Welcome

The Setup program enables you to install the Microsoft Exchange Server software on a new Windows NT Server computer. Before installing the server software, you must ensure that no other programs are running and agree to the terms of the license agreement.

Before installing the server software, you must:

- Verify that the Windows NT Server primary domain controller (PDC) is running.
- Ensure that messaging-aware applications are not running.

Back up your existing installation if you are upgrading Microsoft Exchange Server, in case you need to restore your system later. You can use the Windows NT Server Backup utility to save directory and information store files to a tape drive while the server is online. For more information about performing backups and restoring data from tape backup, see Microsoft Exchange Server Maintenance and Troubleshooting.

• Use the Cluster Administrator program to verify that an appropriate <u>cluster group</u> has been created if you are installing Microsoft Exchange Server on a pair of clustered servers. The group must contain a network name, an Internet Protocol (IP) address, and a shared disk that is part of an external disk array.

Licensing Choose **Accept** to indicate that you have read and agree to the license agreement for this server product. If you do not agree to the terms of this license agreement, quit Setup, and promptly return this package to the establishment from which you obtained it for a full refund.

Main Application Installation

The Setup program enables you to install the Microsoft Exchange Server software on a new Windows NT Server computer, or add Microsoft Exchange components to or remove them from an existing Microsoft Exchange installation.

Setup provides different installation types. If an installation type is unavailable, you do not have enough disk space. You can do one of the following:

Choose another installation type.

• Choose **Change Directory** to specify another destination directory for the Microsoft Exchange Server software.

Choose one of the following installation types:

Installation Type	Components Installed
Typical	The Microsoft Exchange Server software and Microsoft Exchange Server Administrator program. No connectors are installed.
Complete/Custom	As selected. You can install any and all available components, including certain connectors.
Minimum	Just the Microsoft Exchange Server software. No connectors are installed.

To install Microsoft Exchange Server in a different directory

- 1. Choose Change Directory.
- 2. Type the path of the destination directory in the **Path** box, and then choose **OK**.
- 3. Select a directory in the **Directories** box, and then choose **OK**.
- 4. Select a drive in the **Drives** box, and then choose **OK**.

If you are installing Microsoft Exchange Server on a <u>clustered server</u>, select the drive that represents the shared disk.

Note If the default directory does not exist, Setup creates it.

To set up the organization and site

You need the following information to run the server Setup program for a server in a new site or organization:

- Organization name (case sensitive)
- Site name
- Clients to be installed
- Connectors to be installed
- Service account name
- Service account password

Complete/Custom Installation

This installation type enables you to select components, such as certain connectors, to install.

To select installation options

• In the **Options** box, select the check box for any item that you want to install or clear the check box for any item that you don't want to install.

A description of the selected item appears in the **Description** box.

To view further options

In the **Options** box, select an item, and then choose **Change Option**.

Note Change Option is unavailable if there are no additional items to select.

To install an item in a different directory

• In the **Options** box, select an item, and then choose **Change Directory**. **Change Directory** is available only for an item that can be installed in another directory.

The **Space Required** line at the bottom of the screen indicates the disk space required for the selected items. These items will be installed in the specified directory.

Suboptions Available

To install or remove installation suboptions

• In the **Options** box, select the check box for the item that you want to install or clear the check box for any item that you don't want to install.

A description of the selected item appears in the **Description** box.

The **Space Required** line at the bottom of the screen indicates the disk space required for the selected items. These items will be installed in the specified directory.

Maintenance Installation

To install or remove installation options

• In the **Options** box, select the check box for the item you want to install or clear the check box for any item you want to remove.

A description of the selected item appears in the **Description** box.

Note If an item in the **Options** box is unavailable, the item was previously installed by another application. You cannot reinstall or remove the item.

To view more options

In the **Options** box, select an item, and then choose **Change Option**.

Note Change Option is unavailable if there are no additional items for the selected option.

To install an item in a different directory

In the **Options** box, select an item, and then choose **Change Directory**. **Change Directory** is only available for an item that can be installed in another directory.

The **Space Required** line at the bottom of the screen indicates the disk space required for the selected items. These items will be installed in the specified directory.

The complete count of components that you are adding or removing appears near the bottom of the screen.

Warning If you are adding components to an existing Microsoft Exchange Server installation, make sure that you don't unintentionally remove Microsoft Exchange Server components. For example, if you want to add a connector to an existing Microsoft Exchange Server computer, do not clear options that are already selected in the **Complete/Custom Setup** dialog box. Doing so will remove the component and may seriously damage your Microsoft Exchange Server system.

Suboptions Maintenance

To install or remove suboptions or components

• In the **Options** box, select the check box for the item you want to install or clear the check box for any item you want to remove.

A description of the selected item appears in the **Description** box.

The **Space Required** line at the bottom of the screen indicates the disk space required for selected items.

The complete count of components that you are adding or removing appears near the bottom of the screen.

Warning If you are adding components to an existing Microsoft Exchange Server installation, make sure that you don't unintentionally remove Microsoft Exchange Server components. For example, if you want to add a connector to an existing Microsoft Exchange Server computer, do not clear options that are already selected in the **Complete/Custom Setup** dialog box. Doing so will remove the component and may seriously damage your Microsoft Exchange Server system.

Microsoft Exchange Site and Organization

See Also

A new Microsoft Exchange Server computer can be either part of an existing site or the first server in a site. If you are installing the first server in your organization, create a new site. Otherwise, the Microsoft Exchange Server computer must join an existing site.

To install an additional server in an existing site, you need the following information:

- Clients to be installed
- Connectors to be installed
- Name of another server in the site
- Service account password

For more information about site planning, see *Microsoft Exchange Server Concepts and Planning.*

To install the first server in a site

• Select **Create a New Site**, and then type the organization and site names in the appropriate boxes. Note that the **organization name** is case-sensitive and must be typed exactly as you create it in future installations.

To add a server to an existing site

• Select **Join An Existing Site** and type the name of an existing server in the site this server will join. The **server name** must match the name of the server in the site you are joining.

Note Extended characters can be mapped in site and organization names. If you use extended characters in your site or organization names, verify the address assigned in the Microsoft Exchange Server Administrator program after installation.

Confirm Exchange Site and Organization

To add a server to an existing site

In the **Existing Server** box, type the name of a Microsoft Exchange Server computer • in the site you are joining. The **Organization** and **Exchange Site** boxes contain information obtained from the

specified server.

Site Services Account

Setup creates several services that run in the context of a user account called a service account. Before you install Microsoft Exchange Server on the first server in a site, you must create a Windows NT domain account that Microsoft Exchange Server uses to validate, start, and run the services. All Microsoft Exchange Server computers in the site must use the same service. You can create the service account on any computer that is running Windows NT Server and is a member of the same domain as the Microsoft Exchange Server computer.

For information about creating a Windows NT service account for Microsoft Exchange Server services, see *Microsoft Exchange Server Getting Started* or *Microsoft Exchange Server Concepts and Planning.*

To select a Windows NT service account

- 1. Select the service account you will use for Microsoft Exchange Server.
- If you are installing a new server in a new site, choose **Browse**.
- -Or-

• If you are installing a new server in an existing site, Setup uses the default service account for the site.

- 2. The **Add User Or Group** dialog box appears.
- In the Names box select the service account, choose Add, and then choose OK.
 -Or-

• In the **Add Names** box, type *domain\account* for the service account, and then choose **OK**.

3. In the **Account Password** box (in the **Site Services Account** dialog box), type the password for the service account.

Add User Or Group

Use the **Add User Or Group** dialog box to select the Windows NT service account for Microsoft Exchange Server.

To select a Windows NT service account from the Add User Or Group dialog box

1. In the **List Names From** box, select the domain where the Windows NT service account for Microsoft Exchange Server is located. The service account must be a member of the same domain as the Microsoft Exchange Server computer.

2. From the **Names** box, select the name of the service account you want to use.

3. Choose **Add** to add the service account to the **Add Names** box.

4. In the **Add Names** box, type *domain\account* for the service account, and then choose **OK**.

Find Account

Use the **Find Account** dialog box to locate a user account or group.

Find User or Group

Type the name of the user or group you want to search for. The system searches only for user accounts or groups with the exact name you specify.

Search All

Searches for a matching user or group name in the local domain or computer, and in all domains trusted by the local domain.

Search Only In

Searches for a matching user or group name only in the domains and computers you select from the list. The list includes the local domain or computer and all domains trusted by the local domain.

Search button

Begins a search based on the parameters specified in the **Find User Or Group** box, and by the **Search All** or **Search Only In** options.

Search Results

Contains a list of user accounts and groups found during a search. The list continuously fills as the search progresses.

Select one or more names from the **Search Results** list, and then choose **Add** to add them to the **Add Names** list in the **Add Users And Groups** dialog box.

The list presents the matching users and groups in the following forms:

Users

domainname \ username (fullname) description computername \ username (fullname) description

Groups

domainname \ groupname description computername \ groupname description

Add button

Closes the **Find Account** dialog box and adds the accounts selected in the **Search Results** list to the **Add Names** list in the **Add Users And Groups** dialog box.

Global Group Membership

The **Global Group Membership** dialog box lists the user accounts that are members of the selected global group.

Members Of Global Group

Lists the members of the selected global group.

Add

To add user accounts to the **Add Names** box in the **Add Users and Groups** dialog box, select one or more names from the **Members Of** list, and then choose **Add**.

Naming Conventions

You should carefully plan the naming conventions for your organization before you install and configure the system. Some names (organization, site, and server) cannot be changed without reinstalling the Microsoft Exchange Server software.

Due to some character limitations on organization and site names, the Setup program may not be able to use the exact names you specify; however, it will attempt to use a name that closely matches the name you specify. If you do not want to use the name Setup chooses for your site or organization, you can change the object's display name in the **General** property page. You cannot change the directory name (also called the relative distinguished name) of the object.

Note Extended characters can be mapped in site and organization names. If you use extended characters in your site or organization names, verify the address assigned in the Microsoft Exchange Server Administrator program after installation.

See Also

Naming Conventions

Microsoft Exchange Server Options

Select the components you want installed on your Microsoft Exchange Server computer.

You can install:

• **MS Mail Connector:** Connects a Microsoft Exchange Server computer to MS Mail PC and MS Mail AppleTalk (also known as Quarterdeck Mail) systems.

• **Connector for Lotus cc:Mail:** Connects a Microsoft Exchange Server computer to a Lotus cc:Mail system.

• **X.400 Connector:** Connects a Microsoft Exchange Server computer to an X.400-compatible system.

• **Microsoft Exchange Event Service:** Installs support for folders with customized workflow applications.

• **Key Management Server:** Installs support for encrypting and adding digital signatures to messages.

Microsoft Exchange Server Setup

Type the name of the Microsoft Exchange Server computer that the Web service will connect to. You must have a local access network (LAN) connection to the Microsoft Exchange Server computer.

Microsoft Exchange Server Setup

Setup enables you to add or remove Microsoft Exchange Server components, or upgrade your existing installation of Microsoft Exchange Server. You can do one of the following:

Choose **Add/Remove** to add or remove components from a current installation.

• Choose **Upgrade** to upgrade your current Microsoft Exchange Server installation to a newer version.

• Choose **Update Node** to install Microsoft Exchange Server on a <u>clustered server</u> secondary node. Also choose **Update Node** if you are installing Microsoft Exchange Server on a new server in the cluster, or on a server that has replaced a failed node.

Choose **Remove All** to remove all previously installed components.

Choosing **Remove All** on a clustered server active node removes all databases, system 32 files, registry keys, service listings, and cluster registry database information associated with Microsoft Exchange Server.

Choosing **Remove All** on a clustered server secondary node removes only the files in the System 32 directory, registry keys, and service listings from the server. It also removes the secondary node from the failover policies defined for Microsoft Exchange Server.

Database Backup Location

Choose Standard Database Upgrade or Fault-Tolerant Upgrade.

Note Neither option performs a complete backup of your existing databases. You should perform a full backup of your information store before running Setup.

• To upgrade your databases in their current locations, choose **Standard Upgrade**. If Setup fails during this operation, the databases must be restored before you can return to your previous installation or run Setup again.

• To back up each database to a different, temporary location before upgrading, choose **Fault-Tolerant Upgrade**. If you are upgrading from Microsoft Exchange Server version 4.0, the **Fault-Tolerant Upgrade** option is not available. To perform a fault-tolerant upgrade, you must first upgrade to Microsoft Exchange Server version 5.0.

Fault-Tolerant Upgrade

If you choose Fault-Tolerant Upgrade and Setup fails while upgrading your databases:
 This upgrade significantly reduces the risk of having to restore your databases.
 Instead, you can restart your computer and run Setup again. After all databases are successfully upgraded, the backup databases are removed and replaced by the upgraded databases.

• You must restore your databases before you can return to your previous installation, or run Setup again. The alternate location for a fault-tolerant upgrade must have available space at least twice the size of your information store and cannot be a network drive.

Upgrading from Previous Versions of Microsoft Exchange Server

When Setup starts, it searches for any Microsoft Exchange Server components installed on your computer. Previous versions are detected when Setup connects to the directory and reads the version on every Microsoft Exchange Server computer in the site. It also detects the language and server type. You can determine the version of a Microsoft Exchange Server computer by viewing the properties on the server object in the Administrator window.

Upgrading from Microsoft Exchange Server 4.0

Due to directory schema changes between versions 4.0 and 5.5, it is recommended you first upgrade all Microsoft Exchange Server sites to version 4.0, Service Pack 2 (SP2). After you upgrade all servers in the site to SP2, you can upgrade them to version 5.5 in any order.

Note In a single-server site, you can upgrade to version 5.5 directly from version 4.0. You do not have to upgrade to SP2 or restart the services after an upgrade.

You can download Microsoft Exchange Server SP2 from the Microsoft Web at http://www.microsoft.com/, or you can transfer it from ftp.microsoft.com.

Alternative Upgrade Procedure

If you cannot upgrade your servers to SP2 first, it is strongly recommended that you first upgrade any directory replication bridgehead servers in the site to version 5.5. A directory replication bridgehead server is a server connected to another site using the directory replication connector. To determine which servers are directory replication bridgehead servers, view the **General** property page of each directory replication connector in the site. These servers are located in the Directory Replication container under the Site container in the Administrator window.

If there is more than one directory replication bridgehead server in your site, you should upgrade all of these servers to version 5.5.

Important If you do not upgrade your directory replication bridgehead servers first, directory replication stops and won't restart until you upgrade them.

After you install version 5.5 on the first server in the site, restart all computers running Microsoft Exchange Server 4.0 in that site after the new directory is replicated. This can take from a few minutes to an hour, depending on the number of servers in your organization.

Upgrading from Microsoft Exchange Server 5.0

Setup backs up your existing Web Connector files in case you have made significant changes to them after they were installed. The backup directory is Webdata\<Lang> <5.5>.tmp, where Lang is the language your server uses, and 5.5 is a number that increases each time you upgrade.

Installing Microsoft Exchange Server on a Clustered Server

You are about to install Microsoft Exchange Server on a clustered server.

Before you continue, verify that:

- You are installing Microsoft Exchange Server Enterprise Edition.The processors and amount of RAM are the same for each clustered server.

To install Microsoft Exchange Server on a different computer, choose **Cancel**.

Clustered Server

A Windows NT Server Enterprise Edition computer that is running Microsoft Cluster Server software. Microsoft Cluster Server provides a high degree of reliability and protection against hardware failure on mission-critical systems.

A *cluster* comprises an active node and a secondary node. If the active node goes down, or if a critical service on the active node fails, the secondary node takes its place without interrupting service or dropping client connections. This transition is called a failover.

Cluster Resources

The <u>cluster group</u> you selected does not contain the resources required by Microsoft Exchange Server. Select a group that contains a network name, an Internet Protocol (IP) address, and a shared disk that is part of an external disk array.

To locate or create a group that contains these resources, quit Setup and run Cluster Administrator.

Selecting a Cluster Group

Select a <u>cluster group</u> that contains a network name, an Internet Protocol (IP) address, and a shared disk that is part of an external disk array.

To locate or create a group that contains these resources, quit Setup and run Cluster Administrator.

Cluster Group

A collection of interdependent resources used by various Windows NT services. Microsoft Cluster Server uses cluster groups to organize essential system resources, such as the network name and a server's Internet Protocol (IP) address.

Resources that are specific to Microsoft Exchange Server include the system attendant and the information store. Setup adds these resources to the group you select.

Cluster Node Setup Is Complete

Microsoft Exchange Server has been installed on this node. To complete the installation, you must run Setup on all other nodes in the cluster.

After you install Microsoft Exchange Server on each node, use Cluster Administrator to define the failover rules for the Microsoft Exchange Server services (system attendant, information store, and so on). Each service can have its own failover policy that defines the events or conditions that trigger a failover to the secondary node.

Important If you want the Microsoft Mail Connector services to failover, run Cluster Administrator and add each service to the appropriate <u>cluster group</u>.

KM Server Configuration

Choose how your Microsoft Exchange Key Manager service password is given to you. To display the Microsoft Exchange Key Manager service password, choose **Display this**

password once. I will write it down and enter it manually on startup.

You can write the password down and use it later during Setup.

• To copy the password for the Microsoft Exchange Key Manager service to a floppy disk, choose Write this password to a removable (floppy) disk and create a backup copy. This option will require 2 blank, formatted floppy disks.

After the password is copied to the disk, Setup immediately backs up the disk containing the password to another disk. Keep the disks created during Setup in a secure place in to avoid loss or damage.

There is no default password.

Note If you choose not to create a Microsoft Exchange KM server floppy disk, you must type the password that Setup provides in the **Startup Parameters** box. The password is case-sensitive.

KM Server Password Disk Location

Specify the location of the floppy disk drives where your Microsoft Exchange Key Manager service password will be copied and backed up to.

Primary copy of startup password

Specify the drive letter of the floppy disk that Setup will write the primary copy of the startup password to.

Backup copy of startup password

Specify the drive letter of the floppy disk that Setup will write the backup copy of the startup password to.