

# Exchange Server Archiver

*Exchange Server Archiver - 3.0*

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## Getting started

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Red Gate's Exchange Server Archiver enables you to improve the efficiency of your Microsoft® Exchange servers by delivering a transparent archiving solution.

The archived messages and attachments can be retrieved as and when required, allowing you to:

- remove restrictions on mailbox sizes
- spend less time managing users
- free up space on your Exchange server stores

Exchange Server Archiver is simple to install, configure, and maintain.

You can use Exchange Server Archiver to archive messages on Microsoft Exchange Server 2003, Exchange Server 2007, or Exchange Server 2010. For full system requirements, see Prerequisites (page 15).

### Technical notes

For a description of the Exchange Server Archiver architecture and processes, see Technical overview. If preferred, you can download this document as a pdf file (<http://www.red-gate.com/ESA/Overview/v3.0>).

## Technical overview

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This topic describes the architecture of Exchange Server Archiver, and provides an overview of the archive and retrieval processes. Some information on security, licensing, and evaluation is also provided.

You can download this topic as a pdf file (<http://www.red-gate.com/ESA/Overview/v3.0>).

You are recommended to read this topic before you install Exchange Server Archiver. For full details of how to install Exchange Server Archiver, see Installing Exchange Server Archiver (page 14).

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### Archive modes

Exchange Server Archiver offers four different archive modes so that you can choose what will happen to messages that are processed during an archive. The selected archive mode is used whenever an archive is run.

The archive mode that you choose does not affect the end-user experience.

The following archive modes are available:

### **Copy attachments only**

- copies attachments to the specified Archive Store
- the original attachments remain on the Exchange server

### **Copy entire message**

- copies the message bodies to the Archive Store
- copies attachments to the Archive Store
- originals of both remain on the Exchange server

### **Copy and remove attachments only**

- copies attachments to the Archive Store
- removes the attachments from the Exchange server

### **Full archive**

- copies messages and attachments to the Archive Store
- on the Exchange server, removes each message that has been archived and replaces it with a placeholder; the placeholder contains the first few lines of the message, and links to the full archived message and any attachments
- removes the attachments from the Exchange server

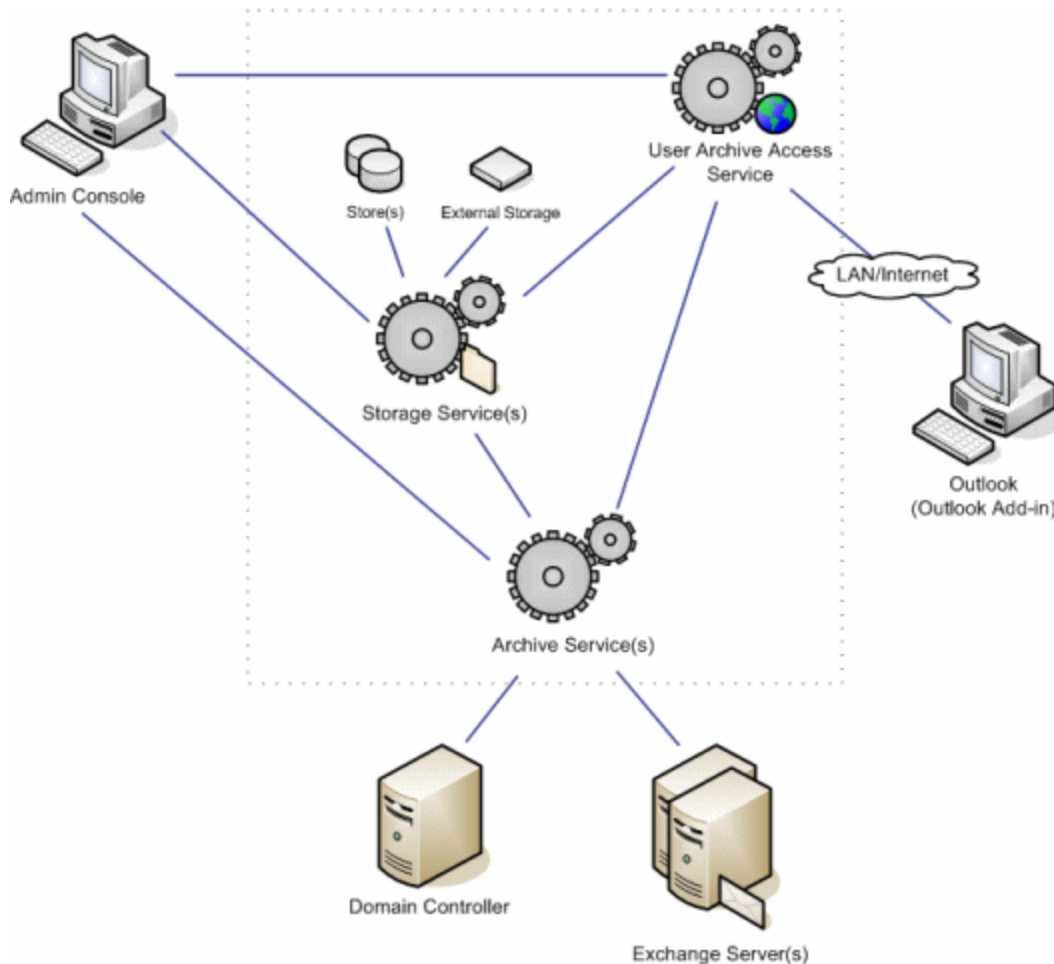
If you are evaluating Exchange Server Archiver, you may wish to use one of the 'copy only' modes so that messages and attachments remain on the Exchange server; see Evaluating Exchange Server Archiver (page 12) for more information.

If necessary, you can change the archive mode later (see Changing the archive mode (<http://www.red-gate.com/ESA/3.0?i=9320>)). When you change archive mode, Exchange Server Archiver schedules a tidy up task so that all previously-archived messages and attachments match the new archive mode.

Note that placeholders replace the archived messages in Exchange only when you choose *Full archive* mode; in the following descriptions of the architecture and processes, it is assumed that you have selected *Full archive* mode.

## Architecture

An overview of the Exchange Server Archiver architecture is illustrated below. The individual components are described in the following sections.



When you install Exchange Server Archiver, no software is installed on your Exchange server (unless you choose to install the optional Outlook® Web Access Add-in) and no information is stored in Active Directory®.

### Admin Console

The Admin Console provides an easy-to-use graphical user interface for you to install and configure the Exchange Server Archiver services, and to manage and schedule archives.

You use the Admin Console to set up rules to:

- specify which mailboxes are archived to which Archive Stores
- specify conditions that define which messages will be archived (such as 'messages over 10MB or messages older than 30 days')
- set up schedules to control when messages will be processed

You can apply a rule to individual mailboxes or to groups of mailboxes using the Exchange server storage hierarchy or Active Directory.

You also use the Admin Console to change the Exchange Server Archiver configuration, for example, to create new Archive Stores as required.

The settings you define using the Admin Console are replicated in the Archive Services. You can therefore view and manage the Exchange Server Archiver settings from Admin Consoles that have been installed on different computers.

To use the Admin Console, you must be a *domain administrator* on the domain on which the services are installed.

## Archive Service

The Archive Service coordinates the scheduling and archiving of messages.

Using the rules set up in the Admin Console, the Archive Service accesses the mailboxes, and determines which messages to extract and archive. It then compresses the messages to be archived, and passes them to the appropriate Storage Service.

The Archive Service also handles administration tasks. It:

- stores the system configuration
- performs tidy-up tasks if you choose to change archive mode
- performs copy-back tasks, if you choose to copy the archived messages back to the Exchange server

The Archive Service uses MAPI (Messaging Application Programming Interface) to communicate with Exchange.

The Archive Service requires a user with 'Administer information store' permissions (such as a *domain administrator*) so that it can access all messages when it communicates with Exchange. For more information, see [Creating the Archive Service user \(http://www.red-gate.com/ESA/3.0?i=9190\)](http://www.red-gate.com/ESA/3.0?i=9190).

## User Archive Access (UAA) Service

The UAA Service enables your users to access archived messages. It is a Web service and Web site hosted on IIS.

When a user opens an archived message, the UAA Service communicates with the Archive Service to confirm that the user is authorized to view the message. It then locates and retrieves the message from the Archive Store, via the Storage Service.



When a user searches for a message, the UAA Service delegates the search request to the appropriate Storage Services, and then combines the results retrieved from the Storage Services so that they can be displayed for the user.

If you choose not to install the Outlook Add-in or the Outlook Web Access Add-in, users can use the Web pages provided by the UAA Service to access their messages.

You can set up the UAA Service Admin Search to allow a specified security group access to search all archived messages.

The UAA Service uses MAPI if you choose to export messages to EML or MSG format.

For more information, see Using the UAA Service (<http://www.red-gate.com/ESA/3.0?i=9430>).

## **Storage Service**

A Storage Service provides fast, reliable, space efficient storage and retrieval of archived messages.

You can set up any number of Storage Services, and for each Storage Service you can set up any number of Archive Stores. For more information, see Using multiple Archive Stores (<http://www.red-gate.com/ESA/3.0?i=9438>).

You are recommended to install the Storage Service on the same server as the Archive Stores that it hosts. However, there may be some exceptions; for example, if you create an Archive Store on a NAS (network attached storage) unit, the Storage Service is installed on a different computer; for more information, see Archiving to external storage (<http://www.red-gate.com/ESA/3.0?i=9439>).

The Storage Service uses the Microsoft® Indexing Service to index and search the Archive Stores.

## **Archive Stores**

An Archive Store is a folder in which messages are archived.

Each message body and attachment is stored as a file in the Archive Store. Message bodies are compressed; attachments are not compressed. Once written, an archive file cannot be modified. Because the archived messages and attachments are stored as individual files, they are easy to back up (see Backing up and restoring Archive Stores (<http://www.red-gate.com/ESA/3.0?i=9472>)).

Single-instance storage (SIS) ensures that duplicate messages and attachments are stored only once in each store. Messages or attachments are considered to be duplicates if their checksums are identical. The header is stored for each instance of the duplicated message.

You create and manage Archive Stores using the Admin Console.

You can change the Archive Store to which a mailbox is archived. For example, you may want to do this when the store becomes large: you specify that you want to archive messages to a new Archive Store in the archive rules, and you can then make the old


store read-only, and perform a final backup on it. Messages in the old store can still be accessed.

Because Archive Stores and archived messages are uniquely identified using GUIDs (Globally Unique Identifiers), you can move an Archive Store to a different Storage Service if necessary.


For more information, see About Archive stores (<http://www.red-gate.com/ESA/3.0?i=9470>).

## Outlook

When you install the Outlook Add-in, Exchange Server Archiver provides a transparent interface for your users to access archived messages using Microsoft® Outlook 2007 or Outlook 2003.

Messages that have been archived are identified with a yellow envelope .

A search feature is provided so that users can search archived and unarchived messages within a single search when working online.

If you do not install the Outlook Add-in, messages that have been archived are identified with a yellow envelope  in Outlook, but only a placeholder is displayed when an archived message is selected. Users can access the full message from within Microsoft Outlook by using a hyperlink to the UAA Service which is provided in the placeholder. When the Add-in is not installed, searches from within Outlook will search only the message placeholders, but users can use the UAA Service Web page for a full-text search of archived messages.

For more information, see Using the Outlook Add-in (<http://www.red-gate.com/ESA/3.0?i=9433>).

## Outlook Web Access

When you install the Outlook Web Access Add-in, Exchange Server Archiver provides a transparent interface for your users to access the archived messages using Exchange Server 2007 Outlook Web Access or Outlook Web Access 2003. (Exchange 2010 Outlook Web Access is not supported.)

Messages that have been archived are identified with a yellow envelope .

Searches within Outlook Web Access will search only the message placeholders. Users can use the UAA Service Web page for a full-text search of archived messages.

If you do not install the Outlook Web Access Add-in, archived messages are not identified with an icon. When a user selects an archived message, the message placeholder is displayed and users can access the full message by using a hyperlink to the UAA Service.

For more information, see Using the Outlook Web Access Add-in (<http://www.red-gate.com/ESA/3.0?i=9471>).

## Outlook Anywhere

You can use Outlook Anywhere with Exchange Server Archiver if the server on which you install the UAA Service is visible to users accessing their messages remotely.

## The archive process

For a full archive:

1. When a mailbox is scheduled to be archived, the Archive Service accesses the mailbox on Exchange, and determines which messages to process.  
  
Note that messages in the Drafts or Outbox folders, (or any subfolders within these folders) are not archived.
2. For each message to be processed, the Archive Service checks whether the message is already in the Archive Store:
  - ♦ If the message does not exist already in the store, the Archive Service extracts the message body, header, and any attachments, and passes them to the corresponding Storage Service.
  - ♦ If the message already exists in the store (because it is a duplicate of a message that has already been archived), the Archive Service passes the message header to the appropriate Storage Service, and uses single-instance storage (SIS) to link it to the existing archived message body (and attachments, if it has any).
3. The Storage Service stores the messages.
4. When the messages have been safely stored, the Archive Service replaces the messages in Exchange with placeholders.

A placeholder contains the first few lines of the message, and links to the full archived message and any attachments.

Note that the original message is removed from the Exchange server only when the message and attachments have been written to the Archive Store, ensuring no data is lost if there is an interruption to the process.

You are advised to defragment your Exchange databases after the first archive to take advantage of the reduction in the size of Exchange stores; if you do not defragment the databases, you will not see any reduction in size. You should then continue to defragment the databases according to your usual maintenance schedule.

## The retrieval process

Using Outlook or Outlook Web Access, the user chooses to view a message that has been archived.

The User Archive Access (UAA) Service confirms, via the Archive Service, that the user is authorized to view the message, and then retrieves the message from the Archive Store and returns it to the user.

## Security

Exchange Server Archiver uses the permissions that have been set up in Exchange and Active Directory. The UAA Service and Archive Service prevent unauthorized access to messages.

HTTPS can be used to protect messages in transit between the UAA Service and the Outlook client.

For more detailed information about security, see Data security in Exchange Server Archiver (<http://www.red-gate.com/ESA/3.0?i=9450>).

## Licensing overview

Exchange Server Archiver is licensed per mailbox.

When the number of mailboxes approaches your licensing limit, the Admin Console displays a warning, so that you can upgrade your license if required.

If a mailbox is no longer scheduled to be archived (for example, because the user has left the company), the license is automatically made available so that you can reuse it with a different mailbox. The old mailbox archives remain accessible.

For more detailed information about licensing, see Licensing (<http://www.red-gate.com/ESA/3.0?i=9400>).

## Evaluating Exchange Server Archiver

When you install Exchange Server Archiver, you can choose an archive mode that leaves the original messages and attachments on your Exchange server and only copies them to the Archive Server (*Copy entire message* or *Copy attachments only*). Therefore, you can evaluate it with no risk to your data.

Because the archived messages and attachments are not removed from Exchange, you will not be able to see the reduction in size of your Exchange stores. However, you will be able to evaluate the performance of Exchange Server Archiver and assess the storage requirements for the archives, and you will have the reassurance that if you choose to uninstall Exchange Server Archiver, you do not need to copy back messages and attachments to the Exchange store.

If you prefer, you can evaluate Exchange Server Archiver in *Full archive* mode. Messages will be archived to the Archive Stores according to the rules you set up and replaced with placeholders in Exchange, and attachments will be removed from the Exchange server. You will therefore be able to see the resulting reduction in the size of Exchange stores when you defragment your Exchange databases. If you later choose to uninstall Exchange Server Archiver, you can first copy back archived messages and attachments to the

Exchange stores; however, you will lose any single-instance storage that was used on those messages.

Whichever archive mode you choose, you can specify which mailboxes and messages will be archived by setting up rules. For example, you may want to process only a few test mailboxes initially, and then roll out the evaluation to further mailboxes later.

The installation is a simple two-stage process:

1. Install the Admin Console.
2. Run the Configuration wizard to install the services and components, and set up the initial archive.

For full details, see *Installing Exchange Server Archiver (page 14)*.

For details of how to install and configure a trial environment for evaluating Exchange Server Archiver, see *Setting up a trial environment* (<http://www.red-gate.com/ESA/3.0?i=9435>).



## Prerequisites

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This topic contains information about the prerequisites for installing Exchange Server Archiver. For a pdf file containing all the information on installing and configuring Exchange Server Archiver, see *Installing Exchange Server Archiver* (<http://www.red-gate.com/esa/installation/v3.0>).

To install Exchange Server Archiver, and to use the Admin Console, you must be a *domain administrator*. The Archive Service, User Archive Access (UAA) Service, and the Storage Service must all be installed in the same domain.

The following is required:

- Microsoft Exchange Server 2010 (Update Rollup 1 or later)
- or Microsoft Exchange Server 2007 with public folders enabled (Service Pack 1 and Update Rollup 3 or later (<http://support.microsoft.com/kb/937052>) for Outlook® Web Access Add-in)
- or Exchange Server 2003 (Service Pack 2 or later for Outlook Web Access Add-in)

For each of the computers on which you will install a service, the following is required:

- Windows XP, Windows 2003, Windows 2008, or Windows Vista®
- Microsoft .NET Framework 2.0 or later

Additionally, for the individual services, the following is required:

### Archive Service

- MAPI (Messaging Application Programming Interface)  
You must ensure that you install a version of MAPI that is compatible with your Exchange configuration. For details, see *MAPI versions supported for Exchange Server Archiver* (<http://www.red-gate.com/ESA/3.0?i=9464>).

The Archive Service needs a user to communicate with Exchange. You must create the user prior to installing the services and components; for full details of the necessary permissions and other requirements, see *Creating the Archive Service user* (<http://www.red-gate.com/ESA/3.0?i=9190>).

### User Archive Access (UAA) Service

- IIS 5.1 or later  
If you are using IIS 7, you must also set up IIS 6 Metabase Compatibility and Windows Authentication; see *Configuring IIS* (page 32).  
Note: in a production environment, do not install the UAA Service on IIS 5.1 (or IIS 6.0 in IIS 5.0 isolation mode); only install the UAA Service on these versions in an evaluation environment in which all services are installed on the same server.

- ASP.NET 2.0

For IIS 7 and IIS 6, the UAA Service installer creates an application pool that is configured for ASP.NET 2.0. For IIS 5.1, you must ensure the ASP.NET version is set to 2.0; see Configuring IIS (page 32).

- MAPI

You must ensure that you install a version of MAPI that is compatible with your Exchange configuration. For details, see MAPI versions supported for Exchange Server Archiver (<http://www.red-gate.com/ESA/3.0?i=9464>).

- the installer requires that a Web site must be configured to use port 80 before you install the UAA Service; however, you do not have to use this Web site for the UAA Service

The server on which you install the UAA Service must be visible to users accessing their messages remotely.

The location of the UAA Service is added to archived messages. Therefore, **you are strongly recommended to create a CNAME (alias) DNS record for the UAA Service's server and enter this in the Web site address**; otherwise, a change to the URL will mean that all archived messages will need to be reprocessed.

## Storage Service

- Microsoft® Indexing Service

For operating systems prior to Windows Vista and Windows Server® 2008, the Indexing Service is installed by default.

To install the Indexing Service on a Windows Vista computer, go to the Control Panel, and turn the Indexing Service feature on. You are also recommended to install the latest Windows Vista service pack; see the Microsoft support page article 940069 (<http://support.microsoft.com/kb/940069>). If you do not install this service pack, searches from the Outlook Add-in or UAA Service may return results from subfolders unexpectedly.

For information about how to install and configure the Indexing Service on a Windows Server 2008-based computer, see the Microsoft support page article 954822 (<http://support.microsoft.com/kb/954822>).

## Outlook Web Access Add-in (optional)

- for Exchange Server 2007, Service Pack 1 and Update Rollup 3 or later (<http://support.microsoft.com/kb/937052>)
- for Exchange Server 2003, Service Pack 2 or later

Exchange Server 2010 Outlook Web Access is not supported.

Note that if you install further service packs or rollups after you have installed the Outlook Web Access (OWA) Add-in, you may need to uninstall and re-install the add-in.

If you are using Exchange Server 2003 and you install the UAA Service on a different computer from the Exchange server, to use the OWA Add-in you must allow delegation of



credentials to the UAA Service. For full details, see Authorization for the OWA Add-in on Exchange Server 2003 (<http://www.red-gate.com/ESA/3.0?i=9453>).

**Outlook Add-in (optional)**

- Outlook 2007 (Service Pack 2 or later) or Outlook 2003
- Outlook .NET Programmability Support

## Creating the Archive Service user

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The Archive Service needs a mailbox-enabled user that has 'administer information store' permissions on all mailboxes when it communicates with Exchange. For Exchange Server 2003, the Archive Service user must also have 'view information store' permissions.

You are recommended to make the Archive Service user a domain administrator; domain administrators have the necessary permissions. If you do not wish to do this, you must:

1. Make the Archive Service user a local administrator on the Exchange servers, or add permissions to execute WMI calls on Exchange (page 18).
2. Add read permissions to the Exchange configuration subtree in Active Directory (page 19).
3. Make the Archive Service user a local administrator on the Archive Service computer.
4. Grant permissions on all mailbox databases (page 20).
- 5.

### Adding WMI permissions

If you do not want to make the Archive Service user a domain administrator or a local administrator on the Exchange servers, add permissions to execute WMI calls on Exchange:

1. Navigate to **WMI Control**.  
To launch this from a command line, run `wmimgmt.msc`
2. Right-click **WMI Control** and select **Properties**.
3. In WMI Control Properties, select the **Security** tab.
4. Under **Root**, expand **CIMV2**, and then click **Security**.
5. Click **Advanced**.
6. Click **Add**, type the name of the user, and click **OK**.
7. In Permission Entry for CIMV2, ensure *This namespace and subnamespaces* is selected in **Apply to**, and then select the **Allow** check box for:
  - ♦ **Execute Methods**
  - ♦ **Enable Account**
  - ♦ **Remote Enable**
8. Click **OK** three times to return to the **Security** tab.
9. For Exchange Server 2003 only:
  - a. Under **Root**, expand **MicrosoftExchangeV2**, and then click **Security**.
  - b. Click **Advanced**.

- c. Click **Add**, type the name of the user, and click **OK**.
- d. In Permission Entry for MicrosoftExchangeV2, ensure *This namespace and subnamespaces* is selected in **Apply to**, and then select the **Allow** check box for:
  - ♦ **Execute Methods**
  - ♦ **Enable Account**
  - ♦ **Remote Enable**
10. Click **OK** on all the WMI Control Properties dialog boxes, and close the WMI Control.
11. In Administrative Tools, open **Component Services**.
12. Expand **Component Services**, expand **Computers**, right-click **My Computer**, and then click **Properties**.
13. Select the **COM Security** tab.
14. Under **Launch and Activation Permissions**, click **Edit Limits**.
15. Add the Archive Service user name.
16. If the Archive Service will run locally, select the Allow check box for **Local Launch** and **Local Activation**; if it will run remotely, select **Remote Launch** and **Remote Activation**.
17. Click **OK** on all the My Computer Properties dialog boxes.
18. For Exchange Server 2007 only: navigate to the folder on disk for each storage group, and grant the Archive Service user permissions to read the folder and its contents.  
For example, for a new, default installation, the storage group is in:  
*C:\Program Files\Microsoft\Exchange Server\Mailbox\First Storage Group*

## Adding Exchange configuration subtree permissions

If you do not want to make the Archive Service user a domain administrator, you must add permissions to read the Exchange configuration subtree:

1. If necessary, install ADSI Edit by following the instructions on Windows Server TechCenter (<http://technet.microsoft.com/en-us/library/cc773354.aspx>).
2. Run *adsiedit.msc* to open **ADSI Edit**.
3. Under **Configuration**, expand **Services**, right-click **Microsoft Exchange**, and then click **Properties**.
4. In the Microsoft Exchange Properties dialog box, select the **Security** tab.
5. Click **Add**, type the name of the Archive Service user, and click **OK**.
6. Click **Advanced**, select the Archive Service user, and click **Edit**.
7. In the **Apply to** box, select *This object and all child objects* and select the **Allow** check box for:
  - ♦ **List Contents**
  - ♦ **Read All Properties**

♦ **Read Permissions**

8. Click **OK** on all the Microsoft Exchange Properties dialog boxes.
9. Under **Domain**, right-click **Microsoft Exchange System Objects** and click **Properties**.
10. In the Microsoft Exchange System Objects Properties dialog box, select the **Security** tab.
11. Click **Add**, type the name of the Archive Service user, and click **OK**.
12. Click **Advanced**, select the Archive Service user, and click **Edit**.
13. In the **Apply to** box, select *This object and all child objects* and select the **Allow** check box for:
  - ♦ **List Contents**
  - ♦ **Read All Properties**
  - ♦ **Read Permissions**
14. Click **OK** on all the Microsoft Exchange System Object Properties dialog boxes.
15. Close **ADSI Edit**.

## Granting permissions on all mailbox databases

It is necessary to grant 'administer information store' permissions manually if the Archive Service user is *not* a domain administrator.

For Exchange Server 2003, it is also necessary to grant 'view information store' permissions.

## In Exchange Server 2010 and Exchange Server 2007

In Exchange Server 2010 and Exchange Server 2007, you use a Powershell command to change the user permissions.

The following command gives the user *UserName* rights on all storage groups within any Exchange 2007 server on the domain *DomainName.com*:

```
foreach ($sg in Get-StorageGroup) { if ((Get-ExchangeServer
    $sg.Server).Domain.Equals("DomainName.com")) { get-mailboxdatabase
    -storagegroup $sg.Identity | add-adpermission -user $UserName
    -ExtendedRights MS-Exch-Store-Admin; } }
```

The command must be run on an Exchange server in each domain.

The following command gives the user *UserName* rights within any Exchange 2010 mailbox database:

```
get-mailboxdatabase | add-adpermission -user $UserName -ExtendedRights MS-
Exch-Store-Admin
```

## In Exchange Server 2003

By default, the System Manager in Exchange Server 2003 does not display the **Security** tab when you select an Exchange Organization object, so you cannot modify the permissions. Therefore, to change user permissions, you must enable the *ShowSecurityPage* registry setting:

1. Go to the following Exchange branch in the registry editor:  
*HKEY\_CURRENT\_USER\Software\Microsoft\Exchange\Exadmin*
2. Create a new dword called *ShowSecurityPage*.
3. Change the value of the dword to 1.  
This displays the **Security** tab when you select an object.
4. Close and re-open the Exchange System Manager.

You can now change the permissions on the servers to grant full access to the user.

1. For each Exchange server you will archive, navigate to the server object that has the Administrative group containing the user.
2. Right-click the server object, and click **Properties**.
3. In the Properties window, click the **Security** tab.
4. Click **Add**, specify the user or group for which you want to change permissions, and then click **OK**.
5. Ensure that the user or group is selected in the **Group of user names** list, and then under **Permissions for...**, select **Allow Administer Information Store** and **Allow View Information Store Status**.
6. Click **OK**.

## Installation overview

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This topic provides an overview of how you install Exchange Server Archiver. For a pdf file containing all the information on installing and configuring Exchange Server Archiver, see [Installing Exchange Server Archiver \(http://www.red-gate.com/esa/installation/v3.0\)](http://www.red-gate.com/esa/installation/v3.0).

To install Exchange Server Archiver, you must have *domain administrator* privileges.

1. Install the Admin Console.

The Admin Console provides the interface for you to configure and manage Exchange Server Archiver.

2. Install the services and components (page 24).

To do this, open the Admin Console and click the **Launch Configuration Wizard** button. The Configuration wizard takes you through installation of the services and components. Installing the services and components (page 24) provides some supporting information to help you with the installation.

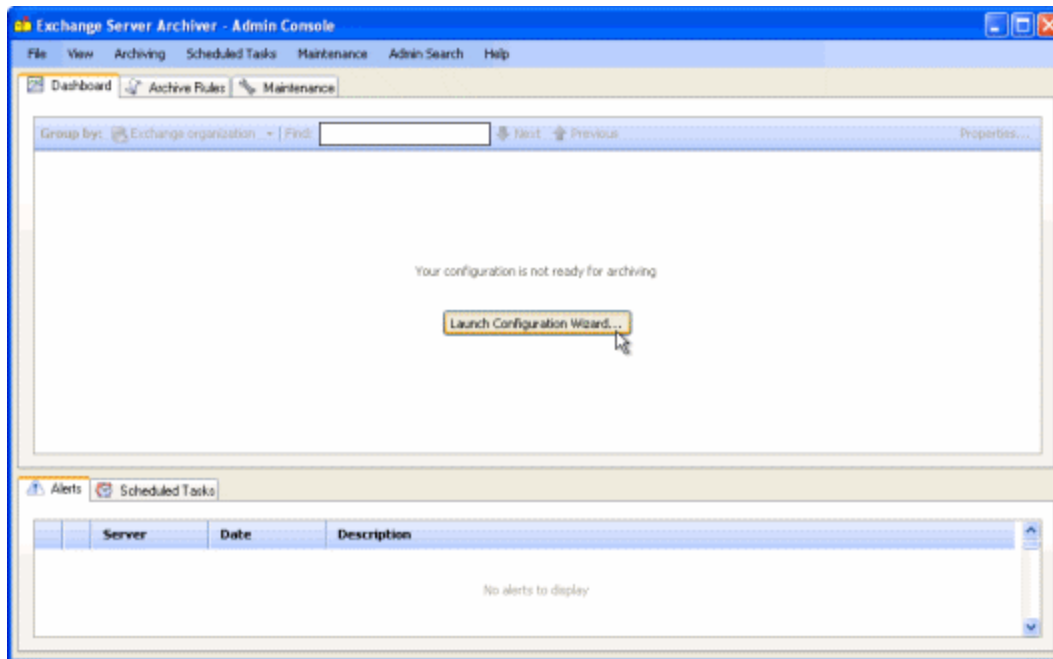
If you are upgrading from a previous version, see [Upgrading Exchange Server Archiver \(http://www.red-gate.com/ESA/3.0?i=9459\)](http://www.red-gate.com/ESA/3.0?i=9459).

## Installing the Admin Console

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You install the Admin Console by running the installer that you downloaded from the Red Gate Web site. This installs the Admin Console, and places the installers for the services and components in your installation folder.

When you have installed the Admin Console, on the Start menu, select **Red Gate** and then **Exchange Server Archiver Admin Console**.



To install the services and components and configure your system ready for archiving, click **Launch Configuration Wizard**.

## Installing the services and components

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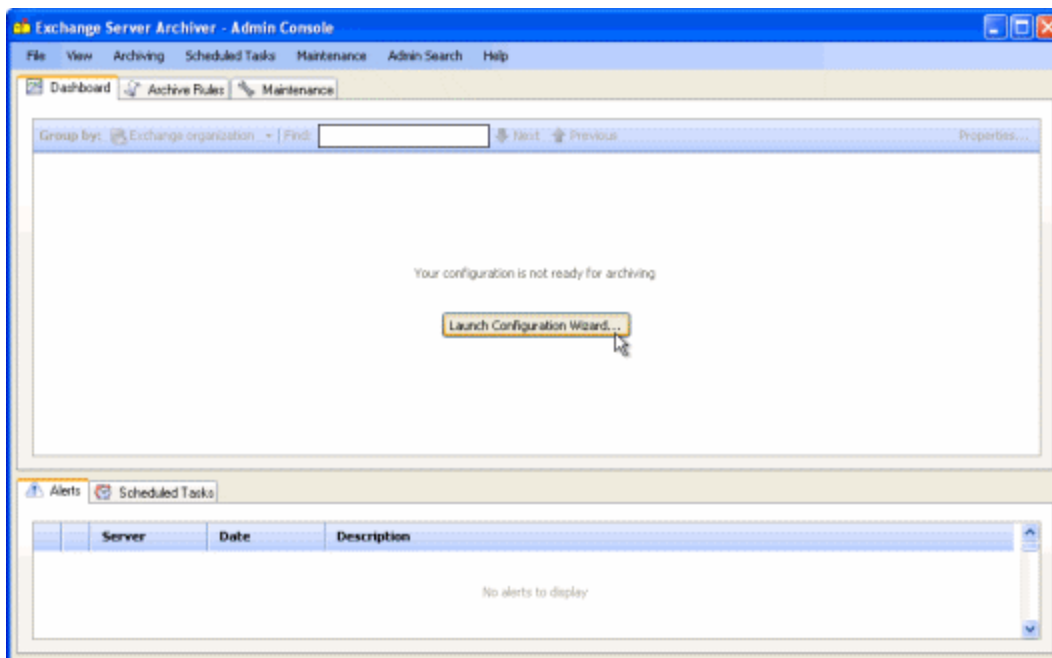
This topic contains information about installing the services and components for Exchange Server Archiver. For a pdf file containing all the information on installing and configuring Exchange Server Archiver, see [Installing Exchange Server Archiver \(http://www.red-gate.com/esa/installation/v3.0\)](http://www.red-gate.com/esa/installation/v3.0).

When you have installed the Admin Console, you can install the services and components. To install the services and components, you must be a *domain administrator*. Install all of the services and components in the same domain.

If you encounter problems during installation and configuration, for information about how to solve some common issues see [Troubleshooting your installation \(page 51\)](#).

You are recommended to use the Configuration wizard to guide you through the installation and configuration of the services and components.

To start the Configuration wizard, click **Launch Configuration Wizard** in the Admin Console (or on the **Maintenance** menu, click **Configuration Wizard**).



The wizard comprises the following steps:

1. Setting up the Archive Service user (page 25)
- 2a. Installing the Archive Service (page 26)
- 2b. Installing the Storage Service (page 26)
- 2c. Adding Archive Stores (page 27)
- 2d. Installing the UAA Service (page 27)
- 2e. Installing the OWA Add-in (page 29)
- 2f. Installing the Outlook Add-in (page 29)



3. Selecting the archive mode (page 30)
4. Setting up a 'quick rule' (page 30)

You can change the configuration of the services and components at a later date using the **Maintenance** tab in the Admin Console.

For each service, you can choose to install locally or on a remote server.

### Installing locally

If you install locally, the Setup wizard for the service is launched by the Configuration wizard; when you have completed the service Setup wizard, you are returned to the Configuration wizard.

### Installing on a remote server

If you install on a remote server, the installation executable for the service must be copied to the server because it must be run on the server. The Configuration wizard prompts you to:

1. Copy the installer to the remote server.

The Configuration wizard takes you to the folder that contains the installers. By default, this is:

*C:\Program Files\Red Gate\ESA Admin Console\Installers*

2. Connect to the remote server; you must then run the service installer on the server.

When you run the installer, the Setup wizard for the service is displayed. Complete the steps and click **Finish**, and then return to the Configuration wizard on your local computer.

3. In the Configuration wizard, specify the server and port details so that the Admin Console can register the service.

### Installing manually

You are recommended to use the Configuration wizard to install the services and components. However, if you prefer you can run the individual installers for the services and components manually. By default, they are located in:

*C:\Program Files\Red Gate\ESA Admin Console\Installers*

## 1. Setting up the Archive Service user

The Archive Service coordinates the scheduling and archiving of messages.

You must create the Archive Service user in Active Directory®. For full details about the permissions required and how you can add them, see Creating the Archive Service user.

## 2a. Installing the Archive Service

Before you install the Archive Service, ensure that MAPI is installed on the computer that will host the Archive Service. For details, see MAPI versions supported for Exchange Server Archiver (<http://www.red-gate.com/ESA/3.0?i=9464>).

Exchange Server Archiver requires a minimum of one Archive Service to communicate with Exchange, but you can install more Archive Services if required. For example, you may want to use a different Archive Service for each Exchange server to improve performance or because you have different versions of Exchange in your configuration. Only one Archive Service can be active for a particular Exchange server at a time.

The wizard guides you through the installation of only one Archive Service; if you want to add more, you can do this later by using the **Install Service** button on the **Maintenance** tab of the Admin Console.

Only Exchange servers that are on the local domain will be registered with the Archive Service. If you want to archive mailboxes that are on other domains or Exchange servers, you can register them later by using the **Manage Exchange Organization and Domains** button on the **Maintenance** tab of the Admin Console.

In **Step 2a: Archive Service location** in the Configuration wizard, you can choose to install the Archive Service locally or on a remote server (see *Installing on a remote server*, above).

In the Archive Service Setup wizard:

- Under **Windows service account**, enter the details of the Archive Service user you specified in Step 1.
- Under **Remoting access**, you are recommended to select **Accessible via TCP**, and specify the port to be used.

If you are installing all services (Archive Service, Storage Service, and UAA Service) locally, you can select **Accessible from this computer only (IPC)** if you prefer.

## 2b. Installing the Storage Service

A Storage Service hosts one or more Archive Stores.

You can have any number of Storage Services in your Exchange Server Archiver configuration. However, the wizard guides you through the installation of only one Storage Service; if you want to add more, you can do this later using the **Maintenance** tab of the Admin Console.

You are recommended to install the Storage Service on the same server as the Archive Stores that it hosts. However, there may be some exceptions; for example, if you create an Archive Store on a NAS (network attached storage) unit, the Storage Service is installed on a different computer; for more information, see Archiving to external storage (<http://www.red-gate.com/ESA/3.0?i=9439>).

Before you install the Storage Service, ensure that the Indexing Service is installed on the server. The Indexing Service creates and stores a catalog of the messages on the disk.

In **Step 2b: Storage Service location** in the Configuration wizard, you can choose to install the Storage Service locally or on a remote server (see *Installing on a remote server*, above).

In the Storage Service Setup wizard:

- When you are prompted for the **Catalog folder**, enter a location on a local disk for the catalog of messages that will be created by the Indexing Service.  
The catalog size can grow to 25% of the total store size; therefore ensure the location you specify will have sufficient disk space.
- Under **Service Account**, you are recommended to select **Local system**.  
If you select **Specific user**, enter the details of a domain account that has permissions to read and write files to the local disk, and to administer the Indexing Service on the local computer.

## 2c. Adding Archive Stores

When you have installed a Storage Service, you can add one or more Archive Stores. An Archive Store is a folder in which messages are archived; for more information, see About Archive stores (<http://www.red-gate.com/ESA/3.0?i=9470>).

In **Step 2c: Archive Store locations**, the Configuration wizard suggests a name and path for the Archive Store. The path is local to the server on which you installed the Storage Service. You can change the name and location if required, but each Archive Store must have a unique folder name. You can move the Archive Store later, if required; see Moving an Archive Store (<http://www.red-gate.com/ESA/3.0?i=9475>).

If you want to add more Archive Stores, click  **Add** and enter details for the new store. You can add up to 15 stores using the Configuration wizard; if you need to add more, you can do this later by clicking **Add Archive Stores** on the **Maintenance** menu of the Admin Console.

## 2d. Installing the UAA Service

The UAA Service enables your users to access and search archived messages.

Before you install the UAA Service, ensure that the following is installed on the computer that will host the service:

- IIS 5.1 or later  
If you are using IIS 7, you must set up IIS 6 Metabase Compatibility; see Configuring IIS (page 32).  
If you are using IIS 6 or IIS 7, the UAA Service installer will disable the Windows loopback check and restart IIS (if the loopback check has not already been disabled). For information about why the installer does this, see Microsoft support page article 896861 (<http://support.microsoft.com/kb/896861>).  
Note: in a production environment, do not install the UAA Service on IIS 5.1 (or IIS 6.0 in IIS 5.0 isolation mode); only install the UAA Service on these versions in an evaluation environment in which all services are installed on the same server.

- ASP.NET 2.0

For IIS 7 and IIS 6, the UAA Service installer creates an application pool that is configured for ASP.NET 2.0. For IIS 5.1, you must ensure the ASP.NET version is set to 2.0; see *Configuring IIS* (page 32).

- MAPI

You must ensure that you install a version of MAPI that is compatible with your Exchange configuration. For details, see MAPI versions supported for Exchange Server Archiver (<http://www.red-gate.com/ESA/3.0?i=9464>).

- the installer requires that a Web site must be configured to use port 80 before you install the UAA Service; however, you do not have to use this Web site for the UAA Service

The server on which you install the UAA Service must be visible to users accessing their messages remotely (for example, if they are using Outlook Anywhere). However, note that an external URL is not required for Outlook Web Access.

The location of the UAA Service is added to archived messages. Therefore, **you are recommended to create a CNAME (alias) DNS record for the UAA Service's server and enter this in the Web site address**; otherwise, a change to the URL will mean that all archived messages will need to be reprocessed.

All Exchange servers on the local domain that are detected by Exchange Server Archiver will automatically use the UAA Service you install using this Configuration wizard. If you need to install a second UAA Service, for example because of your network topology, you can do this later using the **Install Service** button on the **Maintenance** tab of the Admin Console. You can then change the UAA Service used by an Exchange server by selecting the server in the **Maintenance** tab of the Admin Console, and clicking **Properties**.

In **Step 2d: User Archive Access Service** in the Configuration wizard, choose to install the UAA Service locally or on a remote server (see *Installing on a remote server*, above).

In the UAA Service Setup wizard, you will be prompted to specify:

- the installation folder
- the Web site on which you want to install the UAA Service

You can choose to use an existing Web site that is configured to use port 80, or to create a new Web site.

To install on an existing Web site that is not configured to use port 80, run the installer from the command line and specify the parameter `WEBSITE_PORT`. For example:

```
msiexec /i "ESA User Archive Access Service x86.msi"
WEBSITE_PORT=8080
```

Note that if you are creating a new Web site and you are using IIS 5.1, you cannot use SSL as the communication protocol.

- the virtual directory of the UAA Service

Note that if you specify an existing virtual directory, it will be overwritten.

## 2e. Installing the OWA Add-in

If you want your users to access their archived messages from Microsoft Outlook Web Access using a transparent interface, you can install the Exchange Server Archiver OWA Add-in.

Before you install the OWA Add-in, ensure that the following is installed on the server:

- for Exchange Server 2007, Service Pack 1 and Update Rollup 3 or later (<http://support.microsoft.com/kb/937052>)
- for Exchange Server 2003, Service Pack 2 or later

Exchange Server 2010 Outlook Web Access is not supported.

If you are using Exchange Server 2003 and you install the UAA Service on a different computer from the Exchange server, to use the OWA Add-in you must allow delegation of credentials to the UAA Service. For full details, see Authorization for the OWA Add-in on Exchange Server 2003 (<http://www.red-gate.com/ESA/3.0?i=9453>).

To install the add-in, in **Step 2e: Outlook Web Access Add-in** in the Configuration wizard, copy the installer to the Exchange server that hosts Outlook Web Access, and then connect to the Exchange server and run the installer on the server. By default, the installer is located in:

*C:\Program Files\Red Gate\ESA Admin Console\Installers*

If you want to install the OWA Add-in later, you can do this from the Admin Console **Maintenance** tab: right-click the Exchange server and click **Properties**, and then click **Go to Installer**.

## 2f. Installing the Outlook Add-in

The Outlook Add-in provides a transparent interface for your users to access archived messages using Microsoft Outlook 2007 or Outlook 2003.

(If you do not install the add-in, users can access the archived messages by using a hyperlink to the UAA Service.)

Before you install the Outlook Add-in, ensure that the following is installed on the computer:

- Outlook 2007 or Outlook 2003
- Outlook .NET Programmability Support

To install the add-in, in **Step 2f: Outlook Add-in location** of the Configuration wizard, select the **Install Outlook Add-in on this computer** check box and then specify the path.

You can save the installer so that you can deploy it to other computers as part of a batch process (see Deploying the Exchange Server Archiver Outlook Add-in using Active Directory group policy (<http://www.red-gate.com/ESA/3.0?i=9463>)). The same installer is used for both Outlook 2007 and Outlook 2003. If you want to do this, select the **Save the installer** check box, and then specify the location to which you want to save it.

When you click **Next**, the Outlook Add-in Setup wizard is started. You will be prompted to specify the installation folder for the add-in.

When you have installed the Outlook Add-in, you must restart Outlook.

### 3. Selecting the archive mode

Exchange Server Archiver offers four different archive modes. An archive mode specifies what happens to messages that are processed during an archive.

You select the archive mode in **Step 3: Archive mode** in the Configuration wizard.

For example, you may wish to use **Copy entire message** or **Copy attachment only** mode if you are running a trial version of Exchange Server Archiver.

#### Copy attachments only

- copies attachments to the specified Archive Store
- the original attachments remain on the Exchange server

#### Copy entire message

- copies the message bodies to the Archive Store
- copies attachments to the Archive Store
- originals of both remain on the Exchange server

#### Copy and remove attachments only

- copies attachments to the Archive Store
- removes the attachments from the Exchange server

#### Full archive

- copies messages and attachments to the Archive Store
- on the Exchange server, removes each message that has been archived and replaces it with a placeholder; the placeholder contains the first few lines of the message, and links to the full archived message and any attachments
- removes the attachments from the Exchange server

### 4. Setting up a 'quick rule'

If you want to set up an archive task immediately, in **Step 4: Quick Rule** in the Configuration wizard you can define a rule to specify which mailboxes will be archived and when they will be archived. (If you do not want to set up a rule now, select **Skip this step**; no archive task will be set up and the configuration is completed.)

To set up a rule, select a rule template and click **Next**. In the wizard pages that follow, you are prompted to specify:

- the conditions under which you want messages to be archived
- a unique name for the rule
- the mailboxes to be considered for archiving
- the Archive Store in which you want the archived messages to be stored
- the schedule for the archive task

You can set up more rules and apply them to groups of users, or individual users when you have completed the Configuration wizard by using the **Rules** tab on the Admin Console.

When you have set up the quick rule (or skipped this step), you have completed the Configuration wizard and you can click **Finish** to close the wizard. You can then use the Admin Console to add more rules or to amend your configuration, as required.

## Configuring IIS

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This topic contains information about installing the services and components for Exchange Server Archiver. For a pdf file containing all the information on installing and configuring Exchange Server Archiver, see Installing Exchange Server Archiver (<http://www.red-gate.com/esa/installation/v3.0>).

By default, IIS (Internet Information Services) runs on the lowest available version of ASP.NET. However, the UAA Service Web application has a minimum requirement of ASP.NET 2.0. For IIS 7 and IIS 6, the UAA Service installer creates an application pool that is configured for ASP.NET 2.0. For IIS 5.1, you must set the ASP.NET version to 2.0 (page 33).

In addition, for IIS 7, you must set up IIS 6 Metabase Compatibility and Windows Authentication before you use the UAA Service.

Note that if you are using IIS 6 or IIS 7, the UAA Service installer will disable the Windows loopback check and restart IIS (if the loopback check has not already been disabled). For information about why the installer does this, see Microsoft support page article 896861 (<http://support.microsoft.com/kb/896861>).

For IIS 6.0 only, the UAA Service installer will automatically set ASP.NET v2.0 to Allowed in Web Service Extensions.

### IIS 7 on Vista: IIS 6 Metabase Compatibility

To set up IIS 6 Metabase Compatibility and Windows Authentication for IIS 7 on Vista:

1. In the Control Panel, open **Programs and Features**, and then click **Turn Windows features on or off**.
2. If necessary, enter administrator credentials in the User Access Control dialog box.
3. In the Windows Features dialog box, expand **Internet Information Services, Web Management Tools**, and then **IIS 6 Management Compatibility**.
4. Ensure that the **IIS Metabase and IIS 6 configuration compatibility** check box is selected.
5. Return to the top level of the features list, and expand **Internet Information Services, World Wide Web Services**, and then **Security**.
6. Ensure that the **Windows Authentication** check box is selected.
7. Click **OK**.

### IIS 7 on Windows Server 2008: IIS 6 Metabase Compatibility

To set up IIS 6 Metabase Compatibility and Windows Authentication for IIS 7 on Windows Server 2008:

1. In the Control Panel, open **Administrative Tools**, and then **Server Manager**.
2. Expand **Roles**, and select **Web Server IIS**.



3. In the Web Server (IIS) pane, under **Roles Services** pane, check that **Windows Authentication** and **IIS 6 Metabase Compatibility** are installed:

- ♦ **Windows Authentication** is located under **Web Server, Security**

**IIS 6 Metabase Compatibility** is located under **Management Tools, IIS 6 Management Compatibility**

### ASP.NET version on IIS 5.1

The option to set the ASP.NET version may not be available if you installed IIS before .NET 2.0. To make the option available, at the command line, navigate to:

*C:\Windows\Microsoft.NET\Framework\v2.0.50727* (for x86)

*C:\Windows\Microsoft.NET\Framework64\v2.0.50727* (for x64)

and then run:

```
aspnet_regiis /iru
```

To set the ASP.NET version to 2.0:

1. In the Control Panel, select **Administrative Tools**, and then **Internet Information Services (IIS) Manager**.
2. Navigate to the Web site on which you installed the UAA Service, and then right-click **UAAService** and click **Properties**.
3. Select the **ASP.NET** tab and ensure that the **ASP.NET version** is set to **v2.0**.
4. Click **OK**.

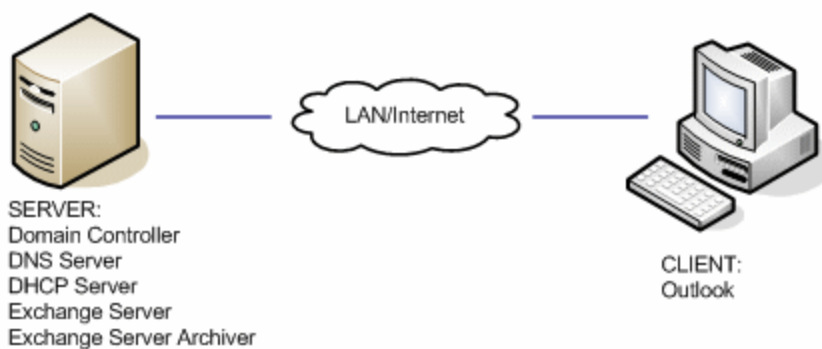
## Setting up a trial environment

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This topic describes how you can set up a trial environment for using Exchange Server Archiver with Exchange Server 2007. To download this topic as a pdf document, see Trial environment setup ([http://www.red-gate.com/ESA/Trial\\_Setup/v3.0](http://www.red-gate.com/ESA/Trial_Setup/v3.0)).

You do not have to use this particular setup for your evaluation; Exchange Server Archiver can be deployed into a wide number of Exchange configurations, and you can set up a trial on the configuration that is most convenient for you (for full details of the supported software, see Prerequisites (page 15)).

However, the environment described here is designed to get you up and running with Exchange Server Archiver as quickly as possible, using the fewest number of computers.



The easiest way to do this is to use virtualization technology such as VMWare® Server, Microsoft® Virtual Server, or Microsoft Hyper-V™. However, you could use physical computers if you prefer.

Before you set up a trial environment, you are recommended to read the Exchange Server Archiver Technical Overview for a description of the architecture and an explanation of how Exchange Server Archiver archives and retrieves messages.

### Requirements

Below are the requirements for this trial configuration. For details of the general requirements for Exchange Server Archiver, see Prerequisites (page 15).

- 32-bit Windows 2003 Server SP2 (SERVER), 1.5 GB RAM, 50 GB of hard disk space
- 32-bit Windows XP SP3 (CLIENT), 512 MB RAM, 10 GB of hard disk space

Both computers should have a network connection and be on the same subnet.

The domain controller will run a DHCP server, therefore you are recommended to use a network that is dedicated to this system, such as the *Host only* networks in VMWare, or a Loopback adaptor if you are using Virtual Server.

## Software:

- Microsoft Windows® 2003 Server installation CD
- Microsoft Exchange Server 2007 (32-bit) SP1 installation CD
- Microsoft Outlook® 2007 installation CD
- Red Gate Exchanger Server Archiver installer, available from the Red Gate Web site (<http://www.red-gate.com/ESA>)
- Installers for the following, all available from the Microsoft Web site (<http://www.microsoft.com>)
  - ♦ Windows Installer 3.0
  - ♦ Microsoft .NET 2.0 with SP1 or later
  - ♦ Messaging API and Collaboration Data Objects (<http://www.red-gate.com/ESA/3.0?i=9464>)
  - ♦ Windows PowerShell
  - ♦ December 2007 cumulative time zone update for Microsoft Windows operating systems (<http://go.microsoft.com/fwlink/?linkid=92858>)

## Configure the server

The server will be the Active Directory Domain Controller, DNS Server, DHCP Server, Exchange 2007 Server, and Exchange Server Archiver server for the trial environment.

### 1. Install the prerequisites

Before you install the Windows roles, Exchange 2007, and Exchange Server Archiver, some prerequisites must be installed.

1. Log in to the computer as an administrator.
2. Place the Windows 2003 Installation disk into the CD drive of the server.
3. In the Control Panel, navigate to Add/Remove Programs and click **Add/Remove Windows Components**.
4. When the Windows Components Wizard is displayed, double-click **Application Server**.
5. Select the following components and then click **OK**:
  - ♦ ASP.NET
  - ♦ Internet Information Services (IIS)
6. Click **Next** and wait for the services to install.
7. Ensure that Windows Installer 3.0 or later is installed.

If you need to install Windows Installer, you will be required to restart your system before you continue.

8. Install .NET 2.0 SP1

9. Install Messaging API and Collaboration Data Objects.
10. Install Windows PowerShell.

## 2. Configure the Indexing Service

Exchange Server Archiver requires that the Windows Indexing Service is running so that the Storage Service can search archived messages.

1. In Administrative Tools, select **Services**.
2. Right-click the Indexing Service and select **Properties**.
3. Change the **Startup type** to *Automatic*.
4. Click **Apply**.
5. Click **Start**.
6. Click **OK**, and then close **Services**.

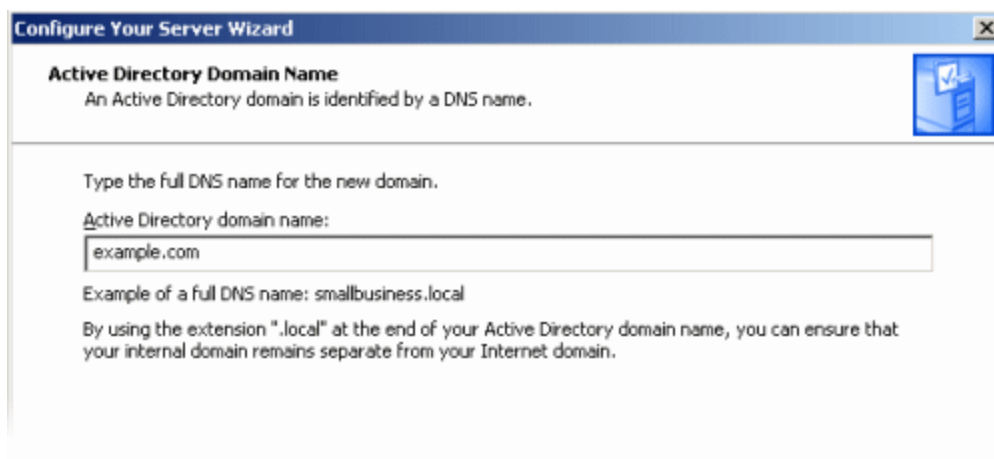
## 3. Install the required Windows roles

When you have installed the prerequisite components, you can install the necessary Windows roles required to run a domain.

1. Open the **Manage Your Server** application.
2. Click the **Add or Remove a role** link.
3. When the Configure Your Server Wizard is displayed, on the Preliminary Steps page, click **Next**.
4. Select **Typical Configuration** and then click **Next**.

This will install the Active Directory Domain Controller, DNS and DHCP roles required.

5. Enter the full **Active Directory domain name** for your environment, such as *example.com*, and then click **Next**.



6. Leave the **NETBIOS** settings as they are, and click **Next**.
7. On the **Summary of Selections** page, click **Next** to install the roles.

8. Accept any prompts to restart the system; when you log in again, the configuration continues.
9. When the Server Configuration Process is complete, click **Next**.

#### 4. Configure the Windows roles

The Windows roles must be configured so that services and client computers can communicate.

Configure the DHCP role:

1. In Administrative Tools, select **DHCP**.
2. Ensure that the DHCP server is authorized by right-clicking the domain name; if **Authorize** is displayed in the menu, select this option; if **Unauthorize** is displayed, the DHCP server is already authorized and you do not need to take any action.
3. Expand the local domain, right-click **Server Options**, and then click **Configure Options**.
4. Select the **003 Router** option and enter the IP addresses for your network's Router (also known as the default gateway).
5. Close **DHCP**.

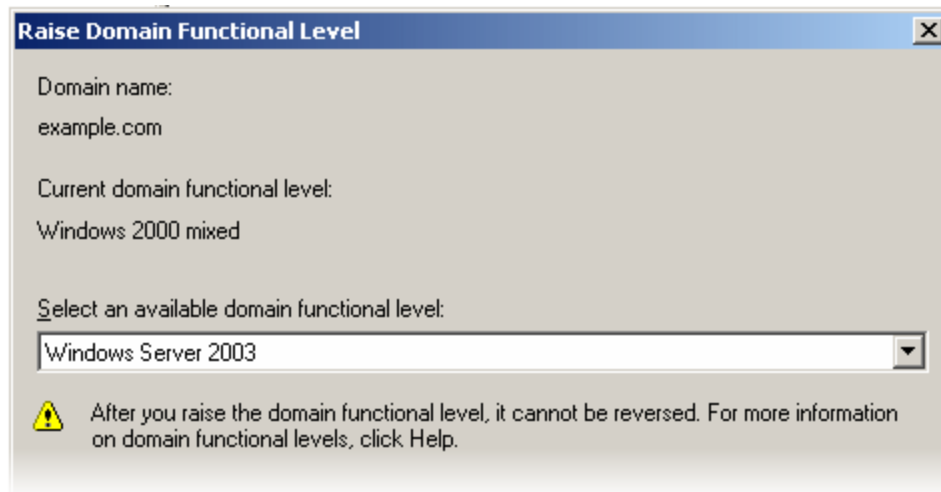
Configure the DNS role:

1. In Administrative Tools, select **DNS**.
2. Right-click the server name and click **Properties**.
3. Select **Forwarders**, and enter the IP addresses of your network's DNS servers.
4. Click **OK** and close **DNS**.

Configure the Active Directory role:

1. In Administrative Tools, select **Active Directory Domains and Trusts**.
2. Right-click the Active Directory domain for your environment and click **Raise Domain Functional Level**.

3. From the drop-down list, select *Windows Server 2003*.



4. Click **Raise**, and agree to the confirmation message.
5. Close Active Directory Domains and Trusts.

## 5. Install Exchange Server 2007 SP1

When you have set up a working domain, you can install Exchange.

1. Place the Exchange Server 2007 SP1 installation disk into the CD-ROM drive of the server, and run *setup.exe* in the CD-ROM's root directory.

2. When the options page is displayed, ensure that Steps 1-3 are disabled; if they are not, you have not installed one of the prerequisites.



3. Click **Step 4: Install Microsoft Exchange Server 2007 SP1**.
4. When the Exchange Server 2007 SP1 Setup wizard launches, click **Next** on the first page.
5. Accept the License Agreement, and select the Error Reporting option you require.
6. Select **Typical Exchange Server Installation** and click **Next**.
7. Enter the name of your Exchange Organization, and click **Next**.
8. Select Yes to support for Outlook 2003 and Entourage, and then click **Next**.
9. Wait for the readiness checks to complete, ignore any warnings about using evaluation versions of Exchange, and then click **Next**.
10. Exchange Server 2007 SP1 will now be installed; when it completes the process, click **Finish** and restart the system.
11. When the system has rebooted, run *setup.exe* in the CD-ROM's root directory again.
12. When the options page is displayed, click **Step 5: Get Critical Updates for Microsoft Exchange**.
13. Follow the on-screen prompts to install any necessary updates.

## 6. Create users and mailboxes

You can now create three users with mailboxes: *esausuer* is required by Exchange Server Archiver; *testuser1* and *testuser2* are users that you can use to send test e-mail messages and archive them.

1. Start the **Exchange Management Console**.
2. Navigate to **Microsoft Exchange, Recipient Configuration, Mailbox**.
3. In the Actions area, click **New Mailbox**.
4. In the New Mailbox wizard, choose to create a **User Mailbox**, and then click **Next**.
  - a. Select **Create a Mailbox for a New user** and click **Next**.
  - b. Enter *esausuer* as both the **Name** and **User Logon** name (User Principal Name), complete the password fields, and then click **Next**.

This creates the user that Exchange Server Archiver will use to communicate with Exchange.

The screenshot shows the 'New Mailbox' wizard in the Exchange Management Console. The 'User Information' step is active, showing fields for organizational unit, first name, initials, last name, user logon name, and password. The 'Organizational unit' field contains 'trial3 example.com/Users'. The 'First name' field contains 'esa', 'Initials' is empty, and 'Last name' contains 'user'. The 'Name' field contains 'esa user'. The 'User logon name (User Principal Name)' field contains 'esausuer' and the domain dropdown is '@trial3 example.com'. The 'User logon name (pre-Windows 2000)' field contains 'esausuer'. The 'Password' and 'Confirm password' fields are masked with dots. The 'User must change password at next logon' checkbox is unchecked. Navigation buttons at the bottom include '< Back', 'Next >', and 'Cancel'.

- c. Click **Browse**, select a mailbox database for the user, click **OK**, and then click **Next**.
  - d. Review the summary configuration, click **New**, and when the user is created, click **Finish**.
5. Repeat steps 1 to 4 above, specifying *testuser1* as both the **Name** and **User Logon name** (User Principal Name).



This will be a test user whose mailbox will be archived.

6. Repeat steps 1 to 4 above, specifying *testuser2* as both the **Name** and **User Logon name** (User Principal Name).

This will be a second test user whose mailbox will be archived.

## 7. Grant permissions to the ESA user

The Exchange Server Archiver Archive Service user must be a mailbox-enabled user in Exchange, and must have domain administrator rights and full access to the mailboxes on the Exchange server.

1. In Administrative Tools, select **Active Directory Users and Computers**.
2. In the Users directory, right-click the **Domain Admins** group, and then click **Properties**.
3. Select the **Members** tab and click **Add**.
4. Enter *esouser* and click **OK**.  
*esouser* will be added to the list of members of the Domain Admins group.
5. Click **OK**, and then close **Active Directory Users and Computers**.

## Configure the client computer

You are recommended not to install Outlook on the same computer as Exchange. Therefore, you should configure a second computer to act as client in your test environment.

1. Install Windows XP and Service Pack 3.
2. Check that you have a network connection to the server by pinging it.
3. In the Control Panel, select **System**, select the **Computer Name** tab, and click **Change**.
4. In the Computer Names Changes dialog box, for **Computer name** enter *CLIENT*, for **Member of Domain** select *example.com*, and then click **OK**.
5. When prompted, enter the domain's administrator username and password.
6. At the *Welcome to the example.com Domain* prompt, click **OK**.
7. At the *You must restart this computer for the changes to take effect* prompt, click **OK**.
8. In the **System Properties** dialog box, click **OK**, and then click **Yes** when you are asked whether you wish to restart your computer.
9. When the computer has restarted, log in as *example\administrator* and install Outlook 2007 SP2.

## Set up the Outlook accounts

You can now set up Outlook for the users:

1. Start Outlook, and configure the necessary details for *testuser1* to send e-mail.
2. Send a test e-mail message to *esouser@example.com* and *testuser2@example.com*.  
This creates their mailboxes in Exchange.
3. Log out and log back in again as *esouser*, start Outlook and set up the Outlook settings account for *esouser*.
4. Check that *esouser* has received the email from *testuser1@example.com*.
5. On the **Tools** menu, click **Account Settings**, select the *esouser@example.com* account and click **Change**.
6. Click **More Settings**.
7. Click **Advanced**.
8. Select the **Advanced** tab and click **Add**.
9. Enter *testuser2* as the mailbox, and click **OK**.
10. Close the open dialog boxes, accepting all changes made.

*esouser* should now be able to view *testuser2*'s mailbox and see the test e-mail message sent from *testuser1*.

The trial environment is now ready for Exchange Server Archiver to be installed. For details, see Installing Exchange Server Archiver (page 14).

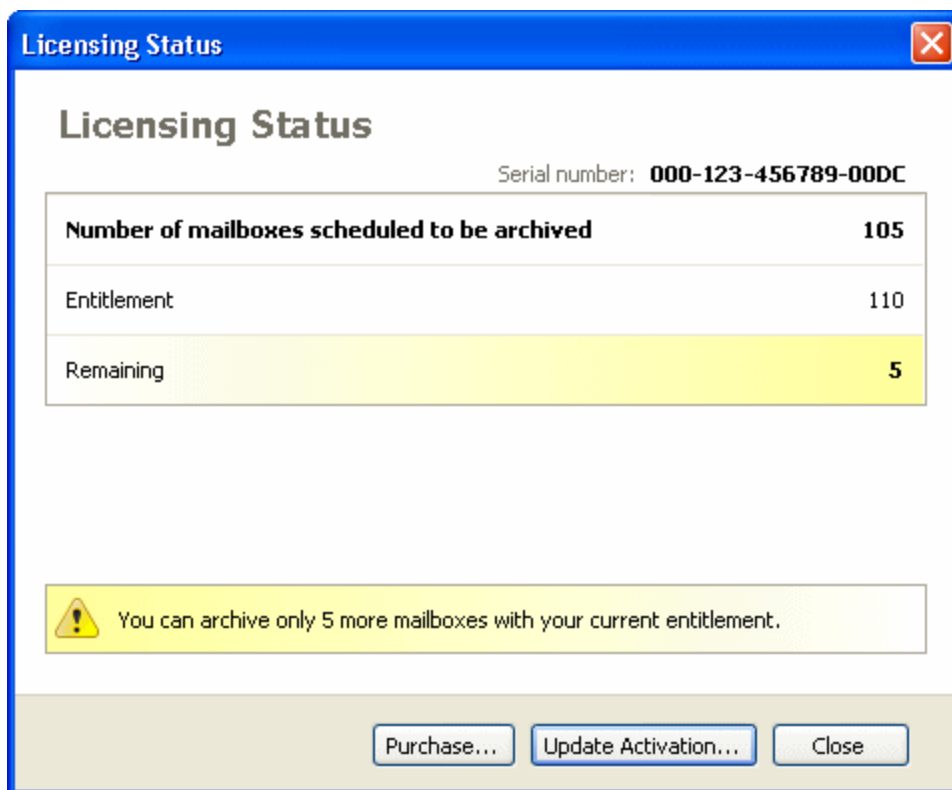
## Licensing

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Exchange Server Archiver is licensed per mailbox. A mailbox license is used for each mailbox that is scheduled to be archived, that is, for each mailbox that has an archive rule applied to it. A journaling mailbox uses one license.

When you have purchased a license, you activate the mailbox entitlement by entering the serial number. For full details, see [Activating Exchange Server Archiver](#) (page 45).

To check your licensing status, on the **Help** menu, click **Licensing Status**.



**Number of mailboxes scheduled to be archived** shows the number of mailboxes that have an archive rule applied. Note that:

- a mailbox is counted even if the applied rule specifies that no messages are to be archived
- if a mailbox has two rules applied, only one rule is active, therefore this counts as one mailbox license used
- if a mailbox is selected to be copied back (page 102) to the Exchange server, it is not counted because the copy-back task overrides any rules

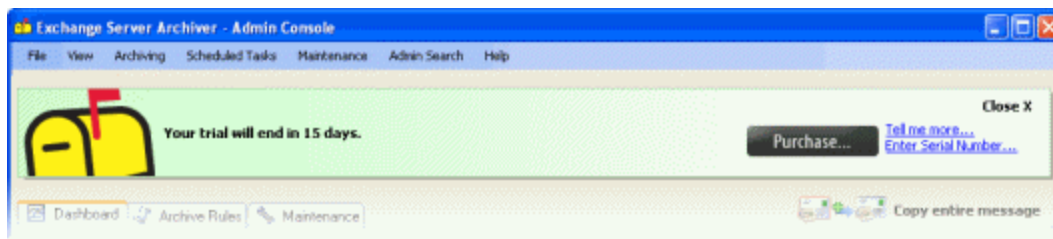
**Entitlement** shows the number of mailboxes you have purchased, or *Not applicable* if you are in the trial period. If **Remaining** shows a negative number, you have exceeded your entitlement.

To increase your mailbox entitlement, click **Purchase**. When you have purchased the upgrade to your license, to activate the new entitlement click **Update Activation** on the Licensing Status dialog box, or on the **Help** menu.

### What happens in the trial period?

When you are in your trial period, you have unlimited mailbox entitlement.

Exchange Server Archiver displays a message each time you start the Admin Console to inform you of the number of days remaining in the trial.



You can close the message, if required.

You can activate Exchange Server Archiver at any time during the trial period; click **Enter Serial Number** on the trial status message, or on the **Help** menu, or in the Licensing Status dialog box. The serial number that you use to activate must be valid for at least the number of mailboxes that you have scheduled to be archived.

When your trial period expires, Exchange Server Archiver displays a message in the Admin Console, and the Archive Services stop archiving mailboxes. You must activate Exchange Server Archiver to start archiving again.

If you do not enter a valid serial number, you can continue to use the Admin Console and access previously-archived messages for 30 days after the trial period expires.

### What happens if I exceed the mailbox entitlement?

If you exceed your mailbox entitlement, Exchange Server Archiver displays a warning when you next start the Admin Console. You must:

- reduce the number of mailboxes that have an archive rule applied
- or
- purchase further mailbox entitlement, and enter the serial number to reactivate your license

If you do not do either of these, the Archive Services will archive mailboxes only up to your mailbox entitlement. You can continue to use the Admin Console and access previously-archived messages.

## Activating Exchange Server Archiver

---

When you download and install Exchange Server Archiver, you have a 30 day trial period in which you can evaluate the product. When your trial period expires, you are invited to purchase the product. If you need more time to evaluate the product, contact [licensing@red-gate.com](mailto:licensing@red-gate.com) (<mailto:licensing@red-gate.com>)

When you purchase Exchange Server Archiver, you are sent an invoice that contains your serial number. You use the serial number to activate the product. If you cannot find your invoice, you can review your serial numbers at <http://www.red-gate.com/myserialnumbers> (<http://www.red-gate.com/myserialnumbers>).

When you activate Exchange Server Archiver, the licensing and activation program sends an activation request to the Red Gate activation server, using checksums of attributes from your computer. The checksums that are sent to the activation server do not contain any details that might pose a security risk. The activation server returns an activation response and an encrypted key to unlock the software. The licensing and activation program should activate Exchange Server Archiver within a few seconds.

If you experience problems, you will be offered the option to activate manually (page 47). For example, you will need to use manual activation if:

- your computer is not connected to the Internet
- your network uses a proxy server that interrupts contact between the product and the Red Gate activation server

Activation should work with proxies configured in the Internet Options applet in the Windows Control Panel. However, it will not work when:

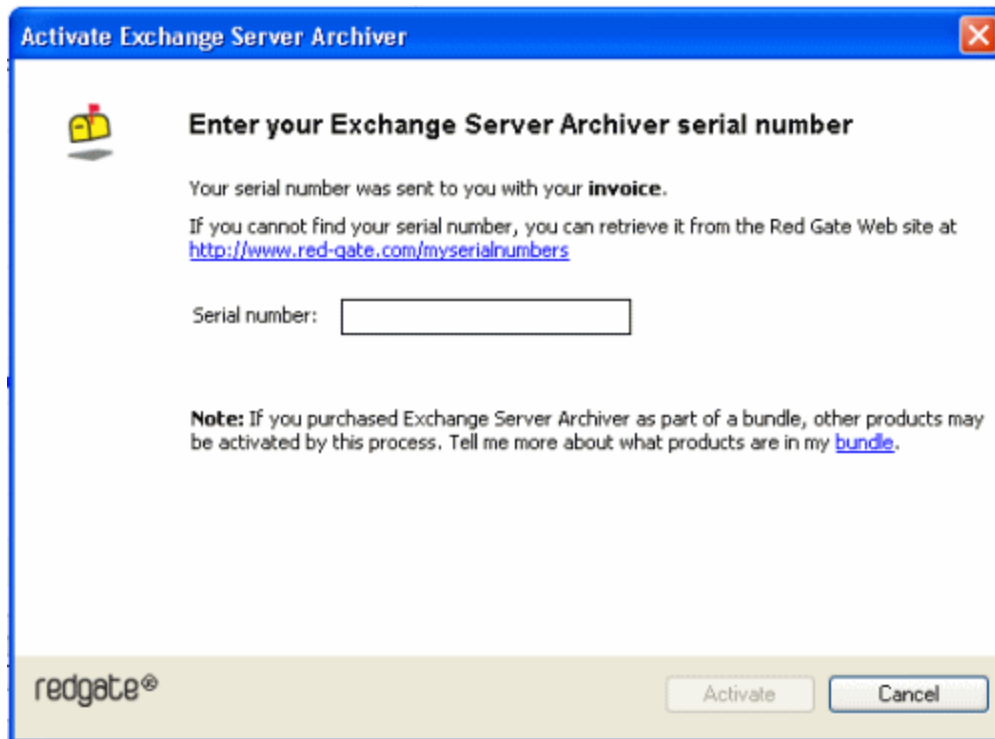
- ♦ the proxy settings specify an automatic configuration script
- ♦ the proxy requires authentication, which cannot be transparently handled by Windows
- ♦ the proxy filters out SOAP packet data or XML data
- activation is unsuccessful (see Troubleshooting licensing and activation errors ([http://www.red-gate.com/supportcenter/GeneralContent.aspx?c=all\\_products/articles/licensing\\_error\\_messages.htm](http://www.red-gate.com/supportcenter/GeneralContent.aspx?c=all_products/articles/licensing_error_messages.htm)))

For general questions about licensing, see Licensing and activation resources ([http://www.red-gate.com/SupportCenter/GeneralContent/all\\_products/articles/Licensing\\_and\\_Activation\\_resources](http://www.red-gate.com/SupportCenter/GeneralContent/all_products/articles/Licensing_and_Activation_resources)).


### To activate Exchange Server Archiver

1. On the **Help** menu, or in the **Licensing Status** dialog box, or on the trial status message, click **Enter Serial Number**.

The activation dialog box is displayed:



**Activate Exchange Server Archiver**

 **Enter your Exchange Server Archiver serial number**

Your serial number was sent to you with your **invoice**.


If you cannot find your serial number, you can retrieve it from the Red Gate Web site at <http://www.red-gate.com/myserialnumbers>

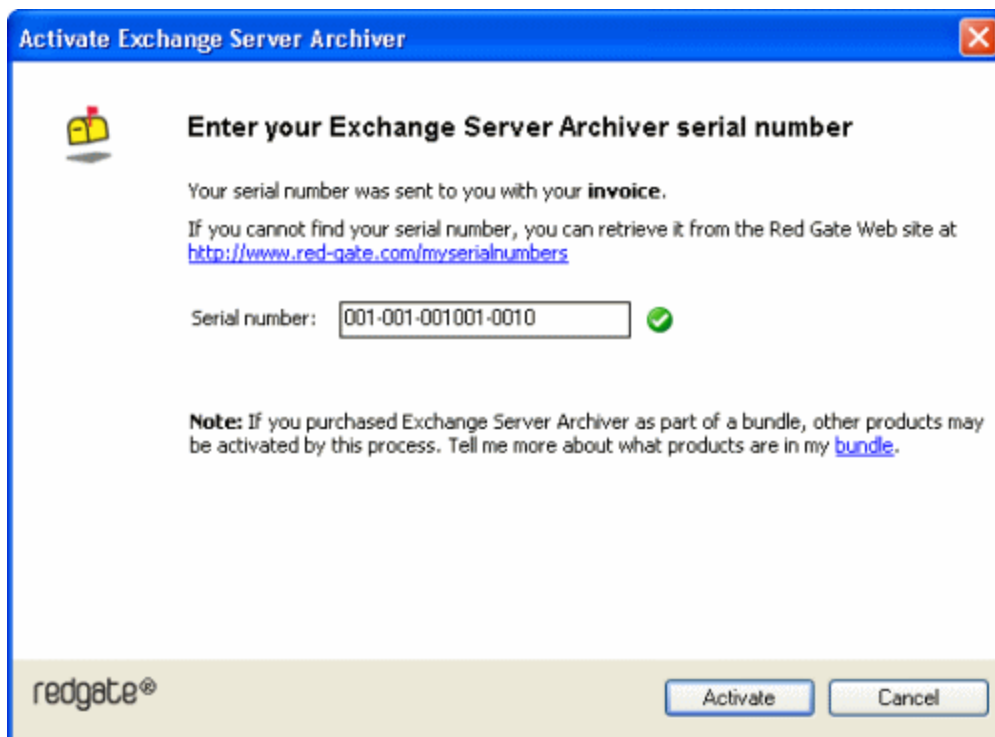
Serial number:

**Note:** If you purchased Exchange Server Archiver as part of a bundle, other products may be activated by this process. Tell me more about what products are in my [bundle](#).

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2. Enter your serial number.

When you have entered a valid serial number,  is displayed next to the serial number box:




**Activate Exchange Server Archiver**

 **Enter your Exchange Server Archiver serial number**

Your serial number was sent to you with your **invoice**.

If you cannot find your serial number, you can retrieve it from the Red Gate Web site at <http://www.red-gate.com/myserialnumbers>

Serial number:  

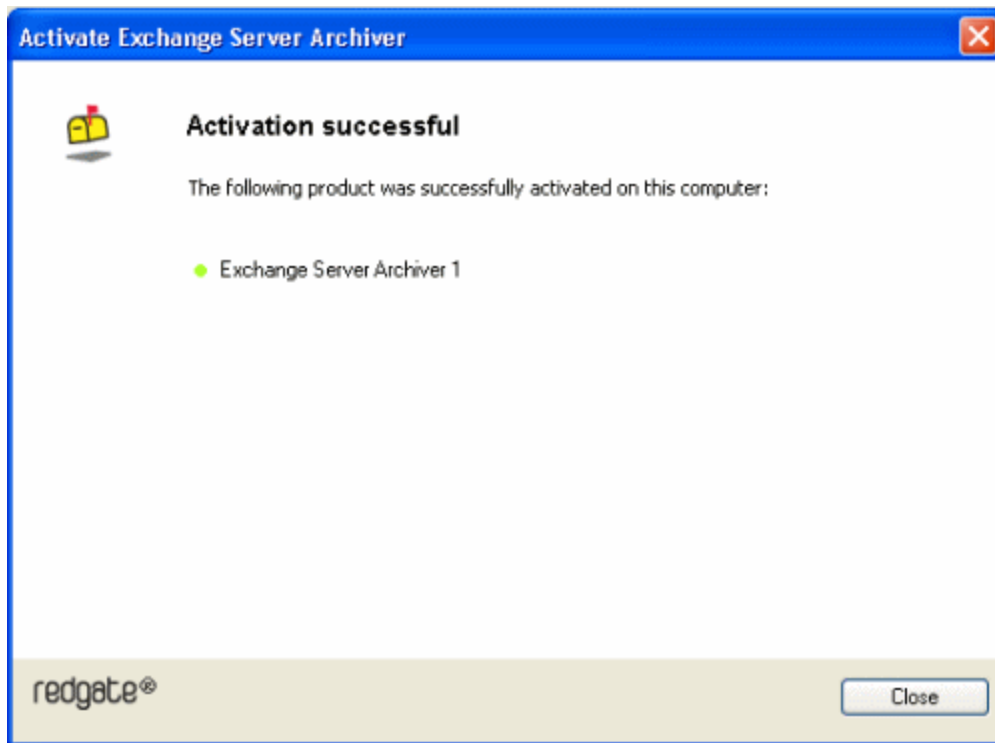
**Note:** If you purchased Exchange Server Archiver as part of a bundle, other products may be activated by this process. Tell me more about what products are in my [bundle](#).

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3. Click **Activate**.

Your activation request is sent to the Red Gate activation server.

When your activation has been confirmed, the **Activation successful** page is displayed:



If there is a problem with your activation request, an error dialog box is displayed. For information about activation errors and what you can do to resolve them, see Troubleshooting licensing and activation errors ([http://www.red-gate.com/supportcenter/GeneralContent.aspx?c=all\\_products/articles/licensing\\_error\\_messages.htm](http://www.red-gate.com/supportcenter/GeneralContent.aspx?c=all_products/articles/licensing_error_messages.htm)). Depending on the error, you may want to try manual activation (page 47).

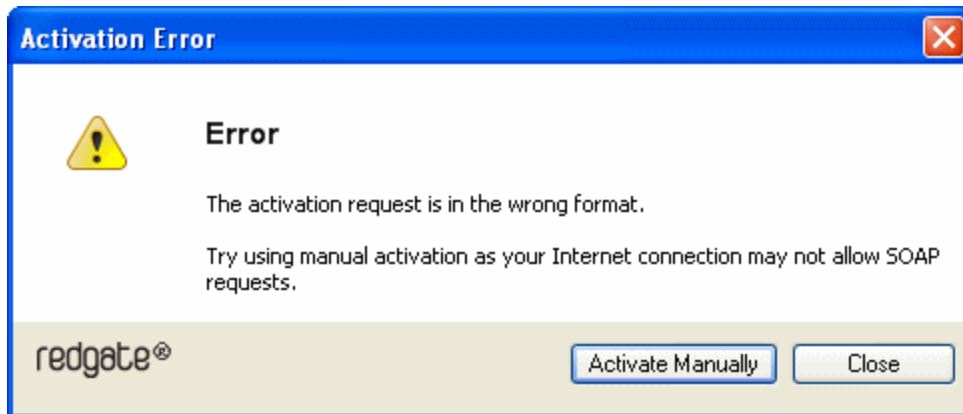
4. Click **Close**.

You can now continue to use your product

## Manual activation

Manual activation enables you to activate products when your computer does not have an Internet connection or your Internet connection does not allow SOAP requests. You will need access to another computer that does have an Internet connection.

You can use manual activation whenever the **Activation Error** dialog box is displayed and the **Activate Manually** button is available, for example:



To activate manually:

1. On the error dialog box, click **Activate Manually**.

The **Activate using the Red Gate Web site** dialog box is displayed:



2. Copy all of the activation request, and **leave this dialog box open** (if you close the dialog box, you may have to start again).

Alternatively you can save the activation request, for example to a location on your network or to a USB device.



3. On a computer that has an Internet connection, go to the **Manual Activation** page (<http://www.red-gate.com/activate>) on the Red Gate Web site and paste the activation request into the box under **Step 1**.

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### Manual Activation

Use the activation request from the licensing program to generate an activation response so that you can activate products on your computer.

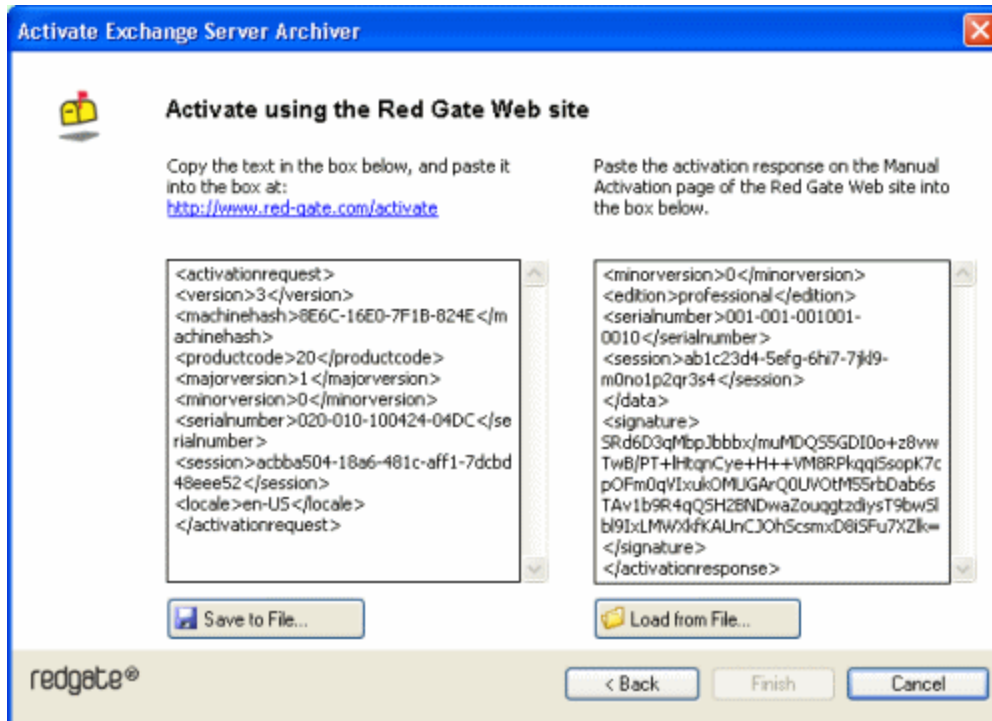
**Step 1**  
Paste the activation request into the box below.  
Make sure you paste all of the text.

**Step 2**  
Copy the contents of this box into your product activation dialog box.

```
<machinehash>XXXX-XXXX-XXXX-XXXX</machinehash>
<productcode>1</productcode>
<majorversion>6</majorversion>
<minorversion>0</minorversion>
<serialnumber>001-001-001001-0010</serialnumber>
<session>ab1c23d4-5efg-6hi7-7jkl9-m0no1p2qr3s4</session>
<locale>en-US</locale>
</activationrequest>
```

Get Activation Response Save to File...

4. Click **Get Activation Response**.
5. When the activation response is displayed under **Step 2**, copy all of it.  
Alternatively you can save the activation response.
6. On the computer where the licensing and activation program is running, paste the activation response or if you saved it, load it from the file.



7. Click **Finish**.

The **Activation successful** page is displayed.

8. Click **Close**.

You can now continue to use Exchange Server Archiver.

## Troubleshooting your installation

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Some common problems that you may encounter when you install and configure Exchange Server Archiver are described below.

Admin Console (page 51)

Installing and configuring services (page 52)

Archiving and retrieving messages (page 54)

Accessing messages (page 56)

When you have completed the installation and configuration, to validate your setup:

1. In the Admin Console, check the Maintenance tab for any error messages.
2. Check the Alerts tab for any error messages.
3. Set up and run an archive, and check the Alerts tab for any error messages.
4. Open an archived message from Outlook.

Open an archived message from Outlook Web Access.

### Admin Console

#### Access error opening the Admin Console

To use the Admin Console, you must be a *domain administrator* with full permissions. If the user logged on is not a domain administrator, an error is displayed in the Alerts tab of the Admin Console, for example:

```
Error in configuration of Archive Service 'computename'.  
'domain\'\'username' is not a valid account for access.
```

If you see this error:

- Check that the Admin Console user is a domain administrator with no permissions explicitly denied.

If you cannot set up a domain administrator user to use the Admin Console:

1. In Active Directory®, create a new security group.
2. Add the Admin Console user to the security group.
3. In the .NET configuration file for the Archive Service, the Storage Service, and the UAA Service, edit the SecureRemoting value to the new security group:

```
<add key="SecureRemoting" value="New_Security_Group" />
```

The Archive Service and Storage Service configuration files are located in  
<Installation Directory>/RedGate.ExchangeArchiver.<component>.exe.config

The UAA Service configuration file is located in <Installation Directory>/Web.config

## Installing and configuring services

### Errors setting up the Archive Service

If an error is displayed when you click Next on Step 1 of the Configuration Wizard, there may be a problem with the permissions of the Archive Service user.

- If any Exchange Server that you want to archive is **not** on the same domain as the Archive Service user, manually grant the permissions required for the Archive Service user.

For details, see *Creating the Archive Service user* for version 3.0 (<http://www.red-gate.com/ESA/3.0?i=9190>), or for version 2.1 or earlier (<http://www.red-gate.com/ESA/2.1?i=9190>), as appropriate.

### Archive Service installer: remoting security exception

If you see a remoting security exception error connecting to the Exchange server when you are installing the Archive Service, this may be caused by the system clocks of the Archive Service server and the Domain Controller server being out of sync by more than 10 minutes.

- Reset the computer account in Active Directory.

For details, see *Active Directory Users and Computers* in the Microsoft KB support article *Resetting computer accounts in Windows* (<http://support.microsoft.com/kb/216393>).

### Archive Service user not recognized

If the Archive Service user is not recognized by the Active Directory (AD) server, an error is displayed when the Admin Console refreshes the list of mailboxes in the dashboard. For example:

```
Error populating Active Directory user cache for domain DC=example,DC=com:
System.Runtime.InteropServices.COMException (0x80040E37): Table does not
exist.
```

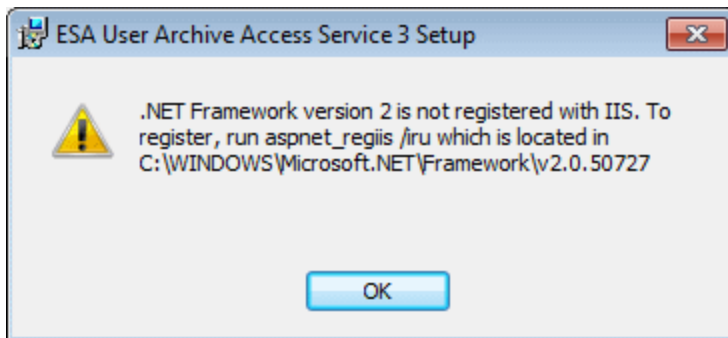
This may be because AD replication is not working.

- Check the AD global catalog to ensure that the Archive Service user has been replicated across the forest.

For more information, see the Microsoft TechNet article *Troubleshooting Active Directory Replication Problems* (<http://technet.microsoft.com/en-gb/library/bb727057.aspx>).

### UAA Service installer: .NET 2.0 not installed error

When you are installing the UAA Service, you may see the following error:



If this error is displayed:

- Run `aspnet_regiis /iru`
- Check that ASP .NET 2.0 is installed.
- Check that ASP .NET 2.0 is allowed in Web Service Extensions.
- Ensure the subfolder `\aspnet_client\system_web\2_0_50727` exists in the location specified by the **PathWWWRoot** registry key:

`HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\InetStp\PathWWWRoot`

The default value is:

`C:\Inetpub\wwwroot`

If the subfolder does not exist, create it in the specified location.

### UAA Service installer: IIS 7 metabase compatibility error

You may see the following error when you are installing the UAA Service:

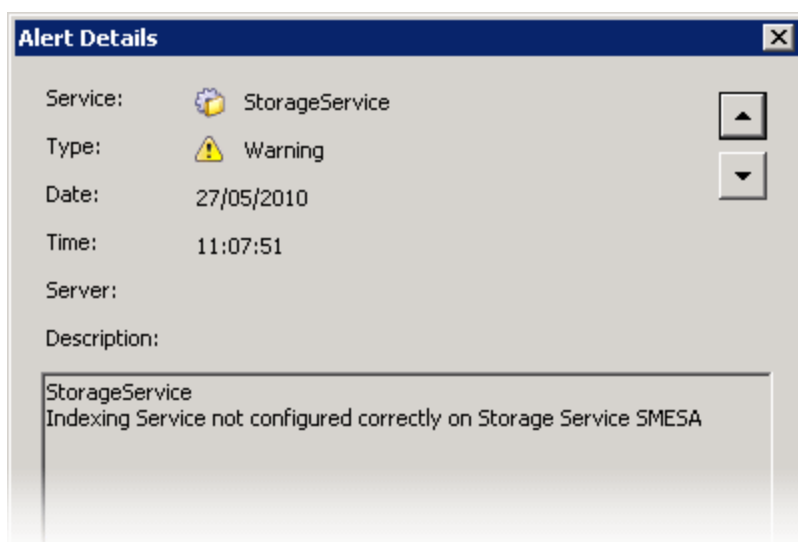


- Check that you are using the correct UAA Service installer for your architecture (x64 or x86).
- For IIS 7, check that you have set up IIS 6 Metabase Compatibility; for details, see Configuring IIS (<http://www.red-gate.com/ESA/3.0?i=9431>).

## Archiving and retrieving messages

### Indexing service errors

If you see errors in the Alerts tab that refer to the Indexing Service when Exchange Server Archiver is archiving or retrieving archived messages, this may be because the Indexing Service is not running, or because it was not started before the Storage Service was installed. For example:



To fix this:

1. On the Storage Service server, run `services.msc` to open **Services**.
2. Stop the ESA Storage Service.
3. Check that the Indexing Service **Startup Type** is set to **Automatic**.  
If it is not, double-click to open the Indexing Service Properties, and change the Startup type to Automatic.
4. If the Indexing Service status is not started, right-click the **Status** and click **Start**; otherwise, click **Restart**.
5. Start the ESA Storage Service.

To ensure the Indexing Service catalog is up-to-date:

1. Run `mmc` to open the **Microsoft Management Console**.
2. If necessary, add the Indexing Service snap-in.
3. Under **Exchange Server Archiver, Directories**, right-click each Archive Store folder and click **Rescan**.

If there are still problems, the Indexing Service catalog may be corrupt. To recreate the catalog:

1. On the Storage Service server, run `services.msc` to open **Services**.

2. Stop the Indexing Service.
3. Run `mmc` to open the **Microsoft Management Console**.
4. If necessary, add the Indexing Service snap-in.
5. Right-click the **Exchange Server Archiver** catalog and click **Properties**.
6. Note down the catalog location, and then click **Cancel** to close the dialog box.
7. Right-click the **Exchange Server Archiver** catalog, and click **Delete**.
8. Right-click **Indexing Service**, and click **New, Catalog**.
9. In **Name**, type *Exchange Server Archiver*, enter the **Location** that you noted in step 6, and click **OK**.
10. For each Archive Store:
  - a. Under **Exchange Server Archiver**, right-click **Directories**, and click **New, Directory**.
  - b. Enter the **Path** of the Archive Store, and click **OK**.
11. Start the Indexing Service.
12. Under **Exchange Server Archiver, Directories**, right-click each Archive Store folder and click **Rescan**.

### Archive Service errors

If the DN of a user contains an apostrophe, an Archive Service error is displayed in the Alerts tab. For example:

```
User 'domain\'\'username' cannot be granted permission on the mailbox  
'user@domain.com' - no archive service which could be contacted allowed  
this.
```

For a patch to fix this, contact Red Gate support at: <https://www.red-gate.com/supportcenter/contactsupport.aspx> (<https://www.red-gate.com/supportcenter/contactsupport.aspx>)

### InvalidCastException error

If you are using Exchange Server Archiver version 2.0 or later and you are retrieving messages that were archived using version 1.1 of Exchange Server Archiver, you may see an `InvalidCastException` error, for example:

```
Unable to convert from type Byte[] to Byte[][]
```

For a patch to fix this, contact Red Gate support at: <https://www.red-gate.com/supportcenter/contactsupport.aspx> (<https://www.red-gate.com/supportcenter/contactsupport.aspx>)

### WSAECONNRESET error

When you run an archive rule or when the Admin Console retrieves mailbox sizes for an Exchange 2007 system, you may see the following error:

ArchiveService

```
COMException logging on to Exchange Server:  
System.Runtime.InteropServices.COMException (0x81002746): Error in  
IMsgServiceAdmin::ConfigureMsgService: WSAECONNRESET
```

The most common cause is that the Archive Service user has been hidden from the Exchange Global Address List. To stop hiding the user from the Exchange Address List, see WSAECONNRESET error when archiving or retrieving mailbox sizes (<http://www.red-gate.com/ESA/3.0?i=9461>).

### MAPI\_E\_NOT\_FOUND error

You may see the following error message when you run an archive rule:

Archive Service

```
COMException logging on to Exchange Server:  
System.Runtime.InteropServices.COMException (0x8004010F): Error in  
IMsgServiceAdmin::CreateMsgService: MAPI_E_NOT_FOUND
```


This error can occur if MAPI is not installed, or if the version of MAPI is not compatible with Exchange Server Archiver.

- Check that MAPI is installed.  
You must ensure that you install a version of MAPI that is compatible with your Exchange configuration. For details, see MAPI versions supported for Exchange Server Archiver (<http://www.red-gate.com/ESA/3.0?i=9464>).
- Check that the installed version of MAPI is supported.  
For more information, see MAPI versions supported for Exchange Server Archiver (<http://www.red-gate.com/ESA/3.0?i=9464>).
- If you have installed the standalone MAPI client, reboot the server.

## Accessing messages

### Message placeholders are shown in Outlook

If you see a message placeholder when you open a message in Outlook instead of the full message:

- Check that the Outlook Add-in is installed.
- Check that the Outlook Add-in is **not** disabled:  
In Outlook, click  in the Exchange Server Archiver toolbar; if the About Exchange Server Archiver box is not displayed, the Outlook Add-in is disabled. For information about how to enable the add-in, see Disabling the Outlook Add-in (<http://www.red-gate.com/ESA/3.0?i=9460>).
- On the Admin Console **Maintenance** tab, check that the Storage Service is running, and the Archive Stores are attached.
- Check that the UAA Service Web site is running.



## Using the Admin Console

---

This chapter describes how you use the Admin Console, and perform common administration tasks.

## Using the Admin Console

---

You use the Admin Console to set up and monitor archiving, and to make changes to your configuration.

To use the Admin Console, you must be a *domain administrator*.

The Admin Console (page 58)

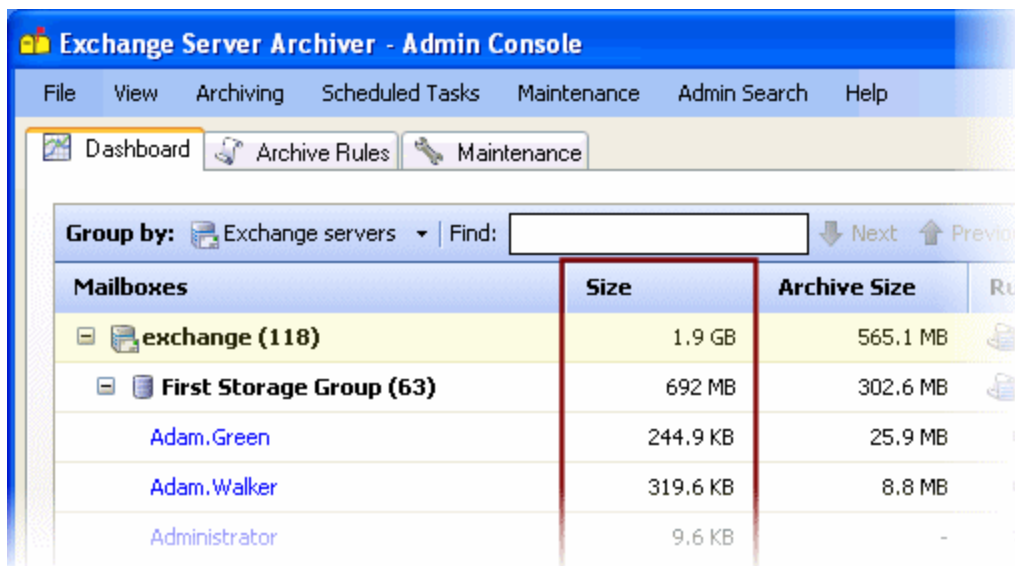
Running an archive rule now (page 60)

Using multiple Admin Consoles (page 60)

Refreshing the data (page 60)

### The Admin Console

The Admin Console is divided into five areas:



### Dashboard

This displays information about mailboxes and the archive rules that have been applied to them.

You can view the information by Exchange organization, or by your Active Directory structure. If you view by Exchange organization:

- For Exchange Server 2003 and Exchange Server 2007, the mailboxes are grouped by Exchange server and then storage group.
- For Exchange Server 2010, the mailboxes are grouped by Database Availability Group (DAG) and then database. For Exchange servers not in a DAG, the mailboxes are grouped by Exchange server and then database.

Only mailboxes hosted by Exchange organizations and domains that you have registered with the Archive Services are displayed; for details see Managing Exchange organization and domains (page 100). In the Active Directory view, all domains and subdomains are shown at the top level (subdomains do not inherit from their parent domains).

The **Size** column displays the size of the item on the Exchange server. When a mailbox is archived, the mailbox size on the Exchange server after archiving is shown in the **Size** column when the data is next refreshed (page 60). However, note that the size of a storage group on the Exchange server is reduced only when you defragment the Exchange server database.

You can choose not to display the sizes for individual mailboxes to speed up the data refresh (page 60) time; on the **View** menu, click **Display Mailbox Sizes**.

**Archive Size** shows the total size of the corresponding archives in the Archive Stores.

The **Rule** column displays the name of the archive rule that applies to that item. If no rule has been applied, **Set rule** is displayed and you can click this to create a new rule.

## Archive Rules

This tab enables you to view, create, and edit rules; see Setting up rules (page 63).

## Maintenance

This tab displays information about your current configuration, and enables you to add new services or stores, and change your configuration.

Alternatively, if you want to add new services or stores, you can open the **Configuration Wizard** from the **Maintenance** menu to guide you through their configuration.

## Alerts

This tab displays information about tasks that have been run (such as archives), alerts about configuration events, warnings, and so on. Double-click an alert to view its details.

## Scheduled Tasks

This tab displays the tasks that are scheduled to run. Right-click a scheduled task to run, edit, or delete it.

## Running an archive rule now

When you create a rule, the next occurrence is displayed in the **Scheduled Tasks** tab. If you want to run the rule immediately:

- in the **Scheduled Tasks** tab, right-click the task and click **Run Now**
- or, in the **Archive Rules** tab, right-click the rule and click **Run Rule**

To run tasks associated with all rules, on the **Archiving** menu, click **Run All Rules Now**.

## Using multiple Admin Consoles

You can view and manage the Exchange Server Archiver settings from Admin Consoles that have been installed on different computers. However, ensure that changes to the archive setup and configuration are not made simultaneously from different Admin Consoles; otherwise the archiving system may become inconsistent, and messages may not be archived or may be temporarily inaccessible.

Each new Admin Console user must register the Archive Service to see the configuration details: on the **Maintenance** tab, click **Register Archive Service** and enter the details of the service.

## Refreshing the data

The Admin Console automatically refreshes its status periodically to update alerts, scheduled tasks, the status of services, and so on. To refresh the status immediately, press F5 (or on the **View** menu, click **Refresh**).

You can choose not to display the sizes for individual mailboxes to speed up the data refresh time; on the **View** menu, click **Display Mailbox Sizes**.

If you make any configuration changes, such as adding mailboxes in Exchange or restarting a service, to see the changes, press Ctrl + F5 to refresh all the data (or on the **View** menu, click **Refresh All**).

## Changing the archive mode

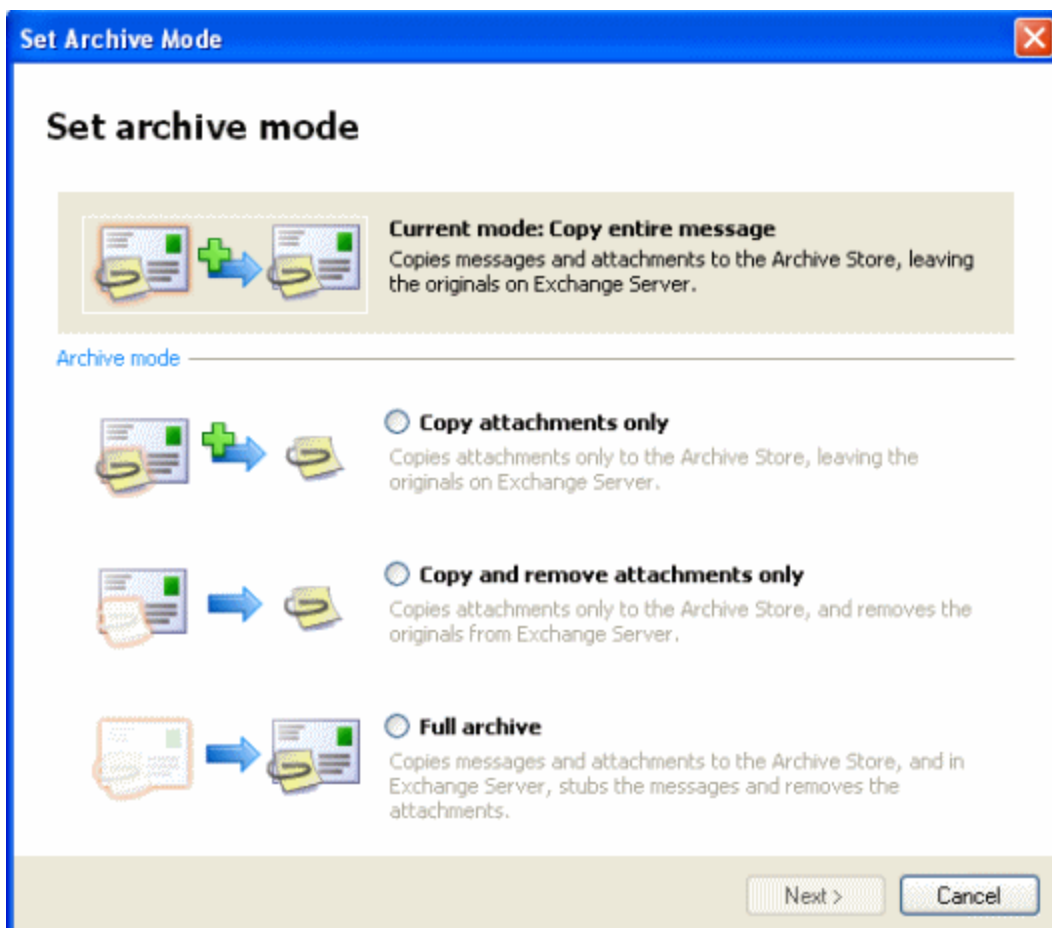
The archive mode (page 5) that Exchange Server Archiver uses when any messages are archived is displayed in the Admin Console.



You can change the archive mode, if required. For example, if you have been evaluating Exchange Server Archiver using the 'copy only' mode *Copy entire message*, you may want to change it to *Full archive* so that archived messages and attachments are removed from the Exchange server.

When you change the archive mode, the new mode will be used by all existing rules on all servers, from the time at which you change the mode.

To change the archive mode, on the **Archiving** menu, click **Set Archive Mode**.



When you select the archive mode you require and click **Next**, you are prompted to schedule a 'tidy up' task. This task will process all messages that have been archived previously so that they are in a state in Exchange that is consistent with the new archive mode.

For example, if you change the mode from *Copy entire message* to *Full archive*, for each message that has been previously copied the tidy up task will:

- create a message placeholder and remove the message body from the Exchange server
- remove any attachments from the Exchange server, and create links to the attachments in the placeholder

The tidy up task may take some time (depending upon the number of messages that need to be processed). You can create a schedule for the task immediately, or you can choose to set up the task later using **Schedule Tasks, Tidy Up** on the **Maintenance** menu; an alert is created to remind you.

Note that if messages or attachments are copied back to the Exchange server (for example, if you are changing from *Full archive* to *Copy entire message*), you will lose single-instance storage on the Exchange server.

## Setting up rules

---

You set up archive rules to:

- specify which mailboxes are to be archived  
You can apply a rule to individual mailboxes or to groups of mailboxes.
- specify conditions that define which messages will be archived (such as 'messages over 10MB or older than 30 days')
- specify the Archive Store to which the messages will be archived
- set up schedules to control when messages will be processed

Note that only one rule can be active on a mailbox. However, you can create complex criteria for archiving by specifying a number of conditions within a rule. For more details, see [Rule conditions](#) (page 63).

The **Archive Rules** tab displays a summary of the rules you have created, and enables you to create new rules and edit existing rules.

### Contents

[Rule conditions](#) (page 63)

[Rule precedence](#) (page 65)

[New mailbox rule inheritance](#) (page 67)

[Example: creating exceptions to group rules](#) (page 67)

[Example: excluding mailboxes from a group rule](#) (page 68)

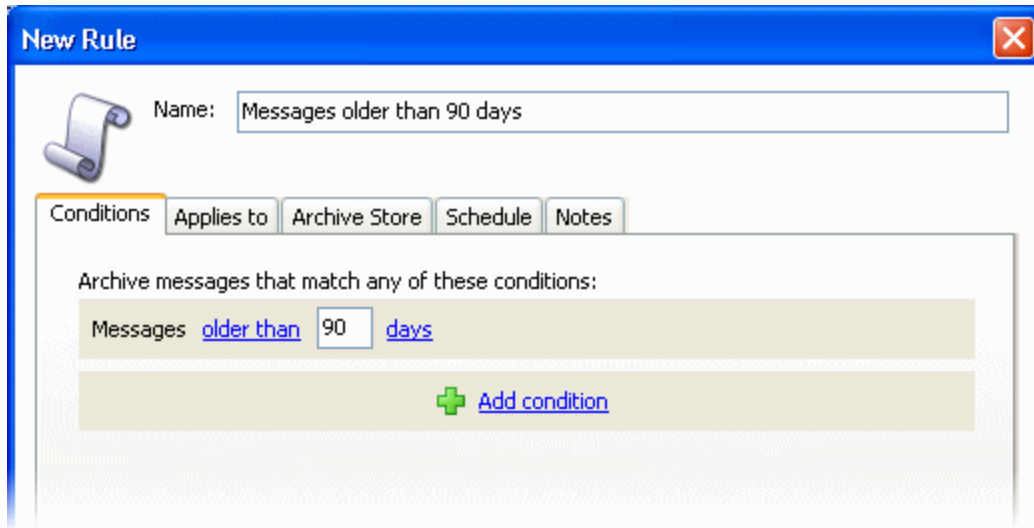
[Scheduling rules](#) (page 69)

[Running a rule immediately](#) (page 70)

### Rule conditions

When you create a rule, you can select **New Rule** to create a rule from scratch, or **New from Template** to create a rule that has some conditions already preset that you can then edit.

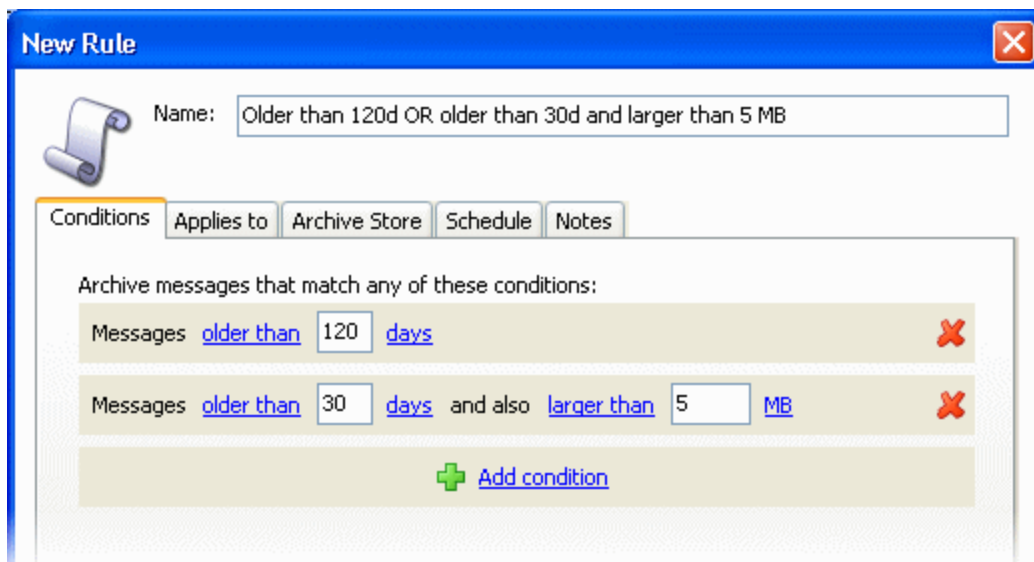
A simple rule could contain just one condition, such as *archive messages that are older than 90 days* which uses the *Age* template.



The screenshot shows the 'New Rule' dialog box with the title bar 'New Rule' and a close button. A scroll icon is on the left. The 'Name' field contains 'Messages older than 90 days'. Below the tabs 'Conditions', 'Applies to', 'Archive Store', 'Schedule', and 'Notes', the 'Conditions' tab is selected. It shows 'Archive messages that match any of these conditions:' followed by a single condition: 'Messages older than 90 days'. Below this is a green plus icon and a link 'Add condition'.

You may want to set up a rule that will archive messages under a number of different conditions. You can do this by clicking **Add condition** and selecting a new condition.

In the example below, messages will be archived if they are older than 120 days *or* if they are older than 30 days and larger than 5 MB.



The screenshot shows the 'New Rule' dialog box with the title bar 'New Rule' and a close button. A scroll icon is on the left. The 'Name' field contains 'Older than 120d OR older than 30d and larger than 5 MB'. Below the tabs 'Conditions', 'Applies to', 'Archive Store', 'Schedule', and 'Notes', the 'Conditions' tab is selected. It shows 'Archive messages that match any of these conditions:' followed by two conditions: 'Messages older than 120 days' and 'Messages older than 30 days and also larger than 5 MB'. Each condition has a red 'X' icon to its right. Below these is a green plus icon and a link 'Add condition'.

You can also use the *All messages* condition to ensure that all messages in a mailbox are archived, or *No messages* to ensure that messages in a mailbox are never archived; see Example: excluding mailboxes from a group rule (page 68) for an example of this.



## Rule precedence

Only one rule can be active on a mailbox at any one time; if more than one rule is applied to a mailbox:

- a rule that is applied using the Active Directory tree takes priority over a rule that has been applied using the Exchange organization tree
- the rule that is most specifically applied is used

For example, if you apply *Rule A* to *First storage Group*, this is inherited by all mailboxes within that group. This is displayed in the **Rule** column on the dashboard.

Mailboxes	Size	Archive Size	Rule	Active Archive Loc
exchange (3)	75.6 MB	-	Set rule...	
First Storage Group (3)	27.6 MB	-	Rule A	esabox/Store 60977
mailbox1	11.5 MB	-	Rule A	esabox/Store 60977
mailbox2	12.3 MB	-	Rule A	esabox/Store 60977
mailbox3	3.8 MB	-	Rule A	esabox/Store 60977
Second Storage Group (6)	48.0 MB	-	Set rule...	esabox/Store 89699

If you then create *Rule B* and apply it to *mailbox 3* only:

Conditions Applies to Archive Store Schedule Notes

If more than one rule is assigned to a mailbox, only the highest priority is used. ?

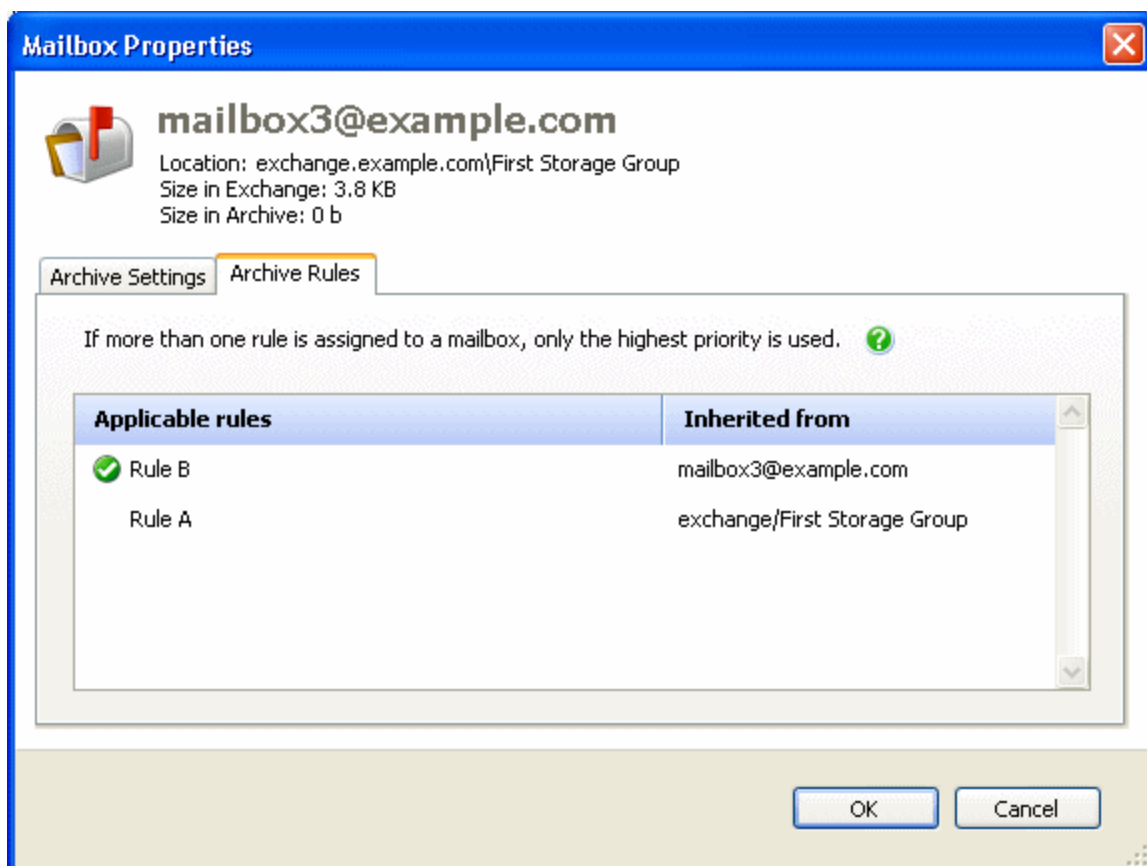
Select by: Exchange organization Properties...

Mailboxes	Current Rule
exchange (3)	-
First Storage Group (3)	Rule A
mailbox1	Rule A
mailbox2	Rule A
<input checked="" type="checkbox"/> mailbox3	Rule B
Second Storage Group (0)	-

...Rule B overrides Rule A because it is more specific:

Mailboxes	Size	Archive Size	Rule	Active Archive Loc
exchange (3)	75.6 MB	-	Set rule...	
First Storage Group (3)	27.6 MB	-	Rule A	esabox/Store 60977
mailbox1	11.5 MB	-	Rule A	esabox/Store 60977
mailbox2	12.3 MB	-	Rule A	esabox/Store 60977
mailbox3	3.8 MB	-	Rule B	esabox/Store 60977
Second Storage Group (6)	48.0 MB	-	Set rule...	esabox/Store 60977

This is also shown in the mailbox properties:



It does not matter in which order you create the rules; the most specific rule always takes precedence.

You can use rule precedence to exclude individual mailboxes from a group rule; see Example: excluding mailboxes from a group rule (page 68).

Note that you cannot have two rules applied to the same group or mailbox at the same level; if you apply *Rule C* to *mailbox 1* and then you apply *Rule D* to *mailbox 1*, *Rule C* is automatically changed so that it no longer applies to *mailbox 1*.

## New mailbox rule inheritance

When you apply a rule to a group, such as a storage group, a DAG, or an Active Directory folder, any new mailboxes that are added to that group in Exchange automatically inherit the group's rule.

If, however, you select individual mailboxes in a group rather than applying the rule at group level, new mailboxes that are added subsequently do not inherit a rule and will not be archived unless you explicitly apply a rule.

Therefore, if you want a rule to be inherited when you add mailboxes, it is best to create a group rule. You can then create individual rules for any mailboxes within the group that you do not want to use the group rule.

Note that in Exchange Server Archiver, domains and subdomains are all considered to be at the top-level; therefore, if you add a subdomain, the mailboxes in the subdomain will not inherit rules from the parent domain.

If you select a group containing a large number of mailboxes, to ensure that you have not exceeded your mailbox entitlement, on the **Help** menu, click **Licensing Status**.

## Example: creating exceptions to group rules

In this example, you have a company policy that specifies that messages must be archived at least every 90 days, but a graphic designer in your marketing department often receives messages with large attachments so you want to archive his mailbox more frequently.

1. Create a rule for the company using the *Age* template, and on the **Conditions** tab specify *Messages older than 90 days*.
2. On the **Applies to** tab, select the top level check box to apply the rule to all users in the company.
3. Specify the name, archive store, and schedule, and click **OK**.
4. Create a new rule for the graphic designer using the *Age* template, and on the **Conditions** tab specify *Messages older than 90 days*.
5. Click **Add Condition**, select the *Age and Size* condition, and specify *Messages older than 14 days and larger than 5 MB*.


This rule will archive any messages that are older than 90 days. It will also archive any messages that are older than 14 days *and* larger than 5 MB.

6. On the **Applies to** tab, select the check box to apply the rule to the graphic designer's mailbox.
7. Specify the name, archive store, and schedule, and click **OK**.

The company rule will act on all mailboxes except the graphic designer's mailbox, and any new mailboxes that are added to the company group will inherit this rule. The individual rule will act only on the graphic designer's mailbox, and will ensure that large messages are archived after 14 days.

### Example: excluding mailboxes from a group rule

There may be occasions on which you do not want a mailbox within a group to be archived at all. For example, you may want to set up a global company rule, but you do not want the mailbox for a resource to be archived. To do this:

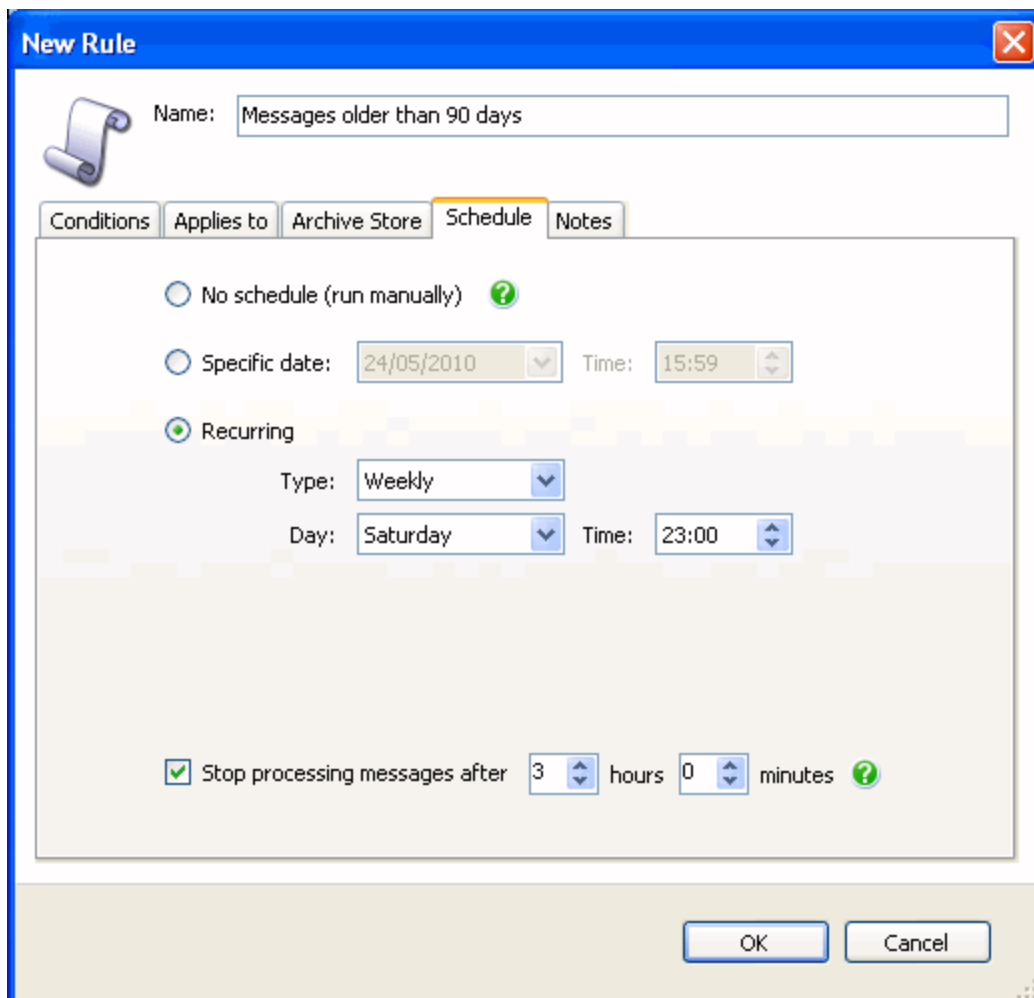
1. Create the global rule, and apply it to the company group.
2. Create a new rule, and on the **Conditions** tab under **Add condition**, select *No messages*.
3. Delete any other conditions by clicking 
4. On the **Applies to** tab, select the mailbox for the resource.
5. Complete the details for the rule.

(Although the rule will not archive messages, you must select an Archive Store and a schedule to complete the rule setup.)

The company rule will act on all mailboxes except the resource's mailbox, and any new mailboxes that are added to the company group will inherit the company rule. The individual rule will ensure that messages in the resource's mailbox are never archived.

## Scheduling rules

When you create a rule you can set up a schedule, for example to run the rule weekly.



The screenshot shows the 'New Rule' dialog box with the 'Schedule' tab selected. The 'Name' field contains 'Messages older than 90 days'. The 'Schedule' tab is active, showing three options: 'No schedule (run manually)', 'Specific date', and 'Recurring'. The 'Recurring' option is selected. Under 'Recurring', the 'Type' is set to 'Weekly' and the 'Day' is set to 'Saturday'. The 'Time' is set to '23:00'. At the bottom, the 'Stop processing messages after' checkbox is checked, with the time set to '3 hours 0 minutes'. The 'OK' and 'Cancel' buttons are at the bottom right.

**New Rule**

Name: Messages older than 90 days

Conditions Applies to Archive Store **Schedule** Notes

☐ No schedule (run manually) ?

☐ Specific date: 24/05/2010 Time: 15:59

☒ Recurring

Type: Weekly

Day: Saturday Time: 23:00

☒ Stop processing messages after 3 hours 0 minutes ?

OK Cancel

You should ensure that your archive rule schedules do not coincide with any Archive Store backup schedules. If an archive occurs while you are backing up, the database file could be inconsistent with the archived messages in the backup. For more information about backing up Archive Stores, see [Backing up Archive Stores](#) (page 93).

You can specify the length of time for which you want the archive task to run. The default time is 3 hours. If the archive task has not completed at the end of the specified time, messages that match the archive rule but have not yet been processed remain unarchived. The next archive run starts again at the first mailbox. If the archive process repeatedly does not complete, mailboxes at the end of the archive process will remain unarchived and you are recommended to extend the time for which you want the archive task to run.

If you want the archive process to run until it has processed all messages that match the archive rule, clear the **Stop processing messages** check box.

Note that the first archive run using a particular rule will take longer than subsequent archive runs using the same rule.

### Running a rule immediately

When you create a rule, the next occurrence of the task is displayed in the **Scheduled Tasks** tab. If you want to run the rule immediately:

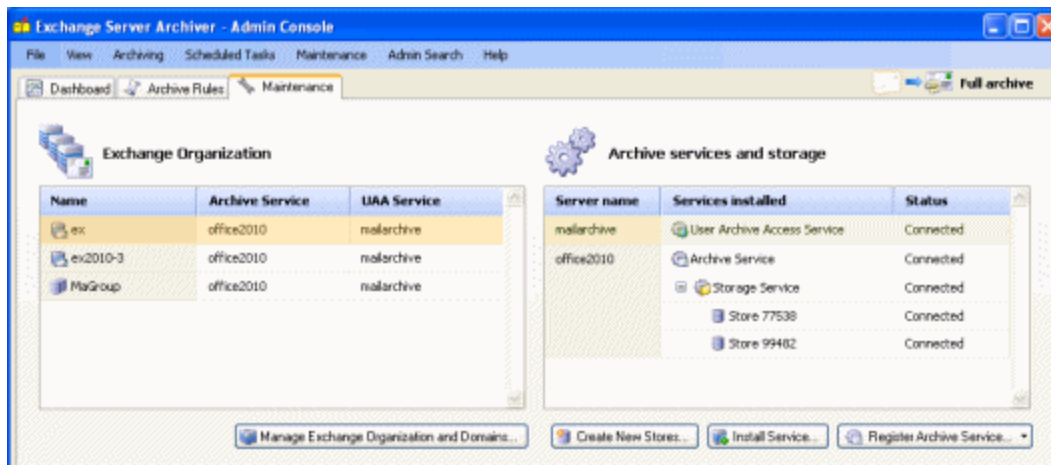
- in the **Scheduled Tasks** tab, right-click the task and click **Run Now**
- or, in the **Archive Rules** tab, right-click the rule and click **Run Rule**

To run tasks associated with *all* rules, on the **Archiving** menu, click **Run All Rules Now**.

## Maintenance tasks

---

You can monitor and change your configuration by using the **Maintenance** tab.



### Exchange organization

The Exchange organization that the Archive Services have detected are displayed on the left-hand side.

- for Exchange Server 2003 and Exchange Server 2007, the registered Exchange servers are displayed
- for Exchange Server 2010, the registered Database Availability Groups (DAGs) and registered Exchange servers that are not in a DAG are displayed

Right-click the name of an Exchange server or DAG to view its properties or to set an archive rule (page 63).

For information about how to register further Exchange servers or DAGs with the Archive Services, see Managing Exchange organization and domains (page 100).

### Services

The services that you have registered are displayed on the right-hand side of the Maintenance tab, with information on their status.

To install a service on another server, click **Install Service**.

If you have installed a service but it is not displayed in the list, select the appropriate option from the **Register** button to register the service.

To view the properties of a service, right-click the service and click **Properties**.

## Archive Stores

To see the Archive Stores that have been added to a Storage Service, expand the Storage Service in the right-hand pane.

For more information about Archive Stores, see [About Archive Stores](#) (page 83).




## Accessing archived messages

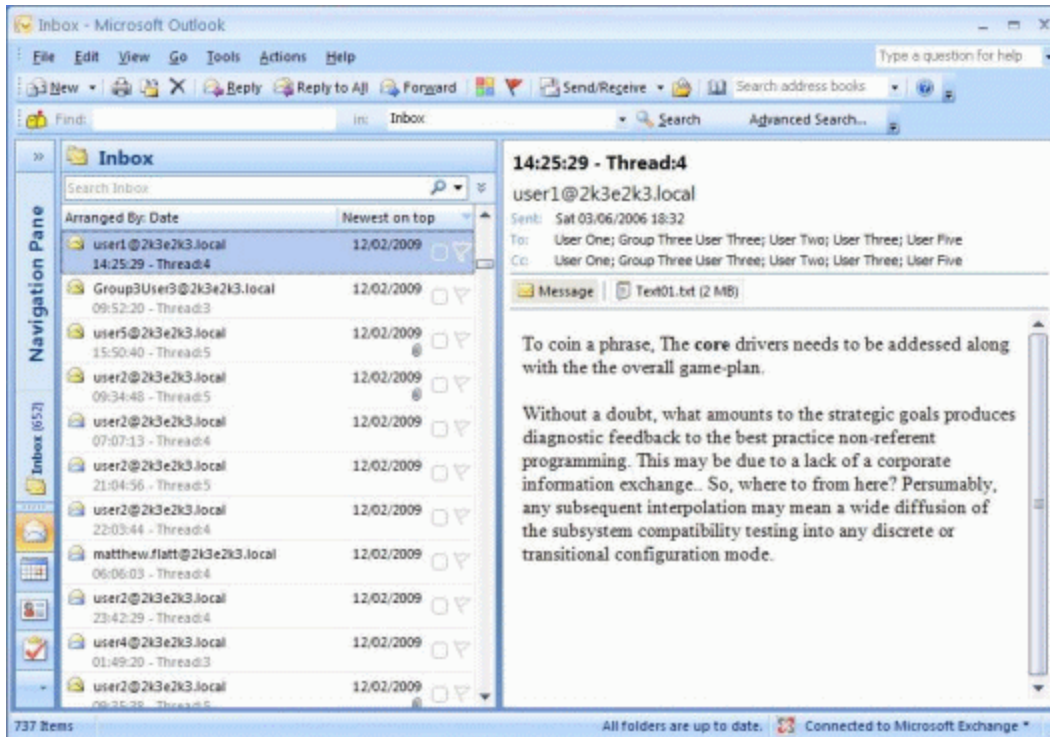
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This chapter describes how users can access their archived messages.

## Using the Outlook Add-in

When you install the Outlook Add-in on your users' computers, Exchange Server Archiver provides a transparent interface for your users to access archived messages using Microsoft® Outlook 2003 or Outlook 2007.

Messages that have been archived are identified with a yellow envelope .



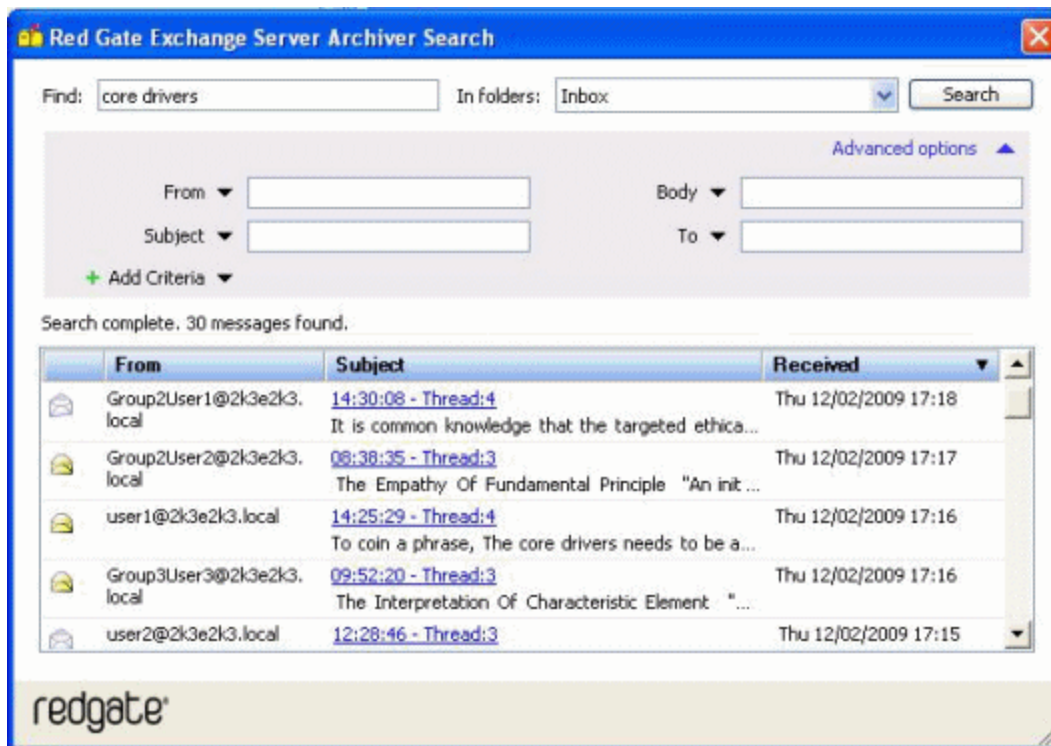
When a user opens an archived message by selecting it in the message list, Exchange Server Archiver retrieves the full message and any attachments.

Users can move or delete a message, or change its status (read/unread, category, or flag) by selecting the message in the message list. (These features are not available when the archived message is opened in a new window.)

Note that archived messages are not cached on the local computer; if users work offline in Outlook, when they open an archived message a placeholder is displayed.


## Outlook Add-in search

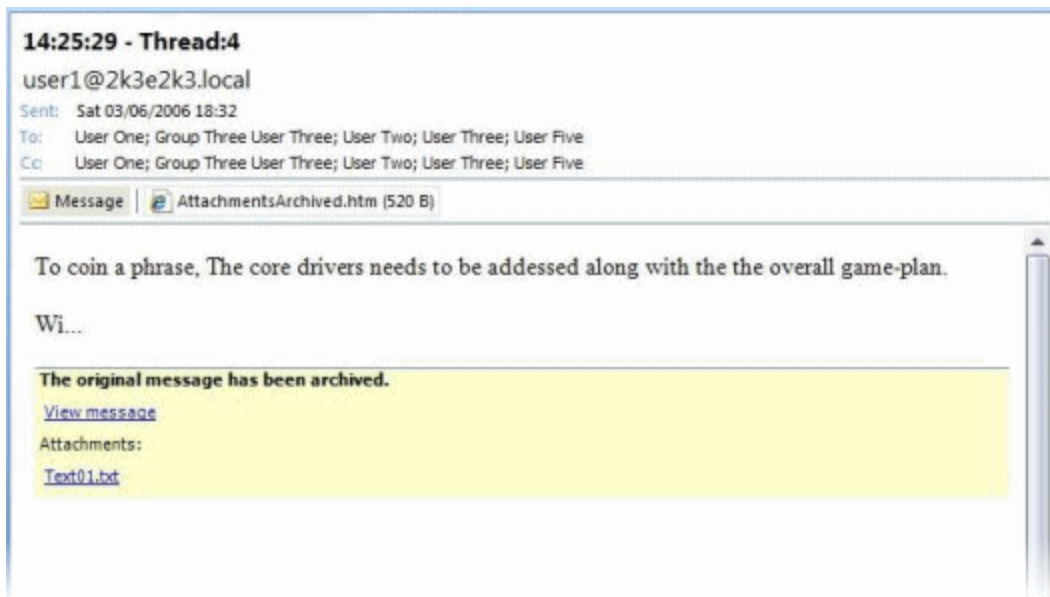
A search feature is provided so that users can search the message body and header of both archived and unarchived messages in a single search when working online. Attachments are not searched.



However, note that if you are using the **Copy and remove attachments only** archive mode (page 5), your users should use the standard Outlook search.

## Using Outlook without the Add-in installed

If you do not install the Outlook Add-in, messages that have been archived are identified with a yellow envelope , but only a placeholder is displayed when an archived message is selected:



Users can access the full message by clicking the **View message** hyperlink to the UAA Service (page 79).

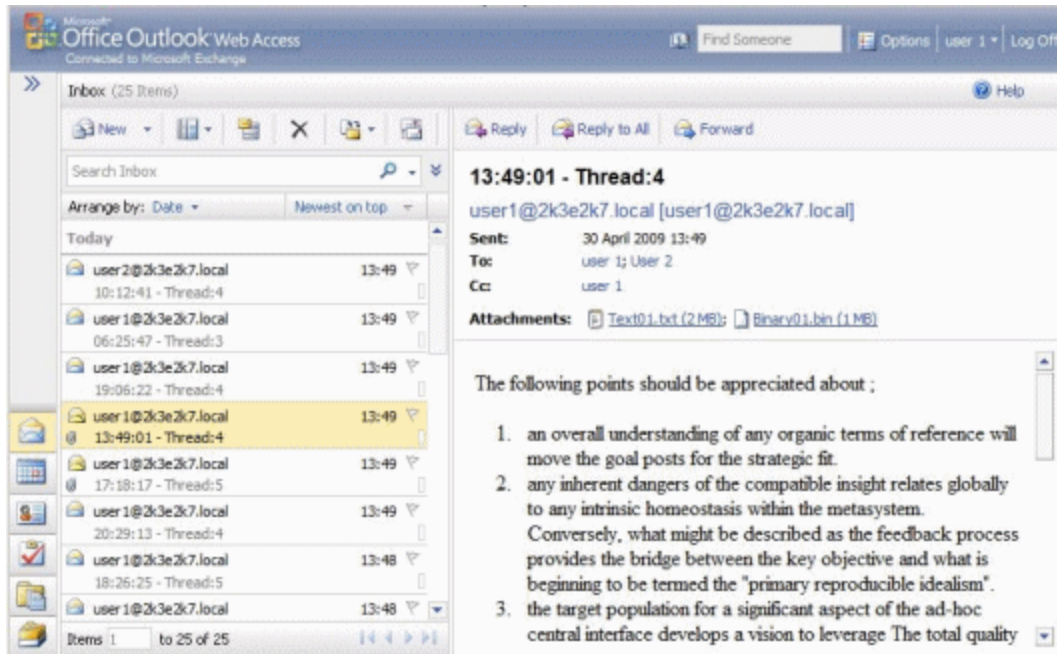
Searches from within Outlook will search only the message placeholders. To search archived messages, users can use the UAA Service search feature.

## Using the Outlook Web Access Add-in

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When you install the Outlook Web Access (OWA) Add-in, Exchange Server Archiver provides a transparent interface for your users to access the archived messages using Exchange Server 2007 Outlook Web Access or Outlook Web Access 2003.

Messages that have been archived are identified with a yellow envelope .

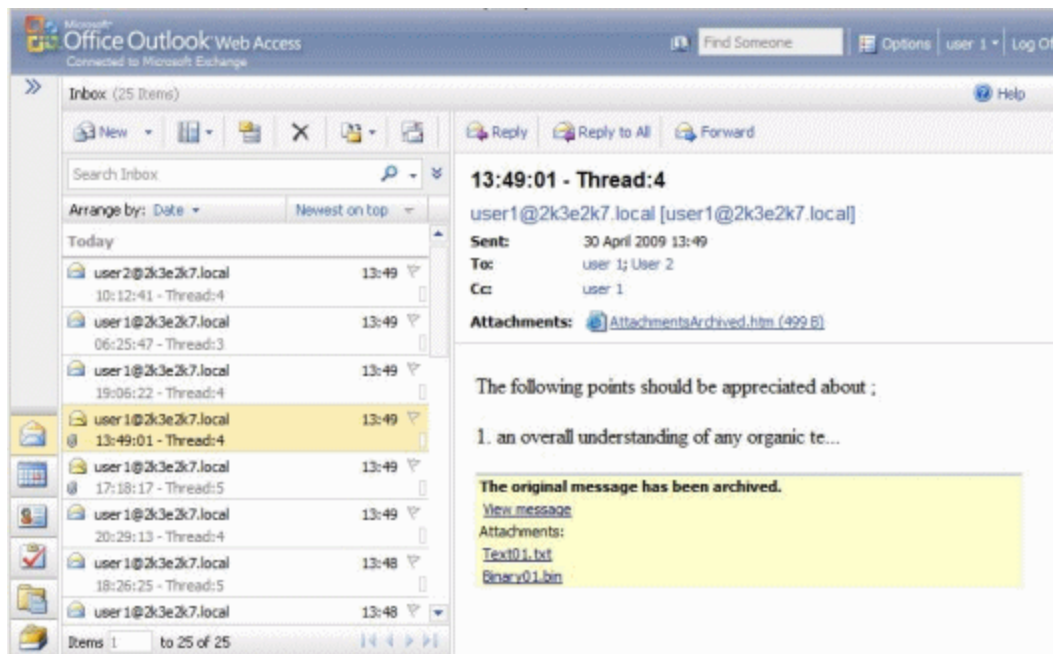


Searches from within Outlook Web Access will search only the message placeholders. Users can use the UAA Service Web page for a full-text search of archived messages.

## Using OWA without the Add-in installed

If you do not install the Outlook Web Access Add-in, archived messages are not identified with an icon.

When a user selects an archived message, a placeholder is displayed and users can access the full message by using a hyperlink to the UAA Service.



Searches from within Outlook Web Access will search only the message placeholders. Users can use the UAA Service Web page for a full-text search of archived messages.

Note that if you are using the **Copy and remove attachments only** archive mode (page 5) and you have not installed the OWA Add-in, users cannot access archived attachments from within OWA; they must use the UAA Service (page 79) to access the attachments. (For more details, see Cannot access attachment from OWA (<http://www.red-gate.com/ESA/3.0?i=9452>).)

## Using the UAA Service

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You use the User Archive Access (UAA) Service if you do not want to install the Outlook Add-in or the Outlook Web Access Add-in, or if you do not use Outlook or Outlook Web Access to access your messages.

If the relevant add-in is not installed and you select an archived message, a message placeholder is displayed with a hyperlink to the UAA Service. When you click the hyperlink, the full message is displayed in your default Web browser.

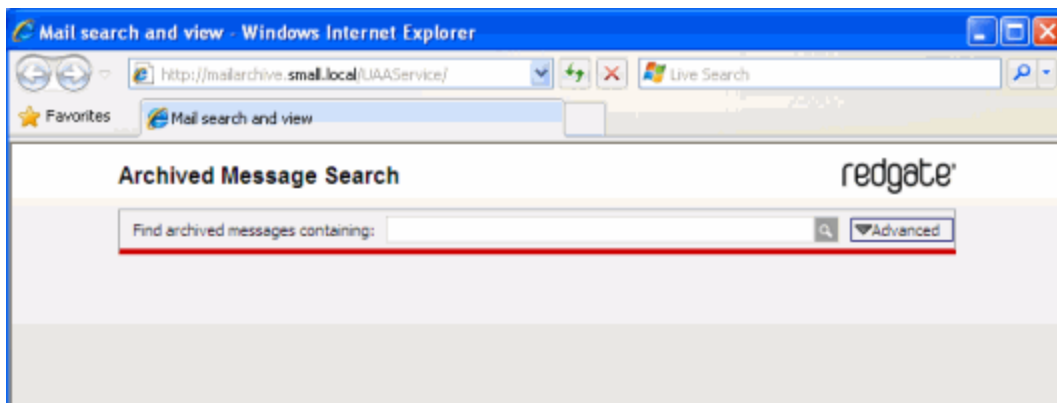
You can download the message from the UAA Service as an Outlook message (.msg) or an internet e-mail message (.eml), if required.

### Searching archived messages

If the add-in is not installed, you must use the UAA Service search feature to search archived messages. To access the search, type the URL for the UAA Service in your Web browser. For example:

*<http://esabox/uaaservice>*

The UAA Service search feature is displayed.

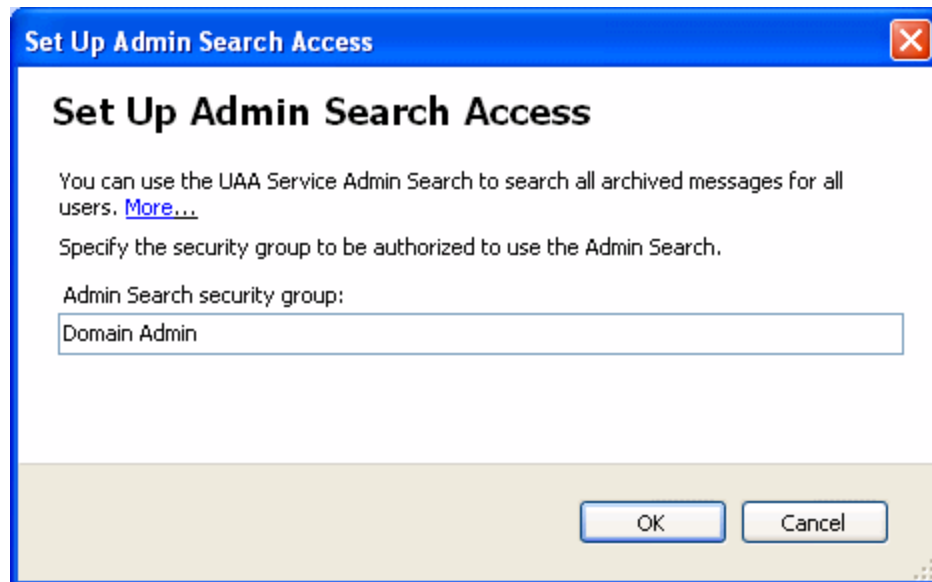


Note that if you are using Exchange Server 2010 or Exchange Server 2007 journaling, the UAA Service does not search the message body; only the Sender, Recipients, Subject, and Date are searched.

### Administrator access to archived messages

If you are an administrator, you can use the UAA Service to search all archived messages, for all users. To do this, you must first specify the security group that will have access to the Admin Search:

1. On the **Admin Search** menu, click **Set Up Admin Search Access**.



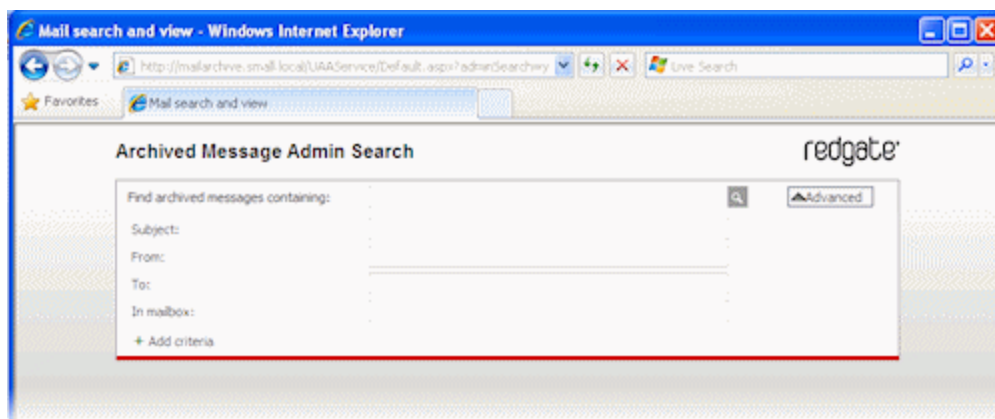
2. Type the name of the security group, and then click **OK**.

You can specify only one security group. If you want to more than one security group to have access, create a new security group in Active Directory containing the all the security groups for which you want to set up access.

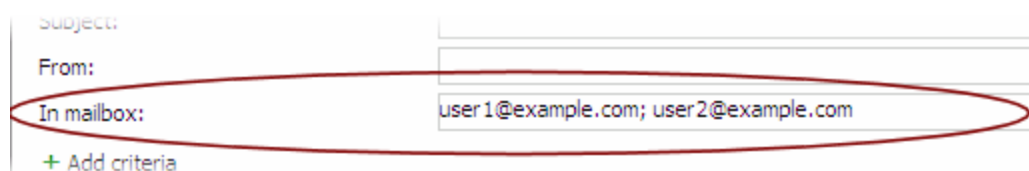
To use the Admin Search:

- On the **Admin Search** menu, click **Launch Admin Search**.

The UAA Service is displayed:



To search multiple mailboxes, separate each email address with a semi-colon. For example:





To search all mailboxes, leave **In mailbox** blank.



## About Archive Stores

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An Archive Store is a folder in which messages are archived.

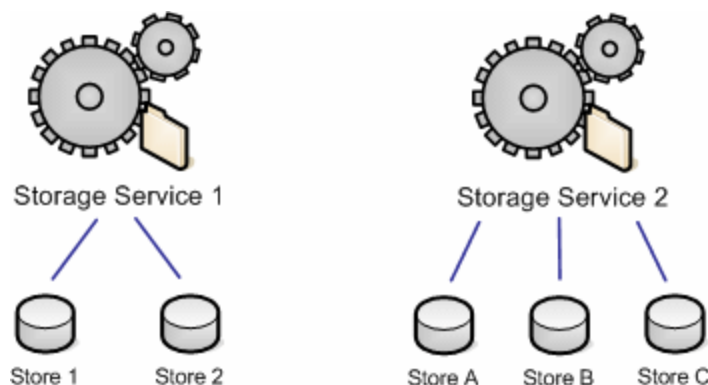
When a message is archived, the message body and any attachments are stored as individual files in the Archive Store folder. Message bodies are compressed. Once written, the individual files in the Archive Store folder cannot be modified.

Single-instance storage (SIS) ensures that duplicate messages and attachments are stored only once in each Archive Store. Messages or attachments are considered to be duplicates if their checksums are identical. The header is stored for each instance of the duplicated message.

Each Archive Store has a database file, *meta.db*, which contains details of all the archived messages, and an xml file, *Store.xml*, which contains information that is used by the Storage Service.

### Store architecture

Exchange Server Archiver uses a Storage Service to store and retrieve the archived messages. You can set up any number of Storage Services, and for each Storage Service you can set up any number of Archive Stores. However, an Archive Store can be hosted by only one Storage Service. For example:



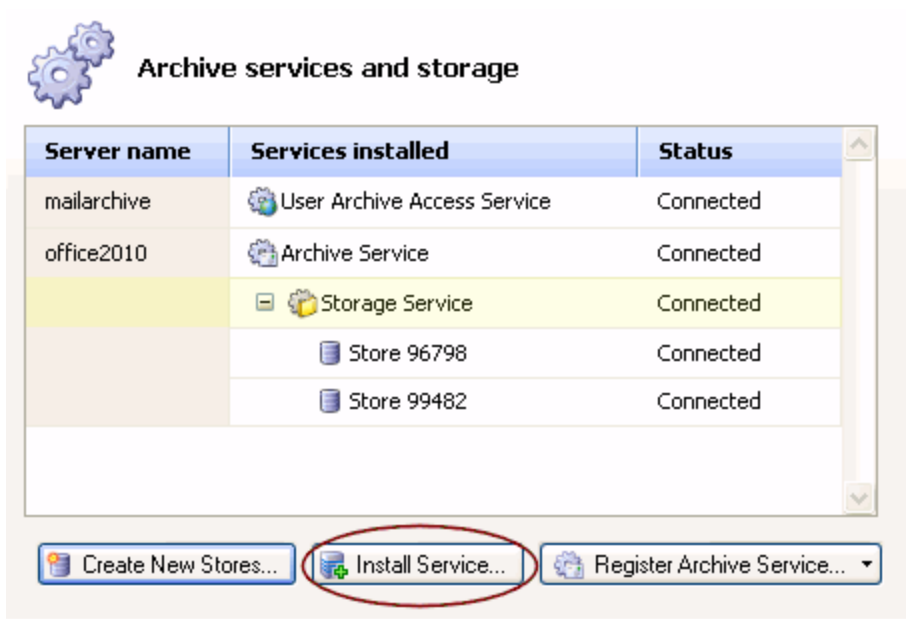
You are recommended to create the Archive Stores on the same computer as their host Storage Service; if you create the Archive Stores on a computer that is remote from the Storage Service, this may affect performance and reliability.

You specify which Archive Store will be used for a particular mailbox when you set up the archive rules (<http://www.red-gate.com/ESA/3.0?i=9030>).

Although single-instance storage (SIS) ensures that duplicate messages and attachments are stored only once within each Archive Store, if duplicate messages or attachments are archived to different Archive Stores, they will be duplicated across the Archive Stores.

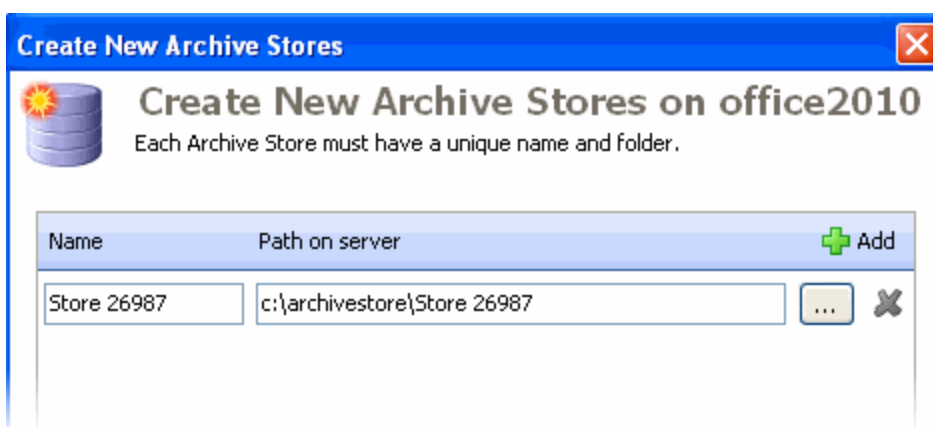
## Creating new Archive Stores

Before you create an Archive Store, you must first install a Storage Service on the server. To install a Storage Service, on the **Maintenance** tab, click **Install Service** and follow the instructions. For more information about installing a Storage Service, see Installing the services and components (<http://www.red-gate.com/ESA/3.0?i=9310>).



You can install any number of Storage Services, and for each Storage Service you can create any number of Archive Stores; for more information, see Using multiple Archive Stores (page 91).

To create a new Archive Store, on the **Maintenance** tab, right-click the Storage Service and then click **Create New Archive Stores**. The Create New Archive Stores dialog box displays a unique name and folder for the new store.



You can edit these details if required, but they must remain unique. **Path on server** must specify an absolute path to a folder on the server.

The default folder for Archive Stores is `C:\archivestore` on the Storage Service server.

You can also add new Archive Stores when you are creating or editing archive rules (page 63), or by using the Configuration wizard (<http://www.red-gate.com/ESA/3.0?i=9270>).

## Moving an Archive Store

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You may want to move an Archive Store, for example because the current disk is running out of space.

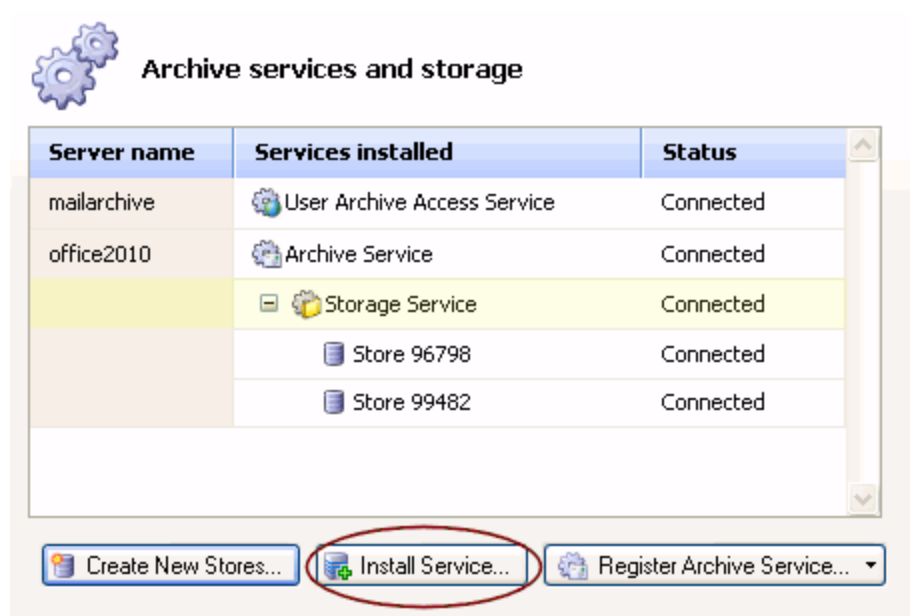
Archive Stores are uniquely identified using GUIDs (Globally Unique Identifiers). Therefore, when you move a store, existing rules that archive to the store will automatically find it in its new location.

You are recommended to keep the Archive Stores on the same computer as their host Storage Service; if you move an Archive Store to a computer that is remote from the Storage Service, this may affect performance and reliability.

To move an Archive Store:

1. If a Storage Service is not installed on the new server, on the **Maintenance** tab click **Install Service** and install the service.

For more information about installing a Storage Service, see Installing the services and components (<http://www.red-gate.com/ESA/3.0?i=9310>).



2. On the **Maintenance** tab, right-click the Archive Store that you are moving and click **Detach**.
3. Use your file manager to move the Archive Store folder to the new location on disk.
4. On the **Maintenance** tab, right-click the Storage Service on the new server and click **Attach Store**.
5. Specify the path to the store's new location, and click **OK**.

## Moving an Archive Store database

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Each Archive Store has a database file, *meta.db*, which contains details of all the archived messages.

By default, the database file is located in the same folder as the Archive Store data files. However, you may want to move the database file:

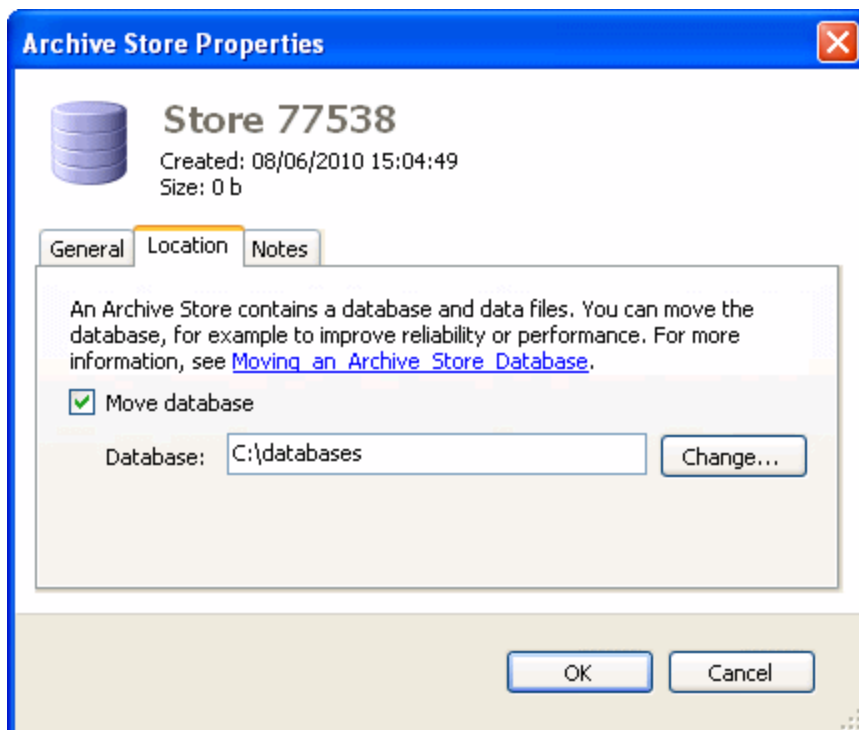
- to improve reliability when the Archive Store is located on an external storage (see Archiving to external storage (page 89))  
Move the database file to a folder on the Storage Service server.
- to improve performance if you are using local SATA drives for your storage devices  
Move the database file to a different disk on the same server as the Archive Store.

When you move a database file, its name is changed to include the GUID of the Archive Store.

If you are using more than one Archive Store, you can move all of the databases to the same folder. For example, you may want to do this for convenience when you back up the database file folder.

To move the database:

1. On the **Maintenance** tab, right-click the Archive Store and click **Properties**.
2. In the **Archive Store Properties** dialog box, click **Location**.



3. Select the **Move database** check box.
4. In **Database**, specify the folder to which you want to move the database.
5. Click **OK**.

To move the database file back to the Archive Store data files folder, clear the **Move database** check box and click **OK**.



## Archiving to external storage

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If you want your archived messages to be stored on external storage, you can create your Archive Stores on a NAS (network attached storage) unit. Format the NAS unit as NTFS, ext3, or similar; you are recommended not to format the NAS unit as FAT, because this limits the number of files per folder.

When you use a NAS unit, the Archive Store is located on a different computer from the Storage Service. You are therefore recommended to move the Archive Store database file (*meta.db*) from the NAS unit to the Storage Service computer to improve reliability. For more information, see Moving an Archive Store database (<http://www.red-gate.com/ESA/3.0?i=9473>).

If you are **not** using a NAS unit for the Archive Stores, you are recommended to create the Archive Stores on the same computer as their host Storage Service; if you create the Archive Stores on a computer that is remote from the Storage Service, this may affect performance and reliability.

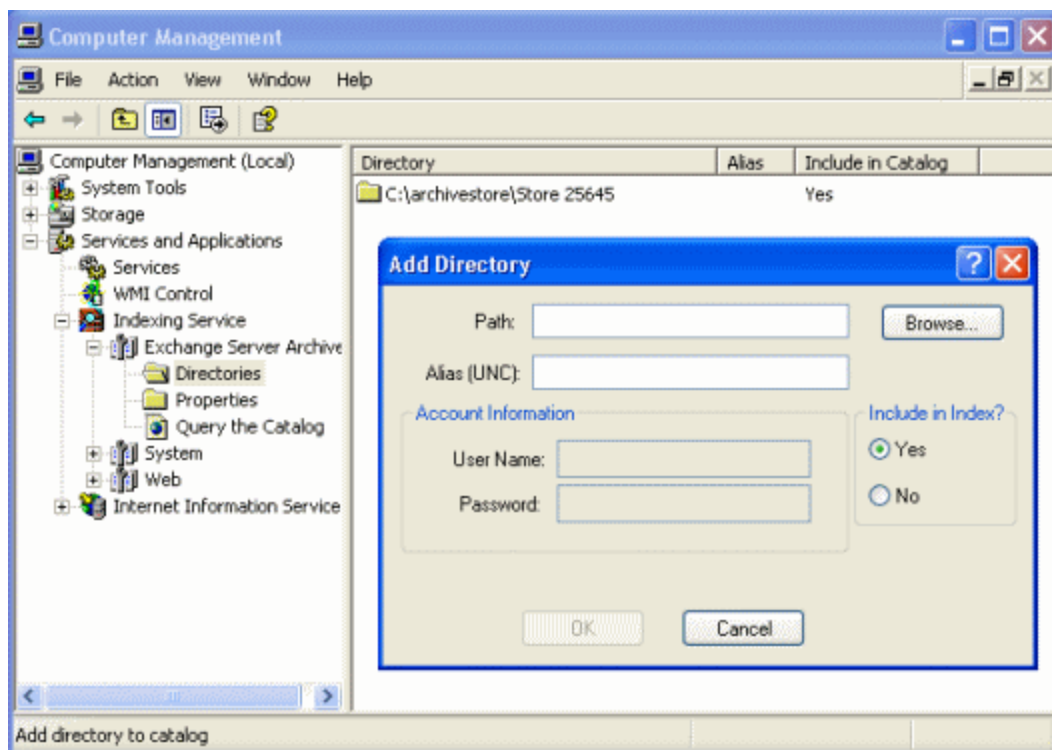
### Indexing Service

When you have created an Archive Store on a NAS unit or remote computer, you must add the Archive Store directory to the Indexing Service manually. (Exchange Server Archiver cannot add the directory automatically, because the Indexing Service requires authorization for the UNC path.) If you do not do this, searching for archived messages will not work correctly.

To add the directory, in the **Indexing Service** Manager:

1. Expand the **Exchange Server Archiver** catalog.

2. Right-click **Directories**, click **New**, and then click **Directory**.



3. Enter the details of the directory, including the **User Name** and **Password**.
4. Under **Include in Index** ensure that **Yes** is selected, and click **OK**.

## Security for external storage

If you choose to use a NAS unit for your Archive Stores, you are recommended to 'lock down' the external storage unit, granting Read and Write permissions only to:

- the Storage Service
- the Indexing Service
- the user credentials to be used when managing the Indexing Service (for example, adding directories)

## Using multiple Archive Stores

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This topic describes how you can use multiple Archive Stores to:

- mimic your Exchange server store structure (page 91)
- manage the Archive Store size (page 91)
- optimize performance (page 92)
- decommission an Archive Store (page 92)

For information about multiple stores architecture, see About Archive Stores (page 83).

### Mimic your Exchange store structure

You may want to set up multiple Archive Stores so that they mirror the stores in Exchange, simply for familiarity.

For example, if your Exchange Server stores are organized by mailbox name, such as 'A to M' and 'N to Z', you could set up a Storage Service with two Archive Stores. You would then create two archive rules - one to archive mailboxes A to M to the first Archive Store, and the other to archive mailboxes N to Z to the second Archive Store.

### Manage Archive Store size

If you archive a lot of mailboxes, or if the messages and attachments that you archive are large, you may want to set up multiple Archive Stores to keep the size of the individual stores manageable.

Also, when an Archive Store reaches a certain size, you may want to stop archiving to it and create a new Archive Store. You can then make the old Archive Store read-only so that users can access the archived messages, but no further messages can be archived to it.

You may want to keep your Archive Stores small for the following reasons:

- Smaller Archive Stores may be more convenient when you schedule your backups.

If you have multiple active Archive Stores, you can stagger the backups of the individual Archive Stores, rather than backing up one large store.

If you have read-only stores, you can perform a final full backup on these stores and remove them from your backup schedule; you need only back up the active stores.

For more information, see Backing up Archive Stores (<http://www.red-gate.com/ESA/3.0?i=9472>).

- Smaller active Archive Stores can mean cheaper storage.

If a read-only Archive Store contains very old messages that are not frequently accessed, you could move the store to cheaper storage with no noticeable impact on your end users.

- Smaller Archive Stores are easier to manage.

For example, if you have a failover system that means you copy the Archive Stores to another location, only the active Archive Stores need to be copied regularly.

The read-only Archive Stores can be copied once, and do not need to be copied again.

To make an Archive Store read-only:

1. Use the **Archive Rules** tab to ensure that any rules that are set up to use the store are changed to archive to a new store.
2. On the **Maintenance** tab, right-click the store and click **Properties**, and then select the **Make store read-only** check box.

Note that you cannot make a store writeable once you have made it read-only.

## Optimize performance

You can improve performance by setting up different Archive Stores on different disks. The Archive Stores can be hosted by the same Storage Service if they are all on the same server.

You can also improve performance by setting up Storage Services on different servers, but note that you are recommended to install each Storage Service on the same server as the Archive Stores that it hosts. (There may be some exceptions; for example, if you create an Archive Store on a NAS (network attached storage) unit, the Storage Service is installed on a different computer - see Archiving to external storage (<http://www.red-gate.com/ESA/3.0?i=9439>).)

## Decommission an Archive Store

You may want to use multiple Archive Stores to enable you to 'decommission' an old Archive Store so that messages can no longer be archived to it, or so that the archived messages in the Archive Store cannot be accessed at all.

For more information, see Decommissioning an Archive Store (page 95).

## Backing up and restoring Archive Stores

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When you use Exchange Server Archiver to archive your Exchange Server data, the archived messages and attachments are stored as individual files in the Archive Store. You are recommended to set up a schedule to back up this archive data.

The individual files in the Archive Store are not modified once they have been written; subsequent archives create additional files in the Archive Store folder. If you perform incremental backups on an Archive Store, only the new archive files, the database file *meta.db*, and the xml file *Store.xml* are backed up each time.

If you have moved the database file, remember to include the new location of the database file in your backup schedule (see Moving an Archive Store database (<http://www.red-gate.com/ESA/3.0?i=9473>)).

For maximum protection of your data:

1. Before you begin archiving, back up your Exchange server.
2. In Exchange Server Archiver, set up the archive rules you require and run them.  
Messages are archived to the Archive Stores according to the rules you set up. If you are using full archive mode (page 5), the messages are replaced with placeholders in Exchange Server, and attachments are removed from the Exchange server.

For more information about what happens when you archive, see the Technical overview.

3. Set up a backup schedule to back up your archive data using your usual backup solution.
4. To back up the archive rules, back up the file *ArchiveService.xml*. By default this is located in:

`%allusersprofile%\Application Data\Red Gate\Archive Service`

You should ensure that your backup schedules do not coincide with the archiving schedules you define in the archive rules. If an archive occurs while you are backing up, the database file could be inconsistent with the archived messages in the backup.

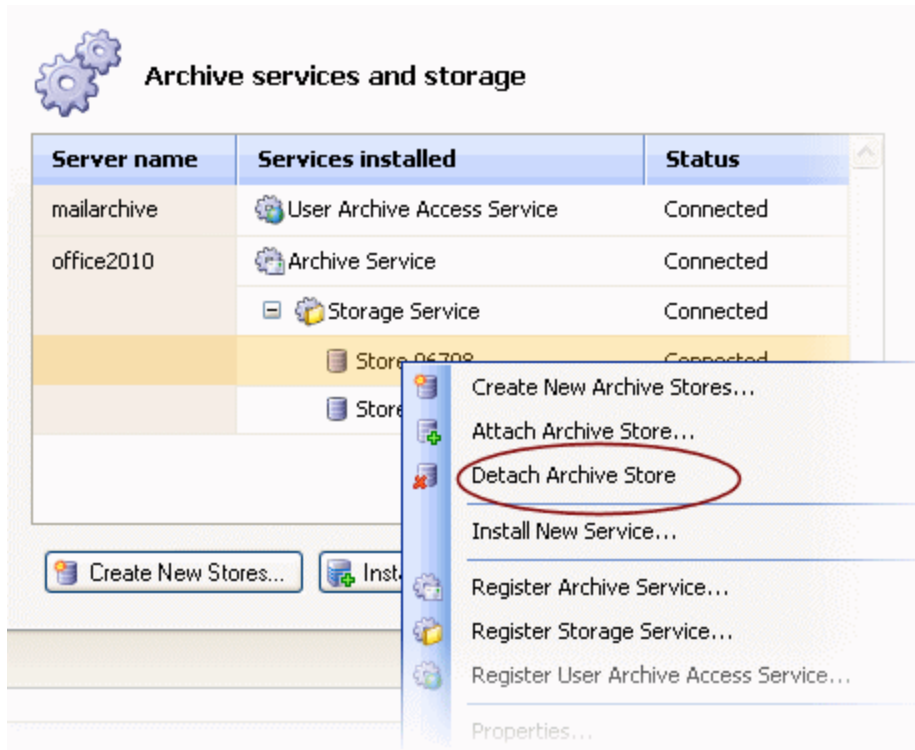
### Restoring an individual Archive Store

Note that when you restore an Archive Store from backup, if any messages were archived after the most recent backup they will not be available in the restored Archive Store.

To retrieve a particular Archive Store, for example because you have noticed some missing or corrupt archived messages:

1. Restore the Archive Store data files, database file, and xml file to a new location.
2. In the Admin Console, select the **Maintenance tab**.

3. Right-click the current Archive Store and click **Detach Archive Store**.



4. Right-click the Storage Service, and click **Attach Archive Store**.
5. In the **Attach Archive Store** dialog box, specify the location of the restored Archive Store and click **OK**.

## Restoring all Archive Stores

Note that when you restore Archive Stores from backup, if any messages were archived after the most recent backup they will not be available in the restored Archive Stores.

To retrieve the Archive Stores in full (for example, if your server has been replaced):

1. Restore each Archive Store folder from the backup.
2. If you moved the database file for any Archive Store, restore the database file folders.
3. If you backed up the archive rules, restore the file *ArchiveService.xml* to:  
`%allusersprofile%\Application Data\Red Gate\Archive Service`
4. In the Admin Console, select the **Maintenance tab**.
5. For each Archive Store, right-click the Storage Service, and click **Attach Archive Store**.
6. In the **Attach Archive Store** dialog box, specify the location of the Archive Store and click **OK**.

## Decommissioning an Archive Store

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You can decommission an old Archive Store so that messages can no longer be archived to it, or so that the archived messages in the Archive Store cannot be accessed at all.

### Making an Archive Store read-only

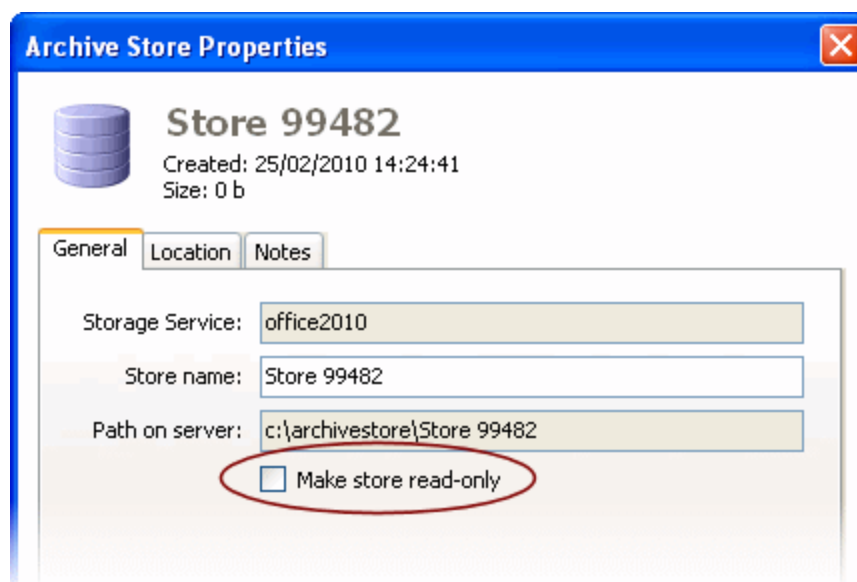
You may want to make an Archive Store read-only so that users can access the archived messages, but no further archives can be created in it.

For example, you may want to do this if the store contains very old messages that are not frequently accessed; you could move the store to cheaper storage with no noticeable impact on your end users.

Note that you cannot make a store writeable once you have made it read-only.

To make an Archive Store read-only:

1. Use the **Archive Rules** tab to ensure that no rules are set to archive to the store.
2. On the **Maintenance** tab, right-click the Archive Store and click **Properties**.



3. Select the **Make store read-only** check box and click **OK**.

If you make an Archive Store read-only and it is used by an Archive Rule, an alert is displayed in the **Alerts** tab, and the Archive Store name is shown in red next to the rule in the **Archive Rules** tab. You cannot run a rule if its Archive Store is read-only.

## Making an Archive Store inaccessible

You may want to 'decommission' an Archive Store so that the messages can no longer be accessed.

To do this:

1. Use the **Archive Rules** tab to ensure that no rules are set to archive to the store.
2. On the **Maintenance** tab, right-click the Archive Store and click **Detach**.

If you detach a store without re-attaching it and it is used by a rule, an alert is displayed in the **Alerts** tab, and *Store not found* is displayed in the **Archive Rules** tab next to the rule. You cannot run a rule if its Archive Store has been detached.

If a user opens a message that was archived to the detached Archive Store, a placeholder is displayed.



## Repairing and rebuilding Archive Stores

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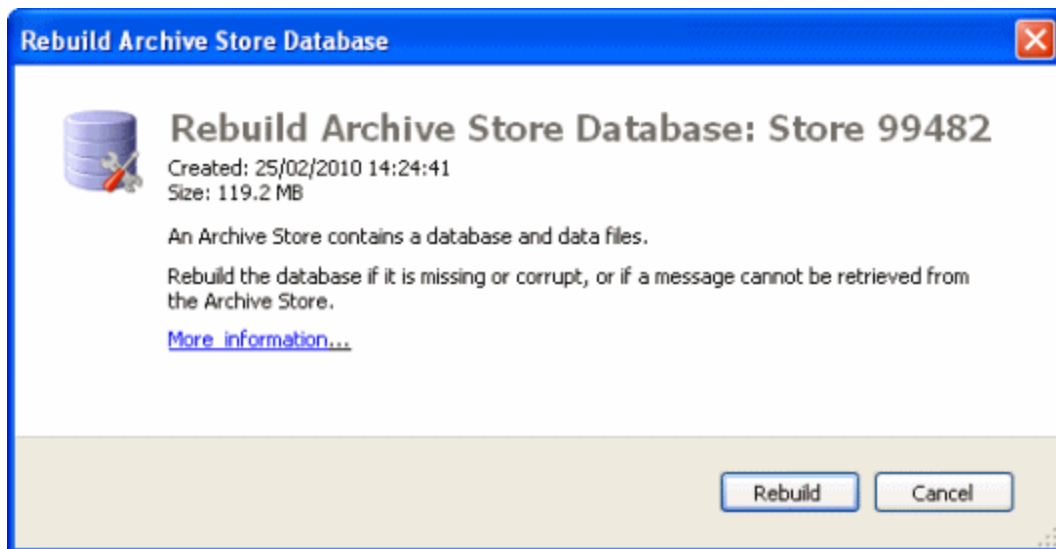
If there is a problem with an Archive Store, a message is displayed in the **Alerts** tab and in the **Maintenance** tab (for example, *Cannot retrieve message from Archive Store*).

This could occur because the database file *meta.db* is missing or corrupt. You can attempt to fix this by rebuilding the Archive Store database and xml file.

If a data file is missing or corrupt, Exchange Server Archiver cannot repair this, and you are recommended to retrieve the data files from backup. For more information, see *Backing up Archive Stores* (page 93).

To rebuild the database:

1. In the **Maintenance** tab, click the name of the Archive Store to select it.
2. On the **Maintenance** menu, click **Rebuild Archive Store Database**.

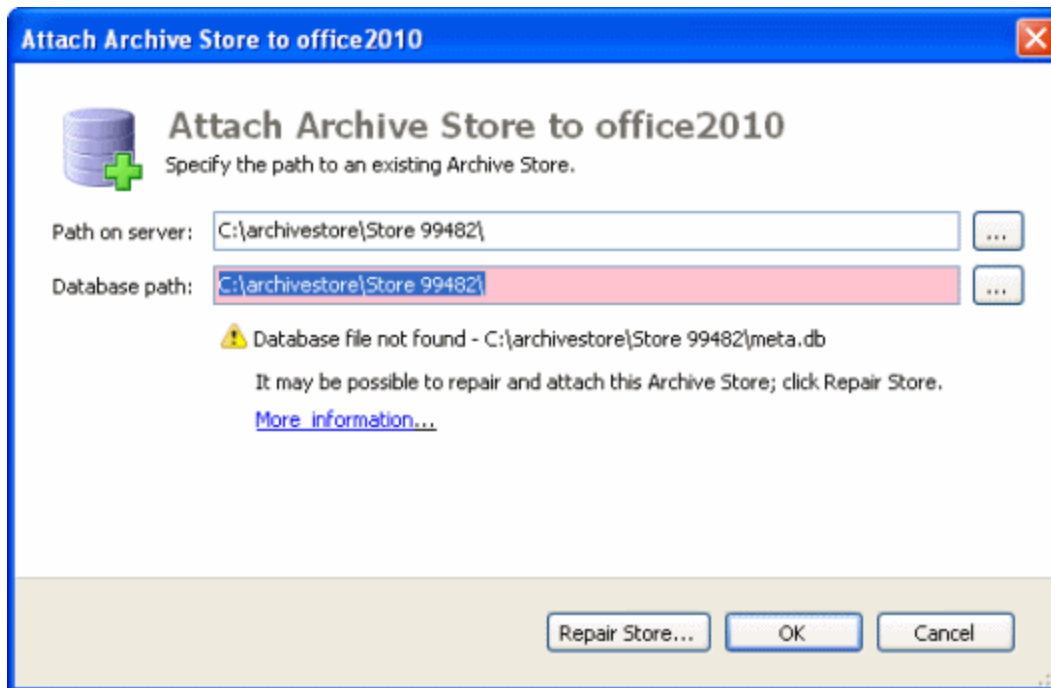


3. Click **Rebuild**.

The **Alerts** tab displays progress information about the rebuild.

## Repairing while attaching an Archive Store

If you have attempted to attach an existing Archive Store and there is a problem you are offered the option to repair the store.



When you click **Repair Store**, you are prompted to enter the file locations for the Archive Store files. You can then click **Repair and Attach** to proceed. Exchange Server Archiver rebuilds the database file and the xml file, and if there are no further problems the store is attached.

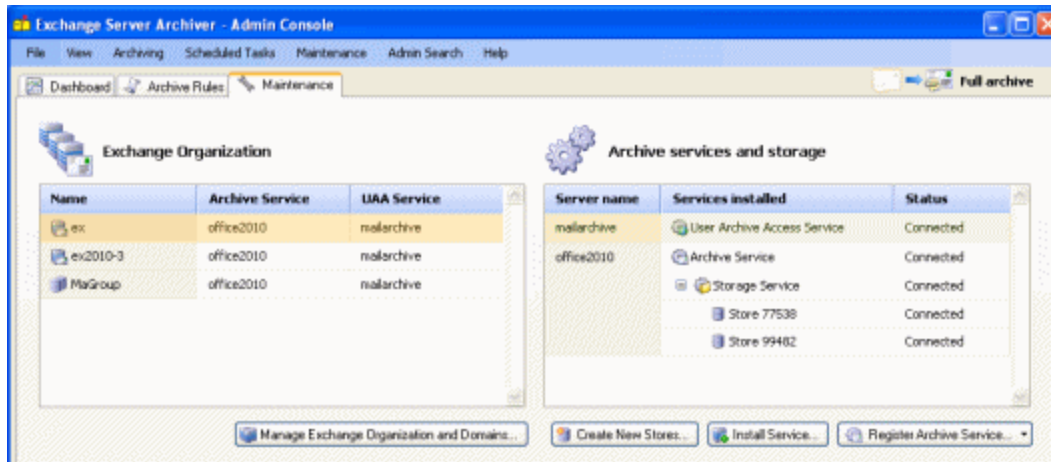


## Managing Exchange organizations and domains

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To archive a mailbox using Exchange Server Archiver, both the Exchange server or Database Availability Group (DAG) that hosts the mailbox, and the user's domain must be registered with the Archive Service.

The registered Exchange servers and DAGs are displayed in the Maintenance tab.



When you install Exchange Server Archiver, the Configuration wizard registers the local domain (for the user running the Configuration wizard) and Exchange servers and DAGs on that domain.

You can register further domains, Exchange servers, or DAGs. However, note that domains on remote servers may take a long time to register.

When you register an Exchange server or DAG, you must also specify the Archive Service to be used to process messages, and the User Archive Access Service to be used to retrieve messages.

You can also remove domains, Exchange servers, and DAGs that have been registered previously.


To add or remove domains, Exchange servers, and DAGs, on the **Maintenance** tab, click **Manage Exchange Organization and Domains** and follow the instructions in the wizard.

## Moving the UAA Service

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If you used a CNAME DNS entry for the host name when you registered the User Archive Access (UAA) Service, subsequently moving the UAA Service will not affect your archived messages.

However, if you did not use a CNAME DNS entry and you move the UAA Service, all archived message must be reprocessed:

1. Schedule a task to copy back all archived messages to the Exchange Store:  
On the **Maintenance** menu, click **Copy Back to Exchange** (see Copying back archived messages (page 102)).
2. When all messages have been copied back, register the UAA Service with the new URL:  
On the **Maintenance** tab, click **Register User Archive Access Service**, and enter the details.
3. Uninstall the old UAA Service.
4. Delete the old UAA Service registration:  
An error icon  is displayed next to the old UAA Service. Right-click the UAA Service, and click **Remove from List**.
5. Change the active UAA Service on the Exchange server:  
On the **Maintenance** tab, right-click the Exchange server, click **Properties**, and change the **UAA Service URL**.
6. Set up rules to archive the messages again.

## Copying back archived messages

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**Note:** Before you use the copy-back facility, it is recommended that you back up your archive stores and keep a record of your configuration settings, for details see Preparing to upgrade in Upgrading Exchange Server Archiver (<http://www.red-gate.com/ESA/3.0?i=9459>). You should also copy the following configuration files: Component.NET, Archive Service, Storage Service, and User Archive Service. For details see Logs and configuration files (<http://www.red-gate.com/ESA/3.0?i=9458>).

You may want to copy previously archived messages back to the Exchange server if:

- you need to move a user's mailbox (page 103) to a different Exchange organization
- the User Archive Access Service URL changes (see Moving the UAA Service (page 101))
- you need to uninstall Exchange Server Archiver (page 105)

**Note that when you select a mailbox to be copied back, the copy-back task overrides any archive rules that have been applied and the mailbox will not be archived.**

When you copy back messages to the Exchange server, the archived messages remain in the Archive Store; the size of the Archive Store is, therefore, not reduced.

Single-instance storage in Exchange is lost for messages that have been copied back. However, if you re-archive the messages, Exchange Server Archiver uses single-instance storage in the Archive Stores.

Archived messages for which you have deleted the placeholders in Exchange are not copied back.

To copy back:

1. On the **Maintenance** menu, click **Copy Back to Exchange**.
2. Choose the mailboxes for which you want to copy back archived messages.
3. Set up a schedule for the copy-back task.

The copy-back task may take a long time to complete, therefore you can set up a schedule for the task.

To cancel the copy back task, open the **Copy Back to Exchange** dialog box, and clear the check boxes for the mailboxes that you do not want to copy back.

## Changing your Exchange configuration

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From time to time, it may be necessary for you to change your Exchange configuration.

### Renaming mailboxes in Exchange

When you rename a mailbox in Exchange, Exchange Server Archiver detects the name change, and links the renamed mailbox to its archived messages when you next archive the mailbox.

To see the renamed mailbox in the Dashboard, perform a Refresh all (page 60) (Ctrl + F5) in the Admin Console. Note that the archive size column is empty until you archive the mailbox. (In some circumstances, you may need to restart the Archive Service to see the renamed mailbox.)

If the mailbox belongs to a group that has a rule applied, it will inherit the group rule following the rename. However, if a rule was applied to the mailbox individually, you must apply the rule again following the rename. For more information, see New mailbox rule inheritance (page 67).

### Moving mailboxes within an Exchange organization

When you move a mailbox within the Exchange organization, Exchange Server Archiver detects the change of location.

If the mailbox inherits its rule from a group, it may inherit a different rule after the move. This means that messages could be archived to a different Archive Store. However, the old messages can still be retrieved from the old store, so it is not necessary to move them.

### Moving mailboxes between Exchange organizations

When you move a user's mailbox to a different Exchange organization, you must copy back the archived messages to the Exchange server before you move the mailbox (see Copying back archived messages (page 102)).

### Deleting mailboxes in Exchange

If you apply a rule to a mailbox, and you subsequently delete the mailbox in Exchange, the mailbox is automatically removed from the rule's 'Applies to' list, and the rule continues to run as scheduled.

### Creating a new storage group in Exchange

When you create a new storage group in Exchange, if the Archive Service user that you created when you installed Exchange Server Archiver is not a domain administrator, you must grant permissions to access the new storage group. For details of how to do this,

see Granting permissions on all mailbox databases (<http://www.red-gate.com/ESA/3.0?i=9443>).

If the Archive Service user is not a domain administrator and you are using Exchange Server 2007 or Exchange Server 2010, you must also navigate to the folder on disk for each storage group, and grant the Archive Service user permissions to read the folder and its contents. For example, for a new, default installation, the storage group is in:

*C:\Program Files\Microsoft\Exchange Server\Mailbox\First Storage Group*



## Uninstalling Exchange Server Archiver

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**Note:** Before you uninstall ESA, it is recommended that you back up your archive stores and keep a record of your configuration settings, for details see Preparing to upgrade in Upgrading Exchange Server Archiver (<http://www.red-gate.com/ESA/3.0?i=9459>). You should also copy the following configuration files: Component.NET, Archive Service, Storage Service, and User Archive Service. For details see Logs and configuration files (<http://www.red-gate.com/ESA/3.0?i=9458>).

This topic contains information about how to uninstall the services and components for Exchange Server Archiver. For a pdf file containing all the information on installing and configuring Exchange Server Archiver, see Installing Exchange Server Archiver (page 14).

To uninstall Exchange Server Archiver:

1. Copy back messages and attachments from the Archive Stores to the Exchange server:

The Admin Console provides **Copy Back to Exchange** on the **Maintenance** menu to enable you to schedule the copy-back task; see Copying back archived messages (<http://www.red-gate.com/ESA/3.0?i=9350>).

Note that any single-instance storage will be lost; therefore you may require more space on your Exchange server than was used before you started archiving.

2. Uninstall each service and component, using the standard Add/Remove Programs feature.