

# MailStore Server 9

## Documentation

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1

Chapter

# Installation

# 1.1 Installation

## Choosing a Computer for the Installation of MailStore Server

The MailStore server can be installed on any Windows PC. Neither server operating system nor database system is required. An overview of supported operating systems can be found in chapter System Requirements.

### Installation on an existing server

Depending on the environment, archiving strategy and usage, MailStore Server can be installed on an already existing server. To understand more about these relationships please refer to the Performance and Scalability Guidelines. Although not required, a concurrent installation on a Microsoft Exchange or other email server is possible. No changes are made to the email server. Whenever possible, MailStore Server should be installed on a dedicated machine.

Should the capacity of the current computer used for archiving reach its limits, the entire archive can be moved to another machine within minutes.

### Tips for the test mode

To test MailStore Server, it can be installed on any workstation PC. Operation in a virtual machine (e.g. VMware) is possible without any restrictions as well.

## Starting the Installation

To start the installation process, double-click on the downloaded setup file. This is a regular Windows installation; simply follow the instructions on the screen.

## Choosing a Directory

MailStore Server by default uses the following directory as storage location:

```
C:\MailArchive
```

This will be the directory in which the actual email archive will be stored.

You can change the storage location after the installation has finished by using the MailStore Server Service Configuration. Should you plan to store on a Network Attached Storage (NAS), the chapter Using Network Attached Storage (NAS) will provide more information on this. If you want to move your archive to a new location at a later date, the article Moving the Archive will provide more information on this.

## First Time Installation

After successfully installing MailStore Server for the first time, it is recommended to continue with the Quick Start Guide. A step-by-step tutorial explains the basics, from creating users to successfully archive emails the first time.

# 2

Chapter

## **Archiving Methods**

## 2.1 Archiving Email

### Email Archiving with MailStore Basics

Emails can be archived from the mailboxes of email servers such as Microsoft Exchange as well as from the locally installed email clients of the users. Dependent on its type, archiving tasks can be performed continuously, manually or based on a schedule.

If you are not sure which archiving method best suits your company, please refer to chapter Choosing the Right Archiving Strategy.

In chapter Email Archiving with MailStore Basics you can find out more about working with archiving profiles, archiving specific folders, deleting emails after archiving and automating the archiving process.

### Email Clients

#### Archiving Email from Outlook, Thunderbird and Other E-mail Clients

As opposed to all other archiving features, it is imperative that the MailStore Client software is installed on the user computers when archiving emails from these users' email applications. Once the archiving task is set up, it can be started manually by the user or executed automatically according to a schedule. Additional information about this topic is available in chapter Archiving Email from Outlook, Thunderbird and others.

### Email Files

#### Archiving Outlook PST Files

As administrator, you can archive Microsoft Outlook PST files for other MailStore users. Additional information about these topics is available in chapter Archiving Outlook PST Files Directly.

#### Archiving EML or MBOX Files

As administrator, you can archive emails from .eml or .msg files for other MailStore users. Additional information about these topics is available in chapter Archiving Emails from External Systems (File Import).

### Email Servers

#### Archiving Microsoft Exchange or Office 365 Mailboxes and Public Folders

With MailStore you can archive already existing Exchange or Office 365 mailboxes as well as public folders. You have the option to archive individual, multiple or all mailboxes in one step as well as archiving all incoming and outgoing emails by using the Exchange journal feature.

Additional information about this topic is available in the chapter matching your Exchange version:

- Microsoft Exchange 2003
- Microsoft Exchange 2007
- Microsoft Exchange 2010
- Microsoft Exchange 2013
- Microsoft Office 365

## Archiving Alt-N MDAemon Mailboxes

MailStore offers first class support for the popular MDAemon Messaging Server from Alt-N. With MailStore you are able to archive single mailboxes, multiple or all mailboxes in one step as well as archiving all incoming and outgoing emails. Additional information is available in chapter Archiving Emails from MDAemon.

## Archiving Kerio Connect Mailboxes

MailStore Server offers special support for the popular Kerio Connect email server allowing you to archive individual, multiple or all mailboxes in one easy step. Additional information is available in chapter Archiving Emails from Kerio Connect

## Archiving IceWarp Mail Server Mailboxes

MailStore Server offers special support for the popular Ice Warp Mail Server allowing you to archive individual, multiple or all mailboxes in one easy step. Additional information is available in chapter Archiving Emails from IceWarp Mail Server

## Archiving Other Email Servers

With MailStore you can also archive the mailboxes of other email servers using the IMAP or POP3 protocols. These include web-based mailboxes such as Google Mail or Web.de. MailStore supports archiving individual mailboxes, multiple mailboxes in one step, as well as catchall or multidrop mailboxes that can be used to archive all incoming and outgoing emails.

General information is available in the chapters:

- Archiving Single Mailboxes
- Archiving Multidrop Mailboxes
- Batch-archiving IMAP Mailboxes

The actual procedure depends on the email server you are using. Detailed information for a number of email servers is available in our Implementation Guides.

## 2.2 Choosing the Right Archiving Strategy

MailStore Server offers several options for archiving emails. Choosing the right archiving strategy depends on the email infrastructure (e.g. email server and email clients) on one hand, and company objectives on the other.

### Archiving All Incoming and Outgoing Emails Automatically

With this archiving method, all emails are archived before they are delivered to the user mailboxes.

#### Advantages

- Completeness of the archive is guaranteed
- Emails cannot be manipulated before archiving
- Meeting legal requirements is made possible or greatly facilitated

#### Disadvantages

- If private emails are allowed in the company, this archiving method may cause difficulties regarding the privacy laws of some countries. In this case, a company-wide ban of all private email communication, a contractual agreement with the employees or approval of an employee organization would be required
- The workload of the email server and the amount of data is not reduced because all emails are still delivered and stored in the mailboxes
- Emails can only be allocated to users as sent or received object; a reproduction of the mailbox folder structure is not possible

#### Implementation

- With Microsoft Exchange by archiving the Journal mailbox
- With IMAP-compatible email servers such as Novell GroupWise, Kerio MailServer or MDAemon by archiving multipdrop mailboxes (also called catchall mailboxes)
- In all other cases and in companies without their own email server by using the MailStore Proxy Server free of charge

### Archiving of Individual Mailboxes

With this archiving method, emails are archived from the individual mailboxes of the users. This can be achieved by archiving the mailboxes directly from the email server or, if that is not possible, by archiving of email clients.

#### Advantages

- The folder structure of the archived mailboxes, email clients or PST files is applied to the archive facilitating access to the archived emails
- The archived emails can be deleted from the mailboxes according to pre-defined rules permanently reducing the workload of the email server

#### Disadvantages

- Emails can be deleted or manipulated before archiving, even if the archiving intervals are very short
- Meeting legal requirements cannot, or only with difficulty, be implemented

### Time-controlled Execution of Archiving Tasks

Archiving of email servers is a continuously running task in MailStore Server, carried out server-side in the background, as soon as the execution of an archiving profile is set to *Automatic*. By defining a break between each execution as well as a period in which the archiving profile is never executed, administrators have full control over the automatic archiving process.

Archiving of email clients and email files usually depends on the current Windows user and is therefore executed on the client, typically manually (see *One-time Archiving of Existing Emails*). MailStore allows to create scheduled tasks in the Windows Task Scheduler to automate client-side archiving tasks. This should be considered if no other option is available - server-side archiving is always to be preferred.

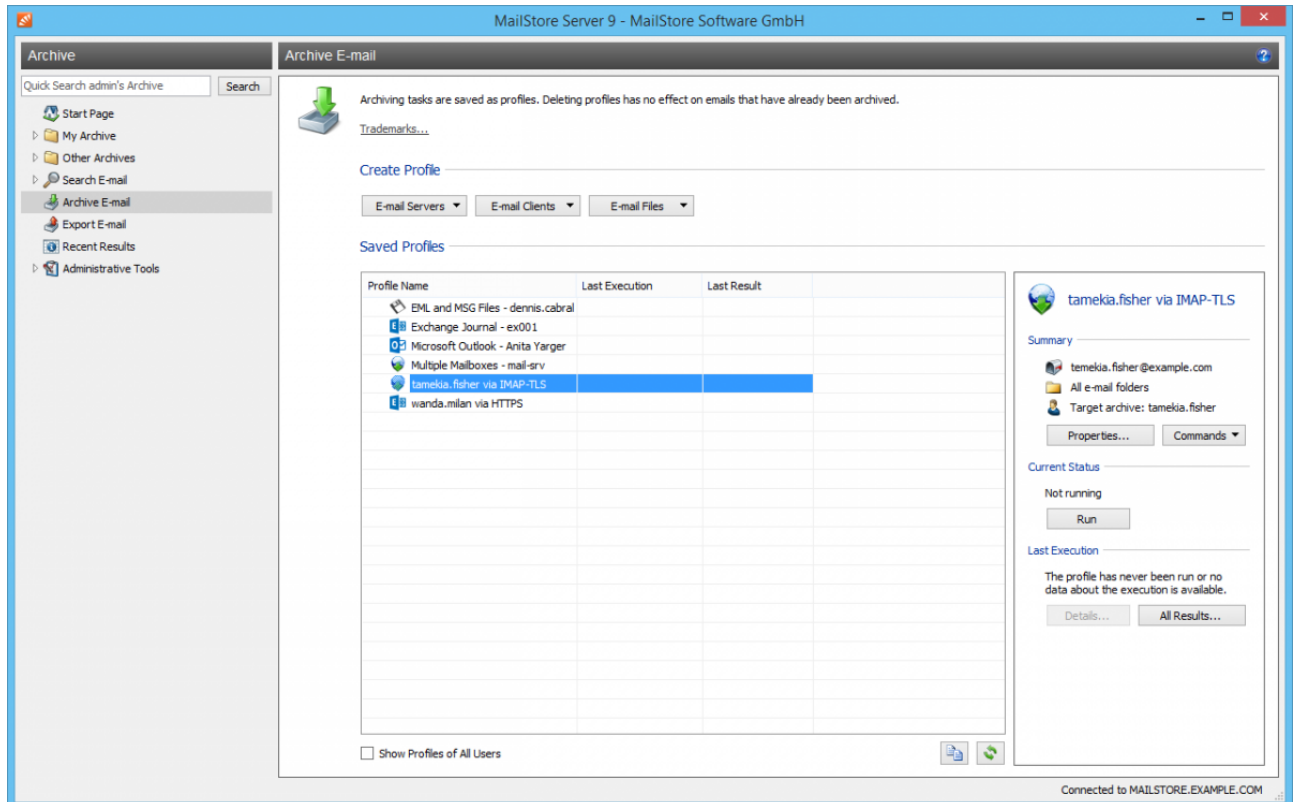
## One-time Archiving of Existing Emails

In addition to archiving future emails, preexisting emails should also be archived and made available permanently to your company. This one-time process should include emails in decentralized storage (e.g. PST files or the users' email clients). At the same time, older emails (e.g. more than two years old) can be deleted from the mailboxes automatically after archiving. This frees up storage space on the email server and simplifies backup procedures. All emails remain accessible to users via the MailStore archive.

## 2.3 Email Archiving with MailStore Basics

### Working with Archiving Profiles

In MailStore Server, every archiving task is stored as an archiving profile. By executing such a profile the archiving process is started.



Such an archiving profile could contain the following information:

- **WHAT:** Mailbox p.berten@company.com
- **WHENCE:** Exchange server EXCHANGE01
- **WHERE** (Target archive in MailStore Server): peter.berten
- **SCOPE:** All folders except drafts
- **DELETION RULE:** Delete all archived emails from the Microsoft Exchange mailbox that are older than 3 months.

## Creating an Archiving Profile

To create a new archiving profile proceed as follows:

- Start the MailStore Client and click on *Archive Email* to create and execute an archiving profile.
- In the *Create Profile* section of the application window, select the source from which the emails should be archived (e.g. Microsoft Outlook). A wizard opens.
- During the first steps of the wizard, several different settings can be specified for the archiving profile. These include the selection of folders (e.g. "Inbox") or deletion rules (by default, no emails are deleted).
- If you are logged on as MailStore Server administrator, you will be prompted for the target archive (user archive), in which the emails should be stored. If logged on as a regular user, the corresponding user archive will be used automatically.
- In the last step, a name for the archiving profile can be specified. Archiving profiles of type *E-mail Server* provide an option to configure the automatic execution from here as well. After clicking *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

**Please note:** Only MailStore Server administrators can archive emails into a target archive other than their own. This is not possible for regular MailStore Server users.

## Manual Start of Archiving Process

As long as the automatic execution of an archiving profile has not already been configured (type *E-mail Servers* only) during its creation, you can manually execute archiving profiles at any time. It is recommended to always start the initial archiving process manually in order to identify possible configuration issues (i.e. incorrect credentials) as early as possible.

To manually start the archiving process, select the archiving profile to be executed from the list under *Saved Profiles* and click on *Run*.

A progress windows appears. After the archiving process has been completed you can get further information about its course as well as possible errors by clicking on *Details...* A debug log is also available here.

In addition to being executed manually, archiving profiles can also be run automatically according to a schedule. Additional information about this topic is available in the chapter *Automating the Archiving Process*.

## Executing Archiving Profiles Multiple Times

Any archiving profile can be run any number of times without concern. MailStore Server only archives emails that are not yet stored in the target archive (the specified user archive). MailStore Server also detects if any emails were moved to a different folder within the source application (e.g. Microsoft Outlook) and reproduces such moves in its archive accordingly.

## Editing Archiving Profiles

To edit an existing archiving profile, proceed as follows:

- Select the archiving profile you want to edit from the list *Saved Profiles* and click on *Properties*.
- Navigate between the profile's pages with *Next* and *Back* and change the settings as desired.
- Save the new settings on the last page by clicking *OK*.
- By clicking *Cancel* you can quit editing the archiving profile at any time without committing any changes.

## Deleting Archiving Profiles

If no longer needed, you can delete an existing archiving profile.

- Right-click on the archiving profile you want to delete or click on *Commands* and select *Delete*
- A confirmation prompt appears. Acknowledge by clicking *OK*.

**Please note:** Deleting an archiving profile has no effect on emails that have already been archived. They remain in the archive.

## Changing Owner of Archiving Profiles

As MailStore Server administrator (*admin*) you can change the owner of an archiving profile. That way you can prepare archiving profiles for your users which they can execute on their own afterwards.

- Right-click on the profile you want to change and select *Change Owner....*
- Choose the profile's new owner in the next dialog.
- Confirm the selection by clicking on *OK*.

**Please note:** If you as a MailStore Server administrator have selected a target archive that does not belong to the new profile owner, the execution of that profile by its new owner will fail if she is not a MailStore Server administrator herself.

Only MailStore Server administrators can archive emails into a target archive other than their own. This is not possible for regular MailStore Server users.

## Managing and Executing the Archiving Profiles of Other Users

As MailStore Server administrator (*admin*) you can manage the archiving profiles created by other users as well.

- In the section *Saved Profiles* activate the option *Show Profiles of All Users*.
- You can now edit, execute or delete these profiles just as your own.

## Special Case: Executing the archiving profiles for email clients for other users

The execution of archiving profiles for email clients such as Microsoft Outlook or Mozilla Thunderbird usually makes only sense on the PC where the corresponding email client is installed because that client stores emails and data necessary for accessing them locally on that PC.

**Example:** If user A has an archiving profile for Microsoft Outlook, you can view and edit it as a MailStore Server administrator through your MailStore Client. However, executing this profile only makes sense if it is run using the MailStore Client that is installed on user A's computer because only there can the locally stored data be accessed.

This information only applies to archiving profiles listed in the *E-mail Clients* section.

## Archiving Specific Folders

By default MailStore Server archives the emails from all folders of the email application or email mailbox except the following (the list may vary depending on the system):

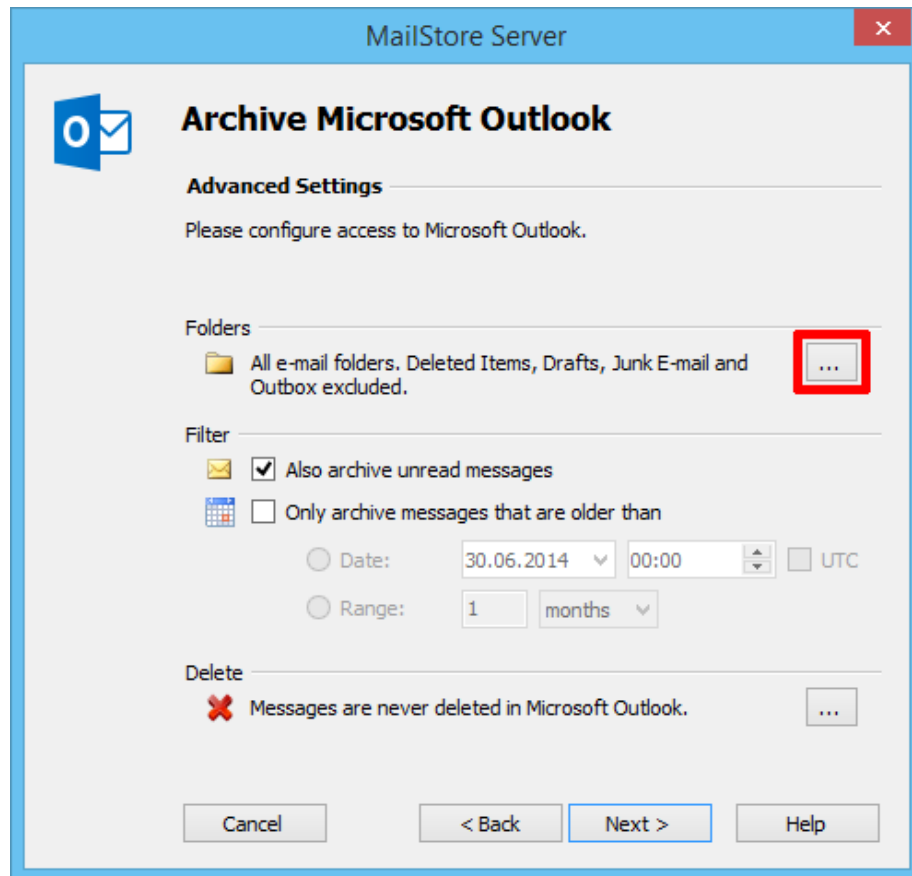
- **Deleted Items** - Emails that were deleted by the user
- **Drafts** - Emails that are still being edited and that have not yet been sent
- **Junk Email** - Emails that have been classified as spam
- **Outbox** - Emails that are about to be sent and will be listed under Sent Items after sending

The standard settings can be customized; for every archiving profile, folders can be included or excluded as needed.

**Please notice:** Take care of upper and lower case when manually specifying folder names for inclusion or exclusion. These declarations are case-sensitive.

## General Procedure

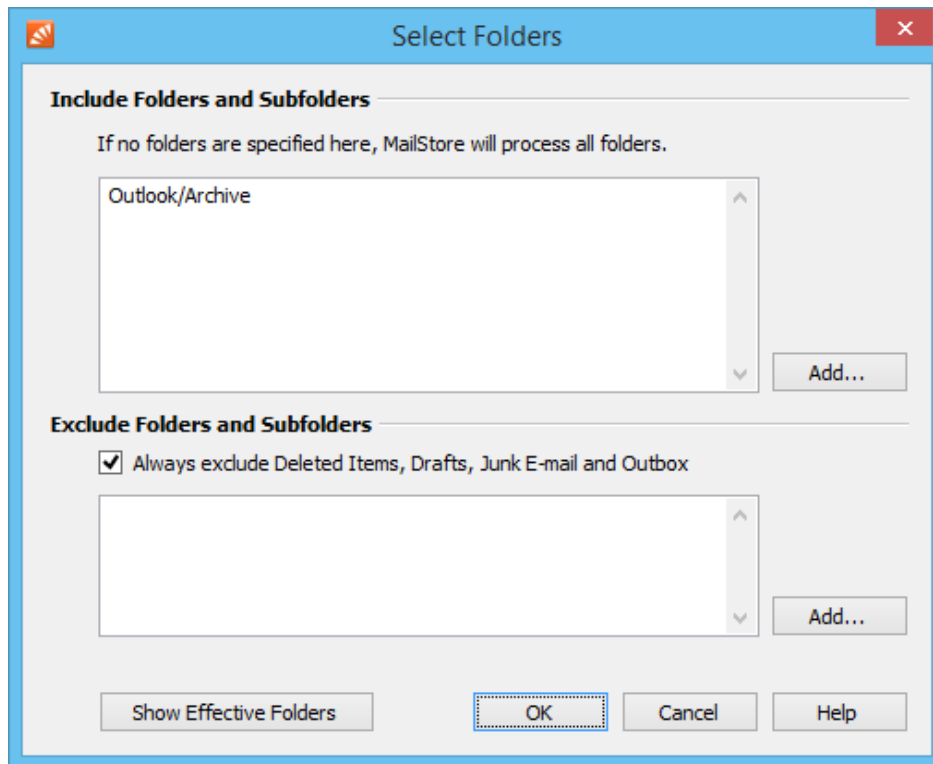
You can select the folders to be archived directly upon creating a new archiving profile. Alternatively, you can adjust the selection for already existing profiles. Additional information about creating and editing archiving profiles is available in the chapter Working with Archiving Profiles. The following screenshot shows how to access the folder settings using a Microsoft Outlook archiving profile as an example:



## Selecting Folders for Archiving

You can specify the folders that MailStore Server should archive. In this case, MailStore Server limits archiving to the selected folders and ignores all others.

- In the folder selection under *Include Folders and Subfolders*, click on *Add*.



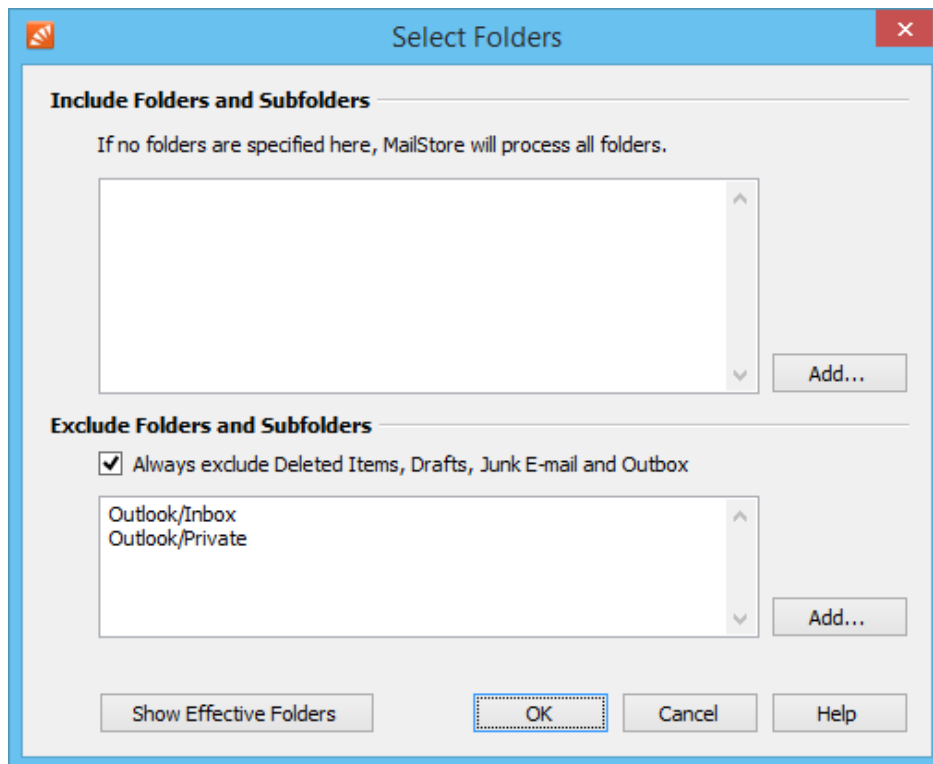
- Select a folder.
- With the *Include Subfolders* option you can specify if subfolders of the selected folder should be included in the archiving process as well.
- Click on *OK* to add the folder to the list.

**Example:** You have created a folder *Archive* in the email application or the mailbox, into which the user moves all emails that should be archived. In this case, add the folder *Archive* to the inclusion list. That way, only this single folder will be archived.

## Excluding Folders from the Archiving Process

MailStore Server can be configured to always exclude certain folders from the archiving process.

- In the folder selection in the *Exclude Folders and Subfolders* section, click on *Add*.



- Select a folder.
- With the *Include Subfolders* option you can specify if subfolders of the selected folder should be excluded from the archiving process as well.
- Click on *OK* to add the folder to the list.

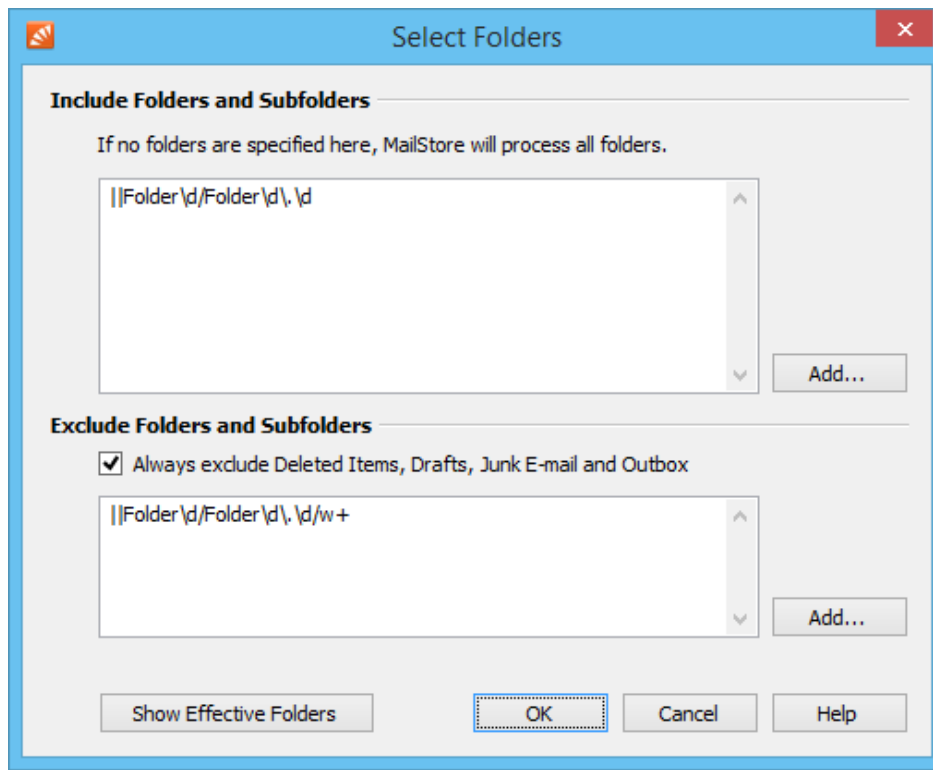
**Example 1:** Emails that are still in the Inbox should not be archived because they will either be deleted or moved to a project folder by the user. In this case, add the *Inbox* folder to the list of folders to be excluded.

**Example 2:** Emails that are in a folder named *Private* should not be archived as it may contain personal information that is prohibited by law (in some countries) to be archived.

**Please note:** Depending on the system, some folders (e.g. *Deleted Items*) are always excluded from the archiving process. To deactivate this automatic exclusion, clear the checkbox *Always exclude <folder names>*.

## Using Regular Expressions to Include or Exclude Folders

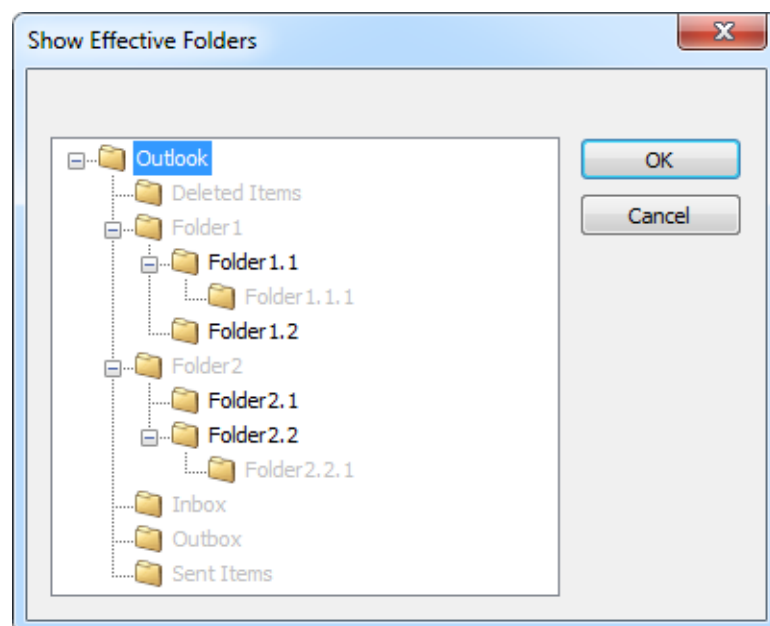
In MailStore Server you can include or exclude folders using regular expressions. The syntax follows the Specification of Regular Expressions in the .NET Framework 4.5.1<sup>[1]</sup>. To specify a regular expression simply prefix it with `||` or `|i|` (using case sensitivity/insensitivity).



### Examples

The regular expression `"||Folder\d\Folder\d\.\\d"` would for example include `Folder1\Folder1.1` in the archiving.

The regular expression `"||Folder\d\Folder\d\.\\d/w+"` excludes further subfolders in the structure above from being archived. The result could look like this:

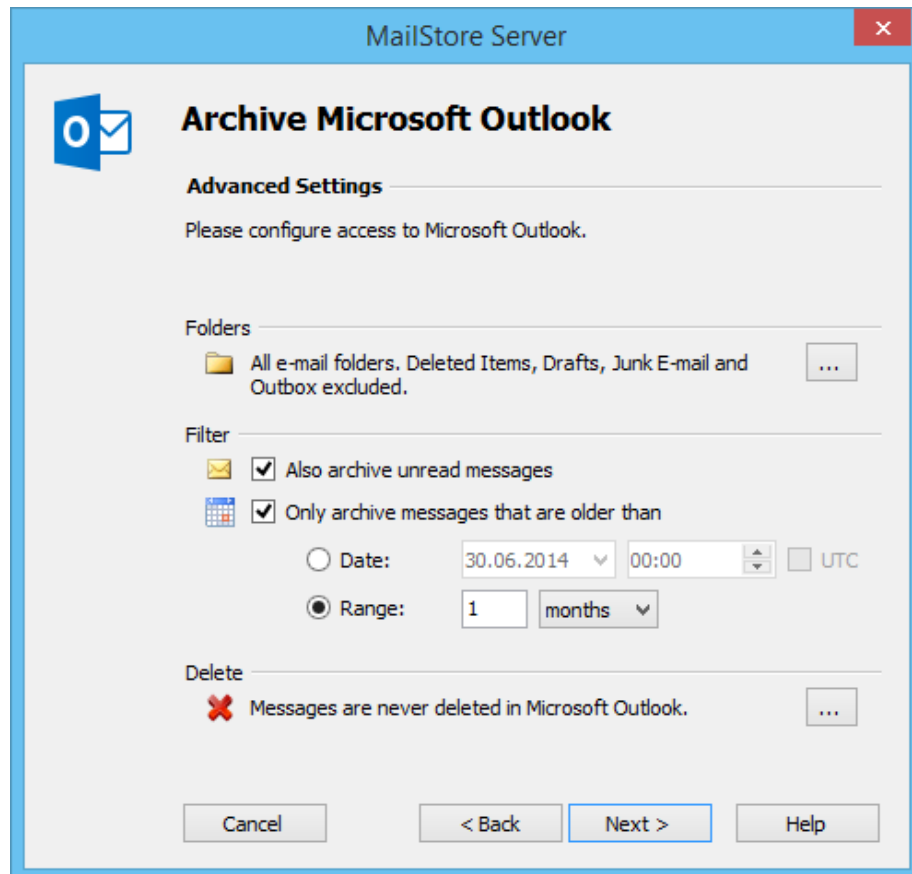


## Showing the Folders Selected for Archiving

In the folder selection, click on *Show Effective Folders* to verify the selected settings. Hereby, all folders that will effectively be archived are displayed.

## Specify Filter Criteria for Archiving

In MailStore Server, you can limit archiving to certain emails for most archiving profiles by specifying filter criteria. The following filter options are available:



- **Also archive unread messages**  
By default, MailStore Server archives emails without regard to their *read/unread* status. Deactivating this option limits archiving to emails with status *read*.
- **Only archive messages that are older than**
  - **Date**  
Here you can specify a particular date to which MailStore Server compares the send or receive date of the emails to be archived. Only emails that have been sent or received before this date will be archived. The *UTC* option defines whether this date is specified in Coordinated Universal Time (UTC) or takes the local time zone of the MailStore Server into account.
  - **Range**  
With this option MailStore Server only archives emails that have been sent or received before the beginning of this range, measured from the date of archiving.

## Deleting Emails after Archiving

MailStore Server can be used to reduce and to keep the amount of emails stored in a source system at a minimum. Source system can be email servers, email mailboxes, email applications as well as email files or email container files. Please notice that deletion of emails is not available in some archiving profiles due missing interfaces of the source system.

The delete feature that has to be activated explicitly enables MailStore Server to delete emails from the source system autonomously, according to specified rules and time periods.

**Please note:** In order to not jeopardize ongoing business processes, emails that have been flagged will never be deleted by MailStore Server. Configured deletion rules do not apply to such emails. To get them delete by MailStore Server you have to un-flag them in the source system directly.

## Functionality

By default, MailStore Server only copies emails from the source system into its archive. The archives emails remain in the source system and will not be deleted.

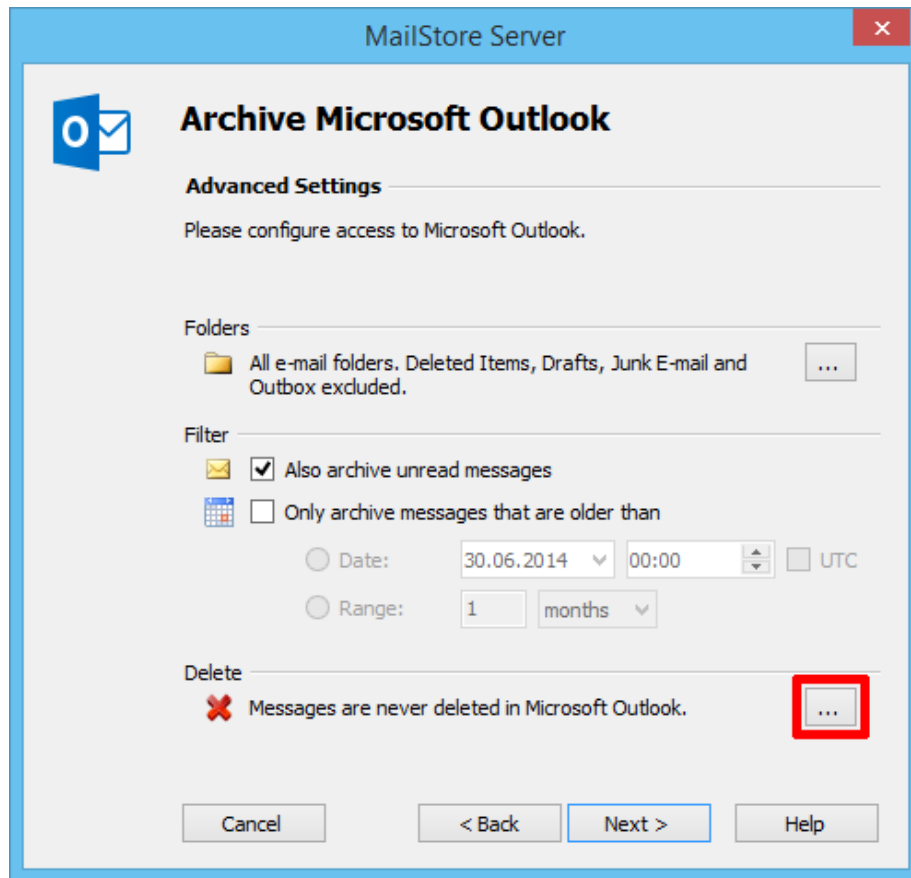
The deletion process will be executed after the archiving of all emails by the archiving profile has been finished. During this process it is explicitly checked whether any email that is about to be deleted has really been archived. This ensures that only emails will be deleted from the source system that have been written into the archive before.

**Please note:** Emails can only be deleted from a source system after an archiving process, which means that such deletions are *always* tied to an archiving profile. Furthermore, deletion rules have to be configured explicitly in such a profile as described in further detail below.

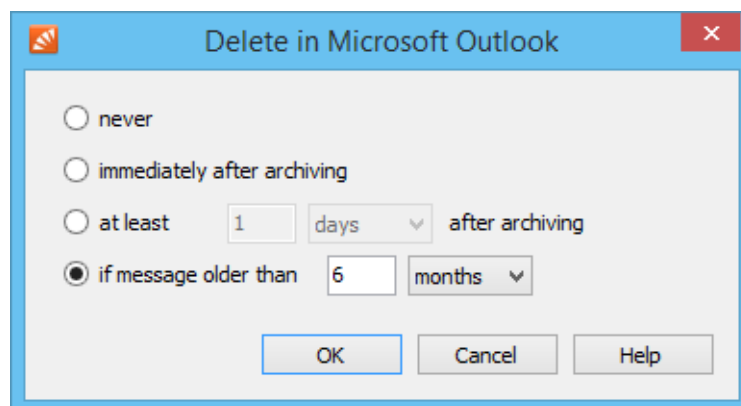
Beyond this functionality, no other automatic processes exist to delete emails from their source systems.

## Configuration

Delete conditions can be configured during setting up a new archiving profile or for existing profiles under *Advanced Settings > Delete*.



The following options are available:



- **never**  
Emails are never deleted from the source system. In effect, emails will be copied into the MailStore Server archive. This is the default setting.
- **immediately after archiving**  
Emails are deleted from the source system as soon as they have been successfully archived. In effect, emails will be moved into the MailStore Server archive.
- **at least [period] after archiving**  
Emails are deleted from the source if they have been in the MailStore Server archive for at least the given

period of time. In effect, emails will be copied into the MailStore Server archive at first and also remain in the source system for the given period, before they will be deleted in a subsequent run of the archiving profile.

- **if message older than [period]**

Emails are deleted from the source system if their send or receive dates predate the given period of time. In effect, emails with send or receive dates in the given range will be copied into the MailStore Server archive at first, while those with send or receive dates predating the given range will be moved into the MailStore Server archive. During subsequent runs of the archiving profiles, previously archived emails will be deleted from the source systems if they match the defined age criterion.

**Please note:** If a filter date or range is configured together with a deletion rule *if message older than*, the longer period of time will be applied to the deletion rule as well.

If, for example, the filter range is set to *Only archive messages that are older than 1 month* and the deletion rule is set to *if message older than 1 day*, only emails will be deleted that are older than one month because younger emails have not been archived yet.

With MailStore Server, it is not possible to delete emails from source systems that have not been previously archived.

## Automating the Archiving Process

With MailStore, every archiving profile can be executed automatically. MailStore Server distinguishes mainly between two type of automatic executions. For archiving profiles from the category *E-mail Server*, a continuous server-side execution by MailStore Server is available, whereas profiles from the category *E-mail Clients* and *E-mail Files* are executed solely on the clients by means of the Windows Task Scheduler.

**Important notice:** The time-controlled execution of archiving processes cannot prevent users from deleting emails from their email applications or mailboxes prior to having been archived. In order to ensure that all emails are archived they should be automatically archived upon sending and receiving.

By deleting a scheduled task (through MailStore's Administrative Tools or the Windows Task Manager) neither the underlying archiving profile nor the emails already archived by the task are deleted.

## Automating Execution of E-mail Server Archiving Profiles

If the automatic execution was not already configured while creating a new archiving profile, follow the below instructions to activate the automatic execution of archiving profiles from the *E-mail Servers* category.

- Start MailStore Client
- Log in to MailStore Server
- Click on *Archive Email*.
- Right-click on an existing archiving profile in the *Saved Profiles* list or click on *Commands* and then click on *Automatic....*
- In the *Automatic Execution* dialog you can specify the properties of the continuous execution:
  - **Between executions, wait...seconds**  
Defines how long MailStore Server should wait until the next execution of the archiving profile.
  - *Do not execute between*  
This option allows to specify a period in which the archiving profile is not executed. This for example can be due to nightly backups or other maintenance tasks.
- After defining all settings, click *OK*

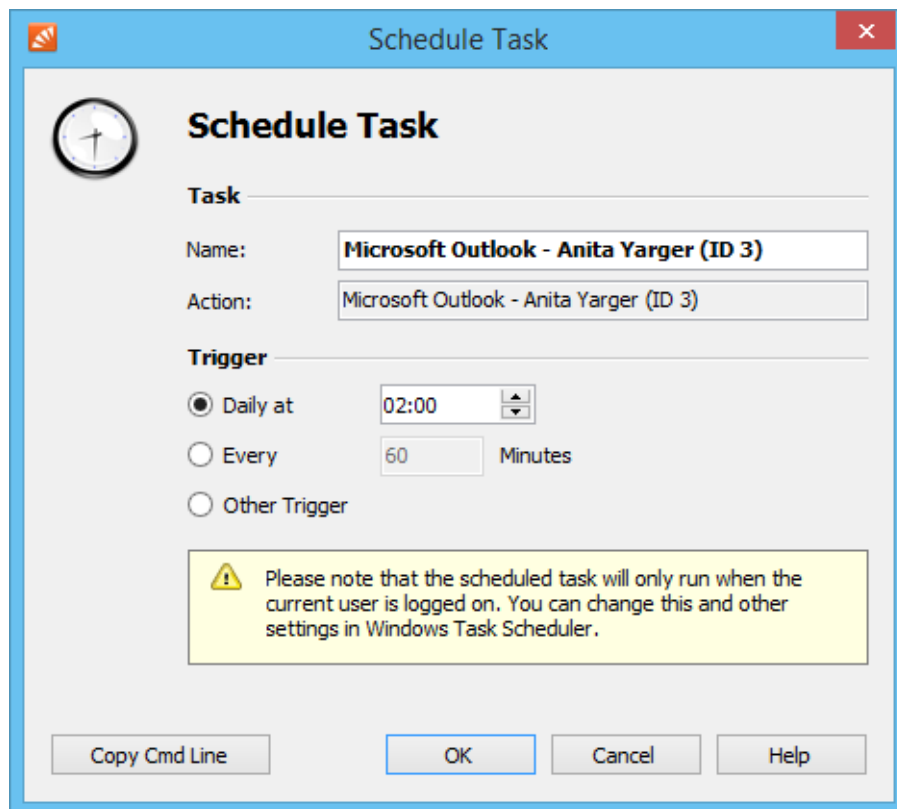
MailStore immediately starts the continuous execution of the archiving profile in the background. In the *Current Status* section, the status of the selected archiving profile can be watched. The very last execution results can be shown by clicking on *Details....*, whereas a list of all previous executions results is shown after clicking on *All Results....*

## Automating Execution of E-mail Client or E-mail Files Archiving Profiles

Archiving profiles from the category *E-mail Clients* (i.e Microsoft Outlook, Mozilla Thunderbird) and *E-mail Files* must be executed in the context of the Windows users whose emails are to be archived or who has access to the files to be archived. To automate the archiving process of these profiles please proceed as follows:

**Please note:** As MailStore administrator and using MailStore's user management, first verify that the user possesses the privilege to archive emails.

- Start MailStore Client *on the user's computer*.
- Log on to MailStore Server using the user's credentials.
- Click on *Archive Email*.
- Right-click on an existing profile or click on *Commands* and then select *Create Task on <COMPUTERNAME>*.



- In the next window "Schedule Task" the following settings can be specified:
  - **Task - Name:**  
The task name can be chosen freely. By default, the name of the archiving profile and its internal MailStore ID are used.
  - **Trigger:**  
The following triggers can be specified:
    - *Daily at* - Specify a time for the daily execution (once a day)
    - *Every [xx] minutes* - Specify an interval of minutes to execute the profile (i.e. every 60 minutes)
    - *Other Trigger* - If the option Other Trigger is chosen, the archiving task is still created as a Windows task but the execution times have to be specified separately. This has to be done using the Windows Task Scheduler and is described in Windows Help. All options offered by your version of Windows can be used.
- After all settings have been specified, the task can be created by clicking on *OK*. Confirm the safety prompt
- Confirm again by clicking *OK*.

**Please notice:** Modifications to the schedule of archiving profiles from the categories *E-mail Clients* or *E-mail Files* is only possible through the Windows Task Scheduler. The task scheduler can be opened directly from

MailStore Client by right-clicking on one of the existing profiles from the above categories and selecting the option *Open Windows Task Scheduler*.

## Showing the Command Line

If desired, the archiving process of *E-mail Client* and *E-mail Files* profiles can be incorporated into a larger procedure, such as one run by a batch file (.bat). To simplify this process, MailStore offers the option *Copy Cmd Line* in the Schedule Task window (see top of this page). Click on the button to view a command line that can be incorporated into the desired procedure. For example:

```
REM *** Microsoft Outlook (ID 4) ***
"C:\Programme\deepinvent\MailStore Server\MailStoreCmd.exe" --h="localhost"
--pkv3="23:18:06:3f:24:7d:f3:83" --u="admin" --p="admin"
-c import-execute --id=4 --user="admin"
```

The command line is to be read as follows:

**"...\MailStoreCmd.exe"** - MailStoreCmd.exe is the MailStore Management Shell. It was developed for the automated execution of certain processes in MailStore. Additional information about MailStoreCmd is available in chapter MailStore Server Management Shell.

**--h="localhost"** - The computer name of MailStore Server to which MailStoreCmd.exe is to connect.

**--pkv3="..."** - Public Key Fingerprint. It guarantees that the MailStore server at the time of archiving is the same as it was at the time when the scheduled task was created (optimal safety feature).

**--u="admin"** - User name.

**--p="admin"** - Password.

**-c** - The actual command follows (non-interactive mode).

**import-execute --id=4 --user="admin"** - Execute the archiving profile of user *admin* with the internal ID 4.

## References

- [1] [http://msdn.microsoft.com/en-us/library/az24scfc\(v=vs.110\).aspx](http://msdn.microsoft.com/en-us/library/az24scfc(v=vs.110).aspx)

## 2.4 Archiving Email from Outlook, Thunderbird and others

**Important notice:** As opposed to all other archiving features, it is imperative that the MailStore Client software is installed on the user computer when archiving emails from Outlook, Thunderbird and other email applications.

Once the archiving task is set up, it can be started manually by the user or executed automatically according to a schedule any number of times. During this process, the emails are transferred by the MailStore Client of the user to the central MailStore Server for archiving.

**Please note:** If the user emails are accessible (e.g. on a network drive) to the MailStore administrator in form of individual PST files, they can be archived directly by the administrator. As opposed to archiving from Outlook, this can be done completely independently from the user and the user computer. Additional information about this topic is available in the chapter Archiving Outlook PST Files Directly.

### Supported Email Applications

MailStore supports archiving emails from various email applications, including:

- Microsoft Outlook XP, 2003, 2007, 2010, 2013
- Microsoft Outlook Express 6.0
- Microsoft Windows Mail (integrated in Windows Vista)
- Microsoft Windows Live Mail
- Mozilla Thunderbird
- Mozilla SeaMonkey

Even email applications not listed here can often be archived using the file system (EML) and MBOX import. Additional information is available in the chapter Archiving Emails from External Systems (File Import).

**Important notice:** MailStore does not support archiving of Microsoft Outlook profiles that use third-party components to access mailboxes on an email server. Please archive those mailboxes directly.

### Procedure

Setting up archiving processes for Outlook, Thunderbird and other email applications is done using archiving profiles. General information about archiving profiles is available in the chapter Working with Archiving Profiles.

- Create a MailStore user account (if one does not already exist) for each user whose emails are to be archived and grant them the privileges to archive emails and to create, edit and delete archiving profiles. Additional information is available in the chapter User Management.
- Install the MailStore Client software on the corresponding user computers.
- Ask each user to log on to MailStore Server using their MailStore Client. Under *Archive Email*, a new archiving profile can be created for each user. In the *Create Profile* area of the application window, select the source from which the emails are to be archived (e.g. Microsoft Outlook).
- A wizard opens. At the first steps of the wizard, several settings can be specified for the archiving profile. These include the selection of the folders (e.g. "Inbox") and deletion rules (by default, no emails are deleted). An explanation of these settings can be found later on in this chapter under Settings for Archiving Profiles.
- If logged on to MailStore Server as administrator, the target archive can be specified at the next step of the wizard. Select the archive of the user whose computer is currently being used.
- At the last step, a name for the archiving profile can be specified. After clicking *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

## Settings for Archiving Profiles

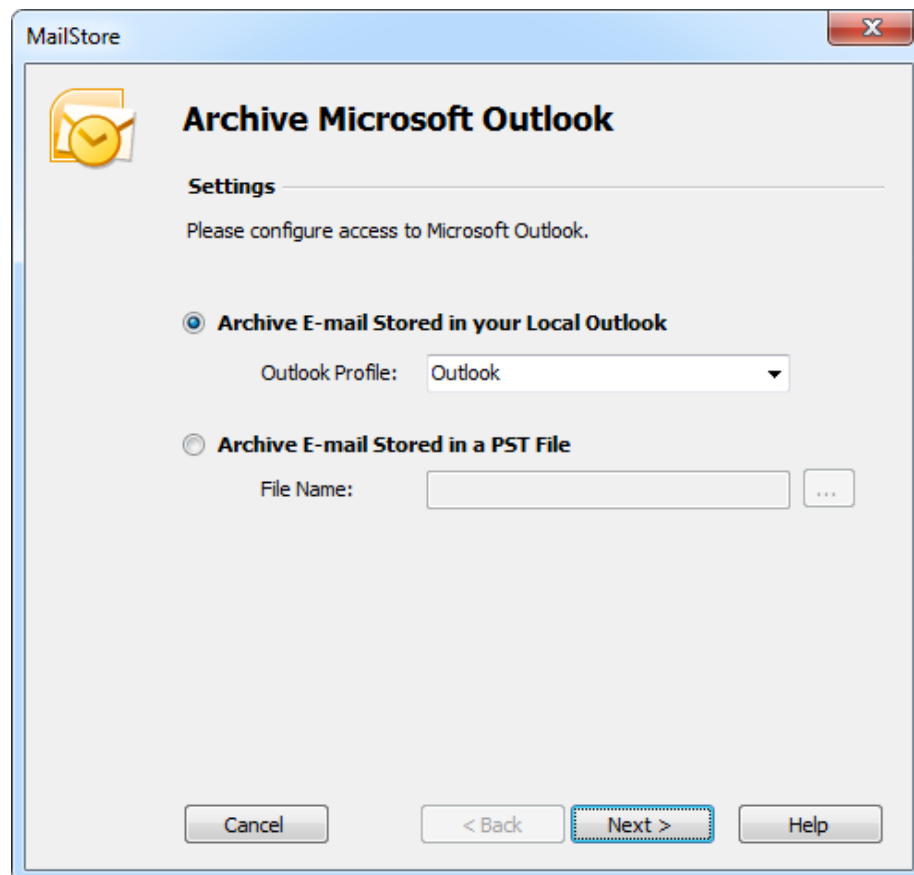
Upon creating or editing an archiving profile, different settings can be specified for the archiving task. Settings vary depending on the type of the email client selected (e.g. *Microsoft Outlook* or *Mozilla Thunderbird*).

**Folders** - Specify here, which folders (e.g. "Inbox") are to be archived. Additional information is available in chapter Archiving Specific Folders.

**Filter** - Also archive unread messages: By default, MailStore archives both read and unread emails. Clear the checkbox next to this text to exclude unread emails from the archiving process.

**Delete** - If desired, MailStore can automatically delete emails from the source application (e.g. Microsoft Outlook), after they have been archived successfully. Additional information is available in chapter Deleting Emails after Archiving.

## Settings Available for Outlook Only



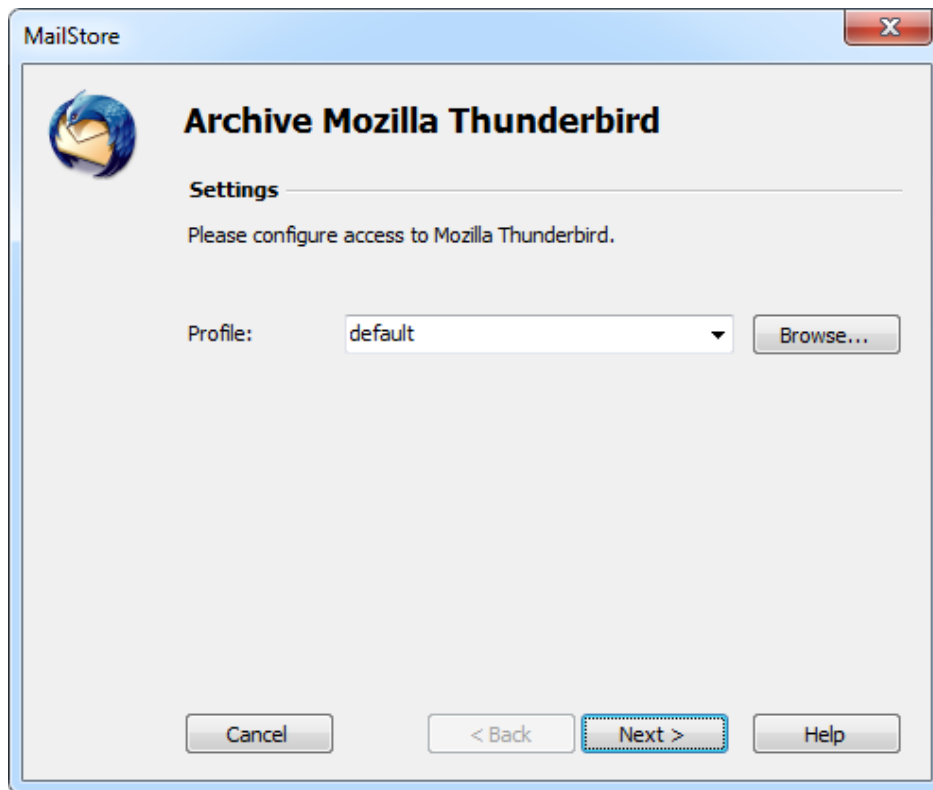
### Archive Email Stored in your Local Outlook

If multiple Outlook profiles exist, to which the user can log on to, the Outlook profile to be archived can be selected here.

### Archive Email Stored in a PST File

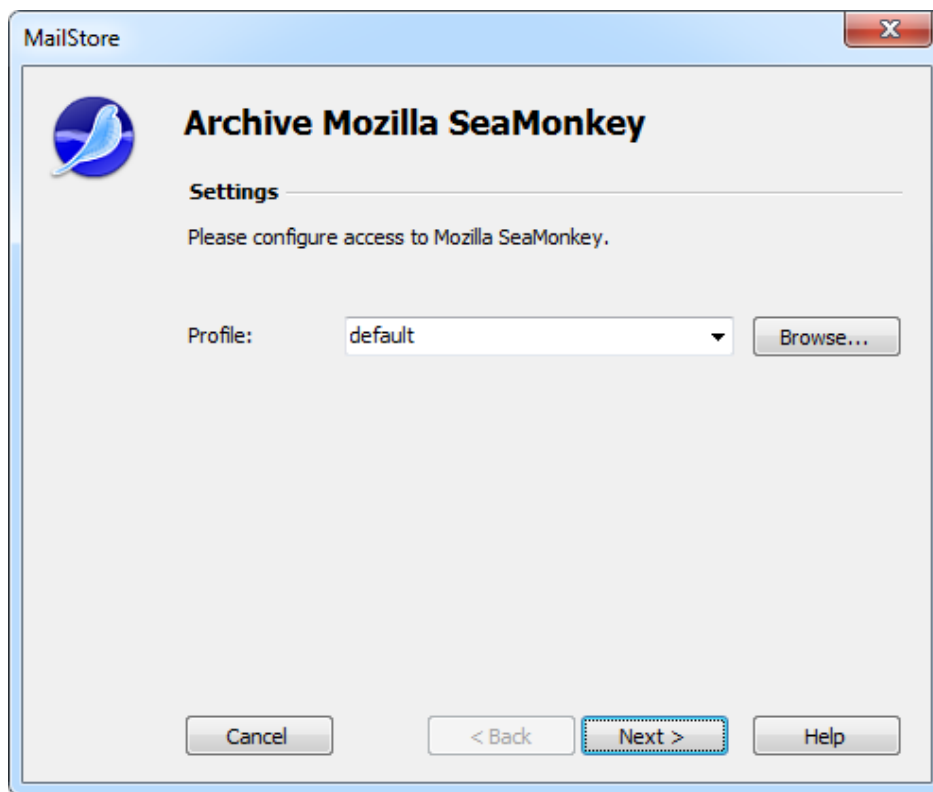
Select this option if MailStore is to access the PST file directly. This option is described in the chapter Archiving Outlook PST Files Directly.

## Settings Available for Mozilla Thunderbird Only



**Profile:** If multiple Thunderbird profiles exist, to which the user can log on to, the profile to be archived can be selected here. Alternatively, by using the *Browse* button, any directory containing Thunderbird data (e.g. from the portable version) not listed under *Profile* can be specified. Select the directory containing the file *prefs.js*.

## Settings Available for Mozilla SeaMonkey Only



**Profile:** If multiple SeaMonkey profiles exist, to which the user can log on to, the profile to be archived can be selected here. Alternatively, by using the *Browse* button, any directory containing SeaMonkey data not listed under *Profile* can be specified. Select the directory containing the file *prefs.js*.

## Starting the Archiving Process

### Starting the Archiving Process Manually

On the start page of MailStore Client, click on *Archive Email* and from the list under *Saved Profiles*, select the appropriate archiving profile. Click on *Run*. After the archiving process has been executed, a protocol appears. It contains information about the volume of emails that have been archived as well as any errors that may have occurred.

This process can be repeated by the user any number of times. MailStore only archives those emails that are not yet stored in the corresponding user archive.

### Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically. Additional information about this topic is available in chapter Automating the Archiving Process.

## 2.5 Archiving Outlook PST Files Directly

With MailStore Server, PST files can be archived directly. Contrary to archiving emails from Outlook, here you can create and execute archiving tasks independently from users and user computers. The users' individual PST files should be made available centrally, e.g. through a network share.

**Please note:** The computer used for archiving PST files through the MailStore Client must have a version of Outlook installed that is compatible with the PST files selected. For example, to archive an Outlook 2007 PST file, the corresponding version of Outlook needs to be installed.

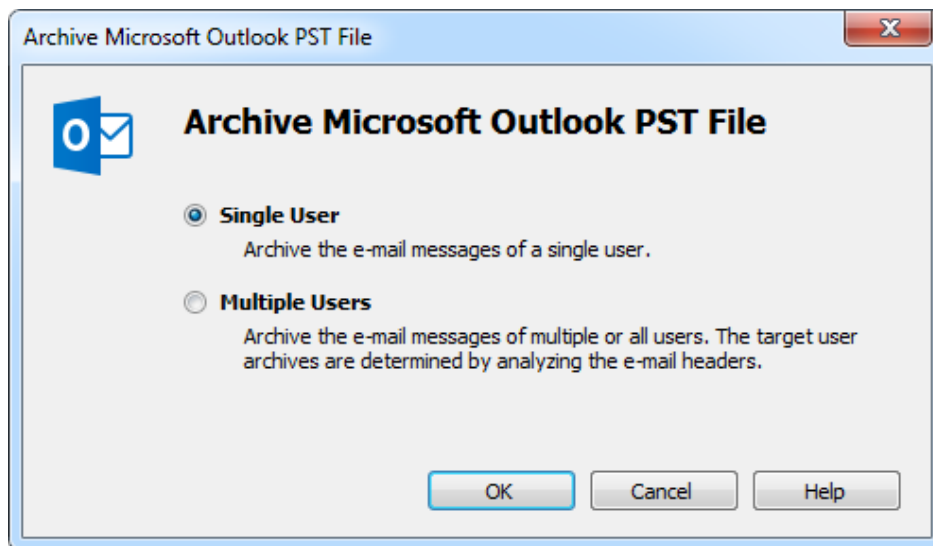
Setting up archiving processes for PST files is done using archiving profiles. General information about archiving profiles is available in the chapter Working with Archiving Profiles.

### Archiving a PST file that contains emails of a single user

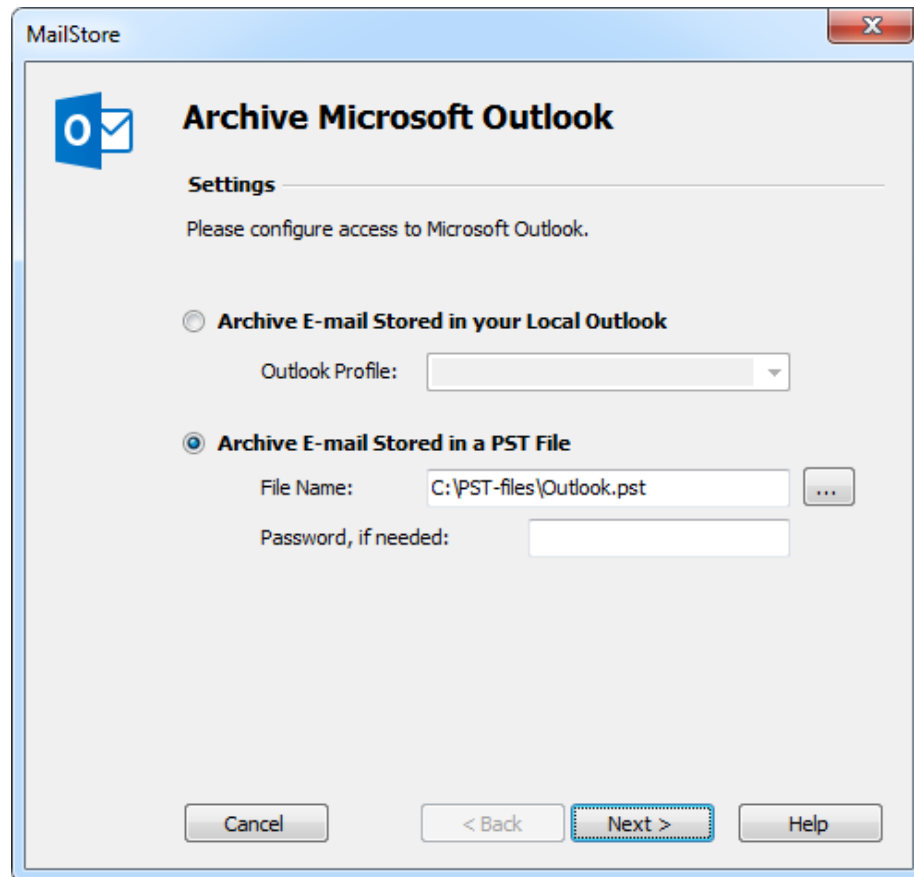
**Please note:** If you don't want to archive PST files in your personal user archive only, you'll have to be logged on to MailStore Client as a MailStore Server administrator. Only a MailStore Server administrator can archive emails for other users.

For each PST file, please proceed as follows:

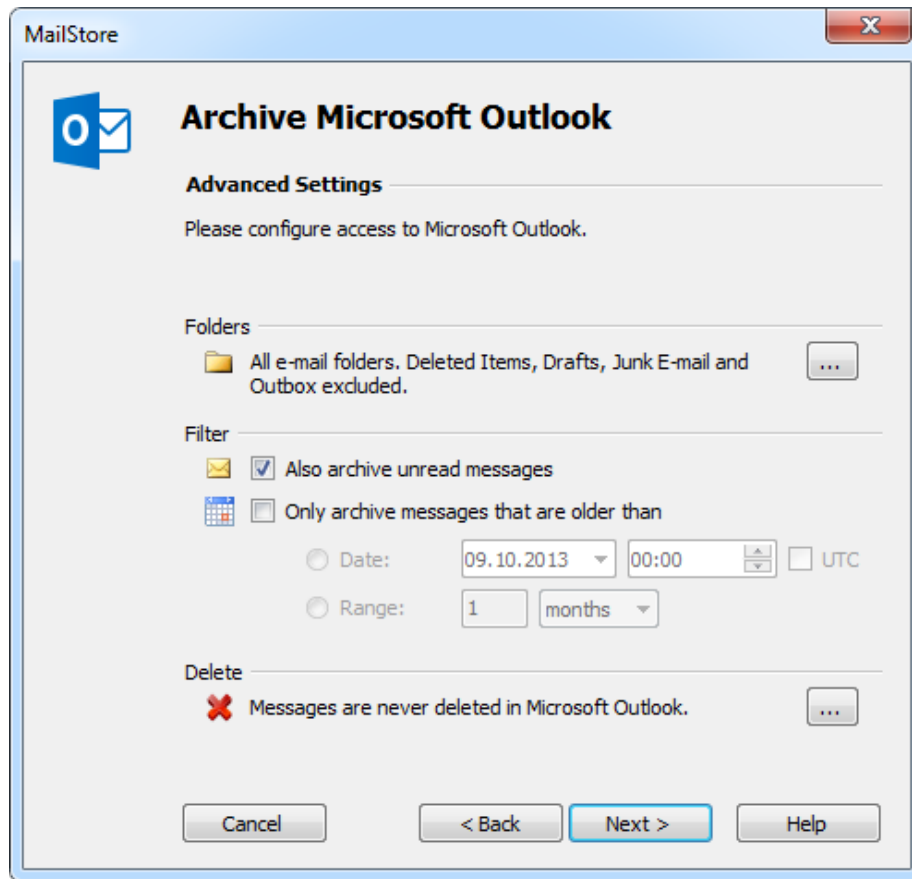
- In MailStore Server, click on *Archive Email*.
- From the *E-mail Files* category in the *Create Profile* section select *Microsoft Outlook PST files*.
- A wizard opens, guiding you through the setup process.



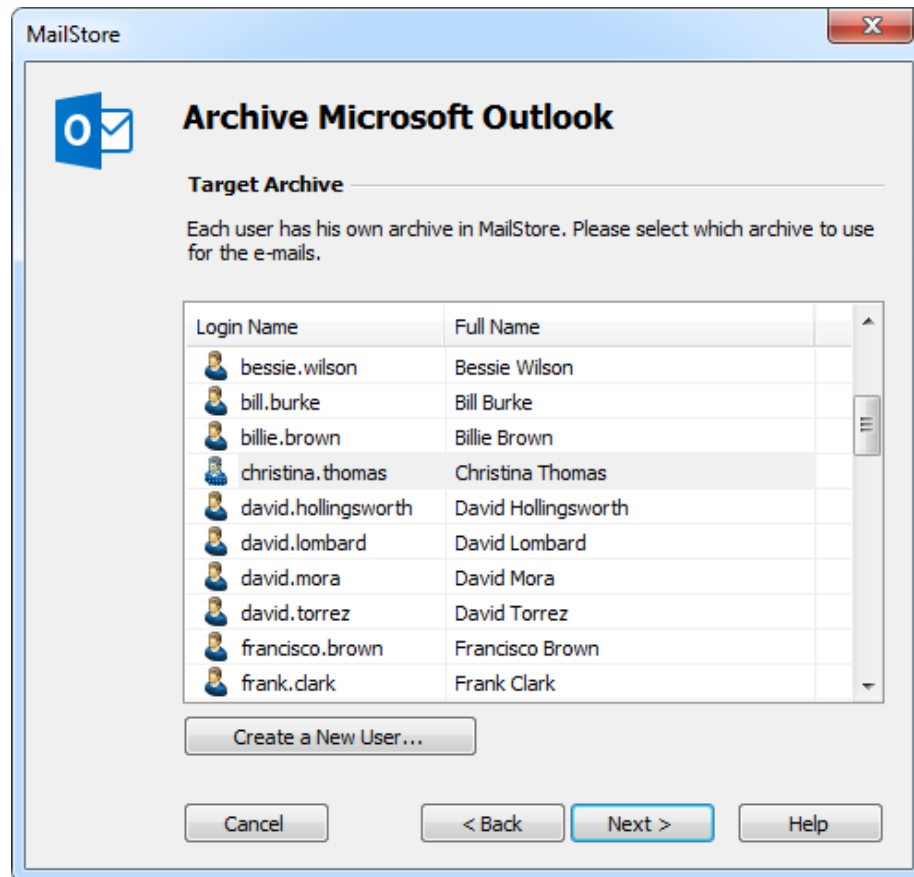
- Select *Single User* and click on *OK*.
- The dialog window *Archive Microsoft Outlook* appears.



- Select *Archive Email Stored in a PST File* as source and specify the PST file to be archived. Click on *Next*.  
**Please note:** If you work with an Outlook/Exchange environment, you get better results by first opening the existing PST file in Outlook and then using the *Archive Email Stored in your Local Outlook* option. This way you can ensure that all existing sender and recipient addresses are correctly archived.
- If needed, adjust the settings for the List of Folders to be Archived, the filter and the Deletion Rules.



- If logged on to MailStore Server as a MailStore Server-administrator, the target archive can be specified in the next step of the wizard. Select the archive of the user for whom the selected PST file is to be archived.



- In the final step you can specify a name for the new archiving profile. After clicking on *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

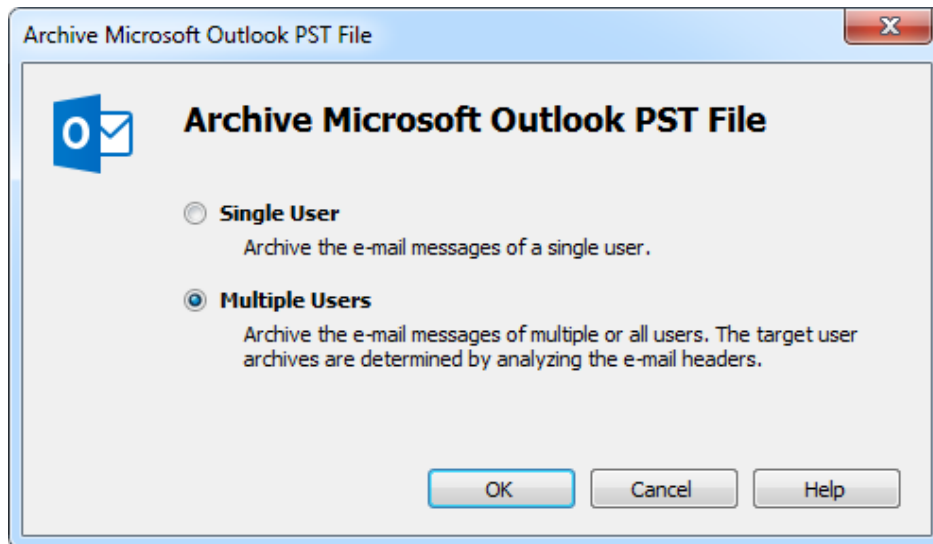
## Archiving a PST file that contains emails of multiple users

**Please note:** In order to be able to select this archiving method, you'll have to be logged on to MailStore Client as a MailStore Server administrator. Only a MailStore Server administrator can archive emails for other users.

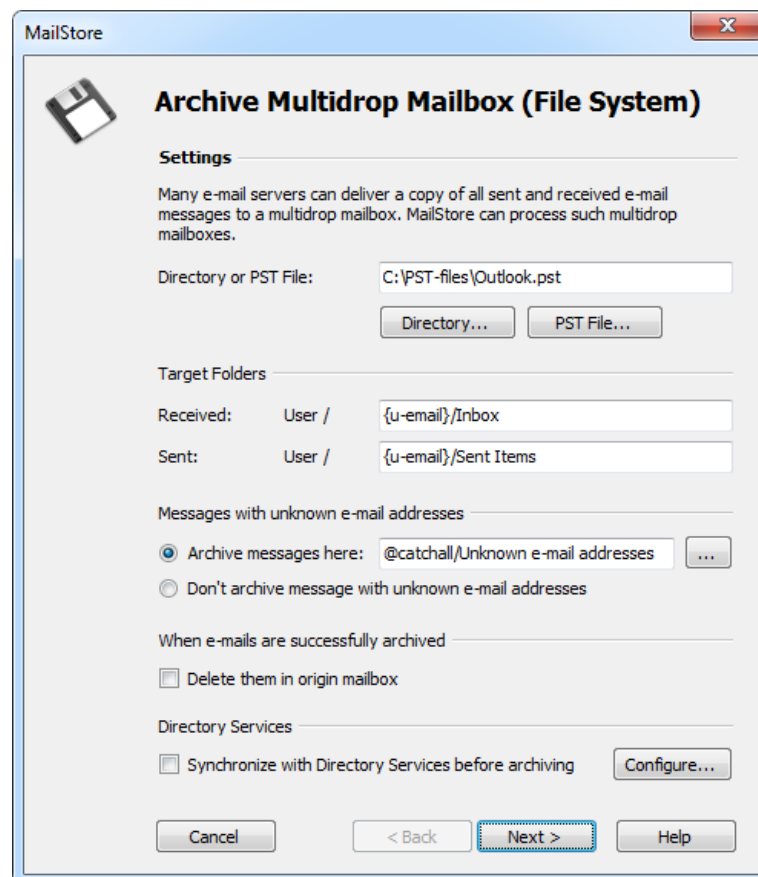
In addition to archiving PST files that contain emails of a single user, MailStore Server can archive PST files that contain emails of multiple users, e.g. from a multidrop mailbox export.

To archive such emails please proceed as follows:

- In MailStore Server, click on *Archive Email*.
- From the *E-mail Files* category in the *Create Profile* section select *Microsoft Outlook PST files*.
- A wizard opens, guiding you through the setup process.



- Select *Multiple Users* and click on *OK*.
- The dialog window *Archive Multidrop Mailbox (Filesystem)* appears.



- Select the PST file to be archived.
- Adjust any further settings such as how to handle emails with unknown addresses or asking MailStore Server to delete email files after they have been archived.
- Click on *Next*.
- In the final step you can specify a name for the new archiving profile. After clicking on *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

## Starting the Archiving Process

### Starting the Archiving Process Manually

On the start page of MailStore Client, click on *Archive Email* and from the list under *Saved Profiles*, select the appropriate archiving profile. Click on *Run*. After the archiving process has been executed, a protocol appears. It contains information about the volume of emails that have been archived as well as any errors that may have occurred.

This process can be repeated by the user any number of times. MailStore only archives those emails that are not yet stored in the corresponding user archive.

### Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically. Additional information about this topic is available in chapter Automating the Archiving Process.

## 2.6 Archiving Emails from External Systems (File Import)

MailStore Server can also archive the emails from applications that are not directly supported if they are available in a standardized format. With most applications it is necessary to export the emails to one of those formats first.

Using file import, MailStore Server can archive the following formats:

- **EML** - One file per email. Often called RFC 822 or MIME format.
- **MSG** - One file per email. Microsoft Outlook email files.
- **PST** - Microsoft Outlook personal folder files.
- **MBOX** - This file format is used by Mozilla Thunderbird, for example, although in this case the file ending is omitted. The MBOX file format is also used by many Unix mail servers.

### Procedure for Archiving PST Files

Archiving PST files is described separately in chapter Archiving Outlook PST Files Directly.

### Procedure for Archiving EML and MSG Files

Setting up archiving processes for files from the file system is done using archiving profiles. General information about archiving profiles is available in chapter Working with Archiving Profiles.

### Archiving Emails of a Single User

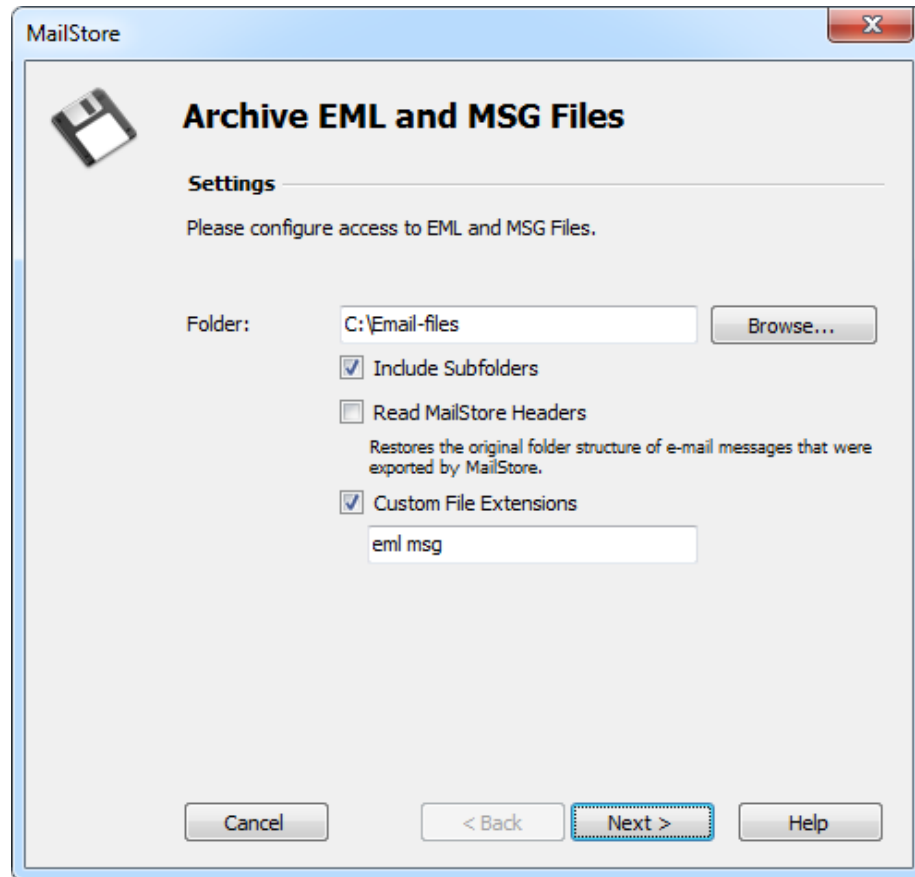
**Please note:** If you do not want to archive email files in your personal user archive only, you'll have to be logged on to MailStore Client as a MailStore Server administrator. Only a MailStore Server administrator can archive emails for other users.

Please proceed as follows:

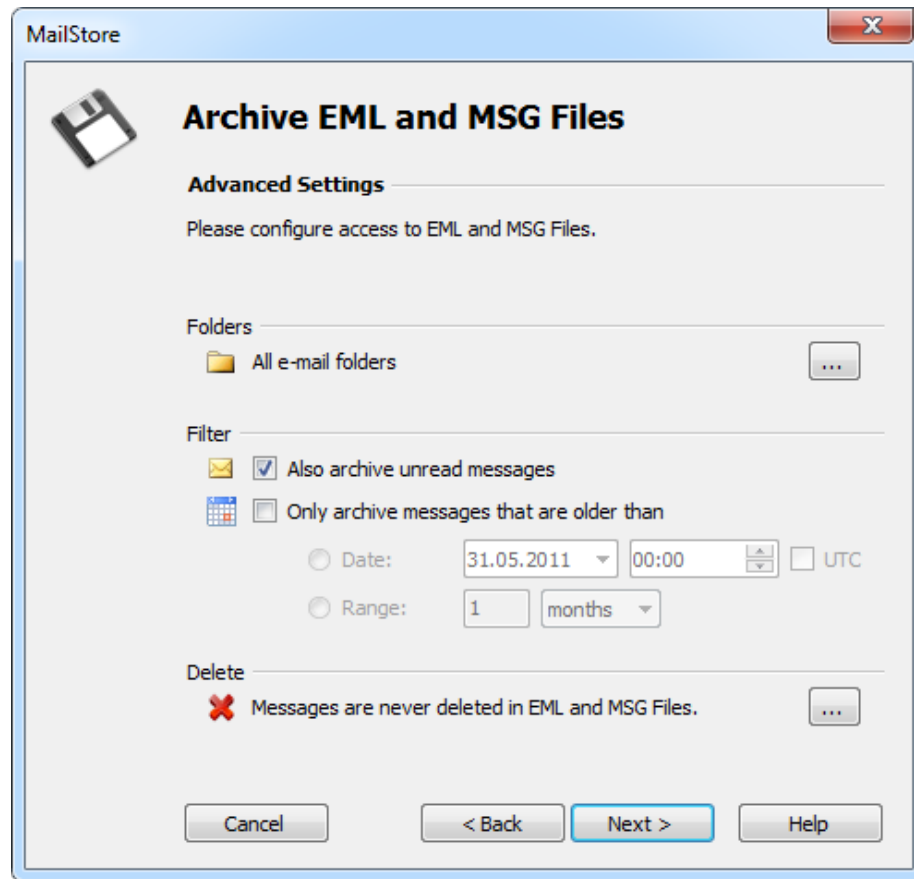
- In MailStore Server, click on *Archive Email*.
- From the *E-mail Files* category in the *Create Profile* section select *EML and MSG files*.
- A wizard opens, guiding you through the setup process.



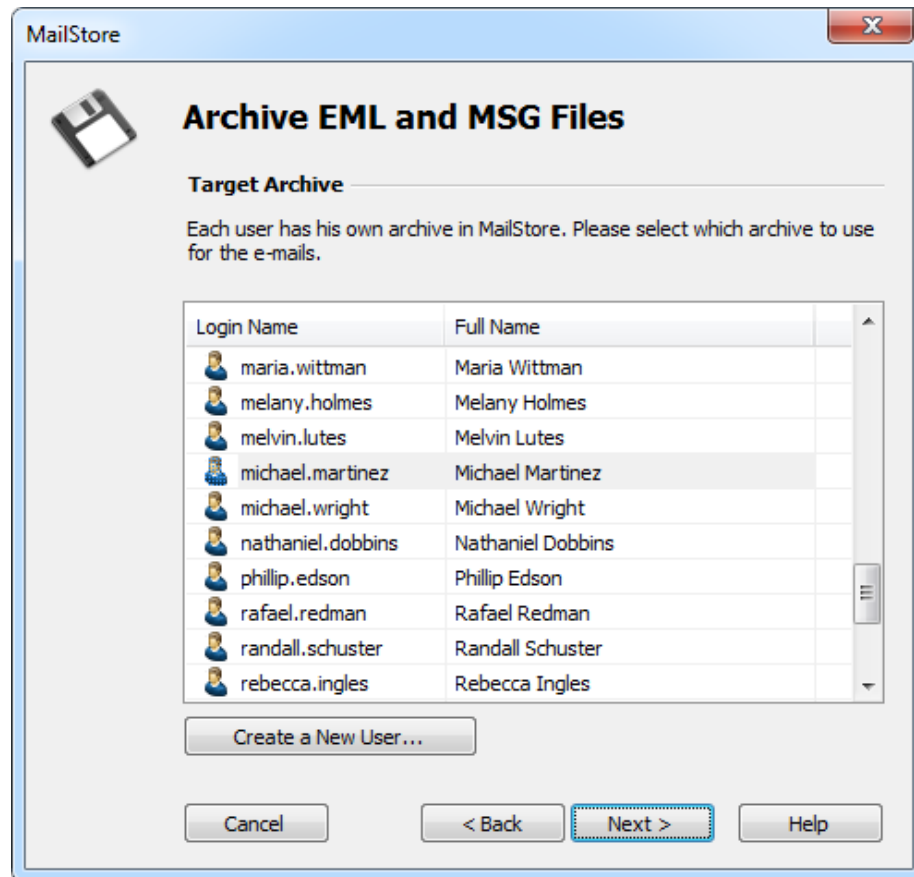
- Select *Single User* and click on *OK*.
- The dialog window *Archive EML and MSG files* appears.



- Select the folder to be archived. All email files in this folder will be archived.
- If desired, adjust the advanced settings or simply click *Next*.
  - **Include Subfolders:**  
In addition to the emails in the selected folder also those located in any subfolders will be archived.
  - **Read MailStore Headers:**  
RFC 822 files created by the MailStore Server-specific export process contain additional information such as the source folder. Set the checkmark if this information should be taken into account.
  - **Custom File Extensions:**  
Here you can make appropriate entries if the files to be archived are in EML or MSG format but have a different file extension.
- If needed, adjust the settings for the List of Folders to be Archived, the filter and the Deletion Rules.



- If logged on to MailStore Server as a MailStore Server-administrator, the target archive can be specified in the next step of the wizard. Select the archive of the user for whom the selected files are to be archived.



- In the final step you can specify a name for the new archiving profile. After clicking on *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

## Archiving Emails of Multiple Users

**Please note:** In order to be able to select this archiving method, you'll have to be logged on to MailStore Client as a MailStore Server administrator. Only a MailStore Server administrator can archive emails for other users.

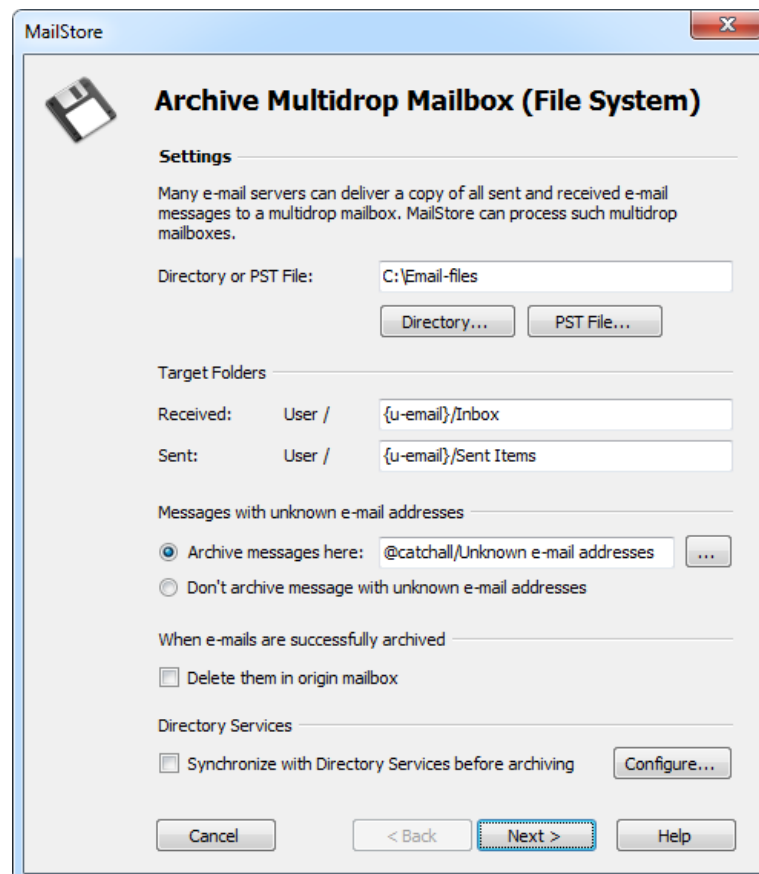
In addition to archiving email files of a single user, MailStore Server can archive email files of multiple users from a single directory; such emails may have been exported from a multidrop mailbox.

To archive such emails please proceed as follows:

- In MailStore Server, click on *Archive Email*.
- From the *E-mail Files* category in the *Create Profile* section select *EML and MSG files*.
- A wizard opens, guiding you through the setup process.



- Select *Multiple Users* and click on *OK*.
- The dialog window *Archive Multidrop Mailbox (Filesystem)* appears.



- Select the folder with the email files to be archived.
- Adjust any further settings such as how to handle emails with unknown addresses or asking MailStore Server to delete email files after they have been archived.
- Click on *Next*.

- In the final step you can specify a name for the new archiving profile. After clicking on *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

## Archiving Emails from a MailStore Export

**Please note:** In order to be able to select this archiving method, you'll have to be logged on to MailStore Client as a MailStore Server administrator. Only a MailStore Server administrator can archive emails for other users.

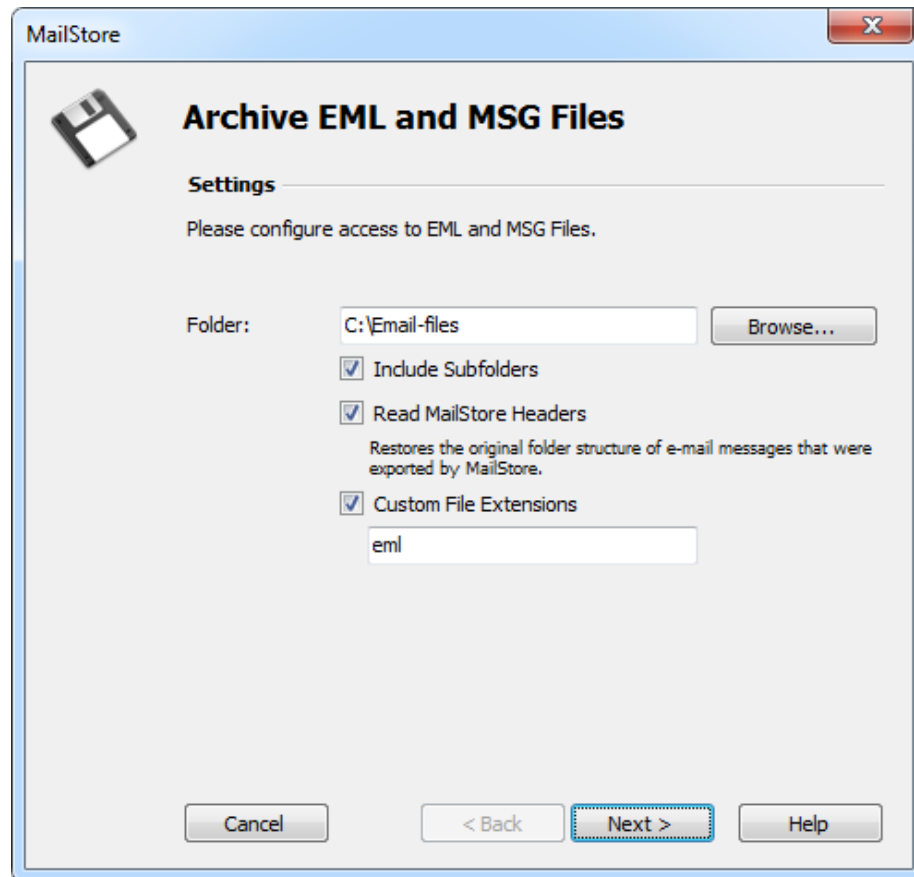
To archive EML files which have been created by a MailStore Export, the correct options have been pre-selected. This provides an easy way to file emails exported from MailStore Server into the correct user archives and folders again.

Please proceed as follows:

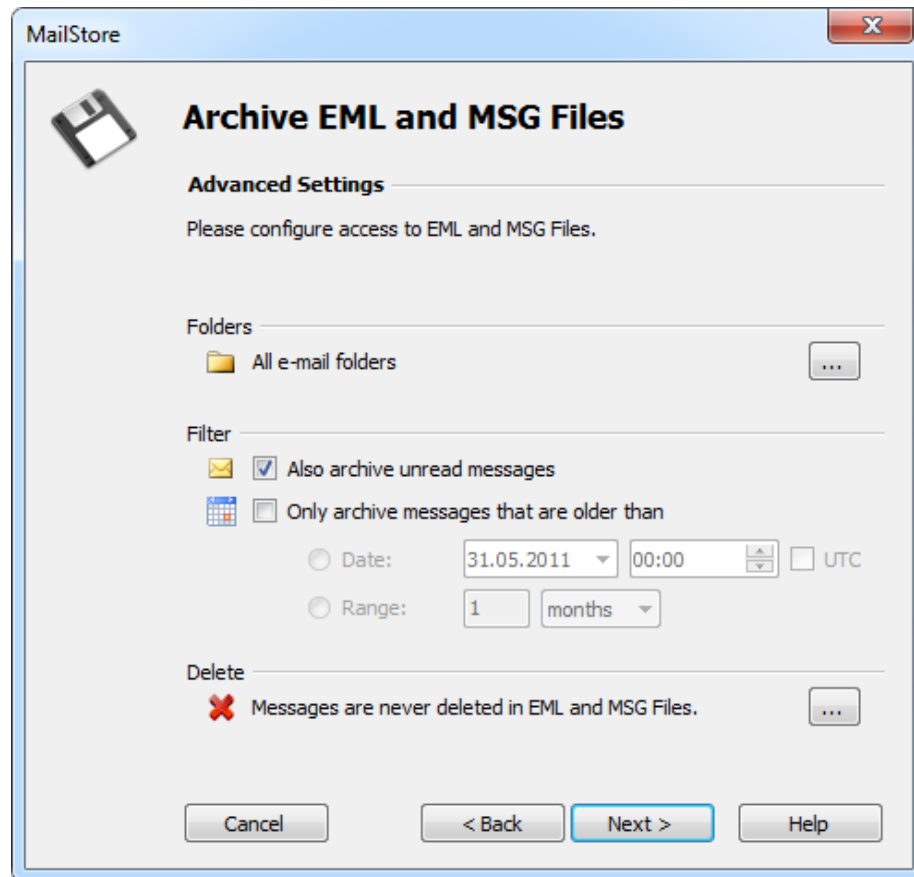
- In MailStore Server, click on *Archive Email*.
- From the *E-mail Files* category in the *Create Profile* section select *EML and MSG files*.
- A wizard opens, guiding you through the setup process.



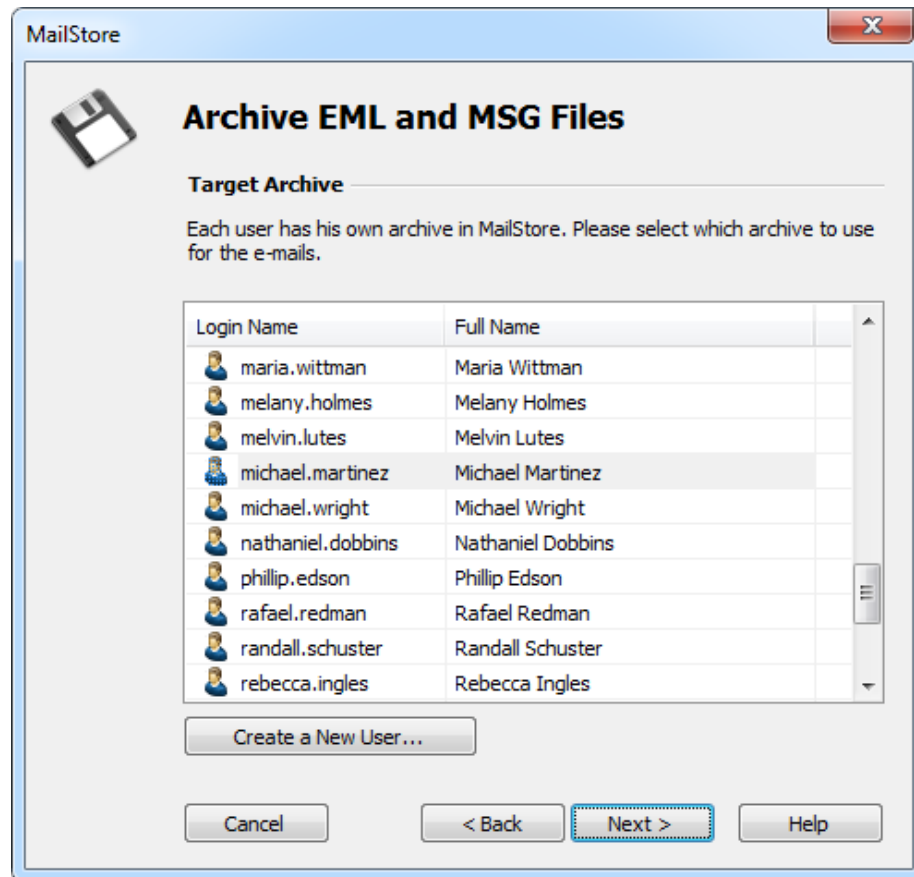
- Select *MailStore Export* and click on *OK*.
- The dialog window *Archive EML and MSG files* appears.



- Select the folder to be archived. All email files in this folder will be archived.
- If desired, adjust the advanced settings or simply click *Next*.
  - **Include Subfolders:**  
In addition to the emails in the selected folder also those located in any subfolders will be archived.
  - **Read MailStore Headers:**  
RFC 822 (EML) files created by the MailStore Server-specific export process contain additional information about the source archives and folders. This information allows to file emails exported from MailStore Server into the correct user archives and folders when being rearchived. Non-existent archives and folders will be created automatically.
  - **Custom File Extensions:**  
Here you can make appropriate entries if the files to be archived are in EML or MSG format but have a different file extension.
- If needed, adjust the settings for the List of Folders to be Archived, the filter and the Deletion Rules.



- You can specify the target archive in the next step of the wizard. Select the archive of the user for whom the selected files are to be archived. The target archive will be ignored if the option *Read MailStore Headers* has been selected and the email to be archived contains such headers.



- In the final step you can specify a name for the new archiving profile. After clicking on *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

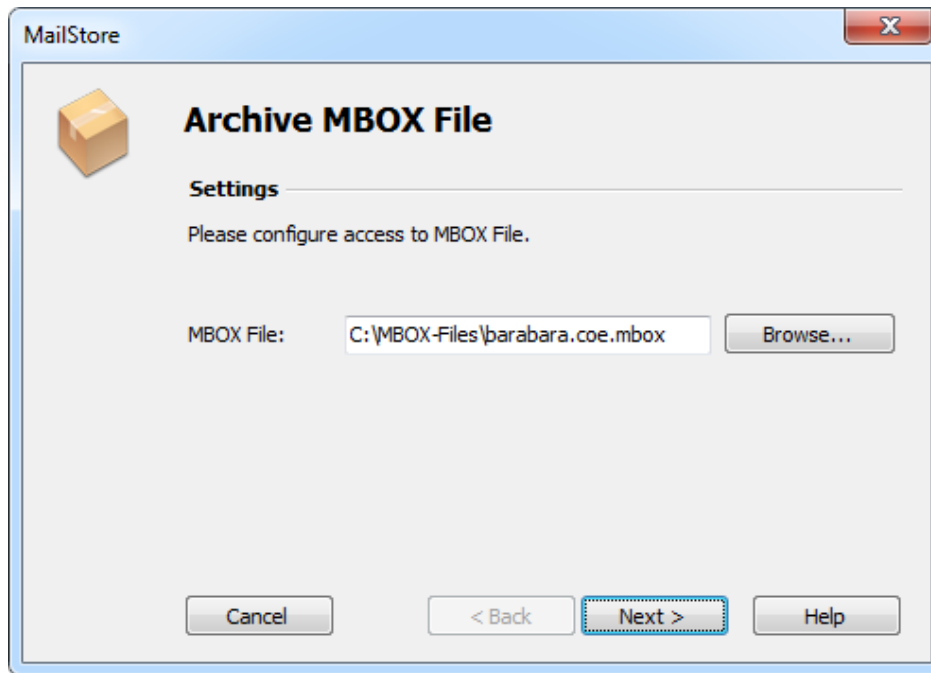
## Procedure for Archiving MBOX Files

Setting up the archiving process for files from the file system is done using archiving profiles. General information about archiving profiles is available in chapter Working with Archiving Profiles.

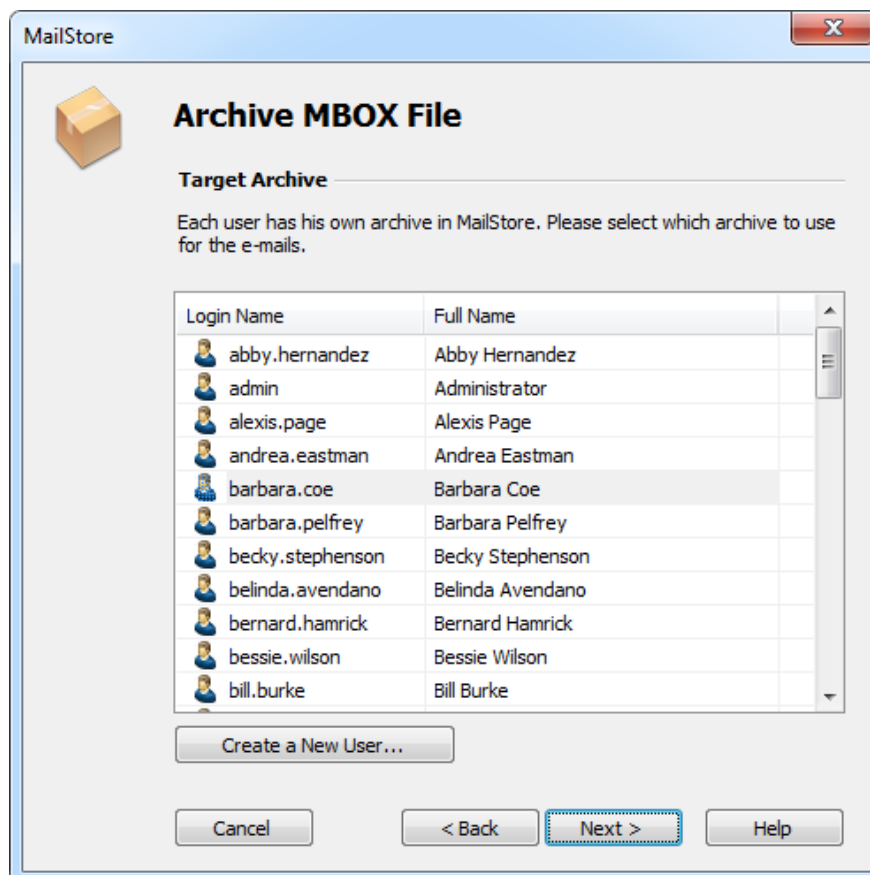
**Please note:** If you do not want to archive email files in your personal user archive only, you'll have to be logged on to MailStore Client as a MailStore Server administrator. Only a MailStore Server administrator can archive emails for other users.

Please proceed as follows:

- In MailStore Server, click on *Archive Email*.
- From the *Email Files* list in the *Create Profile* area of the application window select *MBOX File*.
- A wizard opens, guiding you through the setup process.
- Select the MBOX file to be archived.



- If logged on to MailStore Server as administrator, the target archive can be specified. Select the archive of the user for whom the selected file is to be archived.



- In the final step you can specify a name for the new archiving profile. After clicking on *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

## Archiving with Drag & Drop

Files can also be archived using Drag & Drop: Simply drag the appropriate folder containing EML files or the appropriate MBOX file into the list of saved settings to create an archiving profile for this process directly.

## Starting the Archiving Process

### Starting the Archiving Process Manually

On the start page of MailStore Client, click on *Archive Email* and from the list under *Saved Profiles*, select the appropriate archiving profile. Click on *Run*. After the archiving process has been executed, a protocol appears. It contains information about the volume of emails that have been archived as well as any errors that may have occurred.

This process can be repeated by the user any number of times. MailStore only archives those emails that are not yet stored in the corresponding user archive.

### Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically. Additional information about this topic is available in chapter Automating the Archiving Process.

## 2.7 Archiving Server Mailboxes

This chapter describes how a single mailbox located on any email server can be archived using the IMAP or POP3 protocols. To archive multiple mailboxes in one step, Batch-archiving IMAP Mailboxes can be used. If the mailbox is a multidrop mailboxes, also called catchall mailboxes, that contains emails for more than one person please read the chapter Archiving IMAP and POP3 Multidrop Mailboxes

**Important:** This article describes the general procedure independent from the e-mail server used. Please find e-mail server specific information in our Implementation Guides.

### Required Information

In order to archive a server mailbox, MailStore requires the following data:

- The server name (e.g. imap.myserver.com).
- The protocol used (e.g. IMAP-TLS).
- The user name. Often times, the full email address or the local part (left of the @ character) is used.
- The password.

### IMAP or POP3?

When choosing between IMAP and POP3, we strongly recommend using IMAP. With IMAP, all or specific folders of the mailbox can be archived. POP3 does not "recognize" any folders; because of this it is likely that, with most service providers, only the inbox will be archived.

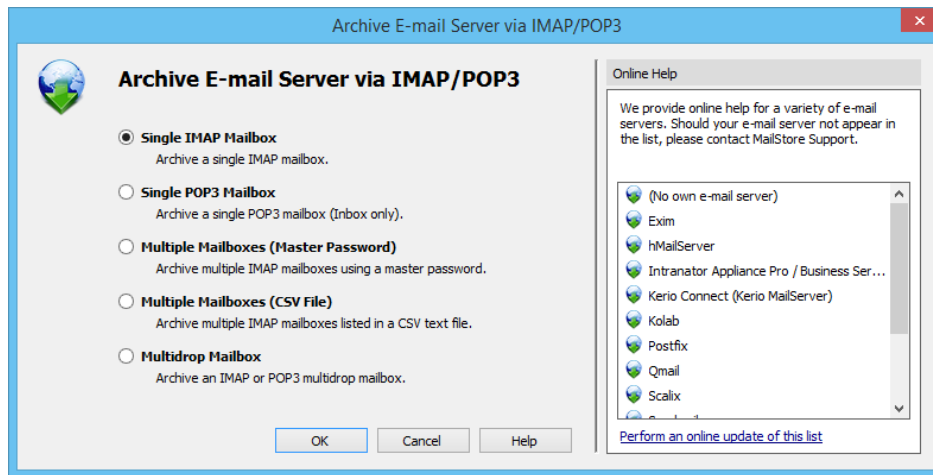
### Setting Up the Archiving Process

By following the procedure described here, a single mailbox can be archived for a specific MailStore user. The archiving process can be executed manually or automatically according to a schedule.

Setting up archiving processes for IMAP or POP3 mailboxes is done using archiving profiles. General information about archiving profiles is available in chapter Working with Archiving Profiles.

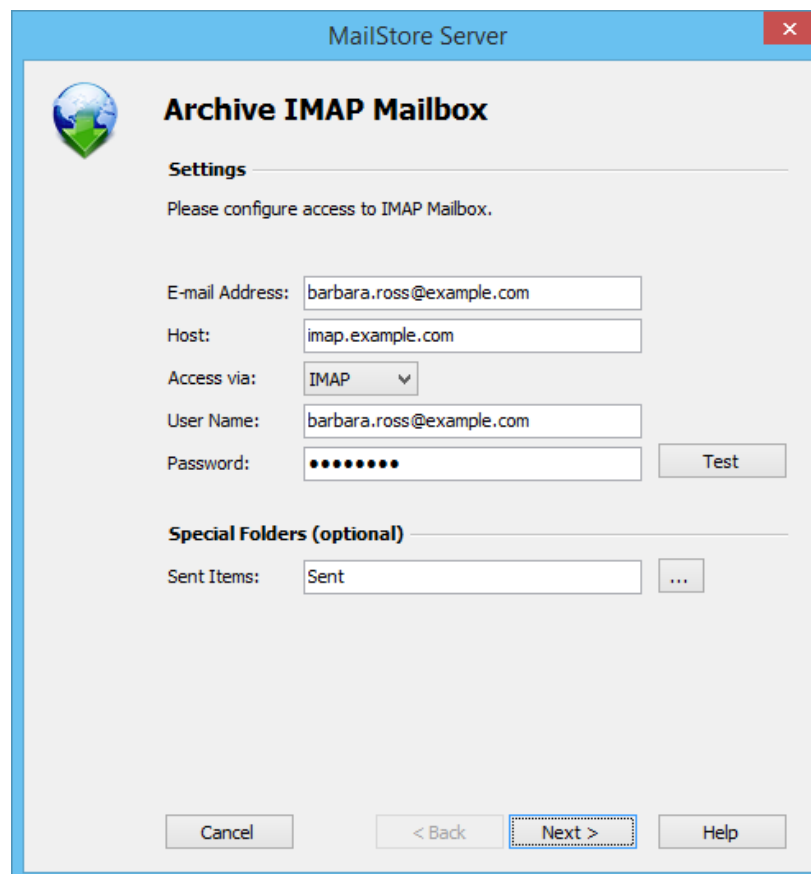
For each mailbox, please proceed as follows:

- Users can only archive their own mailboxes to their personal user archive. To archive the emails of other users, you have to be logged on to MailStore Client as MailStore administrator. Only MailStore administrators can archive the emails of other users.
- In MailStore, click on *Archive Email*.
- To create a new archiving profile, select *Other Server via IMAP/POP3* from the *Email Servers* list in the *Create Profile* area of the application window.
- A wizard opens guiding you through the setup process.

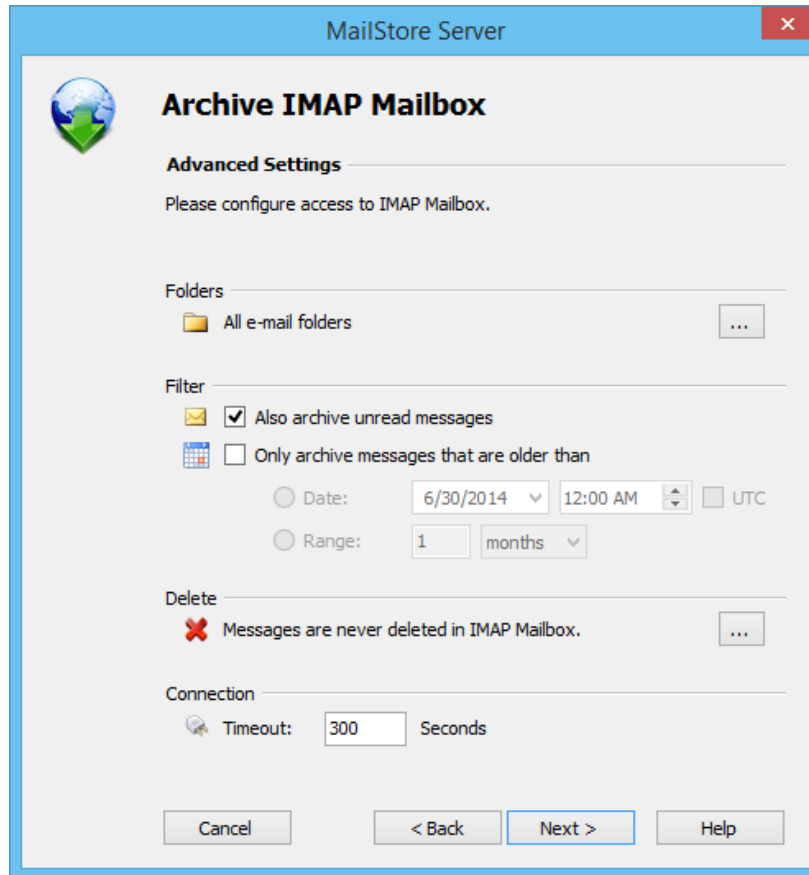


- Select *Single Mailbox* and click on *OK*.
- Fill out the fields *Email Address*, *Host*, *Access via*, *User Name* and *Password*. Click on *Test* to verify the data entered.

**For the IMAP-TLS and IMAP-SSL protocols only:** You have the option to ignore SSL security warnings. Generally, these warnings appear if an unofficial certificate is used on the server.



- Click on *Next*.
- If needed, adjust the list of folders to be archived (only available with IMAP), the deletion rules (only available with IMAP), the filter (also only available with IMAP) and the timeout value in seconds. The timeout value only has to be adjusted in specific cases (e.g. with very slow servers).



The image shows a screenshot of the 'MailStore Server' application window, specifically the 'Archive IMAP Mailbox' dialog box. The window has a blue title bar with the text 'MailStore Server' and a red close button. The main content area is white and contains a globe icon with a green arrow pointing down. The title 'Archive IMAP Mailbox' is in bold. Below the title is a section titled 'Advanced Settings' with a subtitle 'Please configure access to IMAP Mailbox.' The settings are organized into sections: 'Folders' with a folder icon and the text 'All e-mail folders' and a three-dot menu button; 'Filter' with a mail icon and a checked checkbox 'Also archive unread messages', a calendar icon and an unchecked checkbox 'Only archive messages that are older than', and two radio buttons for 'Date' (selected) and 'Range'. The 'Date' section has a date picker showing '6/30/2014', a time picker showing '12:00 AM', and a 'UTC' checkbox. The 'Range' section has a numeric input '1' and a unit dropdown showing 'months'. The 'Delete' section has a red 'X' icon and the text 'Messages are never deleted in IMAP Mailbox.' and a three-dot menu button. The 'Connection' section has a clock icon and the text 'Timeout: 300 Seconds'. At the bottom are four buttons: 'Cancel', '< Back', 'Next >', and 'Help'.

**MailStore Server**

**Archive IMAP Mailbox**

**Advanced Settings**

Please configure access to IMAP Mailbox.

**Folders**

All e-mail folders

**Filter**

☒ Also archive unread messages

☐ Only archive messages that are older than

☐ Date: 6/30/2014 12:00 AM ☐ UTC

☐ Range: 1 months

**Delete**

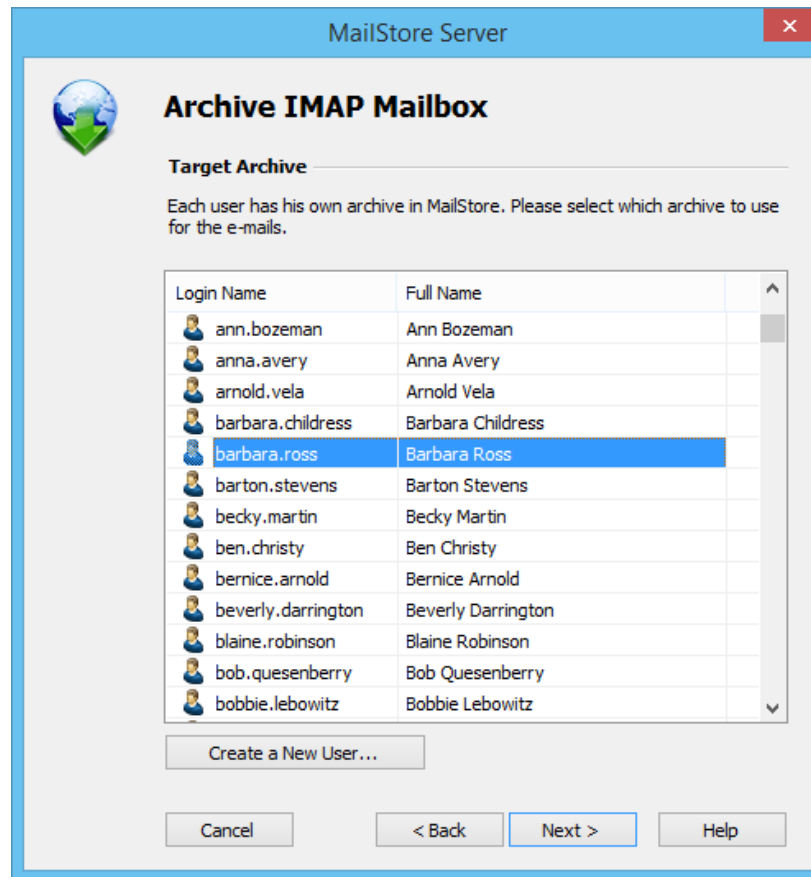
Messages are never deleted in IMAP Mailbox.

**Connection**

Timeout: 300 Seconds

Cancel < Back Next > Help

- Click on *Next*.
- If logged on to MailStore Server as administrator, the target archive can be specified at the next step. Select the archive of the user for whom the mailbox is to be archived.



- At the last step, a name for the new archiving profile can be specified. After clicking on *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

## Starting the Archiving Process

### Starting the Archiving Process Manually

On the start page of MailStore Client, click on *Archive Email* and from the list under *Saved Profiles*, select the appropriate archiving profile. Click on *Run*. After the archiving process has been executed, a protocol appears. It contains information about the volume of emails that have been archived as well as any errors that may have occurred.

This process can be repeated by the user any number of times. MailStore only archives those emails that are not yet stored in the corresponding user archive.

### Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically. Additional information about this topic is available in chapter Automating the Archiving Process.

## 2.8 Batch-archiving IMAP Mailboxes

This chapter describes how multiple IMAP mailboxes can be archived in one step.

**Important:** This article describes the general procedure independent from the e-mail server used. Please find e-mail server specific information in our Implementation Guides.

### Multiple IMAP Mailboxes (Master Password)

MailStore supports archiving multiple IMAP mailboxes by means of a privileged user and the procedure to log in to an IMAP server as specified in *RFC 4616 - The PLAIN SASL Mechanism*. In addition to the privileged user's user name and password, the primary email address (as mailbox name) of the user whose emails are to be archived is passed on in the process as well.

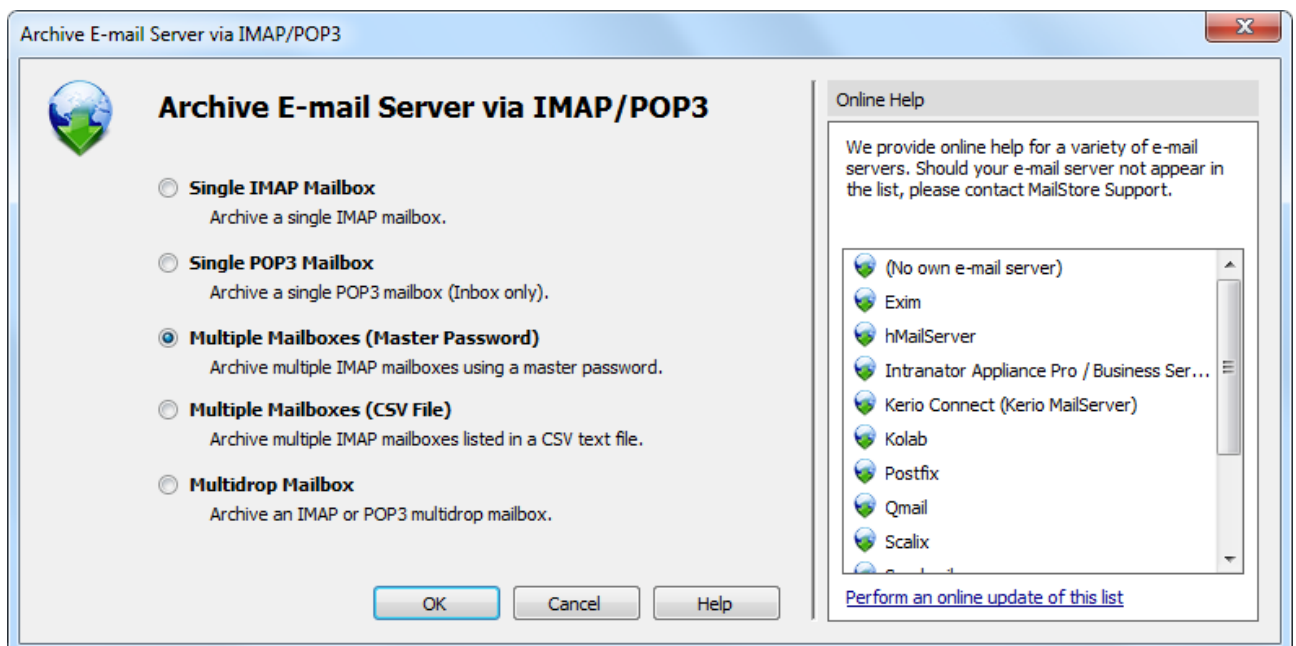
You can learn from your email server's manufacturer if your email server supports this type of login and what the prerequisites are.

### Setting up the Archiving Process

Archiving processes for IMAP or POP3 mailboxes are set up using archiving profiles. General information about archiving profiles is available in chapter Working with Archiving Profiles.

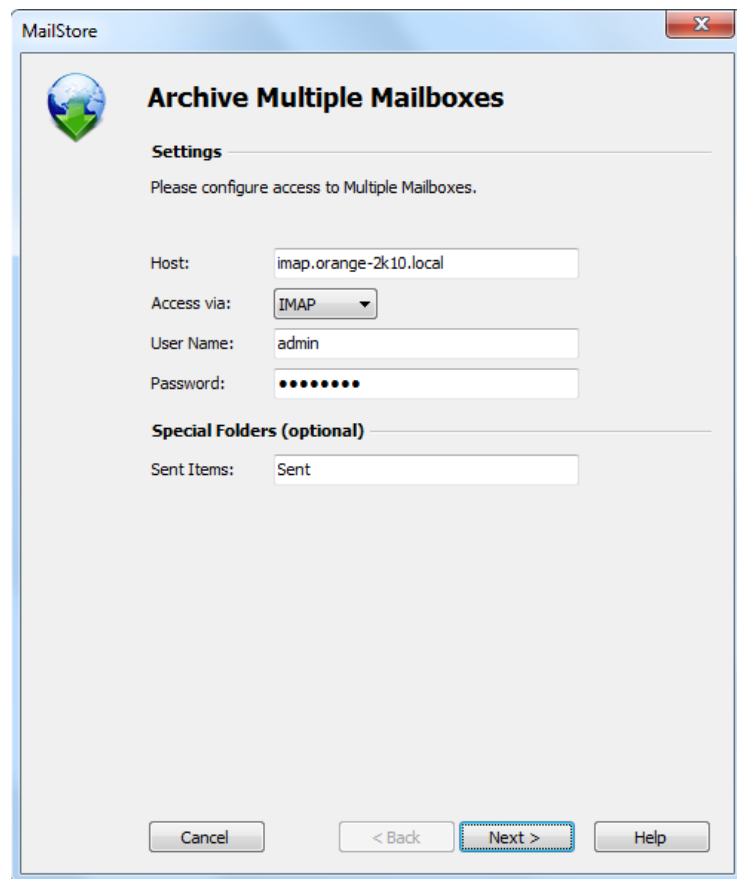
Please proceed as follows:

- Log on as MailStore administrator using MailStore Client.
- In MailStore, click on *Archive Email*.
- From the list of email servers under *Create Profile*, select *Other Server via IMAP/POP3*.
- A wizard opens to assist in specifying the archiving settings.



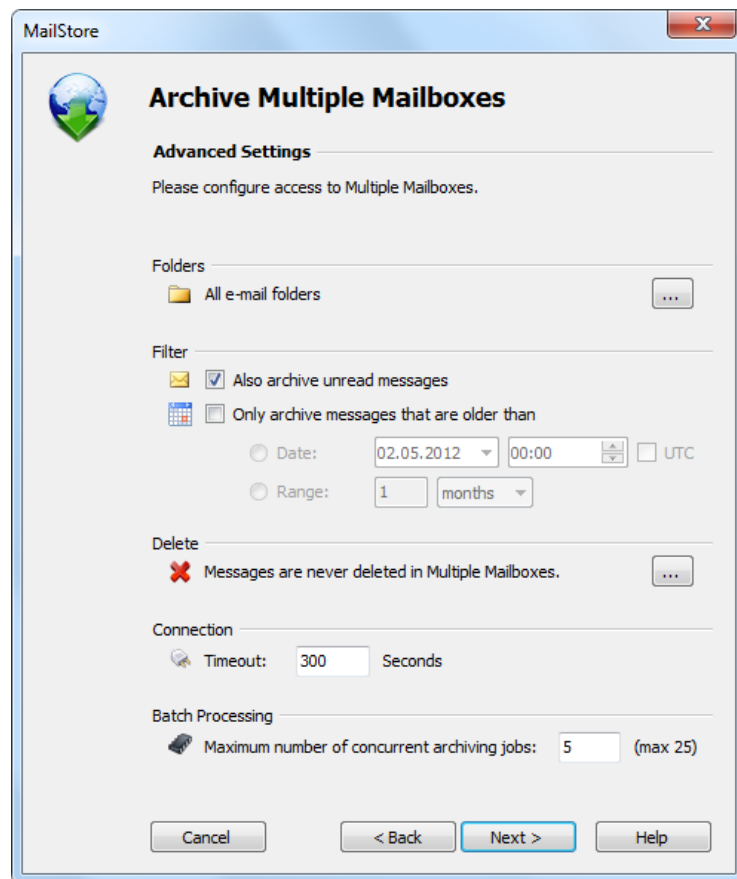
**Hint:** The *Online Help* gives you direct access to the respective Implementation Guides.

- Select *Multiple IMAP Mailboxes (Master Password)* and click on *OK*.

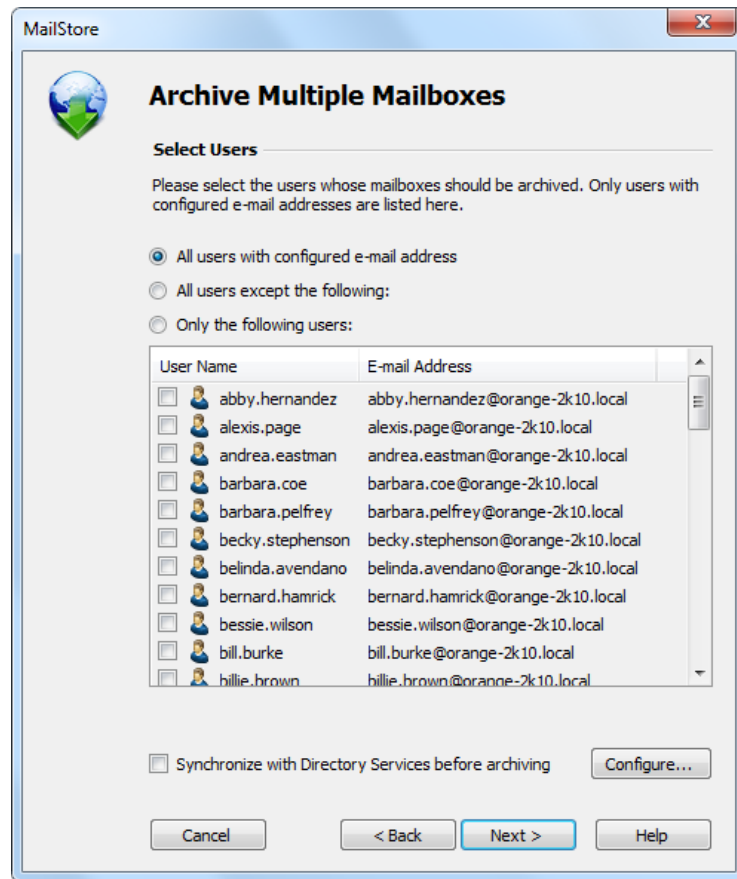


The image shows a Windows-style dialog box titled "MailStore" with a close button (X) in the top right corner. The main title is "Archive Multiple Mailboxes" with a globe icon. Below the title is a section labeled "Settings" with the instruction "Please configure access to Multiple Mailboxes." The form contains several input fields: "Host:" with the value "imap.orange-2k10.local", "Access via:" with a dropdown menu showing "IMAP", "User Name:" with the value "admin", and "Password:" with a masked field of ten dots. Below these is a section labeled "Special Folders (optional)" with a "Sent Items:" field containing the value "Sent". At the bottom of the dialog are four buttons: "Cancel", "< Back", "Next >" (which is highlighted with a blue dashed border), and "Help".

- Fill out the fields *Host* and *Access via* and enter the login data of the privileged user under *User Name* and *Password*.
- **Only with IMAP-TLS and IMAP-SSL:** If you are using an unofficial certificate on the email server, select the option to *Ignore SSL Security Warnings*.
- In the *Sent Items* field you can enter the name of the folder containing sent emails.
- Click on *Next*.



- If needed, customize the list of folders to be archived, the deletion rules, the filters, the timeout value in seconds and the maximum number of archiving jobs to be executed simultaneously. The timeout value only has to be adjusted if needed (e.g. when using a very slow server).
- Click on *Next*.



- Now you can choose the users whose mailboxes are to be archived. The following options are available:

**All users with a configured email address**

Choose this option to archive the mailboxes of all users who are set up in MailStore's user management along with an email address.

**All users except the following**

With this feature, individual users (and their Exchange mailboxes) can be excluded from the archiving process using the list of users below.

**Only the following users**

With this feature, individual users (and their Exchange mailboxes) can be included in the archiving process using the list of users below. Only the mailboxes of users explicitly specified are archived.

**Synchronize with directory services before archiving**

If this option is activated, the list of MailStore users is synchronized with the configured directory service before each archiving process. This has the advantage that a new coworker, for example, is set up as MailStore user automatically so that MailStore archives his or her mailbox automatically as well. This option is especially recommended if mailboxes are archived regularly according to a schedule.

- Finally, you can choose a name for the archiving profile. When you click on *Finish*, the archiving profile is listed under *Saved Profiles* and can be executed, if desired.

## Multiple IMAP Mailboxes (CSV File)

Archiving multiple IMAP mailboxes based on a CSV file is described below. Use this procedure if your IMAP server does not support any of the authentication methods described under *Multiple IMAP Mailboxes (Master Password)*

### Preparation: Creating a CSV File

In order to set up batch archiving of multiple IMAP mailboxes, first, a CSV file needs to be created. For this, a Microsoft Excel spreadsheet can be used, for example:

	A	B	C	D
1	IMAP user name	IMAP password	E-mail address (optional)	MailStore user name (optional)
2	a.dole@domain.com	top!secret2	a.dole@domain.com	a.dole
3	k.park@domain.com	!secret4top	k.park@domain.com	k.park
4	l.paulson@domain.com	pot1tresec\$	l.paulson@domain.com	l.paulson
5				

Set up the columns as shown above. Please keep in mind that the headings (e.g. "IMAP user name") must be in place but their notation may differ. Beneath the headings, enter a row for each mailbox to be archived:

#### IMAP user name and IMAP password

These entries are mandatory for MailStore to be able to access the mailbox.

#### Email address (optional)

If entered, MailStore will label the folder for the respective mailbox in the tree structure of the archive with the email address specified.

#### MailStore user name (optional)

If entered, MailStore will archive the respective mailbox for each MailStore user specified (store the emails in the appropriate user archive). If the user does not yet exist, a user will be created automatically. If this field is left blank, a new MailStore user is created automatically and labeled with the IMAP user name specified.

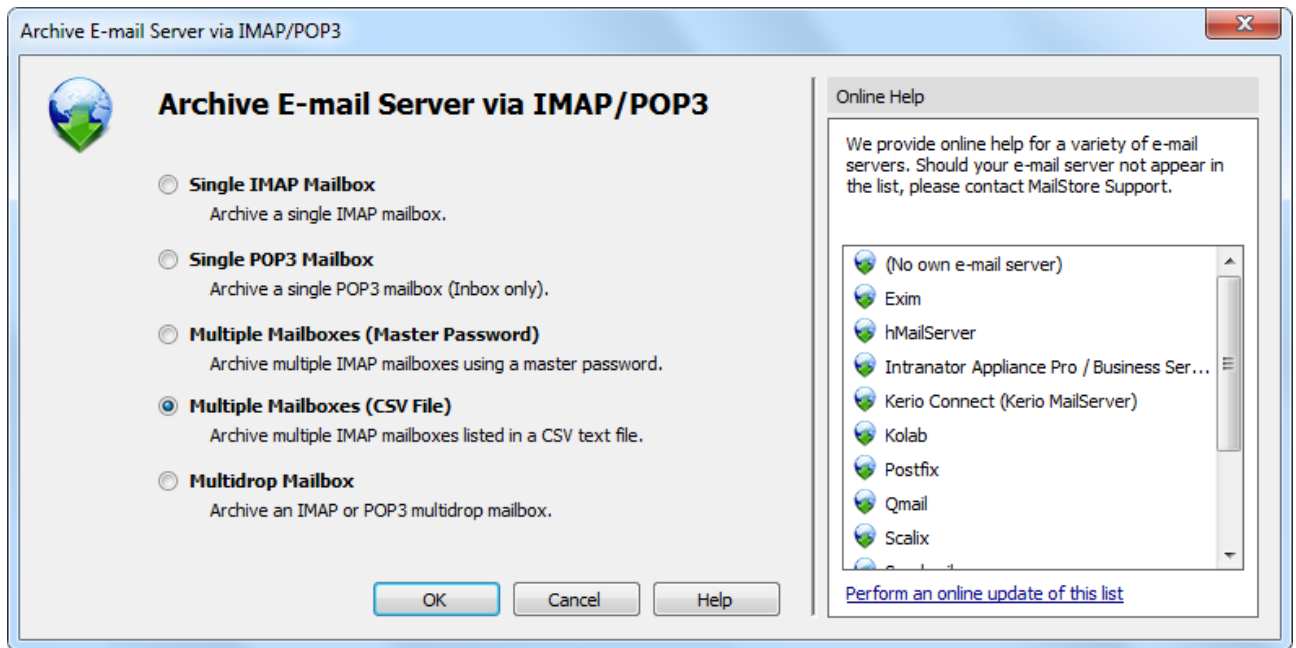
This way, any number of mailboxes of an email server may be entered. When finished, save the file in .csv format (if Microsoft Excel is used via the *Save As* function).

## Setting Up the Archiving Process

Setting up archiving processes for IMAP or POP3 mailboxes is done using archiving profiles. General information about archiving profiles is available in chapter *Working with Archiving Profiles*.

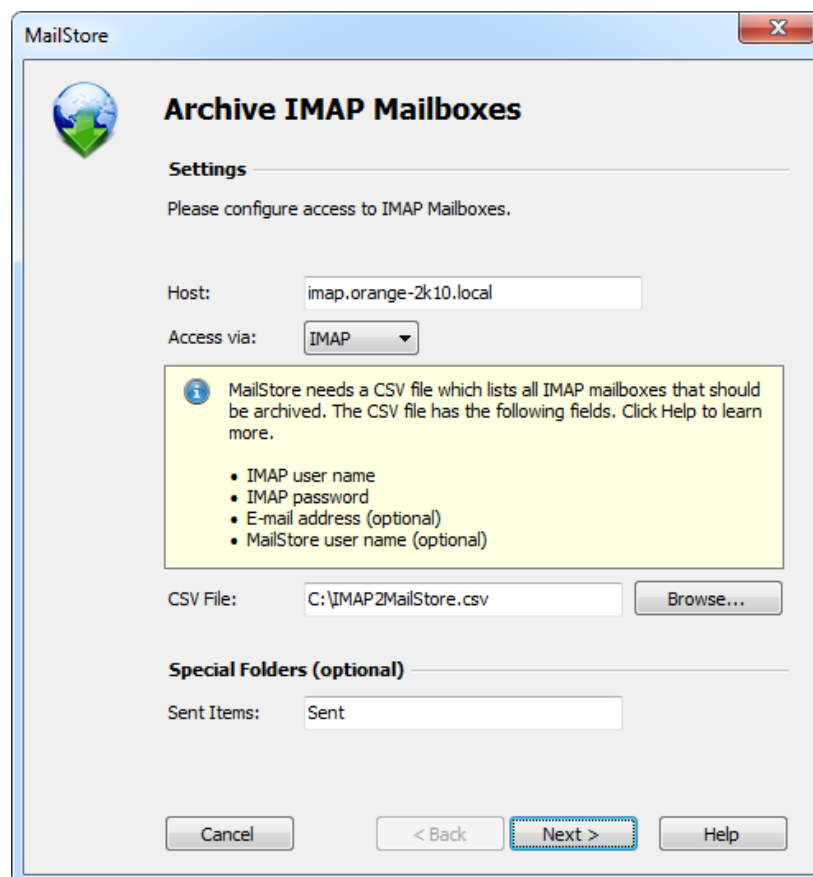
Please proceed as follows:

- Log on as MailStore administrator using MailStore Client.
- In MailStore, click on *Archive Email*.
- To create a new archiving profile, select *Other Server via IMAP/POP3* from the *Email Servers* list in *Create Profile* area of the application window.
- A wizard opens guiding you through the setup process.

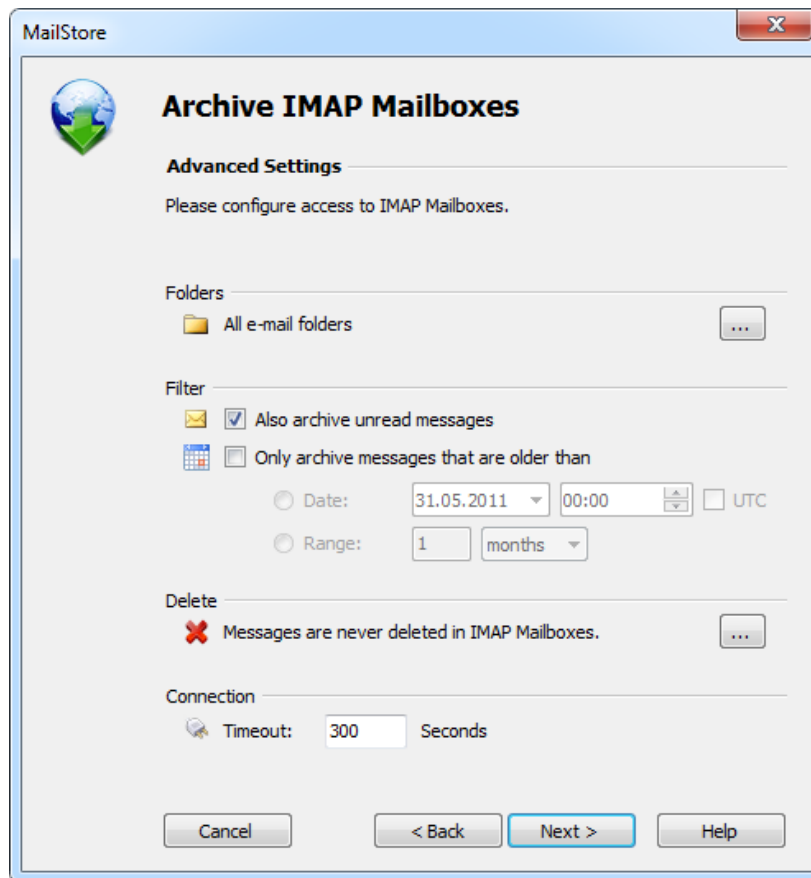


- Select *Multiple Mailboxes (CSV File)* and click on *OK*.
- Fill out the fields *Host* and *Access via*, and under *CSV File* enter the path of the new CSV file (created as described above). This file contains the access information for the mailboxes to be archived. Under *Special Folder (optional)* you may enter the name of the IMAP folder containing sent messages.

**For the IMAP-TLS and IMAP-SSL protocols only:** You have the option to *Ignore SSL Security Warnings*. Generally, these warnings appear if an unofficial certificate is used on the server.



- Click on *Next*.
- If needed, adjust the list of folders to be archived, the deletion rules, the filter, the timeout value in seconds and the maximum number of archiving jobs to be executed simultaneously. The timeout value only has to be adjusted if needed (e.g. when using a very slow server).



- Click on *Next*.
- At the last step, a name for the new archiving profile can be specified. After clicking on *Finish*, the archiving profile will be listed under *Saved Settings (Profiles)* and can be run immediately, if desired.

## Starting the Archiving Process

### Starting the Archiving Process Manually

On the start page of MailStore Client, click on *Archive Email* and from the list under *Saved Profiles*, select the appropriate archiving profile. Click on *Run*. After the archiving process has been executed, a protocol appears. It contains information about the volume of emails that have been archived as well as any errors that may have occurred.

This process can be repeated by the user any number of times. MailStore only archives those emails that are not yet stored in the corresponding user archive.

### Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically. Additional information about this topic is available in chapter Automating the Archiving Process.

## 2.9 Archiving IMAP and POP3 Multidrop Mailboxes

In this chapter, learn how to archive multidrop mailboxes. Multidrop mailboxes, also called catchall mailboxes, contain emails for more than one person. Generally, all emails for a certain domain are collected therein to be retrieved by an internal email server; the server then distributes the emails among the appropriate user mailboxes. Multidrop mailboxes are also used when sending a copy of all emails to a single mailbox on the email server; MailStore extracts the sender and recipient information from the email headers to assign them to the appropriate users. By using this type of mailboxes it is possible to archive all incoming and outgoing emails.

**Important:** This article describes the general procedure independent from the e-mail server used. Please find e-mail server specific information in our Implementation Guides.

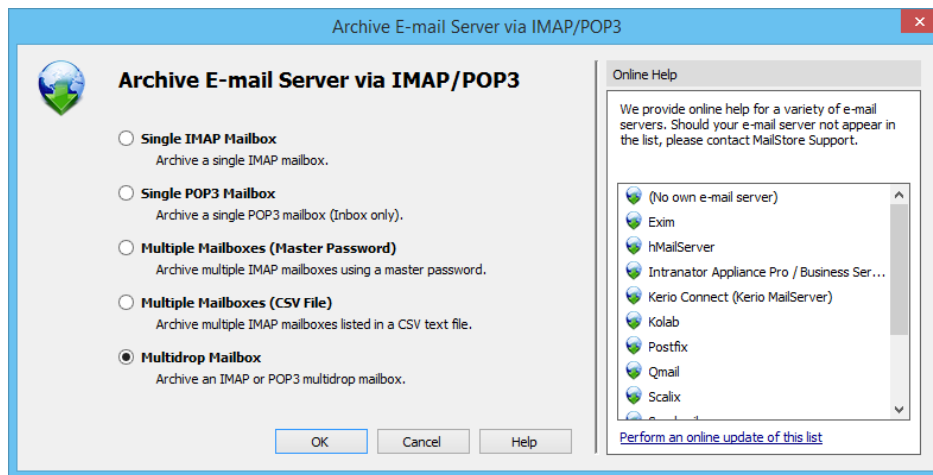
### Setting up the Archiving Process

By following the procedure described here, an IMAP or POP3 multidrop mailbox can be archived. The archiving process can be executed manually or automatically.

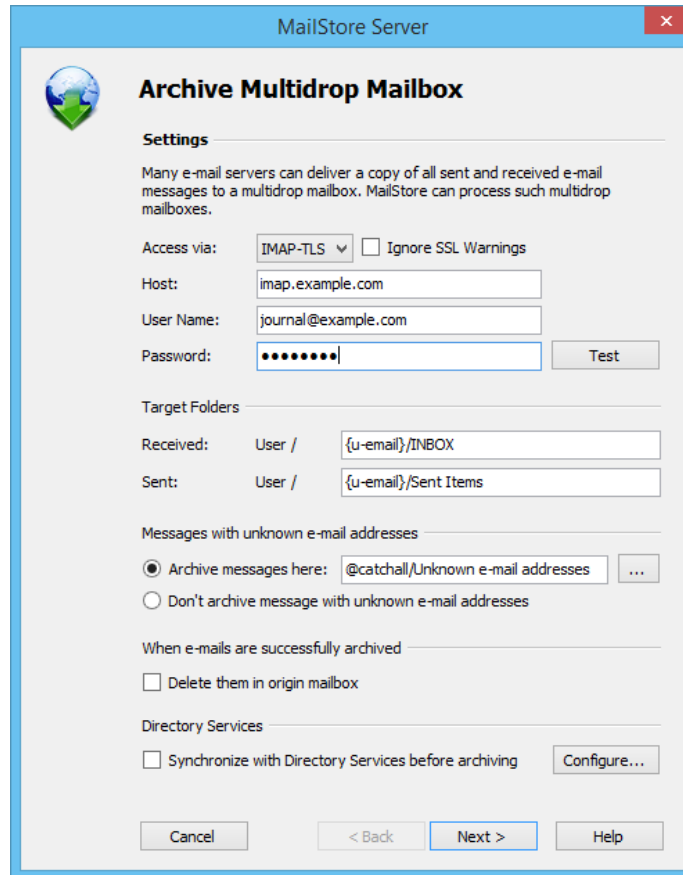
Setting up archiving processes for multidrop mailboxes is done using archiving profiles. General information about archiving profiles is available in chapter Working with Archiving Profiles.

Please proceed as follows:

- Log on as MailStore administrator using MailStore Client.
- In MailStore, click on *Archive Email*.
- To create a new archiving profile, select *Other Server via IMAP/POP3* from the *Email Server* list in the *Create Profile* area of the application window.
- A wizard opens guiding you through the setup process.



- Select *Multidrop Mailbox* and click *OK*.
- Fill out the fields *Access via*, *Host*, *Username* and *Password*. Click on *Test* to verify the data entered.  
For the TLS and SSL protocols only: You have the option to *ignore SSL warnings*. Generally, these warnings appear if an unofficial certificate is used on the server.



**MailStore Server**

**Archive Multidrop Mailbox**

**Settings**

Many e-mail servers can deliver a copy of all sent and received e-mail messages to a multidrop mailbox. MailStore can process such multidrop mailboxes.

Access via:  ☐ Ignore SSL Warnings

Host:

User Name:

Password:

**Target Folders**

Received: User /

Sent: User /

**Messages with unknown e-mail addresses**

☒ Archive messages here:

☐ Don't archive message with unknown e-mail addresses

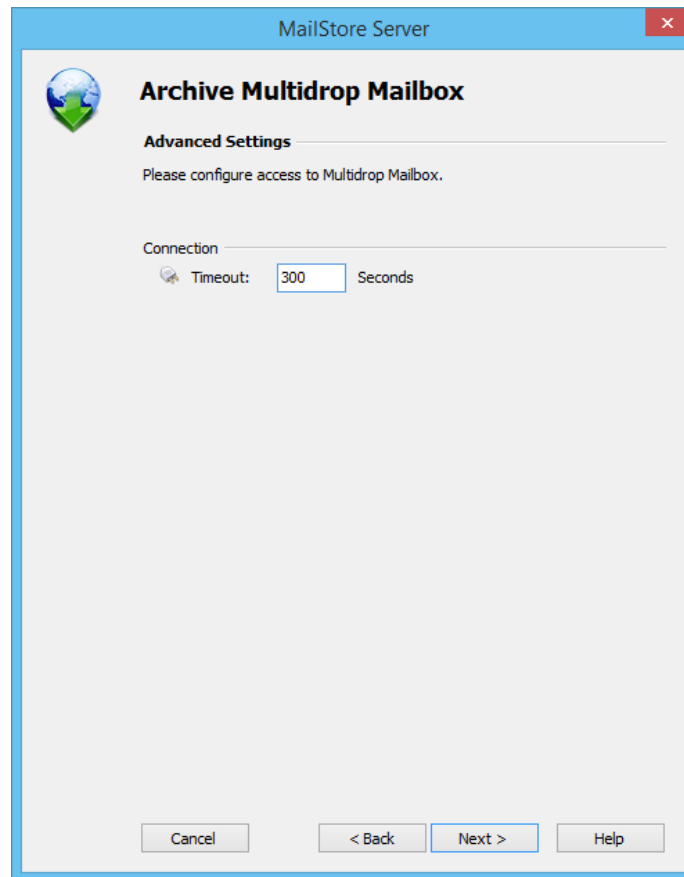
**When e-mails are successfully archived**

☐ Delete them in origin mailbox

**Directory Services**

☐ Synchronize with Directory Services before archiving

- Adjust any further settings such as how to handle emails with unknown addresses or asking MailStore to delete emails after they have been archived. The latter option is especially sensible when dealing with mailboxes that are exclusively used for archiving.
- Click on *Next*.
- The timeout value only has to be adjusted on a case-by-case basis (e.g. with very slow servers).



- Click on *Next*.
- At the last step, select a name for the new archiving profile. After clicking on *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

## Starting the Archiving Process

### Starting the Archiving Process Manually

On the start page of MailStore Client, click on *Archive Email* and from the list under *Saved Profiles*, select the appropriate archiving profile. Click on *Run*. After the archiving process has been executed, a protocol appears. It contains information about the volume of emails that have been archived as well as any errors that may have occurred.

This process can be repeated by the user any number of times. MailStore only archives those emails that are not yet stored in the corresponding user archive.

### Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically. Additional information about this topic is available in chapter Automating the Archiving Process.

# 3

Chapter

## **Accessing the Archive**

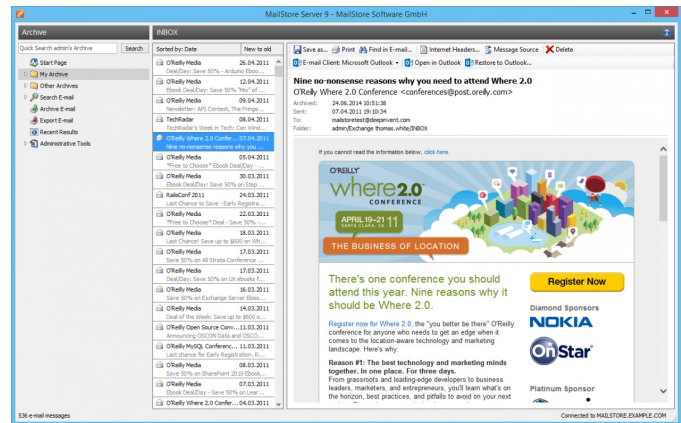
## 3.1 Accessing the Archive

MailStore provides several ways to access archived emails:

### Accessing the Archive with the MailStore Client Software

MailStore Client is a Windows application that can be installed on any number of user computers (depending on the license purchased). Of all the options for accessing the archive, MailStore Client provides the largest range of functions: Not only can users browse and view their emails but, depending on the privileges assigned to them, set up and execute archiving and exporting tasks.

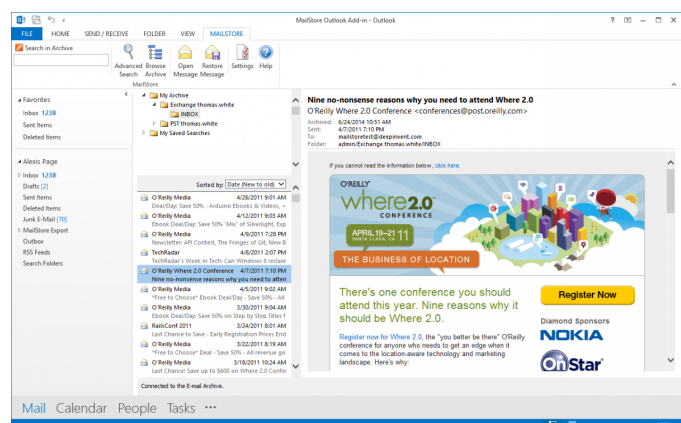
MailStore Client Manual



### Accessing the Archive with the Microsoft Outlook Integration

With a MailStore add-in, users can access the archive directly from Microsoft Outlook.

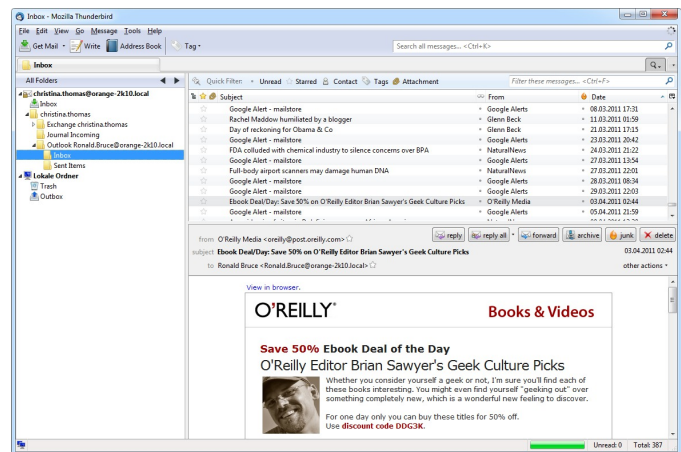
MailStore Outlook Add-in Manual



## Access Using Other Email Clients

MailStore Server provides an integrated IMAP server, that offers you read-only access to the archive for any IMAP capable email client. Especially for alternative email clients (Mozilla Thunderbird) or operating systems (e.g. MacOS or Linux), as well as for mobile platforms such as Android, iPhone or Symbian, this is a very convenient way of accessing the archive.

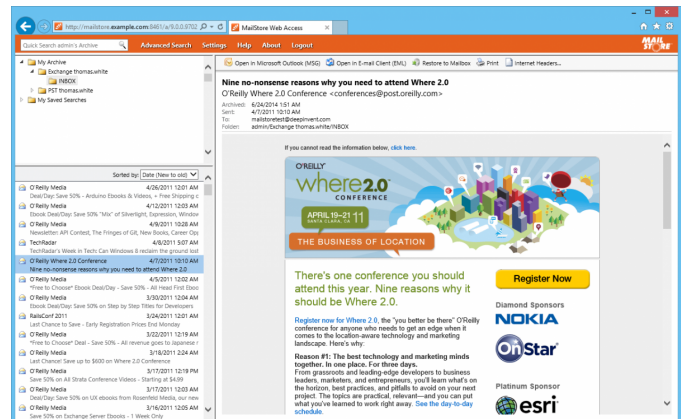
MailStore Integrated IMAP Server Manual



## Accessing the Archive with MailStore Web Access

MailStore Web Access provides access to the archive using an internet browser. This has the advantage that no additional software needs to be installed on the user machines. In addition to browsing and viewing emails, web access also offers access through the folder structure and functions for restoring emails from the archive.

MailStore Web Access Manual



## Access Using MailStore Mobile Web Access

With MailStore Mobile Web Access you can access the MailStore archive regardless of your location using a smart phone. In addition to browsing the folder structure and viewing archived email, the mobile web access also allows you to search the archive.

Go to the MailStore Mobile Web Access Manual



## 3.2 Accessing the Archive with the MailStore Client software

### Installation & Update

The MailStore Client setup file that matches your MailStore Server version is stored on the MailStore Server machine. Follow the *Install MailStore Client on other Computers* link on your desktop and copy the corresponding setup file to the client computer.

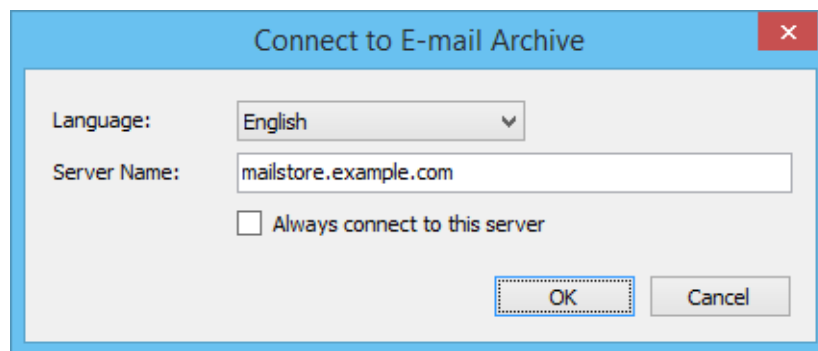
It is a regular Windows setup program, that can be executed on the appropriate client computer by double-clicking on the setup file. Just follow on-screen instructions.

**Notice:** Alternatively to installing the MailStore Client application manually, you can also deploy it to the client computer through the Active Directories Group Policy feature. More information on that can be found in the article *MailStore Client Deployment*

If an update is installed on the MailStore Server computer, MailStore Client updates itself automatically on first login to stay compatible with MailStore Server. Therefore a re-installation of MailStore Client is usually not required.

### Starting and Login

Start MailStore Client by using the appropriate link on the desktop. The window *Connect to E-mail Archive* appears.

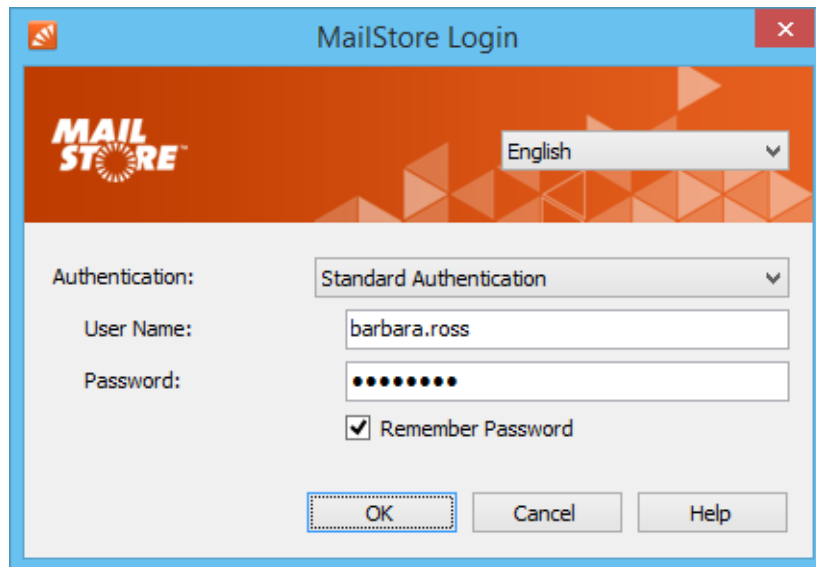


Into *Server Name*, enter the hostname or IP address of the computer on which MailStore Server is installed. Be aware, that the pre-filled entry *localhost* only works if the MailStore Client is run from the same machine where MailStore Server is installed. Click *OK* to connect to MailStore Server.

**Hint:** Did you activate the option *Always connect to this server* and you want to change the destination server later? Hold the Shift-key pressed while opening MailStore Client.

After establishing the connection to MailStore Server, MailStore Client checks if newer a version of its own program files is available for downloading and, if necessary, updates these automatically.

The login window appears.



Enter the username and password of a MailStore administrator (**admin**) or a normal MailStore user into the *User Name* and *Password* fields and click *OK*. You may be asked to trust the MailStore Server; click *OK* here.

**Important notice:** As long as you have not changed the default administrator password (admin), you will not be able to login from any other machine with the username *admin*.

## The MailStore Folder Structure

For each user, MailStore creates a folder on the highest level of the folder structure which corresponds to the archive of the respective user. It contains all emails that were archived for this user and is labeled *My Archive*.

If the user has access to the archives of other MailStore users (as MailStore administrator, for example), their folders are listed as *Archive of <User Name>* under the top level folder *Other Archives*

Below these main folders, the individual email sources (e.g. Microsoft Outlook or Exchange mailboxes) and their folder structures (e.g. *Inbox*) are listed.

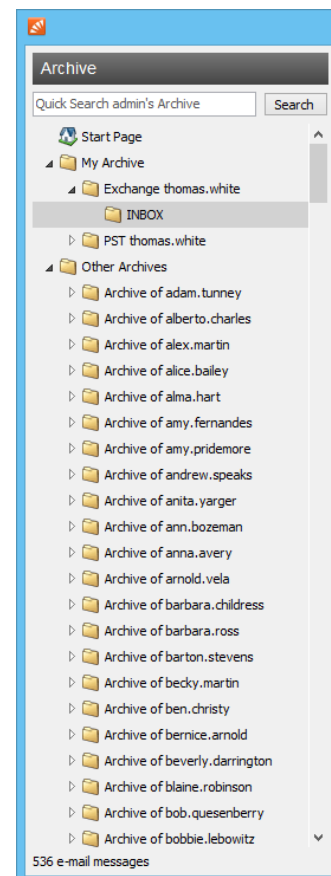
## Deleting Folders

Folders and the emails contained therein can only be deleted after the appropriate user privileges have been assigned explicitly by the administrator. If the folder to be deleted contains any subfolders, they will be deleted as well.

## Moving, Renaming, and Creating Folders Manually

Within MailStore, folders can be moved, renamed or created. Regular users can only do this within their own user archive, while MailStore administrators can move and rename folders beyond the boundaries of user archives. During the archiving process, MailStore adopts the folder structure and the folder names of the source (e.g. Microsoft Outlook).

Please note that moving large archives across the borders of user archives can take some time because the emails being moved have to be gathered by the full text index of the target user.



MailStore sorts all archived email into MailStore's own folder structure. Below the main folders, the individual email sources (e.g. Microsoft Outlook or Exchange mailboxes) and their folder structures (e.g. *Inbox*) are listed.

## Viewing the Emails in a Folder

To view the emails in a folder, simply click on the folder name. The emails will be listed below the folder structure.

Click on the text *Sorted by: <value>* to change the order in which emails are displayed. Emails can be sorted according to:

- Date
- From/To (sender/recipient of the email)
- Subject

Click on the Field to the right of *Sorted by* ("New to Old" in the screenshot) to reverse the order in which emails are arranged. By default, the latest email is displayed first.

## Refreshing the View

To refresh the list of folders, click on a folder and press F5 on your keyboard.

Click on the folder again to refresh the list of emails.

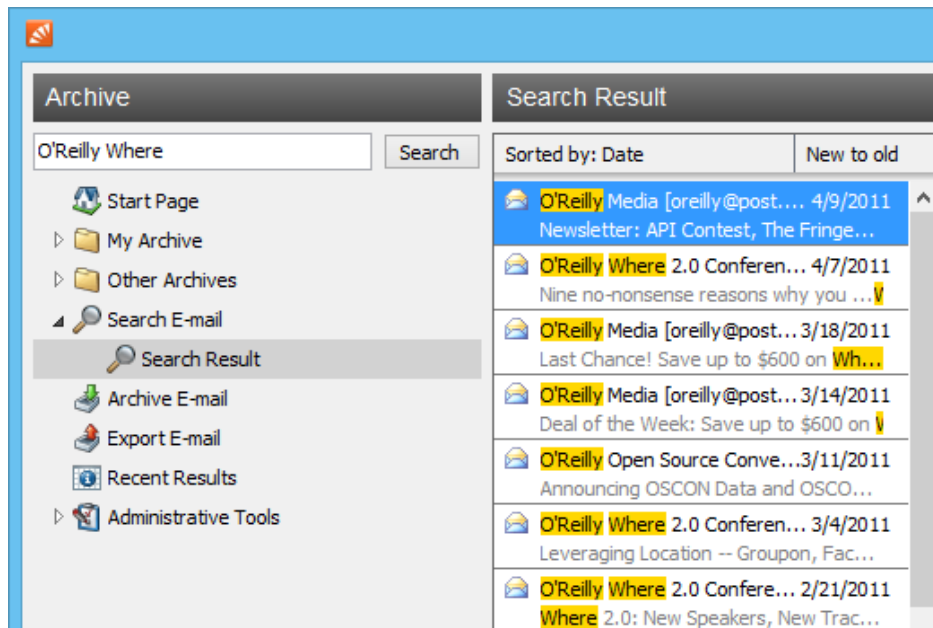
## Creating, Renaming and Deleting Folders

Information about how to create, rename and delete folders is available in the chapter *The MailStore Folder Structure*.

INBOX	
Sorted by: Date	New to old
Google Alerts Google Alert - mailstore	9/7/2010
Google Alerts Google Alert - mailstore	9/5/2010
O'Reilly Media Free Live Webcast - Tapworthy: Desi...	9/4/2010
TechRadar TechRadar's Weird Week in Tech + ...	9/3/2010
Google Alerts Google Alert - mailstore	9/3/2010
O'Reilly Media New Online Course - Python 2: Getti...	9/2/2010
Google Alerts Google Alert - mailstore	9/2/2010
Web 2.0 Expo New York Increase ROI on Your Web 2.0 Mark...	9/1/2010
Google Alerts Google Alert - mailstore	8/28/2010
TechRadar TechRadar's Weird Week in Tech + ...	8/27/2010
Google Alerts Google Alert - mailstore	8/27/2010
Google Alerts Google Alert - mailstore	8/26/2010
Web 2.0 Expo New York Jumpstart Your Skills with a Full Conf...	8/25/2010
Google Alerts Google Alert - mailstore	8/24/2010
O'Reilly Media Free Online Course: Getting the Most...	8/23/2010
Google Alerts Google Alert - mailstore	8/23/2010
Google Alerts Google Alert - mailstore	8/22/2010

## Quick Search

With MailStore's integrated quick search feature, users can browse through all emails in all user archives they have access to. Quick search is especially suitable for simple queries. Alternatively, an Extended Search can be used.



## Using Quick Search

Quick search is located in the upper left area of the application window. Simply enter one or more keywords into the search field and click on *Search* or press Enter. Search results are displayed in the column right of the folder list. If a keyword appears in the header or the subject line, it is highlighted.

## Searching for Word Fragments

To view all emails containing a particular word fragment, use the wildcard character ( \* ). For example:

```
auto*
```

would locate "auto", "automatic", "automobile" and others.

## Searching for Phrases

To search for words appearing consecutively and in a certain order, use quotation marks ( " " ). For example:

```
"Microsoft Windows"
```

would only locate Microsoft Windows, not Microsoft Works or Windows 95.

## Searching for Words with unknown letters

To view all emails containing a word where you do not know how to spell it correctly, you can use the question mark (?). For example

```
"ho?se"
```

would locate *house* and *horse*.

## Narrowing by Fields

A search for keywords or phrases can be limited to particular fields. For example:

```
subject:News          only in Subject
from:john@mailstore.com only in From
to:michael@mailstore.com only in To
cc:lisa@mailstore.com  only in Cc
bcc:customers@mailstore.com only in Bcc
```

## Excluding Words

To narrow a search, it may be desired to specify words that must NOT be present in the emails. To exclude keywords from the search results, simply place a minus ( - ) sign in front of them. For example:

```
ZDNet -download-hint
```

would locate all emails from ZDNet, but not download-hint.

## Combining Search Options

The search options described above can also be combined. For example:

```
ZDNET -"Daily Update"
```

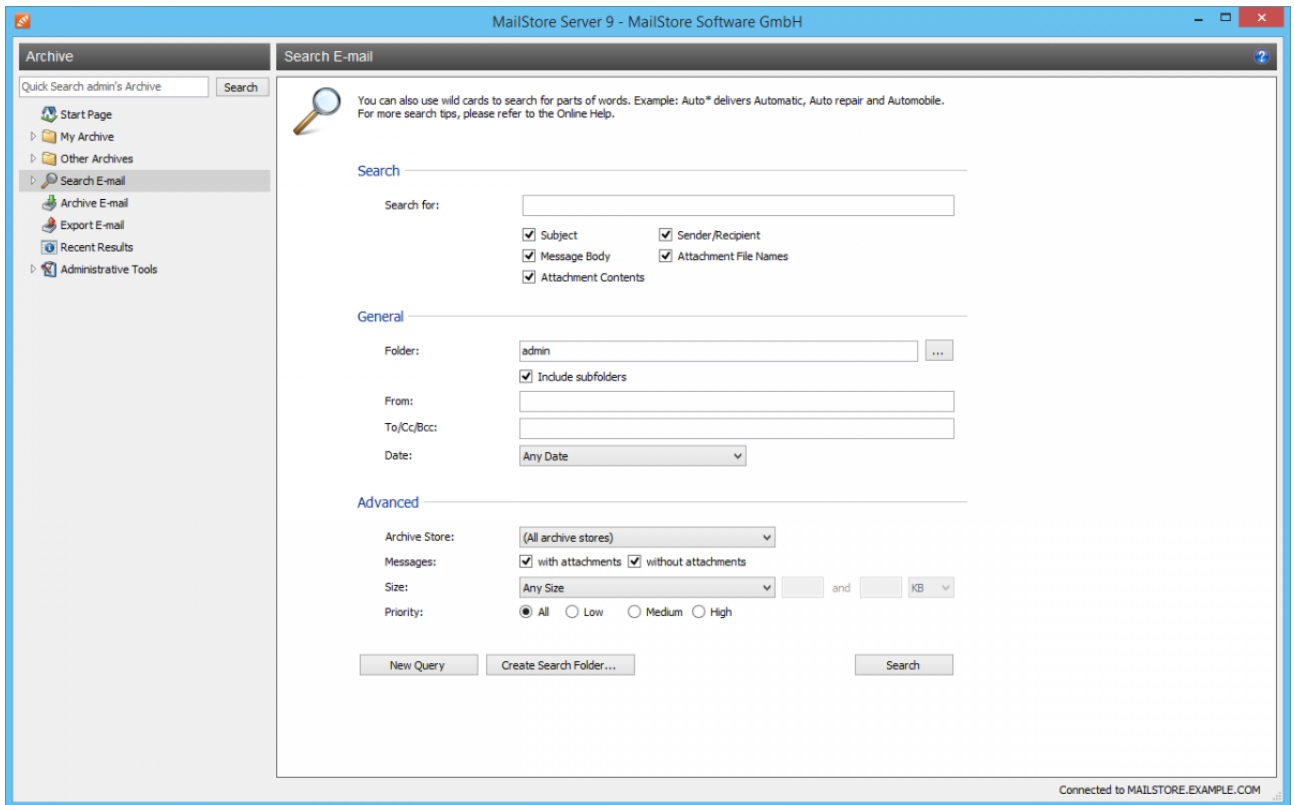
would locate all emails from ZDNet which do not contain the consecutive words Daily Update.

## Extended Search

With MailStore's integrated extended search, complex search processes can be carried out. Not only can the email content be searched but also parameters such as date and email size.

### Using the Extended Search

In the MailStore application window, click on *Search Email*. Specify the search criteria for the emails that are to be included in the results. The criteria are AND-connected, meaning that the search results include only those emails that satisfy all criteria specified. Click on *Search* to start the search.



### Search Criteria under "Search"

Enter a keyword or phrase into the text field, and specify where MailStore is to direct the search. The following options are available:

- **Subject** - The subject line of the email is searched.
- **Sender/Recipient** - The fields "From", "To", "Cc", and "Bcc" are searched.
- **Message body** - The text-only or HTML sections of the email are searched (depending on availability).
- **Attachments File Names** - The file names of the email attachments are searched.
- **Attachment Contents** - The contents of the email attachments are searched. If and to what extent attachments can be searched depends on the indexing options specified (under *Administrative Tools*).

In the textfield *Search for*, all options described in section Quick Search, such as phrases and wildcards, are available here as well.

## Search Criteria under "General"

Under *General*, the following options are available:

- **Folder** - The folder to be searched by MailStore can be selected here. By default, this is the main folder of the current user. By clicking the button to the right of the text field, folders can also be selected using the folder structure. As administrator, the folders of all users can be searched.
- **Include subfolder** - If selected, MailStore not only searches the selected folder (e.g. *Inbox*), but all subfolders created therein (e.g. *Inbox / Projects 2008 / Profit Optimization*) as well.
- **From** - Any keywords or email addresses entered here are searched for only within the email's sender field.
- **To/Cc/Bcc** - Any keywords or email addresses entered here are searched for only within the email's recipient fields.
- **Date** - The timeframe the search is to cover can be selected here. Either a predefined range, such as *Yesterday* or *This year*, can be selected or, by choosing *Custom*, a specific period can be specified manually. In this case, the start and end dates will be included.

In the fields *From* and *To/Cc/Bcc*, all options, such as phrases and wildcards, described in section Quick Search are available.

## Search Criteria under "Advanced"

Under *Advanced*, the following options are available:

- **File Group** - If the archive consists of more than one file group, the search can be limited to just one of the. By default all file groups are searched.
- **Messages with/without attachments** - By default, all messages are searched, regardless of whether or not they have any file attachments. Clear one of the check boxes to remove certain emails, such as those without attachments, from the results.  
**Important:** These searches can be imprecise at times because items like background pictures could be regarded as attachments.
- **Size** - By default, all messages are searched regardless of their size. Use the appropriate fields provided to limit the search according to the size of the emails, e.g. at least *5 MB* or between *400 and 600 KB*.
- **Priority** - Emails are searched according to the priority level of the email as assigned by the sender. When choosing *Low*, all emails with a priority level lower than *Normal* are returned, when choosing *High*, all emails with a priority level higher than *Normal* are returned. Emails not containing any information regarding priority are assumed to have a priority level of *Normal*.

## Starting the Search

Click on *Search* to start the search. Results are displayed in a list in the left section of the main window.

## Refining the Search Results

Click on *Search Email* again to further narrow the results after a search has been executed. Specify any additional search criteria and click on *Search* once more.

## Starting a New Search

Click on *New Query* to start a new search. All search criteria will be reset to their default values (i.e. an unrestricted search of the folders of the current user).

## Saving Search Criteria for Reuse

Search criteria that are used repeatedly (such as "all receipts from last month") can be saved and reused at a later time: Click on *Create Search Folder...* and provide a meaningful name for the search.

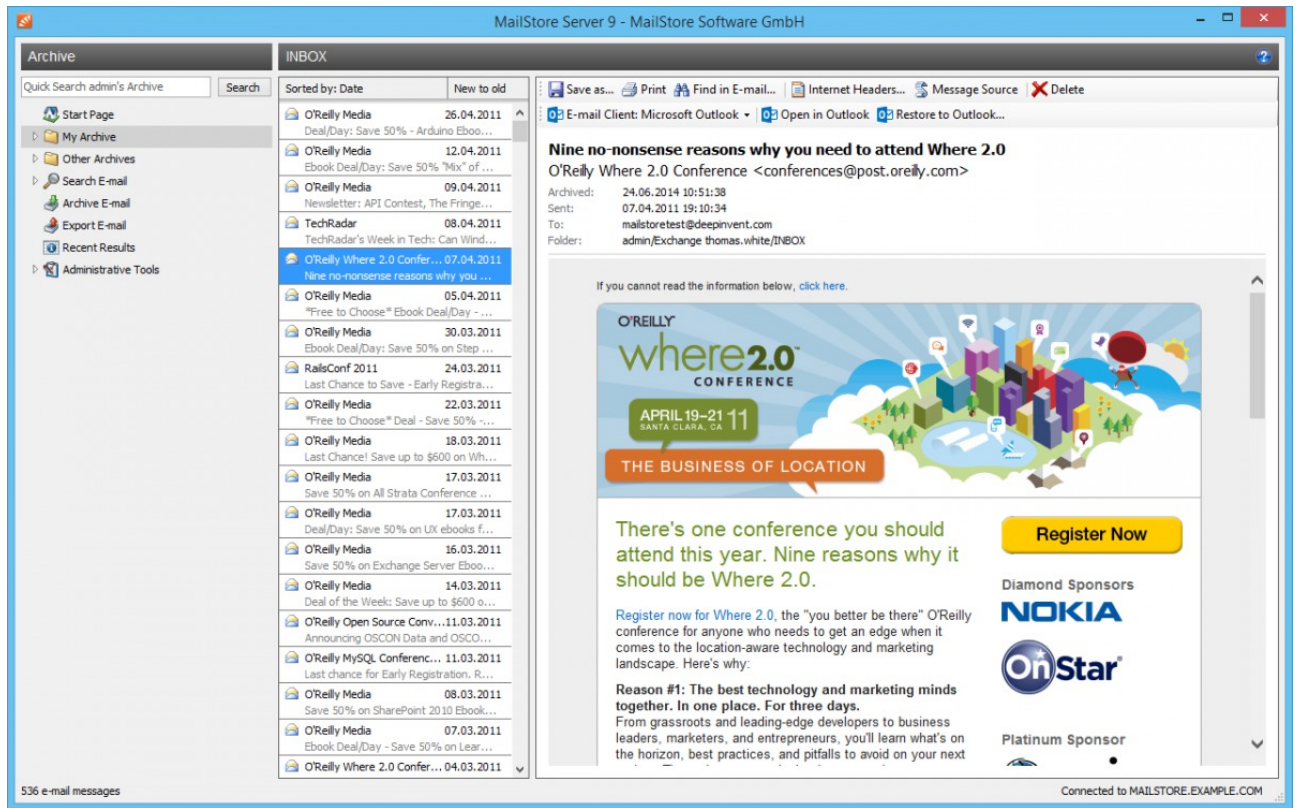
The new search folder will be available under the *Search Email* folder on the left side of the application window.

To modify a search folder, right click on the corresponding folder under *Search Email* on the left side of the application window and select *New Search Query*. After modifying the search criteria, click on *Create Search Folder...* and save it under the same name again.

To rename or delete a search folder, right click on on the corresponding folder under *Search Email* on the left side of the application window and click on the appropriate entry.

## Email Preview

MailStore offers an integrated email preview displaying emails the same way as standard email applications. To activate the preview, simply click on an email or use the arrow keys to highlight the desired email in the list.



The menu bar above the email preview shows all functions available for the email currently displayed.

## Save as...

Click on *Save as...* to save the current email in any Windows folder. Emails can be saved in the following file formats:

- **RFC822 EML** - These files can be opened independently from MailStore by double-clicking and can be moved to applications such as Outlook Express by drag & drop.
- **Outlook MSG** - These files can be opened with or imported to all versions of Microsoft Outlook (not Outlook Express) directly.

## Print

Using the print function, the email currently displayed will be printed including header information such as Date and Subject.

## Find in Email

Click on *Find in Email...* to search the message body of the current email.

## Internet Headers...

Click on Internet Headers to view the header of the current email, including all MIME parts.

## Message Source

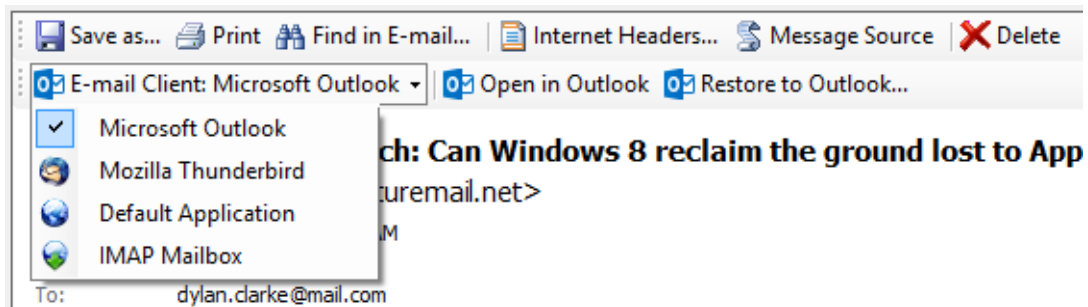
Click on *Message Source* to show the full source of the current message including all MIME-parts.

## Delete (only with the appropriate privilege)

Click on Delete to delete the current email from the archive. Please keep in mind that, in order to use this function, the appropriate privilege has to be in place.

## Reopening Emails in an Email Application

Emails previewed in MailStore can be reopened in any email application to reply to or forward them. Select an email client you want to open email messages in first, by clicking on *Email Client:*. MailStore only lists email clients that are supported and that are installed on the computer from which MailStore Client is executed.



Depending on the selected email client, additional button may be visible:

- **Open in <email client>** - Open the current message to the selected email client. Please note, that emails are simply opened, not stored, in the application. To restore emails to an email application, please use MailStore's Export Feature.
- **Restore to <email client>...** - Restore the current message to the selected email client. If further settings are required an additional button *Settings..* will be shown.

## 3.3 Accessing the Archive with the Microsoft Outlook integration

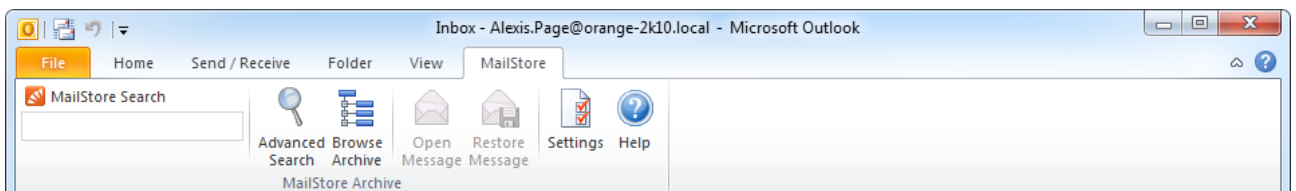
MailStore users can access their archives using a convenient add-in for Microsoft Outlook. A list of supported Microsoft Outlook version can be found under System Requirements.

### Requirements

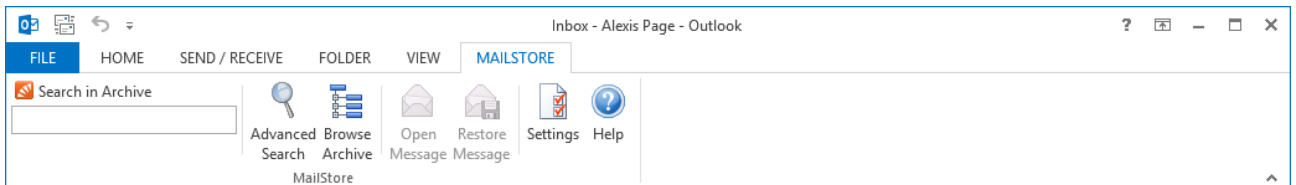
MailStore Server should be in use and the add-in for Microsoft Outlook should be installed on the appropriate machine. In this case, a toolbar (up to 2007) or a tab (in Outlook 2010) labeled "MailStore" will be visible in Microsoft Outlook.



*Image: MailStore toolbar in Microsoft Outlook 2007*



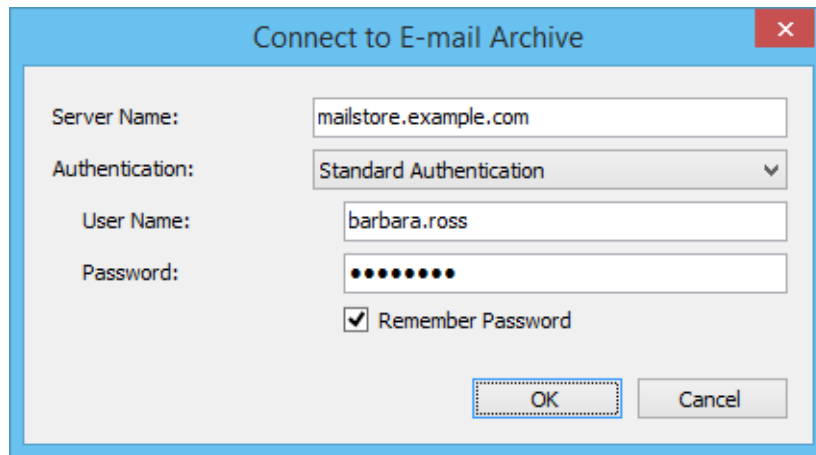
*Image: MailStore tab in Microsoft Outlook 2010*



*Image: MailStore tab in Microsoft Outlook 2013*

## Login to MailStore Server

If the MailStore Outlook Add-in is not pre-configured, you will be asked to log in to MailStore Server as soon as you click any button in the MailStore Outlook Add-in. Please refer to your system administrator for the server name and your access data.

A screenshot of a Windows-style dialog box titled "Connect to E-mail Archive". The dialog has a blue title bar with a red close button in the top right corner. Inside, there are four labeled text input fields: "Server Name:" containing "mailstore.example.com", "Authentication:" with a dropdown menu showing "Standard Authentication", "User Name:" containing "barbara.ross", and "Password:" containing ten black dots. Below the password field is a checked checkbox labeled "Remember Password". At the bottom right are two buttons: "OK" and "Cancel".

Connect to E-mail Archive

Server Name: mailstore.example.com

Authentication: Standard Authentication

User Name: barbara.ross

Password: ••••••••••

☒ Remember Password

OK Cancel

## Deleting Saved Access Data

If you would like to log in to a different server or use different access data, you may have to delete the existing access information saved in Microsoft Outlook. Please proceed as follows:

- Click on *Settings* in the MailStore Outlook Add-in
- Click on *Clear Cached Credentials*.
- Click on *OK*.
- Click on any button in the add-in to go back to the login window.

## Technical Considerations

- The MailStore Outlook Add-in uses the HTTP server integrated in MailStore Server to access the archive.
- If a valid SSL certificate was selected within the MailStore Server Service Configuration, you can mark the checkbox *Secure Connection* in the Outlook Add-in settings to use HTTPS instead of HTTP.
- If you have changed the configuration of the HTTP/HTTPS ports within the MailStore Server Service Configuration (the default HTTP port is 8461, the default HTTPS port is 8462), you must include the port number when logging in. Simply append the port number to the server name, separated by a colon (for example: mailstore:443)

## Search by Archive Folder

### Display of the Archive Folder

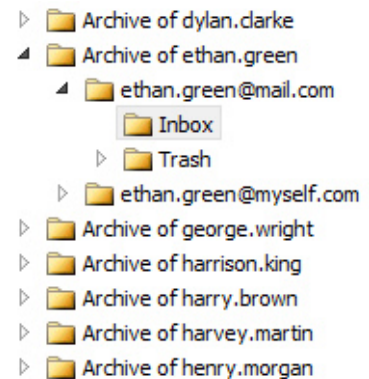
In the MailStore Outlook Add-in, click on *Browse Archive* to display the part of the archive that is visible to you.

### User Archives

The folder *My Archive* contains all emails that were archived from your mailboxes. If you have read-access to the archives of additional users, their emails are located in the folders labeled *Archive of <user name>*.

### Display of Emails in a Folder

To view the emails of a specific folder, simply click on the folder name. The emails are listed below the tree structure.



With quick search you can browse all emails located in the archives you have access to. This feature is especially suitable for simple queries; alternatively, the extended search can be used (see below).

### Using Quick Search

The input field is located in the MailStore Outlook Add-in. Simply enter one or more keywords and press *ENTER*. The search results are displayed. Keywords which appear in the header or the subject line are highlighted.

### Searching for Word Fragments

To display all emails containing a word beginning with a particular fragment, use the wildcard character (\*). For example:

```
auto*
```

will return *auto*, *automatic*, *automobile* etc.

### Searching for Words with unknown letters

To view all emails containing a word where you do not know how to spell it correctly, you can use the question mark (?). For example

```
"ho?se"
```

would locate *house* and *horse*.

### Searching for Phrases

To search for words appearing consecutively and in a specific order, use quotation marks ("). For example:

```
"Microsoft Windows"
```

will return the text *Microsoft Windows* but not *Microsoft Works* or *Windows 95*.

### Narrowing by Fields

A search for keywords or phrases can be limited to specific fields. For example:

```
subject:News          only in Subject
from:john@mailstore.com only in From
to:michael@mailstore.com only in To
cc:lisa@mailstore.com  only in Cc
bcc:customers@mailstore.com only in Bcc
```

## Excluding Words

To narrow a search, you may want to specify words which must not be present in the emails. To exclude words from the search results, prepend the word with the minus character (-). For example:

```
ZDNet -download-tip
```

returns all emails from ZDNet which do not contain *download-tip*.

## Combining Search Options

Any of the search options described above can be combined. For example:

```
ZDNET -"Daily Update"
```

returns all emails from ZDNet which do not contain the consecutive words *Daily Update*.

## Advanced Search

With MailStore's integrated extended search, complex queries can be executed which may not only refer to the email content but also parameters such as the date or the email size.

## Using the Advanced Search

In the MailStore Outlook Add-in, click on *Advanced Search* and enter the search parameters. The criteria are *AND*-connected, i.e. the search returns only those emails satisfying all criteria. Click on *Search* to start the search.

The screenshot shows the 'Search E-mail' dialog box with the following sections and controls:

- Search E-mail** (Title)
- Extended Search** (Section Header)
  - Search for: [Text Input Field]
  - ☒ Subject
 ☒ Sender/Recipient
  - ☒ Message Body
 ☒ Attachment File Names
  - ☒ Attachment Contents
- General** (Section Header)
  - Folder: (All Readable Folders) [Dropdown Menu]
  - ☒ Include subfolders
  - From: [Text Input Field]
  - To/Cc/Bcc: [Text Input Field]
  - Date: Any Date [Dropdown Menu]
- Extended** (Section Header)
  - Messages:
    - ☒ with attachments
    - ☒ without attachments
  - Size: Any Size [Dropdown Menu]
  - Priority: All [Dropdown Menu]
- Search** (Button)

## Search Criteria under "Extended Search"

Enter a keyword or phrase into the text field, and specify where MailStore is to direct the search. The following options are available:

- **Subject** - The subject line of the email is searched.
- **Sender/Recipient** - The fields "From", "To", "Cc", and "Bcc" are searched.
- **Message body** - The text-only or HTML sections of the email are searched (depending on availability).
- **Attachments File Names** - The file names of the email attachments are searched.
- **Attachment Contents** - The contents of the email attachments are searched. If and to what extent attachments can be searched depends on the indexing options specified (under *Administrative Tools*).

In the textfield *Search for*, all options described in section Quick Search, such as phrases and wildcards, are available here as well.

## Search Criteria under "General"

Under *General*, the following options are available:

- **Folder** - The folder to be searched by MailStore can be selected here. By default, this is the main folder of the current user. By clicking the button to the right of the text field, folders can also be selected using the folder structure. As administrator, the folders of all users can be searched.
- **Include subfolder** - If selected, MailStore not only searches the selected folder (e.g. *Inbox*), but all subfolders created therein (e.g. *Inbox / Projects 2008 / Profit Optimization*) as well.
- **From** - Any keywords or email addresses entered here are searched for only within the email's sender field.
- **To/Cc/Bcc** - Any keywords or email addresses entered here are searched for only within the email's recipient fields.
- **Date** - The timeframe the search is to cover can be selected here. Either a predefined range, such as *Yesterday* or *This year*, can be selected or, by choosing *Custom*, a specific period can be specified manually. In this case, the start and end dates will be included.

In the fields *From* and *To/Cc/Bcc*, all options, such as phrases and wildcards, described in section Quick Search are available.

## Search Criteria under "Extended"

Under *Advanced*, the following options are available:

- **Messages with/without attachments** - By default, all messages are searched, regardless of whether or not they have any file attachments. Clear one of the check boxes to remove certain emails, such as those without attachments, from the results.  
**Important:** These searches can be imprecise at times because items like background pictures could be regarded as attachments.
- **Size** - By default, all messages are searched regardless of their size. Use the appropriate fields provided to limit the search according to the size of the emails, e.g. at least *5 MB* or between *400 and 600 KB*.
- **Priority** - Emails are searched according to the priority level of the email as assigned by the sender. When choosing *Low*, all emails with a priority level lower than *Normal* are returned, when choosing *High*, all emails with a priority level higher than *Normal* are returned. Emails not containing any information regarding priority are assumed to have a priority level of *Normal*.

## Starting a Search

Click on *Search* to start the search. The results are displayed in a list.

## Refining the Search Results

To narrow the results after a search has been executed, click on *Advanced Search* again, enter additional search criteria and click on *Search*.

## Starting a New Search

To start a new search, click on *New Query*. All search criteria will be reset to their default values (i.e. no restrictions; the search covers all folders of the current user).

## Saving a Search

Search criteria that are used repeatedly (such as "all receipts from the last month") can be saved and reused at any time. Click on *Save As...* and choose a meaningful name for the search. Click on *Open* to access, edit or restart the search.

## Email Display

To view an email which was returned by one of the search functions described above, simply click on it. A preview of the email is displayed on the right side of the screen.

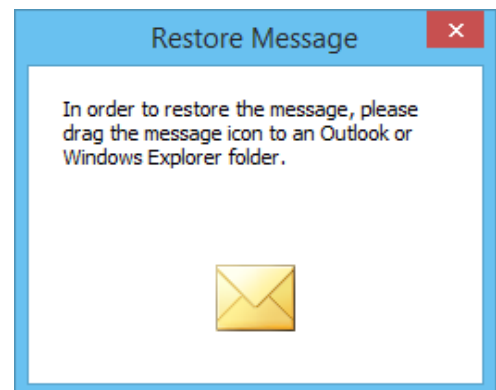
Please keep in mind that images and any formatting will not be displayed in the preview for security reasons. Emails cannot be forwarded or replied to within the preview, either.

For a comprehensive view of an archived email and the ability to use all the Microsoft Outlook features such as printing, forwarding and replying, click on *Open Email* in the MailStore Outlook Add-in. The email will be loaded from the archive and displayed, either immediately or after a few seconds depending on size.

## Restoring Emails to the Application

To restore an archived email which is no longer in your mailbox to Outlook, please proceed as follows:

- Locate the email within the archive and open it.
- In the MailStore Outlook Add-in, click on *Restore Message*.
- Drag and drop the envelope icon into an Outlook email folder or a Windows Explorer file system folder.
- The email is restored immediately or after a few seconds, depending on its size.



## Changing Regional Settings

By default the MailStore Outlook Add-in uses the same regional settings as Microsoft Outlook. The regional settings can also be set manually in the MailStore Outlook Add-in settings dialog.

## 3.4 Accessing the Archive using other Email Clients

With MailStore's integrated IMAP server you can access the MailStore archive in read-only mode with any IMAP-enabled email client. This provides a convenient way to access the email archive using not only many alternative email clients running on any operating system (e.g. MacOS or Linux) but also through mobile platforms such as Android, iPhone or Symbian. Installing MailStore Client on the user machines is not required.

### Prerequisite for Using the MailStore-Integrated IMAP Server

Activation and configuration of the integrated IMAP server are done using the MailStore Server Service Configuration. All IMAP-enabled email clients are supported.

### Accessing the Integrated IMAP Server

Unless the integrated IMAP server is configured otherwise, users can access MailStore Server using the following settings:

- **Incoming Mail Server** - Host name or IP address of the MailStore server
- **Port** - For unencrypted or TLS-encrypted connections standard IMAP port 143 is used. For SSL-encrypted connections standard IMAP port 993 is used.
- **User Name** - Name of the MailStore user.
- **Password** - Password which is required for accessing the MailStore server.

**Please note:** In addition to configuring the incoming mail server, email clients often require configuring the outgoing mail server as well. In this case, using the same data as for an existing email account will facilitate further processing emails from the email archive.

### Configuring Mobile Devices

In addition to providing access for alternative email clients or for non-Windows operating systems, using the integrated IMAP server is especially useful for mobile devices. The following articles provide detailed information on how to configure an email account for accessing the integrated IMAP server:

- Accessing the Archive with iPhone and iPod touch
- Accessing the Archive from Android Based Devices

## 3.5 Accessing the Archive with MailStore Web Access

MailStore Web Access makes the archive accessible through an internet browser. This way, important functions such as browsing and viewing archived emails can be made available under any system and without having to install additional software. An installation of MailStore Client on the user computers is not required. A manual specifically for the iPhone/iPod touch version is available in chapter Accessing the Archive with iPhone and iPod touch.

### Requirements for Using MailStore Web Access

Activation and configuration of MailStore Web Access is done in the MailStore Server Service Configuration. A list of supported internet browsers can be found in the System Requirements.

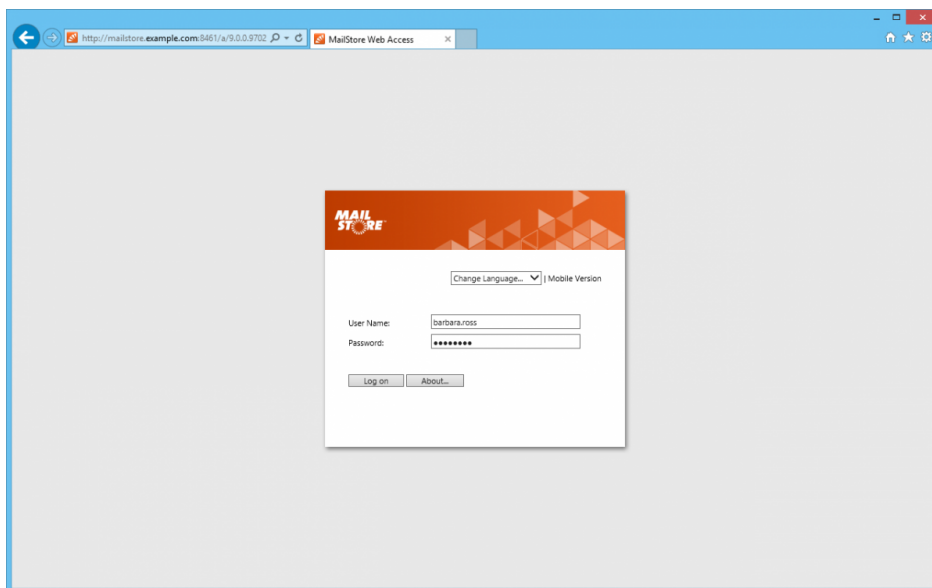
In order to use the *Restore to Mailbox* feature, a MailStore administrator needs to configure the SMTP settings under *Administrative Tools > Miscellaneous > SMTP Settings* first.

### Accessing MailStore Web Access

Unless MailStore Server was configured differently, users can use the following internet addresses to access MailStore Web Access:

```
http://<servername>:8461  
https://<servername>:8462
```

Please replace <servername> with the actual name of the server on which MailStore Server is installed.



To login to MailStore Web Access, fill out the *User Name* and *Password* fields and click *Log on*. Please note, that the username must match the MailStore username of the appropriate user.

**Notice:** If you are using Active Directory integration with MailStore Server, the Microsoft Internet Explorer may be able to authenticate users via Single-Sign-On (Login without username and password).

## Search by Archive Folder

### User Archives

The folder *My Archive* contains all emails that were archived from your mailboxes. If you have read-access to the archives of additional users, their emails are located in the folders labeled *Archive of <user name>*.

### Display of Emails in a Folder

To view the emails of a specific folder, simply click on the folder name. The emails are listed below the tree structure.

## Quick Search

With quick search you can browse all emails located in the archives you have access to. This feature is especially suitable for simple queries; alternatively, the extended search can be used (see below).

### Using Quick Search

The input field is located in the upper part of MailStore Web Access. Simply enter one or more keywords and press *ENTER*. The search results are displayed. Keywords which appear in the header or the subject line are highlighted.

### Searching for Word Fragments

To display all emails containing a word beginning with a particular fragment, use the wildcard character (\*). For example:

```
auto*
```

will return *auto*, *automatic*, *automobile* etc.

### Searching for Words with unknown letters

To view all emails containing a word where you do not know how to spell it correctly, you can use the question mark (?). For example

```
"ho?se"
```

would locate *house* and *horse*.

### Searching for Phrases

To search for words appearing consecutively and in a specific order, use quotation marks (""). For example:

```
"Microsoft Windows"
```

will return the text *Microsoft Windows* but not *Microsoft Works* or *Windows 95*.

## Narrowing by Fields

A search for keywords or phrases can be limited to specific fields. For example:

subject:News	only in <i>Subject</i>
from:john@mailstore.com	only in <i>From</i>
to:michael@mailstore.com	only in <i>To</i>
cc:lisa@mailstore.com	only in <i>Cc</i>
bcc:customers@mailstore.com	only in <i>Bcc</i>

## Excluding Words

To narrow a search, you may want to specify words which must not be present in the emails. To exclude words from the search results, prepend the word with the minus character (-). For example:

```
ZDNet -download-tip
```

returns all emails from ZDNet which do not contain *download-tip*.

## Combining Search Options

Any of the search options described above can be combined. For example:

```
ZDNET -"Daily Update"
```

returns all emails from ZDNet which do not contain the consecutive words *Daily Update*.

## Advanced Search

With MailStore's integrated extended search, complex queries can be executed which may not only refer to the email content but also parameters such as the date or the email size.

## Using the Advanced Search

In the upper part of the MailStore Web Access, click on *Advanced Search* and enter the search parameters. The criteria are *AND*-connected, i.e. the search returns only those emails satisfying all criteria. Click on *Search* to start the search.

**Search E-mail**

**Extended Search**

Search for:

☒ Subject ☒ Sender/Recipient  
☒ Message Body ☒ Attachment File Names  
☒ Attachment Contents

**General**

Folder:  ...

☒ Include subfolders

From:

To/Cc/Bcc:

Date:

**Extended**

Messages: ☒ with attachments ☒ without attachments

Size:

Priority:

## Search Criteria under "Extended Search"

Enter a keyword or phrase into the text field, and specify where MailStore is to direct the search. The following options are available:

- **Subject** - The subject line of the email is searched.
- **Sender/Recipient** - The fields "From", "To", "Cc", and "Bcc" are searched.
- **Message body** - The text-only or HTML sections of the email are searched (depending on availability).
- **Attachments File Names** - The file names of the email attachments are searched.
- **Attachment Contents** - The contents of the email attachments are searched. If and to what extent attachments can be searched depends on the indexing options specified (under *Administrative Tools*).

In the textfield *Search for*, all options described in section Quick Search, such as phrases and wildcards, are available here as well.

## Search Criteria under "General"

Under *General*, the following options are available:

- **Folder** - The folder to be searched by MailStore can be selected here. By default, this is the main folder of the current user. By clicking the button to the right of the text field, folders can also be selected using the folder structure. As administrator, the folders of all users can be searched.
- **Include subfolder** - If selected, MailStore not only searches the selected folder (e.g. *Inbox*), but all subfolders created therein (e.g. *Inbox / Projects 2008 / Profit Optimization*) as well.
- **From** - Any keywords or email addresses entered here are searched for only within the email's sender field.
- **To/Cc/Bcc** - Any keywords or email addresses entered here are searched for only within the email's recipient fields.
- **Date** - The timeframe the search is to cover can be selected here. Either a predefined range, such as *Yesterday* or *This year*, can be selected or, by choosing *Custom*, a specific period can be specified manually. In this case, the start and end dates will be included.

In the fields *From* and *To/Cc/Bcc*, all options, such as phrases and wildcards, described in section Quick Search are available.

## Search Criteria under "Extended"

Under *Advanced*, the following options are available:

- **Messages with/without attachments** - By default, all messages are searched, regardless of whether or not they have any file attachments. Clear one of the check boxes to remove certain emails, such as those without attachments, from the results.  
**Important:** These searches can be imprecise at times because items like background pictures could be regarded as attachments.
- **Size** - By default, all messages are searched regardless of their size. Use the appropriate fields provided to limit the search according to the size of the emails, e.g. at least *5 MB* or between *400 and 600 KB*.
- **Priority** - Emails are searched according to the priority level of the email as assigned by the sender. When choosing *Low*, all emails with a priority level lower than *Normal* are returned, when choosing *High*, all emails with a priority level higher than *Normal* are returned. Emails not containing any information regarding priority are assumed to have a priority level of *Normal*.

## Starting a Search

Click on *Search* to start the search. The results are displayed in a list.

## Refining the Search Results

To narrow the results after a search has been executed, click on *Advanced Search* again, enter additional search criteria and click on *Search*.

## Starting a New Search

To start a new search, click on *New Query*. All search criteria will be reset to their default values (i.e. no restrictions; the search covers all folders of the current user).

## Saving a Search

Search criteria that are used repeatedly (such as "all receipts from the last month") can be saved and reused at any time. Click on *Save As...* and choose a meaningful name for the search. Click on *Open* to access, edit or restart the search.

## Email Preview

To view an email which was returned by one of the search functions described above, simply click on it. A preview of the email is displayed on the right side of the screen.

Please keep in mind that images and any formatting will not be displayed in the preview for security reasons. Emails cannot be forwarded or replied to within the preview, either.

## Opening Email in Email Application

In the toolbar above the email preview, two buttons are available: *Open in Microsoft Outlook (MSG)* and *Open in Email Client (EML)*. These may be used for instance to answer or forward archived emails. Additionally styles and graphics of HTML emails can be displayed this way.

## Restoring Email

In the toolbar above the email preview you can find the function *Restore to Mailbox*. By using that function, you can send the currently displayed message to an arbitrary email address in order to restore the message from the archive. Before you can use that function, preparations have to be done by a MailStore administrator. Please see MailStore Server Service Configuration for more information.

## Printing the Displayed Email

In the toolbar above the email preview you can find the function *Print*. By using that function, you can print the displayed message including the message headers.

## Internet Headers

In the toolbar above the email preview click on *Internet Headers...* to display the internet headers of the current message as well as all MIME parts.

## Changing Regional Settings

By default the MailStore Web Access uses the same regional settings as your web browser. The regional settings can also be set manually in the MailStore Web Access settings dialog.

## 3.6 Accessing the Archive with MailStore Mobile Web Access

### Requirements for Using MailStore Mobile Web Access

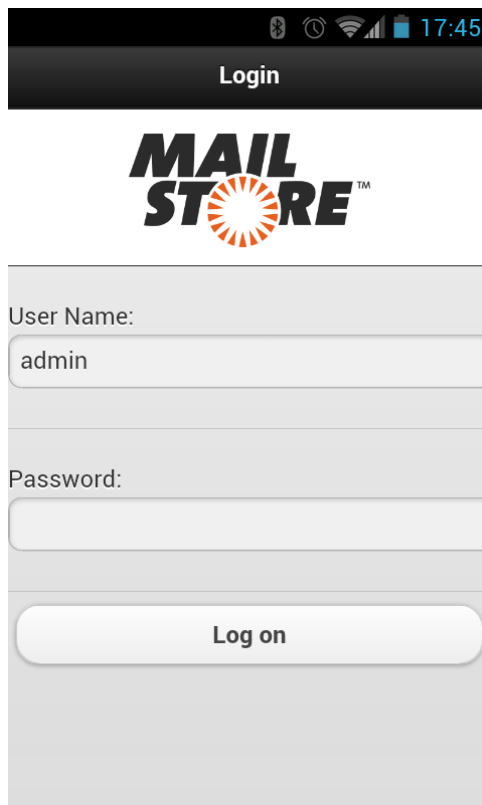
Activation and configuration of MailStore Mobile Web Access are done using the MailStore Server Service Configuration. A list of supported internet browsers is available under System Requirements.

### Accessing MailStore Mobile Web Access

Unless MailStore Server is configured otherwise, users can access MailStore Mobile Web Access using the following internet addresses:

```
http://<servername>:8461/m  
https://<servername>:8462/m
```

Please replace <servername> with the actual name or the IP address of the computer on which MailStore Server is installed.

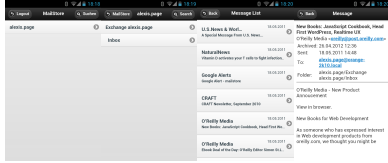


The screenshot displays the MailStore Mobile Web Access login interface. At the top, a black header bar contains the word "Login" in white. Below this is the MailStore logo, which consists of the word "MAIL" in bold black letters above the word "STORE" in bold black letters, with a stylized orange sunburst icon between them. The main content area is light gray and contains two input fields. The first field is labeled "User Name:" and has the text "admin" entered. The second field is labeled "Password:" and is empty. Below these fields is a white button with the text "Log on" in black.

To log in to MailStore Mobile Web Access, please fill out the fields *User Name* and *Password* and click on *Log on*. Please keep in mind that the user name must always match the user's MailStore name.

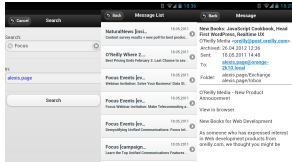
## Search by Folder Structure

- After login, a list of all readable user archives appears.
- To open a user archive or a folder, simply tap on it.
- To return to the previous screen, tap on the *Back* button in the upper left corner.
- To view the emails in a folder, tap on emails in the folder.
- To view an email, simply tap on it.



## Full Text Search

- To search for a specific keyword, first go to the archive to be searched. (Subfolders are included in the search).
- Tap on *Search*.
- Enter the keyword and tap on *Search* again.
- The search results are displayed.
- To view an email, simply tap on it.



# 4

Chapter

**Export Email**

## 4.1 Exporting Email

MailStore provides several functions regarding the export of archived emails. Emails can be exported directly into server mailboxes, or to the file system as individual email files (EML or MSG format), for example.

**Please note:** Backup strategies (a backup of the entire archive) are discussed separately in the article Backup and Restore.

### Available Export Destinations

#### Email Server

- **Exchange mailbox** - A folder named *MailStore Export* is created in the Exchange mailbox into which emails are copied.
- **IMAP mailbox** - A folder named *MailStore Export* is created in an IMAP mailbox into which emails are copied.

#### Email Clients

- **Microsoft Outlook** - A folder named *MailStore Export* is created in Microsoft Outlook into which emails are copied.
- **Windows Mail** - A folder named *MailStore Export* is created in Windows Mail into which emails are copied.
- **Mozilla Thunderbird** - A folder named *MailStore Export* is created in Mozilla Thunderbird into which emails are copied.
- **Mozilla SeaMonkey** - A folder named *MailStore Export* is created in Mozilla SeaMonkey into which emails are copied.

#### Email Files

- **Directory (File System)** - Either EML or MSG files are created (one per email).
- **Outlook PST File** - A folder named *MailStore Export* is created in a Microsoft Outlook PST file into which emails are copied.

**Please note:** EML files can be opened independently from MailStore by double-clicking and moving to applications such as Outlook Express via drag & drop. Outlook MSG files can be opened or archived directly with all versions of Microsoft Outlook (except Outlook Express).

### Starting an Export

**Using the email preview** - To export an email currently displayed in the Email Preview, click on Export in the menu bar above the preview and select the export destination. A window appears in which additional settings may have to be specified.

**Using the list of emails (folder contents or search results)** - Highlight the emails to be exported by holding down the control key (Ctrl) and right-clicking onto the emails. Pressing Ctrl and A highlights all emails. Click *Export To* and select the export destination. A window appears in which additional settings may have to be specified.

**Using the page "Export Email"** - On this page, exporting tasks can be created and executed as export profiles (just like archiving profiles). Export profiles hold information about which emails will be exported to which destination. Each profile (i.e. the exporting task) can be executed manually or regularly according to a schedule. To learn more, please read on in the next section.

## Working with Exporting Profiles

In MailStore, every exporting task is stored as an exporting profile. The exporting process is started by executing such a profile.

Such an exporting profile could contain the following information:

- WHAT: Mailbox p.berten@company.com
- TO: Exchange server EXCHANGE01
- SCOPE: All folders except drafts

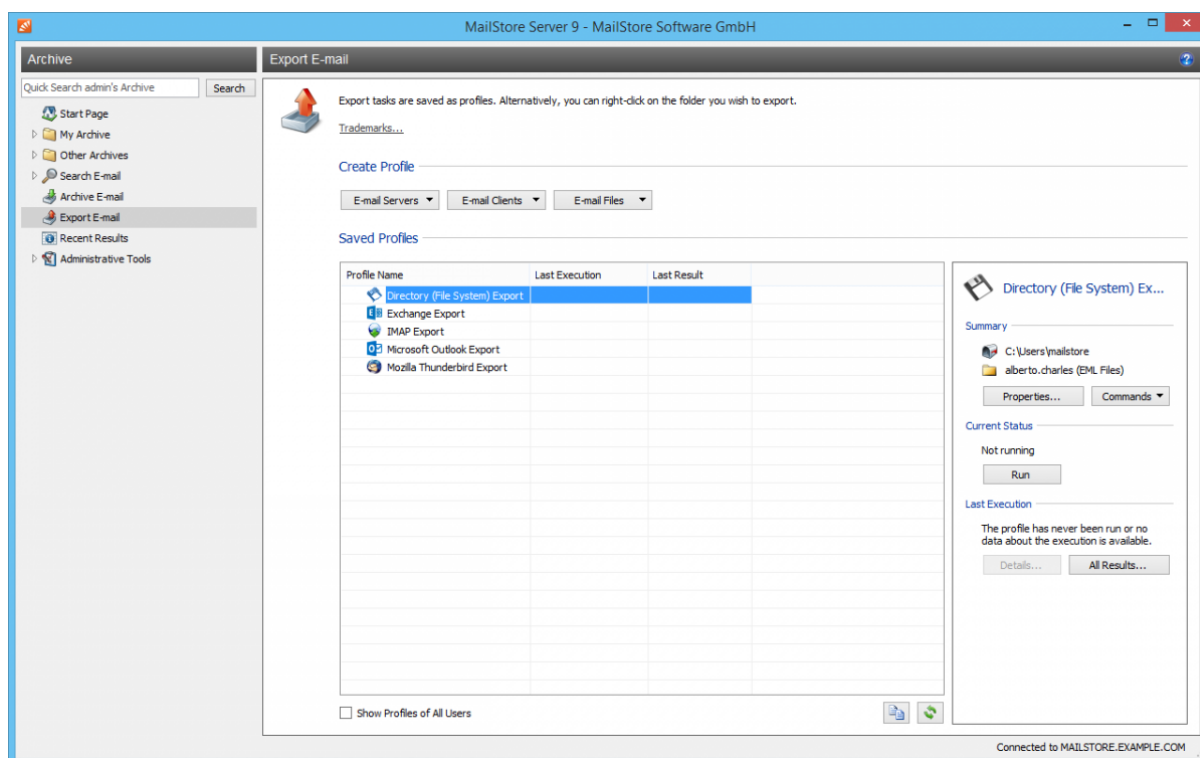
Like archiving profiles, existing export profiles can be executed, modified, deleted or even executed automatically. Further details can be found in the chapters [[Email\_Archiving\_with\_MailStore\_Basics#Working\_with\_Archiving\_Profiles Working with Archiving Profiles]] and Automating the Archiving Process

**Important notice:** Be aware that an export does not verify if the messages already exist in the destination. Therefore duplicates are created in the selected destination when re-executing an export profile multiple times. Thus it is not recommended to automate the execution of export profiles. Only exception is the *Directory (File System)* export profile, where MailStore is able to do a comparison based on the file names.

## Creating an Export Profile

To create a new export profile, please proceed as follows:

- Start MailStore Client on the computer which is to execute the export. Log on as administrator if the emails of other users are to be exported as well. Only a MailStore administrator is allowed to export the emails of others.
- In MailStore, click on *Export Email*.



- From the lists in the upper *Create Profile* area, select the destination to which emails are to be exported.
- A wizard opens to assist in specifying the export settings.
- At the first step, specify which folder is to be exported (subfolders are always included). Depending on the export destination, the file format to be used (e.g. EML, MSG or database backup) can be selected as well. Click on *Next*.

**Please note:** Below the list of folders, a saved search can also be selected. MailStore runs the search

before executing the actual export procedure; all emails returned by the search will be exported.

- At the second step, specify the exact target location to which emails are to be exported. For example, if *Exchange Mailbox* was selected as export destination earlier, the access data for the target mailbox can be specified and verified by clicking on *Test*. Then click on *Next*.
- Depending on the export destination specified, additional settings can be selected at the next step. For example, if *IMAP mailbox* was selected as the destination, a timeout value can be set, if needed.
- At the last step, a name for the export profile can be specified. After clicking on *Finish*, the profile will be listed under *Saved Profiles* and can be run immediately, if desired.

# 5

Chapter

## **Administration**

## 5.1 Users, Folders and Settings

### User Management

When emails are archived, they are always assigned to individual users (the original owners of the emails). Every MailStore user has his or her own user archive which is created automatically upon setting up the new user account. For this reason, before any emails can be archived, the appropriate user accounts have to be created first.

### Options for the Setup of New User Accounts

- Adding users manually (described here)
- Synchronizing User Accounts with Active Directory
- Synchronizing User Accounts with an Application Integration Server
- Synchronizing User Accounts with an IceWarp Server
- Synchronizing User Accounts with a Kerio Connect Server
- Synchronizing User Accounts with a generic LDAP Server
- Synchronizing User Accounts with MDAemon USERLIST.DAT

### Opening User Management

Log on to MailStore Client as administrator. Click on *Administrative Tools* and then on *Users*.

### Creating a New User

Click on *Create New* and enter a login name for the new user. This could be a combination of first and last name, for example. Click on *OK* to confirm. In the next window, additional settings may be specified. Again, click on *OK* to confirm the new settings.

The user is added to the list of users and can be edited at any time, as described in the following section.

**Please note:** The emails of a new user can be archived right away, no additional settings have to be specified. However, for the user to be able to log on to MailStore Client, a password has to be created (in the case of MailStore integrated authentication).

## Editing an Existing User Account

Select a user from the list and click on *Properties*.

The screenshot shows the 'User Properties' dialog box for the user 'barbara.ross'. The dialog is divided into several sections:

- General Information:**
  - Login Name: barbara.ross
  - Full Name: Barbara Ross
  - Authentication: MailStore-integrated (dropdown menu) with a 'Password...' button.
  - ☐ User is an Administrator
- Integration (optional):**
  - LDAP DN String: (empty text box)
  - E-mail Addresses: barbara.ross@example.com (text box) with 'comma separated' label.
  - POP3 User Names: (empty text box) with 'comma separated' label.
- Privileges:**
  - ☒ Log on to MailStore Server
  - ☒ Change Password
  - ☒ Archive E-mail (Unlimited dropdown)
  - ☐ Export E-mail (Unlimited dropdown)
  - ☐ Delete E-mail
- Folder Access Table:**

Folder	Access
barbara.ross	Read, Write

Buttons at the bottom: OK, Cancel, Help. On the right side of the table, there are buttons: Add New..., Edit, Delete.

- In the next window, the following settings can be specified:

### General Information

- Full Name:** Enter first and last name of the user.
- Authentication:** If choosing the setting *MailStore-integrated*, users have to use the password specified in user management when logging on to MailStore Client. Click on *Password...* to set the password. Users can later change their passwords through the *Administrative Tools* in their installation of MailStore Client.  
Alternatively, the authentication *Directory Services* can be used. In this case, users can log on to MailStore using their directory service credential (e.g. Active Directory access data).
- User is an Administrator:** Only administrators have access to the administrative functions found in MailStore Client's *Administrative Tools* and in the management shell.

### Integration (optional)

- LDAP DN String:** This information is needed if the user is to be authenticated through an LDAP based directory service such as Active Directory or other generic LDAP servers.
- Email Addresses:** This information is only needed for the following archiving options: MailStore Proxy Server, Microsoft Exchange Journaling, and archiving multiple Exchange mailboxes synchronously.
- POP3 User Names:** This information is only needed for archiving tasks using MailStore Proxy. If the POP3 user name does not match the user's email address, the user name has to be specified here.

### Privileges

Privileges are described separately in section *Specifying Privileges*. As long as the appropriate privileges are not set, users are not able to delete any emails from the archive (even their own).

- Click on *OK* to apply the new settings.

## Renaming Users

Select the user whose name you would like to change from the list of users and click on *Rename*. In the dialog window, enter the new user name and click *OK*.

Please note that the user archive must be renamed manually. The same applies to user privileges, archiving profiles, scheduled tasks, etc.

## Deleting Users

Click on *Administrative Tools > User and Privileges* and then on *Users*. Select the one or more users from the list and click on *Delete*.

**Deleting a user does not delete the emails that were archived for that user. The corresponding user archive, including all emails, is still available in MailStore and can be accessed by the administrator.**

Deleting a user releases the corresponding user license (despite the remaining user archive). This license can be used to create a new user account.

## Specifying Privileges

To specify the privileges for a user, click on *Administrative Tools > Users and Privileges* and then on *Users*. Select the appropriate user from the list and click on *Properties*.

**Please Note:** If you highlight multiple users and click on *Properties*, you can change the privileges for all selected users in one step.

**User Properties**

**barbara.ross**

**General Information**

Login Name:

Full Name:

Authentication:

☐ User is an Administrator

**Integration (optional)**

LDAP DN String:

E-mail Addresses:  comma separated

POP3 User Names:  comma separated

**Privileges**

☒ Log on to MailStore Server ☒ Change Password

☒ Archive E-mail

☐ Export E-mail

☐ Delete E-mail

Folder	Access
barbara.ross	Read, Write

## The Following Privileges can be Assigned:

### Log on to MailStore Server

Only users with this privilege can log on to MailStore Server through MailStore Client. Please note: Without this privilege, emails can still be archived for the respective user.

### Change Password

Only users with this privilege can change their passwords independently in MailStore's *Administrative Tools* under *Change Password*. Users without this privilege must use the password created by the administrator in user management (relevant with MailStore-integrated authentication).

### Archive Email

Only users with this privilege can execute archiving profiles independently and thereby archive emails to MailStore Server. **Please note:** An administrator can always archive emails for the user regardless of this setting. Please keep in mind that users can archive emails only if they have write-access to their MailStore user folders. This setting can be specified under *Folder Access* (described below).

**Unlimited** - Users with this privilege can create and edit archiving profiles.

**Run existing profiles only** - Users with this privilege can only execute already existing archiving profiles but can neither create new profiles nor modify existing ones.

**Manage profiles only** - Users with this privilege can modify already existing archiving profiles and create new ones, but cannot run any profiles.

You can find additional information about this topic in chapter Working with Archiving Profiles

### Export Email

Only users with this privilege can export emails from MailStore. Please see chapter Exporting Email for a description of the many options MailStore offers for email export.

**Unlimited** - Users with this privilege can create and edit export profiles.

**Run existing profiles only** - Users with this privilege can only execute already existing export profiles but can neither create new profiles nor modify existing ones.

**Manage profiles only** - Users with this privilege can modify already existing export profiles and create new ones, but cannot run any profiles.

Additional information about this topic can be found in chapter Working with Export Profiles

### Delete Email

Only users with this privilege can delete emails from their user archives. Please keep in mind that this privilege should only be granted with great care, because legal requirements are hard, if not impossible, to meet if users are allowed to delete their emails independently. Once deleted, emails can only be recovered by restoring a MailStore backup.

## Folder Access (e.g. Access to the Emails of Other Users)

All main folders, which the current user has access to, are listed here. These folders correspond to the archives of individual MailStore users and contain all their archived emails. By default, users have only access to their own archives (to read and write, but not to delete). By clicking on *Add New*, the main folder of another user can be added to the list of folders accessible by the current user. Then the type of access to be permitted has to be specified.

The following options are available:

- Full Access
- Read
- Write
- Delete

From the users' perspective, the folders they have access to appear as entries in the folder structure of MailStore Client. Please refer to section The MailStore Folder Structure for more information.

Please keep in mind that users can archive emails independently only if they have write-access to their own folders.

## Overview of all Privileges Regarding Folder Access

To view all privileges regarding folder access, click on *Administrative Tools > Users and Privileges* and then on *Privileges*.

The privileges displayed here can be customized on the user management page.

**Archives and Privileges Overview**

Archive	User Name	Privileges
adam.tunney	adam.tunney	Read
alberto.charles	alberto.charles	Read
alex.martin	alex.martin	Read
alice.bailey	amy.pridemore	Read
alma.hart	alice.bailey	Read
amy.fernandes	alice.bailey	Read
amy.pridemore	amy.fernandes	Read
andrew.speaks	alex.martin	Read
anita.yarger	amy.pridemore	Read
ann.bozeman	alice.bailey	Read
anna.avery	andrew.speaks	Read
arnold.vela	andrew.speaks	Read
barbara.childress	anita.yarger	Read
barbara.ross	ann.bozeman	Read
barton.stevens	anna.avery	Read
becky.martin	arnold.vela	Read
ben.christy	arnold.vela	Read
bernice.arnold	barbara.childress	Read
beverly.darrington	barbara.ross	Read, Write
blaine.robinson	barton.stevens	Read
bob.quesenberry	becky.martin	Read
hobbie.lehowitz	ben.christy	Read
	bernice.arnold	Read
	beverly.darrington	Read
	blaine.robinson	Read
	bob.quesenberry	Read
	hobbie.lehowitz	Read

Connected to MAILSTORE.EXAMPLE.COM

The first column shows all user archives, the second column shows the MailStore users that have access to the respective user archive, and the third column lists the type of access privilege (e.g. Read, Write).

## 5.2 Active Directory Integration

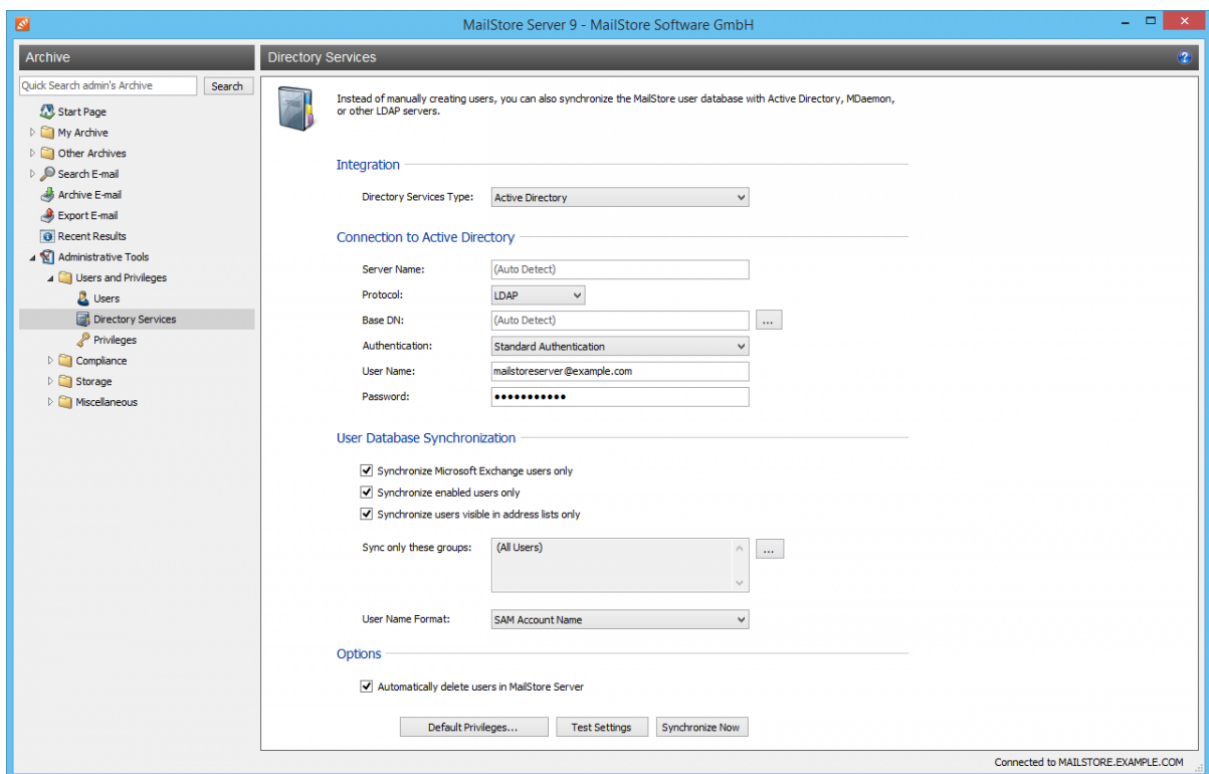
In addition to adding users manually as described in chapter User Management, MailStore Server can synchronize its internal user database with the Active Directory of your company.

During synchronization user information such as user names and email addresses are read from Active Directory and recorded in MailStore Server's user database. No changes are made to the Active Directory itself by MailStore Server. The scope of the synchronization can be limited through filters.

**Please note:** MailStore Server does support neither subdomains nor domain trusts. The MailStore Server service must run as 'Local System account' and the server must be a member of the domain if you want to use 'Integrated Windows authentication'.

### Accessing Directory Service Integration

- Log on to MailStore Client as a MailStore Server administrator.
- Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*.
- In the *Integration* section, change the directory service type to *Active Directory*.



## Connection to Active Directory

For synchronization MailStore Server requires information on how to connect to the Active Directory.

- **Server (optional)**  
DNS name or IP address of an Active Directory domain controller. If the MailStore Server machine is a member of the Active Directory, this setting is detected automatically.
- **Protocol**  
The protocol used to communicate with an Active Directory domain controller.
  - *LDAP*  
The default protocol when accessing an Active Directory. Though parts of the connection is unencrypted the real payload is encrypted.
  - *LDAPS*  
Additionally SSL secured version. Be aware that a properly configured certificate infrastructure is required, in which the MailStore Server computer must classify the domain controller's certificate as trustworthy.
- **Base-DN (optional)**  
Base DN of your Active Directory. Often the Base DN can be derived from the Active Directory domain name. For example, if the Active Directory domain name is *company.local* the Base DN usually is *dc=company,dc=local*. The Base DN can also be selected by clicking the button left of the text field if access to an Active Directory domain controller is available. If the MailStore Server machine is a member of the Active Directory, this setting is detected automatically.
- **Authentication**  
Define how the MailStore Server service should identify itself to the Active Directory:
  - *Standard Authentication*  
If MailStore Server is not installed directly on an Active Directory domain controller, using standard authentication is required. In this case, fill out the *User Name* and *Password* fields; enter the user name in UPN notation, e.g. *Administrator@company.local*
  - *Windows Authentication*  
If MailStore Server is installed directly on an Active Directory domain controller, the MailStore Server service already has the necessary privileges to authenticate against Active Directory using Windows authentication.

## User Database Synchronization

After configuring the connection settings as described above, you can specify filter criteria for the Active Directory synchronization in this section.

- **Synchronize Microsoft Exchange users only**  
Only user accounts with email addresses configured in Active Directory will be taken into account by the synchronization. Clear this checkbox only if all Active Directory users should be created as MailStore Server users as well.
- **Synchronize enabled users only**  
Only user accounts enabled in Active Directory will be taken into account by the synchronization. Deactivating this option may be useful if certain Exchange mailboxes should be archived whose Active Directory user accounts are deactivated by default.
- **Synchronize users visible in address lists only**  
Only Active Directory user accounts will be taken into account by the synchronization whose Exchange mailboxes are not hidden from Exchange address lists.
- **Sync only these groups**  
Choose one or several Active Directory security groups if you only want their members to be created as MailStore Server users. That way it's possible to exclude certain Active Directory accounts from being synchronized to MailStore Server, e.g. system accounts.

## Options

- **Automatically delete users in MailStore Server**

Here you can choose whether users whose accounts have been deleted in the Active Directory will also be deleted in MailStore Server's user database by the synchronization. If the archive folder of such a user already contains archived emails, only the user entry but not its archive folder will be deleted in MailStore Server. Additionally, only MailStore Server users that have their authentication method set to *Directory Services* will be deleted.

## Assign Default Privileges

By default, users that have been synchronized to MailStore Server from an Active Directory have the privilege to log on to MailStore Server as well as read access to their own user archive.

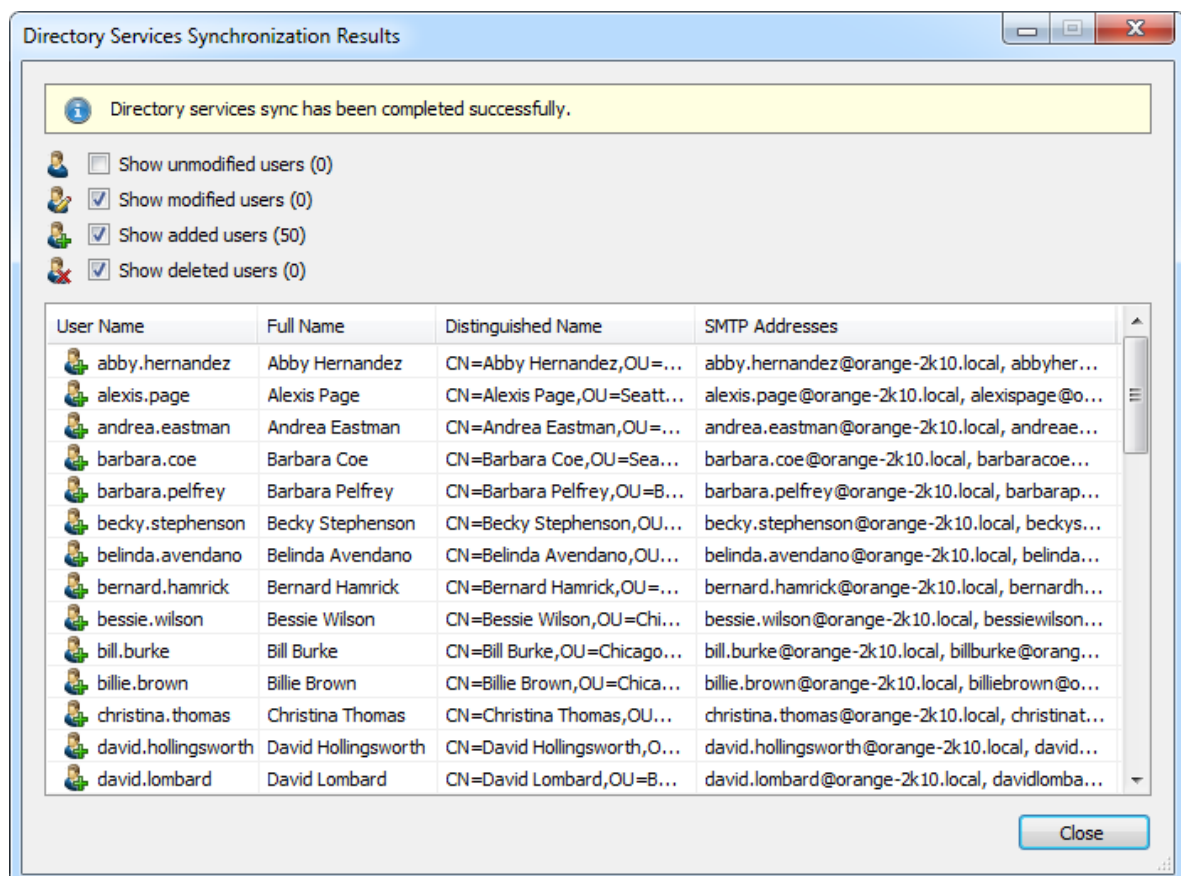
You can configure those default privileges before synchronization, for example, to assign the privilege *Archive E-mail* to all new users. To do this, click on *Default Privileges...*

More information on managing user privileges and their effects is available in the chapter Users, Folders and Settings which also has details on editing existing privileges.

## Run Directory Services Synchronization

Click on *Test Settings* to check synchronization configuration and the results returned by the Active Directory without any changes to the MailStore Server user database being actually committed.

To finally run the synchronization, click on *Synchronize now*. The results are shown with any changes committed to the MailStore Server user database.



## Login with Active Directory Credentials

By default, each user created in MailStore Server has a local password. The MailStore Server administrator can specify this password during creation of a new user account. The respective user can later change this password in MailStore Client's *Quick Access* section if he or she has ample privileges.

Alternatively, if an Active Directory is available, you can configure MailStore Server to allow users to log on to MailStore Server using their Active Directory credentials.

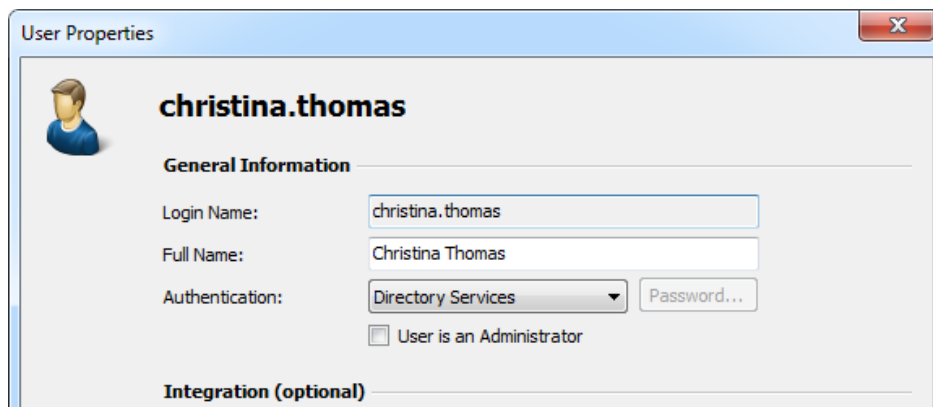
## Procedure for Users Created by Synchronization with Active Directory

If you have created MailStore Server users by Active Directory synchronization as described in the previous section, no further action is required. In this case, MailStore Server has already configured all necessary settings automatically for you. Users can log on to MailStore Server via *Standard Authentication* by using their Active Directory username and Active Directory password.

## Procedure for Manually Created Users

If you have created MailStore Server users manually and want them to be able to log on using their Active Directory credentials, please proceed as follows after you have configured the Active Directory integration as described above.

- Verify that the names of the MailStore Server users match those of the corresponding Active Directory users.
- In the *General Information* section of the user properties select *Directory Services* for *Authentication*.



Users can now log on to MailStore Server via *Standard Authentication* by using their Active Directory username and Active Directory password.

## MailStore Client Single Sign-On

For information on using the single sign-on functionality in Active Directory environments, please refer to the article MailStore Client Deployment.

## 5.3 IceWarp Server Integration

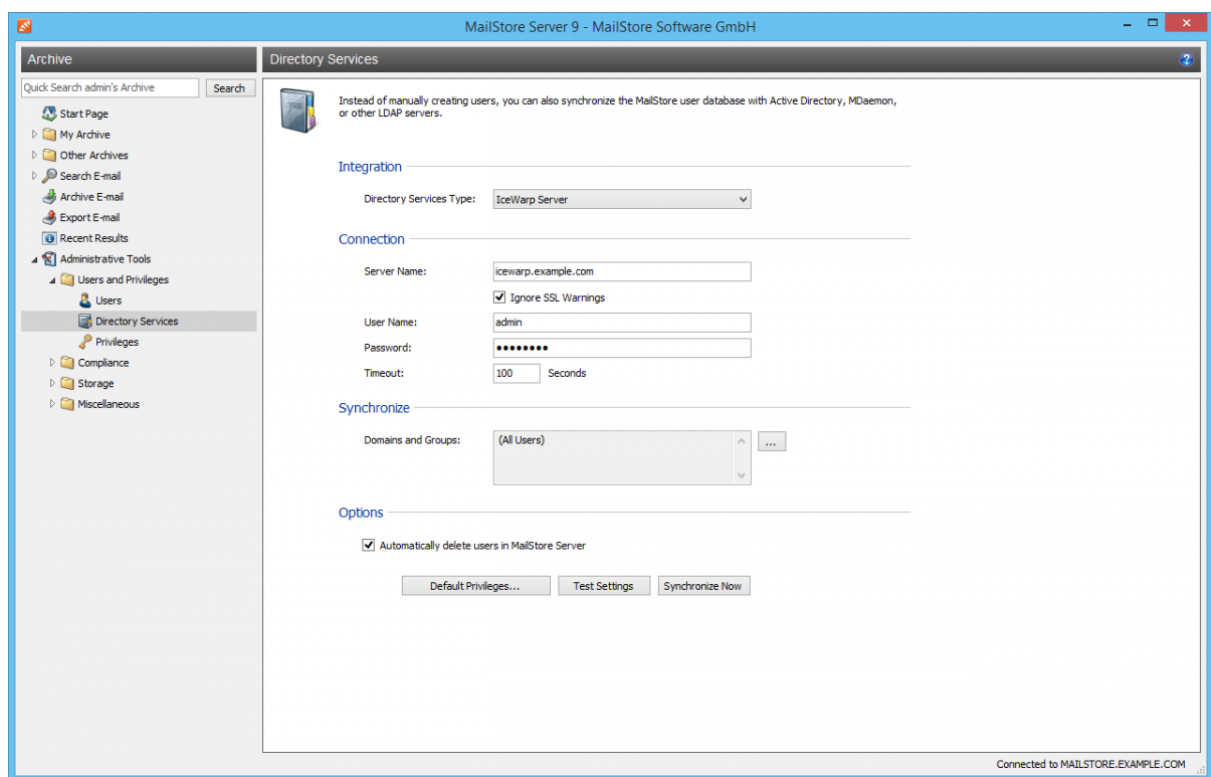
In addition to adding users manually as described in chapter User Management, MailStore Server can synchronize its internal user database with the IceWarp Server of your company.

During synchronization user information such as user names and email addresses are read from IceWarp Server and recorded in MailStore Server's user database. No changes are made to the IceWarp Server itself by MailStore Server. The scope of the synchronization can be limited through filters.

*Please note:* For using this feature, IceWarp Server API 10.4 or newer is required.

### Accessing the Directory Service Integration

- Log on to MailStore Client as a MailStore Server administrator.
- Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*.
- In the *Integration* section, change the directory service type to *IceWarp Server*.



### Connection to the IceWarp Server

For synchronization MailStore Server requires information on how to connect to the IceWarp Server.

- **Server Name**  
DNS name or IP address of the IceWarp server. If you use a self-signed or non-public SSL certificate on the IceWarp server, please set a checkmark next to *Ignore SSL Security Warnings*.
- **User Name**  
Name of a user with administrative privileges on the IceWarp server.
- **Password**  
Password of that user.
- **Timeout**  
The timeout value for IceWarp API requests. For large IceWarp Server user databases it may be necessary to increase this value.

## Synchronize

After configuring the connection settings as described above, you can specify filter criteria for the IceWarp Server user database synchronization in this section.

- **Domains and Groups**

Choose one or more domains or groups to let only their members be created as MailStore Server Users. If no domains or groups are selected, all users will be synchronized.

## Options

- **Automatically delete users in MailStore Server**

Here you can choose whether users whose accounts have been deleted in the IceWarp Server will also be deleted in MailStore Server's user database by the synchronization. If the archive folder of such a user already contains archived emails, only the user entry but not its archive folder will be deleted in MailStore Server. Additionally, only MailStore Server users that have their authentication method set to *Directory Services* will be deleted.

## Assign Default Privileges

By default, users that have been synchronized to MailStore Server from an IceWarp Server have the privilege to log on to MailStore Server as well as read access to their own user archive.

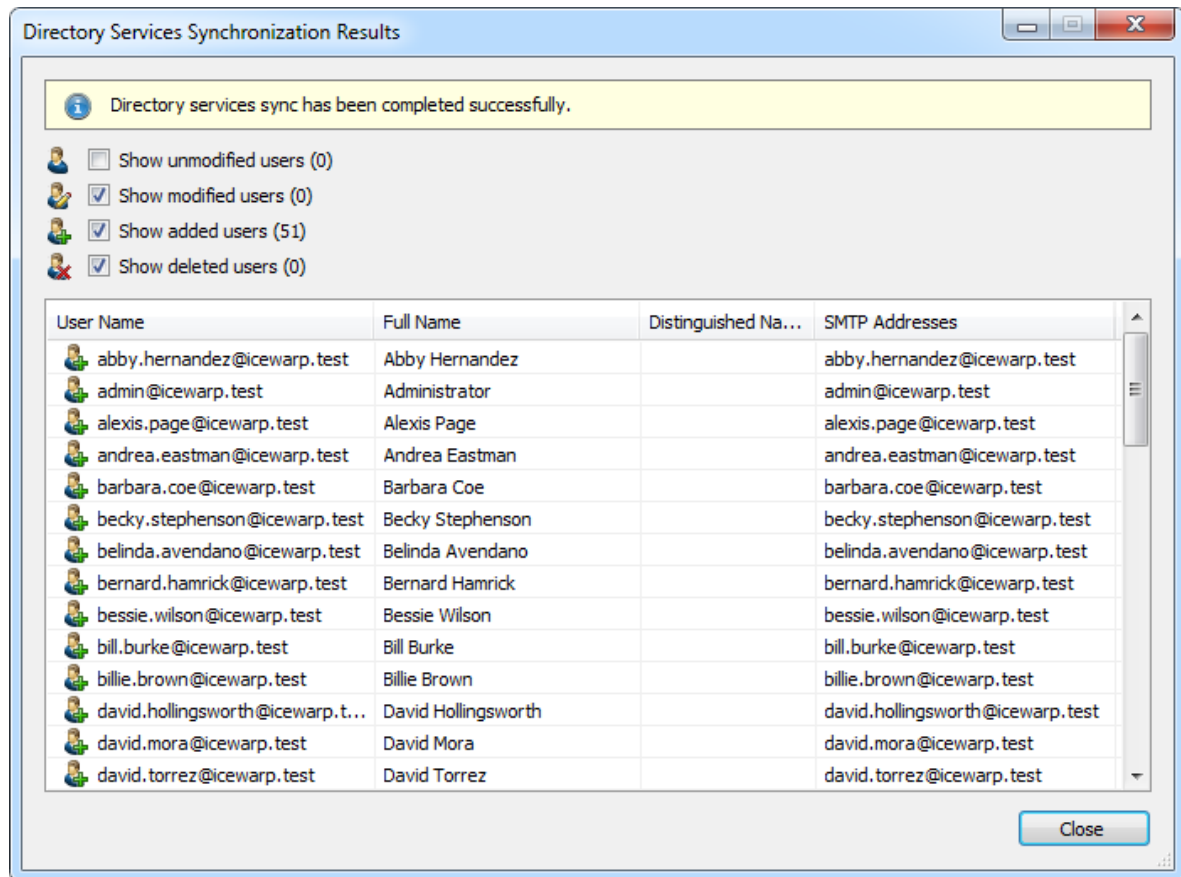
You can configure those default privileges before synchronization, for example, to assign the privilege *Archive E-mail* to all new users. To do this, click on *Default Privileges...*

More information on managing user privileges and their effects is available in the chapter *Users, Folders and Settings* which also has details on editing existing privileges.

## Run Directory Services Synchronization

Click on *Test Settings* to check synchronization configuration and the results returned by the IceWarp Server without any changes to the MailStore Server user database being actually committed.

To finally run the synchronization, click on *Synchronize now*. The results are shown with any changes committed to the MailStore Server user database.



## Login with IceWarp Server Credentials

By default, each user created in MailStore Server has a local password. The MailStore Server administrator can specify this password during creation of a new user account. The respective user can later change this password in MailStore Client's *Quick Access* section if he or she has ample privileges.

Alternatively, if an IceWarp Server is available, you can configure MailStore Server to allow users to log on to MailStore Server using their IceWarp Server credentials.

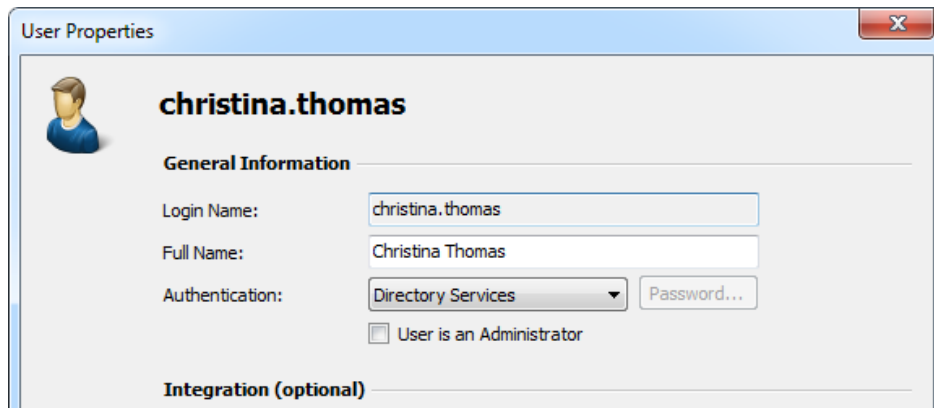
## Procedure for Users Created by Synchronization with IceWarp Server

If you have created MailStore Server users by IceWarp Server synchronization as described in the previous section, no further action is required. In this case, MailStore Server has already configured all necessary settings automatically for you. Users can log on to MailStore Server via *Standard Authentication* by using their IceWarp Server username and IceWarp Server password.

## Procedure for Manually Created Users

If you have created MailStore Server users manually and want them to be able to log on using their IceWarp Server credentials, please proceed as follows after you have configured the IceWarp Server integration as described above.

- Verify that the names of the MailStore Server users match those of the corresponding IceWarp Server users.
- In the *General Information* section of the user properties select *Directory Services for Authentication*.



Users can now log on to MailStore Server via *Standard Authentication* by using their IceWarp Server username and IceWarp Server password.

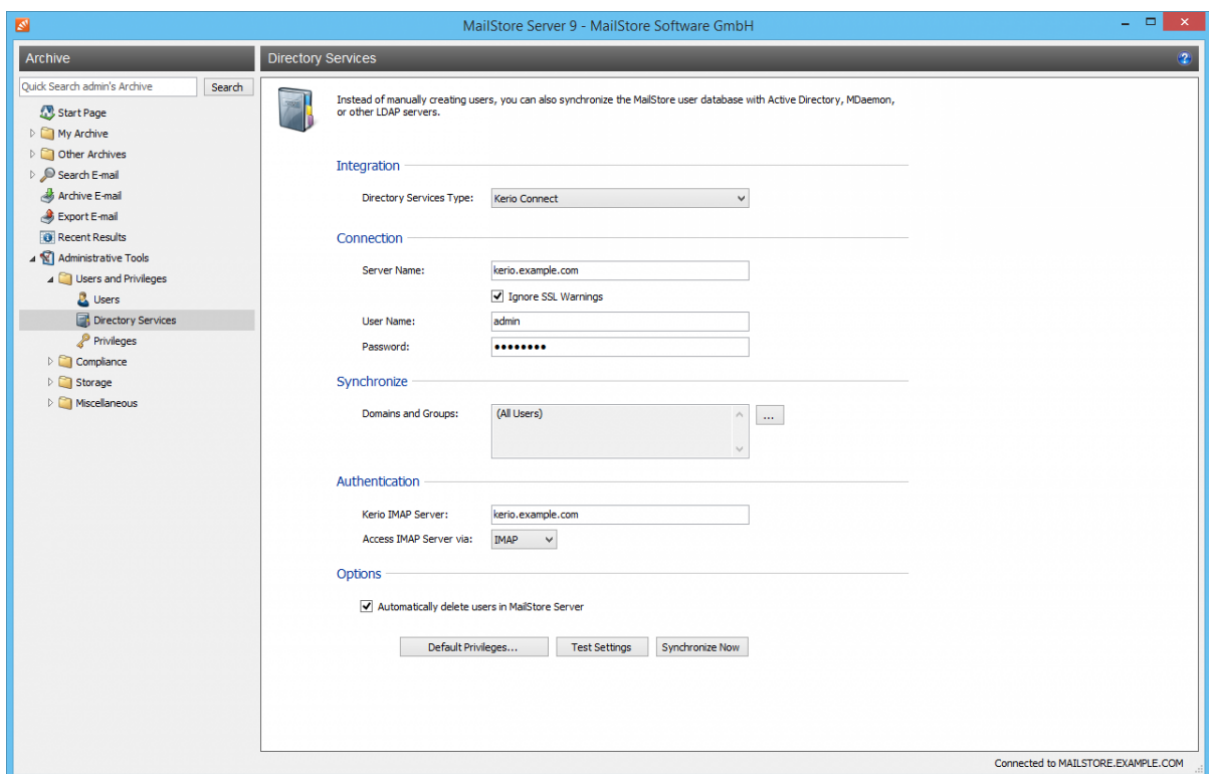
## 5.4 Kerio Connect Integration

In addition to adding users manually as described in chapter User Management, MailStore Server can synchronize its internal user database with the Kerio Connect of your company.

During synchronization user information such as user names and email addresses are read from Kerio Connect and recorded in MailStore Server's user database. No changes are made to the Kerio Connect itself by MailStore Server. The scope of the synchronization can be limited through filters.

### Accessing the Directory Service Integration

- Log on to MailStore Client as a MailStore Server administrator.
- Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*.
- In the *Integration* section, change the directory service type to *Kerio Connect*.



### Connection to the Kerio Connect

For synchronization MailStore Server requires information on how to connect to the Kerio Connect.

- **Server Name**  
DNS name or IP address of the Kerio Connect. If you use a self-signed or non-public SSL certificate on the Kerio Connect, please set a checkmark next to *Ignore SSL Security Warnings*.
- **User Name**  
Name of a user with administrative privileges on the Kerio Connect.
- **Password**  
Password of that user.

## Synchronize

After configuring the connection settings as described above, you can specify filter criteria for the Kerio Connect user database synchronization in this section.

- **Domains and Groups**

Choose one or more domains or groups to let only their members be created as MailStore Server Users. If no domains or groups are selected, all users will be synchronized.

## Options

- **Automatically delete users in MailStore Server**

Here you can choose whether users whose accounts have been deleted in the Kerio Connect will also be deleted in MailStore Server's user database by the synchronization. If the archive folder of such a user already contains archived emails, only the user entry but not its archive folder will be deleted in MailStore Server. Additionally, only MailStore Server users that have their authentication method set to *Directory Services* will be deleted.

## Authentication

As the Kerio Connect API only support synchronization, but not authentication of users, MailStore allows authenticate users via an IMAP login. To achieve this, you have to configure the following settings in the *Authentication* section:

- **Kerio IMAP Server**

Enter the IP address or the DNS name of the Kerio Connect server against which authentication should be performed.

- **IMAP Server Access**

Configure the connection protocol. Be aware that IMAP servers often expect the connection to be encrypted (IMAP-TLS, IMAP-SSL). Additionally activate the *Ignore SSL warnings* option if a self-signed or non-public certificate is used on the email server

**Important Notice:** If your Kerio Connect users authenticate against an Active Directory or if you store the passwords as SHA hashes, you must disable *CRAM-MD5* and *DIGEST-MD5* under *Configuration > Advanced Options > Security Policy* in your Kerio Connect Server. Otherwise users will not be able to log on to MailStore.

## Assign Default Privileges

By default, users that have been synchronized to MailStore Server from an Kerio Connect Server have the privilege to log on to MailStore Server as well as read access to their own user archive.

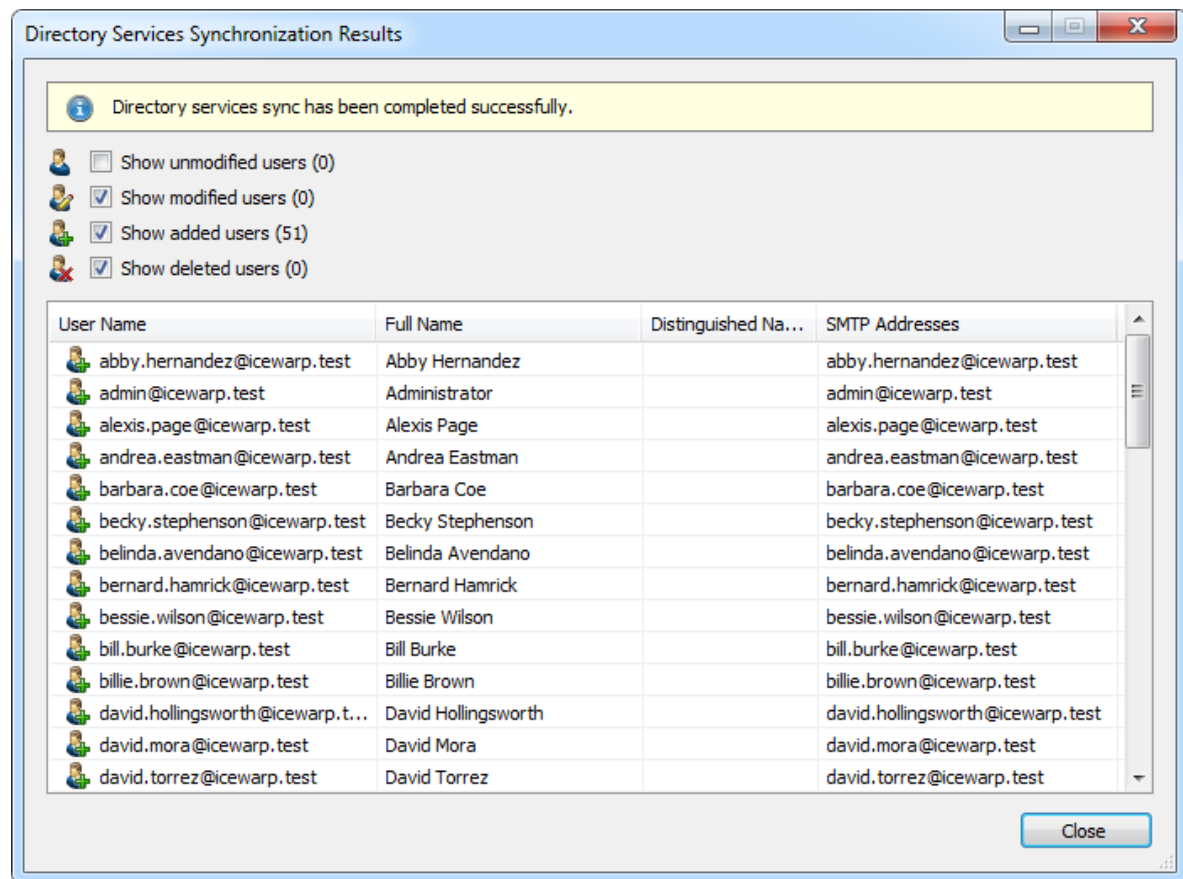
You can configure those default privileges before synchronization, for example, to assign the privilege *Archive E-mail* to all new users. To do this, click on *Default Privileges...*

More information on managing user privileges and their effects is available in the chapter *Users, Folders and Settings* which also has details on editing existing privileges.

## Run Directory Services Synchronization

Click on *Test Settings* to check synchronization configuration and the results returned by the Kerio Connect without any changes to the MailStore Server user database being actually committed.

To finally run the synchronization, click on *Synchronize now*. The results are shown with any changes committed to the MailStore Server user database.



## Login with Kerio Connect Credentials

By default, each user created in MailStore Server has a local password. The MailStore Server administrator can specify this password during creation of a new user account. The respective user can later change this password in MailStore Client's *Quick Access* section if he or she has ample privileges.

Alternatively, if an Kerio Connect is available, you can configure MailStore Server to allow users to log on to MailStore Server using their Kerio Connect credentials.

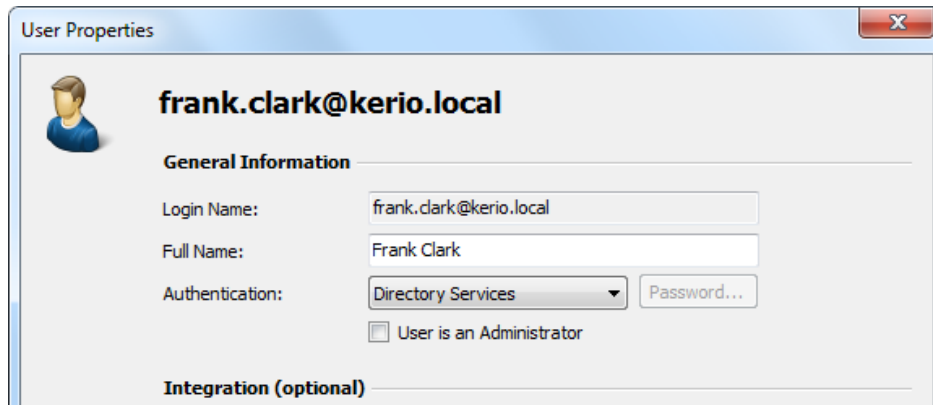
## Procedure for Users Created by Synchronization with Kerio Connect

If you have created MailStore Server users by Kerio Connect synchronization as described in the previous section, no further action is required. In this case, MailStore Server has already configured all necessary settings automatically for you. Users can log on to MailStore Server via *Standard Authentication* by using their Kerio Connect username and Kerio Connect password.

## Procedure for Manually Created Users

If you have created MailStore Server users manually and want them to be able to log on using their Kerio Connect credentials, please proceed as follows after you have configured the Kerio Connect integration as described above.

- Verify that the names of the MailStore Server users match those of the corresponding Kerio Connect users.
- In the *General Information* section of the user properties select *Directory Services for Authentication*.



Users can now log on to MailStore Server via *Standard Authentication* by using their Kerio Connect username and Kerio Connect password.

## 5.5 Generic LDAP Integration

In addition to adding users manually as described in chapter User Management, MailStore Server can synchronize its internal user database with the LDAP server of your company.

During synchronization user information such as user names and email addresses are read from LDAP server and recorded in MailStore Server's user database. No changes are made to the LDAP server itself by MailStore Server. The scope of the synchronization can be limited through filters.

### Accessing Directory Service Integration

- Log on to MailStore Client as a MailStore Server administrator.
- Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*.
- In the *Integration* section, change the directory service type to *LDAP server*.

MailStore Server 9 - MailStore Software GmbH

Archive

Quick Search admin's Archive Search

Start Page

My Archive

Other Archives

Search E-mail

Archive E-mail

Export E-mail

Recent Results

Administrative Tools

Users and Privileges

Users

Directory Services

Privileges

Compliance

Storage

Miscellaneous

Directory Services

Instead of manually creating users, you can also synchronize the MailStore user database with Active Directory, MDAemon, or other LDAP servers.

Integration

Directory Services Type: LDAP Generic

LDAP Connection

Server Name: ldap.example.com

Protocol: LDAP

Administrative DN: cn=admin,dc=example,dc=com

Password: .....

Base DN: dc=example,dc=com

User Filter and Attributes

Filter (optional): objectClass=posixUser

User Name: uid

Full Name (optional): displayName

E-mail Addresses (opt.): mail

Group Filter and Attributes (optional)

Filter: objectClass=posixGroup

Name: cn

Description (optional): description

Members: member

Search Filter for Members: Optional. Use placeholder {member}.

Connected to MAILSTORE.EXAMPLE.COM

### Connection to the LDAP Directory Service

For synchronization MailStore Server requires information on how to connect to the LDAP directory service and how to obtain the required data from it.

#### LDAP Connection

Name	Description
Server Name	DNS name or IP address of your LDAP server
Protocol	Configure whether the connection to the LDAP server is to be unencrypted on port 389, LDAP-TLS on port 389, or LDAP-SSL on port 636
Ignore SSL Security Warnings (only when using LDAP-TLS or LDAP-SSL)	Permit connections when a self-signed or non-public certificate is used by the LDAP server
Administrative DN	Distinguished Name (DN) or user name of a user with appropriate privileges on the LDAP server
Password	Password of the user specified in Administrative DN
Base DN	LDAP base DN, if needed

## User Filter and Attributes

Name	Description
Filter (optional)	Filter LDAP objects to return only user objects with email addresses
User Name	The LDAP attribute containing the username that you wish MailStore to use
Local Part Only (E-mail Addresses / UPN)	If unchecked, MailStore will use the full username including domain portion, e.g. <i>username@example.com</i> . If checked, MailStore will only use the local part of the User Name specified, e.g. the <i>username</i>
Full Name (optional)	The full name of the user, for display purposes within MailStore
E-mail Addresses (opt.)	The LDAP attribute containing the user's email address. This can contain multiple, comma separated, e-mail addresses

## Group Filter and Attributes

Name	Description
Filter	LDAP filter to return only group objects
Name	The LDAP attribute that contains the common name of a group
Description (optional)	The LDAP attribute that contains a human readable description for each group
Members	The LDAP attribute that contains the common name of group members
Search Filter for Members	LDAP filter to resolve group members when members are not specified as a DN string as part of the group results. MailStore will fill in the <code>{member}</code> variable with values from the <i>Members</i> attribute
Group	The actual group(s) containing users that MailStore Server will synchronize

## Options

Name	Description
Automatically delete users in MailStore Server	If enabled, MailStore will delete users from the local MailStore database when the user is deleted, removed from the filtered group, or falls out of scope based on the above LDAP filter settings

## Assign Default Privileges

By default, users that have been synchronized to MailStore Server from a directory service have the privilege to log on to MailStore Server as well as read access to their own user archive.

You can configure those default privileges before synchronization, for example, to assign the privilege *Archive E-mail* to all new users. To do this, click on *Default Privileges...*

More information on managing user privileges and their effects is available in the chapter Users, Folders and Settings which also has details on editing existing privileges.

## Configuration Samples

### Active Directory

It is possible to connect LDAP Generic to Active Directory, allowing for more flexibility and control than MailStore's built-in Active Directory support. For example, LDAP Generic will allow you to accept invalid or self-signed certificates, use custom filters or change which attributes are used by MailStore.

It is assumed that the Active Directory LDAP service is reachable by the MailStore instance on TCP port 389 or 636, including opening ports in the firewall, where applicable.

As most Active Directory configurations are quite similar, it will be possible to copy/paste most of the examples below, making only minor modifications based on your environment.

### LDAP Connection

Name	Value	Description
Server Name	dc001.example.com	DNS name or IP address of an Active Directory domain controller.
Protocol	LDAP	Do not use transport encryption
	LDAP-TLS	Use TLS as transport encryption
	LDAP-SSL	Use SSL as transport encryption
Ignore SSL Security Warnings	<i>Enabled</i>	Establish a TLS/SSL encrypted connection, even if the certificate validation failed.
	<i>Disabled</i>	Do not establish a TLS/SSL encrypted connection, if the certificate validation failed.
Administrative DN	mailstoreserver@example.com	Active Directory account for MailStore's use
Password	MySecretPassword	Password of the user specified in <i>Administrative DN</i> above
Base DN	<i>Empty</i>	LDAP base DN will be detected automatically in Active Directory environments

## User Filter and Attributes

Name	Value	Description
Filter (optional)	<code>(objectCategory=User)</code>	All users
	<code>(&amp;(objectCategory=User)(mail=*))</code>	All users with Active Directory e-mail addresses
	<code>(&amp;(objectCategory=User)(proxyAddresses=*))</code>	All users with Exchange e-mail addresses
	<code>(&amp;(objectCategory=User)(proxyAddresses=*)(mail=*))</code>	All users with Exchange e-mail addresses who are also listed in the global address book
User Name	<code>userPrincipalName</code>	Use Active Directory user name as MailStore user name
	<code>sAMAccountName</code>	Use pre-Windows 2000 user name as MailStore user name
Local Part Only (E-mail Addresses / UPN)	<i>Enabled</i>	Only use the local part from the Active Directory user name in UPN format
	<i>Disabled</i>	Use the full Active Directory user name in UPN format
Full Name (optional)	<code>displayName</code>	The user's visible name in Active Directory
E-mail Addresses (opt.)	<code>proxyAddresses</code>	Exchange environments
	<code>mail</code>	Non-Exchange environments

## Group Filter and Attributes

Name	Value	Description
Filter	<code>(objectCategory=Group)</code>	All objects of category <i>Group</i> , usually all groups
Name	<code>cn</code>	Use the value of the LDAP attribute <i>CN</i> as group name
Description (optional)	<code>description</code>	Use the value of the LDAP attribute <i>description</i> as group name
Members	<code>member</code>	Use the value LDAP attribute <i>member</i> to determine group members
Search Filter for Members	<i>empty</i>	Group members are returned as Distinguished Names
Group	<code>MailStore Users</code>	Synchronize only users from the <i>MailStore Users</i> group

## OpenLDAP

OpenLDAP is a commonly used LDAP server, configuration will require some knowledge of your LDAP environment.

It is assumed that the LDAP service is reachable by the MailStore instance on TCP port 389 or 636, including opening ports in the firewall, where applicable.

As OpenLDAP is very flexible, configuration options vary from server to server and you may need to make significant modifications to the examples below to fit the schema used in your environment.

### LDAP Connection

Name	Value	Description
Server Name	<code>directory.example.com</code>	DNS name or IP address of the OpenLDAP server.
Protocol	LDAP	Do not use transport encryption
	LDAP-TLS	Use TLS as transport encryption
	LDAP-SSL	Use SSL as transport encryption
Ignore SSL Security Warnings	<i>Enabled</i>	Establish a TLS/SSL encrypted connection, even if the certificate validation failed.
	<i>Disabled</i>	Do not establish a TLS/SSL encrypted connection, if the certificate validation failed.
Administrative DN	<code>cn=admin,dc=example,dc=com</code>	LDAP username that MailStore should use for accessing the OpenLDAP server
Password	<code>MySecretPassword</code>	Password of the user specified in <i>Administrative DN</i> above
Base DN	<code>dc=example,dc=com</code>	The Base-DN of the LDAP directory

### User Filter and Attributes

Name	Value	Description
Filter (optional)	<code>(objectClass=posixAccount)</code>	All objects of type <i>posixAccount</i> , usually all users
	<code>(&amp;(objectClass=posixAccount)(mail=*))</code>	All users with configured email address
User Name	<code>uid</code>	Use the value of LDAP attribute <i>UID</i> as MailStore user name
	<code>cn</code>	Use the value of LDAP attribute <i>CN</i> as MailStore user name
Local Part Only (E-mail Addresses / UPN)	<i>Enabled</i>	Only use the local part from a user name in UPN format
	<i>Disabled</i>	Use the full user name in UPN format
Full Name (optional)	<code>displayName</code>	Use the value of LDAP attribute <i>displayName</i> as MailStore user name
E-mail Addresses (opt.)	<code>mail</code>	Use the values of LDAP attribute <i>mail</i> for the email addresses of MailStore users

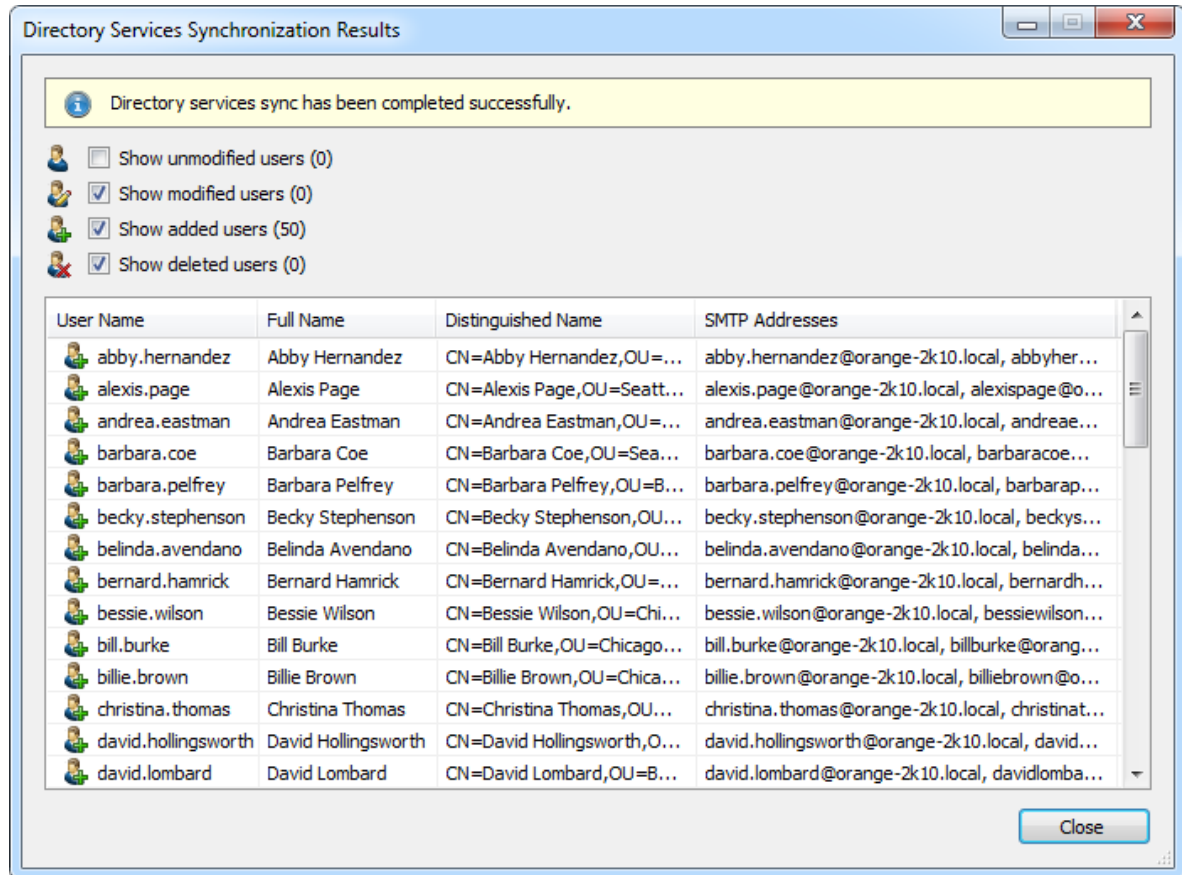
## Group Filter and Attributes

Name	Value	Description
Filter	<code>(objectClass=posixGroup)</code>	All objects of category <i>posixGroup</i> , usually all groups
Name	<code>cn</code>	Use the value of the LDAP attribute <i>CN</i> as group name
Description (optional)	<code>description</code>	Use the value of the LDAP attribute <i>description</i> as group name
Members	<code>member</code>	Use the value LDAP attribute <i>member</i> to determine group members
Search Filter for Members	<code>empty</code>	Group members are returned as Distinguished Names
	<code>(   ( &amp; ( objectClass=posixAccount ) ( uid={member} ) ) ( &amp; ( objectClass=posixGroup ) ( cn={member} ) ) ) )</code>	members in <i>memberUid</i> are only given as plain user or group names
Group	<code>MailStore Users</code>	Synchronize only users from the <i>MailStore Users</i> group

## Run Directory Services Synchronization

Click on *Test Settings* to check synchronization configuration and the results returned by the directory service without any changes to the MailStore Server user database being actually committed.

To finally run the synchronization, click on *Synchronize now*. The results are shown with any changes committed to the MailStore Server user database.



## Login with LDAP server Credentials

By default, each user created in MailStore Server has a local password. The MailStore Server administrator can specify this password during creation of a new user account. The respective user can later change this password in MailStore Client's *Quick Access* section if he or she has ample privileges.

Alternatively, if an LDAP server is available, you can configure MailStore Server to allow users to log on to MailStore Server using their LDAP server credentials.

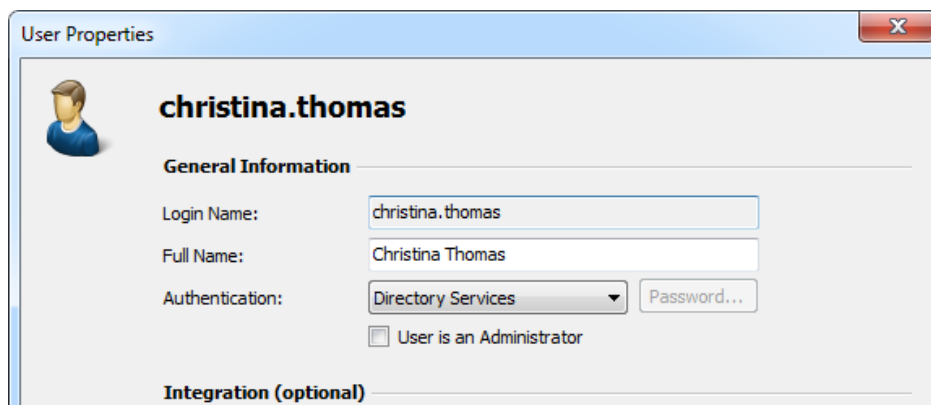
## Procedure for Users Created by Synchronization with LDAP server

If you have created MailStore Server users by LDAP server synchronization as described in the previous section, no further action is required. In this case, MailStore Server has already configured all necessary settings automatically for you. Users can log on to MailStore Server via *Standard Authentication* by using their LDAP server username and LDAP server password.

## Procedure for Manually Created Users

If you have created MailStore Server users manually and want them to be able to log on using their LDAP server credentials, please proceed as follows after you have configured the LDAP server integration as described above.

- Verify that the names of the MailStore Server users match those of the corresponding LDAP server users.
- In the *General Information* section of the user properties select *Directory Services* for *Authentication*.



The screenshot shows the 'User Properties' dialog box for a user named 'christina.thomas'. The dialog has a title bar with the text 'User Properties' and a close button. Below the title bar is a user icon and the username 'christina.thomas'. The 'General Information' section contains the following fields: 'Login Name' with the value 'christina.thomas', 'Full Name' with the value 'Christina Thomas', and 'Authentication' with a dropdown menu set to 'Directory Services' and a 'Password...' button. There is also an unchecked checkbox labeled 'User is an Administrator'. The 'Integration (optional)' section is visible at the bottom but is empty.

Users can now log on to MailStore Server via *Standard Authentication* by using their LDAP server username and LDAP server password.

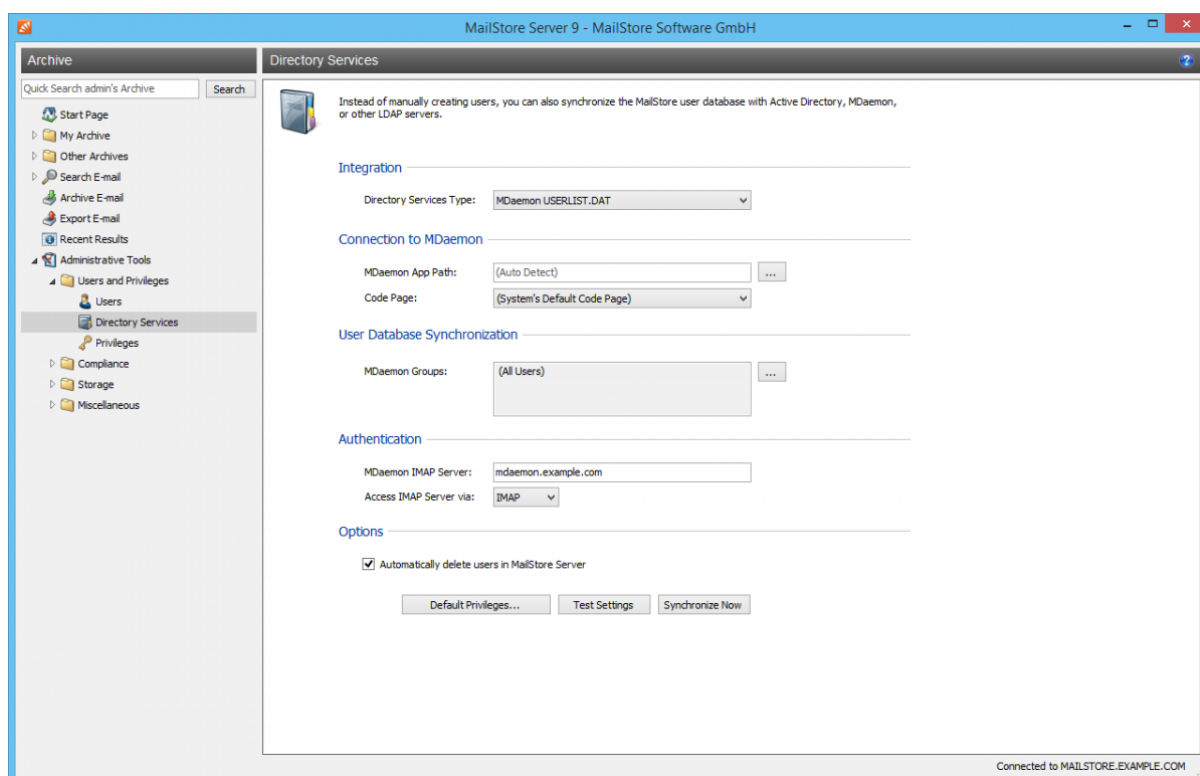
## 5.6 MDaemon Integration

In addition to adding users manually as described in chapter User Management, MailStore Server can synchronize its internal user database with the MDaemon Server of your company.

During synchronization user information such as user names and email addresses are read from MDaemon Server and recorded in MailStore Server's user database. No changes are made to the MDaemon Server itself by MailStore Server. The scope of the synchronization can be limited through filters.

### Accessing the Directory Service Integration

- Log on to MailStore Client as a MailStore Server administrator.
- Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*.
- In the *Integration* section, change the directory service type to *MDaemon Server*.



### Connection to the MDaemon

For synchronization MailStore Server requires information on how to access the MDaemon App directory.

- **MDaemon App Directory**

Enter the path to the App directory of your MDaemon installation. The App directory contains the files *Userlist.dat* and *Groups.dat*. If MailStore Server is installed on the same computer as the MDaemon Server, the MDaemon App directory is detected automatically.

If MailStore Server is not installed on the same machine, share the App directory of the MDaemon server with the MailStore Server computer and enter the share's UNC path into the field *MDaemon App Directory* (e.g. \\MDAEMON\MDApp).

**Please note:** To access the MDaemon App directory through a network share it may be necessary to configure a startup script for the MailStore Server Service.

- **Code Page**

You only have to change this option if the encoding of the files *Userlist.dat* and *Groups.dat* differs from the

standard encoding of the MailStore Server computer.

## User Database Synchronization

After configuring the connection settings as described above, you can specify filter criteria for the MDAemon user database synchronization in this section.

- **MDaemon Groups**

Choose one or more groups to let only their members be created as MailStore Server Users. If no groups are selected, all users will be synchronized.

## Authentication

To achieve this, you have to configure the following settings in the *Authentication* section:

- **MDaemon IMAP Server**

Enter the IP address or the DNS name of the MDAemon server against which authentication should be performed.

- **IMAP Server Access**

Configure whether the connection to the MDAemon IMAP server should be unencrypted or IMAP-TLS/IMAP-SSL encrypted.

- **Ignore SSL Security Warnings (only when using IMAP-TLS or IMAP-SSL)**

Activate this option if a self-signed or non-public certificate is used on the MDAemon IMAP server. Otherwise the authentication will permanently fail.

**Important Notice:** If your MDAemon users authenticate against an Active Directory, you must disable ... *honor APOP & CRAM-MD5* under *Setup > Default Domain / Servers > Default Domain & Servers > Servers* in your MDAemon Server. Otherwise users will not be able to log on to MailStore Server.

## Options

- **Automatically delete users in MailStore Server**

Here you can choose whether users whose accounts have been deleted in the MDAemon will also be deleted in MailStore Server's user database by the synchronization. If the archive folder of such a user already contains archived emails, only the user entry but not its archive folder will be deleted in MailStore Server. Additionally, only MailStore Server users that have their authentication method set to *Directory Services* will be deleted.

## Assign Default Privileges

By default, users that have been synchronized to MailStore Server from an MDAemon have the privilege to log on to MailStore Server as well as read access to their own user archive.

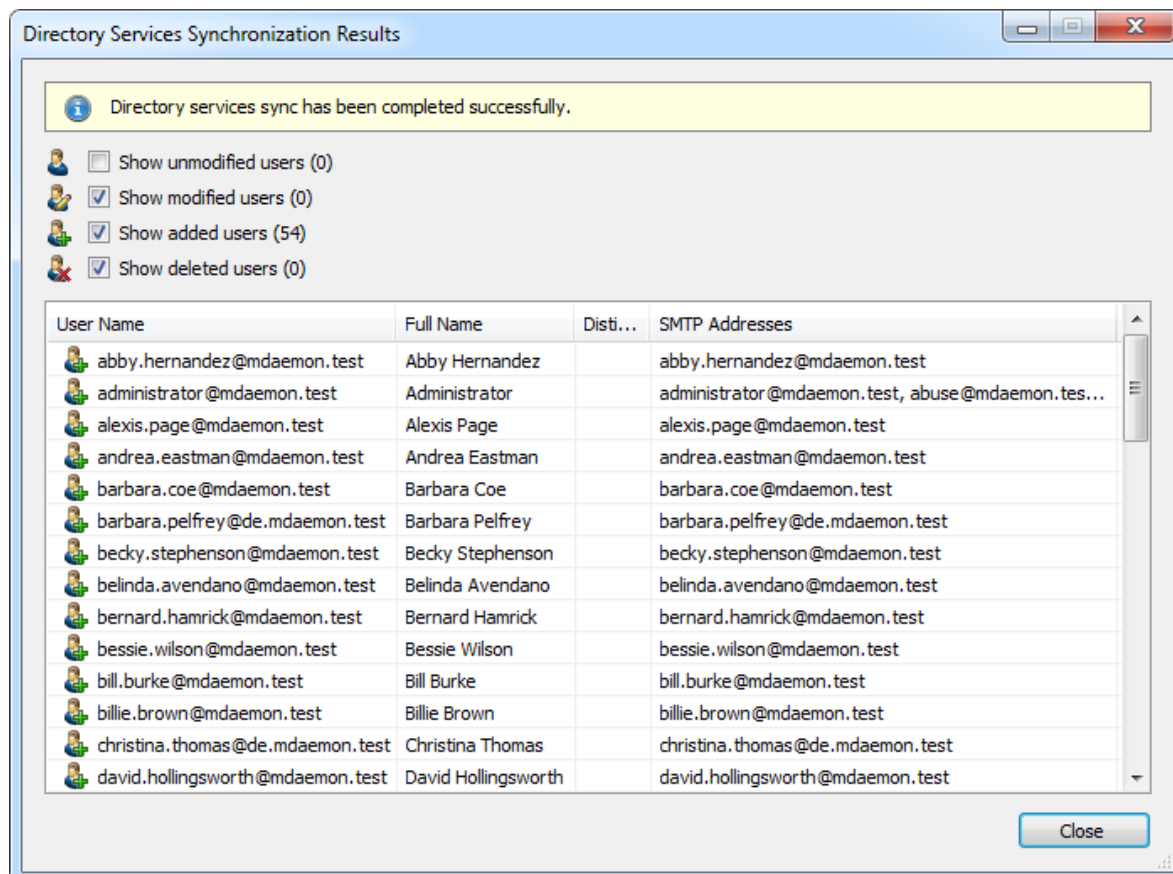
You can configure those default privileges before synchronization, for example, to assign the privilege *Archive E-mail* to all new users. To do this, click on *Default Privileges...*

More information on managing user privileges and their effects is available in the chapter *Users, Folders and Settings* which also has details on editing existing privileges.

## Run Directory Services Synchronization

Click on *Test Settings* to check synchronization configuration and the results returned by the MDAemon without any changes to the MailStore Server user database being actually committed.

To finally run the synchronization, click on *Synchronize now*. The results are shown with any changes committed to the MailStore Server user database.



## Login with MDAemon Credentials

By default, each user created in MailStore Server has a local password. The MailStore Server administrator can specify this password during creation of a new user account. The respective user can later change this password in MailStore Client's *Quick Access* section if he or she has ample privileges.

Alternatively, if an MDAemon is available, you can configure MailStore Server to allow users to log on to MailStore Server using their MDAemon credentials.

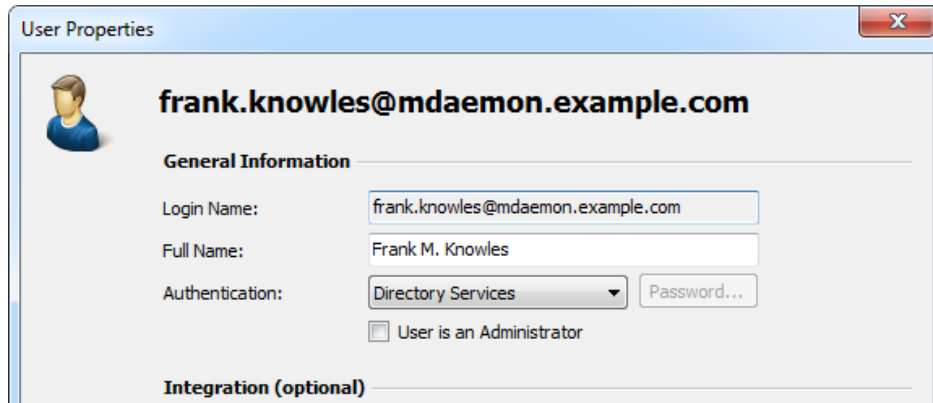
## Procedure for Users Created by Synchronization with MDAemon

If you have created MailStore Server users by MDAemon synchronization as described in the previous section, no further action is required. In this case, MailStore Server has already configured all necessary settings automatically for you. Users can log on to MailStore Server via *Standard Authentication* by using their MDAemon username and MDAemon password.

## Procedure for Manually Created Users

If you have created MailStore Server users manually and want them to be able to log on using their MDAemon credentials, please proceed as follows after you have configured the MDAemon integration as described above.

- Verify that the names of the MailStore Server users match those of the corresponding MDAemon users.
- In the *General Information* section of the user properties select *Directory Services for Authentication*.



The screenshot shows a 'User Properties' window with a blue title bar and a close button. The user's email address, 'frank.knowles@mdaemon.example.com', is displayed at the top. Below this, the 'General Information' section contains the following fields: 'Login Name' (frank.knowles@mdaemon.example.com), 'Full Name' (Frank M. Knowles), and 'Authentication' (Directory Services). A 'Password...' button is located to the right of the 'Authentication' dropdown. Below these fields is a checkbox labeled 'User is an Administrator', which is currently unchecked. The 'Integration (optional)' section is visible at the bottom but is empty.

Users can now log on to MailStore Server via *Standard Authentication* by using their MDAemon username and MDAemon password.

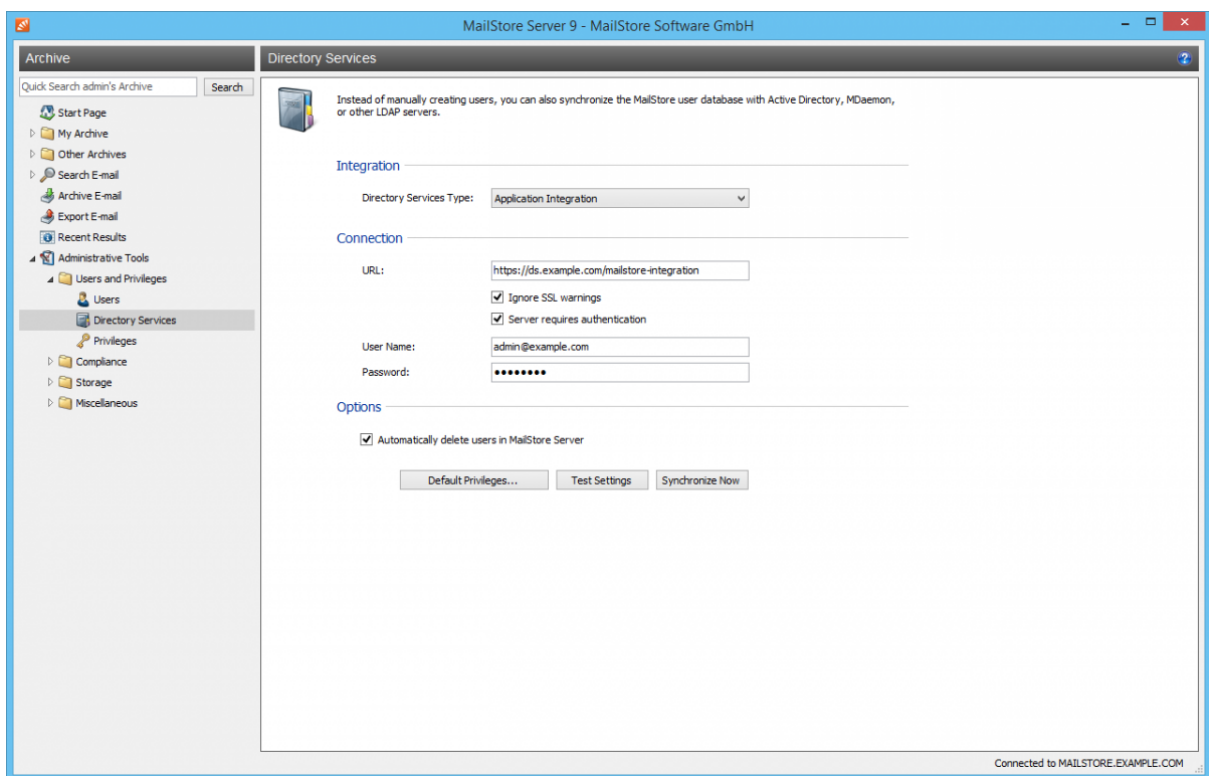
## 5.7 Application Integration

In addition to adding users manually as described in chapter User Management, MailStore Server can synchronize its internal user database with the Application Integration Server of your company.

During synchronization user information such as user names and email addresses are read from Application Integration Server and recorded in MailStore Server's user database. No changes are made to the Application Integration Server itself by MailStore Server. The scope of the synchronization can be limited through filters.

### Accessing the Directory Service Configuration

- Log on to MailStore Client as a MailStore Server administrator.
- Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*.
- In the *Integration* section, change the directory service type to *Application Integration*.



### Connection to Application Integration Server

For synchronization MailStore Server requires information on how to connect to the the Application Integration server.

- **URL**  
The URL where the Application Integration server is serving requests. When using a self signed or non-public SSL certificate on the Application Integration server, enable the *Ignore SSL warnings* option. If accessing the Application Integration server requires authentication , enable the *Server requires authentication* and enter the credential in the following fields:
- **User Name**  
Name of user who has access to the Application Integration server
- **Password**  
Password of the user who has access to Application Integration server

## Options

- **Automatically delete users in MailStore Server**

Here you can choose whether users whose accounts have been deleted in the Application Integration Server will also be deleted in MailStore Server's user database by the synchronization. If the archive folder of such a user already contains archived emails, only the user entry but not its archive folder will be deleted in MailStore Server. Additionally, only MailStore Server users that have their authentication method set to *Directory Services* will be deleted.

## Assign Default Privileges

By default, users that have been synchronized to MailStore Server from Application Integration Server have the privilege to log on to MailStore Server as well as read access to their own user archive.

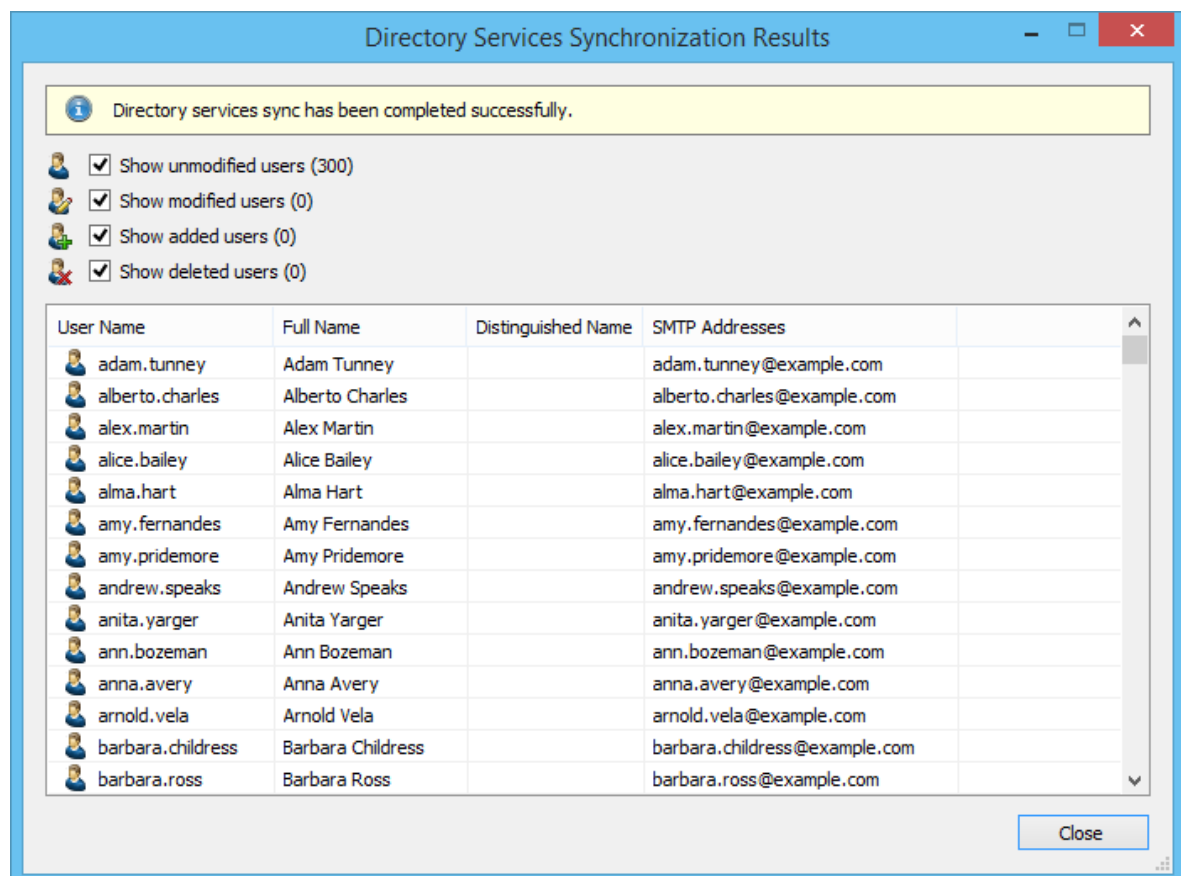
You can configure those default privileges before synchronization, for example, to assign the privilege *Archive E-mail* to all new users. To do this, click on *Default Privileges...*

More information on managing user privileges and their effects is available in the chapter Users, Folders and Settings which also has details on editing existing privileges.

## Run Directory Services Synchronization

Click on *Test Settings* to check synchronization configuration and the results returned by the Application Integration Server without any changes to the MailStore Server user database being actually committed.

To finally run the synchronization, click on *Synchronize now*. The results are shown with any changes committed to the MailStore Server user database.



## Login with Application Integration Server Credentials

By default, each user created in MailStore Server has a local password. The MailStore Server administrator can specify this password during creation of a new user account. The respective user can later change this password in MailStore Client's *Quick Access* section if he or she has ample privileges.

Alternatively, if an Application Integration Server is available, you can configure MailStore Server to allow users to log on to MailStore Server using their Application Integration Server credentials.

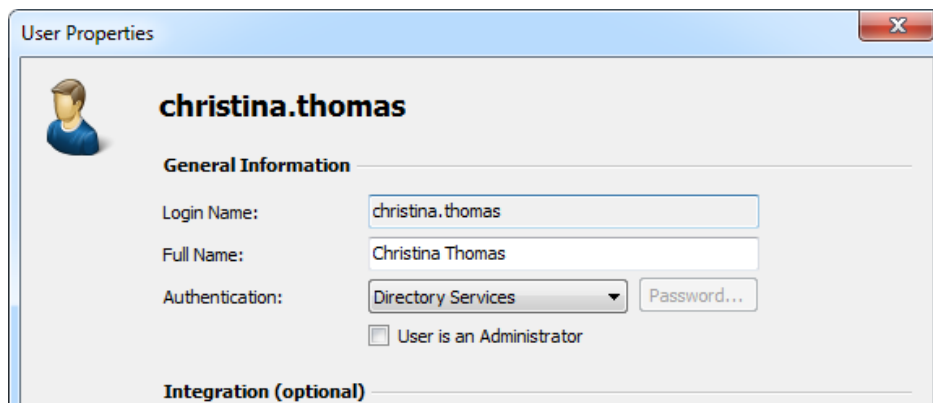
### Procedure for Users Created by Synchronization with Application Integration Server

If you have created MailStore Server users by Application Integration Server synchronization as described in the previous section, no further action is required. In this case, MailStore Server has already configured all necessary settings automatically for you. Users can log on to MailStore Server via *Standard Authentication* by using their Application Integration Server username and Application Integration Server password.

### Procedure for Manually Created Users

If you have created MailStore Server users manually and want them to be able to log on using their Application Integration Server credentials, please proceed as follows after you have configured the Application Integration Server integration as described above.

- Verify that the names of the MailStore Server users match those of the corresponding Application Integration Server users.
- In the *General Information* section of the user properties select *Directory Services* for Authentication.

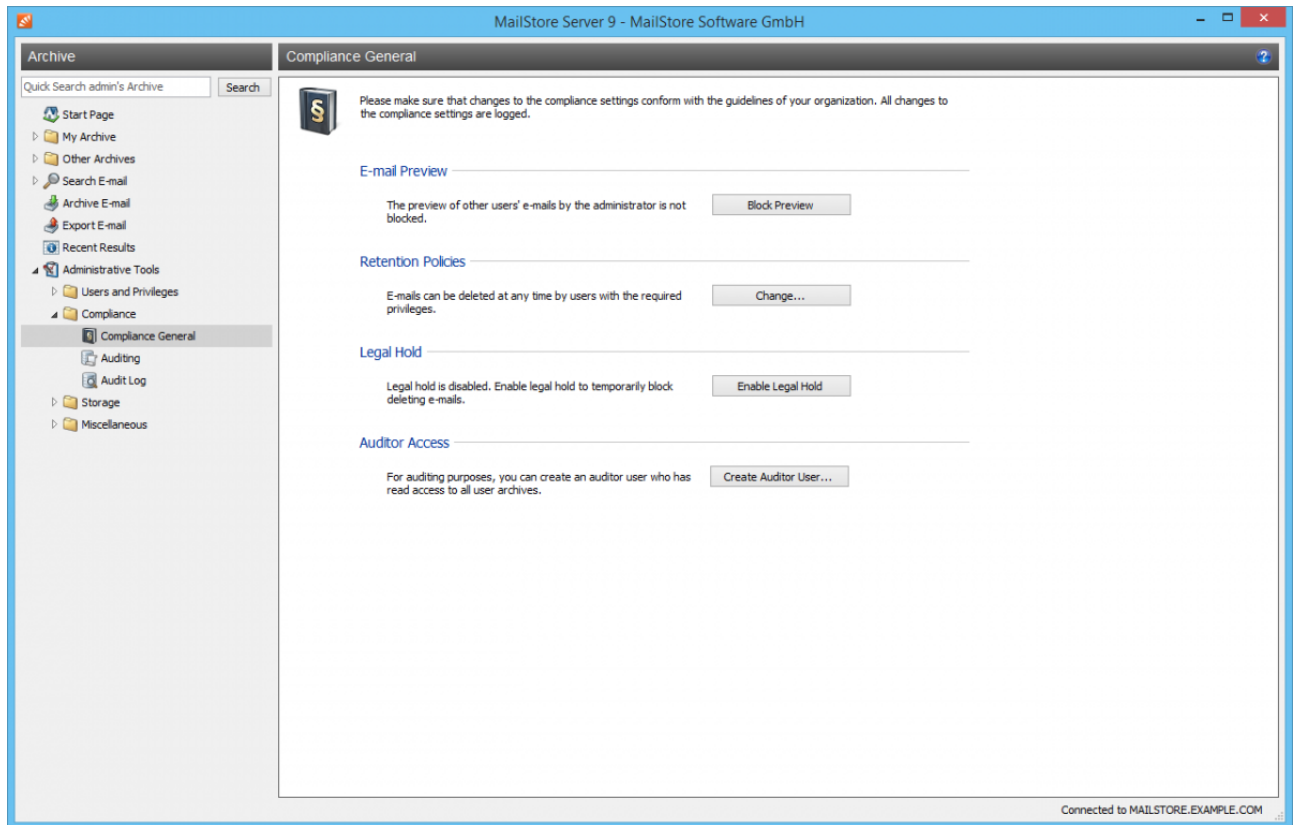


Users can now log on to MailStore Server via *Standard Authentication* by using their Application Integration Server username and Application Integration Server password.

## 5.8 Compliance General

MailStore Server offers several compliance features enabling you to meet operational as well as legal compliance requirements.

**Please note:** MailStore writes changes to these settings into the Windows event log. Additional information about recording events is available in chapter Auditing.



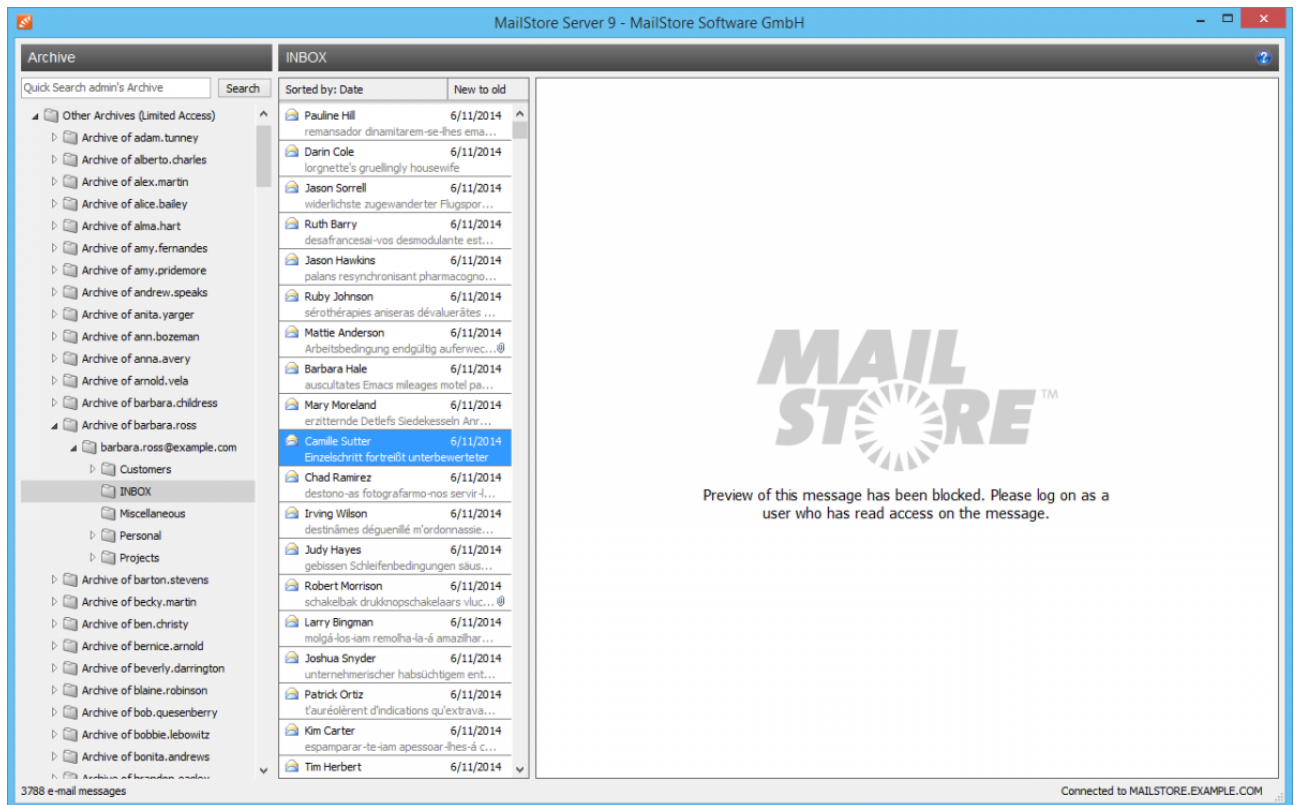
### Email Preview

By default, MailStore administrators can access all contents of the archive. This means that the entire contents of other user archives can be viewed as well.

To prevent the administrator from previewing the emails of other users, please proceed as follows:

- Log on as MailStore administrator (admin).
- Click on *Administrative Tools > Compliance* and then on *Compliance General*.
- Under *Email Preview*, click on *Block Preview*.

If the preview is blocked, the folder *Other Archives (Limited Access)* and all its subfolders will appear grey. Administrators continue to be able to view the folder structures and their contents, including the header fields sender, recipient, subject and date, but no longer the email contents or any of the file attachments.

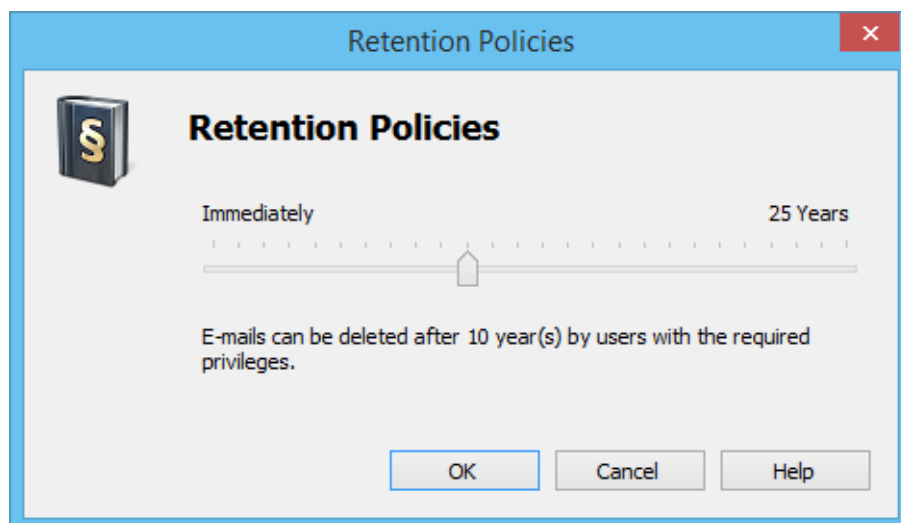


## Retention Policies

Various operational or legal provisions regulate the minimum retention periods for emails liable to be archived. By predefining a storage guideline in MailStore you can define the earliest point in time at which emails may be removed from the archive.

To specify the retention policy, please proceed as follows:

- Log on as MailStore administrator (admin).
- Click on *Administrative Tools > Compliance* and then on *Compliance General*.
- Under *Retention Policies*, click on *Change...*
- Using the slide control, set the earliest point in time from which on archived emails may be deleted.



- Click on *OK* to confirm.

Please note that at no time does MailStore remove emails from the archive automatically. Therefore, this setting only applies to users with the *Delete Emails* privilege.

## Legal Hold

With the *Legal Hold* feature deleting emails from the archive can be temporarily prohibited. This may become necessary in case of legal disputes to prevent the deletion of emails which may serve as evidence.

To enable or disable *Legal Hold*, please proceed as follows:

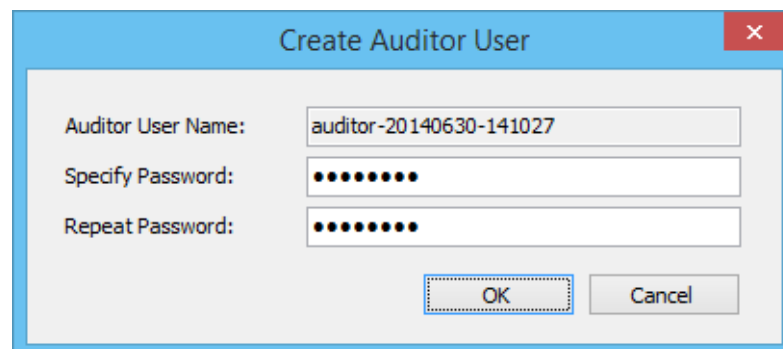
- Log on as MailStore administrator (admin).
- Click on *Administrative Tools > Compliance* and then on *Compliance General*.
- Under *Legal Hold*, click on *Enable Legal Hold/Disable Legal Hold*.

## Auditor Access

In case of an audit by a third party (e.g. tax inspector) it may become necessary to grant this party read-access to the entire archive. With the *Auditor Access* feature, a special user can be set up in MailStore who automatically has read-access to all user archives.

To set up an auditor user, please proceed as follows:

- Log on as MailStore administrator (admin).
- Click on *Administrative Tools > Compliance* and then on *Compliance General*.
- Under *Auditor Access*, click on *Create Auditor User...*
- In the *Create Auditor User* window, create a password for the new auditor user. The user name is generated automatically and has the following format based on the time of creation:  
auditor-YYYYMMDD-HHMMSS



- Click on *OK* to create the new user.

Using MailStore Client, the auditor user can now log on to MailStore Server and browse the archive. However, an auditor user can neither archive or export any emails nor change his or her own password.

## 5.9 Auditing

With MailStore Server, selected events can be written into the Windows event log allowing you to track the activities of both administrators and users. This enables a company's compliance officer, for example, to oversee compliance with legal and operational regulations.

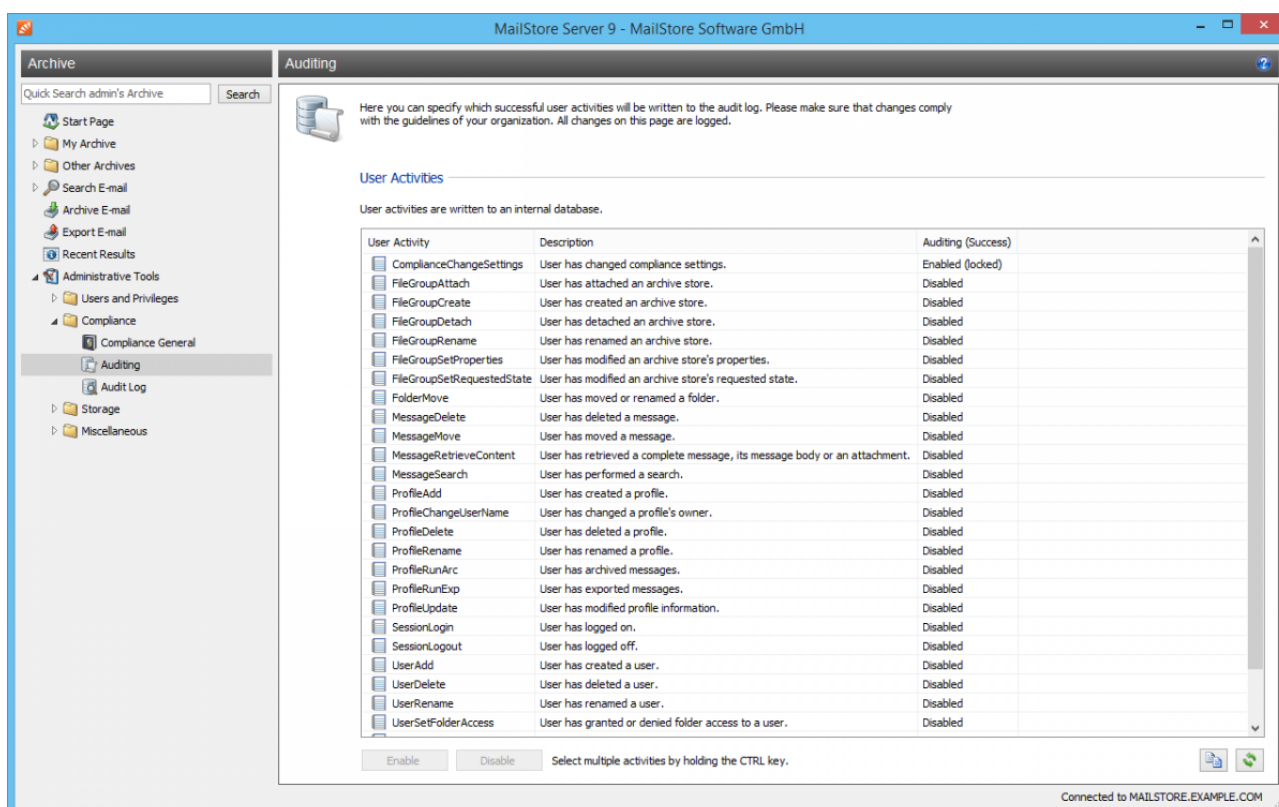
### Specifying the Audit Log Destination

The destination for logging of audit events can be configured in the MailStore Server Service Configuration. By default MailStore's own audit log is used, which can be viewed at *Administrative Tools > Compliance > Audit Log*.

### Changing the Auditing Settings

To change the auditing settings, please proceed as follows:

- Start MailStore Client as MailStore administrator (admin).
- Click on *Administrative Tools > Compliance* and then on *Auditing*.



- From the list, select the event whose auditing status you would like to change.
- Change the auditing status by clicking the *Enable* or *Disable* buttons located beneath the list of events.

**Please note:** The event *ComplianceChangeSettings*, which protocols changes of the settings under *Compliance General*, cannot be disabled.

Please note that some events may generate a large number of entries in the Windows event log. Only enable such events if you are sure that you need the information.

## 5.10 Audit Log

If MailStore's own audit log is used for logging audit events (default), this audit log can be retrieved via MailStore Client.

**Please note:** If the Windows Eventlog is used as destination for logging of audit events, the *Audit Log* option at *Administrative Tools > Compliance* is not shown. In that case, use the your favorite method for retrieving information from the Windows Eventlog.

### Retrieving the Audit Log

To retrieve information stored in MailStore's own audit log, proceed as follows:

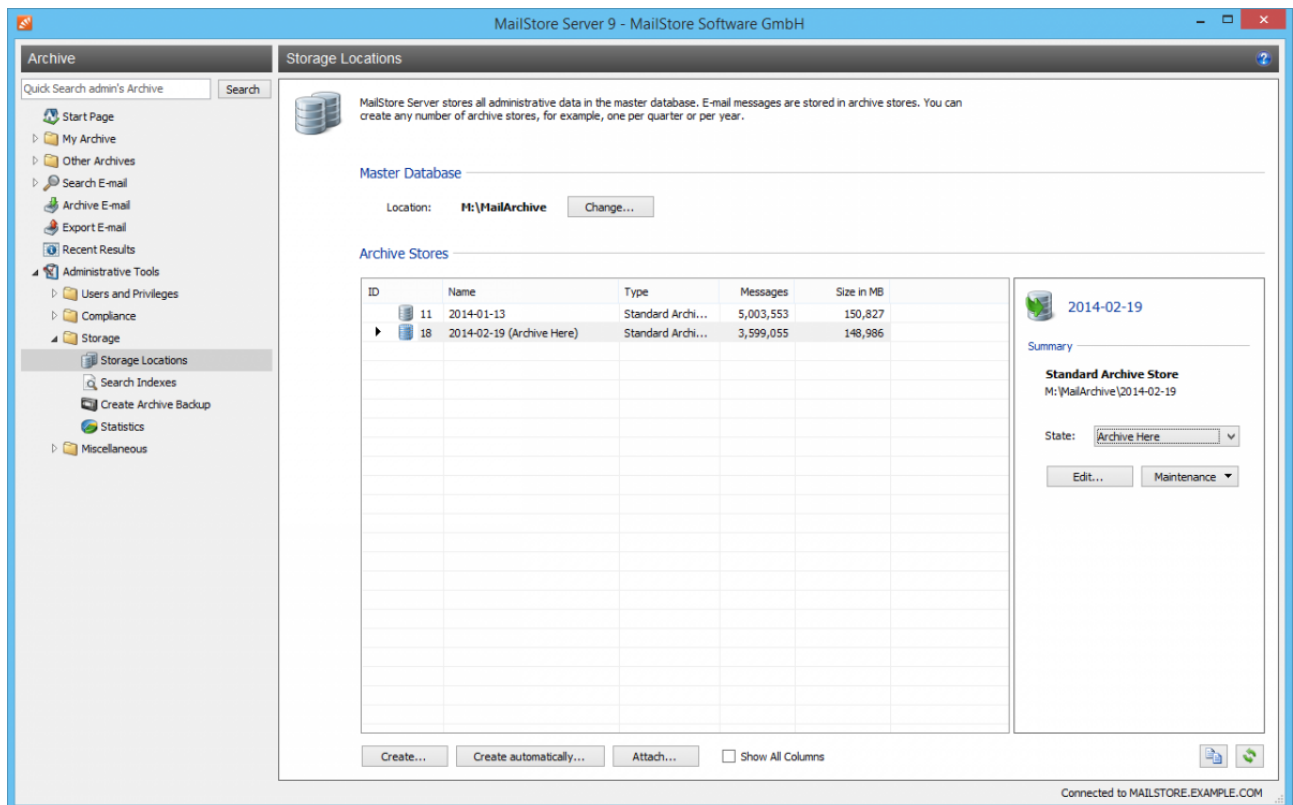
- Start MailStore Client and log on as a MailStore administrator (*admin*).
- Click *Administrative Tools > Compliance* and then *Audit Log*.
- The events to be fetched from the audit log can be filtered by modifying the settings for *Date Range*, *User Name*, *User Activity Type* and *Maximum Number of Results*.
- Click on *Retrieve*.
- The matching events are shown in the table. To show further details of an event, double-click on the corresponding table row.

## 5.11 Storage Locations

In storage locations management you can view the location of the master database, create new archive stores and manage the archive's existing archive stores.

### Accessing Storage Locations Management

Log on to MailStore Client as MailStore administrator. Click on *Administrative Tools* > *Storage* and then on *Storage Locations*.



### Changing the Storage Location of the Master Database

The storage location of the master database can only be viewed here. Clicking on *Change...* closes MailStore Client and starts the MailStore Server Service Configuration.

### Creating Archive Stores

MailStore distinguishes between two types of archive stores: *standard archive store* and *advanced archive store*.

Standard archive stores are stored entirely in an adjustable directory of the file system. Advanced archive stores offer additional options such as storage in SQL databases, but have limited functionality elsewhere. Information about advanced archive stores is available in chapter Using Advanced Archive Stores.

**Please note:** For most environments, using standard archive stores is recommended.

## Creating a Standard Archive Store

To create a new standard archive store, please proceed as follows:

- In the menu bar at the bottom of the window, click on *Create...*
- The dialog *Create New Archive Store* opens.

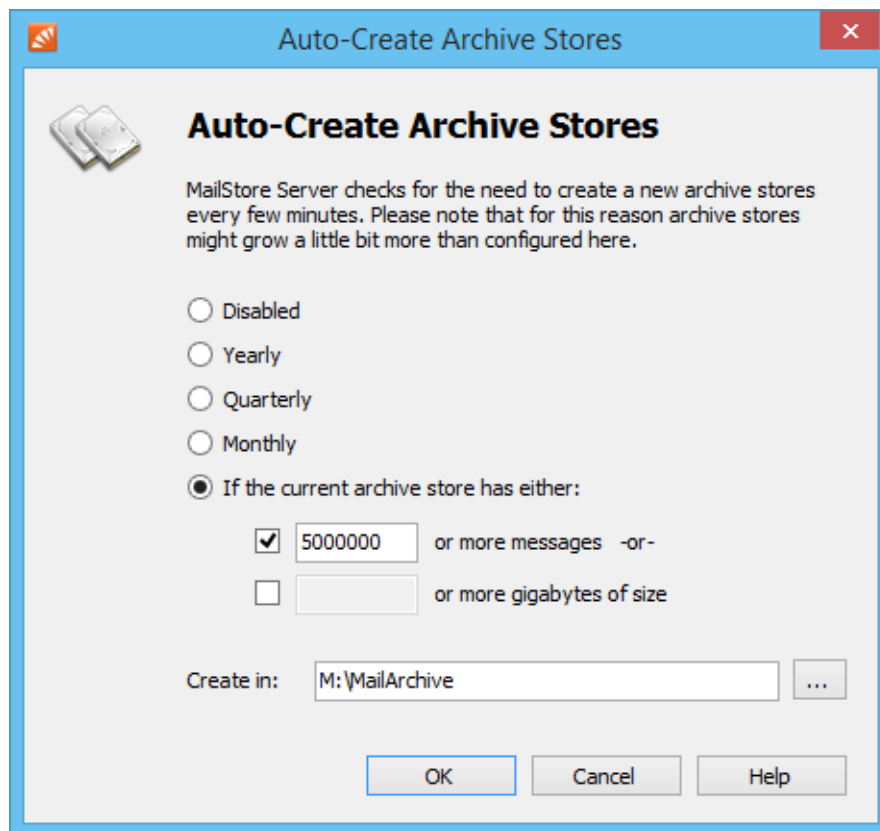
- Enter a name for the new standard archive store in the *Name* field, e.g. 2012-05.  
**Please note:** Remove the checkmark from the box titled *Archive new messages here* if you don't want MailStore to archive new emails in the new archive store.
- Using the name entered and the path of the master database MailStore suggests a destination folder for the new standard archive store. To change the proposed path, click on the button next to the *directory* field or enter a different path manually.  
**Important notice:** The destination folder is created automatically. If it already exists, it may not contain any files or subfolders.
- Click on *Finish* to create the standard archive store.

## Creating Standard Archive Stores Automatically

By default, MailStore Server creates a new standard archive store for every 5 million emails and archives new emails therein. To change this setting (in order to create a new standard archive store quarterly, for example), please proceed as follows:

- Start MailStore Client and log on as MailStore administrator (admin).
- Click on *Administrative Tools > Storage* and then on *Storage Locations*.
- Click on *Create automatically...*
- In the dialog *Auto-Create Archive Stores* customize the settings as desired.

**Please note:** You can find additional important information in the article *Performance and Scalability Guidelines*.



- Under *Create in* replace *C:\MailArchive* with the directory under which you want to add the new standard archive store. The standard archive stores that are created automatically by MailStore, including any subfolders, are named in the format *year-month*, e.g. *2009-04*.
- Click on *OK*.

## Creating an Advanced Archive Store

Creating a new advanced archive store is described in chapter Using Advanced Archive Stores.

## Managing Existing Archive Stores

### Specifying an Archive Store for New Archived Emails

Right-click on an archive store and select *Archive here*.

### Write-Protecting an Archive Store

Right-click on an archive store in the list and select *Read-only*.

After the archive store has been write-protected, the emails contained in the archive store remain available to all MailStore users and can be located though a search and through the folder structure. However, neither can new emails be archived in the archive store, nor can any emails be deleted from it. Please note that file system write access to the directory of the archive store is still required.

Read-only archive stores are marked with a lock symbol.

Write protect for a selected archive store can be deactivated by setting its status to *Normal* or *Archive here*.

## Deactivating an Archive Store

Deactivating an archive store allows you to make changes to its configuration. This may become necessary after Moving the Archive, for example. While an archive store is deactivated, the emails contained therein are not available to the archive.

To deactivate an archive store, right-click on it and select *Deactivated*.

## Attaching and Detaching Archive Stores

Existing archive stores can be detached from the archive. To do so, right-click on an archive store in the list and select *Detach*. The detached archive store and the emails contained therein are no longer available to the archive. This feature can be used when taking old parts of the archive out of storage, for example.

A detached archive store can be reattached to the archive at any time using the *Attach...* button and is then fully available again.

## Maintenance of Archive Stores

All available maintenance commands can be accessed by right-clicking on an archive store. Alternatively, you can highlight an archive store and click on the *Maintenance* button. You can choose from the following features:

### Cleanup (Compact)

Optimizing the data structures while compacting the data.

### Check Data Integrity

Verification of the data integrity between "Folder Information and Meta Data" as well as "Email Headers and Contents".

### Service All FDB Files

Service all Firebird embedded databases in standard or extended archive stores of type *Directory (File System)*.

### Recalculate all statistics

If there are any doubts about the shown statistics (number of emails per archive store), these statistics for all archive stores can be recalculated with this command.

## 5.12 Using Advanced Archive Stores

MailStore distinguishes between two types of archive stores: Standard archive store and advanced archive store.

When using standard archive stores, folder information, meta data, email headers and contents, and the full text index are all stored within a directory structure in the file system, while advanced archive stores allow you to store these components in different locations, such as SQL databases, for example. The 5,000,000 emails per archive store limit also applies to advanced archive stores.

For most environments, using standard archive stores is recommended, which is described in detail in chapter Storage Locations.

**Important notice:** If advanced archive stores use SQL databases to store data, the appropriate database server needs to be running before the MailStore Server service is started. Manual configuration of a service dependency may be required.

### Structure of an Archive Store

In MailStore, both standard and advanced archive stores always consist of the following three components:

#### Folder Information and Meta Data

Contains all data needed for the construction of the directory structure and the email list, which in some cases is also used in search requests.

#### Email Headers and Contents

Contains the actual payload of the archive.

#### Full Text Index

Contains all data needed for browsing emails and attachments.

While there is a direct relationship between *folder information and meta data* and *email headers and contents*, the full text index is derived from both and can be reconstructed at any time.

Because of its special data structure and for performant access, the full text index must always be stored in the file system. Using MailStore's local file system is recommended. Additional information about full text indexes is available in chapter Search Indexes.

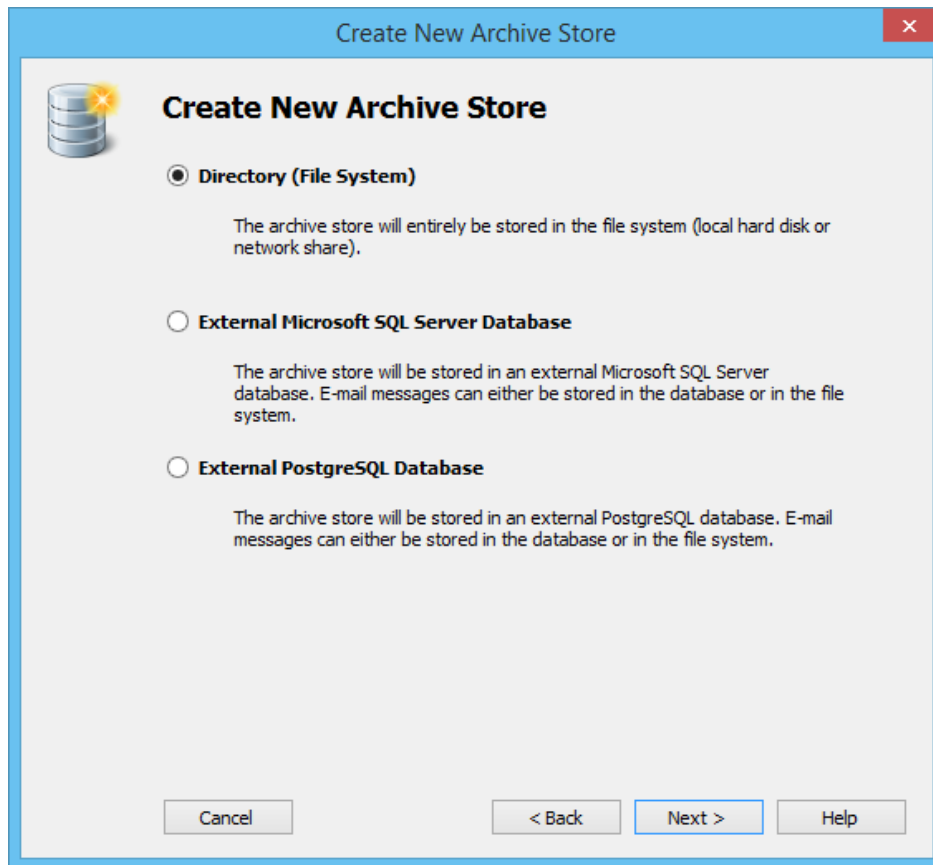
Please notice, that the 5,000,000 emails per archive store limit also applies to advanced archive stores.

## Creating an Advanced Archive Store

To create an advanced archive store, please proceed as follows:

- Start MailStore Client and log on as MailStore administrator (admin).
- Click on *Administrative Tools > Storage* and then on *Storage Locations*.
- In the menu bar at the bottom of the window click on *Create....*
- The dialog *Create New Archive Store* opens.

- Enter a name for the new advanced archive store into the *Name* field, e.g. *2012-05*.  
**Please note:** If you don't want MailStore to archive new emails in the new archive store, remove the checkmark from the box titled *Archive new messages here*.
- Select *Advanced Archive Store* and click on *Next*.
- Select the type of advanced archive store:

**Directory (File System)**

The entire archive store is stored in the file system (local hard drive or network share).

**External Microsoft SQL Server Database**

The archive store is stored in an external Microsoft SQL Server Database. Emails can be stored in the database or in the file system.

**External PostgreSQL Database**

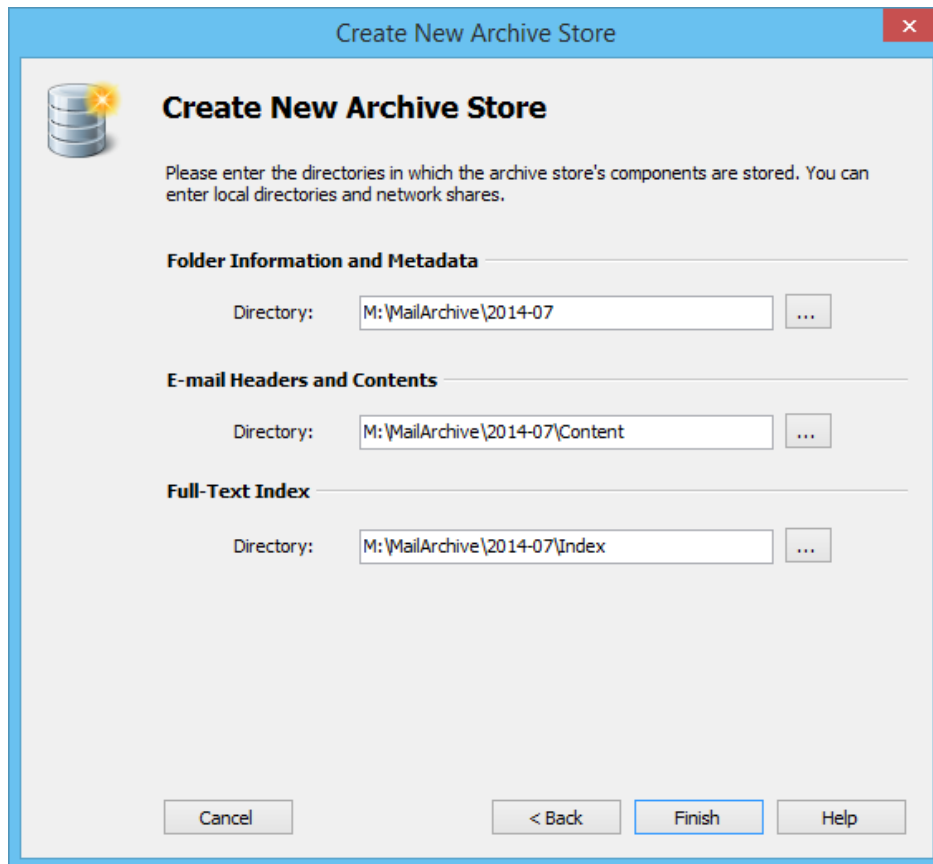
The archive store is stored in an external PostgreSQL Database. E-Mails can be stored in the database or in the file system.

- Click on *Next*.

Depending on the type selected, different input is required. How each archive store type is configured is described in the following sections.

## Advanced Archive Store Type: Directory (File System)

Using an advanced archive store of type *Directory (File System)* requires you to specify directories for the *Folder Information and Meta Data*, the *Email Headers and Contents* and the *Full Text Index*.



**Create New Archive Store**

Please enter the directories in which the archive store's components are stored. You can enter local directories and network shares.

**Folder Information and Metadata**

Directory: M:\MailArchive\2014-07 ...

**E-mail Headers and Contents**

Directory: M:\MailArchive\2014-07\Content ...

**Full-Text Index**

Directory: M:\MailArchive\2014-07\Index ...

Cancel < Back Finish Help

Based on the name entered at the beginning of the wizard and the path of the master database MailStore recommends directories for the new advanced archive store. To change a proposed path, click on the respective button next to the *Directory* field or enter a path manually.

**Important Notice:** The directories are created automatically. If they already exist, they must not contain any files or subfolders.

Please note that distributing the individual components of an advanced archive store among local drives or network shares significantly increases the complexity of Backup and Restore.

## Advanced Archive Store Type: External Microsoft SQL Server Database

Before you can set up the database connection in MailStore, an empty database has to be created on the database server. The MailStore user who is used for the connection should be the owner of the database. Please see the documentation of the database server for details.

*Folder information and meta data* are always stored in the SQL database, while storing *email headers and contents* therein is optional.

**Please note:** MailStore supports all editions of Microsoft SQL Server Version 2005, 2008 and 2012. Please keep their respective size limits in mind and verify their suitability for managing the expected volume of data in your environment.

Once an empty database has been created, please proceed as follows:

- Specify the connection parameters for the *Microsoft SQL Server Database Connection*:

**Create New Archive Store**

Please enter the server name, database name and credentials of the SQL Server database. The specified database must already exist on the server.

**Microsoft SQL Server Database Connection**

Server Name: db001.example.com

User Name: mailstore

Password: .....

Database: MS-2014-07 Test

**E-mail Headers and Content**

Location: Microsoft SQL Server Database

Directory: ...

**Full-Text Index**

Directory: M:\MailArchive\2014-07\Index ...

Cancel < Back Finish Help

**Server Name:** Enter the server name or the IP address of the SQL server on which a database has been created for MailStore. If you click on the arrow to the right of the input field, MailStore will return a list of all Microsoft SQL servers located on the network.

**User Name:** Name of the user with access to the database.

**Password:** Password of the user listed under *User Name*.

**Database:** Name of the database to be used by MailStore. Click on the arrow to the right of the input field to obtain a list of all available databases on the server.

- Under *email headers and contents* select the appropriate storage location. *Microsoft SQL Server Database* is the default suggestion. When choosing *Directory (File System)*, the input field *Directory* is activated. MailStore recommends a directory based on the name entered at the beginning of the wizard and the path of the master database. To choose a different directory, click on the button next to the *Directory* field or enter a path manually.
- **Important Notice:** The specified directory is created automatically. If it already exists, it must not contain any fields of subfolders.
- A directory for the full text index is also recommended based on the name entered at the beginning and the path of the master database.
- Click on *Finish*.

Please note that distributing the individual components of an advanced archive store among different local drives or network shares significantly increases the complexity of Backup and Restore.

## Advanced Archive Store Type: External PostgreSQL Database

Before you can set up the database connection in MailStore, an empty database has to be created on the database server. The MailStore user who is used for the connection should be the owner of the database. Please see the documentation of the database server for details.

*Folder information and meta data* are always stored in the SQL database, while storing *email headers and contents* therein is optional.

**Please note:** MailStore supports PostgreSQL version 8.4.8 or newer.

Once an empty database has been created, please proceed as follows:

- Specify the connection parameters for the *PostgreSQL Database Connection*:

**Create New Archive Store**

Please enter the server name, database name and credentials of the PostgreSQL database. The specified database must already exist on the server.

**PostgreSQL Database Connection**

Server Name:

User Name:

Password:

Database:

**E-mail Headers and Content**

Location:

Directory:

**Full-Text Index**

Directory:

**Server Name:** Enter the server name or the IP address of the SQL server on which a database has been created for MailStore.

**User Name:** Name of a user with access to the database.

**Password:** Password of the user specified under *User Name*.

**Database:** Name of the database to be used by MailStore. To obtain a list of all available databases on the server, click on the arrow to the right of the input field.

- Under *Email Headers and Contents* select the appropriate storage location. *PostgresSQL Database* is the default suggestion. Selecting *Directory (File System)* activates the input field *Directory*. MailStore proposes a directory based on the name entered at the beginning of the wizard and the path of the master database. To choose a different directory, click on the button next to the *Directory* field or enter a path manually.

**Important Notice:** The specified directory is created automatically. If it already exists, it must not contain any files or subfolders.

- MailStore also recommends a directory for the full text index based on the name entered at the beginning and the path of the master database.

- Click on *Finish*.

Please note that distributing the individual components of an advanced archive store among different local drives or network shares significantly increases the complexity of Backup and Restore.

## 5.13 Search Indexes

MailStore Server offers users an extremely fast full-text search. All emails a user has read-access to are searched, in most cases in only fractions of a second. To ensure this remarkable speed, MailStore Server sets up so-called search indexes during archiving. They work in a way similar to the indexes often found in the back of books: looking up something in an index gets results significantly faster than searching each single page.

MailStore Server maintains one index file each

- per file group and
- per user.

MailStore Server can index all file types for which a so-called IFilter driver is installed on the MailStore Server computer. Typically, IFilter drivers exist at least for all applications which are installed on the respective machines.

Under the name Microsoft Office 2010 Filter Packs<sup>[1]</sup> Microsoft provides a package that, additionally to all legacy as well as recent Microsoft Office Formats, supports the Open Document Format (OpenOffice/LibreOffice). For indexing PDF files the Adobe Reader or Adobe PDF iFilter<sup>[2]</sup> must be installed on the MailStore Server machine. Further background information about the IFilter system itself as well as links to additional IFilter drivers can be found in the corresponding Wikipedia article IFilter.

For reasons of stability and performance, MailStore Server processes the following file types directly, regardless of the IFilter drivers that are installed:

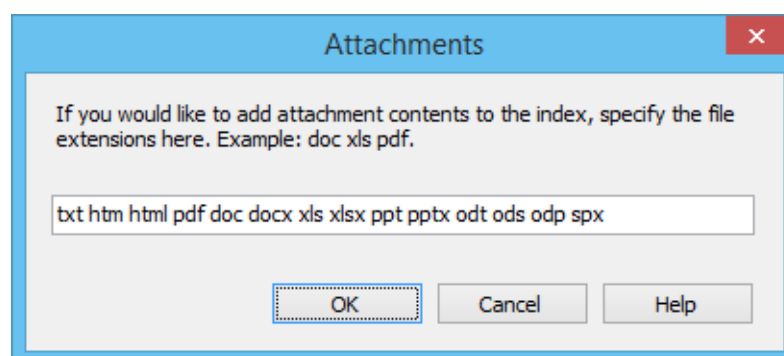
- Text files (TXT)
- HTML files (HTM and HTML)

Typical tasks regarding indexes are described in the following sections.

### Setting Up Indexing for the Contents of File Attachments

In the standard configuration, MailStore Server includes the file names of file attachments in the search indexes but not their contents. To enable MailStore Server to search the contents of file attachments, it has to be configured accordingly. Please proceed as follows:

- Start *MailStore Client* and log on as administrator (*admin*).
- Click on *Administrative Tools > Storage* and then on *Search Indexes*.
- In the area *Attachments* click on *Change...*
- Separated by space, enter the file types (file extensions) whose contents MailStore Server is to include in the search indexes.



- Click on *OK* to save the settings.

MailStore displays a notice, if file extensions were added for which no IFilter driver is installed on the MailStore Server machine.

The new settings apply to all emails that are archived as of now. To apply the settings to already archived emails, rebuild the appropriate search indexes as described below.

## Rebuilding Search Indexes


Normally, the creation, maintenance and usage of search indexes is completely transparent meaning that neither administrators nor MailStore users need to know of their existence or their internal workings. In some cases, however, some maintenance may become necessary. For example:

- because of power outage,
- because of unexpected termination of the MailStore Server service
- because of missing network connectivity (only with storage on an NAS) or
- because of changes to the index configuration (see below).

In these cases it may occur that archive, index and settings are no longer synchronous and that individual indexes must be rebuilt. Generally, a corresponding error message will be displayed.

To rebuild search indexes, please proceed as follows:

- Start MailStore Client and log on as administrator (admin).
- Click on *Administrative Tools > Storage* and then on *Search Indexes*.
- Check all search indexes to be rebuilt. Indexes with the status *Please Rebuild* are already checked for your convenience.
- Click on *Rebuild Search Indexes*.



 At least one search index is created for each archive store and user archive. Search indexes are required to search for a text within emails and attachments. Indexes can be rebuilt at any time.

**Attachments**

Attachments currently indexed: **txt htm html pdf doc docx xls xlsx ppt pptx odt ods odp spx** Change...

**Search Indexes**

Archive Store	Archive	Search Index	File Size	Status
<input type="checkbox"/> 11 - 2014-01-13	adam.tunney	Index0136.dat	46,895 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	alberto.charles	Index0137.dat	58,258 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	alex.martin	Index0138.dat	36,592 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	alice.bailey	Index0139.dat	65,815 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	alma.hart	Index0140.dat	64,311 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	amy.fernandes	Index0141.dat	99,807 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	amy.pridemore	Index0142.dat	65,983 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	andrew.speaks	Index0143.dat	63,304 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	anita.yarger	Index0144.dat	63,592 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	ann.bozeman	Index0145.dat	36,597 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	anna.avery	Index0146.dat	102,706 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	arnold.vela	Index0147.dat	61,661 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	barbara.childress	Index0148.dat	63,346 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	barbara.ross	Index0149.dat	64,430 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	barton.stevens	Index0150.dat	51,691 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	becky.martin	Index0151.dat	59,202 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	ben.christy	Index0152.dat	35,975 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	bernice.arnold	Index0153.dat	36,988 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	beverly.darrington	Index0154.dat	65,475 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	blaine.robinson	Index0155.dat	60,914 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	bob.quesenberry	Index0156.dat	35,513 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	bobbie.lebowitz	Index0157.dat	33,356 KB	OK
<input type="checkbox"/> 11 - 2014-01-13	honnita.andrews	Index0158.dat	66,437 KB	OK

Check All Uncheck All Rebuild Search Indexes  

## References

- [1] <http://www.microsoft.com/download/details.aspx?id=17062>
- [2] <http://www.adobe.com/support/downloads/detail.jsp?ftpID=5542>

## 5.14 Backup and Restore

### Backup

#### Preliminary Considerations

MailStore Server supports two methods to perform a full backup of the email archive including all user settings: the MailStore integrated backup feature and the use of external backup software.

Which method best suits the needs of your business depends on your preferences as well as your system environment. In smaller environments without a designated administrator, the integrated backup feature has the advantage that no extensive configuration needs to be performed in order to make sure that the backup is successfully completed and that all pertinent data and directories are included. To be able to transfer the data (for example to Digital Audio Tape), it is necessary to integrate the backed up data into another system backup.

When using external backup software (e.g. Symantec Backup Exec, Windows NTBackup or Acronis True Image,) a few measures have to be taken to be able to create a successful backup. However, it has the advantage that the MailStore Server data can be integrated into existing backup strategies without having to perform a separate system backup.

**Please note:** In MailStore's *Administrative Tools* under *Storage Locations*, older archive stores can be write-protected. Write-protected archive stores remain available to all users (although they cannot be moved or deleted) and no longer have to be included in ongoing backup procedures. These archive stores can be stored on cost-efficient storage media. More information about archive stores and storage locations is available under *Storage Locations*.

#### Which Data Must be Backed Up?

Each archive store in MailStore consists of three components:

- Folder information and meta data
- Email headers and contents
- Full text index

While *folder information and meta data* as well as *email headers and contents* are a unit that requires consistency, full text indexes can be reconstructed if needed.

In addition to the archive stores, the MailStore master database (MailStoreMaster.fdb) must be backed up as well because it contains all configuration settings of the users and profiles.

## Using the MailStore Integrated Backup Feature

MailStore has built-in technology to perform a full backup of the archive.

A full backup contains all archived emails and all program settings such as users and privileges. Restoring such a backup is sufficient to completely reinstate the original archive without having to perform any further configurations.

**Important Notice:** When using the integrated backup feature, MailStore only supports standard archive stores. If you are using advanced archive stores, a full backup can only be performed using external backup software.

### Procedure

To create a complete database backup, proceed as follows:

- Log in as MailStore administrator (admin)
- Click on *Administrative Tools > Storage* and select *Create Archive Backup*.

MailStore Server can create a backup copy of an email archive on local hard disks, USB storages, and network shares. Alternatively, you can learn how to use an external backup software under Online Help.

**Settings**

Target Directory:

☒ Incremental (copy only new or changed files)

**Advanced Settings**

☒ Backup all archive stores

☐ Backup all archive stores that are not write-protected

☐ Backup the following archive stores:

ID	Name	Type	Size in MB
<input checked="" type="checkbox"/> 11	2014-01-13	Standard Archi...	150,827
<input checked="" type="checkbox"/> 18	2014-02-19 (Archive Here)	Standard Archi...	148,986

- Enter the *Target Directory* for the backup.

**Please note:** If the target directory is a network share, make sure that the MailStore Server service has access to that share. Further information are available in the Using Network Attached Storage (NAS) article.

- Specify the scope of the backup. For determining which archive stores should be included in the backup, the following options are available:
  - **Backup all archive stores** - All currently attached standard archive stores are archived.
  - **Backup all archive stores that are not write-protected** - With MailStore Server archive stores can be write-protected. Users are still able to access the data of a write-protected archive store but are no longer able to make any changes (by adding or deleting emails). If a backup of a write-protected standard archive store has already been performed, it can be excluded from the backup procedure using this option.

- **Backup the following archive stores** - With this option the backup can be limited to specific standard archive stores.
- After selecting the appropriate option, click on *Start Now* to perform a single backup.

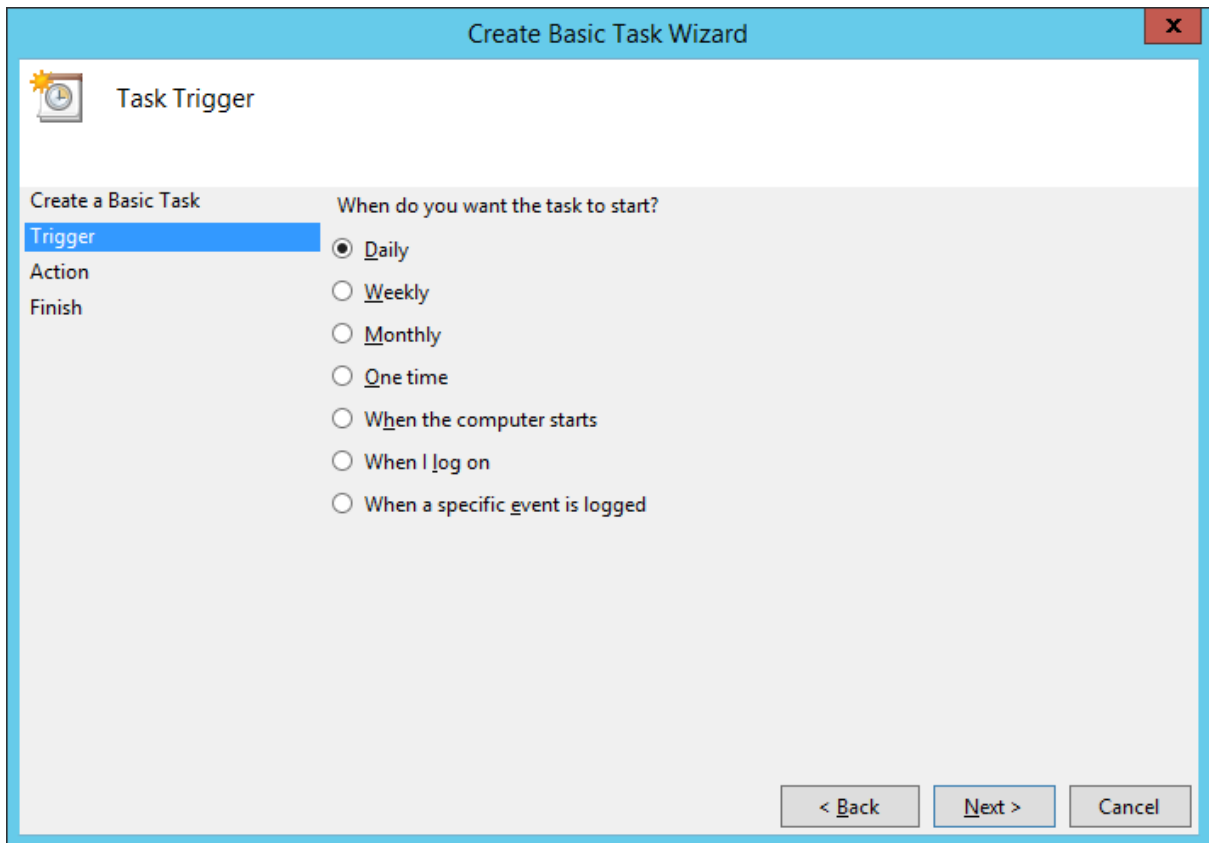
To perform a backup at regular intervals, a task must be created manually in the Windows Task Scheduler. The necessary steps are described in the next section.

## Automating the Backup

Once the backup has been successfully executed manually, it can easily be automated based on these settings by following the steps below:

- Click *Copy Cmd Line* to copy the command line into the clipboard.  
**Notice for users for MailStore Server <= 9.0.3:** Paste the copied command line into an empty text document and copy only the second line again, to get rid of the comment on the first line. Otherwise the command line is not detected correctly by the Windows Task Scheduler.
- Open the *Task Scheduler* by using the Windows start menu or execute the command *taskschd.msc*.
- Right click on *Task Scheduler Library* and select *Create Basic Task...* from the context menu.
- In the first step enter a name for the newly created task, i.e. "MailStore Backup" and afterwards click on *Next*.

- Now select when or how often to run the backup. Depending on the previous selection, additional settings may have to be done after clicking *Next*. Afterwards click on *Next* again.



The screenshot shows the 'Create Basic Task Wizard' window with the 'Task Trigger' step selected. The window has a blue title bar and a red close button. The main area is divided into two sections: 'Create a Basic Task' on the left and 'When do you want the task to start?' on the right. The 'Create a Basic Task' section has a list of steps: 'Trigger' (selected), 'Action', and 'Finish'. The 'When do you want the task to start?' section has a list of radio button options: 'Daily' (selected), 'Weekly', 'Monthly', 'One time', 'When the computer starts', 'When I log on', and 'When a specific event is logged'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Create Basic Task Wizard

Task Trigger

Create a Basic Task

Trigger

Action

Finish

When do you want the task to start?

☒ Daily

☐ Weekly

☐ Monthly

☐ One time

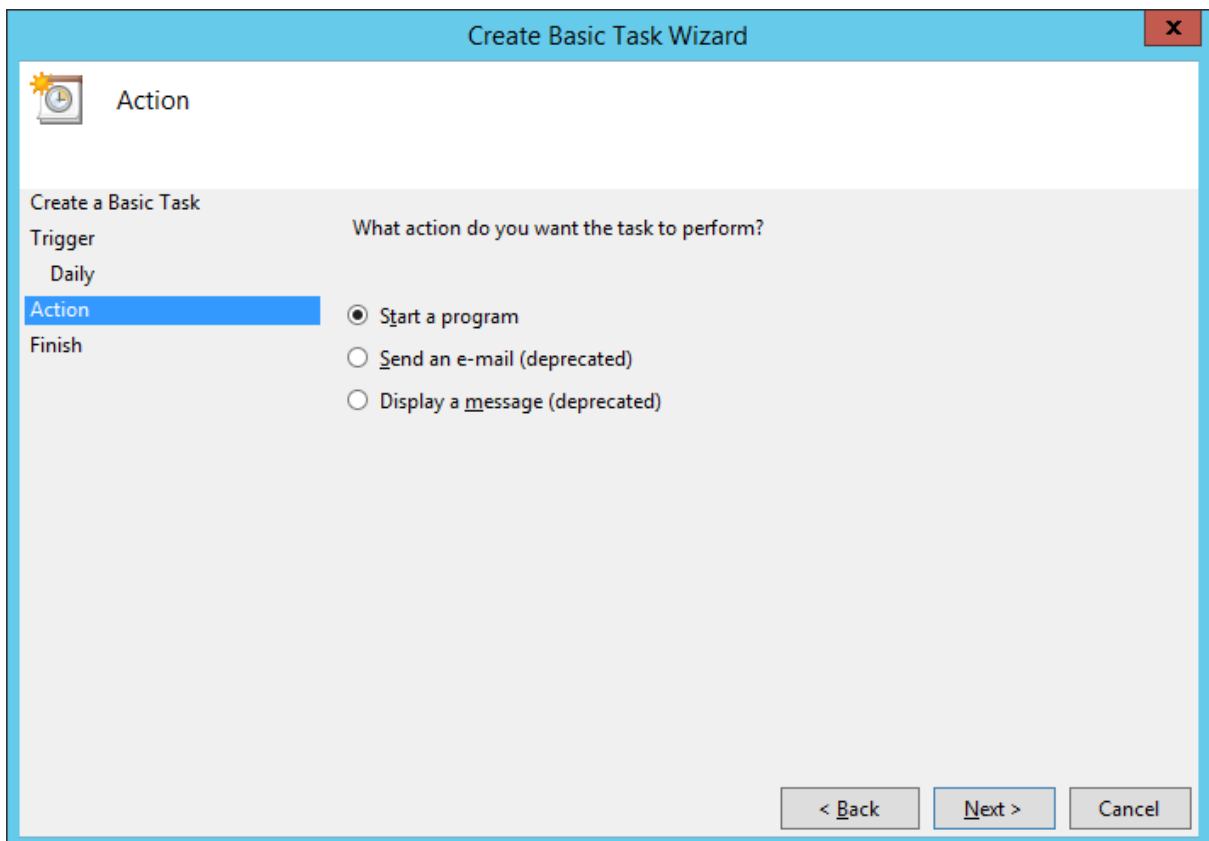
☐ When the computer starts

☐ When I log on

☐ When a specific event is logged

< Back Next > Cancel

- Choose *Start a Program* as action and click *Next*.



The screenshot shows the 'Create Basic Task Wizard' window with the 'Action' step selected. The window has a blue title bar and a red close button. The main area is divided into two sections: 'Create a Basic Task' on the left and 'What action do you want the task to perform?' on the right. The 'Create a Basic Task' section has a list of steps: 'Trigger', 'Daily', 'Action' (selected), and 'Finish'. The 'What action do you want the task to perform?' section has a list of radio button options: 'Start a program' (selected), 'Send an e-mail (deprecated)', and 'Display a message (deprecated)'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Create Basic Task Wizard

Action

Create a Basic Task

Trigger

Daily

Action

Finish

What action do you want the task to perform?

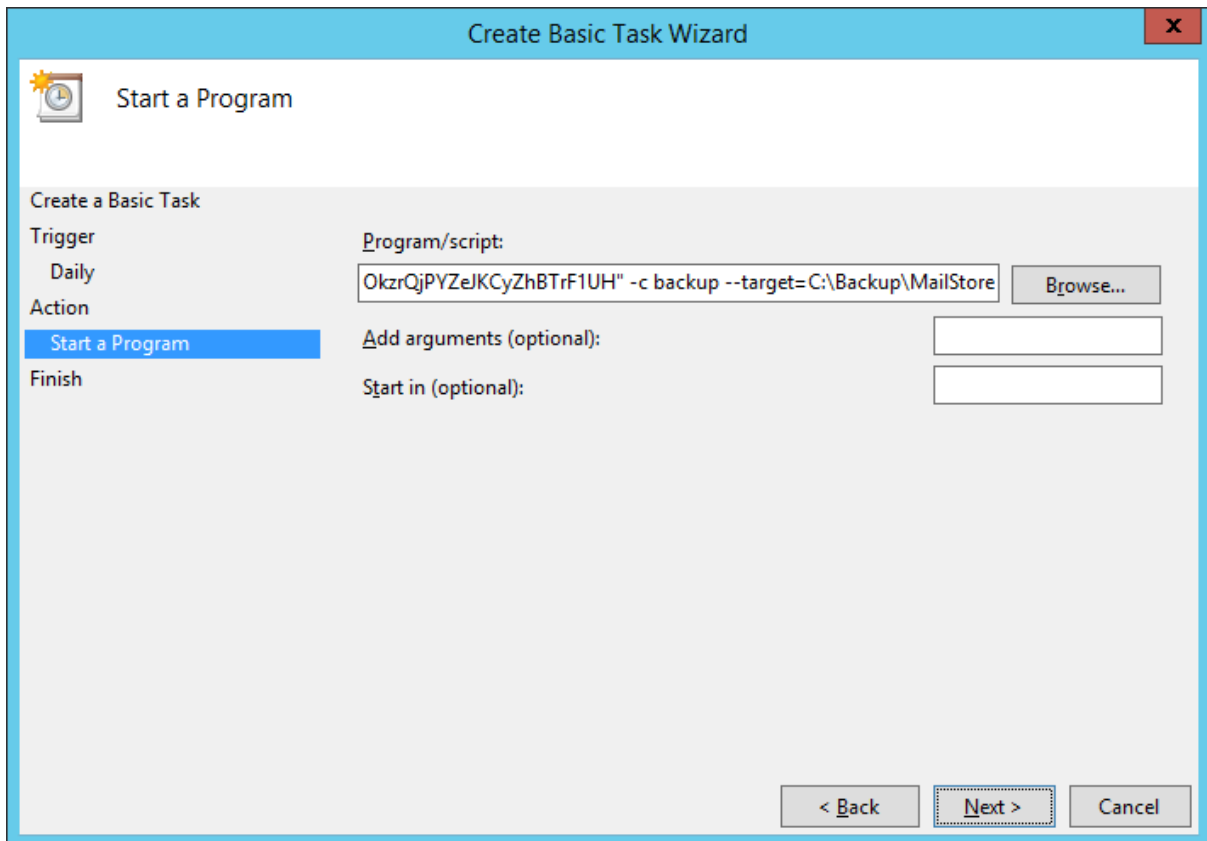
☒ Start a program

☐ Send an e-mail (deprecated)

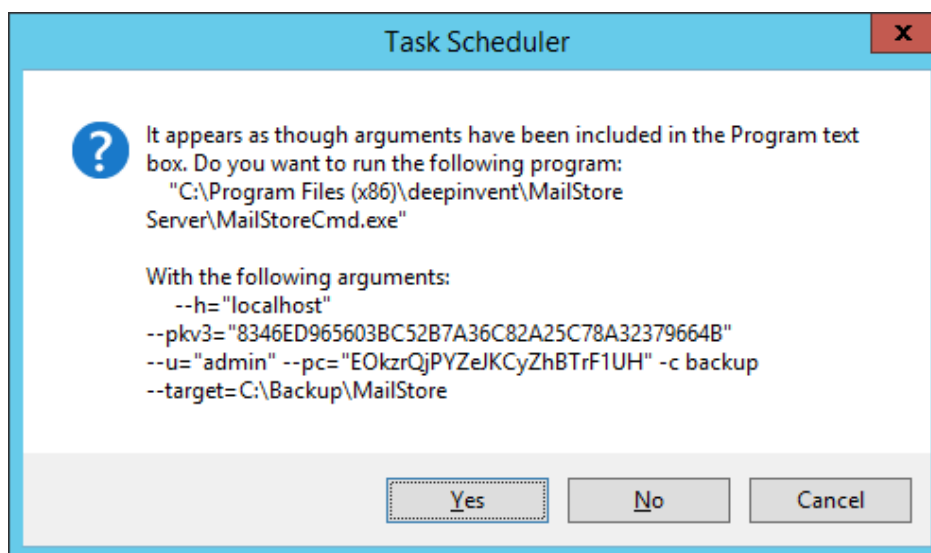
☐ Display a message (deprecated)

< Back Next > Cancel

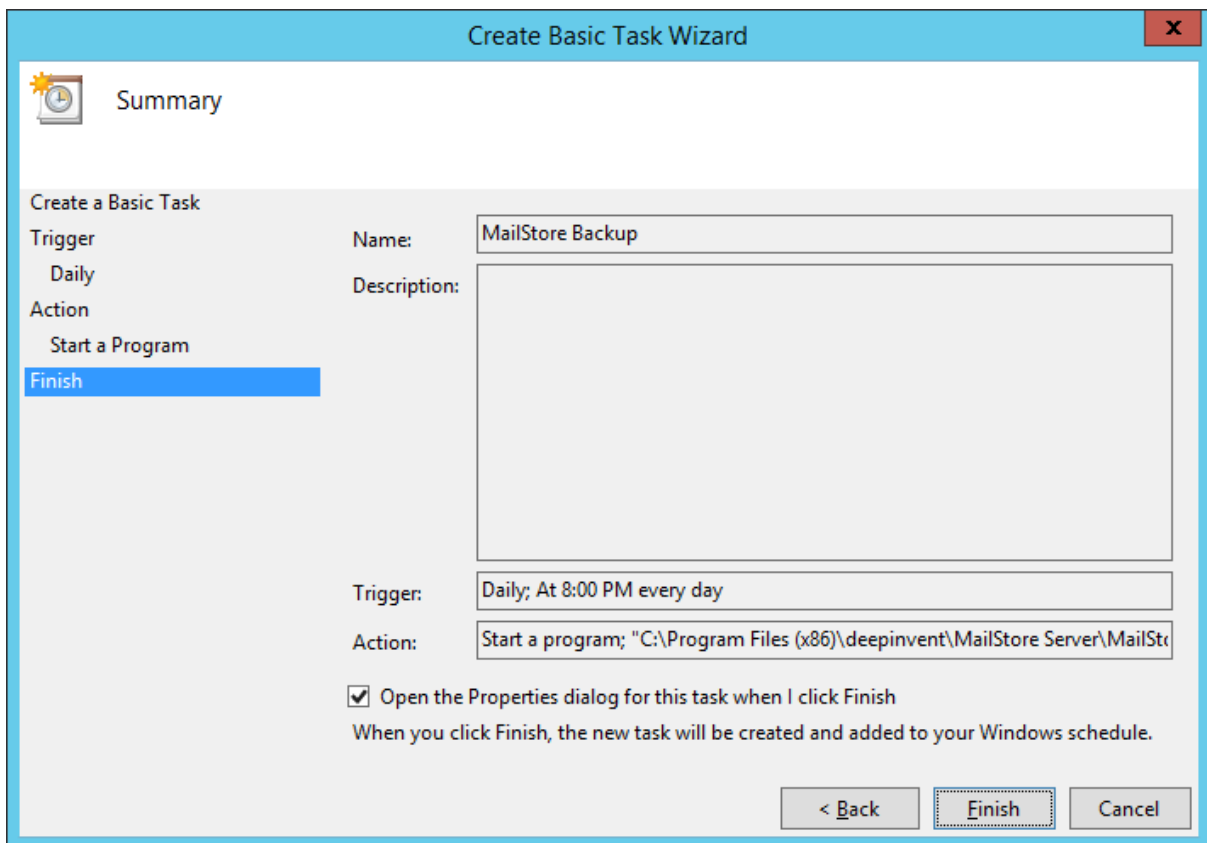
- Paste the copied command line from the beginning into the text field *Program/script*.



- After clicking on *Next*, the task scheduler asks whether to split the command line into a program call and argument list. Answer this question with *Yes*.



- Activate the option *Open the Properties dialog for this task when I click Finish* in the summary and click *Finish*.



**Create Basic Task Wizard**

**Summary**

Create a Basic Task

Trigger: **Daily**

Action: **Start a Program**

**Finish**

Name: MailStore Backup

Description:

Trigger: Daily; At 8:00 PM every day

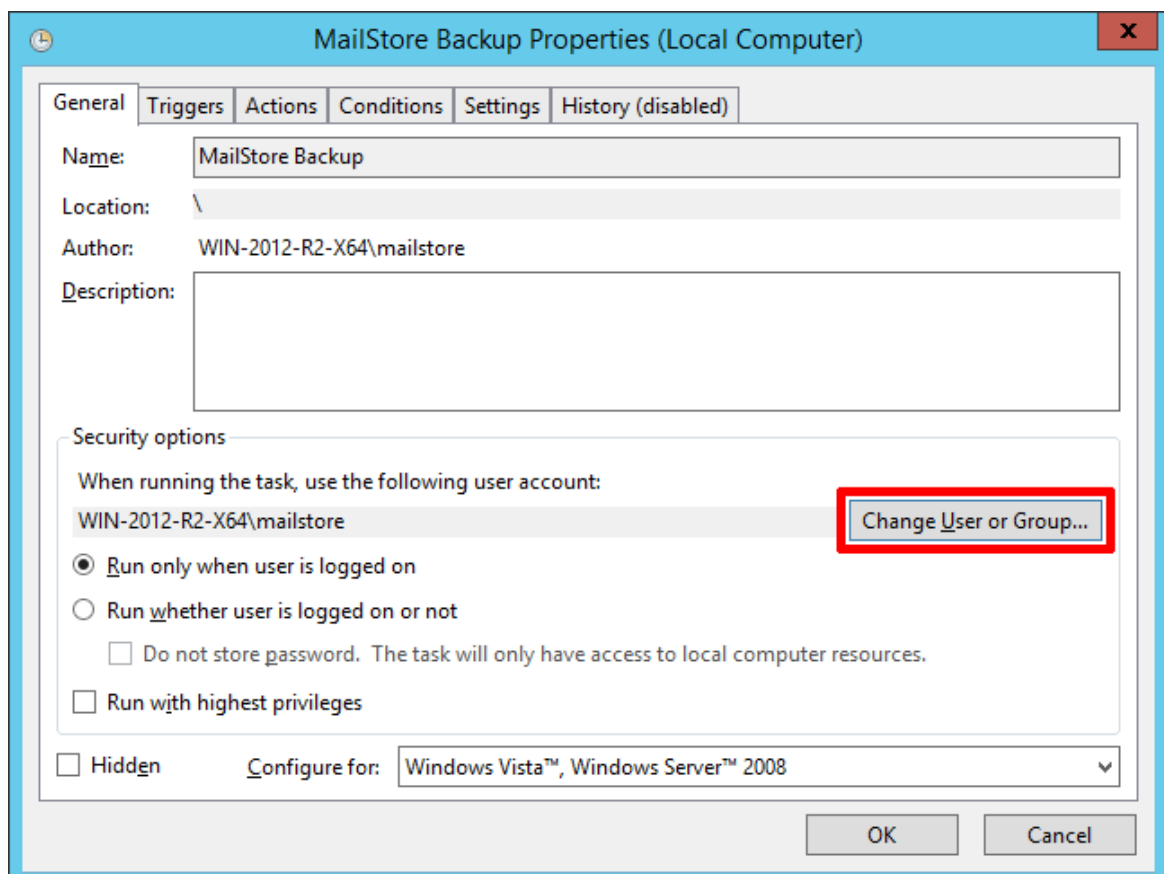
Action: Start a program; "C:\Program Files (x86)\deepinvent\MailStore Server\MailStore Backup.exe"

☒ Open the Properties dialog for this task when I click Finish

When you click Finish, the new task will be created and added to your Windows schedule.

< Back Finish Cancel

- Click on *Change User or Group....*



**MailStore Backup Properties (Local Computer)**

General Triggers Actions Conditions Settings History (disabled)

Name: MailStore Backup

Location: \

Author: WIN-2012-R2-X64\mailstore

Description:

Security options

When running the task, use the following user account:

WIN-2012-R2-X64\mailstore **Change User or Group...**

☒ Run only when user is logged on

☐ Run whether user is logged on or not

☐ Do not store password. The task will only have access to local computer resources.

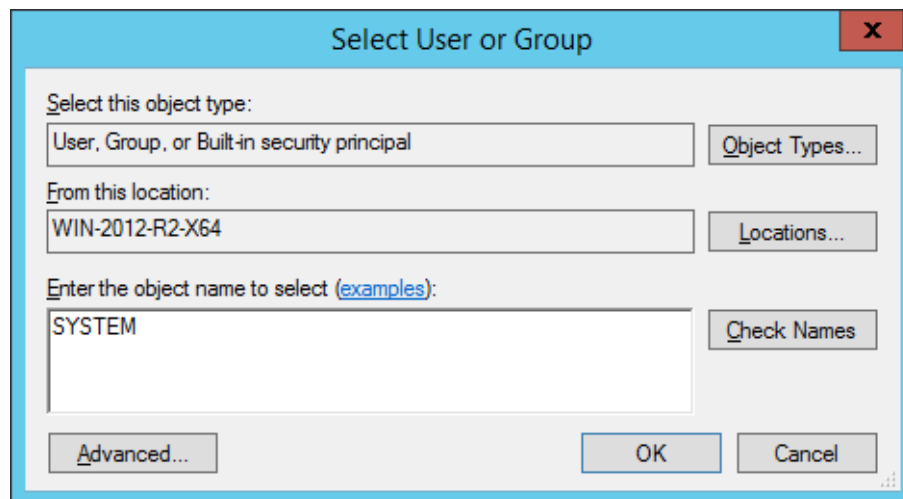
☐ Run with highest privileges

☐ Hidden

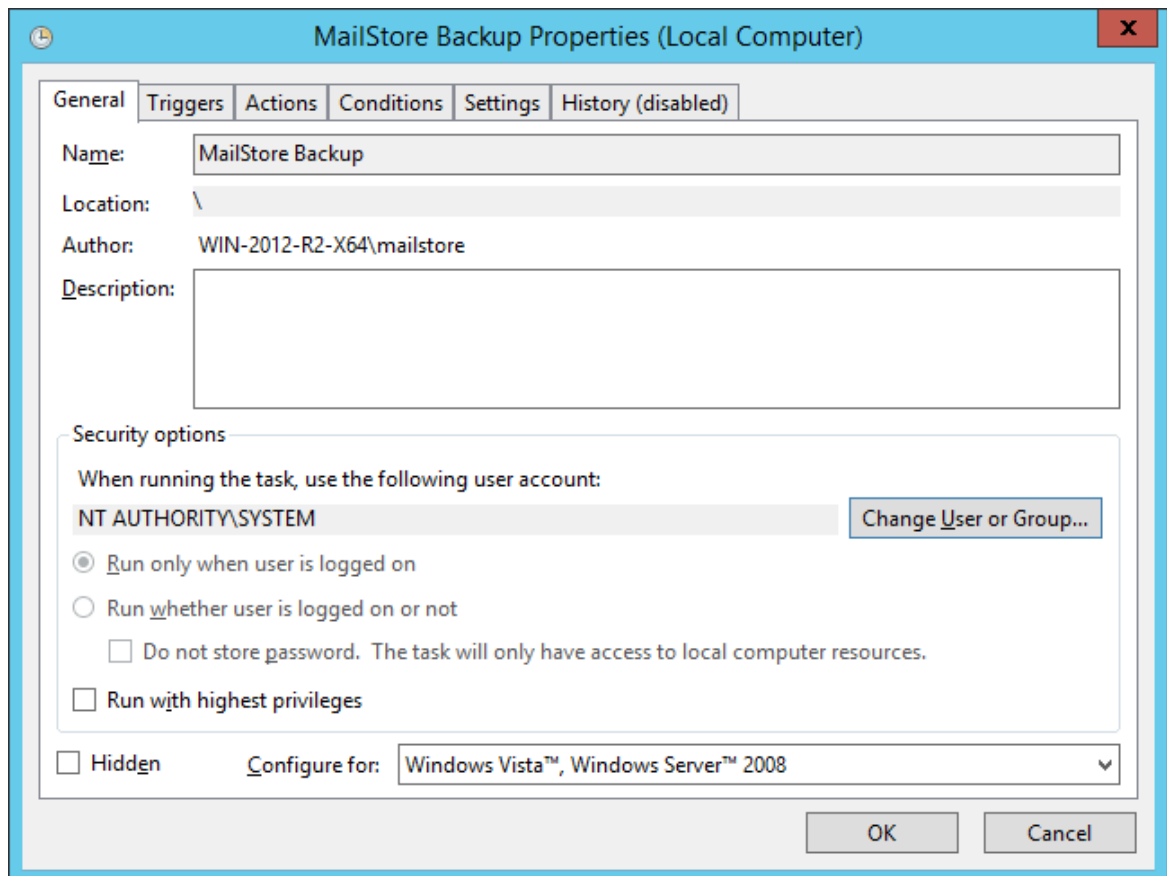
Configure for: Windows Vista™, Windows Server™ 2008

OK Cancel

- Enter *SYSTEM* into the text box and click *OK*.



- The task will now be run as the *NT\_AUTHORITY\SYSTEM* account, the same account as the MailStore Server service.



- To close the properties dialog click on *OK* again.

A new task for executing the backup regularly has now been created in the *Task Scheduler Library*.

**Please note:** The archive cannot be accessed while a backup is in progress. Trying to access the archive will generate the error message "Due to maintenance the server is currently unavailable."

## Using External Backup Software

### Backup of Standard Archive Stores

When backing up standard archived stores with an external backup software, attention must be paid to the consistency of data, which mainly depends on the backup method. The following sections summarize the pros and cons of the different methods.

#### File Based Backups

While file based backups solutions are good for backing up independent files, they are usually not suitable for creating consistent backups of MailStore Servers as their data is spread across multiple rapidly changing files.

In order to create consistent backups with file based backup tools, it is required to either freeze and thaw MailStore Server via `net pause mailstoreserver` and `net continue mailstoreserver` commands or to shutdown and restart the MailStore Server via `net stop mailstoreserver` and `net start mailstoreserver` commands.

As MailStore Server must remain shut down for the time of the backup, this typically results in downtimes during which MailStore is neither able to archive new email nor provide end user access to the archived data.

#### Storage Snapshots

When using Volume Shadow Services (VSS) or other methods of creating snapshots on storage level, it is necessary to ensure that all files used by the instances are closed before the snapshot is created.

The MailStore Server service provides external backup software using Microsoft Volume Shadow Service with a so-called Volume Shadow Service Writer (VSS Writer). The external backup software can use it to create consistent backups of the MailStore master database and all standard archive stores. If this method succeeds, however, largely depends on the backup software which is used.

To verify if the appropriate VSS events were initiated in MailStore during a backup, open the system protocol in the Windows event viewer and search for the following events:

1. *A backup session has been started.*
2. *The archive has been frozen as a reaction on the OnPrepareSnapshot event.*
3. *The archive has been thawed as a reaction on the OnThaw event.*
4. *The backup session has been shut down.*

If these events cannot be found in the system protocol, no consistent backup using Volume Shadow Service was performed. In that case it is necessary, that the backup software is preparing MailStore Server for the snapshots. This can be done with the methods mention in File Based Backups.

To learn how to execute commands before and after performing snapshots, please consult your backup software's documentation.

#### Full Virtual Machine Snapshots

Some backup solutions are highly integrated into virtualization solutions and allow to create and backup/replicate full snapshots of virtual machines. These type of snapshots not only contain the current state of the hard disks but also of the current main memory. Thus full virtual machine snapshots can be considered as consistent.

#### Other Backup or Replication Methods

For questions regarding any other type of backup solutions such as block level replication, continuous backup, etc. please contact the vendor's support to find out whether their software is able to create consistent backups of whole directory structures.

### Backup of Advanced Archive Stores

Advanced archive stores allow you to store individual components of the archive store data in different locations. For example, folder information and meta data can be stored in an SQL database while saving email headers and contents in the file system. Depending on the storage locations, the order can be crucial for a consistent backup.

## Single Storage Location

If all data of an advanced archive store such as folder information and meta data as well as email headers and contents are stored in the same location (file system or SQL database), the consistency of this location must be kept in mind. This can be done using the Volume Shadow Service or appropriate database backup software, for example.

## Multiple Storage Locations

In case different storage locations are used for folder information and meta data as well as email headers and contents of an advanced archive store, the order of the backup is crucial for the consistency of the archive store backup. Please adhere to the following order:

1. Backup of the folder information and meta data
2. Backup of email headers and contents

This ensures that upon recovery, for all folder information and metadata there exist the corresponding email headers and contents, and that data integrity is maintained.

## Restoring Backups

This section describes how a database backup of the entire email archive, which was created using the integrated backup feature, can be restored.

### Background

A database backup which was created using the integrated backup feature contains all archived emails and program settings such as users and privileges. Restoring such a backup is sufficient to completely reinstate the original archive without having to perform any further configurations.

## Automatic Restore of a Database Backup

MailStore creates two files in the backup destination when creating a backup., which allow an automatic full restore of the archive in its original storage location. Should the backup be restored into a different storage location or if only parts (i.e. single archive store) should be restored, the restore procedure must be performed manually (see next section).

An operative installation of MailStore Server is required to restore a database backup. Please proceed as follows:

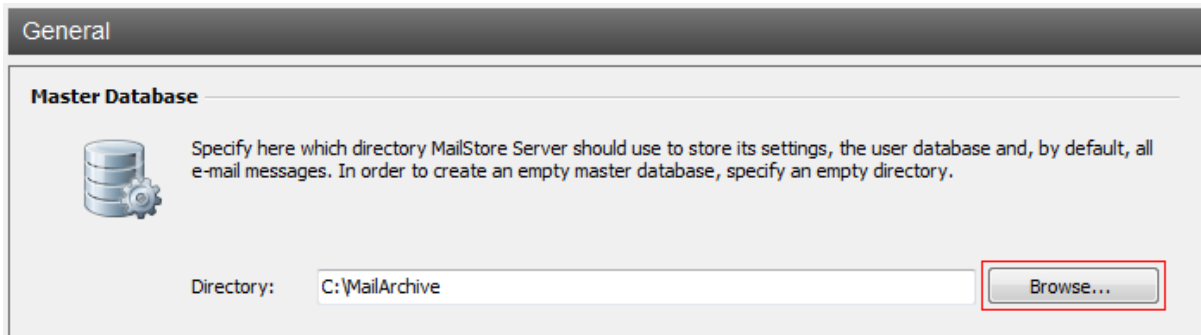
- Stop the MailStore Server Service and remove the empty archive directory that has been created during installation in *C:\MailArchive*.
- Next execute the file *restore.bat* from the backup directory.
- Follow the on-screen instructions. Carefully check the output for possible error messages.
- Run the MailStore Server Service Configuration tool from the MailStore program folder in the Windows start menu.
- Click *Browse...* under *General > Master Database* and select the restore directory which contains the *MailStoreMaster.fdb* file. Confirm the selection by clicking *OK*.
- Finally start the MailStore Server Service again.

No further steps are necessary after using the automatic restore.

## Manual Restore of a Database Backup

An operative installation of MailStore Server is required to restore a database backup. Please proceed as follows:

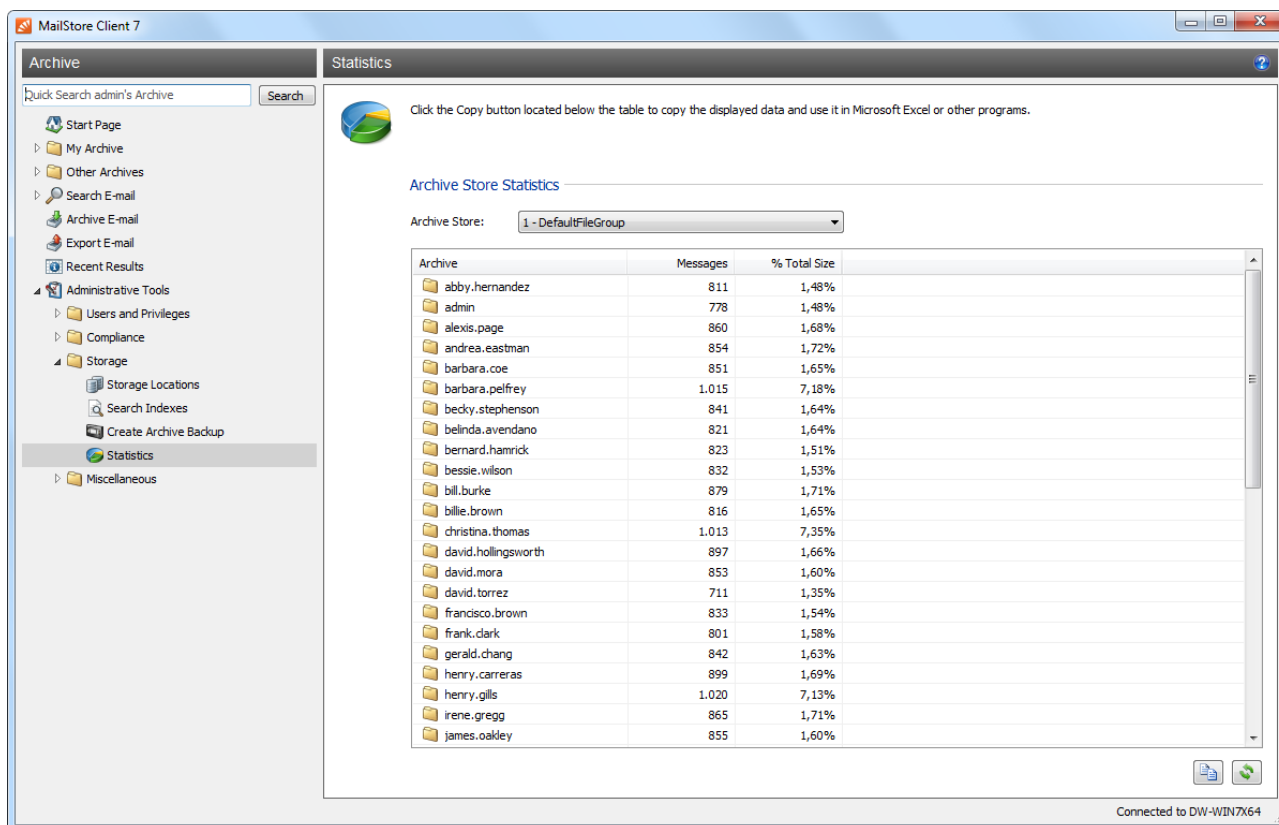
- Copy the database backup to a local hard drive on the computer or to a respective network share.
- Start the MailStore Server Service Configuration. It is located in the MailStore Server program folder that can be accessed through the Windows Start menu.
- Below *Master Database*, click on *Browse...* and select the backup directory containing the file *MailStoreMaster.fdb*.



- Click on *OK* to confirm.
- At the bottom of the window, click on *Restart Service* to save the new settings.
- When creating the backup, the folder names of the archive store may have changed. Please use the Storage Locations Management to adjust the paths to the archive stores or rename the folders in the file system accordingly. *Hint:* A mapping of archive store folder names in the backup to their original names can be found in the *restore.csv* file that has been created with the backup.
- The backup is completely restored to the application and the archive can be used as usual.

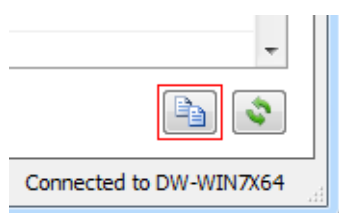
## 5.15 Archive Statistics

To view the statistics, log on to MailStore Client as administrator. Click on *Administrative Tools > Storage* and then on *Statistics*. The statistics always refer to a specific file group which can be selected from the drop-down menu *File Group*.



For every file group, the following statistics can be retrieved:

- Number of emails per user archive
- Percentage share a user archive has of the total volume of a file group based on the MIME size of the email
- Total size of email per user archive in megabyte



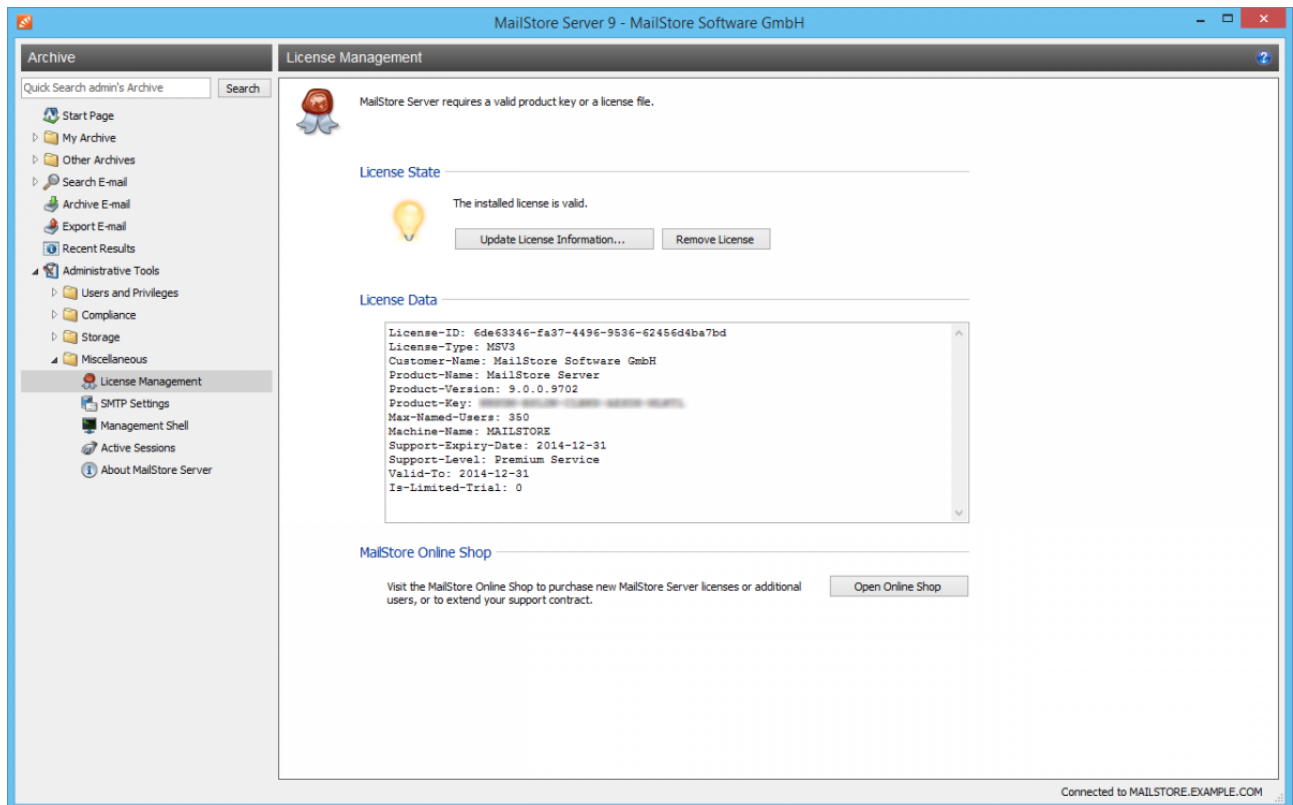
Using the copy function in the lower area of the application window, the information shown can be copied to the clipboard and pasted into other applications, e.g. Microsoft Excel.

General information about file groups is available in the chapter Managing Storage Locations.

## 5.16 License Management

The license management in MailStore allows you to install or update your MailStore Server license and gives an overview of the license currently in use. Furthermore the *Open Online-Shop* button provides direct access to our online shop, where, for example, license renewals or upgrades can be purchased.

**Please notice:** License holders that have not purchased their license directly from MailStore Software must contact their reseller for any license related topics.



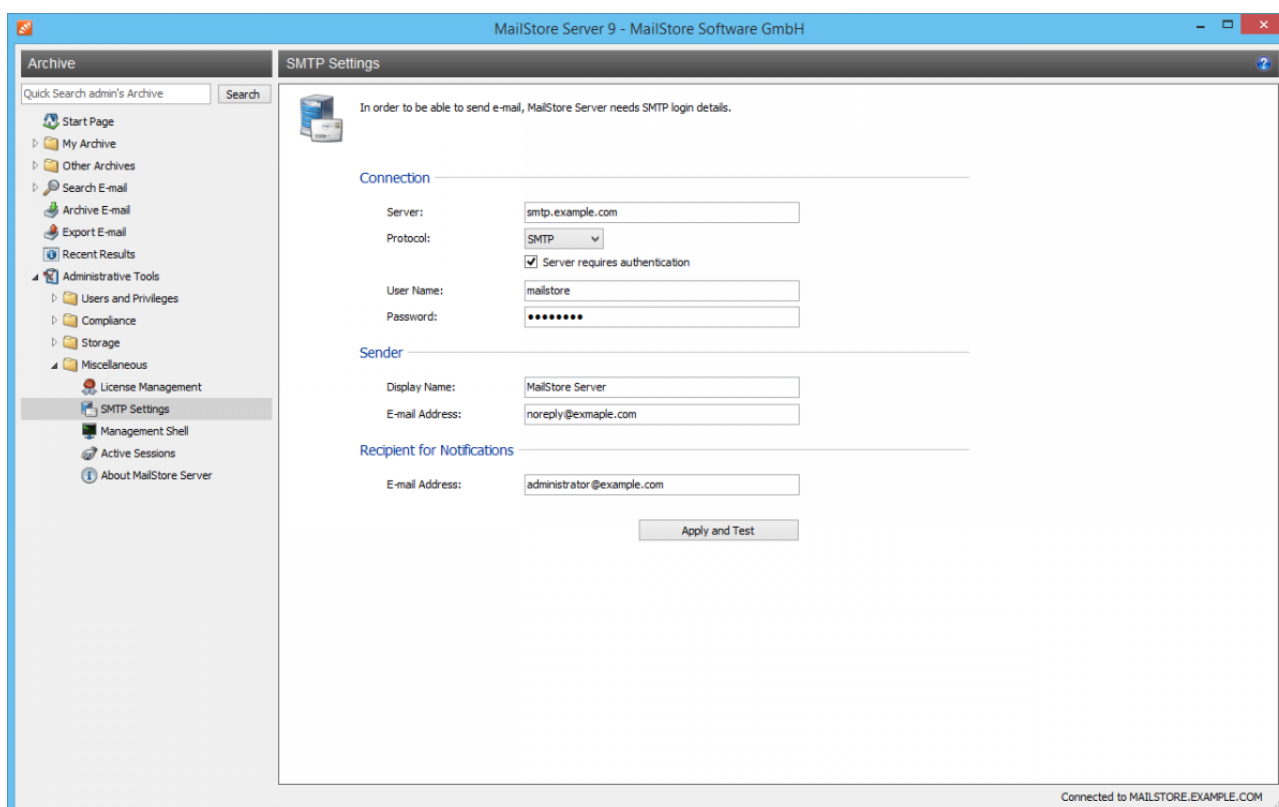
## 5.17 SMTP Settings

To be able to send emails, MailStore Server requires SMTP access data. Email is used to send a notifications email if the automatic creation of a new archive store failed or email copies for the recovery from MailStore Web Access.

### Specifying the Settings

To specify the SMTP settings, please proceed as follows:

- Start MailStore Client and log on as MailStore administrator (*admin*).
- Click on *Administrative Tools > Miscellaneous* and then on *SMTP Settings*.



- Under *Server*, enter the host name of the SMTP server or its IP address.
- If a non-standard port is to be used, enter the port number in the *Server* field as well, separated by a colon. For example: *exchange.orange-2k10.local:587*
- In the field *Protocol*, select *SMTP* if the connection to the SMTP server is to remain unencrypted. If the connection to the SMTP server is to be encrypted, select *SMTP-TLS* or *SMTP-SSL* under *Protocol*. If the SMTP server does not have an official or installed SSL certificate, mark the checkbox *Ignore SSL Warnings*; if it is unchecked, the sending process will fail.
- Especially SMTP servers which are accessible through the internet require a login (SMTP authentication). Mark the corresponding checkbox and enter the appropriate access data. Often times, the POP3 access data of any user on the email server can be used.
- Under *Sender*, enter the *Display Name* and the *Email Address* of the email sender. Many SMTP servers require an existing email address to be entered. The display name can be chosen freely; ideally the name indicates that the email was sent by MailStore Server.
- Under *Recipient for Notifications*, enter the email address of the recipient for administrative notifications of MailStore Server.
- Once all settings have been specified, MailStore Server can be instructed to send a test email to the email address entered for notifications; simply click on *Apply and Test*. If an error message appears or the

recipient specified does not receive the email, the following hints for troubleshooting may be helpful.

## Troubleshooting

- If no error occurs upon sending but the email does not arrive, please check the spam or junk mail folder of the mailbox. Perhaps the email was filtered out.
- If an error message appears because of an invalid certificate ("Server's certificate was rejected by the verifier because of an unknown certificate authority."), mark the checkbox *Ignore SSL Warnings* and try again.
- If an error message appears indicating that "*One or more recipients rejected*", the SMTP server probably requires authentication. Enter the appropriate access data as described above.
- If an error message appears because of invalid access data ("*Incorrect authentication data*" or "*Authentication failed*"), verify the data entered. Often times, the access data match those of the corresponding POP3 server.
- If further error messages appear or other problems arise, please check your entries for possible mistakes.

## 5.18 Active Sessions

Under *Administrative Tools > Active Sessions*, administrator can see which users are currently logged into MailStore Server. This may be important in preparation of performing maintenance tasks such as a backup, in order to identify which active users are affected by such an action.

## 5.19 MailStore Server Management Shell

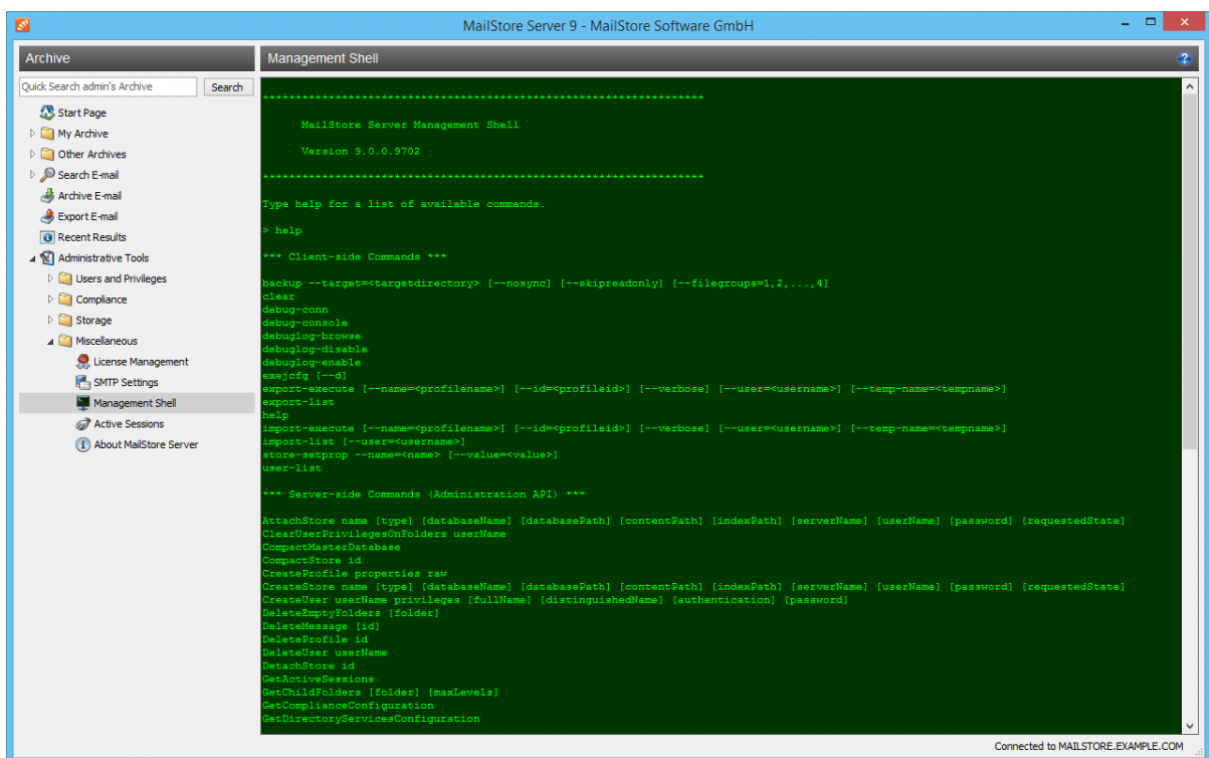
Many instructions available in the graphical user interface of MailStore Client can also be executed using MailStore's management shell, a command line client which is automatically included when installing MailStore Server and MailStore Client.

The management shell is useful when no graphical user interface is available (e.g. if using telnet or ssh) or for the integration of scripts (e.g. batch files) that are executed either manually or automatically.

Beside the client-side commands, the Management Shell also offers access to server-side commands of the MailStore Server Administration API. Output of service-side commands is in JSON format.

### Starting the Management Shell in MailStore Client

The management shell can be started directly from MailStore: Log on to MailStore Client as administrator and click on *Administrative Tools > Miscellaneous* and then on *Management Shell*.



## Using MailStoreCmd.exe in Non-Interactive Mode

In non-interactive mode, the management shell logs on with the access data passed, executes the command passed, and automatically terminates upon execution. If the login and the execution of the command were successful, the exit code (ERRORLEVEL) of the process is set to 0 (zero), otherwise it is set to any value other than 0.

The syntax of the *MailStoreCmd.exe* looks as follows:

```
MailStoreCmd.exe -h <server> -u <user> -p <password> --pvk3 <thumbprint> -c <command> [-param1 <value> -param2 <value> ...]
```

The below command line parameters are required followed by additional API command parameters if necessary.

Parameter	Description
-h	The machine name of the MailStore server to which code>MailStoreCmd.exe is to connect.
--pvk3	The (optional) Public Key Fingerprint, which guarantees the identity of MailStore Server.
-u	User name.
-p	Password.
--pc	Alternative to -p, encrypted password
-c	The actual command follows (non-interactive mode).

## Command Overview

Find a list of all client side commands below. An overview of all available server side commands can be found under Function Reference.

**Hint:** Enter *schedule* in front of a management shell command, client and server side, allows you to define a schedule for executing the given management shell command regularly.

```
backup --target=<targetdirectory> [--nosync] [--skipreadonly] [--filegroups=1,2,...,4]
```

Create a backup of the archive. Following parameters are supported:

```
--target          directory where to create the backup
--nosync           copy all files; not only new or modified ones
--skipreadonly     skip file groups marked as read only
--filegroups=1,2,...,4 make backup of given file groups only
```

```
clear
```

Clears the texts currently displayed improving visibility.

```
debug-conn
```

Activates debug protocol for IMAP and HTTP connections during archiving for the running MailStore Client process.

```
debug-console, debuglog-browse, debuglog-disable, debuglog-enable
```

Activates, displays or deactivates the global debug protocol (within computer scope).

```
export-execute [--name=<profilename>] [--id=<profileid>] [--verbose] [--[property]="value"]
```

Executes an export profile. Following parameters are supported:

- `--name | --id` name or ID of the export profile to execute
- `--verbose` activates a detailed status display on the console
- `--[property]` Overwrites the given property of a profile. The internal properties can be displayed, by selecting an export profile and press `CTRL + SHIFT + P`. The name of the property has to be in brackets. Multiple properties can be modified by repeating the parameter.

```
export-list
```

Displays a list of all existing export profiles (ID and profile name).

```
help
```

Displays a list of all available commands and their parameters.

```
import-execute [--name=<profilename>] [--id=<profileid>] [--verbose] [--user=<username>] [--[property]="value"]
```

Executes the archiving profile. Following parameters are supported:

- `--name | --id` name or ID of the import profile to execute
- `--verbose` activates a detailed status display on the console
- `--user` user archive to store archived emails
- `--[property]` Overwrites the given property of a profile. The internal properties can be displayed, by selecting an archiving profile and press `CTRL + SHIFT + P`. The name of the property has to be in brackets. Multiple properties can be modified by repeating the parameter.

```
import-list [--user=<username>]
```

Displays a list of all existing archiving profiles (ID and profile name).

```
store-setprop --name=<name> [--value=<value>]
```

Changes the value of a global property

- `--name` Name of the global property
- `--value` Value of the global property

Following global properties are supported:

Name	Version	Values	Default
public.arcclient.skipMimeContentConversionFailed	8	<i>true</i> = Exchange <i>MimeContentConversionFailed</i> errors are ignored and not handled as an archiving error. <i>false</i> = Exchange <i>MimeContentConversionFailed</i> errors are handled as archiving errors.	false
public.arcclient.skipVirusDetected	8.1	<i>true</i> = Exchange <i>ErrorVirusDetected</i> errors are ignored and not handled as an archiving error. <i>false</i> = Exchange <i>ErrorVirusDetected</i> errors are handled as archiving errors.	false

```
user-list
```

Display list of users.

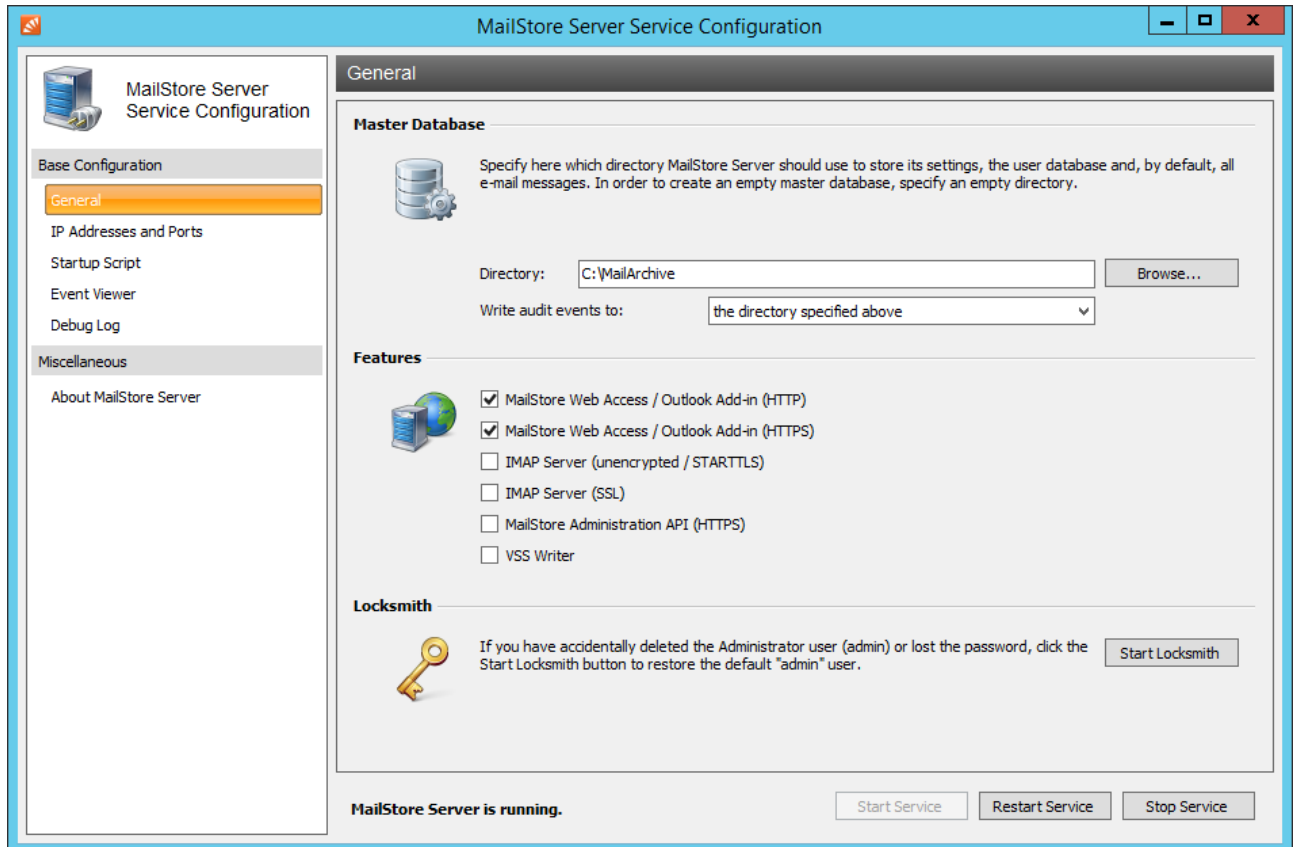
# 6

Chapter

## **Service Configuration**

# 6.1 MailStore Server Service Configuration

Basic administrative features are available through the MailStore Server Service Configuration. It can be accessed through the MailStore Server application folder in the Windows Start menu or the corresponding desktop shortcut.



At the bottom of the window, the current status of the MailStore Server service is shown. The service can be controlled using the *Start Service*, *Restart Service* and *Stop Service* buttons. This may be necessary after certain changes to the configuration have been made or before performing backups, for example.

## General

### Master Database

Select the storage location of an existing master database. When choosing an empty directory, a new master database is created therein. Should an existing archive be moved to a new storage location, refer to the instruction in *Moving the Archive*.

Also the destination for logging audit events can be specified here.

### Features

Individual components for accessing the MailStore server can be activated or deactivated. These include:

- MailStore Web Access / Outlook Add-In (HTTP)
- MailStore Web Access / Outlook Add-In (HTTPS)
- IMAP Server (unencrypted / STARTTLS)
- IMAP Server (SSL)
- MailStore Administrations API (HTTPS)

These components can be configured under *IP Addresses and Ports*.

## Locksmith

Use this feature to restore the user "admin" with the password "admin". The MailStore Server service has to be stopped.

## IP Addresses and Ports

In addition to activating or deactivating individual components, you can choose the IP address and the port to which a component is to be linked as well as the SSL certificate that is to be used for encrypted connections.

### IP Address

IP address at which the component receives connections. Generally, it is advisable to link all MailStore components to all IP addresses (Standard).

### Port

Indicates the TCP port at which the component receives connections.

**Example:** If no web server other than MailStore Web Access is installed (e.g. an IIS website, Microsoft Outlook Web Access or SharePoint), the HTTP- and HTTPS standard ports (80 and 443) can be specified. This way, users can access MailStore Web access directly using the URLs `http://<servername>` or `https://<servername>`.

## Server Certificate

Shows the current SSL certificate for the respective component of the MailStore server. To view details about the SSL certificate, click on its name. Using the button next to the name you can:

- Select an SSL certificate from the certificate store of the MailStore Server computer.
- Create a new self-signed SSL certificate.
- Import an SSL certificate from a file directly into the certificate store of the MailStore Server computer.

## Startup Script

The MailStore Server service can execute a script before startup. The script can be used to establish a connection to a network resource using special connection parameters as described in chapter Using Network Attached Storage (NAS).

## Event Viewer

Events such as starting or stopping the MailStore Server service are displayed here. If there are any errors, click on the corresponding entry to view additional details below the list.

## Debug Log

The *Debug Protocol* item provides direct access to all debug logs created by MailStore, activating or deactivating such logs as well as deletion of single log files.

### Enable Debug Log

Activate this feature if any problems or errors have occurred while running MailStore Server. After restarting the server service via *Restart Service* in the same window, a detailed log file is taken down. This file can be evaluated by the MailStore support team, for example.

## Enable IMAP Connection Debug Log

Activate this feature if problems or errors have occurred while accessing MailStore Server using the integrated IMAP server. After restarting the server service via *Restart Service* in the same window, a detailed log file is taken down. This file can be evaluated by the MailStore support team, for example.

The table shows an overview of all debug log files. To view the contents of a debug log file in a text editor, double-click on the file name or click on *Open*. To delete a debug log file, highlight the file name and click on *Delete*.