Type	Supported Voice Cards	Required Components
NEC NEAX 2000 MCI	Serial (MCI)	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> RS-232 serial cable Analog cables <i>Failover only:</i> 9-pin modem data splitter
NEC NEAX 2400 MCI	Serial (MCI)	All. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> RS-232 serial cable Analog or T1 cables <i>Failover with analog voice connectivity only:</i> 9-pin modem data splitter
Nortel Meridian 1	Serial	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> PBXLink boxes RS-232 serial cables Digital cables Analog cables
Siemens 9751 9006i	DTMF	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> Analog cables
Siemens Hicom 3000	DTMF	All except D/240PCI-T1. See the “Supported Voice Cards” section on page 13.	<ul style="list-style-type: none"> Analog cables

Supported Voice Cards

Table 2 lists supported voice cards for the Cisco Unity server.

ISA voice cards are no longer supported, either for a new Cisco Unity 3.1 system or for an upgrade to Cisco Unity 3.1.

When two or more cards are being installed, the cards must be connected by using an H.100 cable.

Not all cards are available in all countries. Contact Cisco Systems for information about whether a given card is available in your country.

Table 2 Supported Voice Cards for the Cisco Unity Server

Voice Card	Compatible With	Connectors	Intel Dialogic SKU ¹
Intel Dialogic D/41E-PCI (4-port analog card)	D/120JCT-LS	4 RJ-11	D41EPCI
Intel Dialogic D/120JCT-LS (12-port analog card)	D/41EPCI	6 RJ-25	D120JCTLS
Intel Dialogic D/120JCT-Euro (12-port analog card)	None	6 RJ-25	No longer orderable ²

Table 2 Supported Voice Cards for the Cisco Unity Server (continued)

Voice Card	Compatible With	Connectors	Intel Dialogic SKU ¹
Intel Dialogic D/120JCT-Euro (uPCI, 12-port analog card)	None	6 RJ-25	D120JCTLSEUROU
Intel Dialogic D/240PCI-T1 (24-port T1 card)	None	RJ-45	D240PCIT1

1. The SKU, or stock-keeping unit, is the product identifier that Intel Dialogic assigned to the voice card. If you order the voice card from Intel Dialogic, you can use the SKU to ensure that you are ordering the correct version.
2. We recommend using the newer universal (3.3Vdc or 5Vdc dual voltage) PCI version of the D/120JCT-Euro card, rather than the older single-bus voltage (5Vdc) version of the card. Older non-universal PCI cards are still supported for use with Cisco Unity version 3.1(x).

Supported AMIS-Compliant Voice Messaging Systems

The AMIS analog protocol is supported in Cisco Unity version 3.1(2) and later. The AMIS analog protocol allows Cisco Unity to exchange voice messages with other AMIS-compliant voice messaging systems.

The following systems are supported for use with Cisco Unity 3.1(3) and later:

- Active Voice Repartee
- Alcatel 4635
- Avaya
 - Interchange with AMIS-analog Networking Gateway
 - INTUITY AUDIX
 - Octel 100 Messaging
 - Octel 250/350
- Centigram Voice Mail
- Nortel Networks Meridian Mail
- Siemens PhoneMail

The following systems are supported for use with Cisco Unity 3.1(2):

- Active Voice Repartee
- Avaya
 - Octel 100 Messaging
 - Octel 250/350
- Centigram Voice Mail
- Siemens PhoneMail

For information on using AMIS in Cisco Unity, see the *Networking in Cisco Unity Guide, Release 3.1* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/unity31/net/net31/index.htm.

Supported Cisco Gateways for Use with AMIS

The AMIS analog protocol is supported in Cisco Unity version 3.1(2) and later. The AMIS analog protocol allows Cisco Unity to exchange voice messages with other AMIS-compliant voice messaging systems.

AMIS is an analog, DTMF-based protocol. Whenever possible, we recommend that you use standard analog lines from a PBX or FX analog lines from a PSTN for sending AMIS messages to other voice messaging systems.

In a dual-phone system integration with Cisco CallManager and a PBX, if the PBX has PSTN trunks that do not go through Cisco CallManager, then the ports on the Cisco Unity server that use the PBX should be enabled for outgoing AMIS calls. Do not enable the Cisco Unity ports that use Cisco CallManager for AMIS.

In a pure Cisco CallManager environment, because Cisco CallManager supports only IP connectivity, only the gateways listed in [Table 3](#) are supported for use with AMIS.

Table 3 Supported Cisco Gateways for Use with AMIS in a Pure Cisco CallManager Environment

Gateway	Software Version	Mode	Recommended Settings
WS-X6624 (blade in Cisco Catalyst 65XX)	Cisco CallManager 3.2 or later TFTP load	MGCP	
WS-X6608 (blade in Cisco Catalyst 65XX)	Cisco CallManager 3.2 or later TFTP load	MGCP	
26XX IOS Gateway	12.2(8) or later	h.323	
36XX IOS Gateway	12.2(8) or later	h.323	
VG200 IOS Gateway	12.2(13) or later	MGCP	mgcp dtmf-relay codec all mode out-of-band
VG248 Gateway	1.3(1) or later	SCCP	In Cisco CallManager Administration, disable Call Waiting for each VG248 port. On the VG248, disable fax relay on each port. Call-forwarding tones can interrupt DTMF sequences and result in frequent call failures or retries. Disable forwarding tones where possible in Cisco CallManager Administration.

Where applicable for Cisco CallManager and gateways, set DTMF duration and interdigit timing to 80 milliseconds.

Additional Supported Hardware

The following optional hardware is supported for use with Cisco Unity 3.1:

- An external modem (when pcAnywhere is selected as the Cisco TAC remote-access method). Note that modems must be customer-provided.
- Tape drives for system backup. If a UNITY-IBM-DAT SCSI-based tape-drive kit is used with the Cisco MCS-7815I-2.0-ECS1 server, a customer-provided PCI-based SCSI Host Bus Adaptor (HBA) is required. Cisco recommends the IBM 19K4646 card (also known as Adaptec model 29160LP), available from IBM. Refer to the IBM ServerProven website for compatibility of other HBAs.
- A tape autoloader may also be attached to a Cisco Unity server, although network backup to a dedicated backup server is recommended for high-capacity backup and recovery scenarios.
- Uninterrupted power supply (UPS) connected to a Cisco Unity server by a serial cable.
- Directly connected chaining of additional mass storage onto a RAID channel or channels hosted via a SCSI controller or a Fibre Channel host bus adapter inside the server. Note that Cisco TAC is unable to assist with this hardware setup or with problems related to this storage configuration. Consult with the server vendor for any issues related to this configuration.
- Two or more network interface cards (NICs) for fault tolerance, sharing the same IP address (active-passive configuration).
- Use of gigabit Ethernet is recommended on the Cisco Unity server for general connectivity, and in particular for the heartbeat link between Cisco Unity failover nodes, but it is not required.

The following out-of-band management cards are supported for use with Cisco Unity 3.1:

- Dell Remote Assistant Card, version 2.0 and later.
- Hewlett-Packard Remote Insight Lights-Out Edition, all versions.
- IBM Remote Supervisor Adapter, all versions.

See also the [“Additional Supported Software” section on page 18](#) for software that is supported for use in conjunction with the management cards to remotely restart the Cisco Unity server.

Unsupported Configurations

The following configurations are not supported with Cisco Unity 3.1:

- IBM Lotus Notes as the e-mail server. Cisco Unity can support Lotus Notes users if there is a Lotus Notes connector to the Exchange server within the site.
- Running any application or service on the Cisco Unity server other than those listed as required or supported in this document or in cross-referenced documents.
In particular, running any third-party fax server on the Cisco Unity server is not supported. (ActiveFax, the fax server available with previous versions of Cisco Unity, is no longer supported, either on the Cisco Unity server or on a separate fax server.)
- Cisco Unity running on Windows 2000 DataCenter Server.
- Software-based RAID on the Cisco Unity server.
- Exchange 2000 Conferencing Server is not supported when installed on the Cisco Unity server, but it is supported when installed on the network.

The following configuration is supported but not recommended:

- Cisco Unity can run in a Windows 2000 Server domain that is running in native mode; however, the Voice Connector will not install on a domain controller in this configuration. Also, there may be performance degradation at a high port/user count.

Supported Fax Server Software

Only the following fax servers installed with an Exchange gateway are supported for use with Cisco Unity:

- Biscom FAXCOM for Microsoft Exchange, version 6.19 or later.
- Captaris RightFax, version 6 or later.
- Esker Faxgate, version 7 or later.
- Fenestrae Faxination, version 4 or later.
- Interstar Technologies
 - LightningFax, version 5.5 or later.
 - XMediusFax, version 3.0 or later.
- Omtool Fax Sr., version 3 or later.
- Optus FACSys, version 4.5 or later.
- TOPCALL, all versions.

Install the fax cards, fax server software, and dedicated fax lines on the fax server. Installing fax software on the Cisco Unity server is not supported. Refer to the fax server documentation for a list of supported cards and integration methods.

Supported Virus-Scanning Software

The following virus-scanning software has been qualified by Cisco for use with Cisco Unity:

- Computer Associates InoculateIT for Microsoft Windows NT and Windows 2000, version 4.53, build 627 and later.
- McAfee
 - NetShield for Microsoft Windows NT and Windows 2000, version 4.5 and later.
 - VirusScan Enterprise, version 7.1 and later.
- Symantec
 - Norton AntiVirus for Microsoft Exchange, version 2.13 and later.
 - Norton AntiVirus for Microsoft Windows NT and Windows 2000, version 5.02 and later.
- Trend Micro
 - ScanMail for Microsoft Exchange 2000, version 5 and later.
 - ScanMail for Microsoft Exchange 5.5, version 3.x and later.

Support Policy for Virus-Scanning Software

Cisco support policy is that customers can deploy third-party virus-scanning software on the Cisco Unity server. However, Cisco expects that customers (or their systems integration partners) will have tested the interoperability of such products with Cisco Unity before the products are deployed, to mitigate the risk of problems being discovered within the production environment between Cisco Unity and the third-party products loaded on the Cisco Unity server.

If a customer calls Cisco TAC with a problem, a Cisco TAC engineer may require that such third-party software be turned off or even removed from the Cisco Unity server during the course of troubleshooting. If it is determined that the interoperability between the third-party software and Cisco Unity was the root cause of the problem, then the third-party software will be required to be disabled or removed from the Cisco Unity server until such time that the interoperability issue is addressed, so that the customer can continue to have a functional Cisco Unity system.

Before installing any qualified optional Microsoft service pack on the Cisco Unity server, confirm that the manufacturer of any optional third-party software or hardware that you plan to install on the Cisco Unity server—or that is already installed—also supports the service pack for use with its product.

Additional Supported Software

The following optional third-party software has been qualified by Cisco for use with Cisco Unity:

- Adobe Acrobat Reader, version 4.0 and later.
- American Power Conversion (APC) PowerChute Plus for Windows 2000 and Windows NT, version 5.2.1 and later.
- Cisco IDS Host Sensor Agent, version 9/26/2001 and later.



Note Cisco IDS Host Sensor Agent will no longer be supported by Cisco beginning in May 2004. If you want to use an intrusion-prevention application on the Cisco Unity server, we recommend that you upgrade to Cisco Unity 4.0 or later, which supports Cisco Security Agent for Cisco Unity. For more information, refer to *Release Notes for Cisco Security Agent for Cisco Unity* at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_release_notes_list.html.

- Dell OpenManage. Supported when used in conjunction with the Dell Remote Assistant Card to remotely restart the Cisco Unity server.
- Hewlett-Packard
 - Insight Manager. Supported when used in conjunction with the Hewlett-Packard Remote Insight Lights-Out Edition card to remotely restart the Cisco Unity server.
 - OpenView. Supported for use with Cisco Unity version 3.1(5) and later for IP monitoring of Cisco Unity, SQL Server, and Exchange services, on all supported Cisco Unity hardware platforms.
- IBM Director. Supported when used in conjunction with the IBM Remote Supervisor Adapter to remotely restart the Cisco Unity server.
- NetIQ VoIP Manager version 2.0 for Cisco Unity. Install only the agent on the Cisco Unity server.

- RSA SecurID ACE/Agent for Microsoft Windows 2000, version 1.1.

For users who use text to speech to access their e-mail over the phone or who want voice-message access to be more secure, RSA provides a higher level of security than the phone password. The ACE/Server software and Cisco Unity software cannot be installed on the same server. For information about configuring Cisco Unity to work with the RSA SecurID system, refer to the “Enhanced Phone Security” chapter of the *Cisco Unity System Administration Guide, Release 3.1(3)* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/unity31/sag/sag313/index.htm.

- VERITAS
 - Backup Exec for Microsoft Windows NT and Windows 2000, version 8.5 and later.
 - NetBackup version 4.5 and later

VERITAS backup software is not supported for use with a Cisco Unity system that is configured for failover.

For information on backing up Cisco Unity, refer to *White Paper: Backing Up and Restoring a Cisco Unity System, Version 3.0(1) and Later* at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_technical_reference_list.html.

- WinZip, version 7.0 or later.

Support Policy for Optional Third-Party Software

Cisco support policy is that customers can deploy third-party software for backup, monitoring, and security on the Cisco Unity server. However, Cisco expects that customers (or their systems integration partners) will have tested the interoperability of such products with Cisco Unity before the products are deployed, to mitigate the risk of problems being discovered within the production environment between Cisco Unity and the third-party products loaded on the Cisco Unity server.

If a customer calls Cisco TAC with a problem, a Cisco TAC engineer may require that such third-party software be turned off or even removed from the Cisco Unity server during the course of troubleshooting. If it is determined that the interoperability between the third-party software and Cisco Unity was the root cause of the problem, then the third-party software will be required to be disabled or removed from the Cisco Unity server until such time that the interoperability issue is addressed, so that the customer can continue to have a functional Cisco Unity system.

Before installing any qualified optional Microsoft service pack on the Cisco Unity server, confirm that the manufacturer of any optional third-party software or hardware that you plan to install on the Cisco Unity server—or that is already installed—also supports the service pack for use with its product.

Unsupported Third-Party Software

Third-party software that has not been qualified for use with Cisco Unity is not supported on the Cisco Unity server. Cisco TAC will ask that it be removed during troubleshooting.

- All editions of Windows Server 2003 are unsupported.
- Fax software on the Cisco Unity server is not supported.

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 © 2003-2004 Cisco Systems, Inc. All rights reserved.