

# MailStore Server 8

## Documentation

---

© 2013 MailStore Software GmbH

06. March 2013

Products that are referred to in this document may be either trademarks and/or registered trademarks of the respective owners. The publisher and the author make no claim to these trademarks.

While every precaution has been taken in the preparation of this document, the publisher and the author assume no responsibility for errors or omissions, or for damages resulting from the use of information contained in this document or from the use of programs and source code that may accompany it. In no event shall the publisher and the author be liable for any loss of profit or any other commercial damage caused or alleged to have been caused directly or indirectly by this document.

# Contents

<b>1</b>	<b>Installation</b>	<b>1</b>
1.1	Installation	2
	Installing MailStore	2
	First Time Installation	2
<b>2</b>	<b>Archiving Methods</b>	<b>3</b>
2.1	Archiving Email	4
2.2	Email Archiving with MailStore Basics	6
	Working with Archiving Profiles	6
	Archiving Specific Folders	8
	Deleting Emails after Archiving	12
	Automating the Archiving Process	14
2.3	Archiving Email from Outlook, Thunderbird and others	18
	Supported Email Applications	18
	Procedure	18
	Settings for Archiving Profiles	19
	Settings Available for Outlook Only	19
	Settings Available for Mozilla Thunderbird Only	20
	Settings Available for Mozilla SeaMonkey Only	21
	Starting the Archiving Process	21
2.4	Archiving Outlook PST Files Directly	23
	Starting the Archiving Process	25
2.5	Archiving Emails from External Systems (File Import)	27
	Procedure for Archiving PST Files	27
	Procedure for Archiving EML and MSG Files	27
	Procedure for Archiving MBOX Files	30
	Archiving with Drag & Drop	32
	Starting the Archiving Process	32
2.6	Archiving Server Mailboxes	33
	Required Information	33
	IMAP or POP3?	33
	Setting Up the Archiving Process	33
	Starting the Archiving Process	36
2.7	Batch-archiving IMAP Mailboxes	38
	Multiple IMAP Mailboxes (Master Password)	38
	Multiple IMAP Mailboxes (CSV File)	42

Starting the Archiving Process	44
2.8 Archiving IMAP and POP3 Multidrop Mailboxes	46
Setting up the Archiving Process	46
Starting the Archiving Process	48
<b>3 Accessing the Archive</b>	<b>50</b>
3.1 Accessing the Archive	51
3.2 Accessing the Archive with the MailStore Client software	54
Installation	54
Starting and Login	54
Searching by Folder Structure	55
Quick Search	57
Extended Search	58
Email Preview	61
Reopening Emails in an Email Application	62
3.3 Accessing the Archive with the Microsoft Outlook integration	63
Requirements	63
Login to MailStore Server	64
Search by Archive Folder	65
Quick Search	65
Advanced Search	67
Email Display	69
Restoring Emails to the Application	69
Changing Regional Settings	69
3.4 Accessing the Archive using other Email Clients	70
Prerequisite for Using the MailStore-Integrated IMAP Server	70
Accessing the Integrated IMAP Server	70
3.5 Accessing the Archive with MailStore Web Access	71
Requirements for Using MailStore Web Access	71
Accessing MailStore Web Access	71
Search by Archive Folder	72
Quick Search	72
Advanced Search	74
Email Display	76
Printing the Displayed Email	76
Internet Headers	76
Changing Regional Settings	76
3.6 Accessing the Archive with MailStore Mobile Web Access	77

Requirements for Using MailStore Mobile Web Access	77
Accessing MailStore Mobile Web Access	77
<b>4 Export Email</b>	<b>79</b>
4.1 Exporting Email	80
Available Export Destinations	80
Starting an Export	80
Working with Exporting Profiles	81
Automating the Export Process	82
<b>5 Administration</b>	<b>86</b>
5.1 Users, Folders and Settings	87
The MailStore Folder Structure	87
User Management	88
Specifying Privileges	91
5.2 Active Directory Integration	94
Synchronizing User Accounts with Active Directory	94
Login with Windows Credentials	96
MailStore Client Single Sign-On	97
5.3 IceWarp Server Integration	98
Synchronizing User Accounts with an IceWarp Server User Database	98
Login with IceWarp Access Data	100
5.4 Kerio Connect Integration	101
Synchronizing User Accounts with a Kerio Connect User Database	101
Login with Kerio Connect Access Data	103
5.5 Generic LDAP Integration	104
Synchronizing User Accounts with a Generic LDAP Directory Service	104
Login with LDAP Access Data	106
5.6 MDAemon Integration	108
Synchronizing User Accounts with an MDAemon User Database	108
Login with MDAemon Access Data	110
5.7 Compliance General	111
5.8 Auditing	114
5.9 Storage Locations	115
Creating Archive Stores	115
Managing Existing Archive Stores	117
Maintenance of Archive Stores	118
5.10 Using Advanced Archive Stores	119

Structure of an Archive Store	119
Creating an Advanced Archive Store	120
5.11 Search Indexes	125
Administration of the Full-Text Search	125
5.12 Backup and Restore	127
Backup	127
Using the MailStore Integrated Backup Feature	128
Using External Backup Software	129
Restoring Backups	130
5.13 Archive Statistics	131
5.14 SMTP Settings	132
Specifying the Settings	132
Troubleshooting	133
5.15 MailStore Server Management Shell	134
Option 1: Starting the Management Shell in MailStore Client	134
Option 2: Starting the Management Shell with MailStoreCmd.exe	135
Using MailStoreCmd.exe in Non-Interactive Mode	135
Command Overview	136
<b>6 MailStore Server Management API</b>	<b>138</b>
6.1 Using the Management API	139
6.2 MailStore Server Management API Commands	141
<b>7 Service Configuration</b>	<b>152</b>
7.1 MailStore Server Service Configuration	153
Base Configuration - General	153
IP Addresses and Ports	154
Startup Script	154
Event Viewer	154
Debug Log	154

**1**

Chapter

**Installation**

# 1.1 Installation

## Installing MailStore

### 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

MailStore Server can be installed on an already existing server PC without any restrictions. Although not required, a concurrent installation on a Microsoft Exchange server is possible without any restrictions as well. No changes are made to the Exchange server. 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. All archiving tasks can be performed manually or automatically according to 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 directly

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 other files such as EML or MBOX

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 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 IMAP/POP3 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 Email Archiving with MailStore Basics

### Working with Archiving Profiles

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

Such an archiving profile could contain the following information:

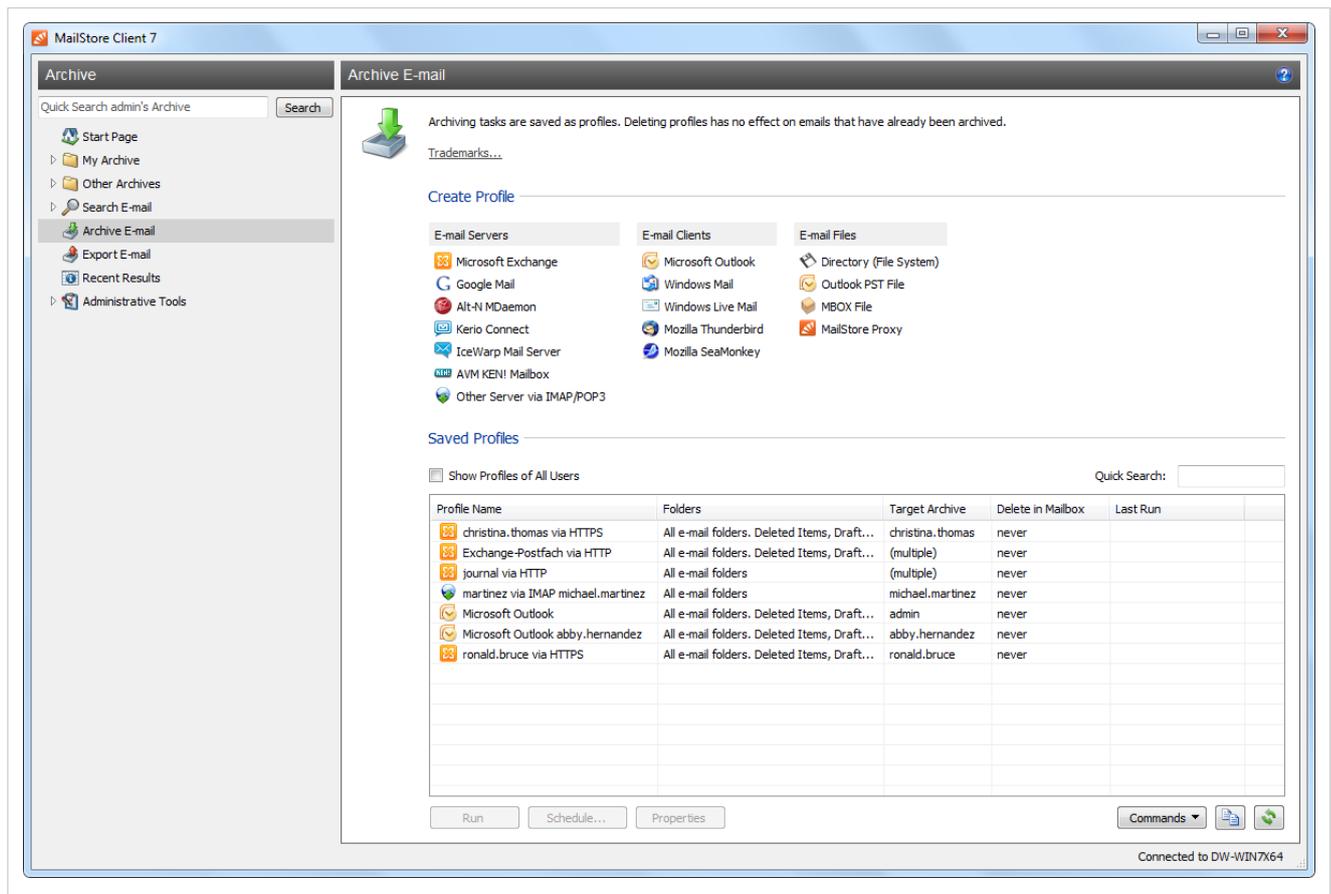
- WHAT: Mailbox p.berten@company.com
- FROM: Exchange server EXCHANGE01
- TO (Target archive in MailStore): peter.berten
- SCOPE: All folders except drafts
- DELETION RULE: Delete all archived emails older than 3 months from the Microsoft Exchange mailbox.

### Creating an Archiving Profile

- Start MailStore Client and click on *Archive Email* to create and execute an archiving profile.
- 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 different settings can be specified for the archiving profile. These include the selection of folders (e.g. "Inbox") and deletion rules (by default, no emails are deleted).
- **Please note:** If you are logged on to MailStore Server as administrator, you will be prompted for the target archive (user archive), in which the emails are to be stored. If logged on as regular user, the corresponding user archive will be used automatically.
- 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.

## Starting the Archiving Process

From the list under *Saved Profiles*, select the archiving profile to be executed and 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.

In addition to being executed manually, archiving profiles can also be run automatically according to a schedule. Simply right-click on an existing profile and select *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 only archives emails that are not yet stored in the target archive (the specified user archive). MailStore also detects if any emails were moved to a different folder within the source application (e.g. Microsoft Outlook) and repeats such moves in MailStore accordingly.

## Editing Archiving Profiles

To edit an existing archiving profile, right-click on the profile and select *Properties*. Make any desired changes and click on *OK* to save the new settings.

## Deleting Archiving Profiles

If no longer needed, archiving profiles can be deleted. This has no effect on the emails that have already been archived. They remain in the archive. Right-click on the profile to be deleted and select *Delete*. A confirmation prompt appears; click on *OK*.

## Changing Owner of Archiving Profiles

As MailStore administrator (*admin*), you are able to change the ownership of an archiving profile. This gives you the ability to prepare archiving profiles for your users, that they can execute on their own afterwards. To change the owner of an existing archiving profile, right-click on the profile you are about to change and select *Change Owner....* Now select a user from the dialog and confirm the selection by clicking on *OK*.

## Managing and Executing the Archiving Profiles of Other Users

As MailStore administrator (*admin*), the archiving profiles created by other users for themselves can be managed as well. Simply select the checkbox *Show Profiles of All Users* in the lower left corner of the screen. Now the profiles can be edited, executed or deleted as if they were your own.

### Exception: Executing the archiving profiles for Microsoft Outlook and other email clients for other users

Generally, it is sensible to execute these profiles exclusively on the computer on which the corresponding application is installed. More precisely: If Mr. Brown has an archiving profile for Microsoft Outlook, it can be viewed and edited by the administrator through MailStore Client. However, executing this profile only makes sense if it is run using the MailStore Client that is installed on Mr. Brown's computer. This exception is only valid for Outlook, Outlook Express/Windows Live Mail, Thunderbird and Seamonkey.

## Archiving Specific Folders

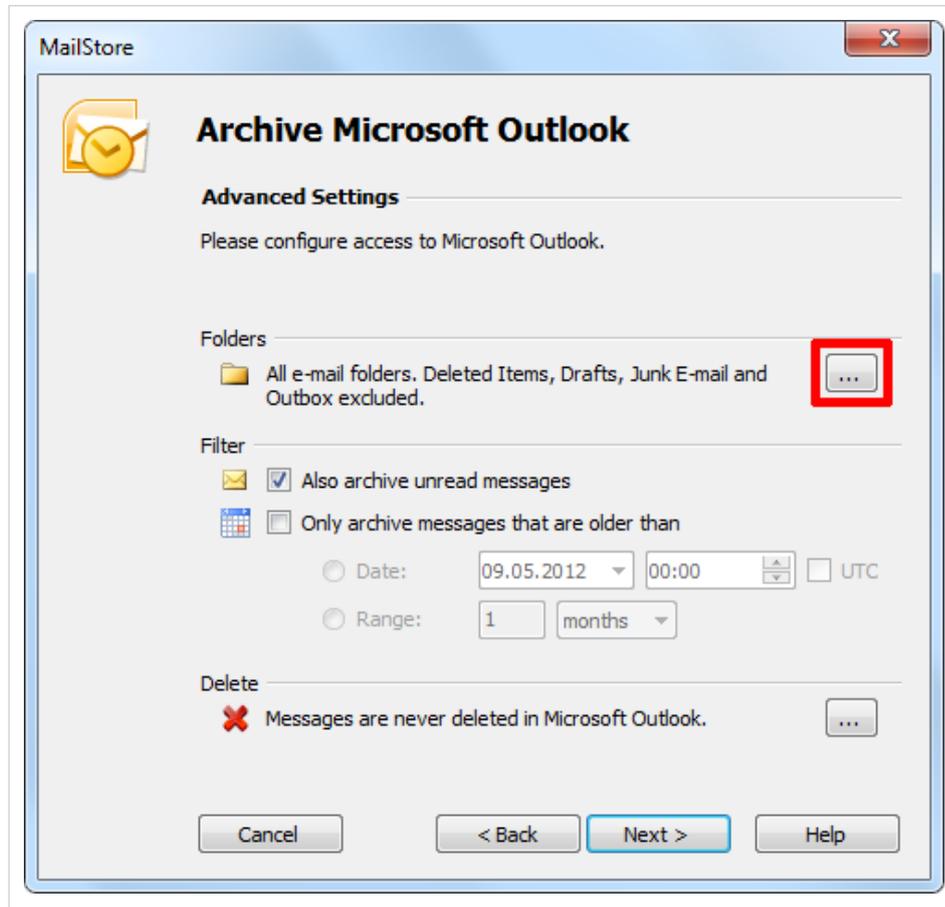
Using the default settings, MailStore archives the emails from all folders of the email application or email mailbox except the following (the list may vary depending on the system):

- **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 extracted by the spam filter
- **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 process, folders can be included or excluded as needed.

## General Procedure

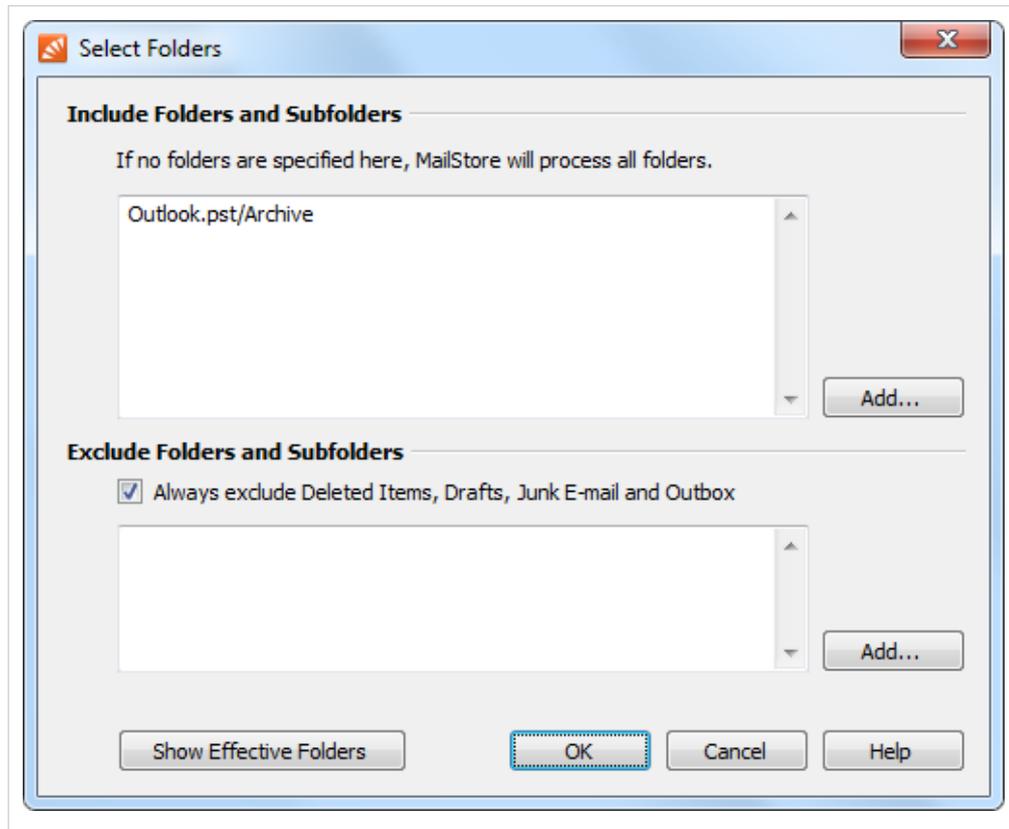
The folders to be archived can be selected directly upon creating a new archiving profile at the first step of the wizard. Alternatively, the selection can be adjusted for already existing profiles. Additional information about creating and editing archiving profiles is available in the chapter Working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



## Selecting Folders for Archiving

Specific folders can be selected to be archived by MailStore. In this case, MailStore only regards the selected folders and ignores all others.

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



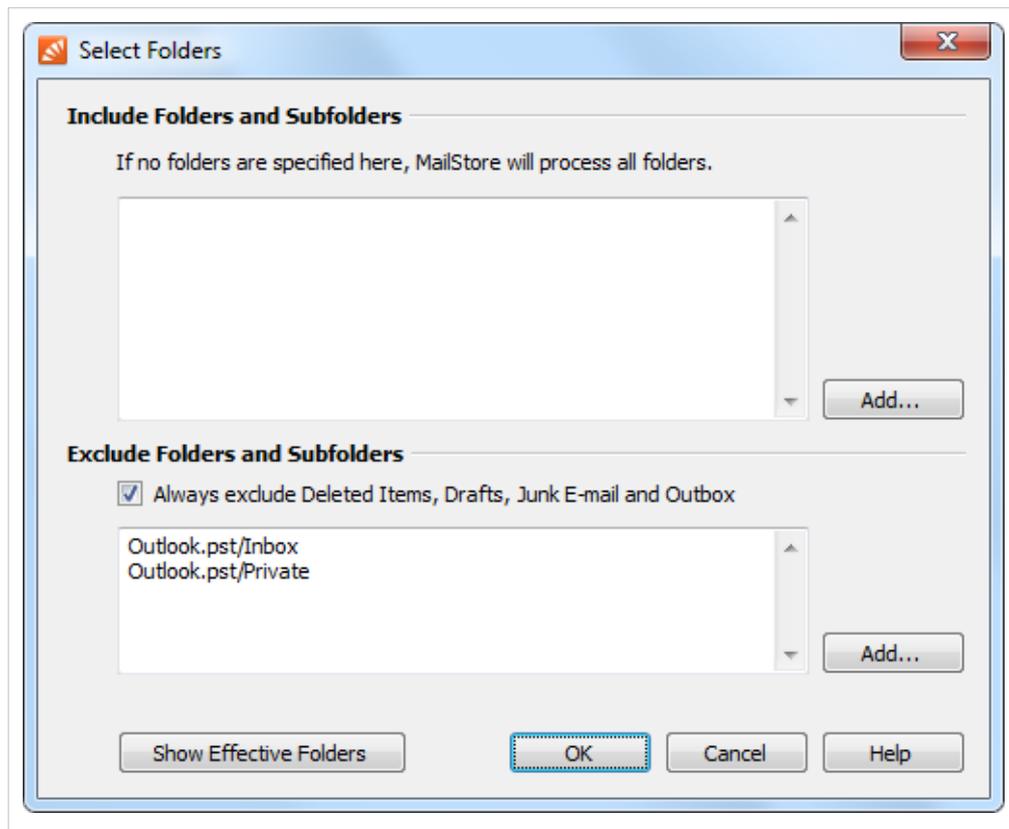
- Select a folder.
- Under Include Subfolders, specify if the subfolders of the selected folder are to be included in the archiving process.
- Click on *OK* to add the folder to the list.

**Example:** A folder *Archive* has been created in the email application, to which the user moves all emails that are to be archived. In this case, add the folder *Archive* to the list of folders to be included. This way, only this single folder will be archived.

## Excluding Folders from the Archiving Process

MailStore can be configured to archive all folders (see above), but to always exclude certain folders from the process.

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



- Select a folder.
- Under *Include Subfolders*, specify if the subfolders of the selected folder are to 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 are NOT desired to 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* are NOT desired to be archived as it may contain personal information that is prohibited by law (in some country) 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>".

## Viewing the Folders Selected for Archiving

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

## Deleting Emails after Archiving

MailStore is often used to reduce and to keep the amount of emails stored in local email applications or server mailboxes at a minimum, speeding up server performance.

MailStore provides a delete feature that can be activated as needed and enables MailStore to delete emails from the source application autonomously, according to specified rules and time periods.

**Please note:** By default, no emails are deleted from the email application or mailbox.

### Where Is the Delete Feature Supported?

The delete feature is not available to all archiving functions. After archiving, MailStore can delete emails automatically from the following applications, files and server mailboxes:

- Microsoft Outlook
- Microsoft Outlook - PST files
- Microsoft Exchange Server - mailboxes
- Microsoft Exchange Server - public folders
- AVM KEN! - mailboxes
- any IMAP mailboxes

### When Will Emails Be Deleted?

Upon request, MailStore deletes emails from the source application during the archiving process (upon executing an archiving profile). By default, no emails will be deleted.

**Please note:** Emails will only be deleted during the archiving process, and only if the respective rules are defined in the corresponding archiving profile as described below. No other automatic processes exist to delete emails from their source applications.

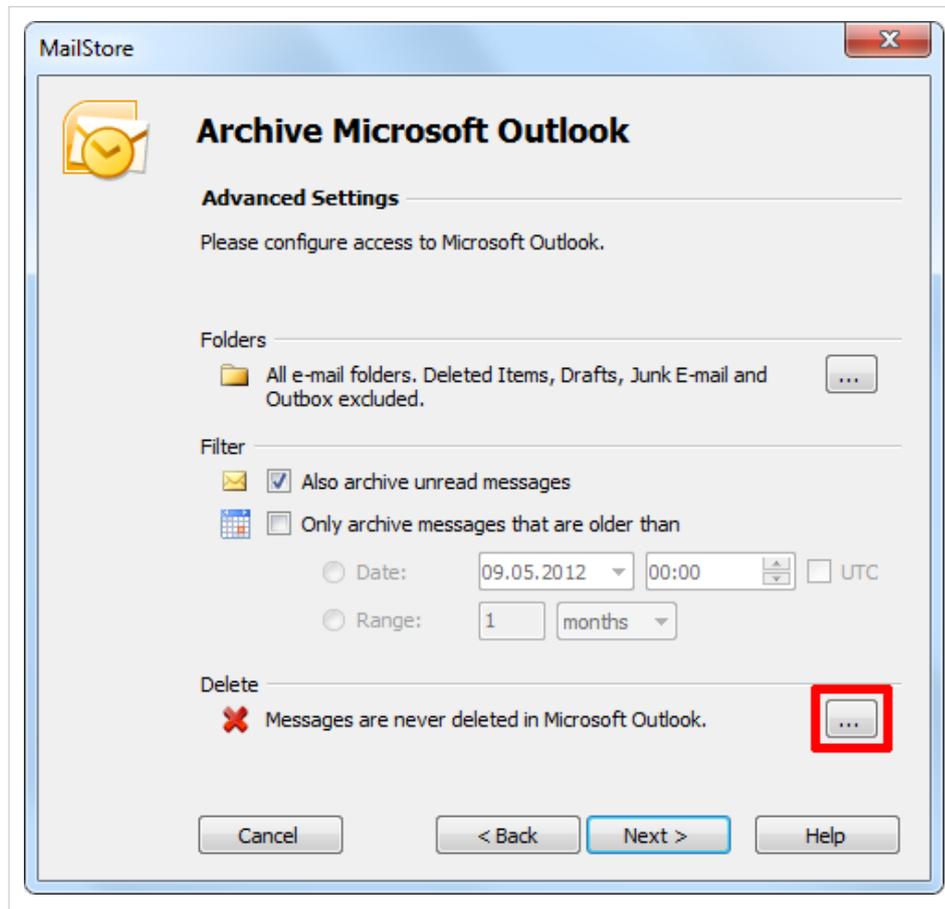
If, during the archiving process, MailStore detects an email that has already been archived, MailStore determines how long the email has been stored in the archive. If a predetermined time period has elapsed (e.g. one year), the email is deleted. Alternatively, the age of the email can be determined according to the source application and used as a prerequisite for deletion instead.

**On principle, MailStore deletes an email from its source application only after safely verifying that it has in fact been archived.**

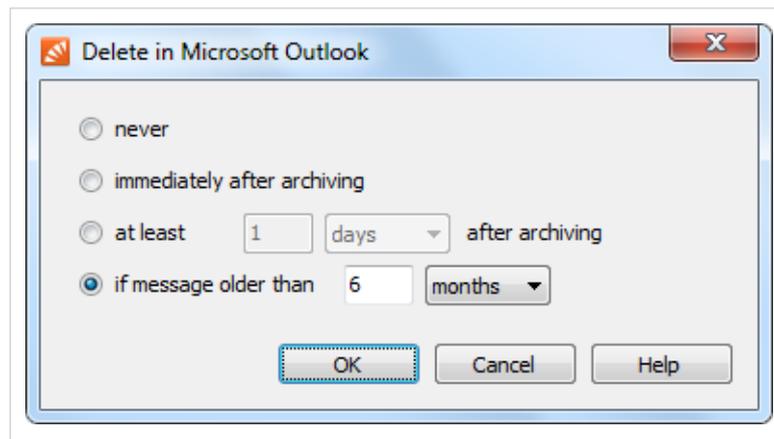
**Please note:** Emails that have been flagged for follow-up will not be deleted by MailStore Server in order to prevent interruption of ongoing business processes.

## How It Is Done

Delete conditions can be configured in step two of setting up a new archiving profile. Additionally this option can be configured for existing profiles as well. General information on working with archiving profiles are available in the chapter Working with Archiving Profiles. The following screenshot shows how to open the deletion settings for an Outlook archiving profile:



The available options are available:



- **never** - emails are never deleted from the source. This is the default setting.
- **immediately after archiving** - emails are deleted from the source as soon as they have been successfully archived.
- **at least [period] after archiving** - emails are deleted from the source if they have been in the archive for at least the given period of time.
- **if message older than [period]** - emails are deleted from the source if they are older than the given period of time.

## Automating the Archiving Process

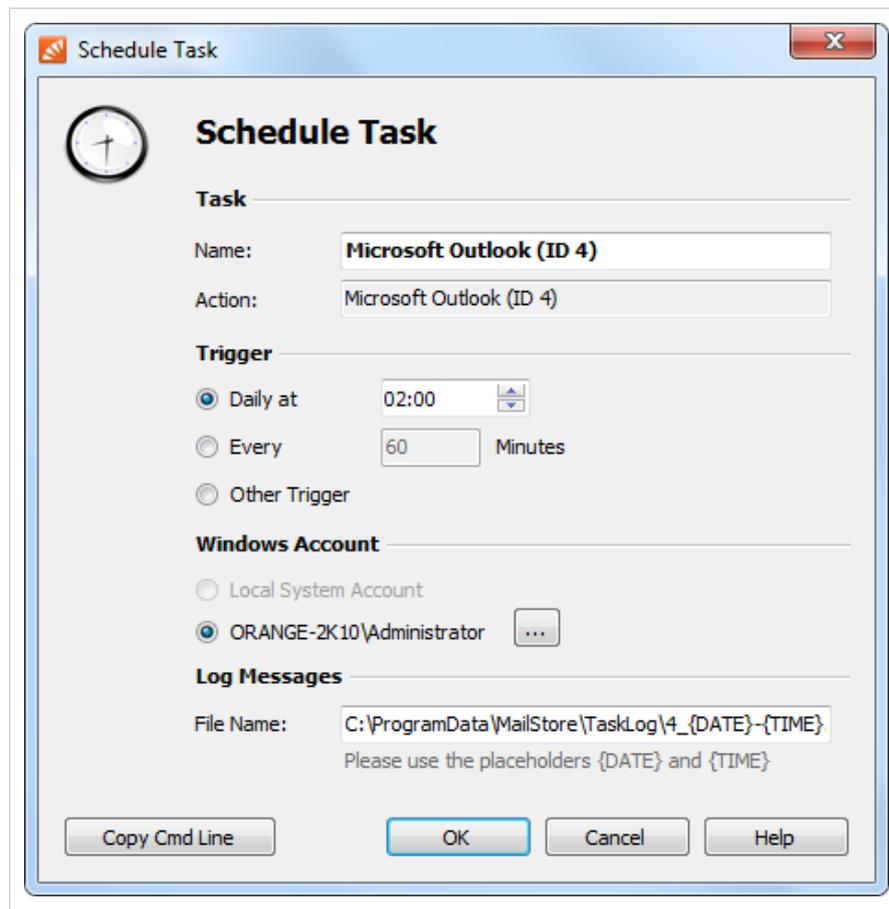
With MailStore, every archiving process (every archiving profile) can be executed automatically according to specified points in time.

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.

### How To: For Emails Stored Locally on User Computers

To automate the archiving process for user emails that are stored on the corresponding user computer - as is the case with Microsoft Outlook (without Exchange server), for example - please proceed as follows:

- Start MailStore Client on the user computer.
- Log on to MailStore Server using the user's access data.  
**Please note:** As MailStore administrator and using MailStore's user management, first verify that the user possesses the privilege to archive emails.
- In the user's MailStore Client click on *Archive Email*.
- Right-click on an existing profile and select *Schedule...*. Please refer to the chapter Working with Archiving Profiles to learn how to create a new archiving profile.



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:** A time for daily execution (the task is executed once a day) or a time interval (e.g. every 60 minutes) can be specified.

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 planner and is described in Windows Help. All options offered by your version of Windows can be used.

**Windows Account:** Specify here which user account is to be used when executing the scheduled task. The option Local System Account is used for the automated archiving of server mailboxes (see below) and has the advantage that no password is required to execute the task. If the emails are to be archived from the application of the current user (e.g. from Microsoft Outlook), the corresponding user account must be selected. In such cases, the option Local System Account is deactivated.

**Log Messages - File Name:** If a log file is to be created, the name for that file can be specified here. The placeholders {DATE} and {TIME} can be used in the file name which will be replaced by the actual date and time during the archiving process. The log file can also be created on a network drive, if desired.

**Copy Cmd Line:** Here, the command line of the scheduled task can be copied to the clipboard so it can be used in batch files, for example. Detailed information about this topic is available at the end of this chapter.

After all settings have been specified, the task can be created by clicking on OK. Confirm the safety prompt and enter the Windows password of the currently logged on user twice. Confirm again by clicking OK. A list of scheduled tasks is displayed in MailStore's Administrative Tools. All tasks created on the current computer up to now are listed here.

### General Background Information

- Every archiving profile can be executed automatically according to a schedule.
- MailStore creates every scheduled task as a Windows task which can be edited and processed independently from MailStore using the Windows task manager.
- For each archiving profile multiple tasks can be created, each executing the profile at different times.
- 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.

### How To: For Emails Stored in Server Mailboxes

To automate the archiving process for user emails that are stored in server mailboxes, e.g. when using Microsoft Exchange or an external IMAP mailbox, please proceed as follows:

- Start MailStore Client on the computer on which the scheduled archiving task is to be initiated. This can be any user computer or the MailStore server machine.
- Log on as MailStore administrator (*admin*).
- Click on *Archive Email*.
- Right-click on an existing archiving profile and click on *Scheduled...*
- Specify the settings for the planned task (see above section "How To: For Emails Stored on User Machines") and click on OK. Confirm the following security warning with OK again.
- A list of scheduled tasks is displayed in MailStore's Administrative Tools. All tasks created on the current computer up to now are listed here.



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.

## 2.3 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
- 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

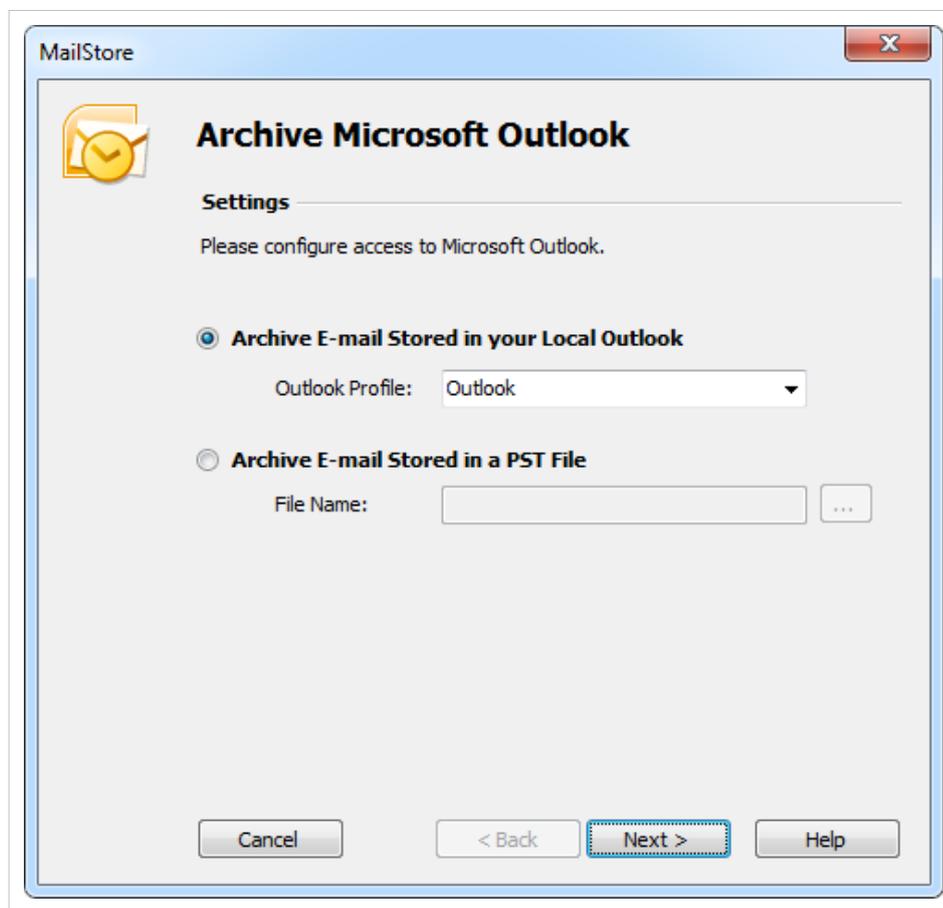
Upon creating or editing an archiving profile, different settings can be specified for the archiving task. Settings vary depending on the type of the email client selected (e.g. *Microsoft Outlook* or *Mozilla Thunderbird*).

**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



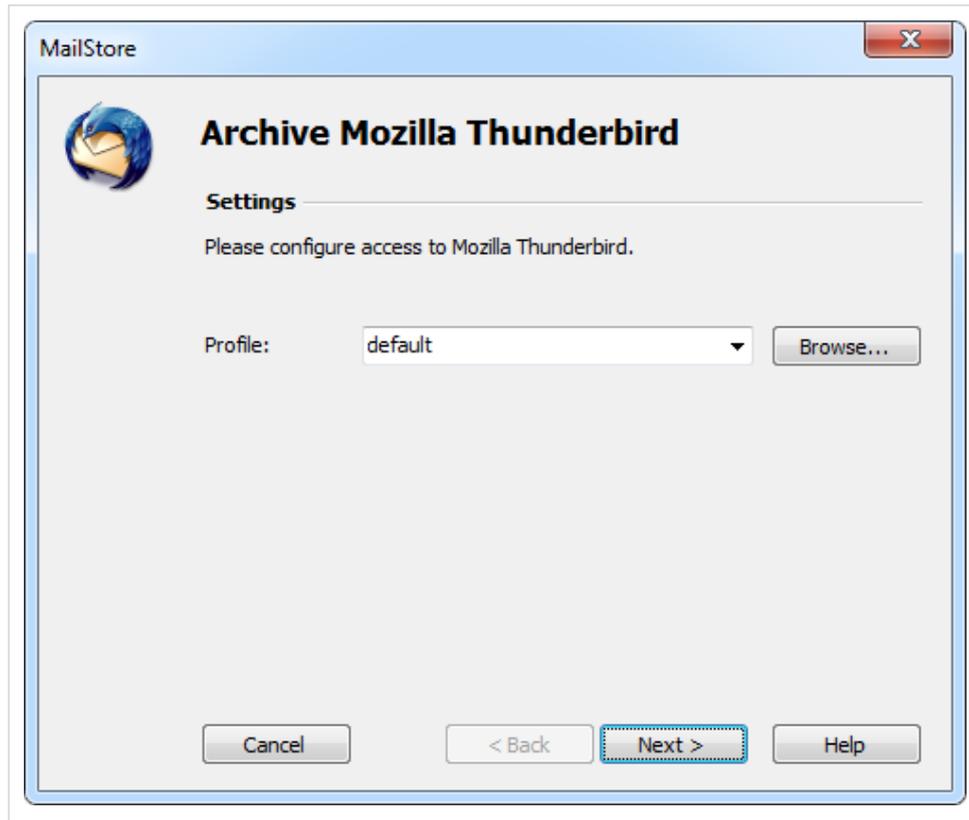
**Archive Email Stored in your Local Outlook**

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**

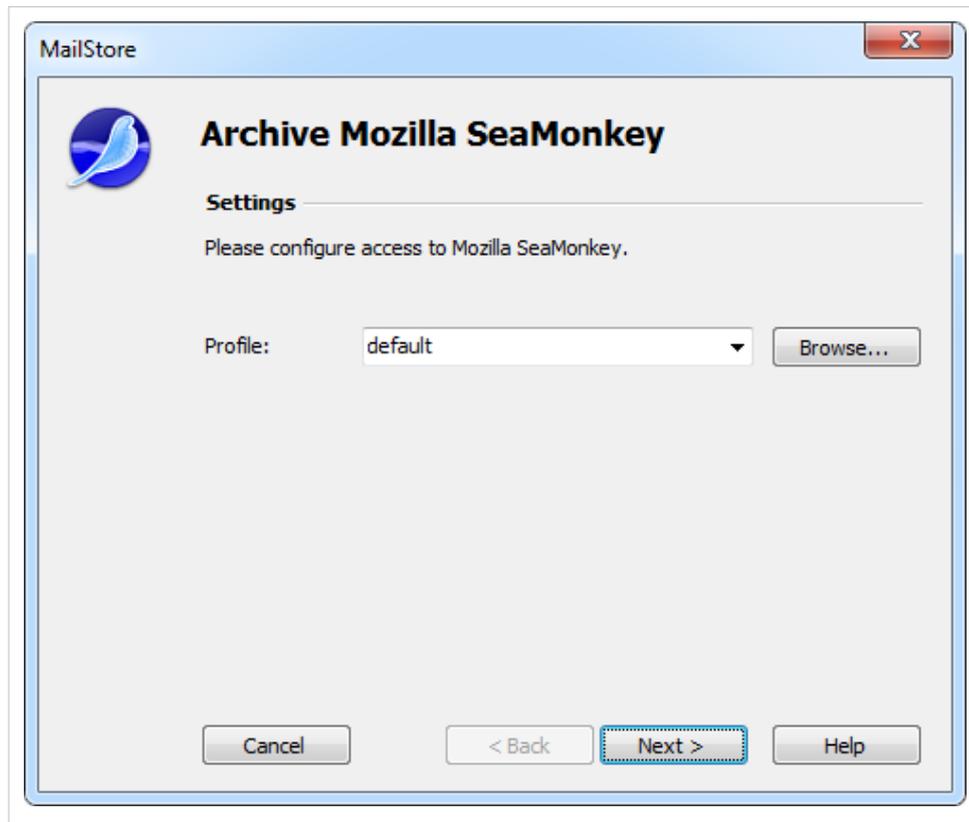
Select this option if MailStore is to access the PST file directly. This option is described in the chapter Archiving Outlook PST Files Directly.

## 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. In addition, MailStore detects if emails within the source application (e.g. Microsoft Outlook) were moved to a different folder and repeats such moves in MailStore accordingly.

## Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically according to a schedule. Simply right-click on an existing profile and select *Schedule...*. Additional information about this topic is available in chapter Automating the Archiving Process.

**Please note:** As long as no deletion rules were specified upon creating the archiving profile, MailStore will never delete or otherwise modify emails in the source application (e.g. Microsoft Outlook).

## 2.4 Archiving Outlook PST Files Directly

With MailStore, PST files can be archived directly. Compared with Archiving Emails from Outlook, this has the advantage that archiving tasks can be created and executed independently from users and user computers. Therefore, as administrator, you should be able to access the individual PST files of the users from your computer (by keeping them on a network drive, for example).

**Please note:** The computer used for archiving PST files through 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.

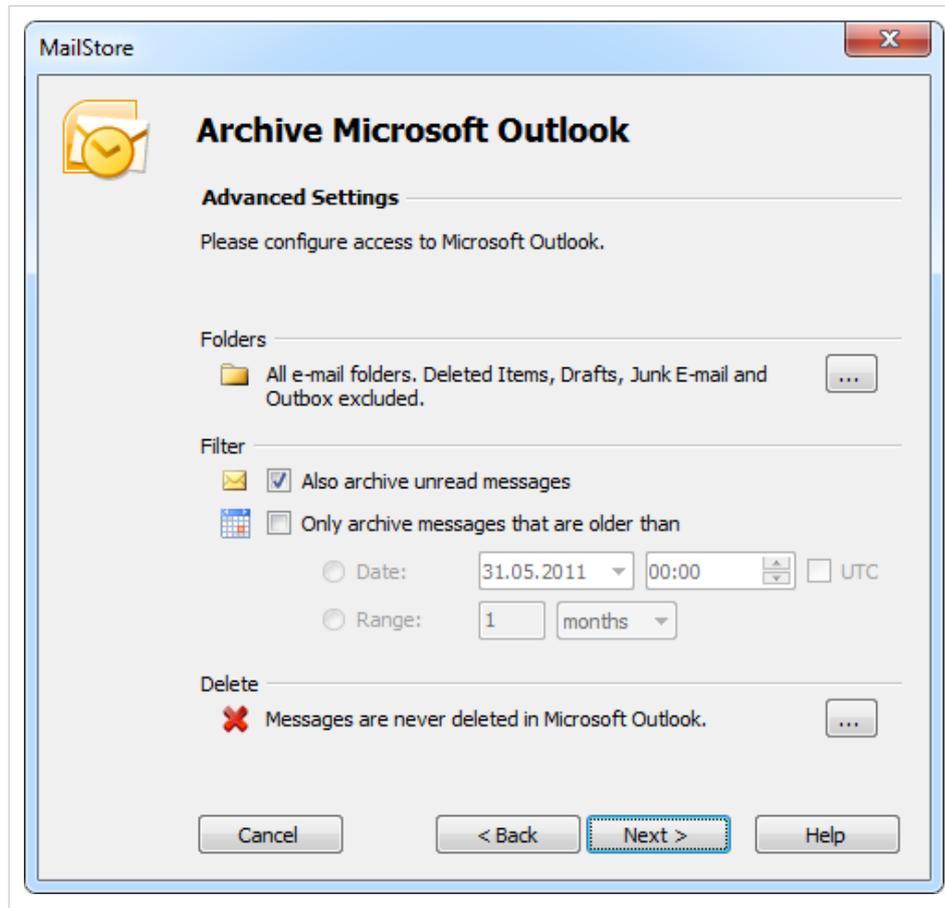
Setting up archiving processes for PST files is done using archiving profiles. General information about archiving profiles is available in the chapter Working with Archiving Profiles.

For each PST file, please proceed as follows:

- Users can only archive their own PST files to their personal user archive. To archive the emails of other users, you have to be logged on to MailStore Client as MailStore administrator.
- In MailStore, click on *Archive Email*.
- From the *Email Files* list in the *Create Profile* area of the application window, select *Outlook PST File* to create a new archiving profile.
- The dialog window *Archive Microsoft Outlook* appears.



- As source, select *Archive Email Stored in a PST File* 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 list of folders to be archived, the deletion rules and the filter.



- If logged on to MailStore Server as administrator, the target archive can be specified. Select the archive of the user for whom the PST file 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. In addition, MailStore detects if emails within the source application (e.g. Microsoft Outlook) were moved to a different folder and repeats such moves in MailStore accordingly.

## Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically according to a schedule. Simply right-click on an existing profile and select *Schedule...*. Additional information about this topic is available in chapter Automating the Archiving Process.

**Please note:** As long as no deletion rules were specified upon creating the archiving profile, MailStore will never delete or otherwise modify emails in the source application (e.g. Microsoft Outlook).

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

MailStore can archive the emails from applications that are not directly supported if they are available in a standardized format. With such applications it will be necessary to access directly or to export the emails to one of these formats first.

Using file import, MailStore can archive the following formats:

- **EML** - One file per email. Often called RFC822 or MIME format.
- **MSG** - One file per email. Microsoft Outlook email files.
- **PST** - Microsoft Outlook personal folder files.
- **MBOX** - The file ending is .mbx. 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

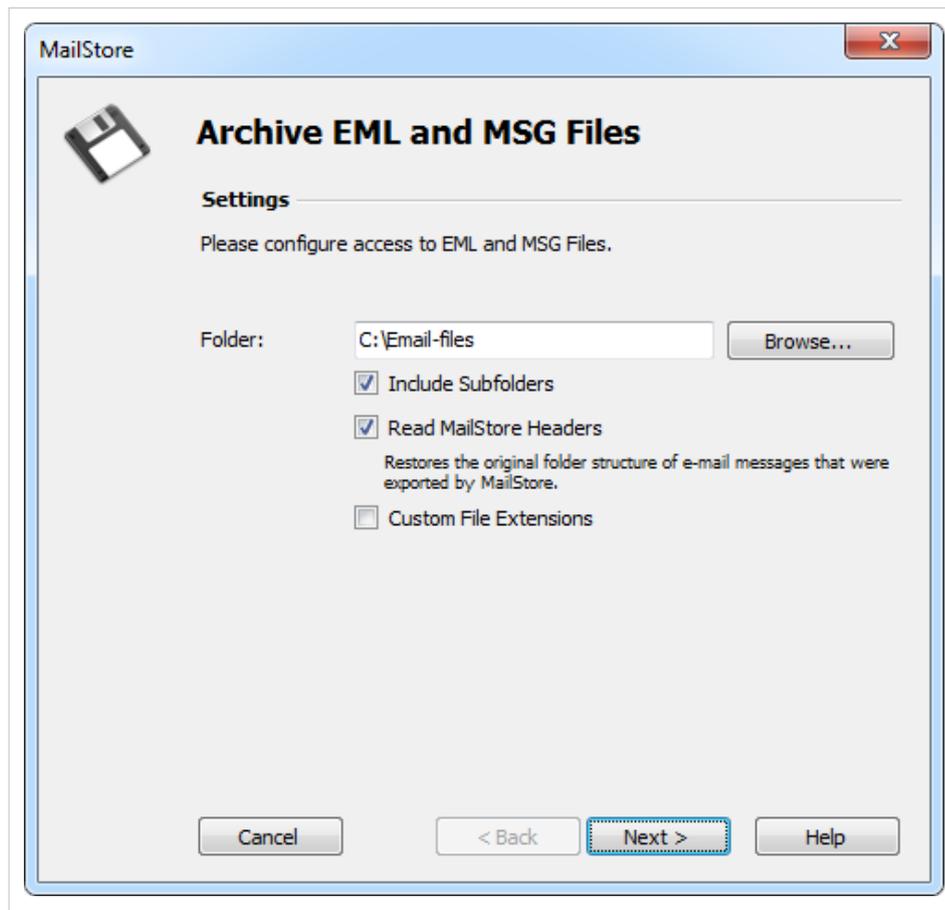
Archiving PST files is described separately in chapter Archiving Outlook PST Files Directly.

### Procedure for Archiving EML and MSG Files

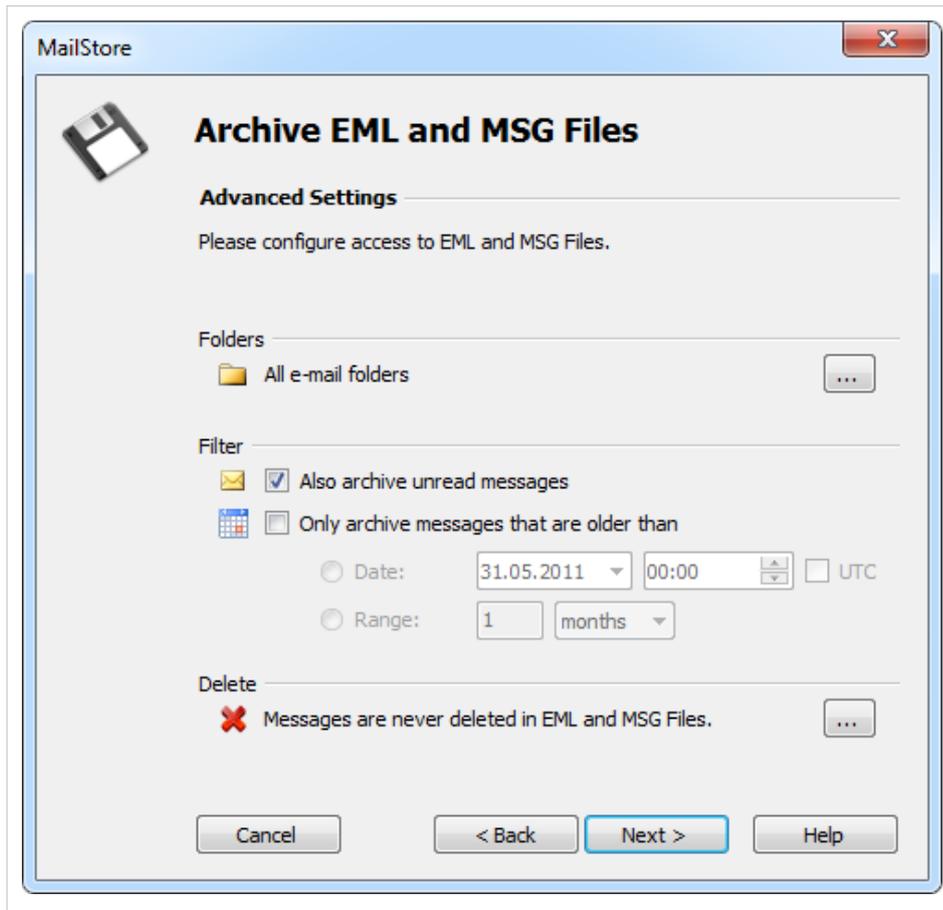
Setting up archiving processes for files from the file system is done using archiving profiles. General information about archiving profiles is available in chapter Working with Archiving Profiles.

Please proceed as follows:

- Users can only archive their own email files to their personal user archive. To archive the emails of other users, they have to be logged on to MailStore Client as MailStore administrator.
- In MailStore, click on *Archive Email*.
- From the *Email Files* list in the *Create Profile* area of the application window select *Directory (File System)*.
- A wizard opens, guiding you through the setup process.
- Select the file type to be archived (e.g. EML or MSG files) and click on *OK*.



- Select the folder to be archived. All email files in this folder will be archived.



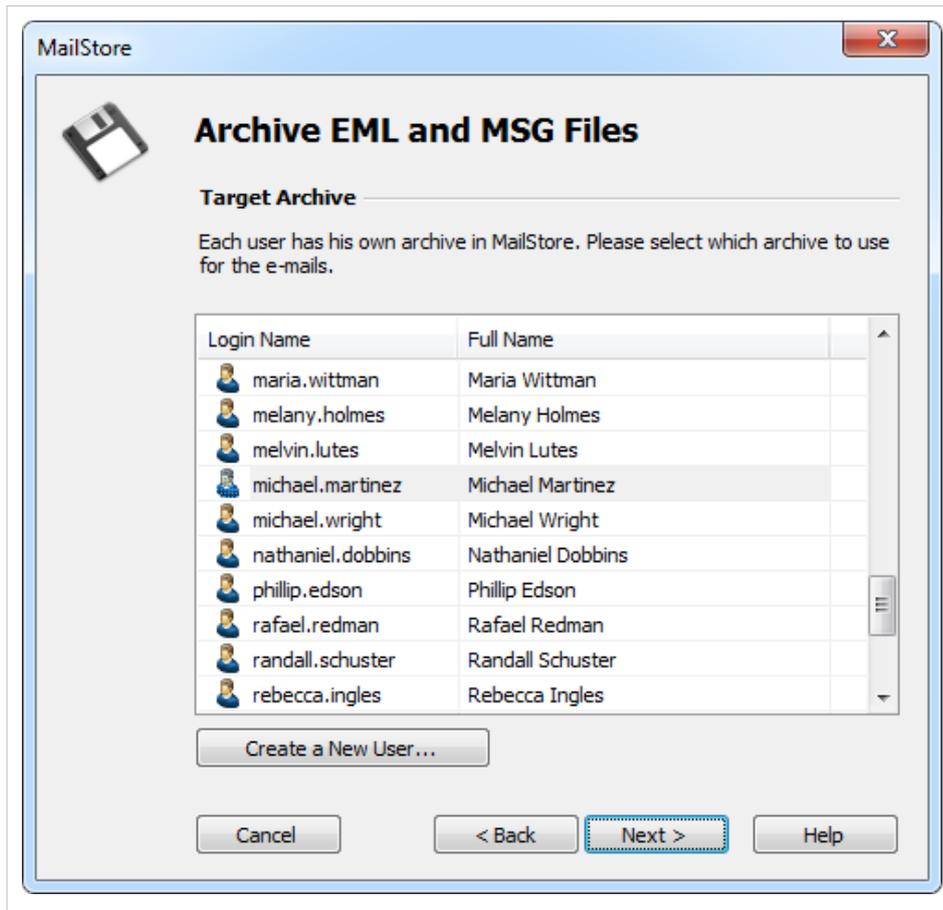
- If desired, adjust the advanced settings or simply click *Next*.

**Include Subfolders:** Not only the emails in the selected folder are archived but also those located in any subfolders.

**Read MailStore Headers:** RFC822 files created by the MailStore-specific export process contain additional information such as the source folder. Remove the checkmark if this information is to be ignored.

**Custom File Extensions:** Choose this option if the files to be archived are in EML format but have a different file ending.

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



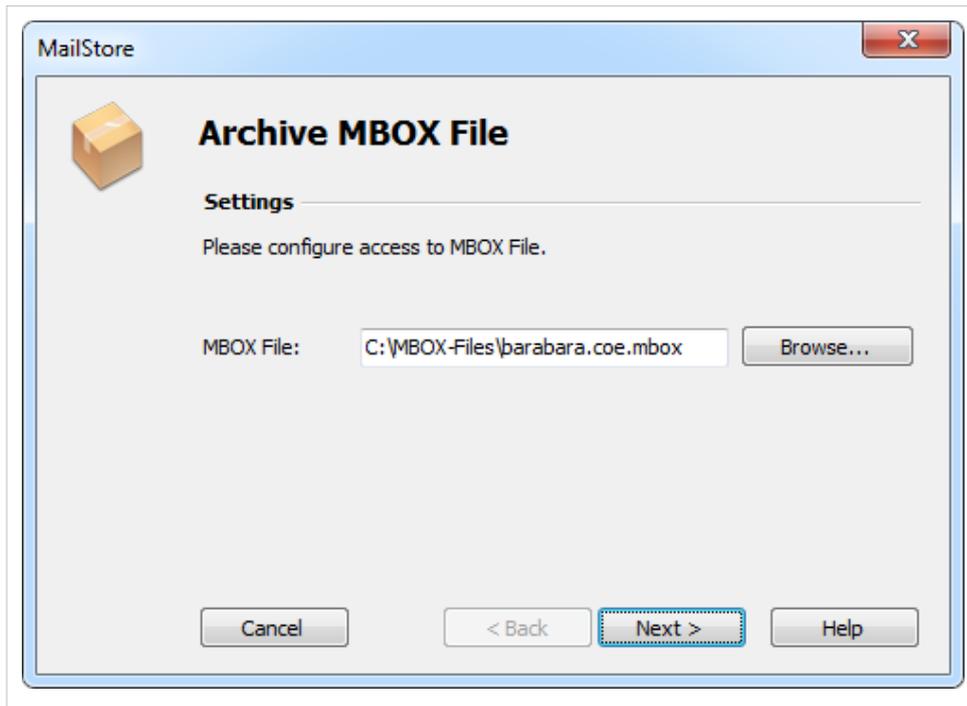
- At the last step, a name for the new archiving profile can be specified. After clicking on *Finish*, the archiving profile will be listed under *Saved Profiles* and can be run immediately, if desired.

## Procedure for Archiving MBOX Files

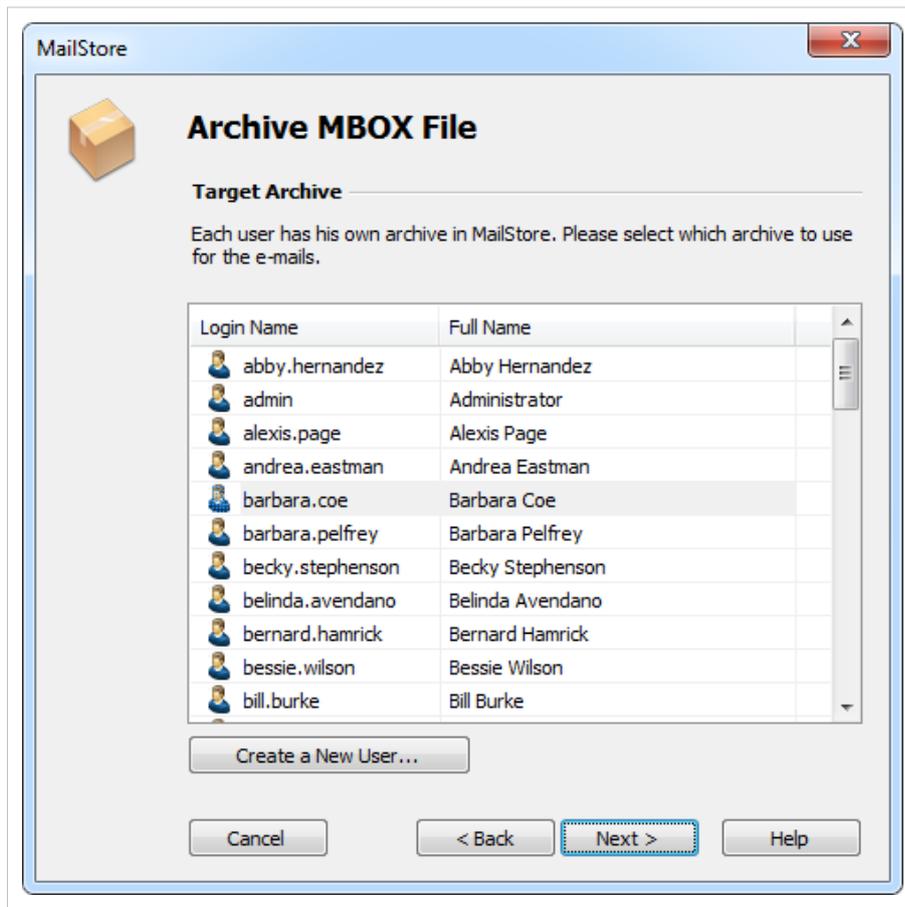
Setting up the archiving process for files from the file system is done using archiving profiles. General information about archiving profiles is available in chapter *Working with Archiving Profiles*.

Please proceed as follows:

- Users can only archive their own email files to their personal user archive. To archive the emails of other users, you have to be logged on to MailStore Client as MailStore administrator.
- In MailStore, 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.



- 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.

## 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. In addition, MailStore detects if emails within the source application (e.g. Microsoft Outlook) were moved to a different folder and repeats such moves in MailStore accordingly.

### Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically according to a schedule. Simply right-click on an existing profile and select *Schedule...* Additional information about this topic is available in chapter Automating the Archiving Process.

**Please note:** As long as no deletion rules were specified upon creating the archiving profile, MailStore will never delete or otherwise modify emails in the source application (e.g. Microsoft Outlook).

## 2.6 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?

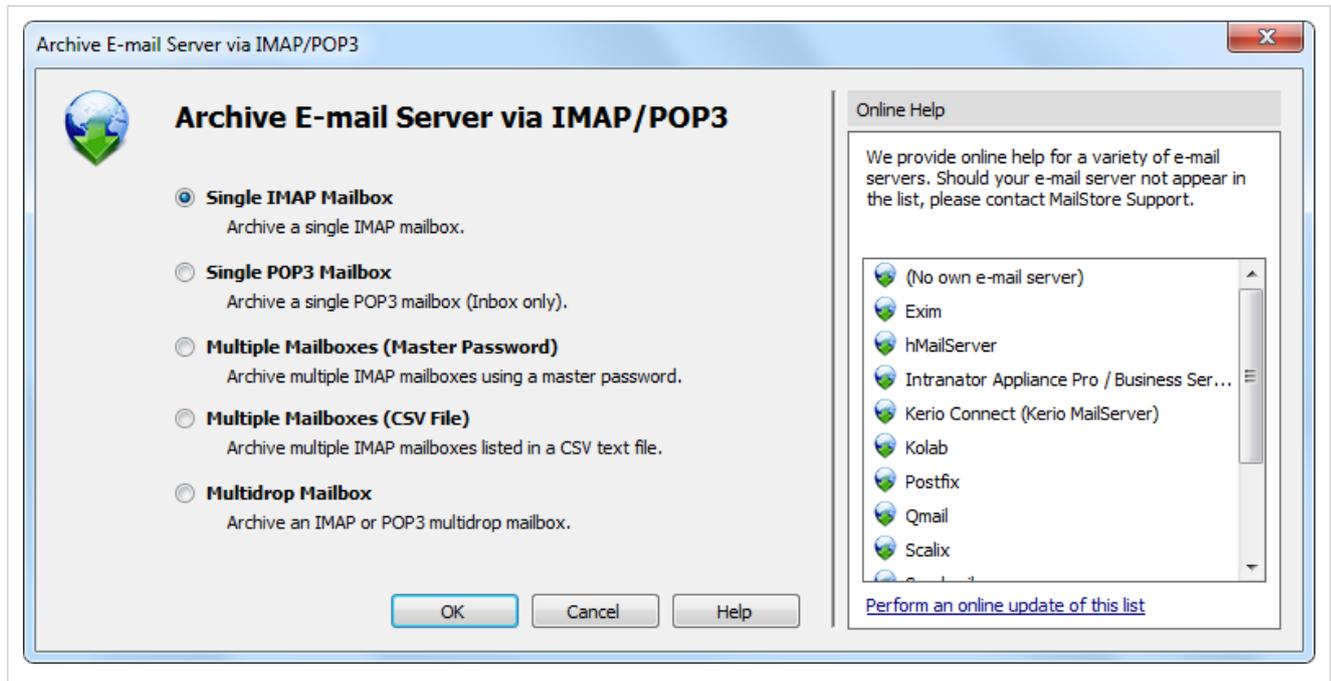
When choosing between IMAP and POP3, we strongly recommend using IMAP. With IMAP, all or specific folders of the mailbox can be archived. POP3 does not "recognize" any folders; because of this it is likely that, with most service providers, only the inbox will be archived.

### Setting Up the Archiving Process

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:

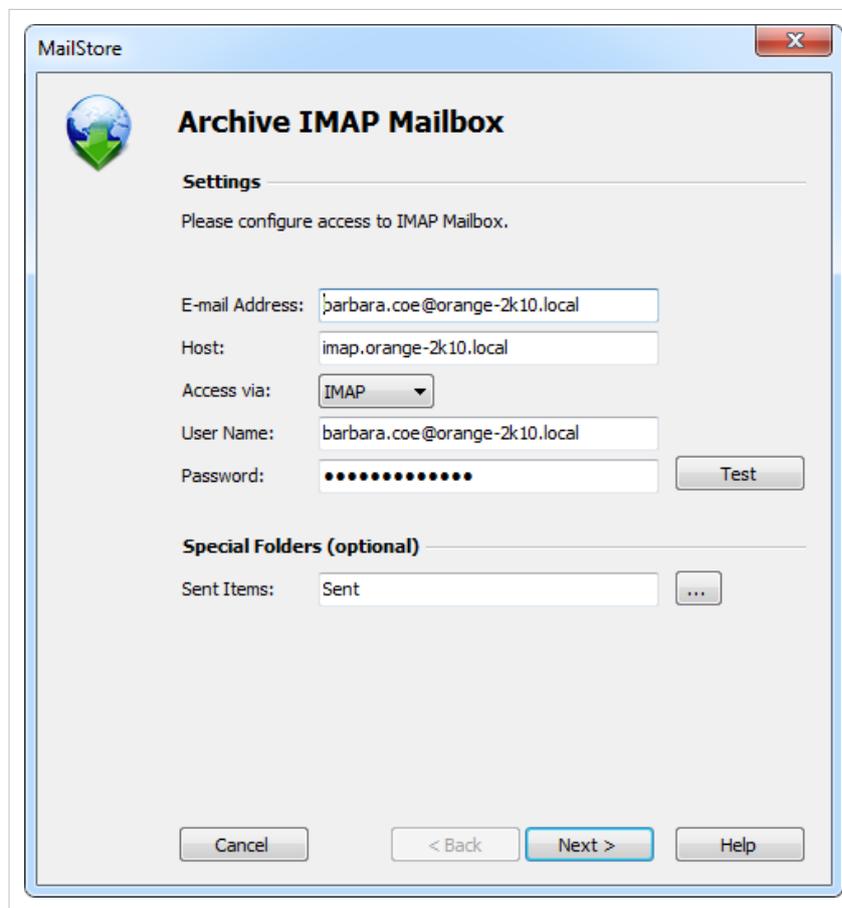
- Users can only archive their own mailboxes to their personal user archive. To archive the emails of other users, you have to be logged on to MailStore Client as MailStore administrator. Only MailStore administrators can archive the emails of other users.
- In MailStore, click on *Archive Email*.
- 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.



**Hint:** Click on an entry in the *Online Help* area to open the corresponding Implementation Guide.

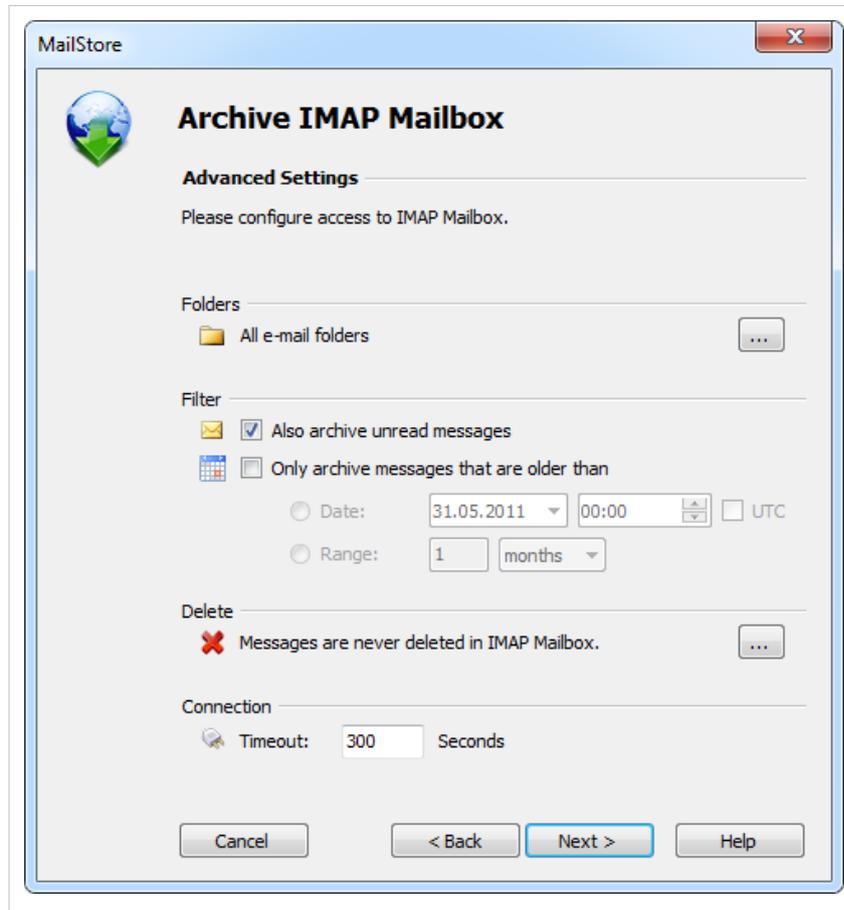
- Select *Single Mailbox* and click on *OK*.
- Fill out the fields *Email Address*, *Host*, *Access via*, *User Name* and *Password*. Click on *Test* to verify the data entered.

**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.

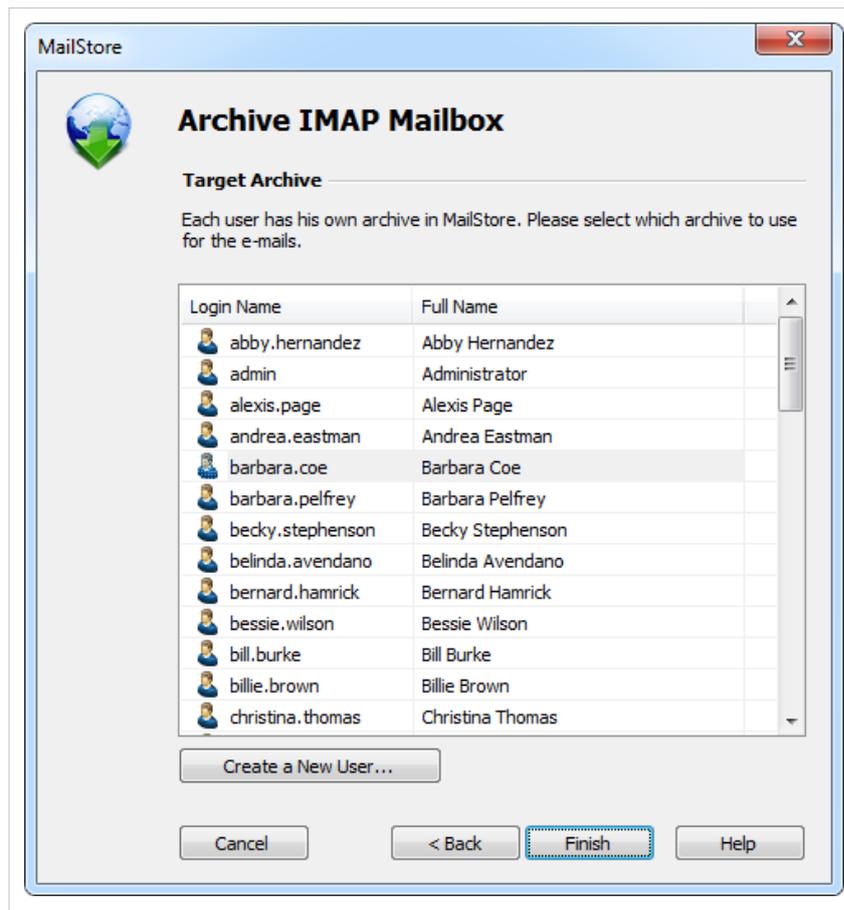


- Click on *Next*.

- 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).



- 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. In addition, MailStore detects if emails within the source application (e.g. Microsoft Outlook) were moved to a different folder and repeats such moves in MailStore accordingly.

## Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically according to a schedule. Simply right-click on an existing profile and select *Schedule...* Additional information about this topic is available in chapter Automating the Archiving Process.

**Please note:** As long as no deletion rules were specified upon creating the archiving profile, MailStore will never delete or otherwise modify emails in the source application (e.g. Microsoft Outlook).

## 2.7 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.

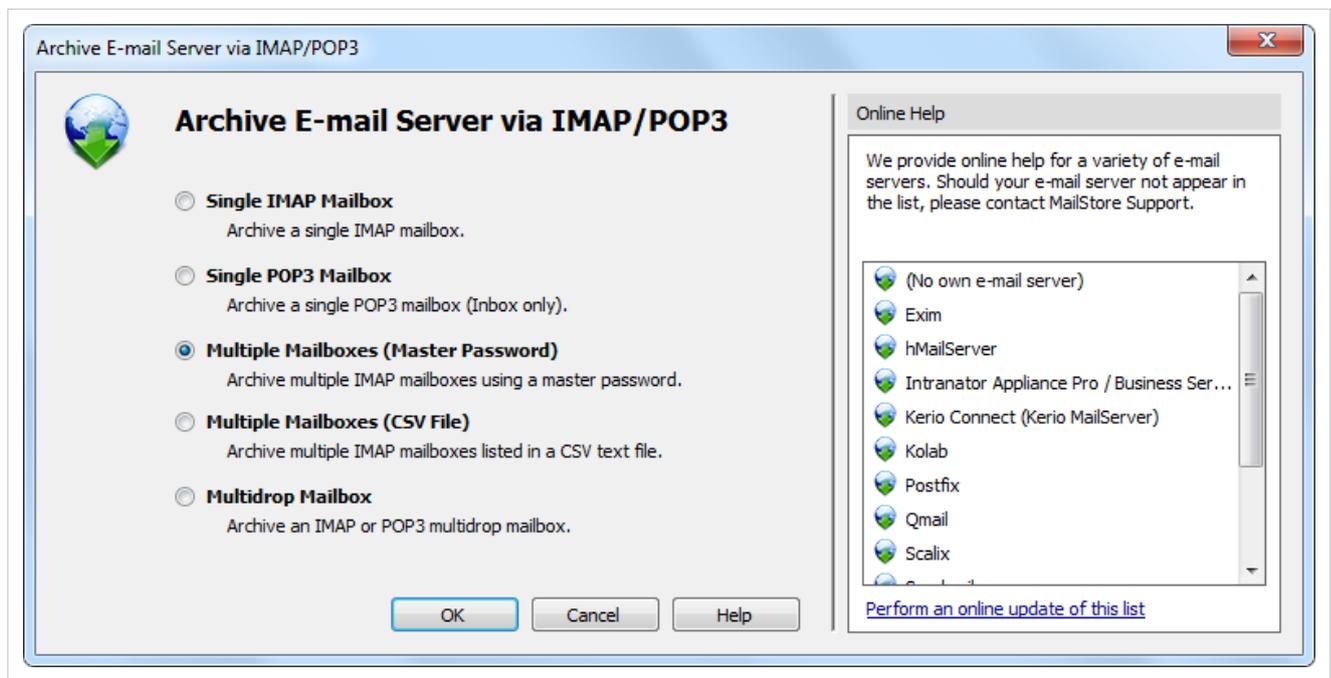
You can learn from your email server's manufacturer if your email server supports this type of login and what the prerequisites are.

#### 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.

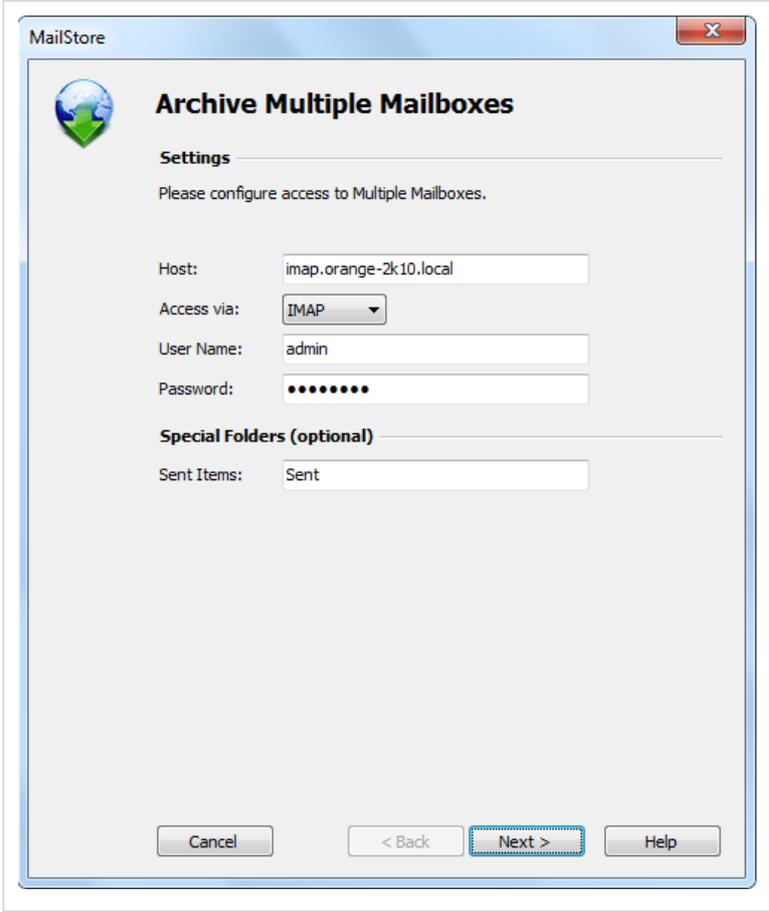
Please proceed as follows:

- 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 in the top right corner. The main title is "Archive Multiple Mailboxes" with a globe icon to the left. Below the title is a "Settings" section with the instruction "Please configure access to Multiple Mailboxes." The form contains the following fields:

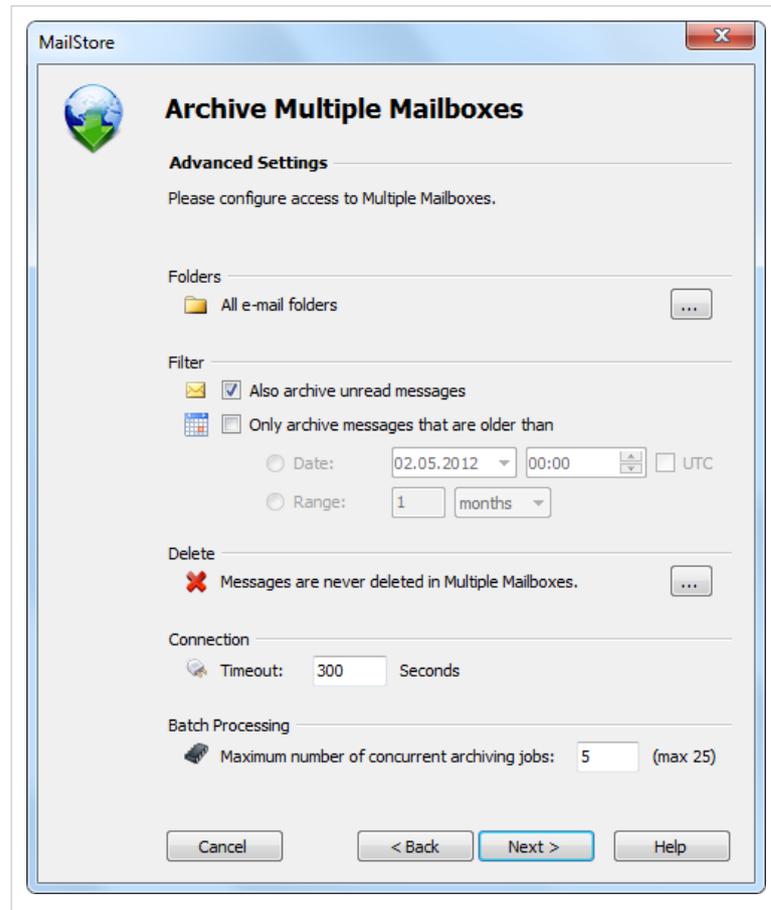
- Host:
- Access via:
- User Name:
- Password:
- Special Folders (optional):
  - Sent Items:

At the bottom of the dialog are four buttons: "Cancel", "< Back", "Next >" (which is highlighted with a blue dashed border), and "Help".

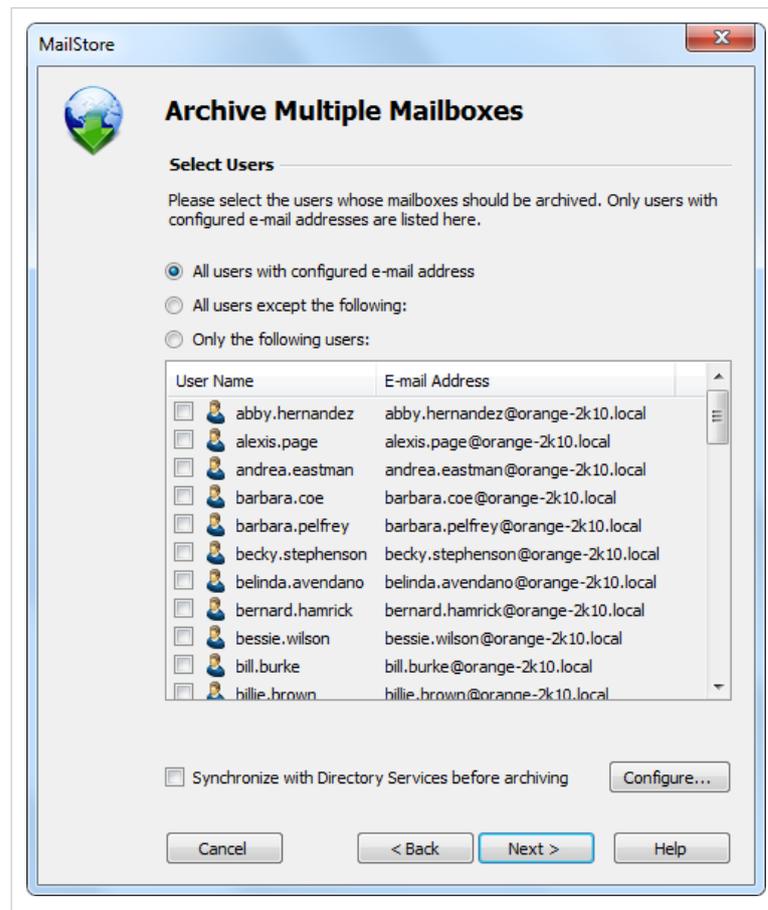
- Fill out the fields *Host* and *Access via* and enter the login data of the privileged user under *User Name* and *Password*.

**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.

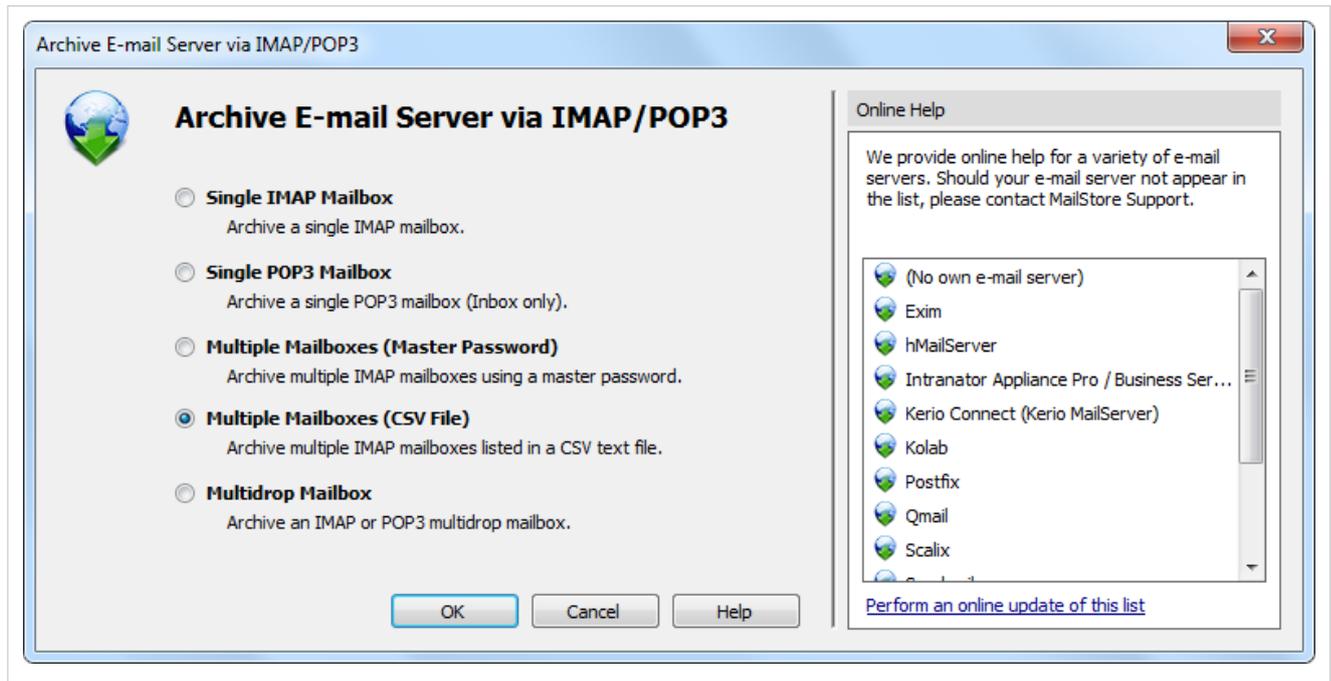
This way, any number of mailboxes of an email server may be entered. When finished, save the file in .csv format (if Microsoft Excel is used via the *Save As* function).

### 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*.

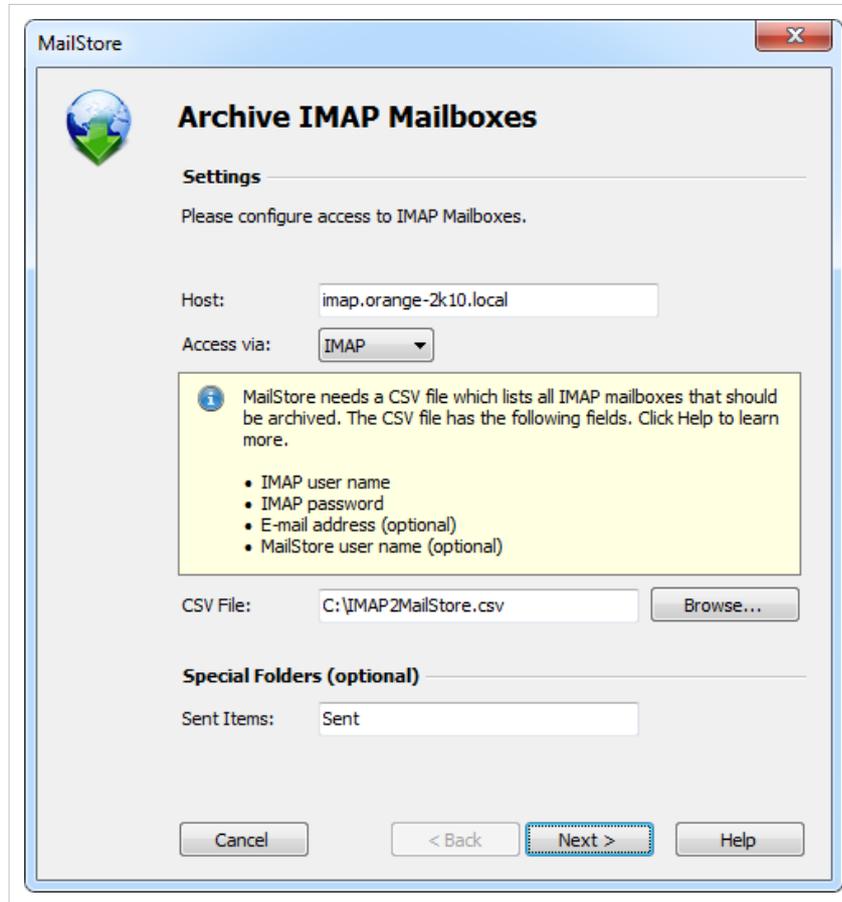
Please proceed as follows:

- 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. In addition, MailStore detects if emails within the source application (e.g. Microsoft Outlook) were moved to a different folder and repeats such moves in MailStore accordingly.

## Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically according to a schedule. Simply right-click on an existing profile and select *Schedule...*. Additional information about this topic is available in chapter Automating the Archiving Process.

**Please note:** As long as no deletion rules were specified upon creating the archiving profile, MailStore will never delete or otherwise modify emails in the source application (e.g. Microsoft Outlook).

## 2.8 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.

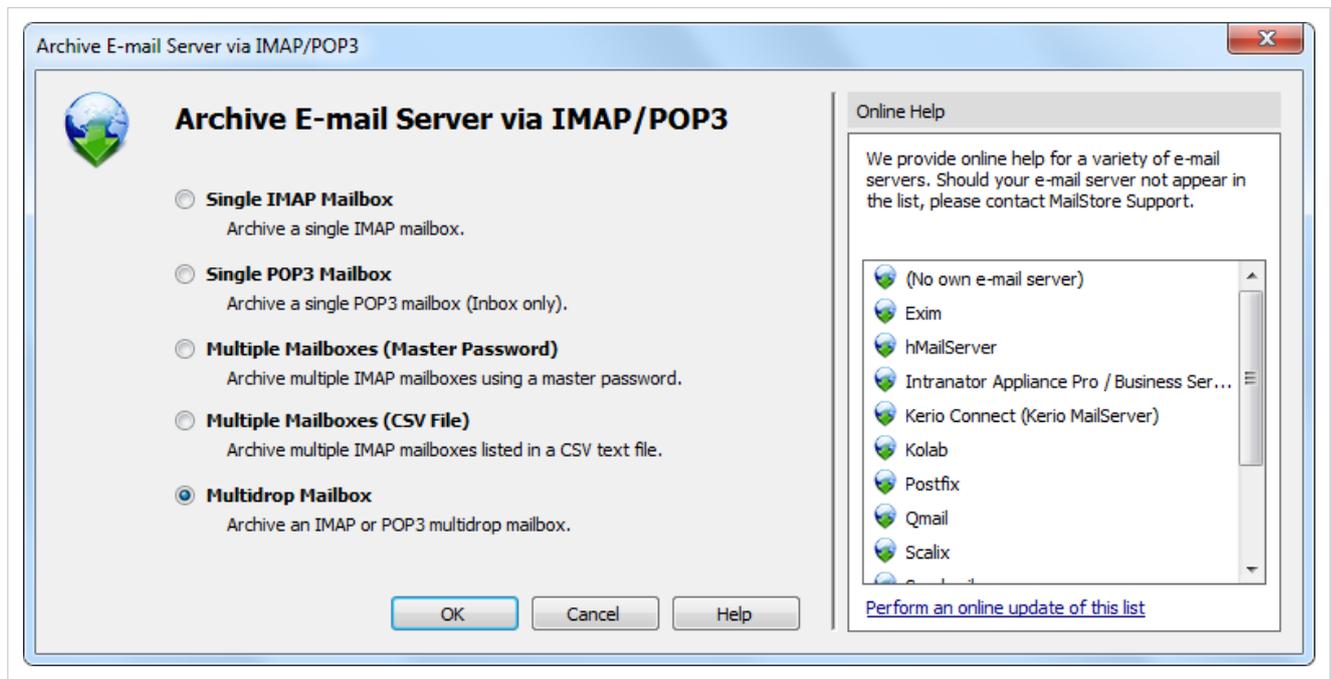
**Important:** This article describes the general procedure independent from the e-mail server used. Please find e-mail server specific information in our Implementation Guides.

### Setting up the Archiving Process

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.

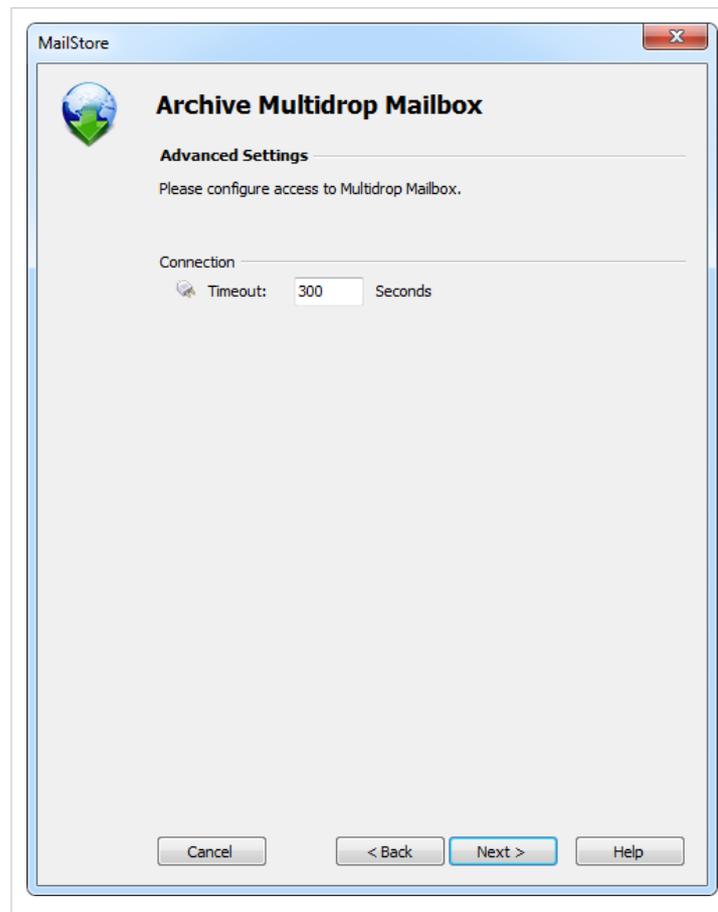


- Select *Multidrop Mailbox* and click *OK*.
- Fill out the fields *Access via*, *Host*, *Username* and *Password*. Click on *Test* to verify the data entered.

*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.

The screenshot shows the 'Archive Multidrop Mailbox' settings window in MailStore. The window has a title bar with 'MailStore' and a close button. Inside, there's a globe icon and the title 'Archive Multidrop Mailbox'. Below the title is a 'Settings' section with a descriptive paragraph: '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.' The settings are organized into several sections: 'Access via:' with a dropdown set to 'IMAP'; 'Host:' with the text 'imap.orange-2k10.local'; 'User Name:' with 'catchall@orange-2k10.local'; and 'Password:' with a masked field and a 'Test' button. The 'Target Folders' section has two rows: 'Received:' with 'User / E-mail Address /' and 'Inbox'; and 'Sent:' with 'User / E-mail Address /' and 'Sent Items'. The 'Messages with unknown e-mail addresses' section has two radio buttons: 'Archive messages here:' (selected) with a text field containing 'admin/Unknown e-mail addresses' and a '...' button, and 'Don't archive message with unknown e-mail addresses'. The 'When e-mails are successfully archived' section has a checkbox for 'Delete them in origin mailbox'. The 'Directory Services' section has a checkbox for 'Synchronize with Directory Services before archiving' and a 'Configure...' button. At the bottom are 'Cancel', '< Back', 'Next >', and 'Help' buttons.

- 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

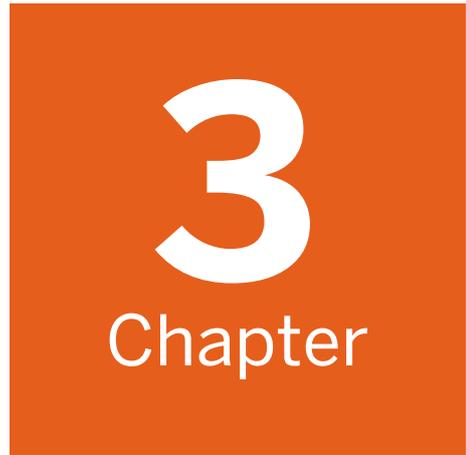
On the start page of MailStore Client, click on *Archive Email* and from the list under *Saved Profiles*, select the appropriate archiving profile. Click on *Run*. After the archiving process has been executed, a protocol appears. It contains information about the volume of emails that have been archived 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. In addition, MailStore detects if emails within the source application (e.g. Microsoft Outlook) were moved to a different folder and repeats such moves in MailStore accordingly.

## Automating the Archiving Process

In addition to being executed manually, archiving tasks can also be executed automatically according to a schedule. Simply right-click on an existing profile and select *Schedule...*. Additional information about this topic is available in chapter Automating the Archiving Process.

**Please note:** As long as no deletion rules were specified upon creating the archiving profile, MailStore will never delete or otherwise modify emails in the source application (e.g. Microsoft Outlook).



## **Accessing the Archive**

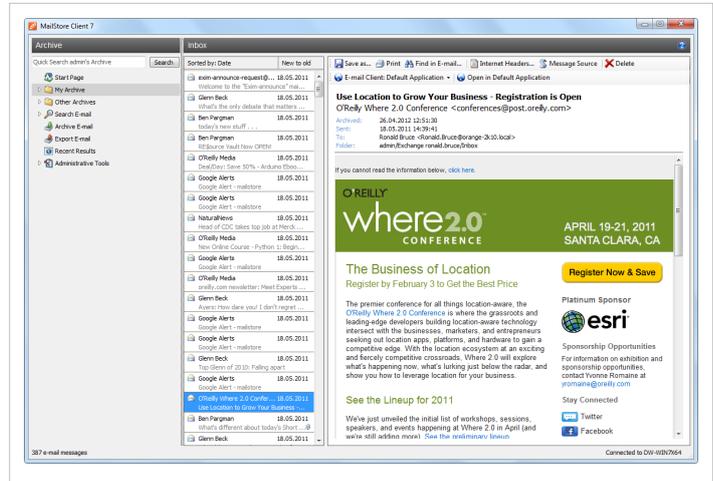
## 3.1 Accessing the Archive

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.

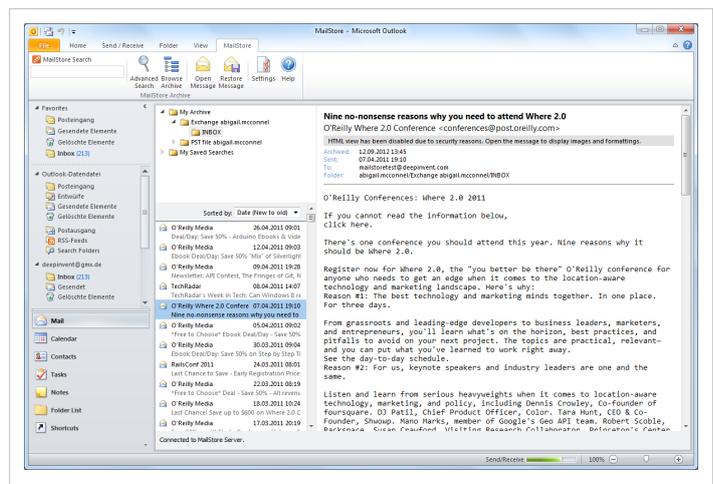
MailStore Client Manual



### Accessing the Archive with the Microsoft Outlook Integration

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

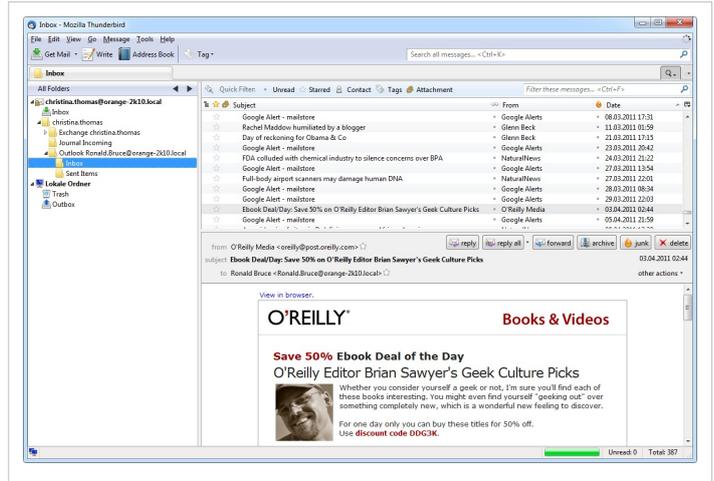
MailStore Outlook Add-in Manual



## 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.

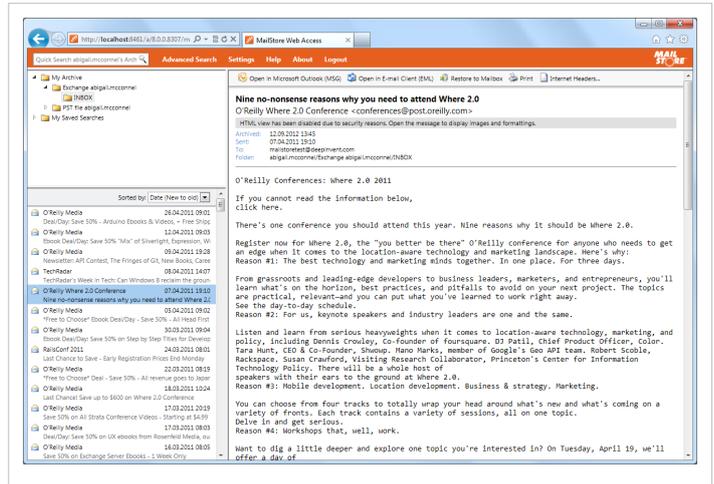
MailStore Integrated IMAP Server Manual



## 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

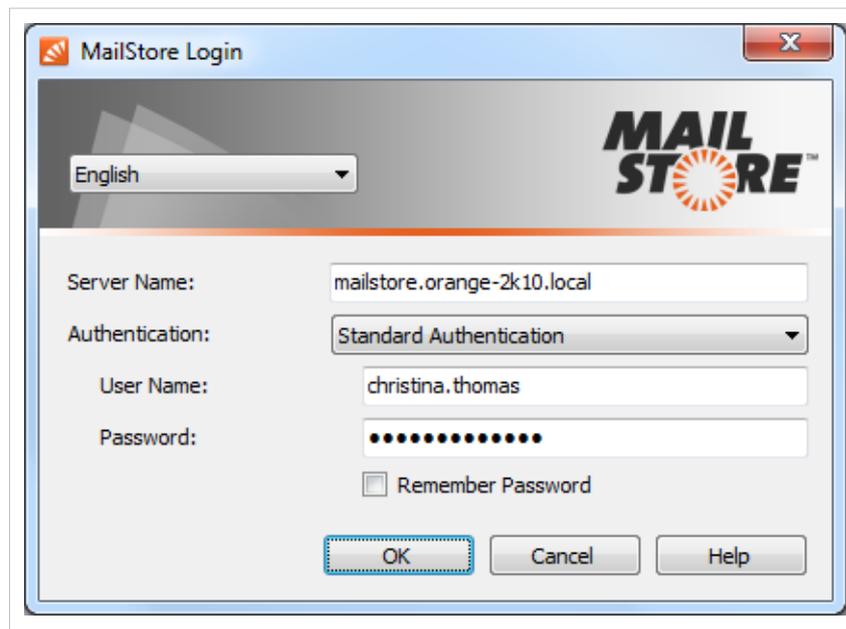
The MailStore Client setup file that matches your MailStore Server version is stored on the MailStore Server machine. Follow the *Install MailStore Client on other Computers* link on your desktop and copy the corresponding setup file to the client computer.

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*

### Starting and Login

Start MailStore Client by using the appropriate link on the desktop. The login window appears.



Put the IP address or hostname of the MailStore Server machine into *Server Name*. 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.

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*.

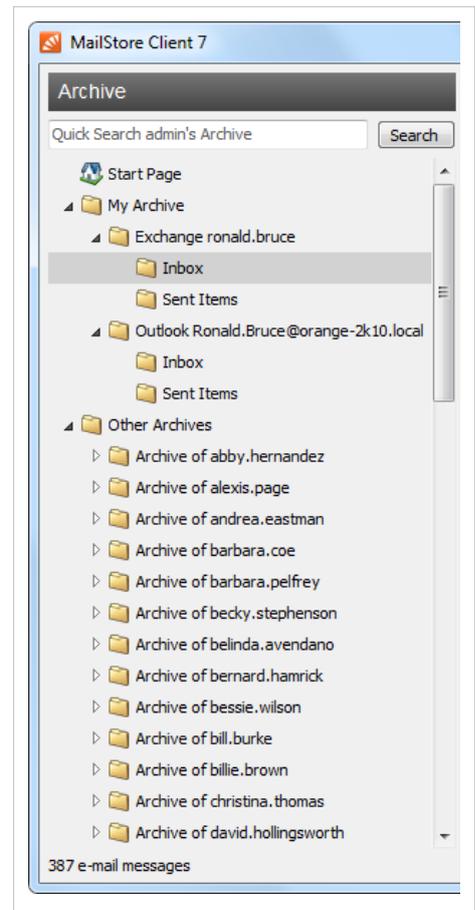
## Searching by Folder Structure

MailStore stores all archived emails in a MailStore-specific folder structure, in which emails are displayed using the same structure as their corresponding source application. This means that folders created in the source application (e.g. Microsoft Outlook) are not changed during the archiving process and can be found easily in MailStore as well.

### User Archives

For every user, MailStore creates a folder called *My Archive* on the highest level of the folder structure. Each folder corresponds to the user archive of the respective user and contains all his or her emails.

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



## 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.

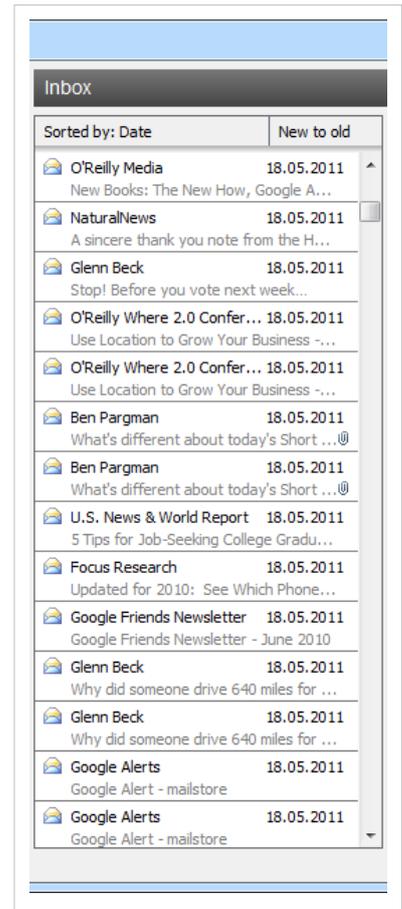
## Refreshing the View

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.

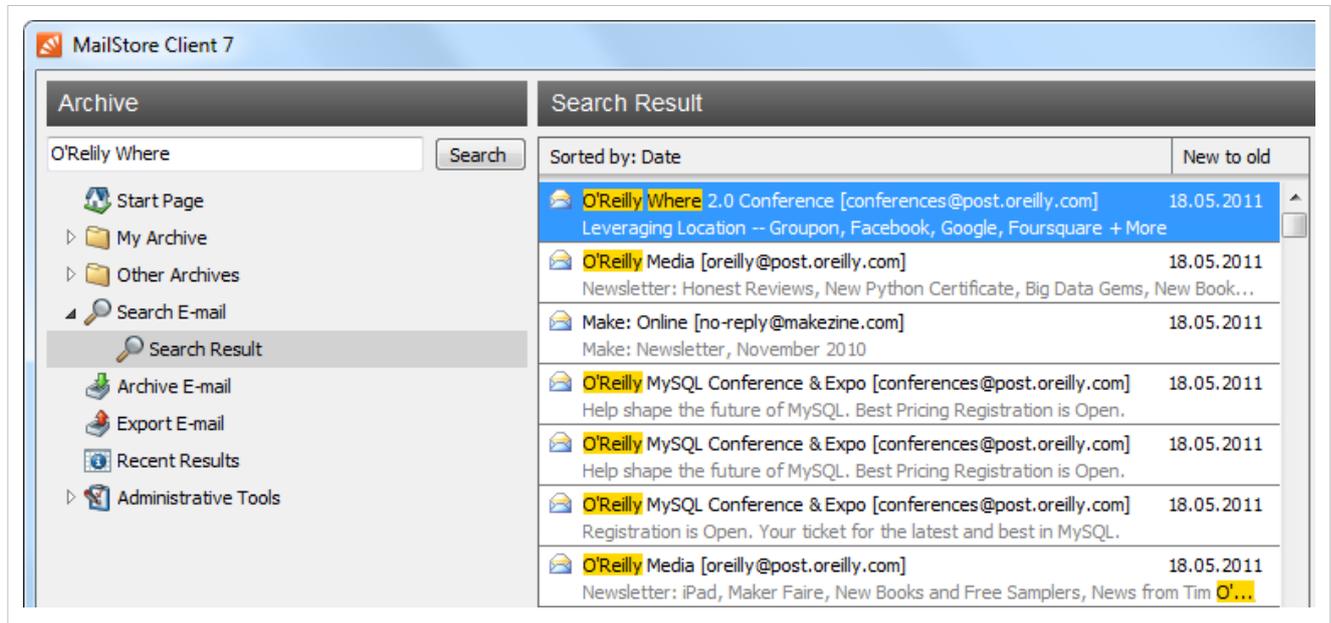
## Creating, Renaming and Deleting Folders

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



## 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.

## 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"
```

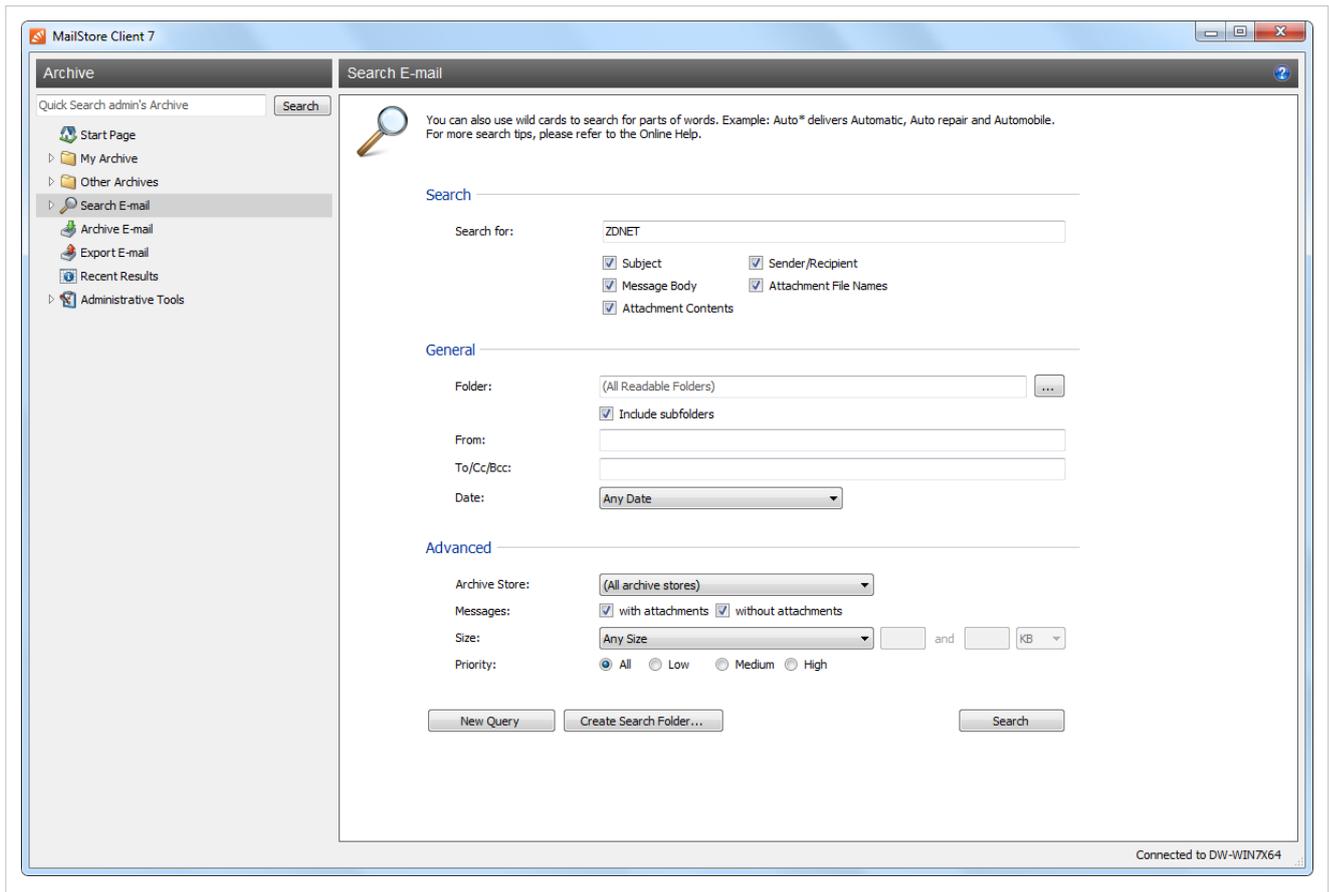
would locate all emails from ZDNet which do not contain the consecutive words Daily Update.

## 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

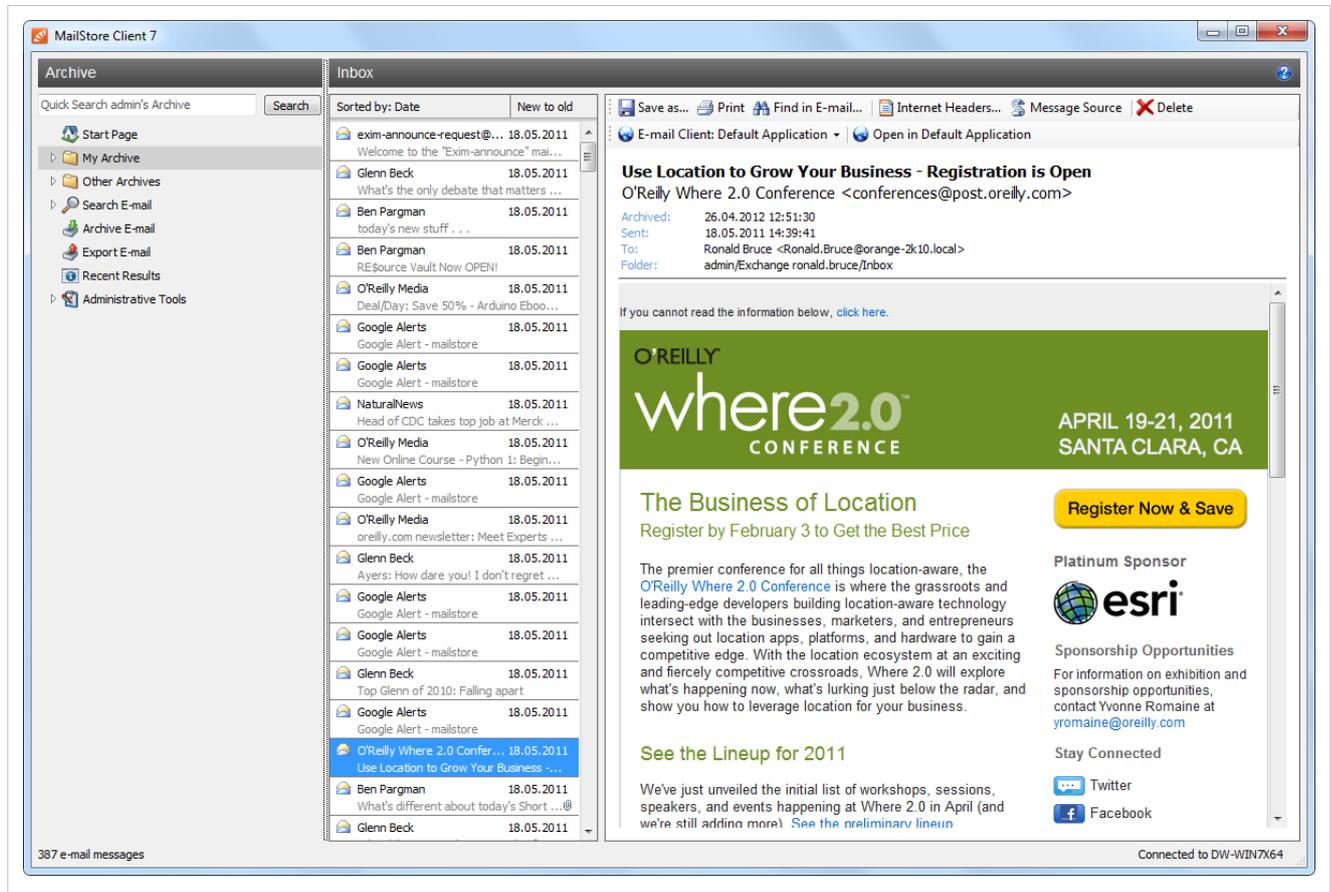
Search criteria that are used repeatedly (such as "all receipts from last month") can be saved and reused at a later time: Click on *Create Search Folder...* and provide a meaningful name for the search. The new search folder will be available under the *Search Email* folder on the left side of the application 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

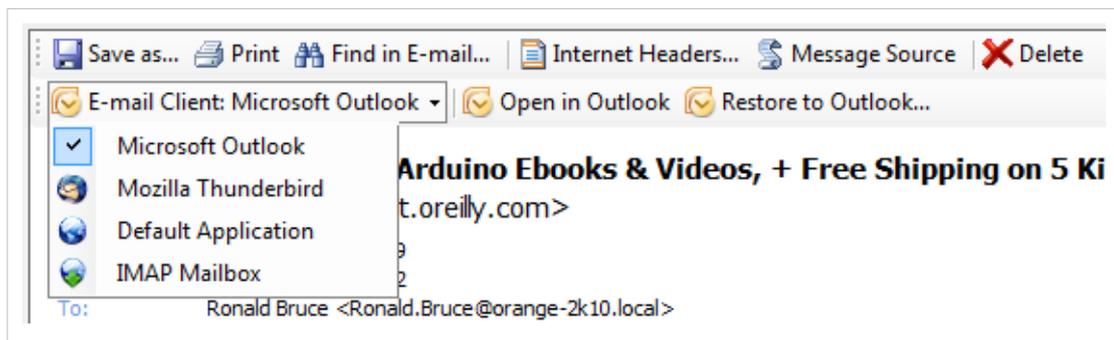
Click on *Message Source* to show the full source of the current message including all MIME-parts.

## 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:

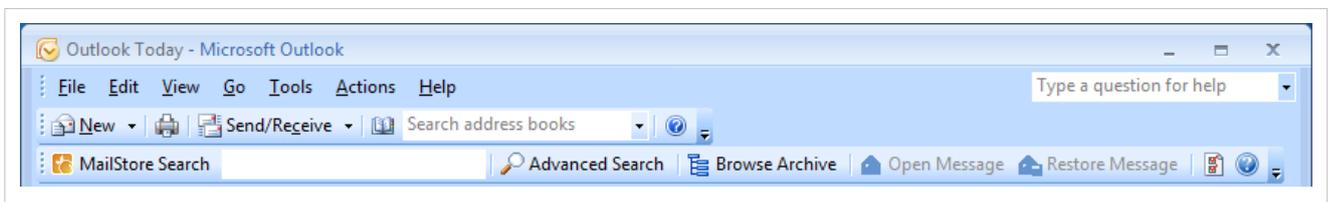
- **Open in <email client>** - Open the current message to the selected email client. Please note, that emails are simply opened, not stored, in the application. To restore emails to an email application, please use MailStore's Export Feature.
- **Restore to <email client>...** - Restore the current 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

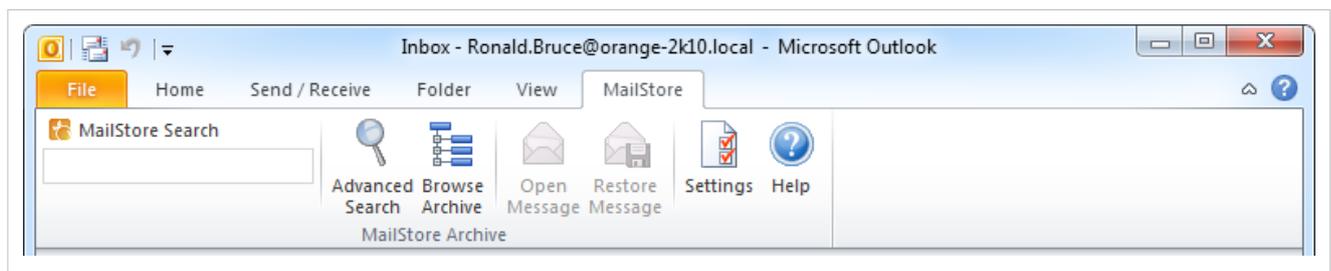
MailStore users can access their archives using a convenient add-in for Microsoft Outlook. A list of supported Microsoft Outlook version can be found under System Requirements.

### 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*

## 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.



### 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

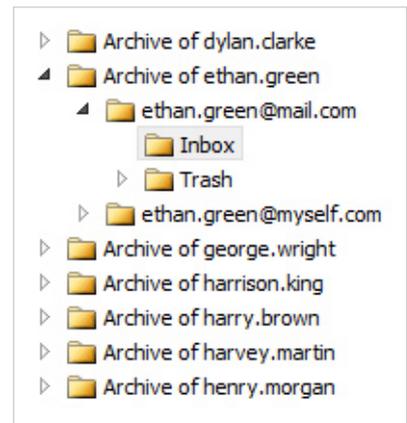
In the MailStore Outlook Add-in, click on *Browse Archive* to display the part of the archive that is visible to you.

## 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.



# 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 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 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.

### 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.

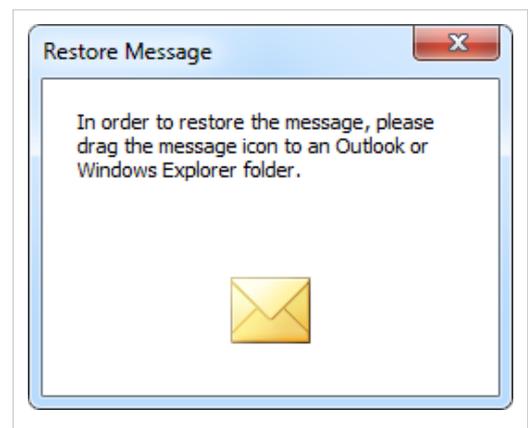
Please keep in mind that images and any formatting will not be displayed in the preview for security reasons. Emails cannot be forwarded or replied to within the preview, either.

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
- Accessing the Archive from Symbian 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.

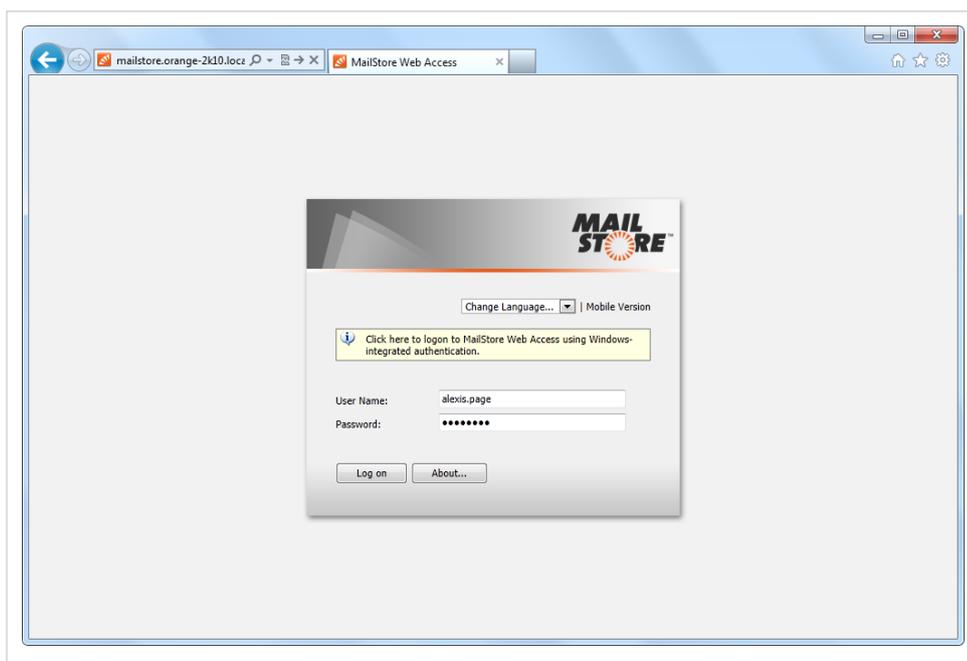
In order to use the *Restore to Mailbox* feature, a MailStore administrator needs to configure the SMTP settings under *Administrative Tools > Miscellaneous > SMTP Settings* first.

### 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 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 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 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.

### 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

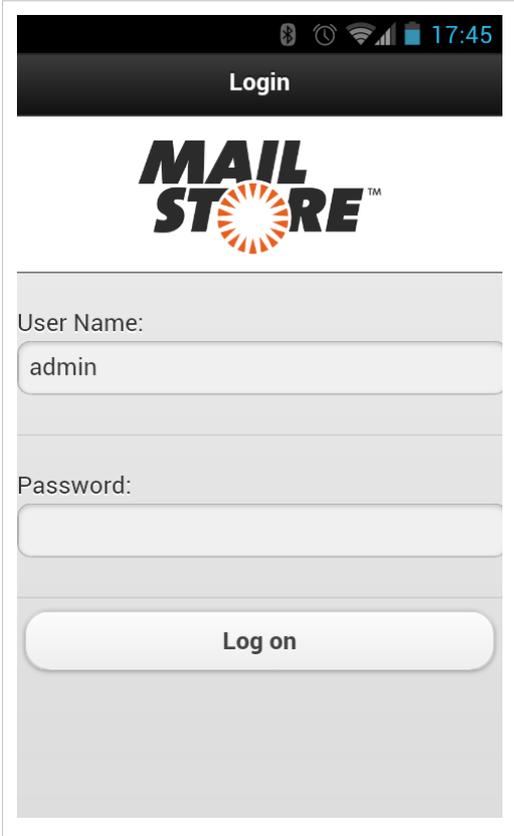
Activation and configuration of MailStore Mobile Web Access are done using the MailStore Server Service Configuration. A list of supported internet browsers is available under System Requirements.

### 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.

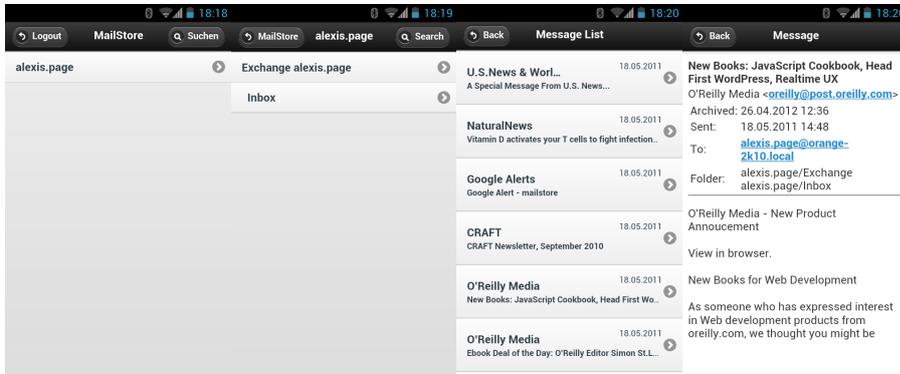


The screenshot shows a mobile web browser interface for MailStore. At the top, there is a black header with the word "Login" in white. Below the header is the MailStore logo, which consists of the word "MAIL" in a bold, sans-serif font above the word "STORE" in a similar font, with a stylized orange sunburst graphic behind the letter "O". Below the logo are two input fields. The first is labeled "User Name:" and contains the text "admin". The second is labeled "Password:" and is currently empty. At the bottom of the form is a large, rounded rectangular button with the text "Log on" in the center.

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.

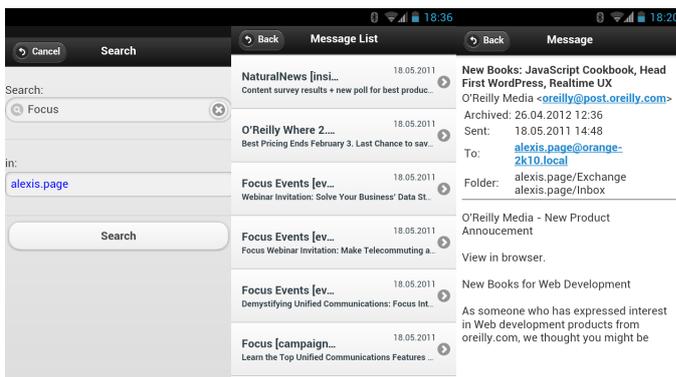
## Search by Folder Structure

- 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 address using SMTP** - Emails are forwarded to a specified email address using SMTP, the standard protocol for sending emails.

#### 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.

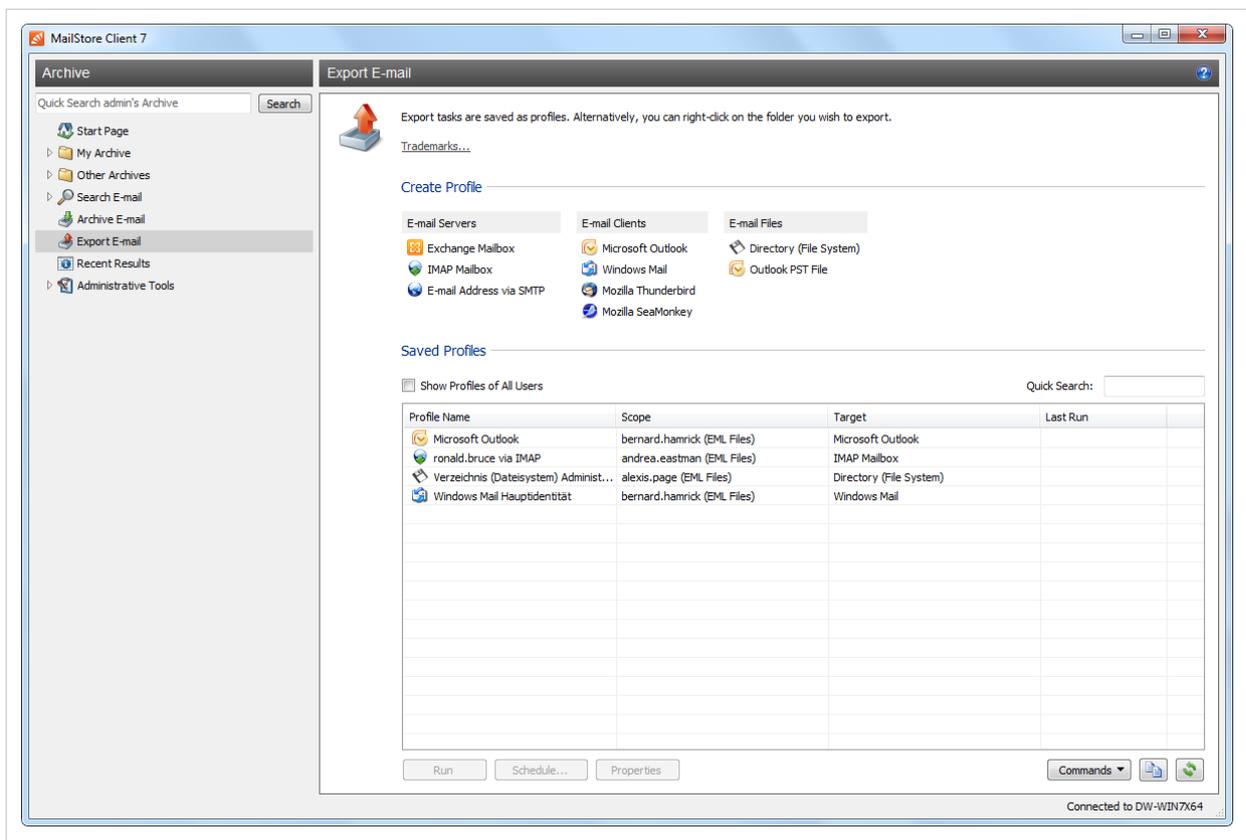
Such an exporting profile could contain the following information:

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

### 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.

Just like archiving profiles, already existing export profiles can be executed, edited or deleted at any time. Additional information is available in chapter *Working with Archiving Profiles*.

### **Executing an Export Profile**

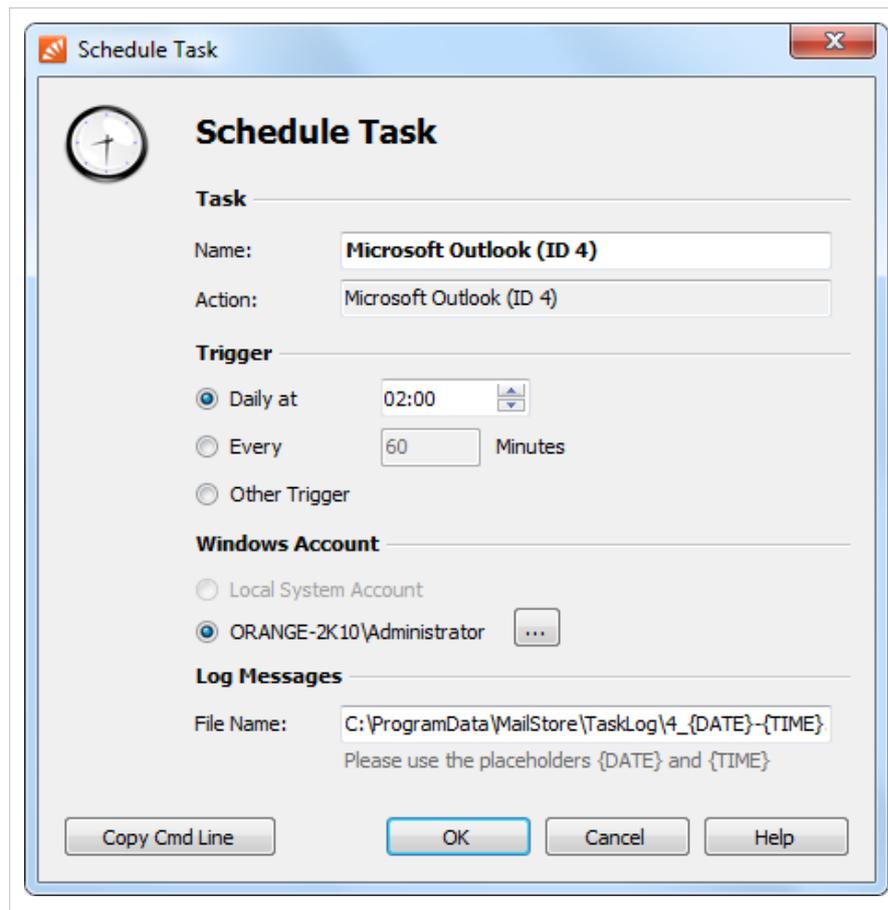
On the start page of MailStore Client, click on *Export Email*. From the list under *Saved Profiles*, select the profile to be executed and click on *Run*. After the export process has finished, a message appears containing information about any errors that may have occurred.

## **Automating the Export Process**

With MailStore, every exporting task (every export profile) can be executed automatically according to specified points in time.

### **Procedure**

- Start MailStore Client on the computer on which the exporting task is to be executed according to a schedule. Please keep in mind that, if a full backup is to be performed, this has to be the computer on which MailStore Server is installed. If the emails of other users are to be exported, log on as administrator.
- On the start page of MailStore Client, click on *Export Email*.
- Right-click on an existing profile and select *Schedule...*



In the next window "Schedule Task", the following settings of the planned task can be specified:

**Task - Name:** The task name can be chosen freely. By default, the name of the export profile and its internal MailStore ID are used.

**Trigger:** A time for daily execution (the task is executed once a day) or a time interval (e.g. every 60 minutes) can be specified.

If the option *Other Trigger* is chosen, the exporting task is created as Windows task but execution times still have to be specified. This has to be done using the Windows task planner and is described in Windows Help. All options offered by your current Windows version can be used.

**Windows Account:** Specify here which user account is to be used when executing the scheduled task. The option *Local System Account* can be used for exports with destination Directory (File System) or CD/DVD, for example, and has the advantage that no password is required to execute the task. If the emails are to be archived from the applications of the current user (e.g. from Microsoft Outlook), the corresponding user account must be selected. In such cases, the option *Local System Account* is deactivated.

**Log Messages** - File Name: If a log file is to be created, the name for that file can be specified here. The placeholders {DATE} and {TIME} can be used in the file name which will be replaced by the actual date and time during the archiving process. If desired, the log file can also be created on a network drive.

**Copy Cmd Line** - By clicking this button the command line to execute this scheduled task is copied to the clipboard, so that you may paste it into batch script files. Detailed instructions can be found at the end of this chapter.

After all settings have been specified, the task can be created by clicking on *OK*. Confirm the following safety prompt by clicking *OK* again. If any account other than the *Local System Account* has been selected under Windows Account, the Windows password of the currently logged on user has to be entered.

A list of scheduled tasks is displayed in MailStore's Administrative Tools, showing all tasks created on the current computer up to this point.



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

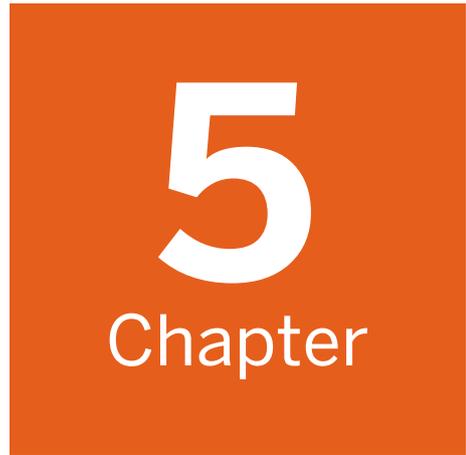
**--pkv3="..."** - Public Key Fingerprint. It ensures that the MailStore server at the time of archiving is the same as it was at the time when the scheduled task was created (optimal safety feature).

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

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

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

**export-execute --id=77 --user="admin"** - Execute the archiving profile of user admin with the internal ID 77.



# **Administration**

# 5.1 Users, Folders and Settings

## 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.

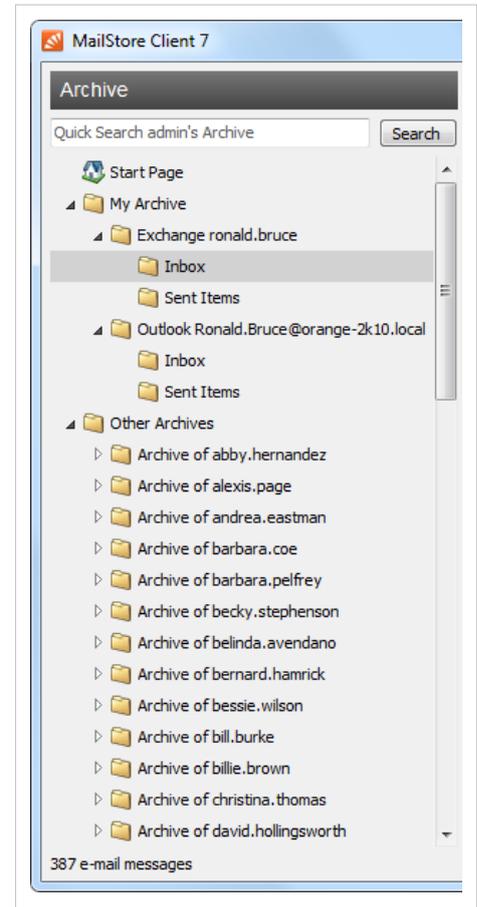
### Deleting Folders

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.



The features *New Folder...*, *Rename* and *Move to Folder...* can be accessed by right-clicking on the corresponding archive folder.

If a MailStore administrator renames a user archive (Folder: *Archive of <user name>*) without renaming the corresponding user, an empty archive will exist with this user name until it is changed.

## Deleting Emails

Highlight the emails to be deleted by clicking on the emails while holding down the control (*Ctrl*) key. Holding down the *Ctrl* key and pressing *A* will highlight all emails. Right-click on the highlighted item(s) and select *Delete*. Users are only allowed to delete emails if they have received this privilege explicitly from the MailStore administrator.

Please keep in mind that allowing users to delete emails is not recommended; assigning such privileges makes it difficult, if not impossible, to comply with legal requirements regarding the storage of emails.

## Moving Emails

Highlight the emails to be moved by clicking on the emails while holding down the control (*Ctrl*) key. Holding down the *Ctrl* key and pressing *A* will highlight all emails. Right-click on the highlighted item(s), select *Move To Folder...* and select a destination folder. Alternatively, drag and drop the highlighted emails into the destination folder. Emails can only be moved within a user archive unless you are a MailStore administrator.

# 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 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 'christina.thomas'. The dialog is divided into several sections:

- General Information:**
  - Login Name: christina.thomas
  - Full Name: Christina Thomas
  - Authentication: Directory Services (dropdown), Password... (button)
  - User is an Administrator
- Integration (optional):**
  - LDAP DN String: CN=Christina Thomas,OU=Berlin,DC=orange-2k:
  - E-mail Addresses: christina.thomas@orange-2k10.local, christina.thomas@orange-2k10.local (comma separated)
  - POP3 User Names: (empty field) (comma separated)
- Privileges:**
  - Log on to MailStore Server  Change Password
  - Archive E-mail (Unlimited)
  - Export E-mail (Unlimited)
  - Delete E-mail
- Folder Access Table:**

Folder	Access
christina.thomas	Read

Buttons at the bottom: OK, Cancel, Help.

- 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.

The screenshot shows the 'User Properties' dialog box for the user 'christina.thomas'. The 'Privileges' section is highlighted with a red border. It contains the following options:

- Log on to MailStore Server
- Change Password
- Archive E-mail (Unlimited)
- Export E-mail (Unlimited)
- Delete E-mail

Below these options is a table for folder access:

Folder	Access
christina.thomas	Read, Write

Buttons for 'Add New...', 'Edit', and 'Delete' are located to the right of the table. At the bottom of the dialog are 'OK', 'Cancel', and 'Help' buttons.

### 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 only modify already existing archiving profiles but can neither create new profiles nor run existing ones.

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 only modify already existing export profiles but can neither create new profiles nor run existing ones.

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 screenshot shows the MailStore Client 7 interface. The left sidebar is expanded to 'Administrative Tools > Users and Privileges > Privileges'. The main window displays the 'Privileges' page, which includes a search bar and a table titled 'Archives and Privileges Overview'. The table has three columns: 'Archive', 'User Name', and 'Privileges'. Below is the data from the table:

Archive	User Name	Privileges
abby.hernandez	abby.hernandez	Read
alexis.page	alexis.page	Read
barbara.coe	barbara.coe	Read
andrea.eastman	andrea.eastman	Read
barbara.coe	barbara.coe	Read
barbara.pelfrey	david.hollingsworth	Read
becky.stephenson	becky.stephenson	Read
belinda.avendano	belinda.avendano	Read
bernard.hamrick	bernard.hamrick	Read
bernard.hamrick	bernard.hamrick	Full Access
bessie.wilson	bessie.wilson	Read
bill.burke	bill.burke	Read
billie.brown	billie.brown	Read
christina.thomas	christina.thomas	Read
david.hollingsworth	david.hollingsworth	Read, Write
david.lombard	david.lombard	Read
david.mora	david.mora	Read
david.torrez	david.torrez	Read
francisco.brown	francisco.brown	Read
frank.clark	frank.clark	Read
gerald.chang	gerald.chang	Read
henry.carreras	henry.carreras	Read
henry.gills	henry.gills	Read

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

### Synchronizing User Accounts with Active Directory

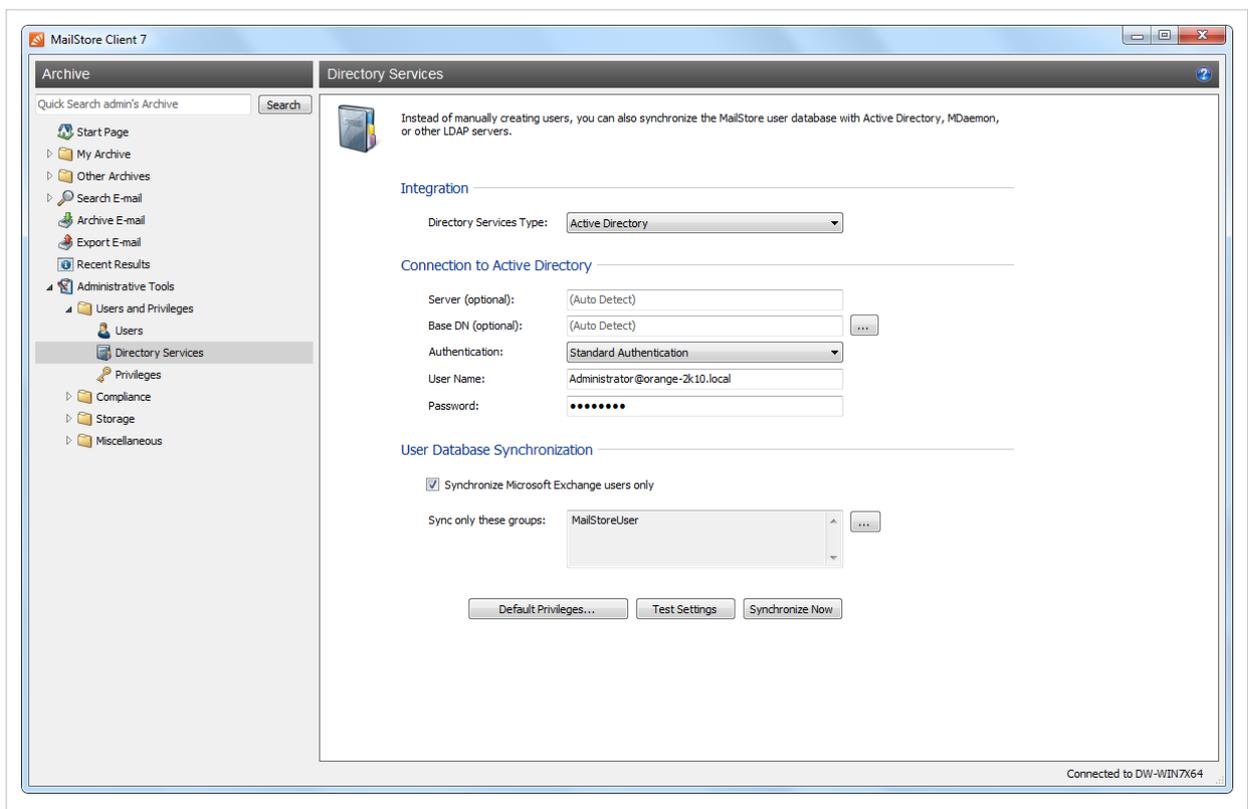
In addition to adding users manually as described in chapter User Management, MailStore can synchronize its internal user database with the Active Directory of your company.

During synchronization, user information and email addresses are gathered from Active Directory and recorded in MailStore; no changes are made to Active Directory.

**Please note:** MailStore Server does neither support subdomains nor domain trusts.

#### Accessing Active Directory Integration

Log on to MailStore Client as administrator. Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*. In the *Integration* area change *Directory Service Type* to *Active Directory*.



## Specifying Connection Settings

Before the synchronization can be started, MailStore requires information on how to connect to the Active Directory server.

- **Server (optional)**  
Name or IP address of an Active Directory server. If the MailStore Server machine is member of the Active Directory, this setting is detected automatically.
- **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 the Active Directory is available. If the MailStore Server machine is 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* - As long as the MailStore Server is not installed on an Active Directory server, using standard authentication is required. Fill out the *User Name* and *Password* fields when using standard authentication; enter the user name in UPN notation, e.g. *Administrator@company.local*
  - *Windows Authentication* - Is the MailStore Server installed on an Active Directory server, the MailStore Server service already has enough privileges to authenticate itself to the Active Directory using Windows authentication.

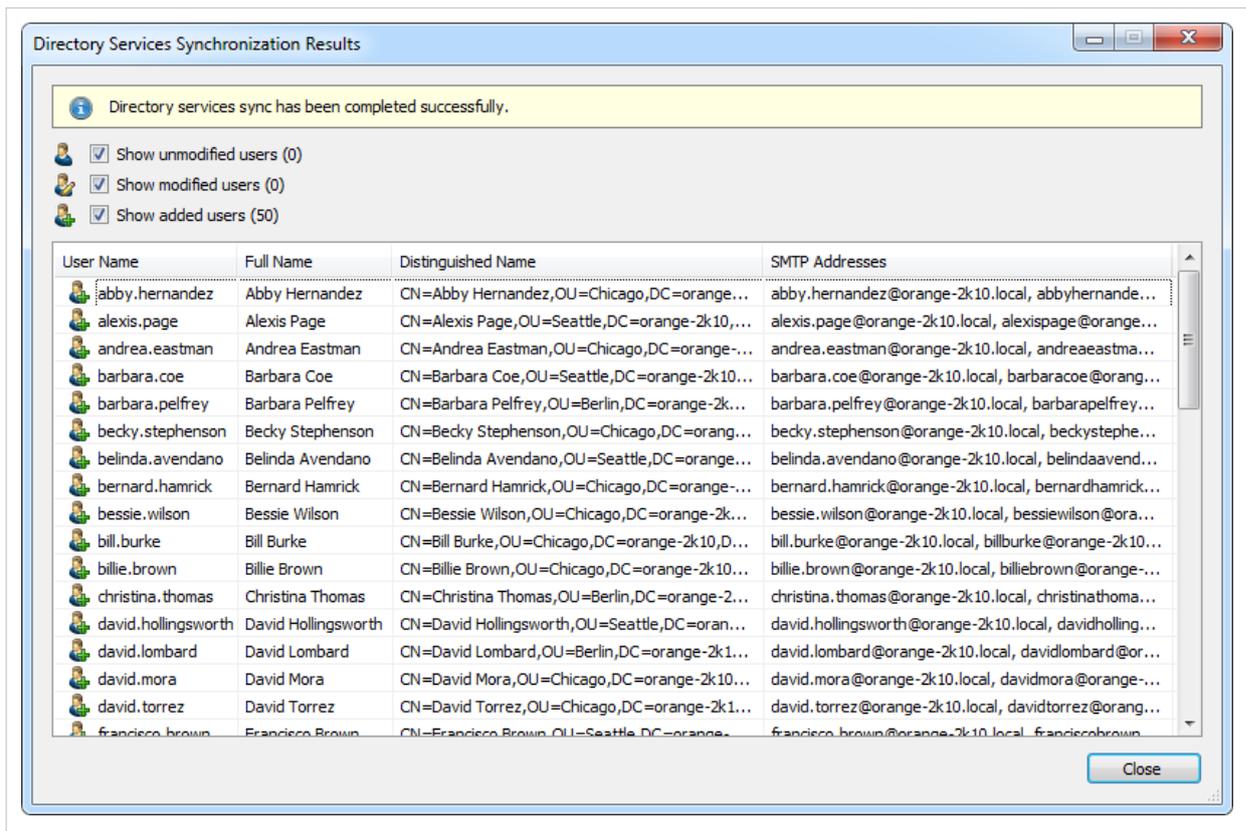
## Executing the Synchronization

Under *User Database Synchronization*, after the connection settings have been specified (as described above), the MailStore user list can be synchronized with the Active Directory user list.

The following options are available:

- **Synchronize Microsoft Exchange users only**  
Clear this checkbox only if all Active Directory users are to be created in MailStore as well.
- **Synchronize only members of a group**  
Check this Checkbox and select a group name, if you want only members of that Active Directory group to be synchronized with you Mailstore Server.

Click on *Test Settings* to see what would happen during actual synchronization. To start, click on *Synchronize Now*.



## Login with Windows Credentials

By default, each MailStore user has a password exclusively for MailStore which the administrator can specify during creation of a new user account. In MailStore Client's *Administrative Tools*, the respective user can later change his or her password.

Alternatively, if Active Directory is available, MailStore can be configured to allow users to log on to MailStore Server through MailStore Client using their Active Directory password.

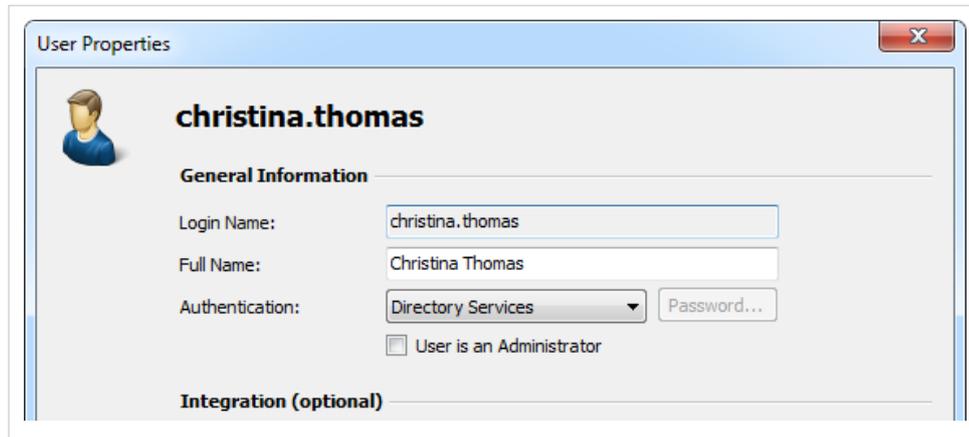
### Procedure for Users Created During Synchronization with Active Directory

If the MailStore users were created using Active Directory Synchronization, as described in the previous section, no further action is required. In this case, MailStore has already specified all necessary settings automatically.

## Procedure for Manually Created Users

If MailStore users who were created manually are to be able to log on using their Active Directory password, please proceed as follows:

- Configure the Active Directory Integration as described in chapter Synchronizing User Accounts with Active Directory.
- Verify that the names of the MailStore users match those of the corresponding Active Directory users.
- In the User Properties window under *Authentication*, select *Directory Services*.



## 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

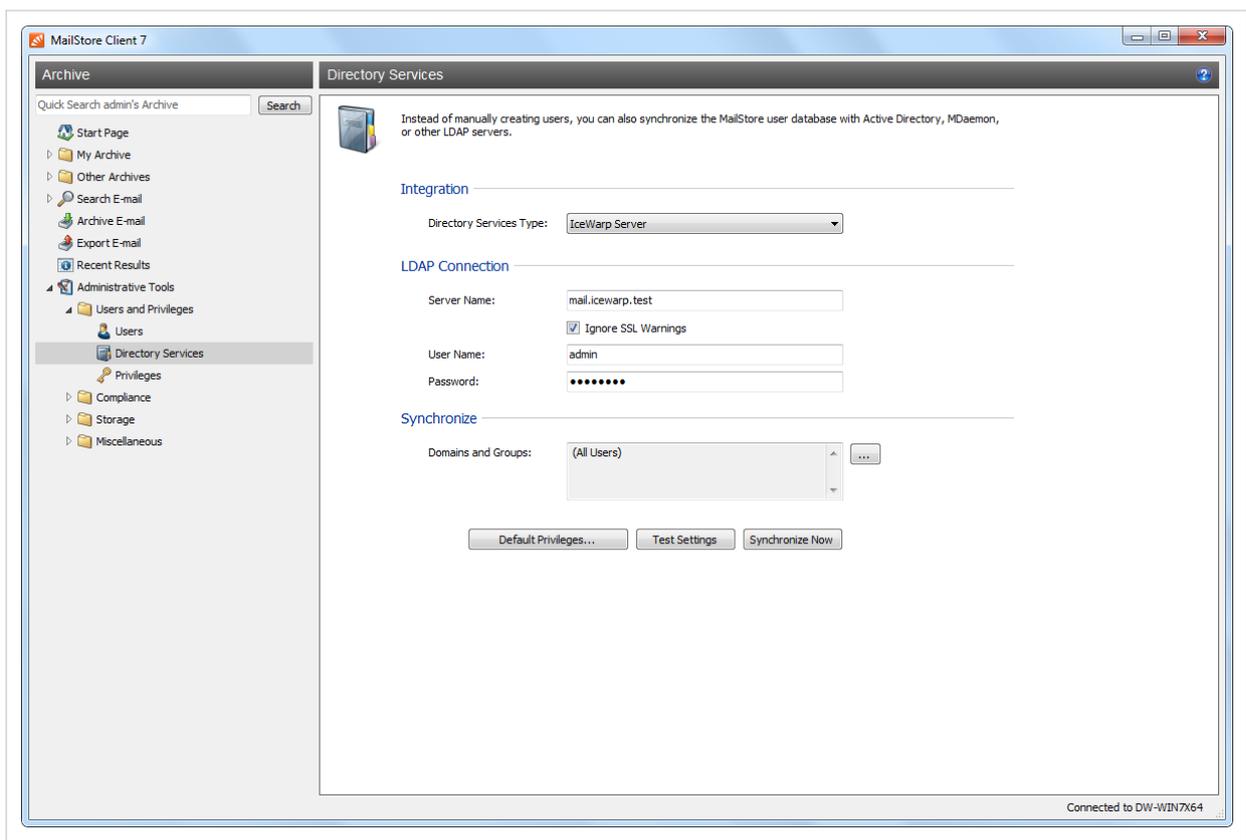
### Synchronizing User Accounts with an IceWarp Server User Database

In addition to adding users manually (which is described in chapter User Management), MailStore can synchronize its internal user database with an IceWarp Server User Database. For this, MailStore requires IceWarp Server API version 10.4 or newer.

During synchronization, user information and email addresses are taken from the IceWarp Server user database and entered into MailStore. MailStore makes no changes to the IceWarp Server user database itself. Synchronization can be limited to individual or multiple domains and groups.

#### Accessing the Directory Service Integration

- Log on to MailStore Client as MailStore administrator.
- Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*.
- Under *Integration* change the *Directory Service Type* to *IceWarp Server*.



## Specifying Connection Settings

Before the synchronization feature can be used, MailStore requires information on how to reach the IceWarp server.

- **Server Name** - Name or IP address of the IceWarp server. If you use a self-signed 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.
- **Password** - Password of the user with administrative privileges.

## Specifying Standard Privileges

By default, users who were synchronized to MailStore from a directory service can log on to MailStore Server and have access to their own user archives.

The standard privileges can be customized before synchronization, to grant all new users the *Archive Emails* privilege, for example. To do so, click on the *Standard Privileges...* button.

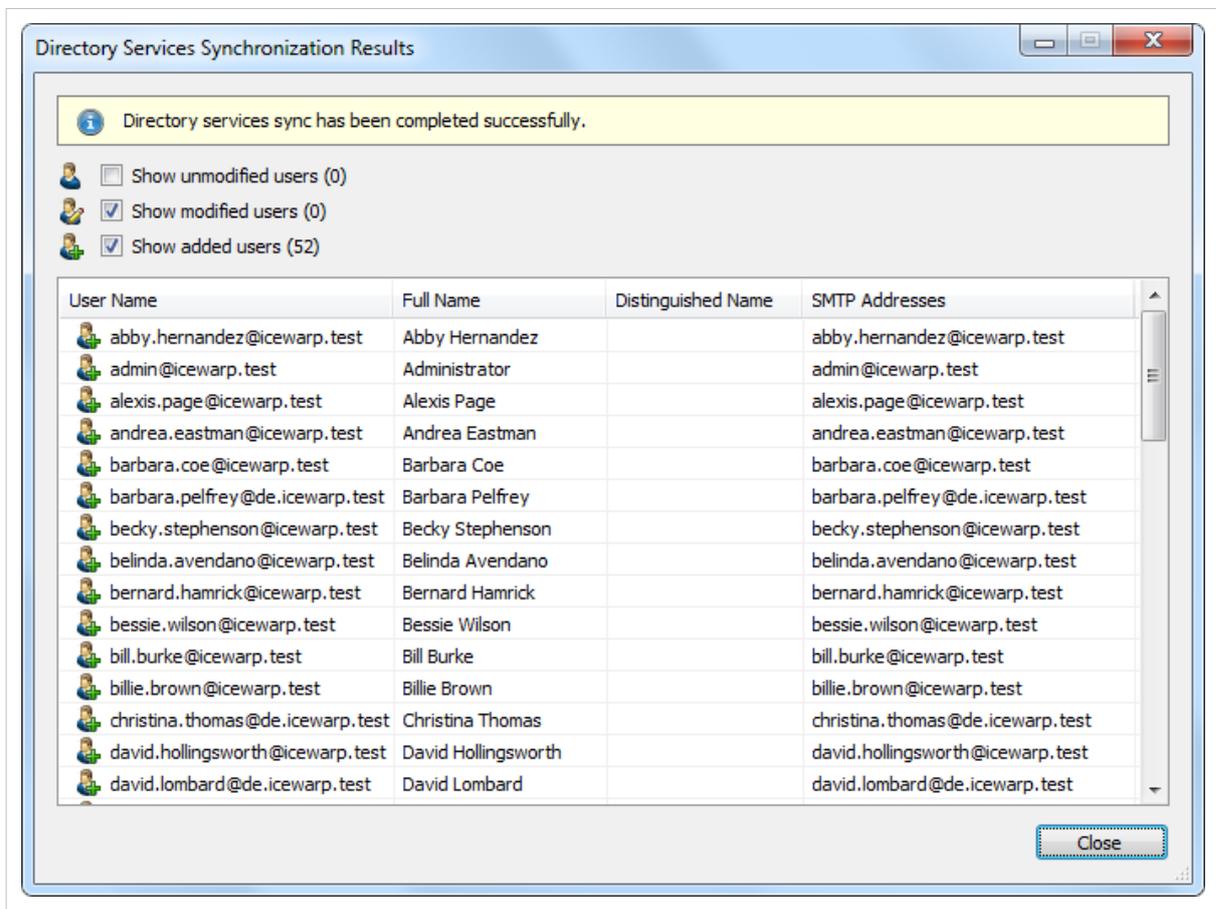
Additional Information about managing user privileges and their effects is available in chapter Users, Folders and Settings. There you can also find directions for customizing existing privileges.

## Executing the Synchronization

After the connection settings have been specified (as described above), the MailStore user list can be synchronized with the IceWarp Server user database.

Synchronization can be limited to one or more domains and groups. To do so, click on the button next to the *Domains and Groups* field and place a checkmark in front of the domains and groups you want to synchronize. If no domains or groups are selected, all users will be synchronized.

Click on *Verify Settings*, to see what would happen when clicking on *Synchronize now*. Click on *Synchronize now* to start.



## Login with IceWarp Access Data

By default, each user created in MailStore has a password specifically for MailStore. The MailStore administrator can specify the password while setting up the user account. Users can later change their passwords in MailStore Client's *Administrative Tools*. Alternatively, you can configure MailStore to allow users to log on to MailStore Server using their IceWarp passwords.

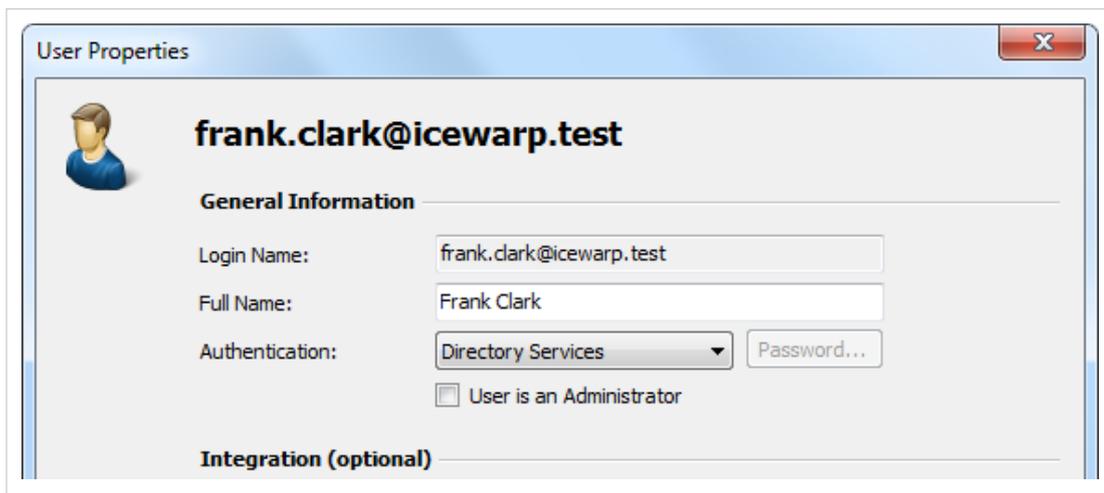
### Procedure for Users Added by Synchronizing with the IceWarp Server User Database

If the MailStore users were added using IceWarp Server Directory Service Synchronization, as described in the previous section, no further action is required. In this case, MailStore has already specified all necessary settings automatically.

### Procedure for Users Added Manually

If the MailStore users were added manually and if these users are to be able to log on using their IceWarp passwords, please proceed as follows:

- Configure the IceWarp Server Integration as described in section Synchronizing User Accounts with an IceWarp Server User Database.
- Make sure that the MailStore users have the same names as the corresponding users in the IceWarp Server user database.
- In the user properties menu under *Authentication*, select *Directory Services*.



## 5.4 Kerio Connect Integration

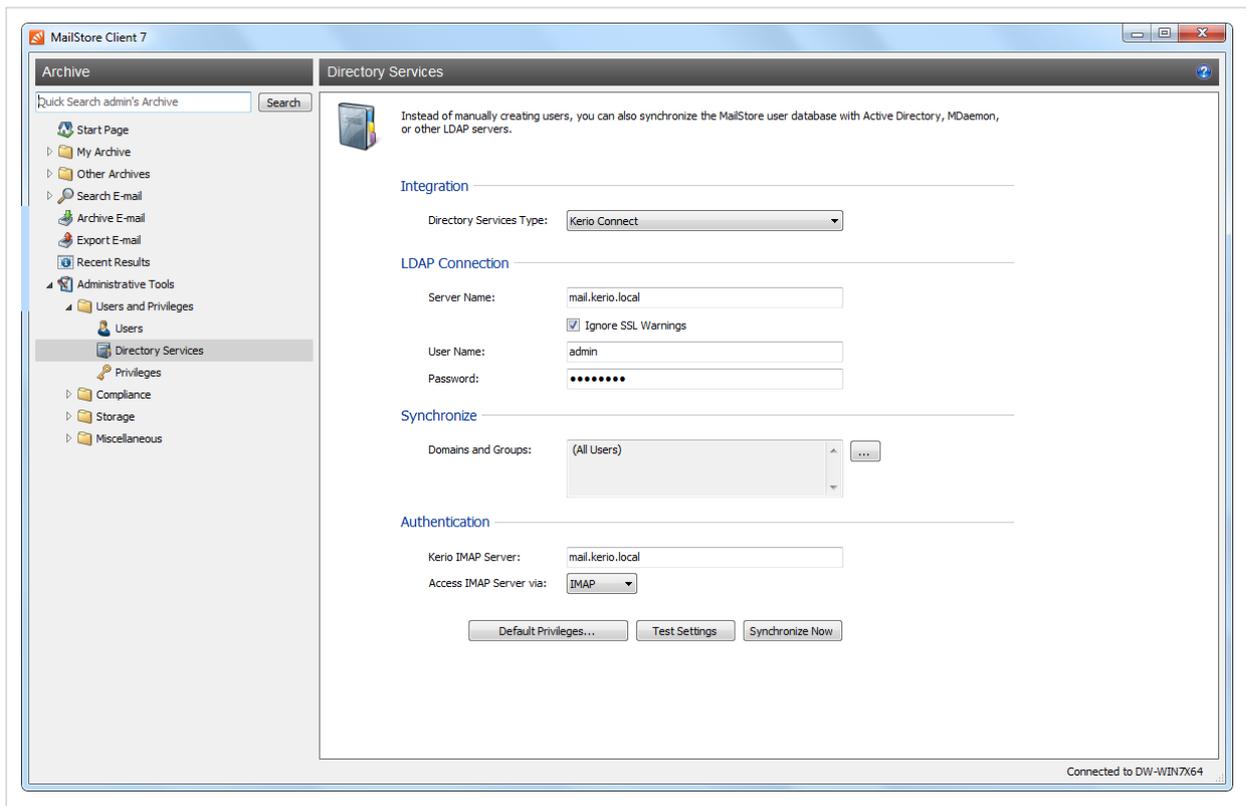
### Synchronizing User Accounts with a Kerio Connect User Database

In addition to adding users manually (as described in chapter User Management), MailStore can synchronize its internal user database with a Kerio Connect user database.

During synchronization, user information and email addresses are taken from the Kerio Connect user database and entered into MailStore. MailStore makes no changes to the Kerio Connect user database itself, and the synchronization can be limited to one or more individual domains and groups.

#### Accessing the Directory Service Integration

- Log on to MailStore Client as MailStore administrator.
- Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*.
- Under *Integration*, change the Directory Service type to *Kerio Connect*.



## Specifying Connection Settings

Before the synchronization feature can be used, MailStore Server needs information on how the Kerio Connect server can be reached:

- **Server Name** - The Name or the IP address of the Kerio Connect server. If you are using a self-signed SSL certificate on the Kerio Connect server, please check the checkbox *Ignore SSL Security Warnings*.
- **User Name** – The name of a user with administrative privileges.
- **Password** – The password of the user with administrative privileges.

## Specifying Standard Privileges

By default, users who were synchronized to MailStore from a directory service can log on to MailStore Server and have access to their own user archive. Before synchronization, you can modify these standard privileges to give all new users the *Archive Emails* privilege, for example. To do so, click on the *Standard Privileges...* button.

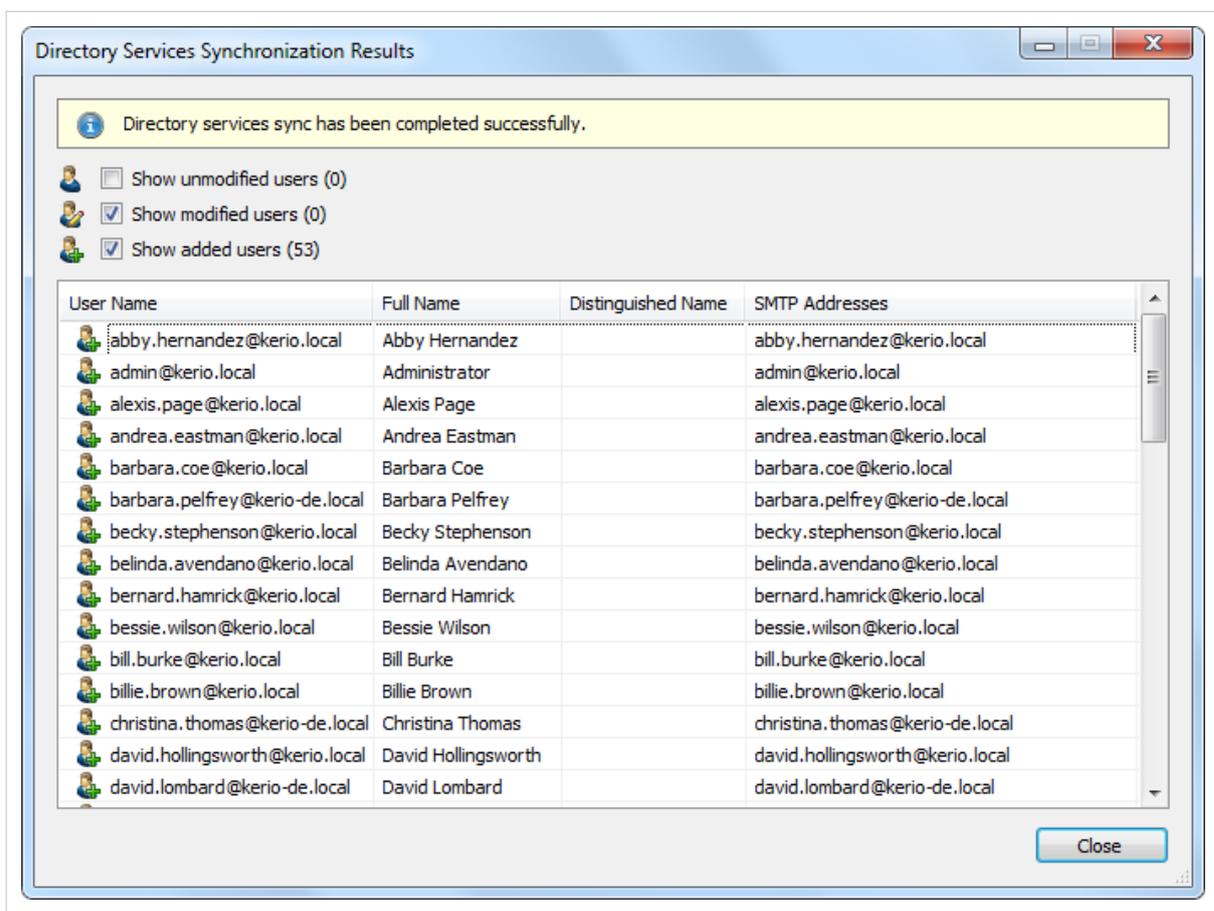
Additional information about managing user privileges and their effects is available in chapter Users, Folders and Settings. There you can also find tips on how to customize existing privileges.

## Performing the Synchronization

Once the connection settings have been specified (as described above), you can synchronize the MailStore user list with the Kerio Connect user database.

To limit synchronization to one or more domains and groups, click on the button next to the domains and groups field and put a checkmark in front of the groups to be synchronized. If no domain or group is selected, all users will be synchronized.

Click on *Verify Settings* to see what happens when clicking *Synchronize Now*. Click on *Synchronize Now* to start.



## Login with Kerio Connect Access Data

By default, each MailStore user has a password exclusively for MailStore. The MailStore administrator specifies the password upon creation of the user account while the user can later change it via MailStore Client's *Administrative Tools*. Alternatively, you can configure MailStore to allow users to log in to MailStore Server using their Kerio Connect passwords.

Before users can log in to MailStore Server using their Kerio Connect access data, the following settings must be specified under *Authentication*:

- **Kerio IMAP Server** – Enter the IP address or the host name of the Kerio Connect server against which authentication is to be performed.
- **IMAP Server Access** – Specify if the connection to the IMAP server is to be unencrypted or IMAP-TLS/IMAP-SSL encrypted.

**Only when using IMAP-TLS and IMAP-SSL:** Activate the option to *Ignore SSL Security Warnings* if an unofficial certificate is used on the Email server. Otherwise, authentication will permanently fail.

### Procedure for Users Who Were Added Via Synchronization with the Kerio Connect User Database

If MailStore users were added via Kerio Connect directory service synchronization as described in the previous section, no further action is required. MailStore has already specified all necessary settings automatically.

### Procedure for Manually Added Users

If MailStore users were added manually, and if these users are to be able to log in using their Kerio Connect password, please proceed as follows:

- Configure the Kerio Connect Integration as described in chapter Synchronizing User Accounts with a Kerio Connect User Database
- Make sure that the MailStore users have the same name as the corresponding users in the Kerio Connect user database.
- In the user properties under *Authentication*, choose *Directory Services*.

The screenshot shows a 'User Properties' dialog box with the following details:

- User:** frank.clark@kerio.local
- General Information:**
  - Login Name: frank.clark@kerio.local
  - Full Name: Frank Clark
  - Authentication: Directory Services (selected in a dropdown menu)
  - Buttons: Password...
  - User is an Administrator
- Integration (optional):** (This section is currently empty in the screenshot)

## 5.5 Generic LDAP Integration

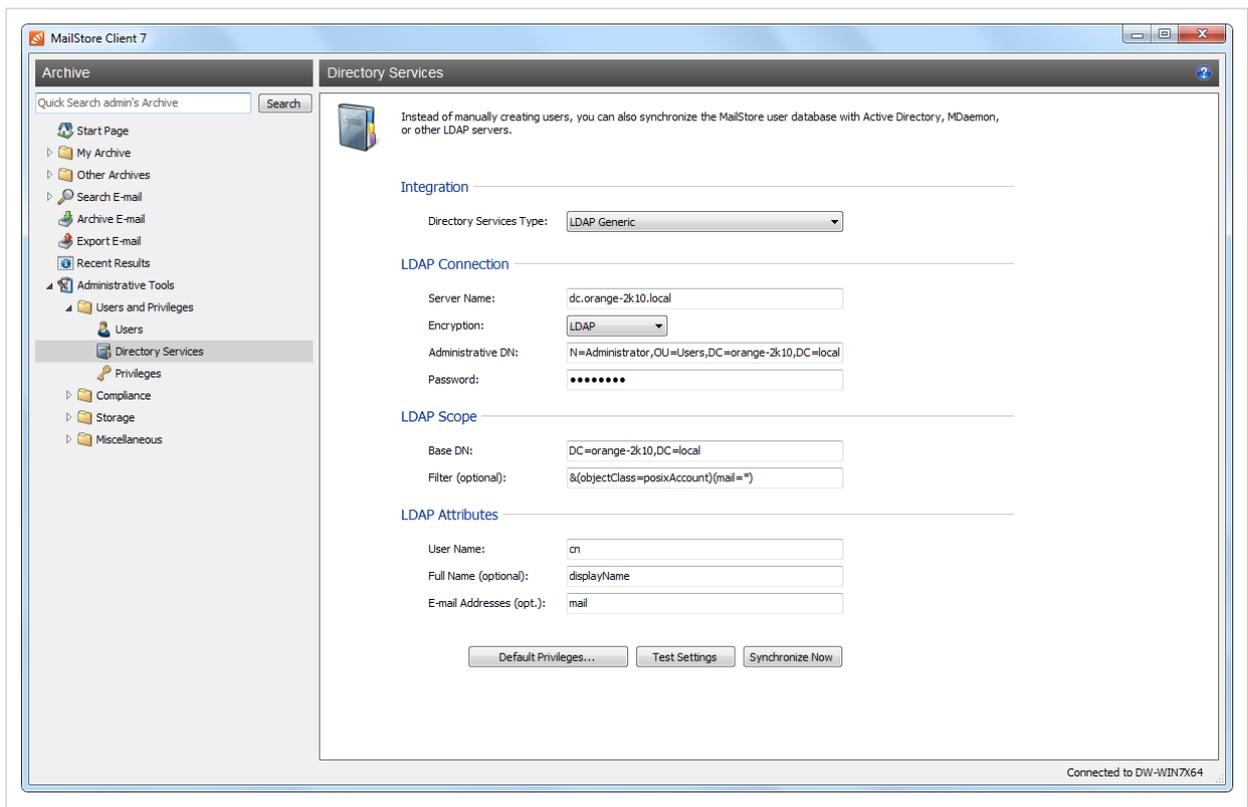
### Synchronizing User Accounts with a Generic LDAP Directory Service

In addition to adding users manually (which is described in chapter User Management), MailStore can synchronize its internal user database with your company's generic LDAP directory service (e.g. OpenLDAP, Novell eDirectory).

During synchronization, user data and email addresses are gathered from the LDAP directory and entered into MailStore. MailStore makes no changes to the LDAP directory. The scope of the synchronization can be limited through filters.

#### Opening the Directory Service Integration

Using MailStore Client, log on as MailStore administrator. Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*. Under *Integration*, change the directory service type to *LDAP Generic*.



## Specifying Connection Settings

Before the synchronization feature can be used, MailStore needs information on how to reach the LDAP directory service.

### LDAP Connection

Specify the connection settings for the LDAP directory service server:

- **Server Name** - Name or IP address of the LDAP directory service server.
- **Encryption** - Type of encryption which is to be used when connecting to the LDAP directory service server.
- **Administrative DN** - Distinguished Name (DN) of an administrative LDAP user.
- **Password** - Password of the LDAP user listed under *Administrative DN*.

### LDAP Scope

Specify the scope of the synchronization:

- **Base-DN** - LDAP base DN, e.g. *dc=myfirm,dc=local*
- **Filter** - RFC 4515 <sup>[1]</sup> compliant LDAP filter, e.g. *&((objectclass=posixAccount)(mail=\*))*

### LDAP-Attributes

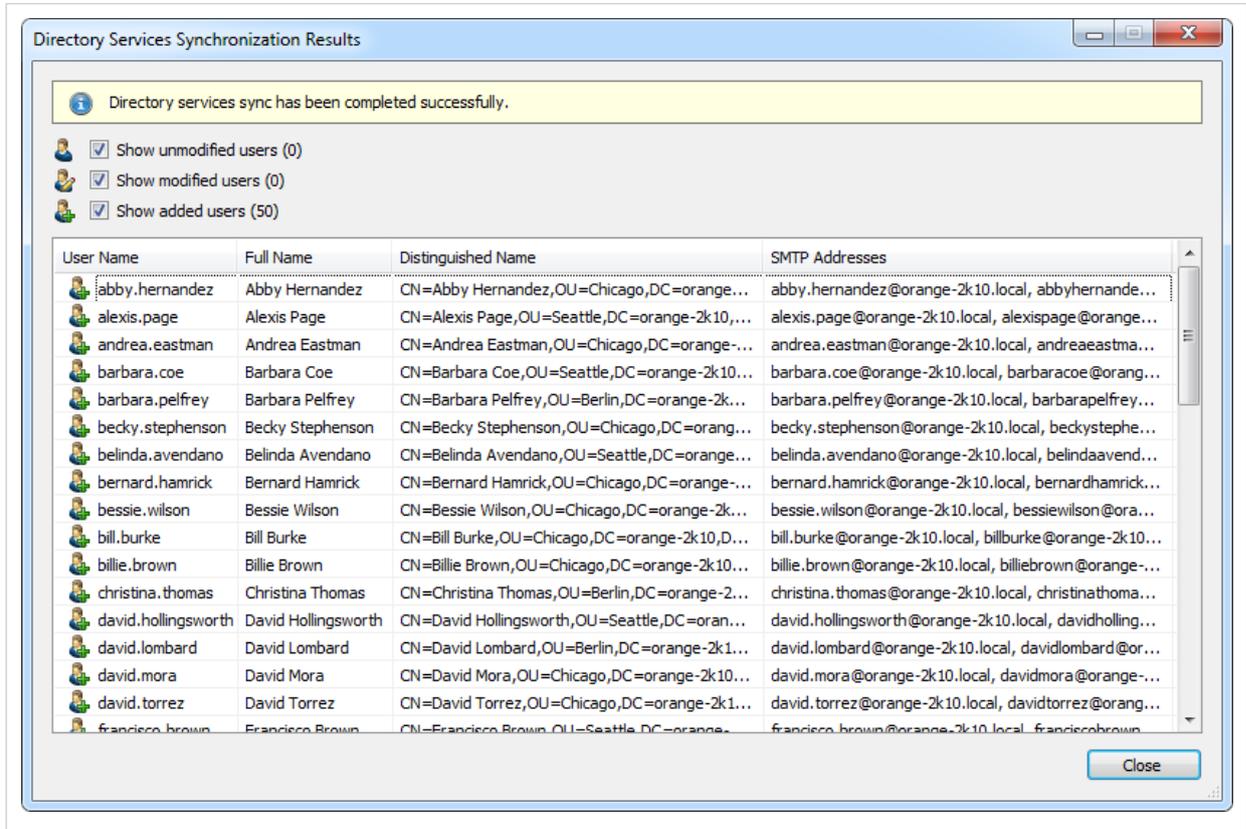
Specify which LDAP user attributes correspond to the MailStore user attributes:

- **User Name** - LDAP attribute for user name, e.g. *cn* or *uid*.
- **Full Name (opt.)** - Optional: LDAP attribute for the display name, e.g. *displayName*.
- **Email addresses** - Optional: LDAP attribute for the SMTP address, e.g. *mail*. Multiple addresses can be specified, separated by comma.

## Executing the Synchronization

Once the connection settings have been specified (as described above), the MailStore user list can be synchronized with the LDAP user list.

Click on *Test Settings* to see a preview of what would happen when clicking *Synchronize Now*. Click on *Synchronize Now* to start.



## Login with LDAP Access Data

By default, each user created in MailStore has his or her own password specifically for MailStore. The MailStore administrator can specify the password during setup of the user account. Users can later change their passwords in MailStore Client's *Administrative Tools*.

If your company has a generic LDAP server (e.g. OpenLDAP, Novell eDirectory), MailStore can also be configured to allow users to log on to MailStore Server via MailStore Client using their LDAP passwords.

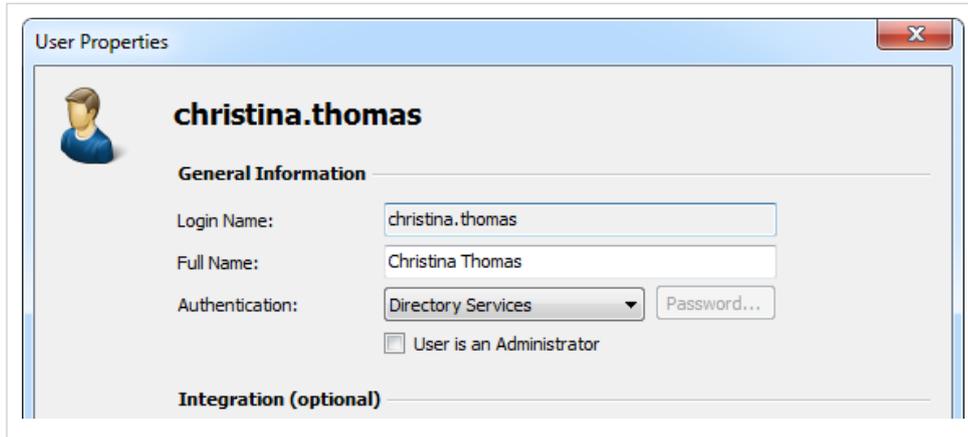
### Procedure for users who were added via synchronization using the generic LDAP directory service

If MailStore users were added using LDAP directory service synchronization as described in the previous section, no actions need to be taken. In this case, MailStore has already performed all necessary settings automatically.

## Procedure for users who were added manually

If MailStore users were added manually and if these users are to be able to log on using their LDAP passwords, please proceed as follows:

- Configure the generic LDAP directory service integration as described in chapter Synchronizing User Accounts with a Generic LDAP Directory Service.
- Make sure that the MailStore users have the same name as the corresponding users in the LDAP directory service.
- Under *Authentication* in the user properties menu, select *Directory Services*.



## References

- [1] <http://tools.ietf.org/html/rfc4515>

## 5.6 MDaemon Integration

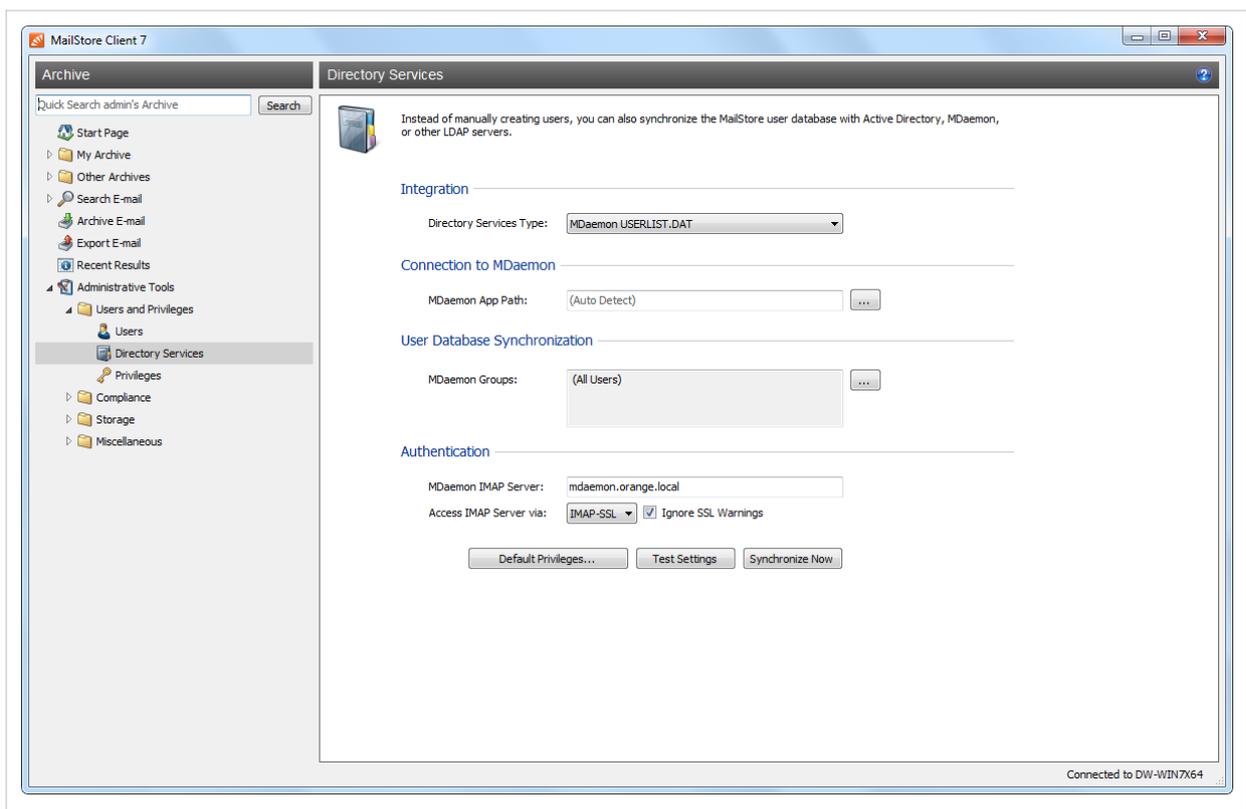
### Synchronizing User Accounts with an MDaemon User Database

In addition to adding users manually (which is described in chapter User Management), MailStore can synchronize its internal user database with an MDaemon user database on the basis of the USERLIST.DAT of your MDaemon server.

During synchronization, user data and email addresses are gathered from the MDaemon user database and entered into MailStore. MailStore makes no changes to the MDaemon user database. Synchronization can be limited to individual or multiple groups.

#### Opening the Directory Service Integration

- Using MailStore Client, log on as MailStore administrator.
- Click on *Administrative Tools > Users and Privileges* and then on *Directory Services*.
- Under *Integration*, change the *Directory Service Type* to *MDaemon USERLIST.DAT*.



## Specifying Connection Settings

Before the synchronization feature can be used, MailStore needs information on how to reach 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 recognized automatically.

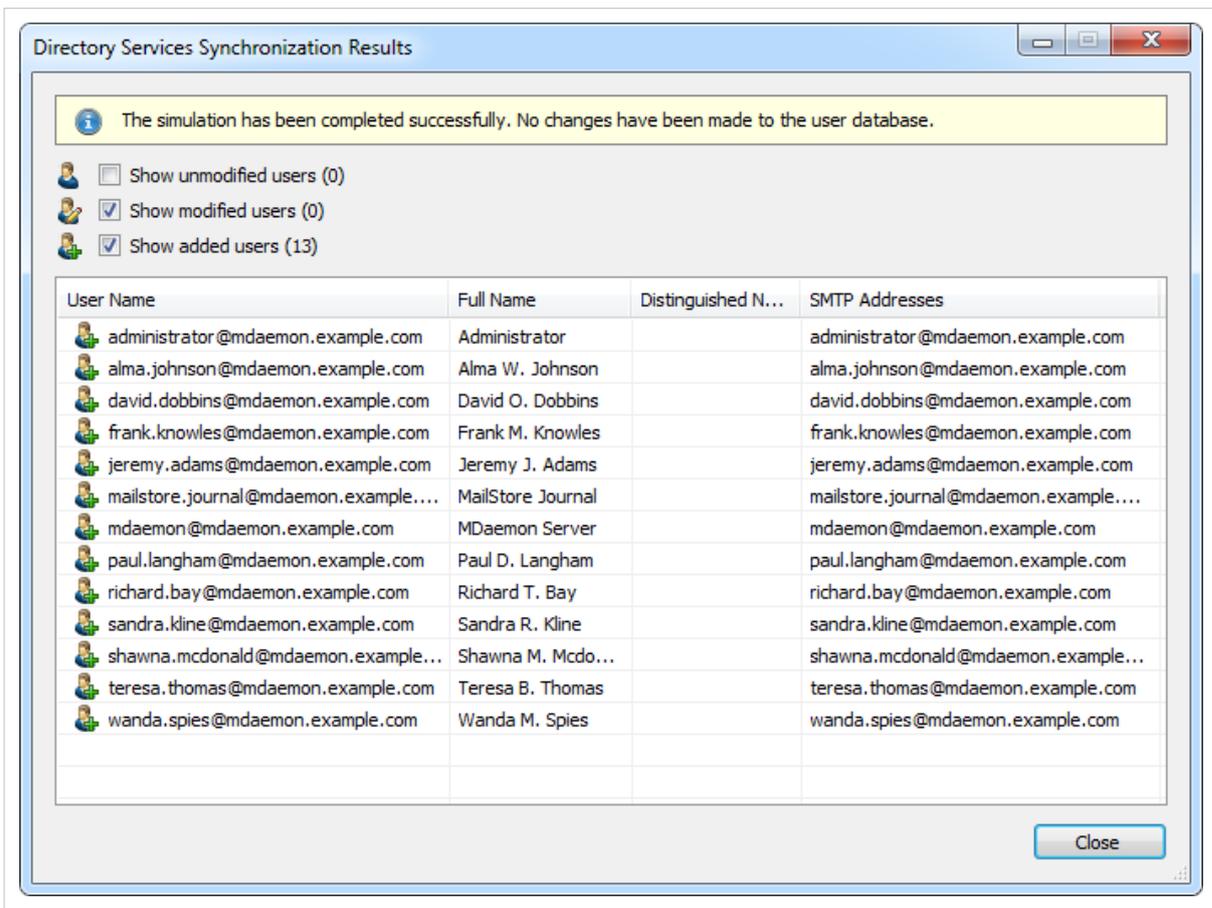
If MailStore Server is not installed on the same machine, share the app directory of the MDAemon server with the MailStore Server computer and enter the UNC path for sharing the app directory into the field *MDaemon App Directory* (e.g. \\MDAEMON\MDAapp).

## Executing the Synchronization

Once the connection settings have been specified (as described above), the MailStore user list can be synchronized with the MDAemon user database.

The synchronization can be limited to one or more MDAemon groups. To do so, click on the button next to the *MDaemon Groups* field and check the checkbox of each group that is to be synchronized. If no group is selected, all users are synchronized.

Click on *Test Settings* to see a preview of what would happen when clicking *Synchronize Now*. Click on *Synchronize Now* to start.



## Login with MDAemon Access Data

By default, each user created in MailStore has his or her own password specifically for MailStore. The MailStore administrator can specify the password during setup of the user account. Users can later change their passwords in MailStore Client's *Administrative Tools*.

Alternatively, MailStore can be configured to allow users to log on to MailStore Server using their MDAemon passwords.

### Specifying the Authentication Settings

Before users can log on to MailStore Server using their MDAemon access data, the following settings need to be specified under *Authentication*:

- **MDaemon IMAP Server** - Enter the IP address or the host name of the MDAemon server against which authentication is to be executed.
- **IMAP Server Access** - Specify if the connection to the IMAP server is to be unencrypted or IMAP-TLS/IMAP-SSL encrypted.

**Only when using IMAP-TLS and IMAP-SSL:** Select the option to *Ignore SSL security warnings* if an unofficial certificate is used on the email server. Otherwise, authentication will fail permanently.

**Important Notice:** If MDAemon is configured to authenticate users against an Active Directory, you must disable ... *honor APOP & CRAM-MD5* under *Setup > Default Domain / Servers > Default Domain & Servers > Servers* in your MDAemon server to make the above configuration work for Active Directory users. Otherwise they will not be able to log in to MailStore.

### Procedure for Users Added via Synchronization with the MDAemon User Database

If MailStore users were added using MDAemon Directory Service Synchronization as described in the previous section, no further actions are required. In this case, MailStore has already adjusted all necessary settings.

### Procedure for Users Added Manually

If MailStore users were added manually and if these users are to be able to log on using their MDAemon passwords, please proceed as follows:

- Configure the MDAemon integration as described in chapter Synchronizing User Accounts with an MDAemon User Database.
- Make sure that the MailStore users have the same names as the corresponding users in the MDAemon user database.
- In the user properties menu under *Authentication*, select *Directory Services*.

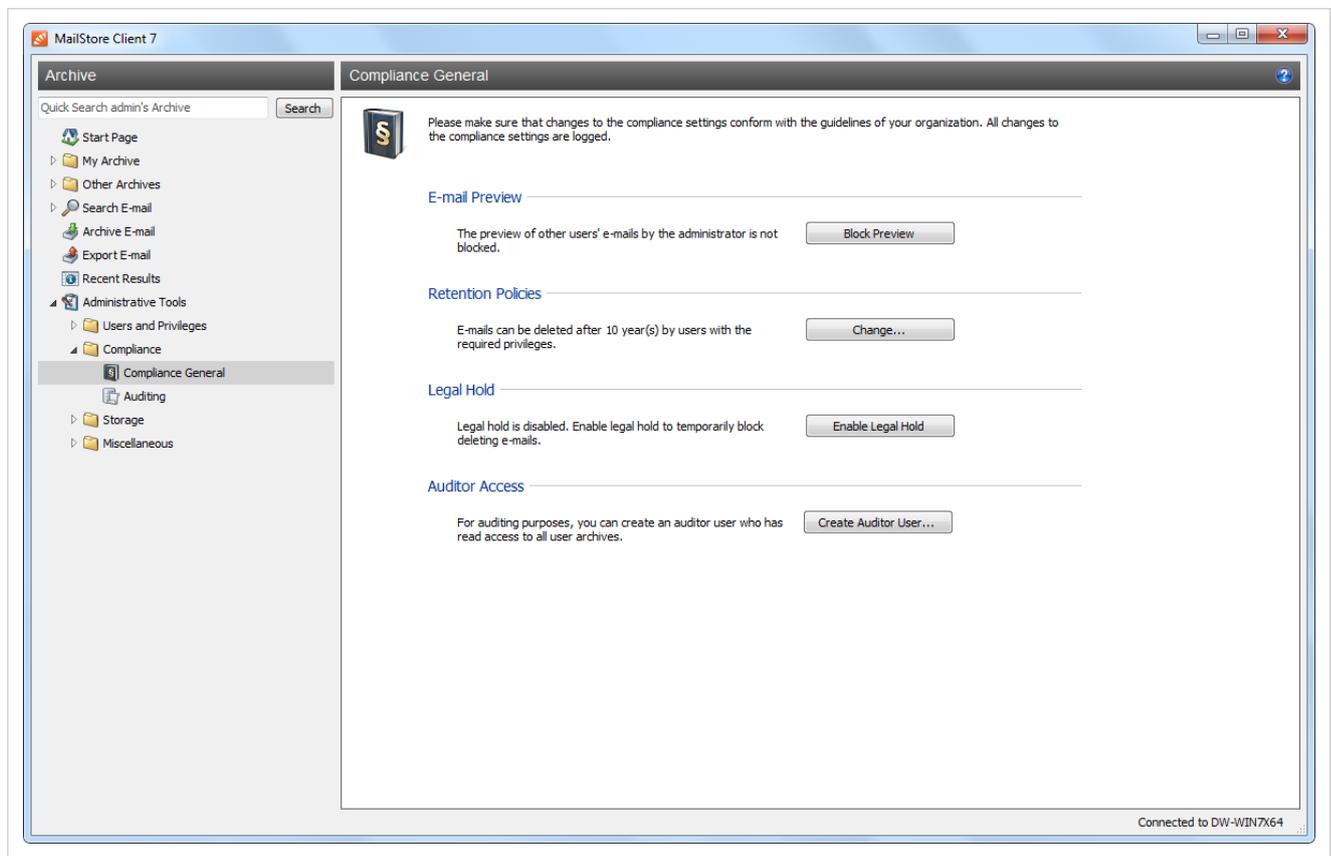
The screenshot shows a 'User Properties' dialog box with the following details:

- User:** frank.knowles@mdaemon.example.com
- General Information:**
  - Login Name: frank.knowles@mdaemon.example.com
  - Full Name: Frank M. Knowles
  - Authentication: Directory Services (selected in a dropdown menu)
  - There is a 'Password...' button next to the authentication dropdown.
  - User is an Administrator
- Integration (optional):** (This section is currently empty in the screenshot)

## 5.7 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.



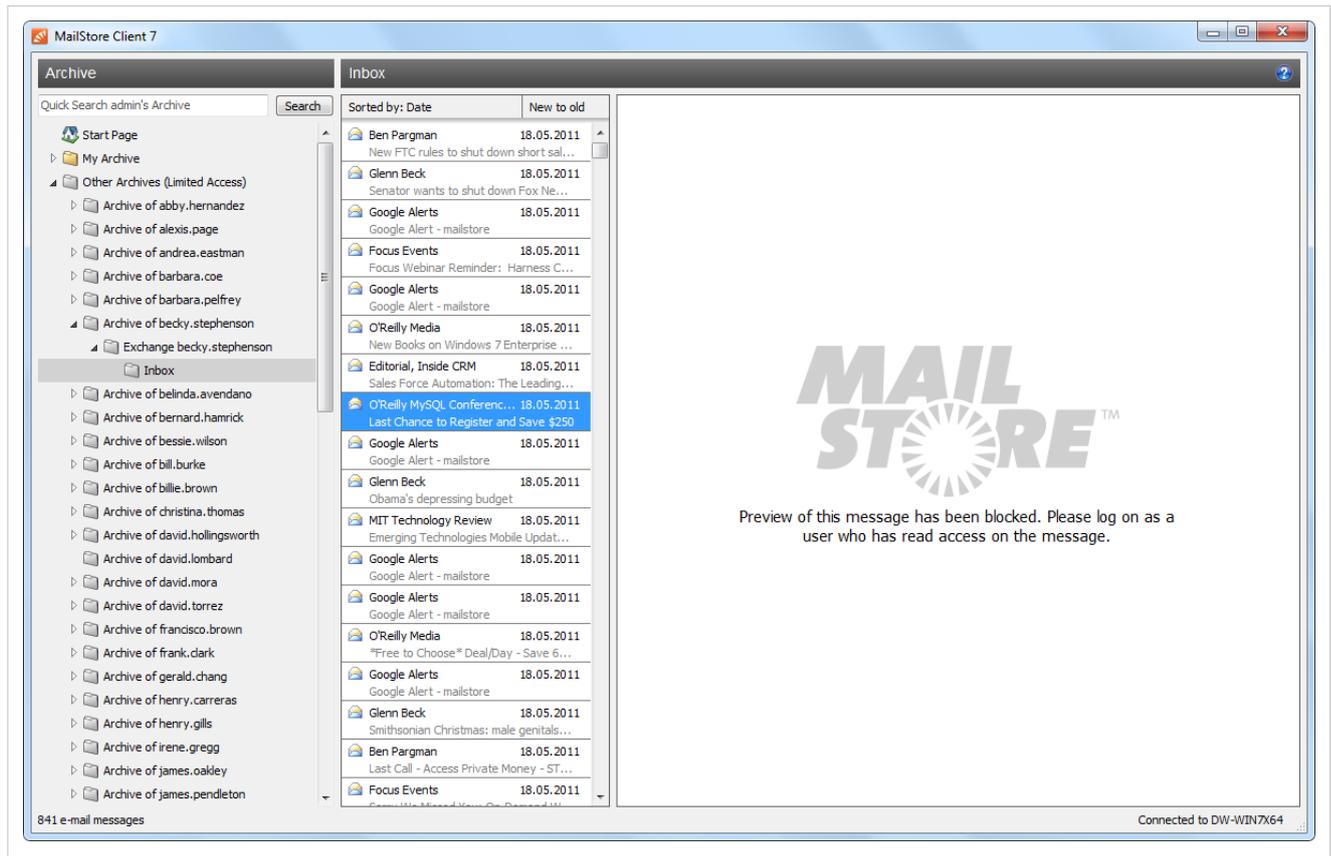
### Email Preview

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.

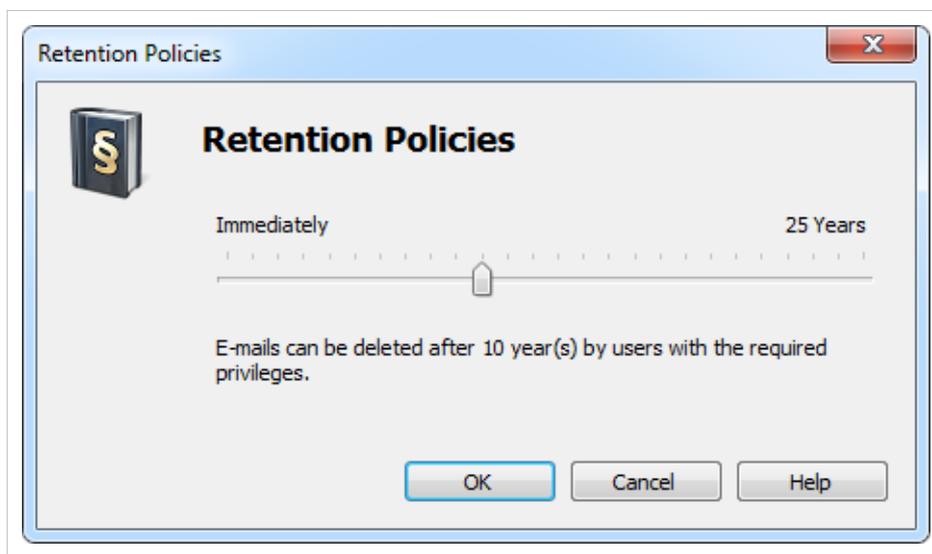


## Retention Policies

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*.

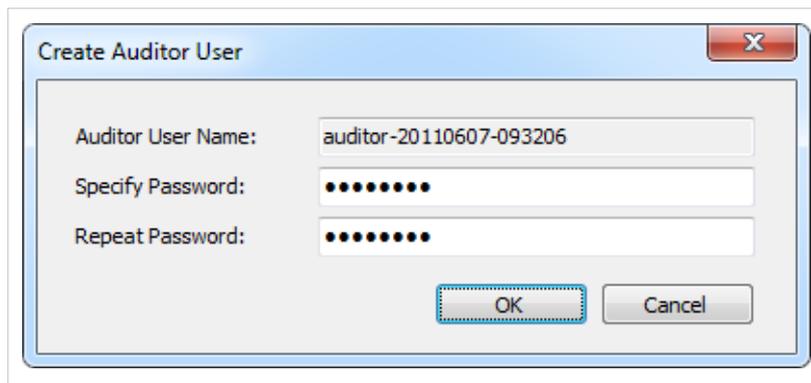
## Auditor Access

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



The screenshot shows a Windows-style dialog box titled "Create Auditor User". It has a standard title bar with a close button (X). The dialog contains three text input fields. The first field is labeled "Auditor User Name:" and contains the text "auditor-20110607-093206". The second field is labeled "Specify Password:" and contains a series of dots representing a masked password. The third field is labeled "Repeat Password:" and also contains a series of dots. At the bottom of the dialog, there are two buttons: "OK" and "Cancel". The "OK" button is highlighted with a dashed border.

- 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.

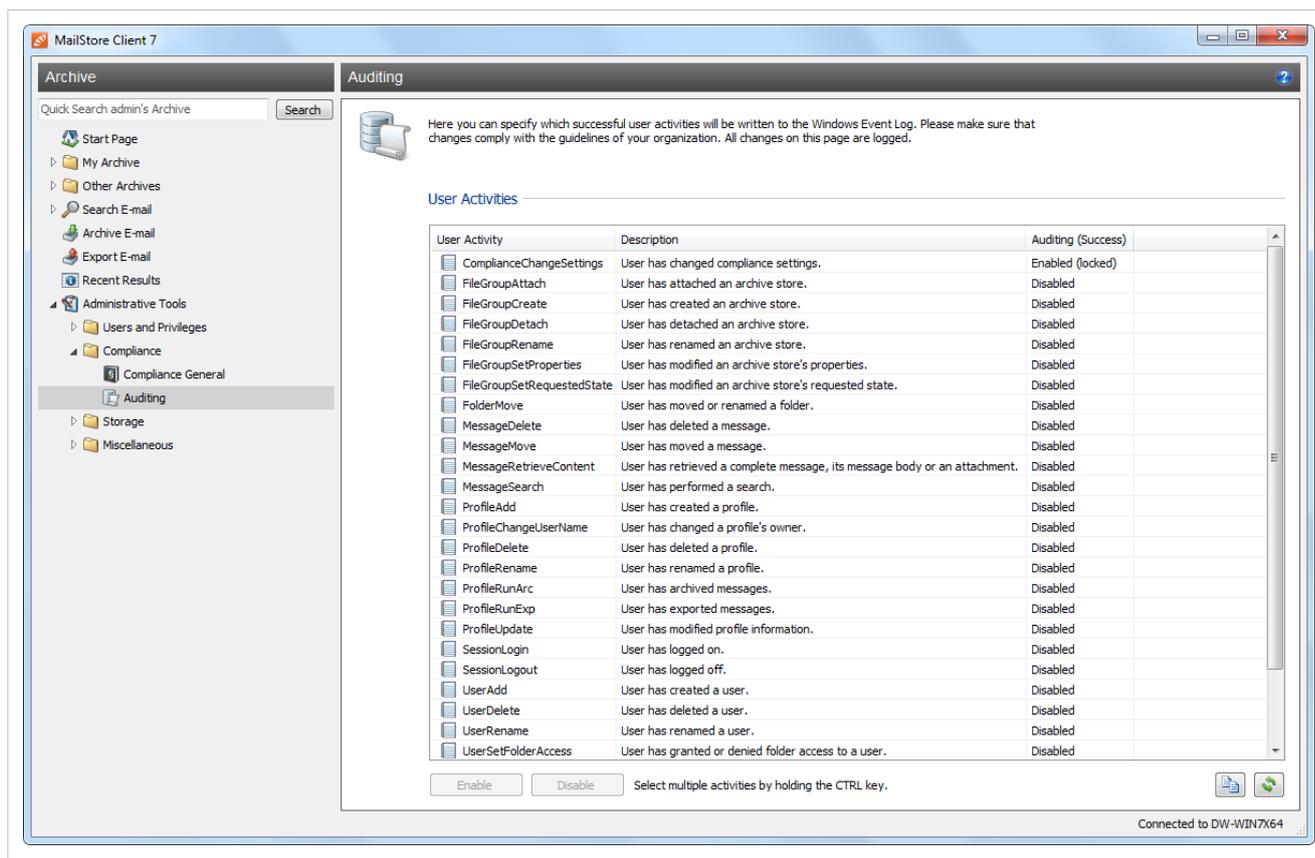
## 5.8 Auditing

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.

### 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.

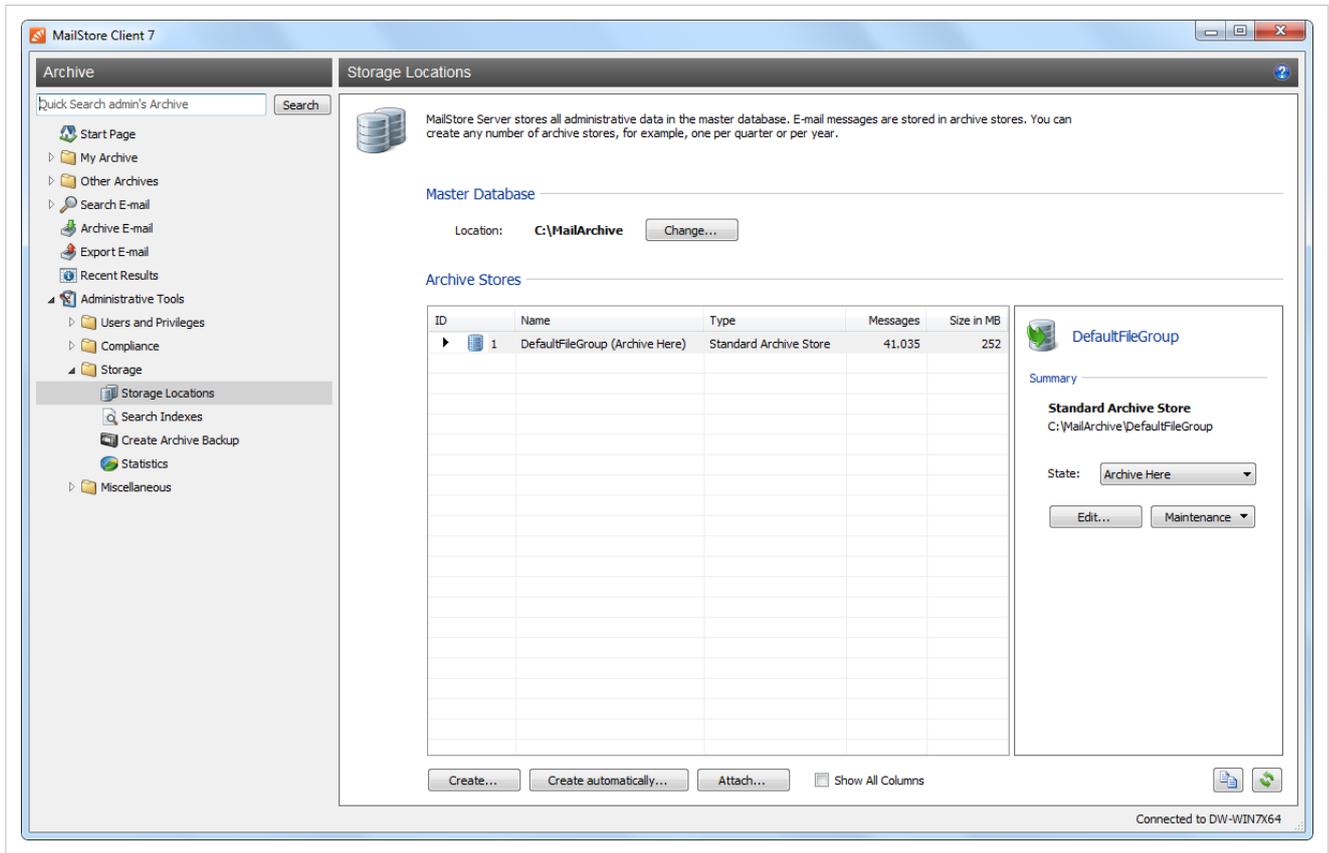
Please note that some events may generate a large number of entries in the Windows event log. Only enable such events if you are sure that you need the information.

## 5.9 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 500,000 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 *Choosing the Right Storage Strategy*.



- 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 through 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.

## 5.10 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.

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.

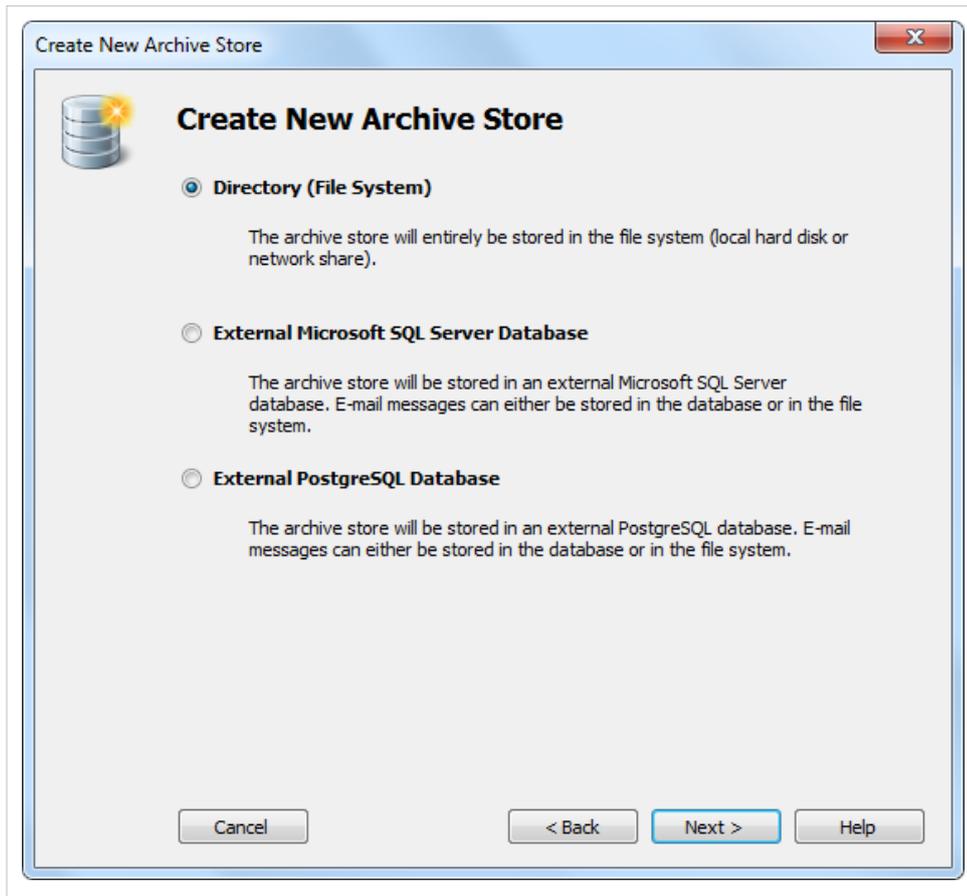
Because of its special data structure and for performant access, the full text index must always be stored in the file system. Using MailStore's local file system is recommended. Additional information about full text indexes is available in chapter Search Indexes.

## 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*.

The screenshot shows a 'Create New Archive Store' dialog box. It has a title bar with 'Create New Archive Store' and a close button. The main area has a database icon and the title 'Create New Archive Store'. Below that is a message: 'Please enter the directories in which the archive store's components are stored. You can enter local directories and network shares.' There are three sections, each with a 'Directory:' label and a text box containing a path, followed by a browse button ('...'). The sections are: 'Folder Information and Metadata' (C:\MailArchive\2012-05), 'E-mail Headers and Contents' (C:\MailArchive\2012-05\Content), and 'Full-Text Index' (C:\MailArchive\2012-05\Index). At the bottom are buttons for 'Cancel', '< Back', 'Finish', and '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: sql01.orange-2k10.local

User Name: mailstore

Password: .....

Database: MS\_2012-05

**E-mail Headers and Content**

Location: Microsoft SQL Server Database

Directory:  ...

**Full-Text Index**

Directory: C:\MailArchive\2012-05\Index ...

**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*:

**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. *PostgreSQL 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.

## 5.11 Search Indexes

### Administration of the Full-Text Search

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.

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).

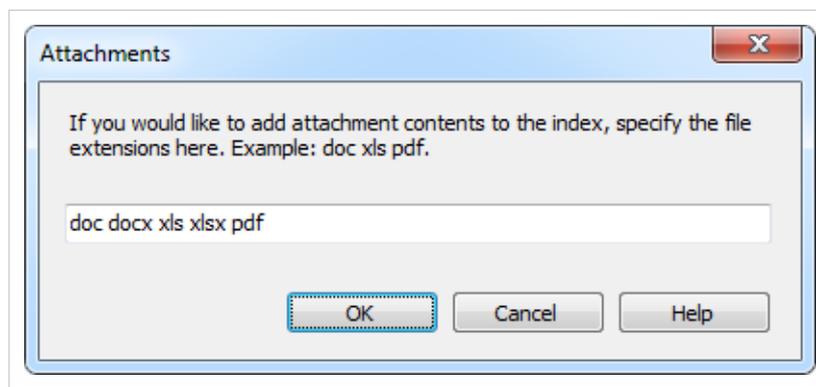
In these cases it may occur that archive, index and settings are no longer synchronous and that individual indexes must be rebuilt. Generally, a corresponding error message will be displayed.

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.
- 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.



MailStore Server can index all file types for which a so-called IFilter driver is installed. When archiving, the drivers must be installed on the MailStore Client machine, when rebuilding indexes they must be installed on MailStore Server. Typically, IFilters 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 offers a package that, additionally to all legacy as well as recent Microsoft Office Formats, supports the Open Document Format (OpenOffice/LibreOffice).

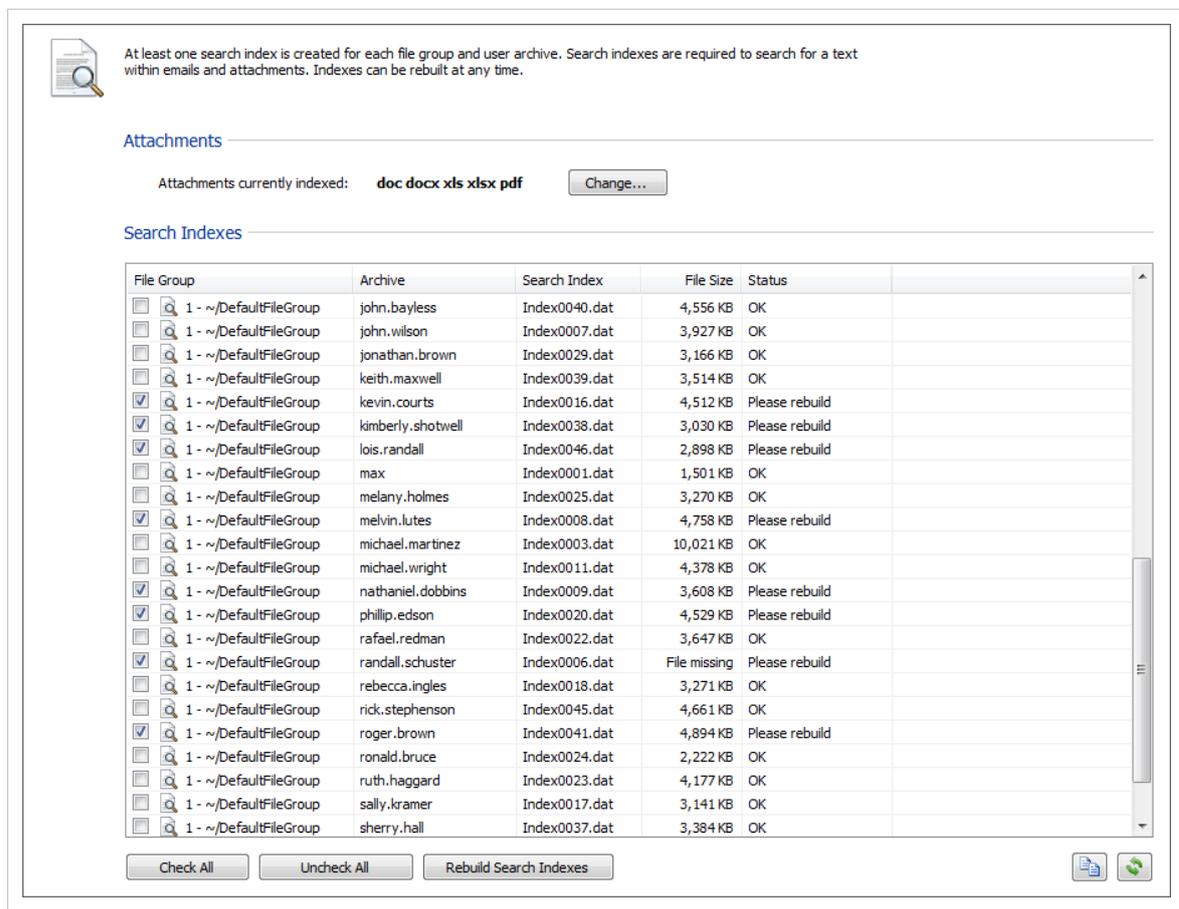
For reasons of stability and performance, MailStore Server processes the following file types directly, regardless of the IFilter drivers that are installed:

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

## Rebuilding Search Indexes

If new indexing settings are to be applied to all existing emails or a message appears indicating that search indexes need to be rebuilt, 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*.



## References

- [1] <http://www.microsoft.com/download/details.aspx?id=17062>

# 5.12 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 file groups

Backup all file groups that are not write-protected

Backup the following file groups:

ID	Location	Size in MB
<input checked="" type="checkbox"/> 1	C:\MailArchive\DefaultFileGroup	449

- Enter the *Target Directory* and 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, click on *Schedule...* and create the appropriate task.

**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

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 this case please make sure that the MailStore Server service is stopped during the backup using external backup software. Please refer to your backup software's documentation to learn how to stop services before performing backups and how to restart services upon their completion.

### 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.

#### **Folder information and meta data as well as email headers and contents were stored in the same location:**

If all data of an advanced archive store is 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.

#### **Folder information and meta data as well as email headers and contents were stored in different locations:**

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. Information about archiving individual files (in EML or MSG format) is available in the chapter Archiving Emails from External Systems.

### 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.

### Restoring 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*.



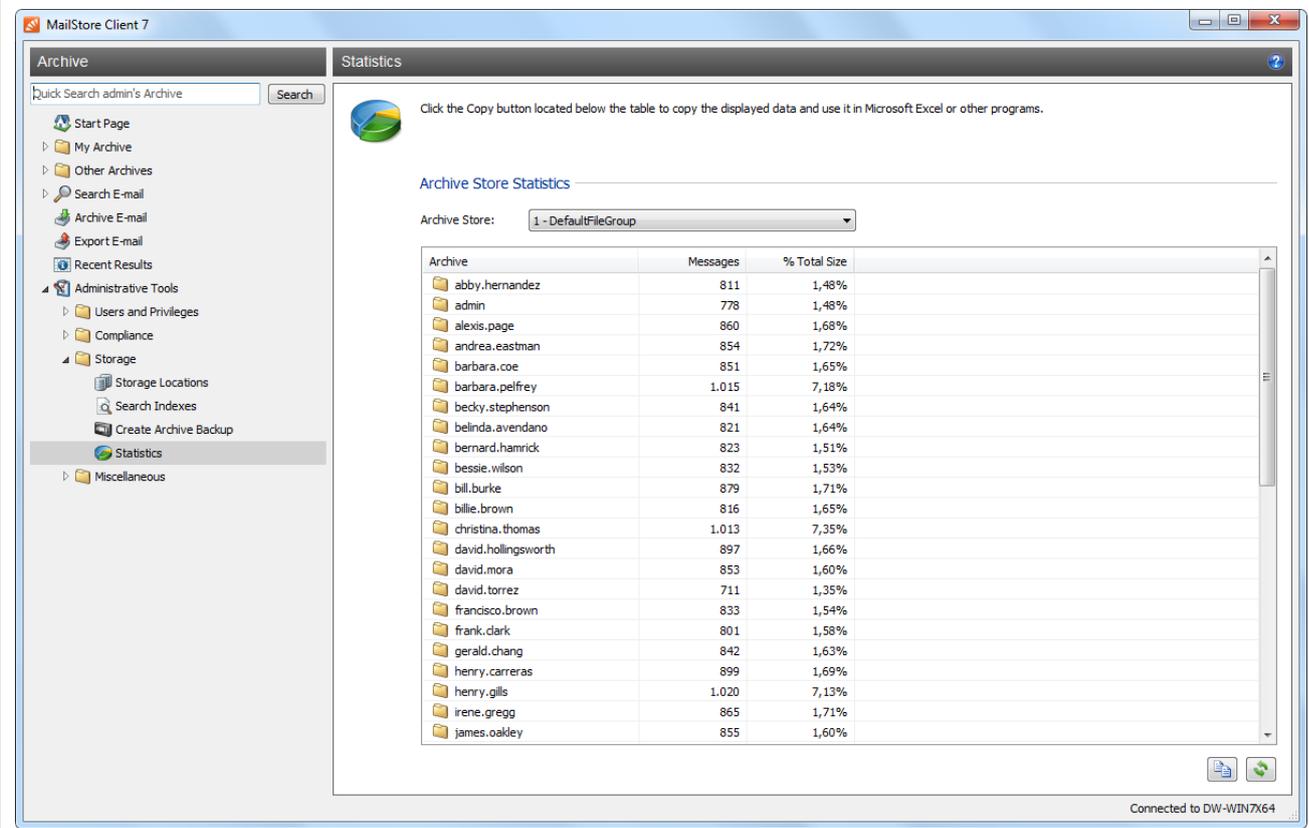
- Click on *OK* to confirm.
- At the bottom of the window, click on *Restart Service* to save the new settings.
- When creating the backup, the folder names of the archive store may have changed. Please use the Storage Locations Management to adjust the paths to the archive stores or rename the folders in the file system accordingly.
- The backup is completely restored to the application and the archive can be used as usual.

Additional archive stores may exist which will not have been restored to the archive after following these steps. In this case, please proceed as follows:

- Start MailStore Client on the MailStore Server PC and log on as MailStore administrator.
- Under *Administrative Tools > Storage* click on *Storage Locations*.
- In the menu bar at the bottom of the screen, click on *Attach...* and select the appropriate archive store.
- Repeat those steps until all archive stores are attached and available again.

## 5.13 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*.



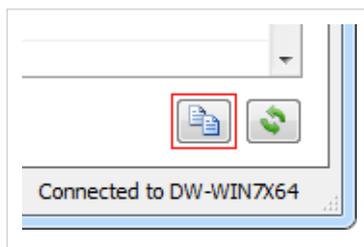
The screenshot shows the MailStore Client 7 interface. The left sidebar is expanded to 'Administrative Tools' > 'Storage' > 'Statistics'. The main window displays the 'Archive Store Statistics' for the selected '1 - DefaultFileGroup'. A table lists various user archives with their message counts and percentage of total size.

Archive	Messages	% Total Size
abby.hernandez	811	1,48%
admin	778	1,48%
alexis.page	860	1,68%
andrea.eastman	854	1,72%
barbara.coe	851	1,65%
barbara.pelfrey	1.015	7,18%
becky.stephenson	841	1,64%
belinda.avendano	821	1,64%
bernard.hamrick	823	1,51%
bessie.wilson	832	1,53%
bill.burke	879	1,71%
bille.brown	816	1,65%
christina.thomas	1.013	7,35%
david.hollingsworth	897	1,66%
david.mora	853	1,60%
david.torrez	711	1,35%
francisco.brown	833	1,54%
frank.dark	801	1,58%
gerald.chang	842	1,63%
henry.carreras	899	1,69%
henry.gills	1.020	7,13%
irene.gregg	865	1,71%
james.oakley	855	1,60%

At the bottom right of the statistics table, there are icons for copying data to the clipboard and refreshing the data.

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



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.

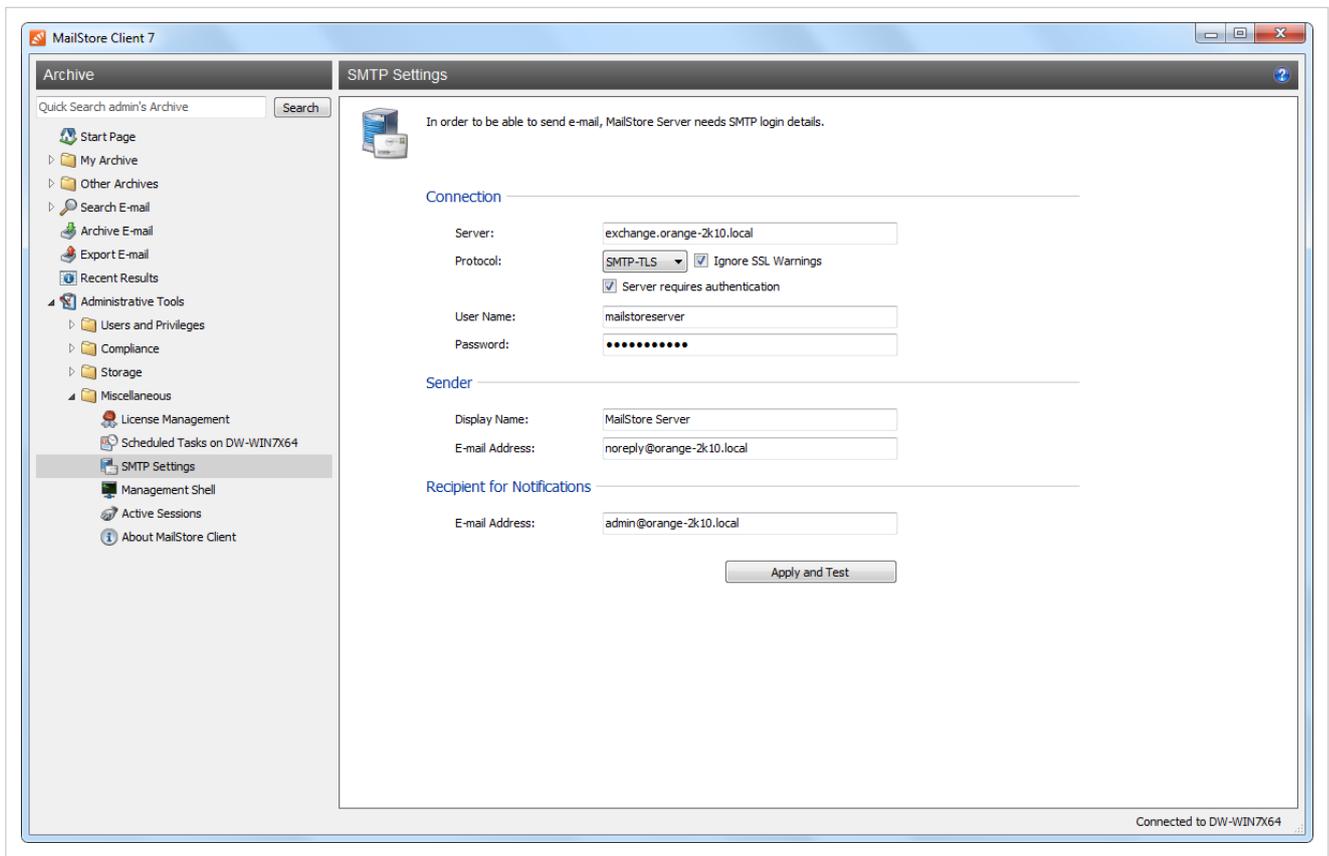
## 5.14 SMTP Settings

To be able to send emails, MailStore Server requires SMTP access data. Email is used to send important administrative notifications 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.

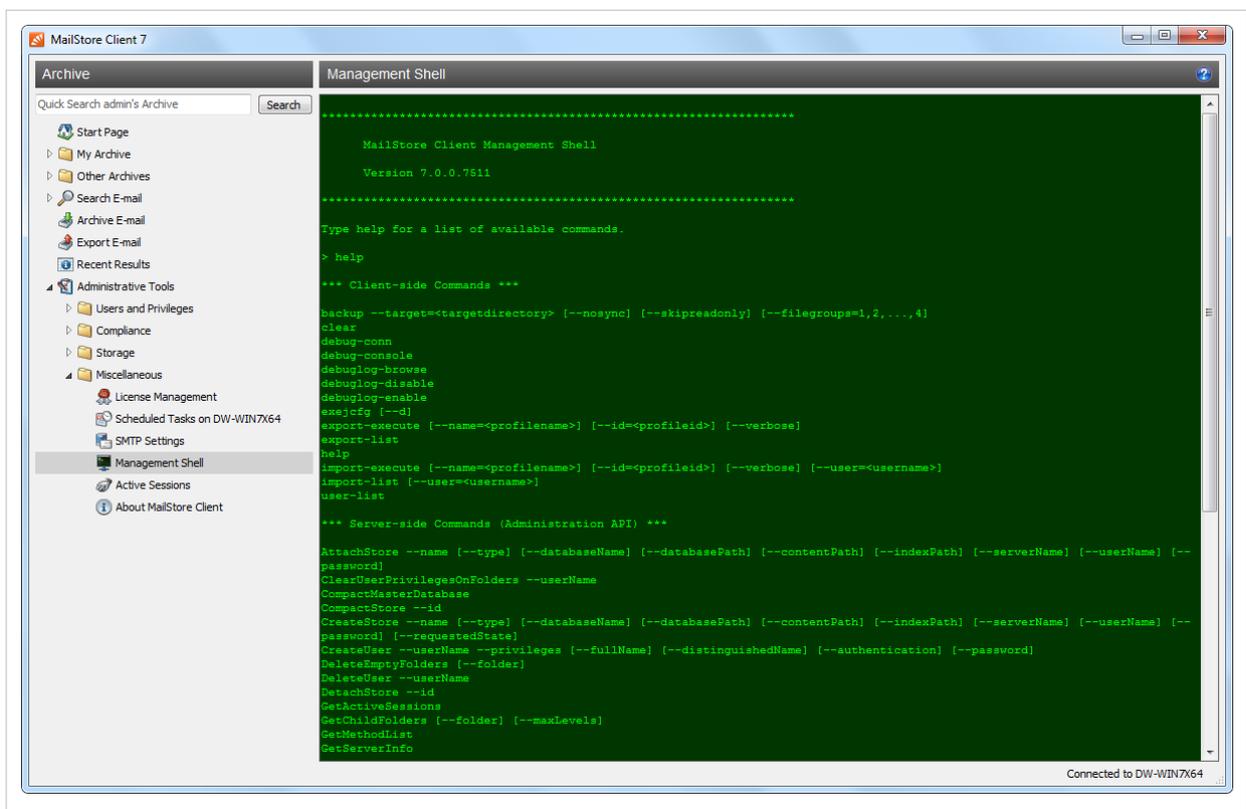
## 5.15 MailStore Server Management Shell

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.

### Option 1: 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*.



## Option 2: Starting the Management Shell with MailStoreCmd.exe

The command line client can be started in interactive mode by executing `MailStoreCmd.exe` without any parameters. After successful login, MailStore is ready to receive commands. Enter `exit` to log off and close the management shell.

```
Administrator: C:\Windows\system32\cmd.exe - MailStoreCmd.exe
C:\Program Files (x86)\deepinvent\MailStore Server>MailStoreCmd.exe
*****
MailStore Client Management Shell
Version 7.0.0.7511
*****
Server Name [localhost]:
User Name [Windows Auth]: admin
Password: *****
Successfully connected to MailStore.
> _
```

## 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.

To use the non-interactive mode, pass the parameters as follows:

```
MailStoreCmd.exe --h="localhost" --pkv3="23:18:06:3f:24:7d:f3:83" --u="admin" --p="admin"
-c <Actual Command and Parameter>
```

The following is a description of the parameters:

```
--h="localhost"
```

The machine name of the MailStore server to which `MailStoreCmd.exe` is to connect.

```
--pkv3="..."
```

The (optional) Public Key Fingerprint, which guarantees the identity of MailStore Server.

```
--u="admin"
```

User name.

```
--p="admin"
```

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 MailStore Server Management API Commands.

**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:

<code>--target</code>	directory where to create the backup
<code>--nosync</code>	copy all files; not only new or modified ones
<code>--skipreadonly</code>	skip file groups marked as read only
<code>--filegroups=1,2,...,4</code>	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:

<code>--name</code>   <code>--id</code>	name or ID of the export profile to execute
<code>--verbose</code>	activates a detailed status display on the console
<code>--[property]</code>	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> error are handled as archiving errors.	false

```
user-list
```

Display list of users.

6

Chapter

# **MailStore Server Management API**

## 6.1 Using the Management API

In this chapter you can find a description of the MailStore Server Management API. With the Management API administrative tasks, such as managing users or storage locations, can be telecontrolled from a central location. Communication with the Management API is done using web requests through HTTPS.

For security reasons, the MailStore Server Management API is deactivated by default and has to be activated using the MailStore Server Service Configuration.

### MailStore API Test Application

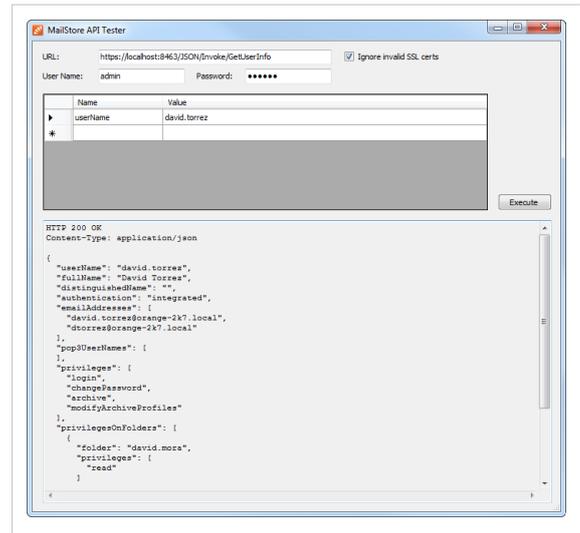
To help you better understand the samples on this page, we provide a small tool that is able to send commands to the API HTTPS server and display its responses. Simply download the ZIP file provided below and run the included `MailStoreApiTester.exe`.

The download comes with the entire C# source code of the test application.

Download [MailStoreApiTester.zip](#) <sup>[1]</sup>

### General Information About Using the Management API

The Management API accepts commands under the following URLs:



`/JSON/Invoke/MethodName`

and

`/XML/Invoke/MethodName`

The first part of the path indicates the return format expected by the client (JSON or XML). JSON is the native return format of the MailStore Server Management API and is therefore recommended. If XML is requested, an internal automatic conversion to XML is made.

Commands must be sent to the Management API using the HTTP POST method. The parameters should be transferred in the HTTP body and encoding must always be done using UTF-8. The return value is always UTF-8 encoded respectively.

**Please note:** A list of all available Management API commands is available in chapter MailStore Server Management API Commands.

If the request cannot be processed, the server responds with HTTP error code 500, and the error message is returned as text/plain (not JSON or XML). An exception are asynchronous commands which use a special URL for status queries (as described below).

## Example

The following is an example for retrieving the information of the user *johndoe*.

### HTTP Request

```
POST /JSON/Invoke/GetUserInfo HTTP/1.1
...
userName=johndoe
```

### HTTP Response

```
HTTP/1.1 200 OK
Content-Type: application/json
...
{
  "userName": "johndoe",
  "fullName": "John Doe",
  "authentication": "integrated",
  "emailAddresses": [
    "johndoe@example.com",
    "doe@example.com"
  ],
  "privileges": "admin"
}
```

## Asynchronously Executed Commands

Management API commands, whose execution typically take more time, are executed asynchronously. The server does not return the actual return value but a URL under which the current status (e.g. the return value for fully executed requests) can be requested.

One example for an asynchronously executed API method is *RebuildStoreIndex*.

### Sample Return Value

```
{
  "statusToken": "C467B22E-7057-43BA-B79B-C6140ED514BD",
  "statusUrl": "/JSON/Status/C467B22E-7057-43BA-B79B-C6140ED514BD"
}
```

If a JSON object is returned which contains a *statusUrl* value, this URL can be used to ask for the current status.

### Structure of the Status Object

```
{
  "status": "running | succeeded | failed",
  "result": { JSON Object },
  "progressPercentage": 0..100,
  "messages": [
    {
      "type": "line | information | warning | error | unknown",
      "text": "..."
    }
  ]
}
```

If the returned status is *succeeded* or *failed*, each additional status query under the same URL will fail, because once the status is delivered, all internally stored status information is deleted.

## References

- [1] <http://www.mailstore.com/support/MailStoreApiTester.zip>

## 6.2 MailStore Server Management API Commands

### AttachStore

Attaches an archive store that has previously been detached.

```
AttachStore --name [--type] [--databaseName] [--databasePath] [--contentPath]
            [--indexPath] [--serverName] [--userName] [--password] [--requestedState]
```

#### Arguments

name

The name of the archive store to be attached. This does not necessarily have to match the name that the archive store originally had before detaching.

type (optional)

databaseName (optional)

databasePath (optional)

contentPath (optional)

indexPath (optional)

serverName (optional)

userName (optional)

password (optional)

For more information about these arguments, please refer to the documentation of the *CreateStore* method.

requestedState (optional)

The requested state to be set. The default value when attaching stores is *normal*. For a list of possible values, please refer to the documentation of the *CreateStore* method.

### ClearUserPrivilegesOnFolders

Removes all privileges that a user has on archive folders.

```
ClearUserPrivilegesOnFolders --userName
```

#### Arguments

userName

The user name of the user whose privileges on archive folders should be removed.

### CompactMasterDatabase

Compacts the master database.

```
CompactMasterDatabase
```

### CompactStore

Compacts an archive store.

```
CompactStore --id
```

## Arguments

id

The identifier of the archive store to be compacted.

## CreateStore

Creates a new archive store and attaches it afterwards.

```
CreateStore --name [--type] [--databaseName] [--databasePath] [--contentPath]
             [--indexPath] [--serverName] [--userName] [--password] [--requestedState]
```

## Arguments

name

A meaningful name for the archive store. Examples: "Messages 2012" or "2012-01".

type (optional)

The archive store type. Possible values:

FileSystemStandard

Standard archive store. Recommended for most environments. This is the default value.

FileSystemAdvanced

Advanced file system-based archive store. The archive store will entirely be stored in the file system (local hard disk or network share).

SQLServer

The archive store will be stored in an external Microsoft SQL Server database. E-mail messages can either be stored in the database or in the file system.

PostgreSQL

The archive store will be stored in an external PostgreSQL database. E-mail messages can either be stored in the database or in the file system.

databasePath (optional)

Only valid for types *FileSystemStandard* and *FileSystemAdvanced*. The directory in which both folder information and e-mail metadata are stored.

serverName (optional)

Only valid for types *PostgreSQL* and *SQLServer*. The server name of the database server.

userName (optional)

Only valid for types *PostgreSQL* and *SQLServer*. The user name which will be used to connect to the database server.

password (optional)

Only valid for types *PostgreSQL* and *SQLServer*. The password which will be used to connect to the database server.

databaseName (optional)

Only valid for types *PostgreSQL* and *SQLServer*. The database on the database server in which both folder information and e-mail metadata are stored.

contentPath (optional)

The directory in which e-mail headers and contents are stored. If the archive store type is *PostgreSQL* or *SQLServer*, you don't need to specify this argument - in this case, e-mail headers and contents are stored in the database.

indexPath (optional)

The directory in which the full-text index is stored.

requestedState (optional)

The requested state. The default value when creating stores is *current*. List of possible values:

disabled

The archive store should be disabled. This causes the archive store to be closed if it is currently open.

writeProtected

The archive store should be write-protected.

normal

The archive store should be opened normally. Write access is possible, but new e-mail messages are not archived into this store.

current

New e-mail messages should be archived into this store.

## CreateUser

Adds a new user to MailStore Server.

```
CreateUser --userName --privileges [--fullName] [--distinguishedName]
           [--authentication] [--password]
```

### Arguments

userName

The name of the user to be created.

privileges

A comma-separated list of global privileges that the user should be granted. Possible values are:

none

The user is granted no global privileges. If specified, this value has to be the only value in the list.

admin

The user is granted administrator privileges. If specified, this value has to be the only value in the list.

login

The user can log on to MailStore Server.

changePassword

The user can change his own MailStore Server password. This only makes sense if the authentication is set to *integrated*.

archive

The user can run archiving profiles.

modifyArchiveProfiles

The user can create, modify and delete archiving profiles.

export

The user can run export profiles.

modifyExportProfiles

The user can create, modify and delete export profiles.

delete

The user can delete messages. Please note that a non-admin user can only delete messages in folders where he has been granted delete access. In addition, compliance settings may be in effect, keeping administrators and users from deleting messages even when they have been granted the privilege to do so.

fullName (*optional*)

The full name (display name) of the user, e.g. "John Doe".

distinguishedName (*optional*)

The LDAP distinguished name of the user. This is typically automatically specified when synchronizing with Active Directory or other LDAP servers.

authentication (*optional*)

The authentication mode. Possible values are:

integrated

Specifies MailStore-integrated authentication. This is the default value.

directoryServices

Specified Directory Services authentication. If this value is specified, the *password* is stored, but is ignored when the user logs on to MailStore Server.

password (*optional*)

The password that the user can use to log on to MailStore Server. This is only meaningful when *authentication* is set to *integrated*.

## DeleteEmptyFolders

Deletes archive folders which don't contain any messages.

```
DeleteEmptyFolders [--folder]
```

### Arguments

folder (*optional*)

If specified, only this folder and its subfolders are deleted if empty.

## DeleteUser

Deletes a user from MailStore Server. Neither the user's archive nor the user's archived e-mail is deleted when deleting users.

```
DeleteUser --userName
```

### Arguments

userName

The user name of the user to be deleted.

## DetachStore

Detaches an archive store from MailStore Server.

```
DetachStore --id
```

### Arguments

id

This identifier of the archive store to be detached.

## GetActiveSessions

Retrieves a list of active logon sessions.

```
GetActiveSessions
```

## GetChildFolders

Retrieves a list of child folders of a specific folder.

```
GetChildFolders [--folder] [--maxLevels]
```

### Arguments

folder (*optional*)

The folder of which the child folders are to be retrieved. If you don't specify this parameter, the method returns the child folders of the root level (user archives).

maxLevels (*optional*)

If *maxLevels* is not specified, this method returns the child folders recursively, which means that you get the whole folder hierarchy starting at the folder specified. Set *maxLevels* to a value equal to or greater than 1 to limit the levels returned.

## GetMethodList

Retrieves a list of API methods.

```
GetMethodList
```

## GetServerInfo

Retrieves a list of server information.

```
GetServerInfo
```

## GetStoreIndexList

Retrieves a list of full-text indexes that are stored within an archive store.

```
GetStoreIndexList --id
```

### Arguments

id

The identifier of the archive store whose full-text indexes are to be returned.

## GetStoreList

Retrieves a list of archive stores currently attached to MailStore Server.

```
GetStoreList
```

## GetUserInfo

Retrieves a detailed user information object about a specific user.

```
GetUserInfo --userName
```

### Arguments

userName

The user name of the user whose information object should be returned.

## GetUserList

Retrieves a list of all users in MailStore Server.

```
GetUserList
```

## MaintainFileSystemDatabases

Runs maintenance on all file system-based databases (Firebird Embedded .fdb files). Each database file will be rebuilt by this operation by creating a backup file and restoring from that backup file.

```
MaintainFileSystemDatabases
```

## MoveFolder

Moves or renames an archive folder.

```
MoveFolder --fromFolder --toFolder
```

### Arguments

fromFolder

The folder which should be moved or renamed, e.g. "johndoe/Outlook/Inbox".

toFolder

The target folder name, e.g. "johndoe/Outlook/Inbox-new".

### Example 1: Rename a user archive

The following example renames the user archive "johndoe" to "john.doe".

```
MoveFolder --fromFolder="johndoe" --toFolder="john.doe"
```

### Example 2: Rename a folder within the user archive

The following example renames the folder "Outlook" within the user archive "johndoe" to "Microsoft Outlook".

```
MoveFolder --fromFolder="johndoe/Outlook" --toFolder="johndoe/Microsoft Outlook"
```

### Example 3: Move a folder within a user archive

The following example moves the folder "Project A" into the folder "Projects".

```
MoveFolder --fromFolder="johndoe/Outlook/Project A" --toFolder="johndoe/Outlook/Projects/Project A"
```

## RebuildStoreIndex

Rebuilds a full-text index contained within an archive store.

```
RebuildStoreIndex --id --folder
```

### Arguments

id

The identifier of the archive store that contains the full-text index to be rebuilt.

folder

The full-text index to be rebuilt, e.g. "johndoe".

## RefreshAllStoreStatistics

Refreshes the statistics of all currently open archive stores.

```
RefreshAllStoreStatistics
```

## RenameStore

This method is not documented.

```
RenameStore --id --name
```

**Arguments**

id

The identifier of the archive store to be renamed.

name

The new archive store name.

**RenameUser**

Renames a user. The user's archive will not be renamed by this method.

```
RenameUser --oldUserName --newUserName
```

**Arguments**

oldUserName

The user name of the user to be renamed.

newUserName

The new user name.

**RetryOpenStores**

Retries opening stores that could not be opened the last time.

```
RetryOpenStores
```

**SetStoreProperties**

Sets the properties of a store.

```
SetStoreProperties --id [--type] [--databaseName] [--databasePath] [--contentPath]
  [--indexPath] [--serverName] [--userName] [--password]
```

**Arguments**

id

This argument is not documented.

type (*optional*)databaseName (*optional*)databasePath (*optional*)contentPath (*optional*)indexPath (*optional*)serverName (*optional*)userName (*optional*)password (*optional*)

Please refer to the FileGroupCreate method documentation for information about these parameters.

## SetStoreRequestedState

Sets the requested state of a store.

```
SetStoreRequestedState --id --requestedState
```

### Arguments

id

The identifier of the archive store whose requested state should be set.

requestedState

The requested state to be set. For a list of possible values, please refer to the documentation of the *CreateStore* method.

## SetUserAuthentication

Sets the authentication mode of a user.

```
SetUserAuthentication --userName --authentication
```

### Arguments

userName

The user name of the user whose authentication mode should be set.

authentication

The authentication mode that should be set. For a list of possible values, please refer to the documentation of the *CreateUser* method.

## SetUserDistinguishedName

Sets the distinguished name (DN) of a user.

```
SetUserDistinguishedName --userName [--distinguishedName]
```

### Arguments

userName

The user name of the user whose distinguished name should be set (or removed).

distinguishedName (*optional*)

The distinguished name to be set. If this argument is not specified, the distinguished name of the specified user is removed.

## SetUserEmailAddresses

Sets the e-mail addresses of a user.

```
SetUserEmailAddresses --userName [--emailAddresses]
```

### Arguments

userName

The user name of the user whose e-mail addresses are to be set.

emailAddresses (*optional*)

A comma-separated list of e-mail addresses. The first e-mail address in the list must be the user's primary e-mail address.

## SetUserFullName

Sets the full name (display name) of a user.

```
SetUserFullName --userName [--fullName]
```

### Arguments

userName

The user name of the user whose full name (display name) should be set (or removed).

fullName (*optional*)

The full name to be set. If this argument is not specified, the full name of the specified user is removed.

## SetUserPassword

Sets the password of a user.

```
SetUserPassword --userName --password
```

### Arguments

userName

The user name of the user whose MailStore Server should be set.

password

The new password.

## SetUserPop3UserNames

Sets the POP3 user names of a user (used for MailStore Proxy).

```
SetUserPop3UserNames --userName [--pop3UserNames]
```

### Arguments

userName

The user name of the user whose POP3 user names should be set.

pop3UserNames (*optional*)

A comma-separated list of POP3 user names that should be set.

## SetUserPrivileges

Sets the privileges of a user.

```
SetUserPrivileges --userName --privileges
```

### Arguments

userName

The user name of the user whose global privileges should be set.

privileges

A comma-separated list of global privileges. For a list of possible values, please refer to the documentation of the *CreateUser* method.

## SetUserPrivilegesOnFolder

Sets a user's privileges on a specific folder.

```
SetUserPrivilegesOnFolder --userName --folder --privileges
```

### Arguments

userName

The user name of the user who should be granted or denied privileges.

folder

The folder on which the user should be granted or denied privileges. In the current version, this can only be a top-level folder (user archive).

privileges

A comma-separated list of privileges that the specified user should be granted on the specified folder. Possible values are:

none

The user is denied access to the specified folder. If specified, this value has to be the only value in the list.

read

The user is granted read access to the specified folder.

write

The user is granted write access to the specified folder.

delete

The user is granted delete access to the specified folder.

## SyncUsersWithDirectoryServices

Synchronizes with Active Directory or another directory service according to MailStore Server's configuration.

```
SyncUsersWithDirectoryServices [--dryRun]
```

### Arguments

dryRun

if set (--dryRun=true) retrieves the user data from the directory service according to MailStore Server's configuration but does not sync the data.

## UpgradeStore

Upgrades an archive store created in MailStore Server 5.x or earlier.

```
UpgradeStore --id
```

**Arguments**

id

The identifier of the archive store to be upgraded.

**VerifyStore**

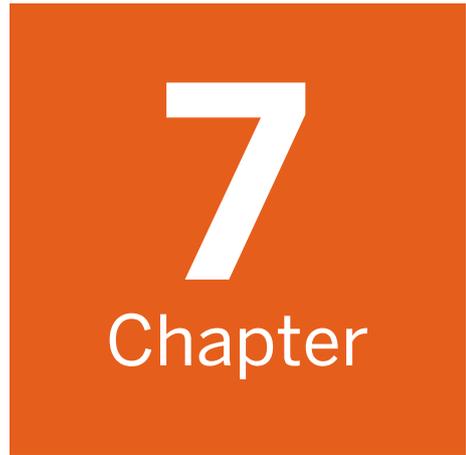
Verifies the contents of an archive store.

```
VerifyStore --id
```

**Arguments**

id

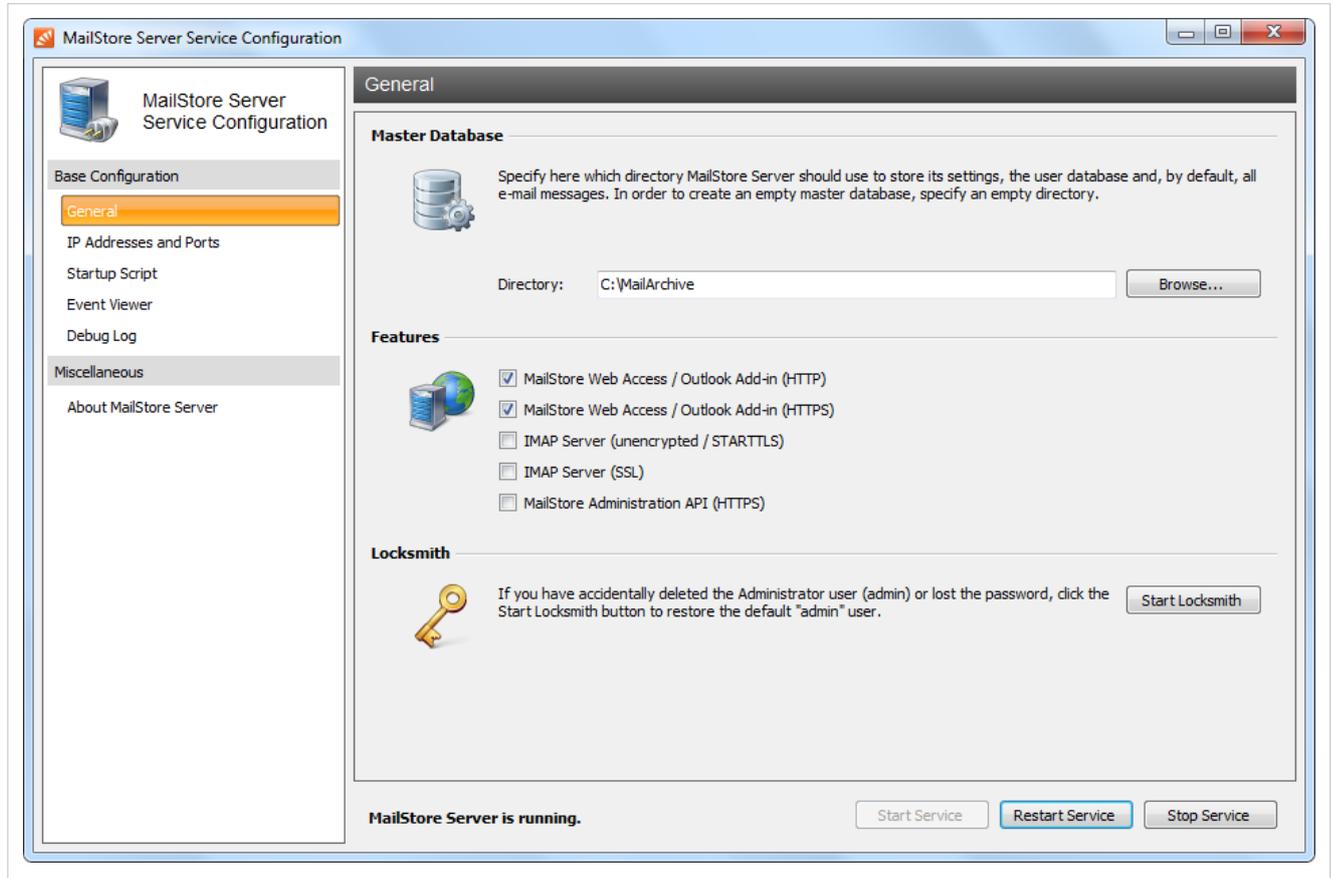
The identifier of the archive store to be verified.



# **Service Configuration**

# 7.1 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.

## Base Configuration - General

**Master Database** - Select the storage location of an existing master database. When choosing an empty directory, a new master database is created therein.

**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

**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*.