MailStore Server 5.0

Documentation

24. May 2011

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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

During the installation you will be prompted for choosing a storage location for the master database. This will be the directory in which the actual email archive will be stored. The following destination folder is suggested:

```
C:\MailArchive
```

You can accept the default folder or change the directory; you will still be able to change the directory after installation through MailStore's Administrative Tools. Should you plan to store on a Network Attached Storage (NAS), the chapter Using Network Attached Storage (NAS) 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

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.

- **Email Archiving with MailStore Basics**
  Working with Archiving Profiles, Archiving Specific Folders, Deleting Emails after Archiving, Automating the Archiving Process
- **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 any number of times. Additional information about this topic is available in the chapter Archiving Emails from Outlook, Thunderbird and Other Applications.
- **Archiving Outlook PST files directly**
  Archiving other files such as EML or MBOX
  As administrator, you can archive Microsoft Outlook PST and other files, such as emails in .eml format, for other MailStore users. Additional information about these topics is available in chapters Archiving Outlook PST Files Directly and Archiving Emails from External Systems (File Import).
- **Archiving Exchange mailboxes and public folders**
  With MailStore, already existing Exchange mailboxes as well as public folders can be archived. You have the option to archive individual, multiple or all mailboxes in one step. Additional information about this topic is available in chapter MailStore and Microsoft Exchange.
- **Archiving server mailboxes**
  In addition to Microsoft Exchange server mailboxes, the mailboxes of other email servers can be archived using IMAP or POP3 protocols. These include web-based mailboxes such as Google Mail or Web.de. Additional information about this topic is available in the chapter Archiving Server Mailboxes.
- **Batch-archiving IMAP Mailboxes**
- **Archiving IMAP/POP3 Multidrop Mailboxes**
  If you have a single multidrop mailbox for your domain on the ISP's mailserver or your current mailserver is able to deliver copies of all sent and received emails to another mailbox, MailStore is able to fetch all emails from such multidrop mailboxes and put them into the corresponding user's archive. Additional information about this topic is available in the chapter Archiving Multidrop IMAP Mailboxes.
- **Archiving emails directly upon sending and receiving**
  MailStore can archive the entire incoming and outgoing email traffic automatically. If an Exchange server is available, this can be done through its Envelope Journaling function. In all other system environments, the MailStore proxy server can be used. The MailStore proxy server is available to all MailStore Server customers free of charge. Additional information about this topic is available in the chapter Archiving Incoming and Outgoing Emails Directly.

Archiving Features

- Emails are archived in facsimile and MIME compatible.
- During the archiving process, file attachments are compressed automatically using a sophisticated algorithm.
- MailStore stores identical file attachments only once in the archive (single-instance storage).
- During the archiving process, emails and file attachments are automatically indexed for a full-text search.
- The file attachments to be indexed can be free defined.

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 upper 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 Settings (Profiles)* and can be run immediately, if desired.

Starting the Archiving Process

From the list under *Saved Settings (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 Task. 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*.

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: 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.

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.

How It Is Done

MailStore can archive the entire incoming and outgoing email traffic automatically. If an Exchange server is available, this can be done through its Envelope Journaling function. In all other system environments, the MailStore Proxy server can be used. The MailStore Proxy server is available to all MailStore Server customers free of charge.

The exact way of proceeding depends on the email system that is used:

- Instructions for Microsoft Exchange Server
- Instructions for other system environments

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 Task*. 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 Task*.
- 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.

Managing Scheduled Tasks

Scheduled tasks created on the current computer are managed through *Administrative Tools* under *Scheduled Tasks*.

The list shows all scheduled tasks for the archiving and export processes that were created on the current computer.

Run Task: The selected task is executed immediately regardless of its scheduled runtime.

Properties: The Windows Task Planner is opened for the selected task; all options offered by your current Windows version can be used.

Delete Task: The selected task is deleted. This does not affect the underlying archiving profile or any of the archived emails.

Open Log Files Directory: The directory containing the protocols for the selected task is opened.

Viewing the Command Line

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

```
REM *** Mozilla Thunderbird default (ID 4) ***
```

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

The command line is to be read as follows:

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

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

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

--u="admin" - User name.

--p="admin" - Password.

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

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

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 2000, 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).

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 upper 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 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 Settings (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 Task*. Additional information about this topic is available in the 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).

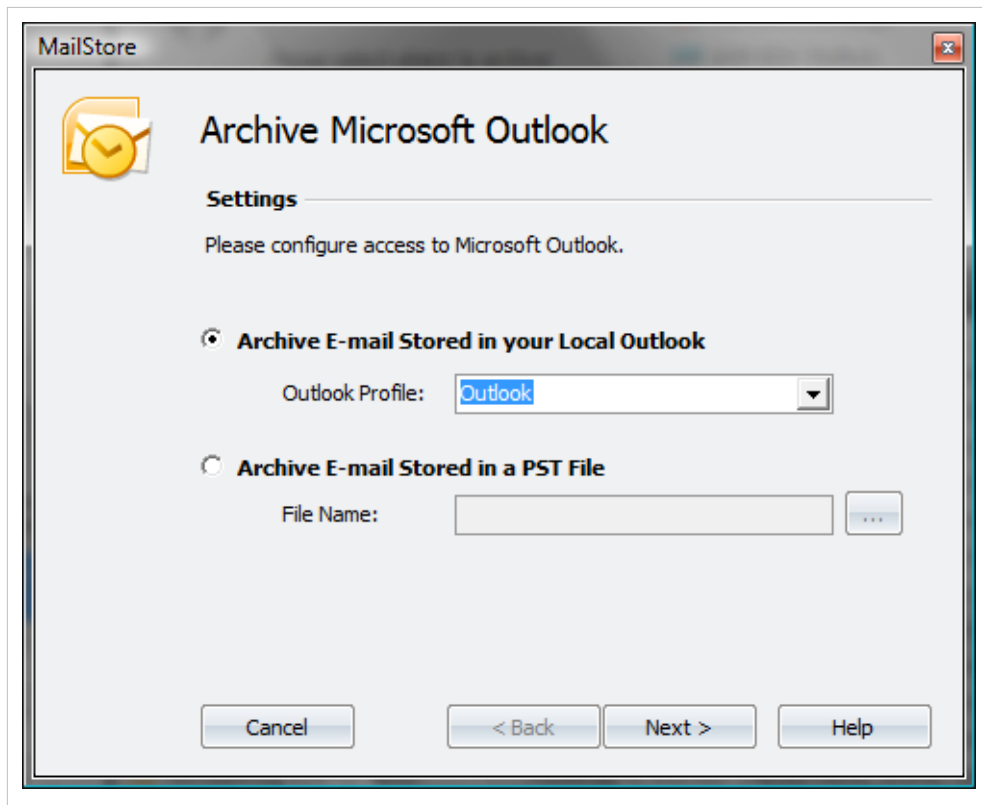# Settings for Archiving Profiles

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.
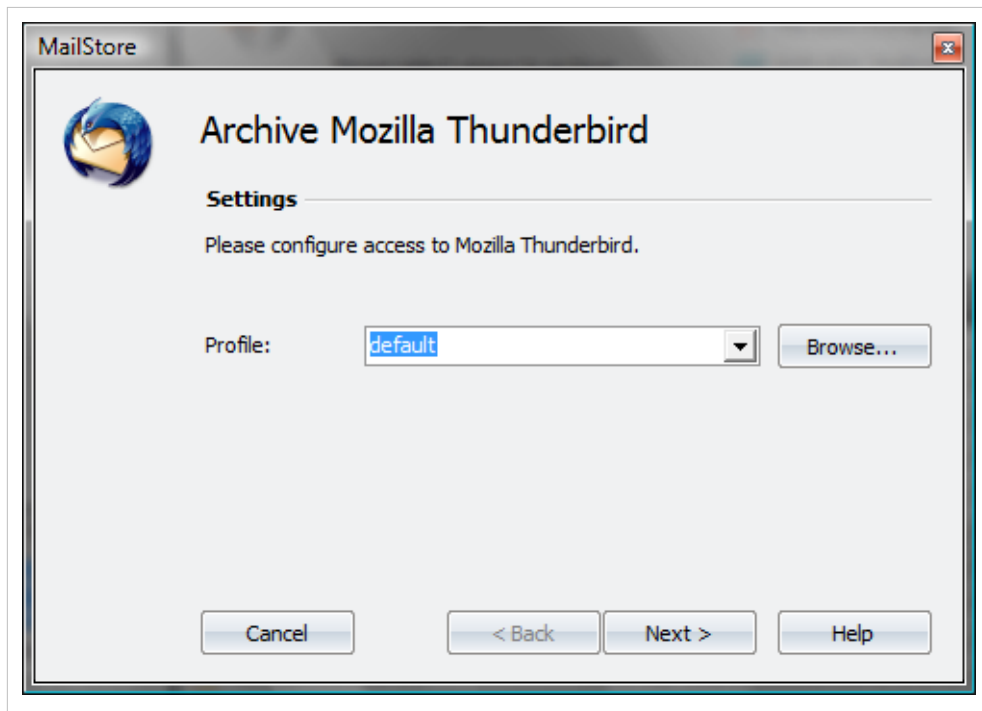
Settings Available for Outlook Only

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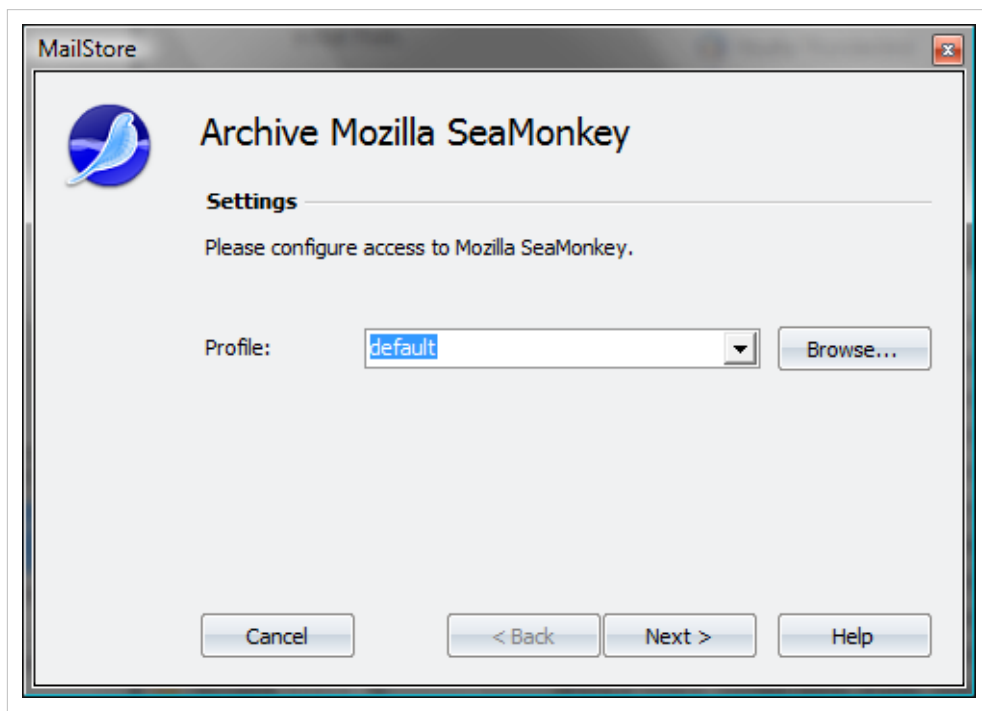
Archive Email Stored in a PST File Select this option if MailStore is to access the PST file directly. This option is described in the chapter Archiving Outlook PST Files Directly.

Setings 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*.
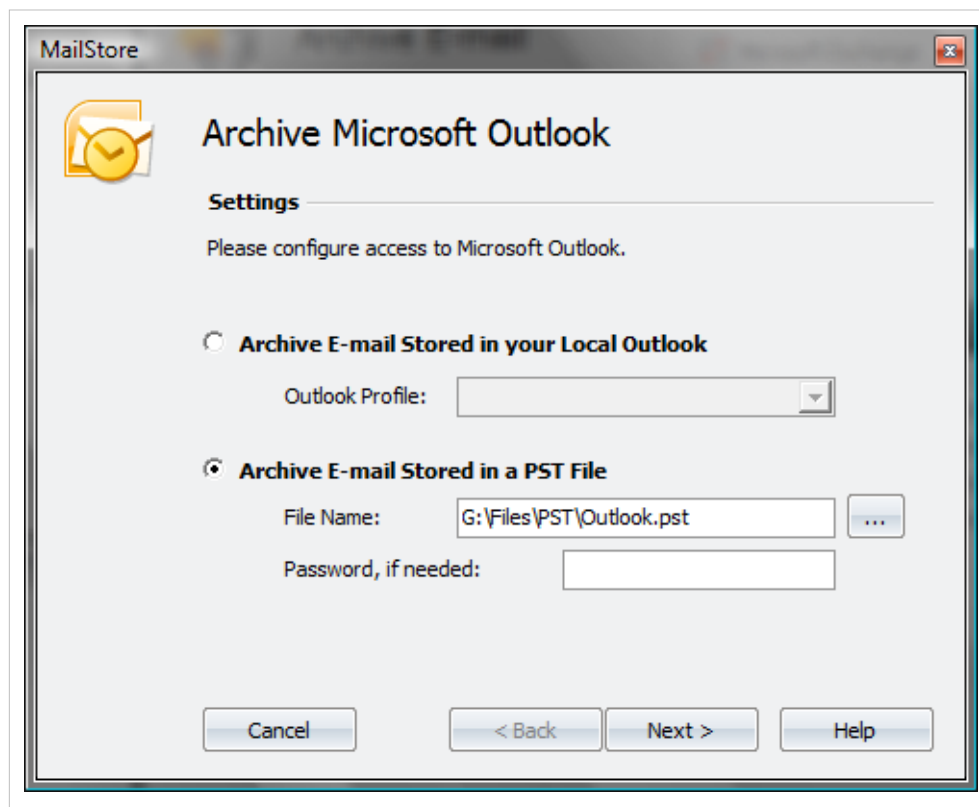
2.4 Archiving Outlook PST Files Directly

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.
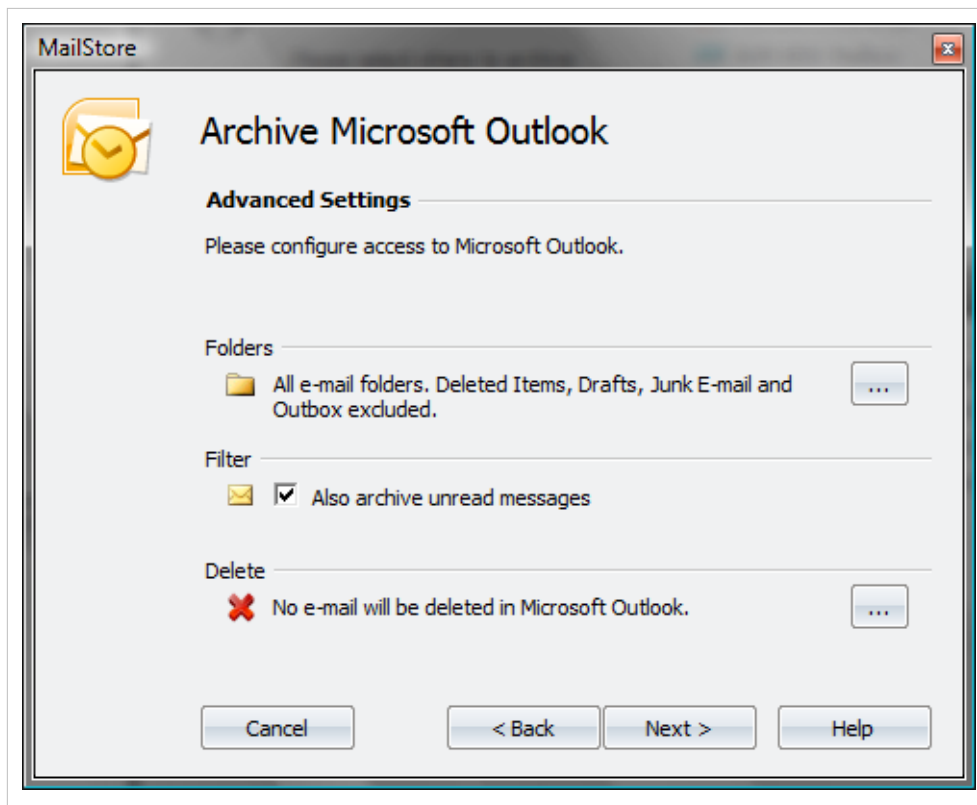
For each PST file, please proceed as follows:

- 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 list in the upper area of the window, select *Microsoft Outlook* 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 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 Settings (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.

The archiving profile can be executed as often as desired. MailStore only archives those emails that are not yet stored in the archive. In addition, MailStore detects if emails within the PST file were moved to a different folder and repeats such moves in the archive 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 Task*. Additional information about this topic is available in chapter Automating the Archiving Process.

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.

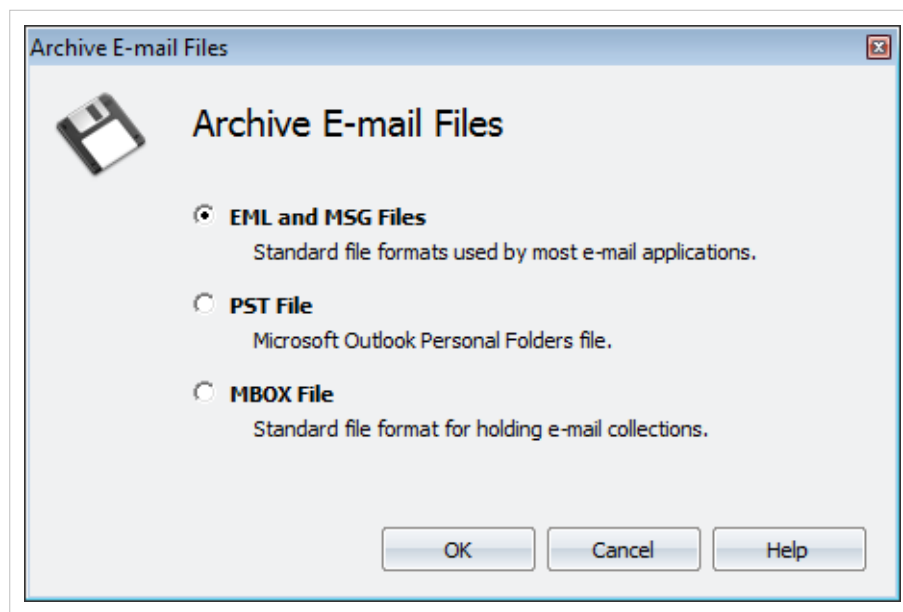## Procedure for Archiving PST Files

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 list in the upper area of the window select *Archive Email Files*.
- 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 (EML Files Only): 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 (EML Files Only): 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 Settings (Profiles)* and can be run immediately, if desired.

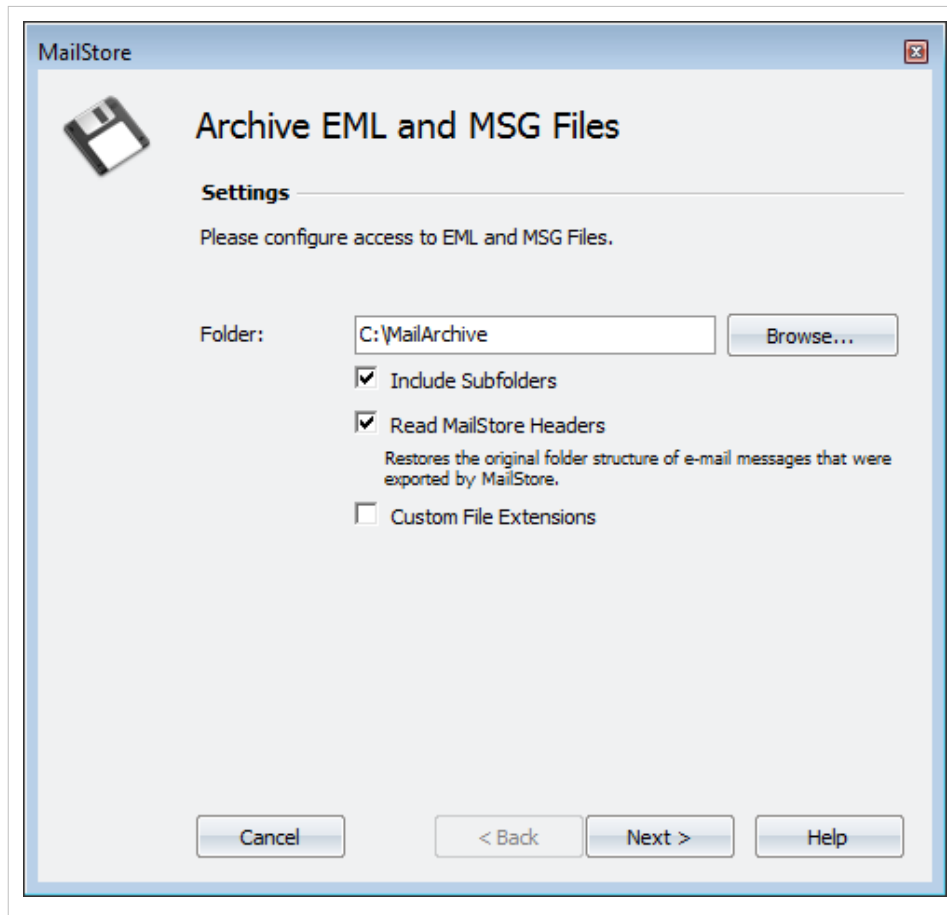# Procedure for Archiving MBOX Files

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 list in the upper area of the window select *Email Files*.
- A wizard opens, guiding you through the setup process.
- As file type, choose *MBOX File* and click on *OK*.
- 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 Settings (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.

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 of IMAP Mailboxes can be used.

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.
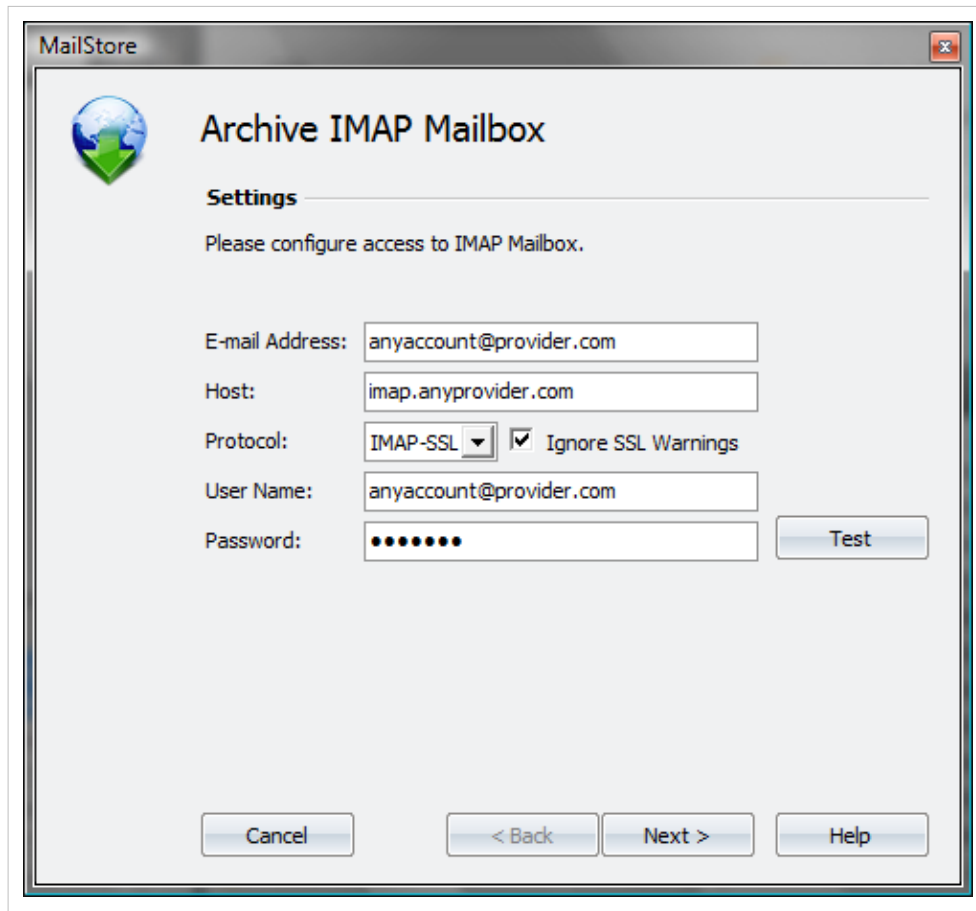*   The password.

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.
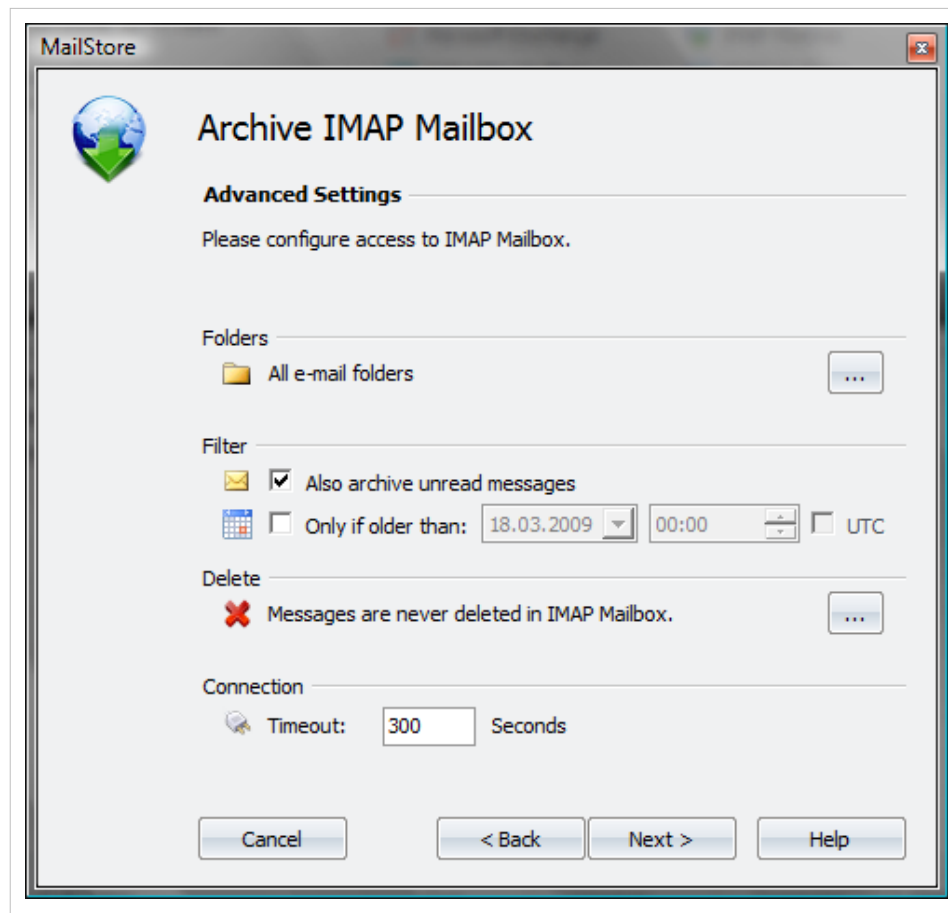
For each mailbox, please proceed as follows:

*   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 either *IMAP Mailbox* or *POP3 Mailbox* from the list in the upper area of the application window.
*   A wizard opens guiding you through the setup process.
*   Select *Single Mailbox* and click on *OK*.
*   Fill out the fields *Email Address*, *Host*, *Protocol*, *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 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 select the appropriate archiving profile from the list under Saved Settings (Profiles). 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.

The archiving profile can be executed any number of times. MailStore only archives those emails that are not yet stored in the archive.

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 Task. Additional information about this topic is available in the chapter Automating the Archiving Process.

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.

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 *IMAP Mailbox* from the list in the upper area of the application window.
- A wizard opens guiding you through the setup process.
- Select Multiple Mailboxes and click on *OK*.
- Enter the name of the email server and the protocol to be used. **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.

- Under *CVS 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.
- Click on *Next*.
- If needed, adjust the list of folders to be archived, the deletion rules, the filter 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*.
- 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 select the appropriate archiving profile from the list under *Saved Settings (Profiles)*. 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.
The archiving profile can be executed any number of times. MailStore only archives those emails that are not yet stored in the archive.

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 Task*. Additional information about this topic is available in the chapter Automating the Archiving Process.

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.

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 *IMAP Mailbox* or *POP3 Mailbox* from the list in the upper area of the application window.
- A wizard opens guiding you through the setup process.
- Select *Multidrop Mailbox* and click *OK*.
- Fill out the fields E-mail Address, Host, Protocol, User Name and Password. Click on *Test* to verify the data entered. For the TLS and 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.
- 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 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 E-mail and select the appropriate archiving profile from the list under Saved Settings (Profiles). Click on Run. After the archiving process has been executed, a protocol appears. It contains information about the amount of e-mails that have been archived as well as any errors that may have occurred.

The archiving profile can be executed any number of times. MailStore only archives those e-mails that are not yet stored in the archive.

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 Task. Additional information about this topic is available in chapter Automating the Archiving Process.

2.9 Archiving Incoming and Outgoing Emails Directly

In addition to archiving server mailboxes, files and email applications (clients), MailStore also provides the option to archive all incoming and outgoing emails automatically and in their entirety.

Below, some of the advantages and disadvantages are described to help determine if this way of archiving is suitable for your company:

Advantages

- Users cannot delete or modify any emails before archiving.
- In many cases, archiving all incoming and outgoing emails automatically and in their entirety is the only practical solution to complying with legal requirements and regulations.
- As opposed to archiving emails from local email clients such as Outlook or Thunderbird, this type of archiving does not require an installation of MailStore Client software on the user computers.
- This way of archiving can also be conducted in non-Windows environments. Only the installation of the main program, MailStore Server, requires a computer with a Windows operating system.

Disadvantages

- Depending on the configuration, unwanted emails, such as spam, are archived as well.
- The folder structure created by the user is ineffective, because emails are archived before being stored into folders.
- Depending on the configuration, adjustments to the settings of the local email clients (e.g. Outlook) may be necessary.

How It Is Done

MailStore can archive the entire incoming and outgoing email traffic automatically. If an Exchange server is available, this can be done through its Envelope Journaling function. In all other system environments, MailStore Proxy can be used. MailStore Proxy is available to all MailStore Server customers free of charge.

The exact way of proceeding depends on the email system that is used:

- Archiving Emails Without Your Own Emailserver (e.g. Hosted Exchange or POP3/IMAP-mailbox provided by an ISP)
- Exim
- hMailServer
- Intranator Appliance Pro / Business Server
- Kerio Connect (Kerio MailServer)
- Kolab
- MDaemon
- Microsoft Exchange 2003
- Microsoft Exchange 2007
- Microsoft Exchange 2010

- Postfix
- Qmail
- Scalix
- Sendmail
- SmarterMail
- Tobit David.fx
- Zarafa
- Zimbra Collaboration Suite
- Other e-mail servers: MailStore Proxy

3
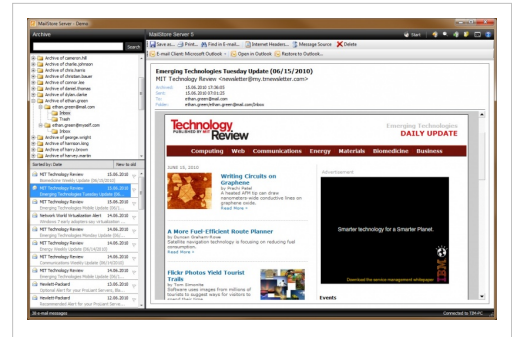
Chapter

Accessing the Archive

3.1 Accessing the Archive

MailStore provides several ways to access archived emails:

Accessing the Archive with the MailStore Client Software

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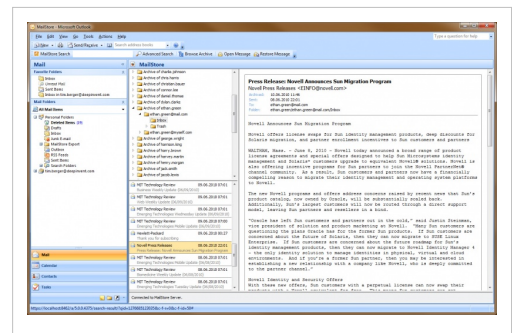
MailStore Client Manual

Accessing the Archive with the Microsoft Outlook Integration

With a MailStore add-in, users can access the archive directly from Microsoft Outlook. The add-in can be included in the installation of MailStore Client.
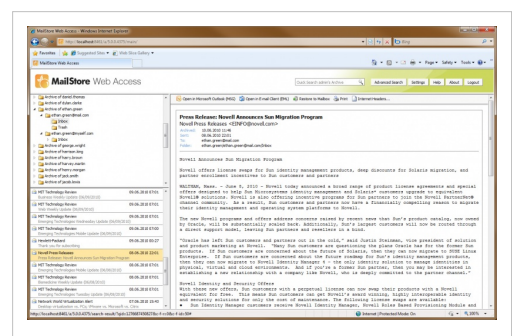
MailStore Outlook Add-in Manual

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

Accessing the Archive with iPhone and iPod touch

Users can access the archive using their iPhone or iPod touch using a version of MailStore Web Access specialized for these devices.

MailStore iPhone Client Manual

3.2 Accessing the Archive with the MailStore Client software

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>*.

Opening a User Archive

To open a folder, click on the plus sign [+] next to the folder name (as is done in Windows Explorer). Proceed the same with any subfolders.
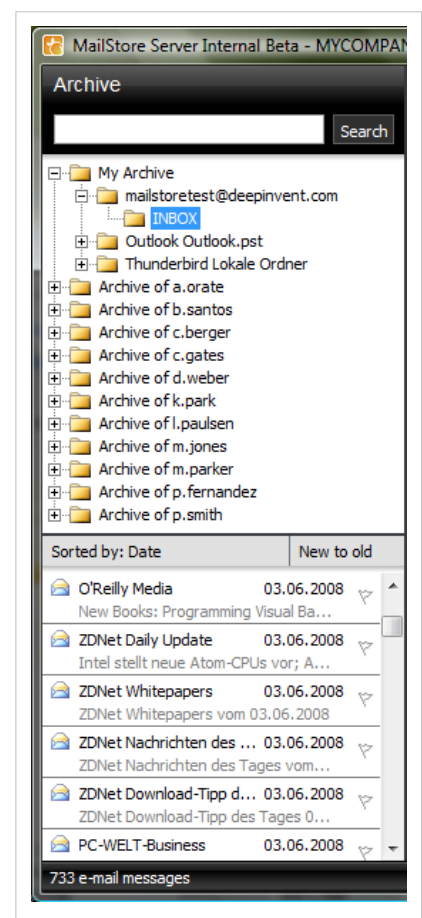
Viewing the Emails in a Folder

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* (called *New to old* in the graphic) to reverse the order in which emails are arranged. By default, the latest email is displayed first.

Number of Emails Contained in a Folder

The number of emails in the current folder is shown below the list of messages.

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 lower left area or the window. 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:
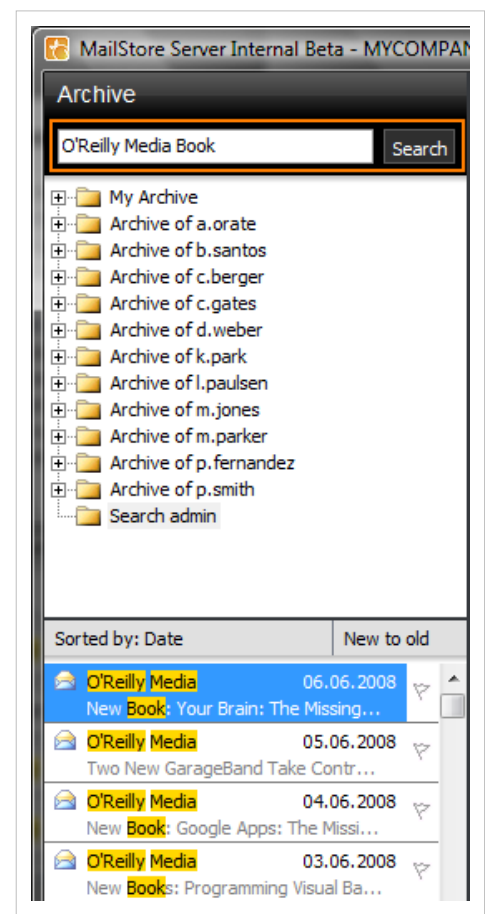
    auto*

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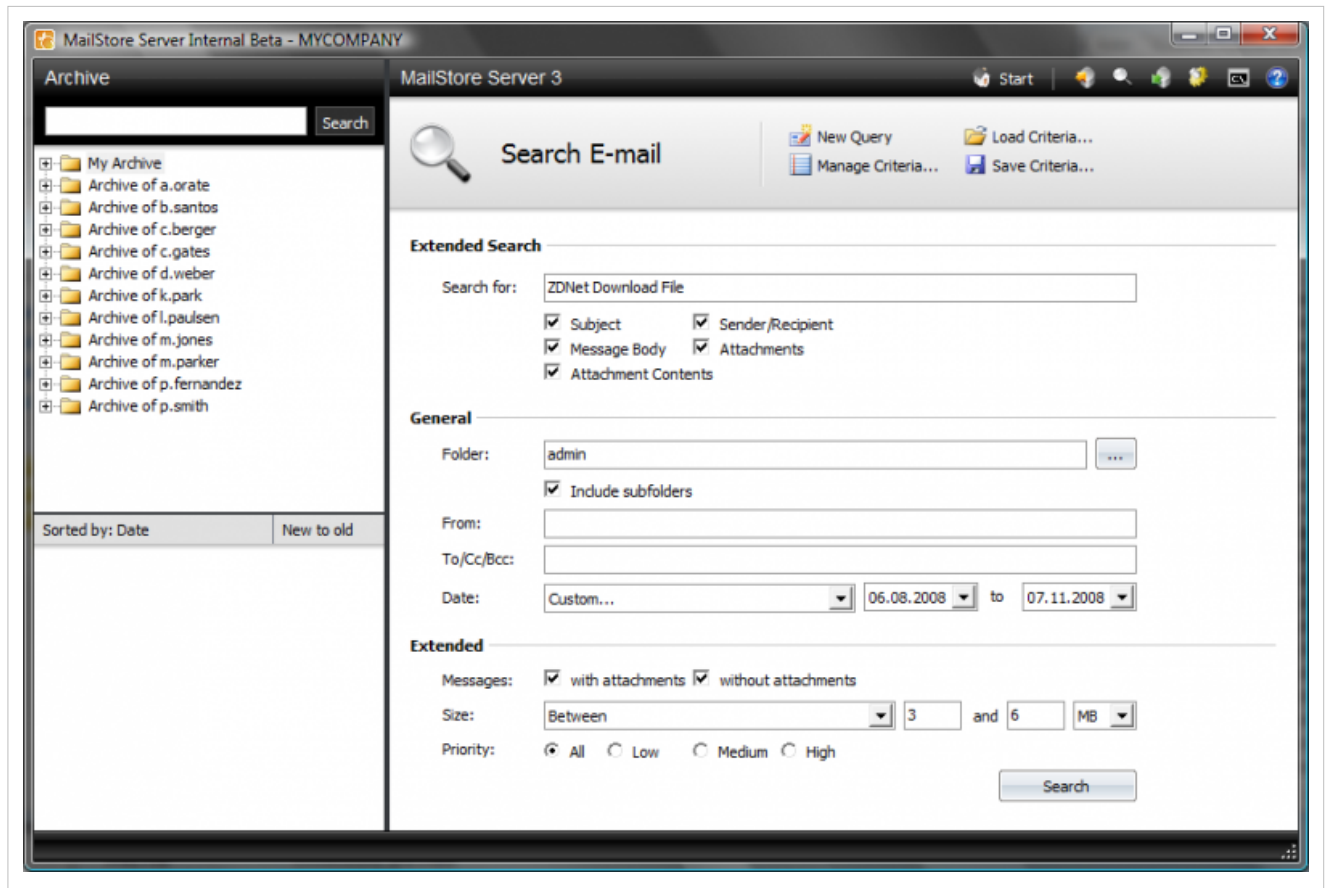
```
ZDNET -"Daily Update"
```

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 "Extended Search - Search For"

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** - 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 Extended, 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 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 *Extended Search* 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).
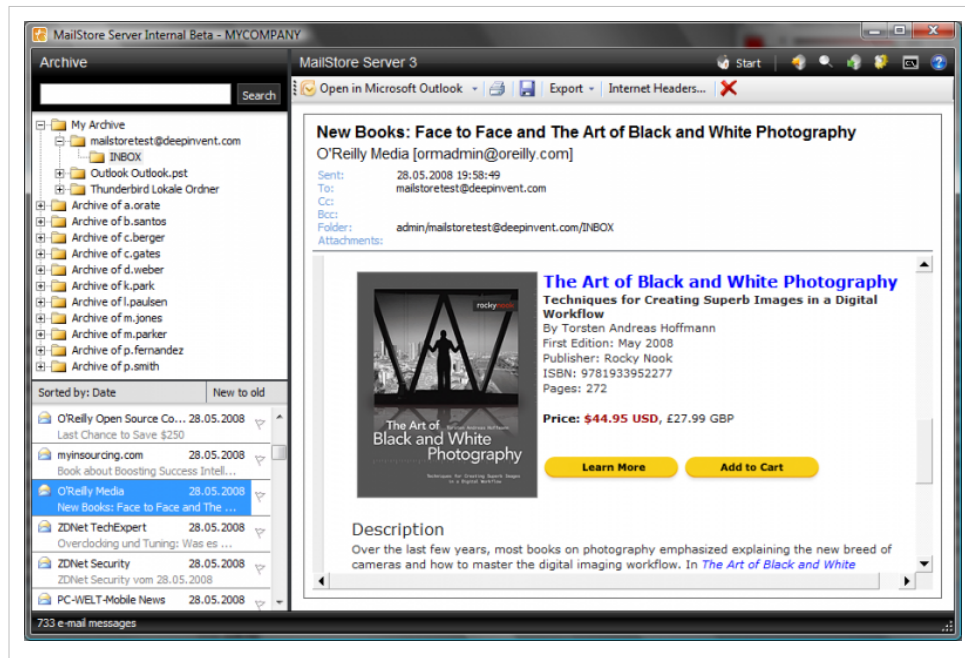
Saving Search Criteria for Reuse

Search criteria that are used repeatedly (such as "all receipts from last month") can be saved and reused at a later time: In the upper area of the application window, click on *Save Criteria* and provide a meaningful name for the search. To access, edit or restart the search, click on *Load Criteria*.

To rename or delete saved search criteria, click on *Manage Criteria*.

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.

Open in...

In order to forward or reply to an email, users can temporarily restore the current email in the MailStore preview to an email application. The following options are available:

- Open in Outlook
- Open in Windows Mail / Outlook Express
- Open in Windows Live Mail
- Open in Thunderbird

Please note: Emails are simply opened, not stored, in the application. To restore emails to an email application, please use MailStore's Export Feature.

Print

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

Save

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.

Export

Using the Export feature, the current email can be exported to other applications, such as Microsoft Outlook, forwarded using SMTP, or burned to a CD. Additional information about this topic is available in section Exporting Emails.

Internet Headers...

Click on Internet Headers to view the header of the current email, including all MIME parts. Hold down the SHIFT key while clicking on Internet Headers to view the entire source code of the message.

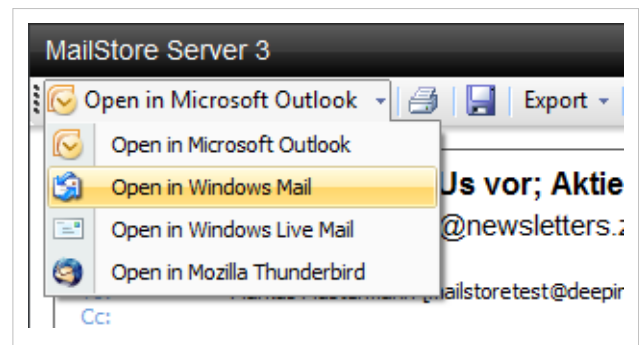### Delete (only with the appropriate privilege)

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. Simply click on Email Commands and select one of the following options:

- Open in Outlook
- Open in Windows Mail / Outlook Express
- Open in Windows Live Mail
- Open in Mozilla Thunderbird

Please note: Emails are simply opened, not stored, in the application. To restore emails to an email application, please use MailStore's Export Feature.

Exporting Emails

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 chapter Backup.

Available Export Destinations

- **Microsoft Outlook** - A folder named MailStore Export is created in Microsoft Outlook into which emails are copied.
- **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.
- **Directory (File System)** - Either EML or MSG files are created (one per email).
- **Email address using SMTP**- Emails are forwarded to a specified email address using SMTP, the standard protocol for sending emails.

- **CD/DVD** - Either EML or MSG files (one per email) are burned to CD or DVD. MailStore can also distribute the backup among several storage media; CDs and DVDs can be used interchangeably. Rewritable disks (CD-RW or DVD-/+RW) can be used as well.

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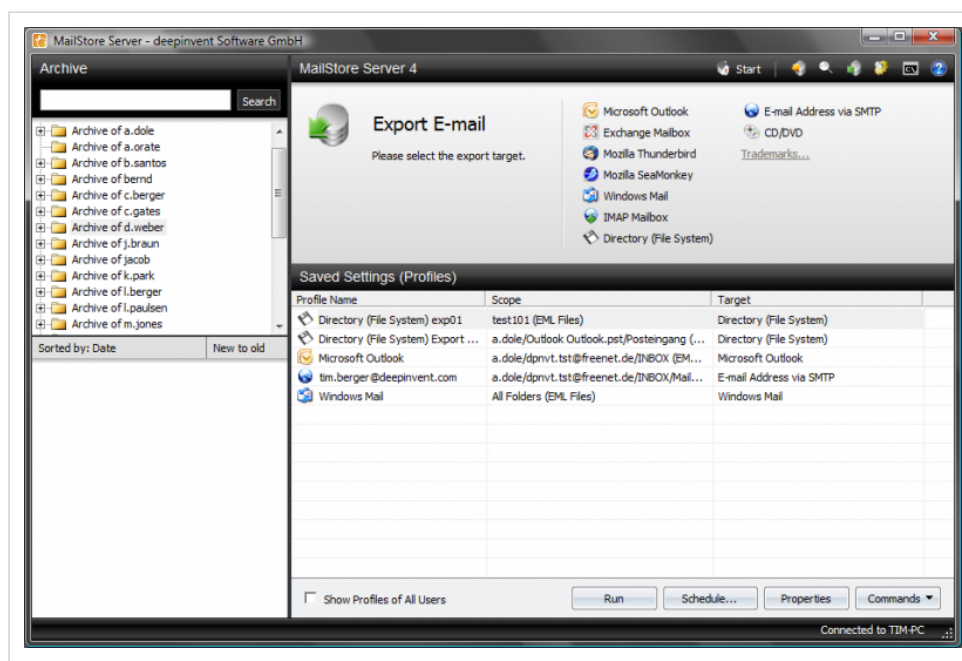
Using the list of emails (folder contents or search results) - Highlight the emails to be exported by holding down the control key (Ctrl) and right-clicking onto the emails. Pressing Ctrl and A highlights all emails. Click *Export To* and select the export destination. A window appears in which additional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

Creating an Export Profile Using the Page "Export Email"

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 list in the upper right 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 Settings (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 Using the Page "Export Email"

On the start page of MailStore Client, click on Export Email. From the list under Saved Settings (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.

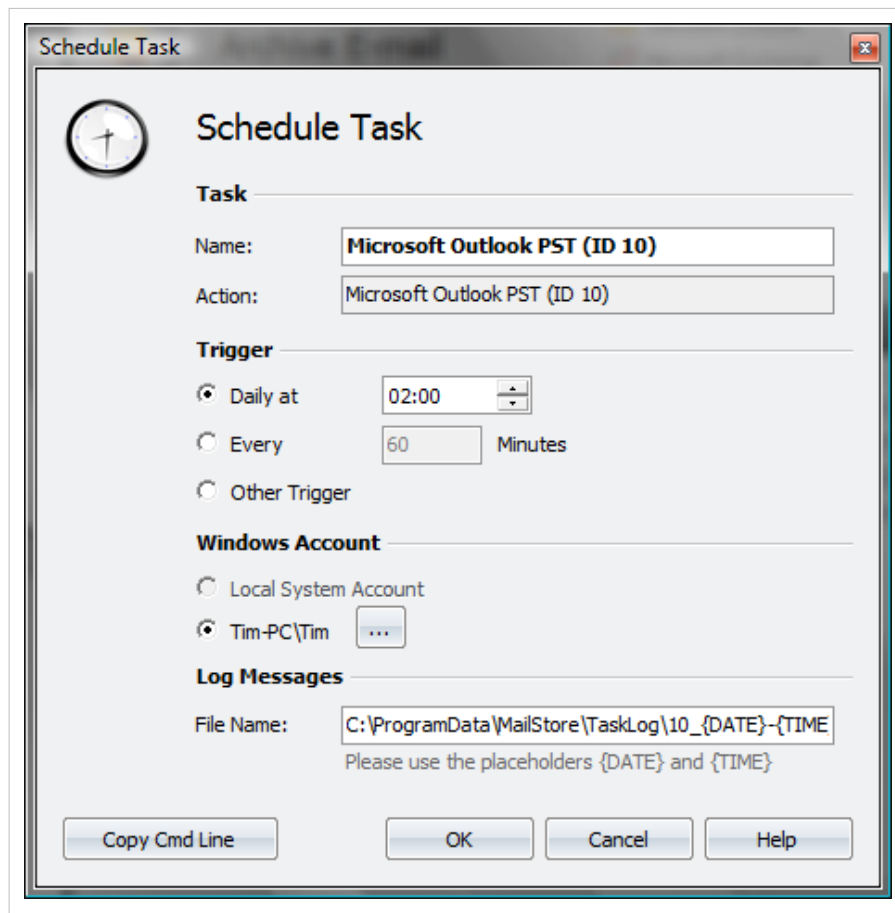### Executing an export profile regularly according to a schedule

In addition to being executed manually, archiving profiles can also be run automatically according to a schedule. For further information please read on in the next chapter: Automating the Export Process.

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 and Backup*.
- Right-click on an existing profile and select *Schedule Task*. Information about creating exporting tasks is available in the previous chapter: Exporting Emails.

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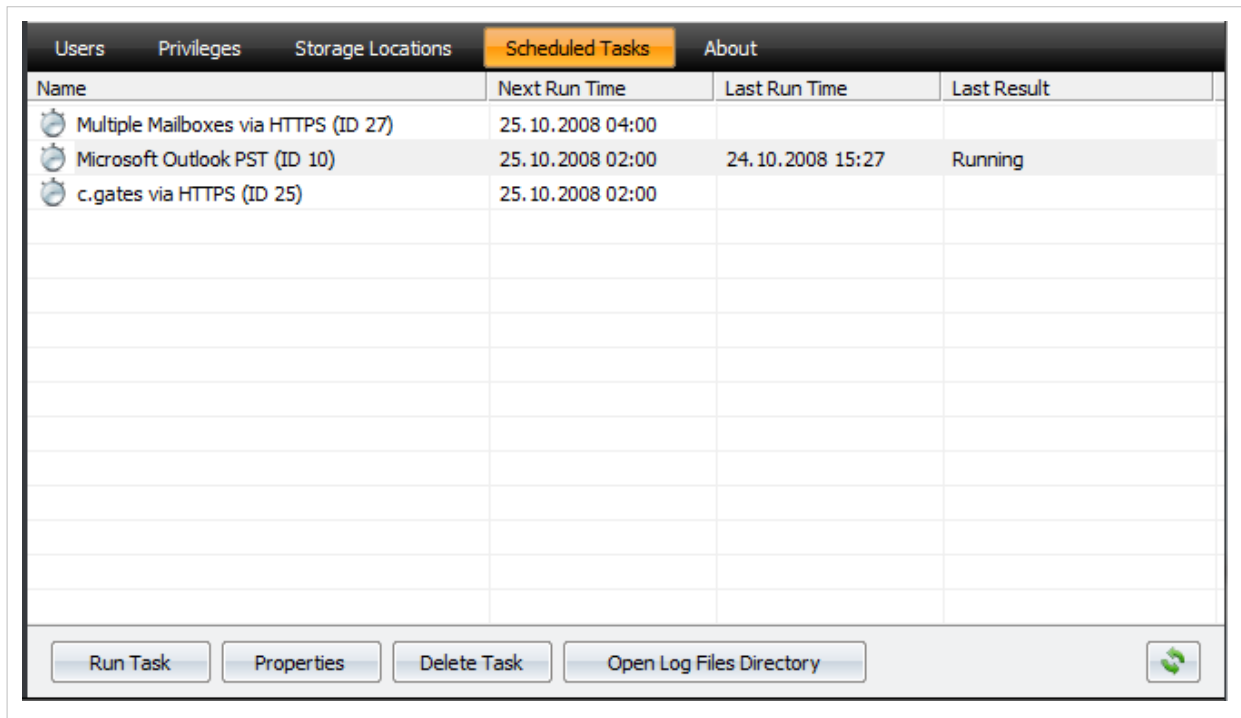
Log Messages - File Name: If a log file is to be created, the name for that file can be specified here. The placeholders {DATE} and {TIME} can be used in the file name which will be replaced by the actual date and time during the archiving process. If desired, the log file can also be created on a network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

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.

Managing Scheduled Tasks

Scheduled tasks created on the current computer are managed in Administrative Tools under Scheduled Tasks.

The list shows all scheduled tasks for archiving and export processes that were created on the current computer.

Run Task: The selected task is executed immediately regardless of its scheduled runtime.

Properties: The Windows task planner is opened for the selected task; all options offered by the current Windows version can be used.

Delete Task: The selected task is deleted. This does not affect the underlying archiving profile or any of the archived emails.

Open Log Files Directory: The directory containing the protocols for the selected task is opened.

Viewing the Command Line

If desired, the export process can be incorporated into a larger procedure, such as one run by a batch file (.bat). To simplify this process, MailStore offers the option Copy Cmd Line in the Schedule Task window (see above). Click on it to view a command line that can be incorporated into the desired procedure. For example:

```
REM *** Microsoft Outlook (ID 77) ***

"C:\Program Files\deepinvent\MailStore Server\MailStoreCmd.exe"
--h="localhost" --pkv3="16:0e:95:b0:79:d2:e8:e0" -u="admin" --p="admin"
--o="C:\ProgramData\MailStore\TaskLog\77_{DATE}-{TIME}.log"
-c export-execute --id=77 --user="admin" --verbose
```

The command line is to be read as follows:

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

--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).

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

3.3 Accessing the Archive with the Microsoft Outlook integration

MailStore users can access their archives using a convenient add-in for Microsoft Outlook which is available for all current versions:

- Microsoft Outlook 2000
- Microsoft Outlook XP
- Microsoft Outlook 2003
- Microsoft Outlook 2007
- Microsoft Outlook 2010 (x86)

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 (in Outlook 2000-2007) or a tab (in Outook 2010) labeled "MailStore" will be visible in Microsoft Outlook.
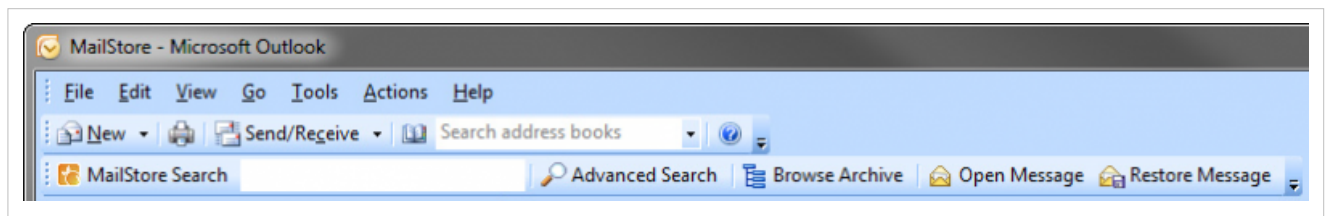
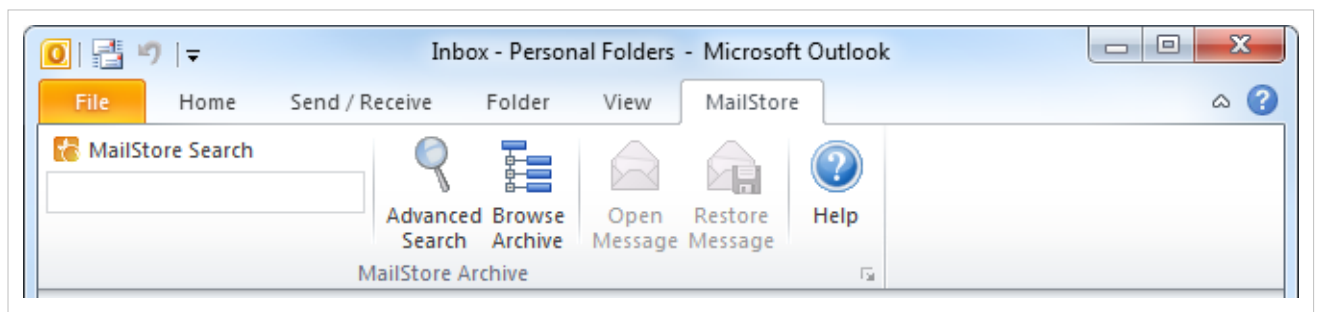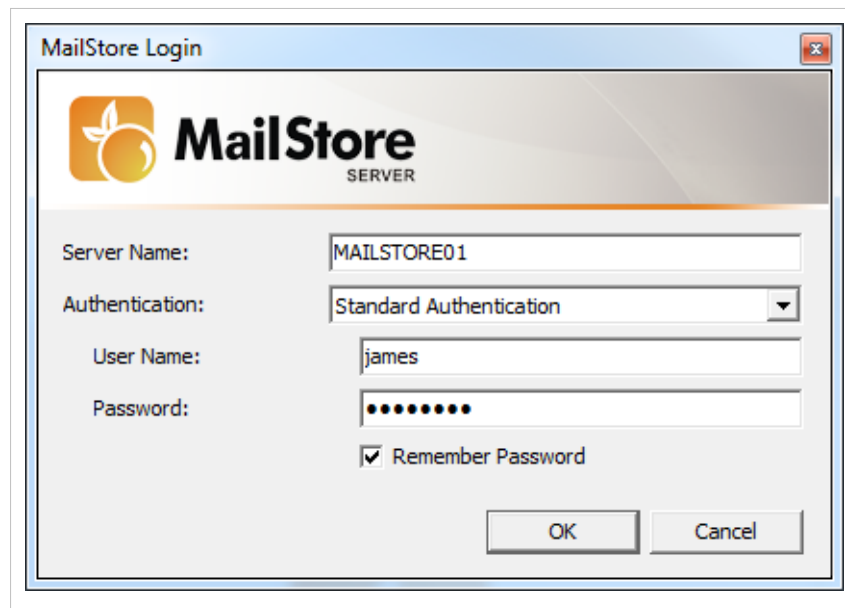*Image: MailStore toolbar in Microsoft Outlook 2007*

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 on the *MailStore* toolbar. 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:

- **Microsoft Outlook 2000, XP, 2003, 2007:** Click on *Extras* and then on *Options*. Open the *MailStore* tab.
- **Microsoft Outlook 2010:** In the *MailStore* tab, click on the little white arrow to the right of *MailStore Archive*.
- Click on *Delete Saved Access Data*.
- Click on *OK*.
- Click on any button on the *MailStore* toolbar to go back to the login window.

Technical Considerations

- The Microsoft 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 base 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 base 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: MAILSTORE01:443)

Search by Archive Folder
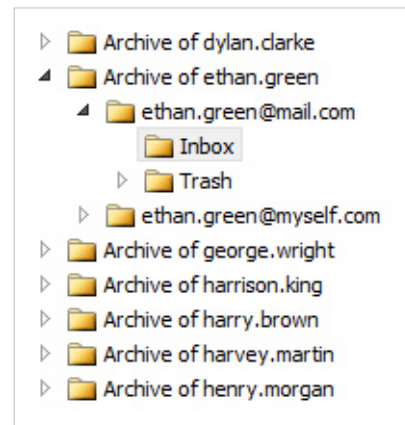
Display of the Archive Folder

In the *MailStore* toolbar, click on *Archive Folders* to display the visible part of the archive.

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* toolbar. 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* toolbar, 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 - Search for"

Enter a keyword or phrase and specify which fields are to be included in the search. You can choose from the following options:

- **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 (based on availability)
- **Attachments** - the file names of the email attachments are searched
- **Attachment contents** - the contents of the email attachments are searched. If and to what extend attachments can be searched depends on the indexing options specified in the *Administrative Tools*.

In the textfield *Search for* all options described in section *Quick Search* are available, including wildcards and phrases, for example.

Search Criteria under "General"

The following options are available:

- **Folder** - Specify which folder MailStore is to search in. By default, this is the main folder of the current user. By clicking the button to the right, the folder can also be selected from the tree structure. Administrators have the option to search the folders of all users.
- **Include subfolders** - If this checkbox is selected, MailStore not only searches the specified folder (e.g. *Inbox*) but also all subfolders (e.g. *Inbox | Projects 2010 | Profit Optimization*)
- **From** - Only the sender field is searched for the keywords or email addresses entered in the textfield.
- **To/Cc/Bcc** - Only the the recipient fields are searched for the keywords or email addresses entered in the textfield.
- **Date** - Specify a timeframe for the search. This can be a predefined range such as *yesterday* or *this year*, or, by choosing *Custom*, a user-defined period can be specified manually. Start and end dates are included in the search.

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

Search Criteria under "Extended"

In this section, the following options are available:

- **Messages with/without attachments** - By default, a search covers all messages regardless of whether or not they have any file attachments. Clear one of the two checkboxes to exclude certain emails (e.g. those without attachments)from the search. Important: A search based on this criteria can be imprecise at times because items such as background pictures could be regarded as attachments.
- **Size** - By default, a search covers all messages regardless of size. Here, you can narrow the search by specifying the email size, e.g. at least 5 MB or between 400 and 600 KB.
- **Priority** - The search covers all emails with a certain priority level as specified by the sender. If *low* is selected, the search returns all emails with a priority level lower than *normal*; when choosing *high*, the search returns all emails with a priority level higher than *normal*. Emails that do not contain any information regarding priority are assigned 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 *Extended 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.
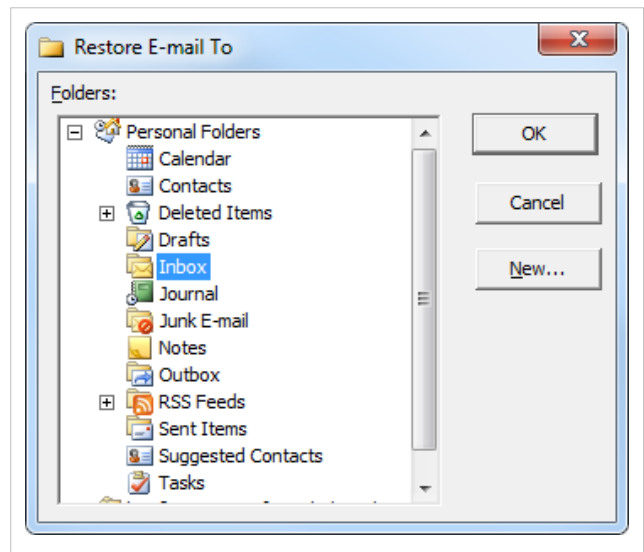
Please keep in mind that images and any formatting will not be displayed in the preview for security reasons. Emails cannot be forwarded or replied to within the preview, either.

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* toolbar. 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* toolbar, click on *Restore Message*.
- Select the Outlook folder to which the email is to be restored.
- Click on *OK*.
- The email is restored immediately or after a few seconds, depending on its size.

3.4 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.

Requirements for Using MailStore Web Access

Activation and configuration of MailStore Web Access are described in chapter MailStore Web Access Configuration. A list of supported internet browsers can be found there as well.

Accessing MailStore Web Access

Unless MailStore Server was configured differently, users can use the following internet addresses to access MailStore Web Access:
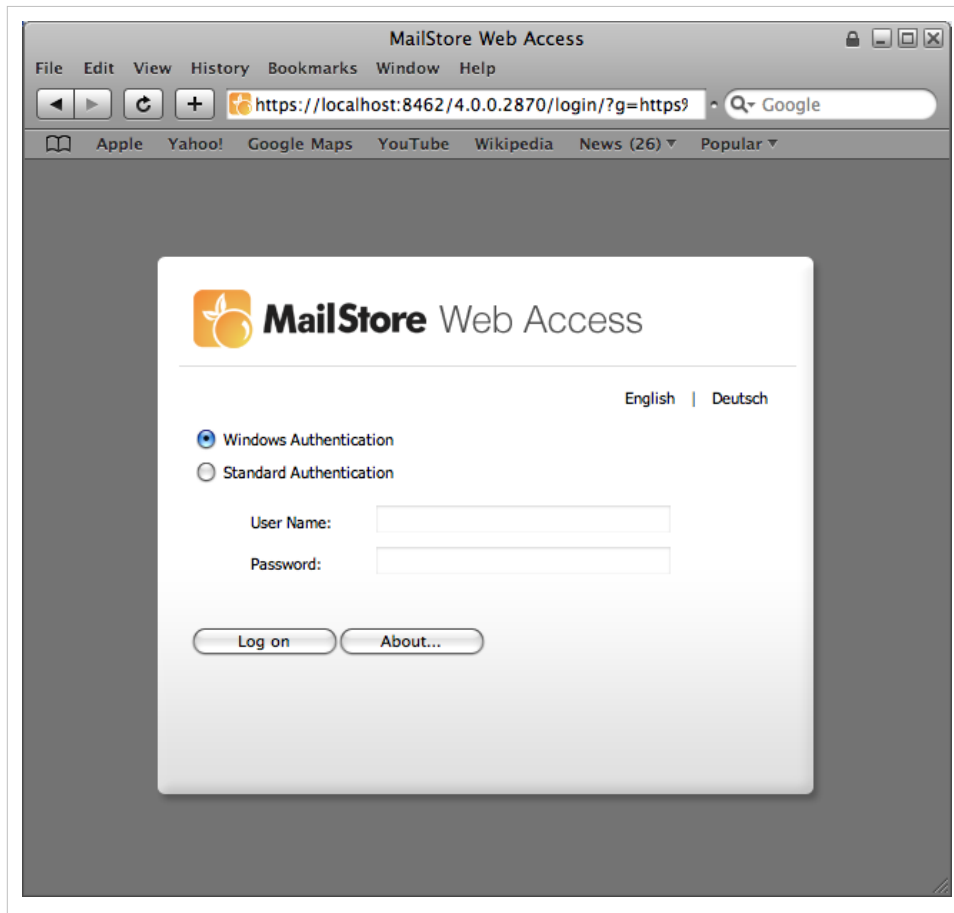
- http://servername:8461
- https://servername:8462

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

A manual specifically for the iPhone/iPod touch version is available in chapter Access Using iPhone and iPod touch.

Authentication

As with MailStore Client, users have to be authenticated before they can access the archive:
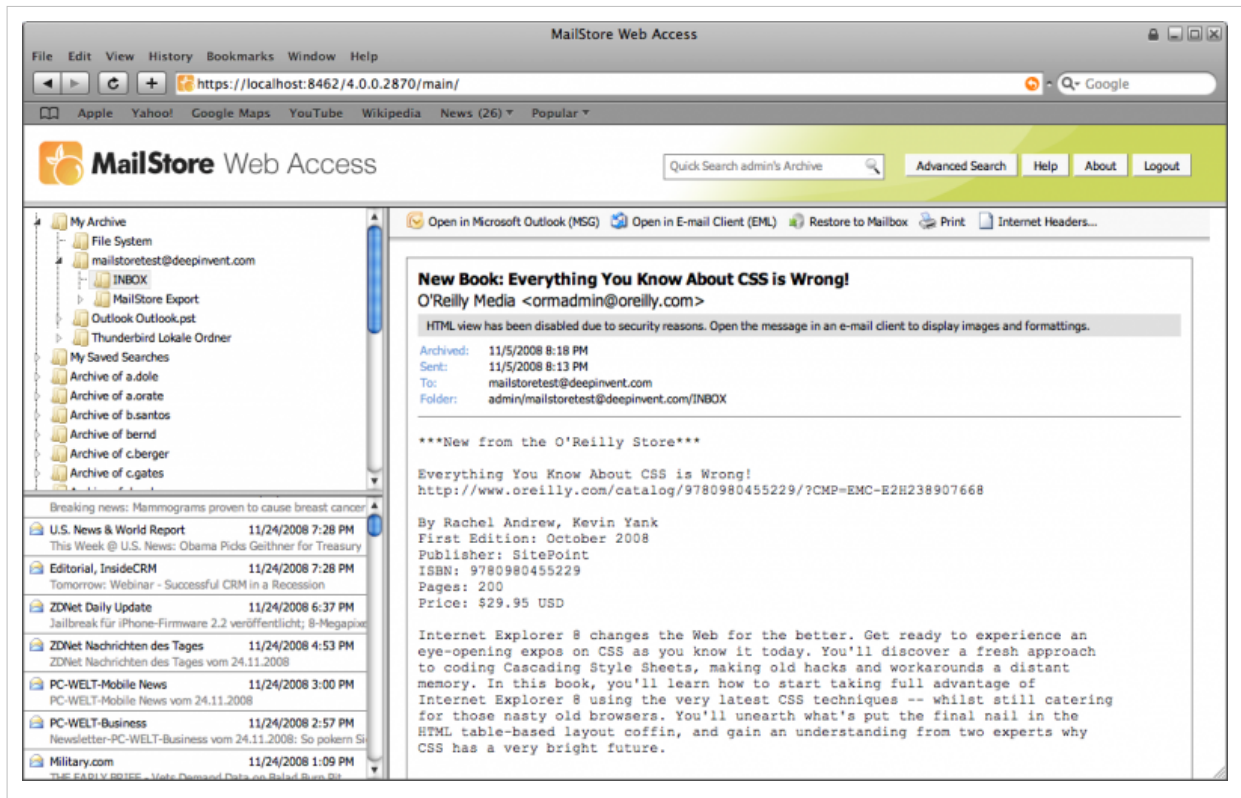

Windows Authentication Single Sign-on (login without entering a password) requires Microsoft Internet Explorer, because it is the only browser capable of sending the appropriate information.

Standard Authentication Requires input of the access data stored in the MailStore user database. Working with MailStore Web Access

Using MailStore Web Access

After successful authentication, many of the functions known from MailStore Client are available:

Searching using the folder structure

For each user, MailStore creates a folder called *My Archive* at the highest level which corresponds to the respective user archive and contains all of the user's archived emails. If the user has access to the archives of others, as is the case with MailStore administrators, for example, their folders are listed as *Archive of <User Name>*. Below these main folders, the user's individual email sources (e.g. Microsoft Outlook or Exchange mailboxes) and their folder structure (e.g. Inbox) are listed.

Searching using quick search

The input field for the quick search is located in the upper area of the application window. The quick search is especially suited for simple queries and, unlike the extended search, only covers the archive of the current user.

Searching using the extended search

With the extended search, users can run complex queries including not only the email content but also parameters such as date or email size. Users can also browse multiple user archives in one step. The search criteria available correspond to those of MailStore Client's extended search. Please learn more about this in chapter Extended Search. With the extended search, queries can also be saved and rerun. This feature is described separately in a later section of this chapter.

Email preview

For security reasons, the HTML display of emails is prohibited in MailStore Web Access. To view graphics and formatting, emails need to be opened in an email client (e.g. Microsoft Outlook).

Opening emails in an email client

The toolbar above the email preview provides the features *Open in Microsoft Outlook (MSG)* and *Open in Email Client (EML)*. These are needed to reply to or forward archived emails and provide a way to view graphics and formatting of emails in HTML format. Please keep in mind that preparations need to be made in order to use the *Open in Microsoft Outlook (MSG)* feature. Please refer to the chapter MailStore Web Access Configuration for more information.

Restoring the current email

The toolbar above the email preview provides the *Restore to Mailbox* feature which allows the current email to be sent to any email address, thereby restoring it from the archive. In order to use this feature, certain preparations have to be made. Please refer to the chapter MailStore Web Access Configuration for more information.

Printing the current email

The *Print* feature is available in the toolbar above the email preview. In addition to the actual message, the internet headers of the email are printed as well.

Internet headers

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

Using Search Folders

With the extended search, any number of queries can be saved and run again later. This has the advantage that, after a search has been saved, it appears as a folder in the folder structure below *Saved Searches*.

If such a folder is clicked on, the query is executed and the results are passed off as folder contents. In practice, this has a variety of possible applications. For example, such a folder may contain:

- All Emails of today or any other timeframe
- All Emails of relating to a certain project
- All Emails of a particular person, department or company
- All Emails with certain file attachments (e.g. video or Excel files)

3.5 Accessing the Archive with iPhone and iPod touch

In addition to the MailStore Client software and MailStore Web Access, MailStore Server also provides access to the archive using an iPhone or iPod touch (software version 2.0 or later). In this chapter, learn how to:

- Set up MailStore on an iPhone or iPod touch and
- Access the archived emails using an iPhone or iPod touch.

Administrators, please note: MailStore for iPhone is designed as an iPhone web application. The URLs are the same that are used with MailStore Web Access. For this reason, MailStore Web Access must be activated in order to use the iPhone functionality. To learn how to configure MailStore Web Access, please refer to the corresponding chapter.

Setup

To set up MailStore on an iPhone or iPod touch, please proceed as follows:

- Start Safari.
- Enter the internet address of MailStore Web Access. With the standard installation, it has the following format:

```
http://servername:8461
```

- The MailStore login screen appears (see graphic).
- On the Safari command bar, tap the "+" key.
- Tap on Add to Home Screen.

- A prompt appears. Tap on Add.
- On the iPhone home screen an additional symbol MailStore appears. It can now be used to access the MailStore archive.

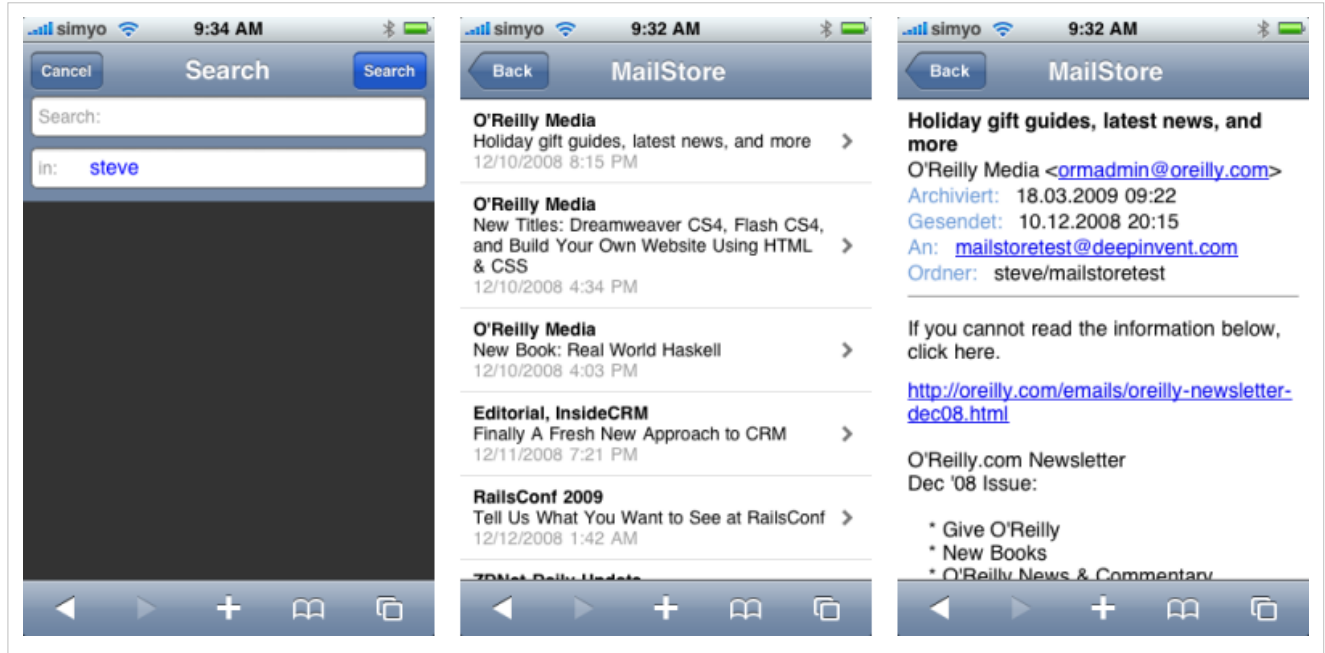# Using MailStore iPhone Client

Start and Login

- Start the iPhone client using the MailStore symbol on the iPhone home screen.
- Enter user name and password.
- Tap on Log on.

Please note: For security reasons, a login using the combination admin / admin is not allowed. Please change the password before logging in as user admin.

Search by Folder Structure

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

Full-Text Search

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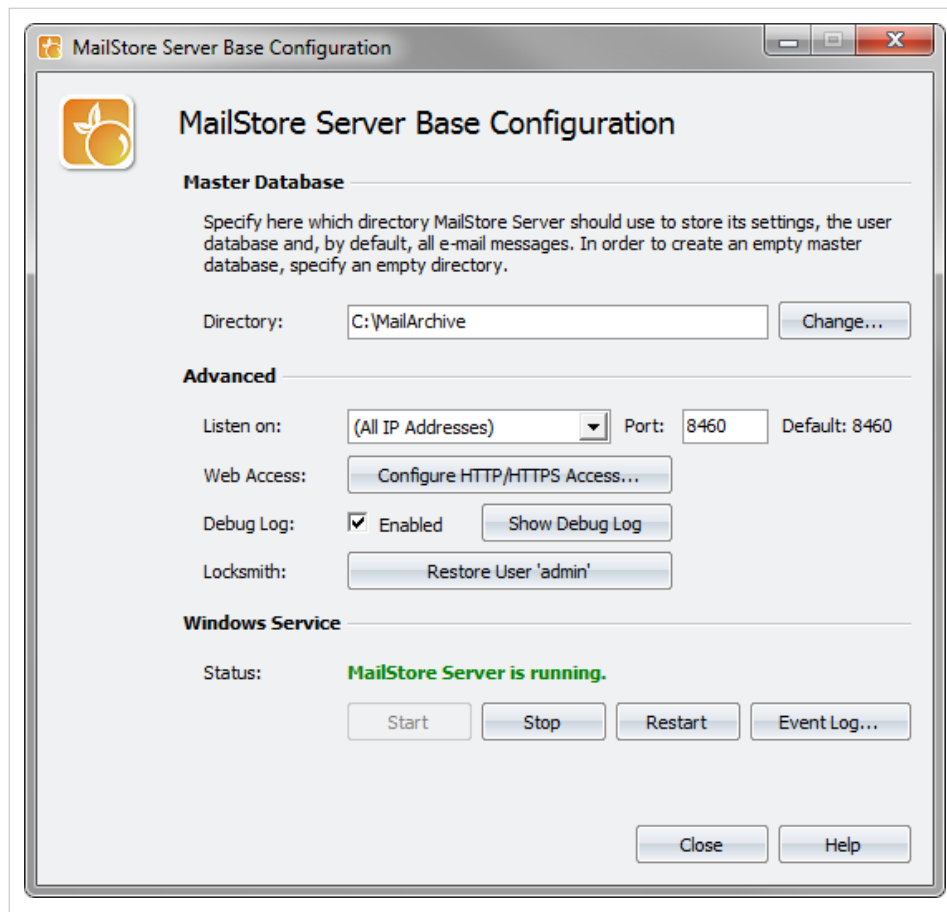- To view an email, simply tap on it.

4

Chapter

Administration

4.1 MailStore Server Base Configuration

MailStore Server Base Configuration

Basic administrative functions are available in the MailStore Server Base Configuration which can be accessed from the MailStore Server program folder in the Window start menu.

The following functions and settings are available:

Master Database Under Directory, select the storage location of an existing master database. If an empty directory is chosen, a new master database is created therein. Additional information about master databases is available in the chapter Structure of the MailStore Database.

IP Address and Port These settings can be adjusted as needed.

Web Access The Web Access configuration dialog will be opened. Additional information is available in the next chapter: MailStore Web Access Configuration.

Debug Log Activate this setting if problems or errors have occurred while operating MailStore Server. After restarting the server service by clicking on *Restart* in the same window, a detailed log file is written. This file can be evaluated by the MailStore support team, for example.

Locksmith With this function, the user admin with the password admin can be restored.

Windows Service With this function, the MailStore Server service can be stopped and restarted. This may become necessary after certain changes to the configuration have been made or before performing a Backup.

MailStore Web Access Configuration

MailStore Web Access is a limited web version of MailStore Client. It provides access to the archived emails using an internet browser; an installation of MailStore Client is not required.
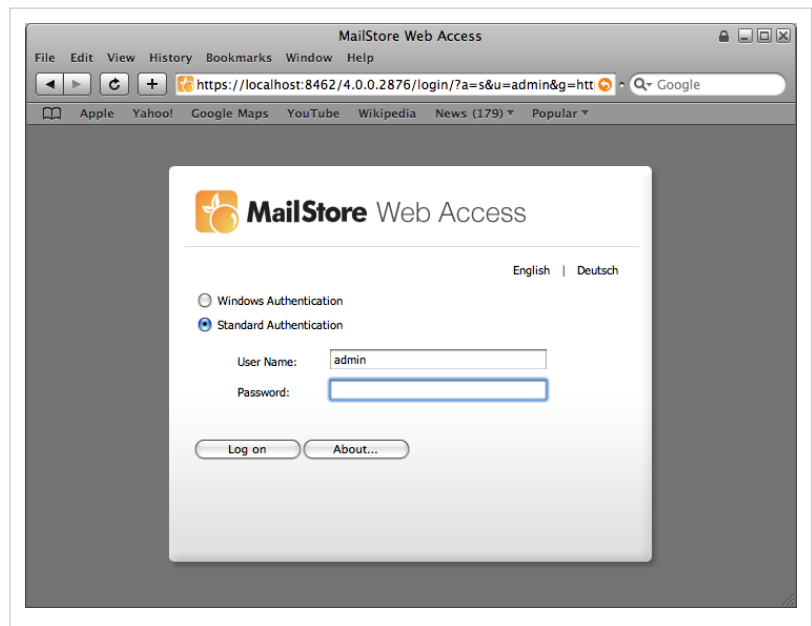
Users can use the following internet addresses to access their archives. A detailed description is available in the chapter Using MailStore Web Access.

- http://servername:8461
- https://servername:8462

Please note: By default, the setup of MailStore Web Access is completed. This chapter only provides information about the settings and how they may be adjusted.

Summary for Experts

- MailStore Web Access requires MailStore Server to run on Windows XP starting with SP2, Windows Vista, or Windows Server 2003 or 2008.
- By default, MailStore Web Access is activated. The preset URLs are http://servername:8461 and https://servername:8462 respectively.
- Using the MailStore Server Base Configuration, MailStore Web Access can be activated and deactivated, and HTTP and HTTPS ports as well as SSL certificates can be specified if a secure connection is required.
- To use the function Open in Microsoft Outlook, MAPI must be installed. If neither Outlook nor Exchange Server 2003 or lower are installed on the server, MAPI must be installed separately using the following download: http://www.mailstore.com/?mapi.
- To use the function Restore to Mailbox, the SMTP access data must be specified once through administrative tools.

System Requirements

In order to be able to use MailStore Web Access, MailStore Server must be installed on one of the following operating systems:

- Microsoft Windows XP Service Pack 2 or higher
- Microsoft Windows Vista
- Microsoft Windows Server 2003
- Microsoft Windows Server 2008
- each including Small Business Edition

Users may use any operating system because MailStore Web Access is accessed using an internet browser. MailStore officially supports the following browsers:

- Microsoft Internet Explorer 6
- Microsoft Internet Explorer 7
- Microsoft Internet Explorer 8
- Mozilla Firefox
- Google Chrome

- Opera
- Apple Safari
- Apple Safari on iPhone or iPod touch (special interface)

Windows authentication (single sign-on; login without entering the password) requires Microsoft Internet Explorer because it is the only browser capable of sending the appropriate information.

Accessing MailStore Web Access

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

- http://servername:8461
- https://servername:8462

Detailed instructions for the web access are available in the chapter Using MailStore Web Access. Instructions for the special iPhone/iPod touch version is available in the chapter Accessing the Archive with iPhone and iPod touch.
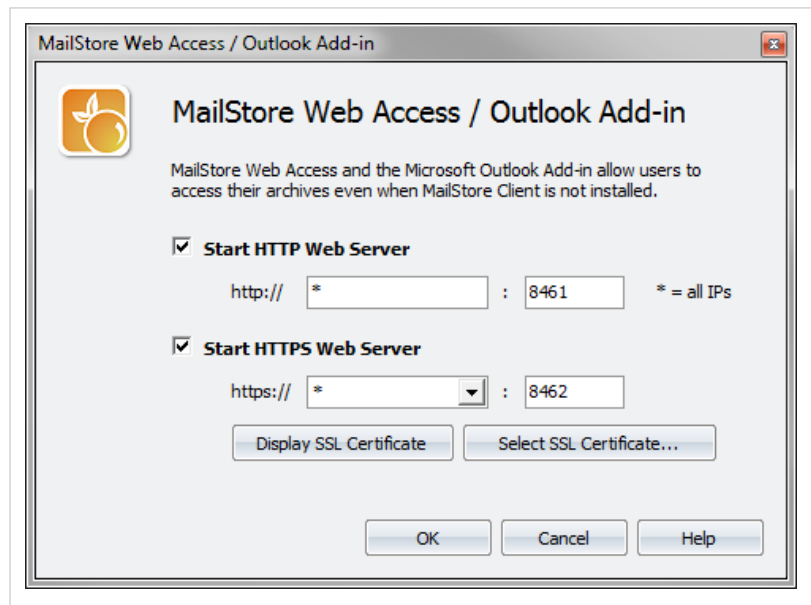
By default, MailStore Web Access is activated. To deactivate or reactivate it, please proceed as follows:

- Start the MailStore Server Base Configuration using the appropriate desktop icon.
- Click on *Configure HTTP/HTTPS Access*.
- Remove/add both checkmarks.
- Click on *OK* to save the settings.
- To apply the settings, restart MailStore Server by clicking on *Restart*.

Specifying Standard Ports for MailStore Web Access

If, besides MailStore Web Access, no other web server is installed (e.g. an IIS website, Microsoft Outlook Web Access or SharePoint), the standard ports HTTP and HTTPS can be specified. This way, users can access MailStore Web Access directly (without having to enter the port numbers) using the addresses http:/ / servername or https:/ / servername. Please proceed as follows:

- Start the MailStore Server Base Configuration using the appropriate desktop icon.
- Click on Configure HTTP/HTTPS Access.
- Specify port 80 as HTTP port (upper right field).
- Specify port 443 as HTTPS port (lower right field).
- Click on *OK* to save the settings.
- To apply the new settings, restart MailStore Server by clicking on *Restart*.

Specifying an SSL Certificate for MailStore Web Access

In order to provide encrypted access (HTTPS) via MailStore Web Access, MailStore Server automatically generates a test certificate with the installation. One disadvantage of using test certificates is that, depending on which internet browser is used, a lot of warning messages are displayed. If you own an official SSL certificate for the server, it can be used for MailStore Web Access as follows:

- Install the certificate into the certificate store (local system).
- Start the MailStore Server Base Configuration using the appropriate desktop icon.
- Click on *Configure HTTP/HTTPS Access*.
- Click on *Select SSL Certificate* and select the certificate that was saved in the certificate store.
- Click on *OK*.
- Click on *OK* once more to save the settings.
- To apply the new settings, restart MailStore Server by clicking on *Restart*.

Setting Up the "Open in Outlook (MSG)" Function

To enable users to use the Open in Outlook function, MAPI must be installed on the machine on which MailStore Server is installed. This is the case whenever one of the following software products is installed:

- Microsoft Outlook 2000
- Microsoft Outlook XP
- Microsoft Outlook 2003
- Microsoft Outlook 2007
- Microsoft Exchange Server 2000
- Microsoft Exchange Server 2003

If none of the above products is installed, or if Microsoft Exchange Server 2007 is installed, which does not include MAPI in its installation, MAPI must be installed separately. Please proceed as follows:

- Download *Microsoft Exchange Server MAPI Client and Collaboration Data Objects* from the Microsoft website. You can enter the following email address which will redirect you to the appropriate Microsoft download page:

```
http://www.mailstore.com/?mapi
```

- Execute the downloaded file *ExchangeMapiCdo.exe*
- Specify any directory, e.g. *C:\MAPI*
- The directory will now contain the following subfolder: *ExchangeMapiCdo.* Open it.
- Execute the installer file *ExchangeMapiCdo.msi.*
- If the message "*Messaging API and Collaboration Data Objects 1.2.1 cannot be installed with Microsoft Outlook / Microsoft Exchange Server.*" appears, MAPI is already installed. No additional installation is needed.
- After the installation, the installation directory (e.g. *C:\MAPI*) can be removed again from the hard drive.

Setting Up the "Restore to Mailbox" Function

To set up the Restore to Mailbox function, please proceed as follows:

- Start MailStore Client and log on as MailStore administrator (*admin*).
- Under *Administrative Tools -> SMTP Settings*, specify the access data of your SMTP server. MailStore Server needs this data in order to be able to deliver the emails which are to be restored to the appropriate user. Detailed instructions are available in section SMTP Settings.
- Make sure that the field Email Address is filled out for every MailStore user. This prevents users from having to enter their email address each time they use the restore function.

4.2 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*.
- Click on *SMTP Settings*.
- The following dialog window appears:

- 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: *smtp.deepinvent.com: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.

Verifying the Settings

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 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.

4.3 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>*.

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 cannot be moved or renamed.
During the archiving process, MailStore adopts the folder structure and the folder names of the source (e.g. Microsoft Outlook).
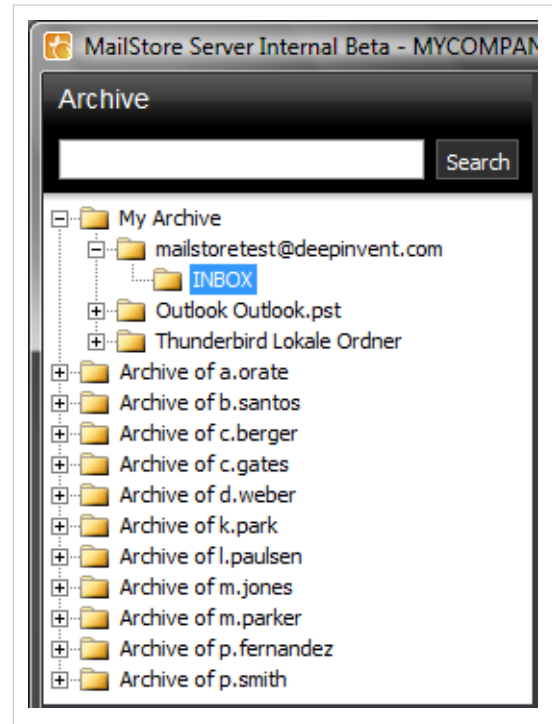
Deleting Emails

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 from the 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. Emails can only be moved within a user archive.

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

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 for 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*.

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

- **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 Administrative Tools in their installation of MailStore Client.

Alternatively, the authentication LDAP (Active Directory) can be used. In this case, users can log on to MailStore using their Active Directory access data. Please refer to chapter MailStore and Active Directory for more information.

- **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 - Windows User Name:** This information is only needed if single sign-on is to be available to the user. In this case, after logging on to Windows, no additional login is required for starting MailStore Client.
- **Integration - Email Addresses:** This information is only needed for the following archiving options: MailStore Proxy Server, Microsoft Exchange Journaling, and archiving multiple Exchange mailboxes synchronously.
- **Integration - 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 chapter 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.

Deleting Users

Click on *Administrative Tools* and then on *Users*. Select the appropriate user 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* and then on *Users*. Select the appropriate user from the list and click on *Properties*.

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.

Archive Email Only users with this privilege can execute archive 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).

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

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.

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).

Add, Modify and Delete Archive Profiles Users with this privilege can create and edit archiving profiles. Otherwise, users can only execute already existing archiving profiles. Additional information about this topic is available in the chapter Working with Archiving Profiles.

Add, Modify and Delete Export Profiles Users with this privilege can create and edit export profiles. Otherwise, users can only execute already existing export profiles.

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.
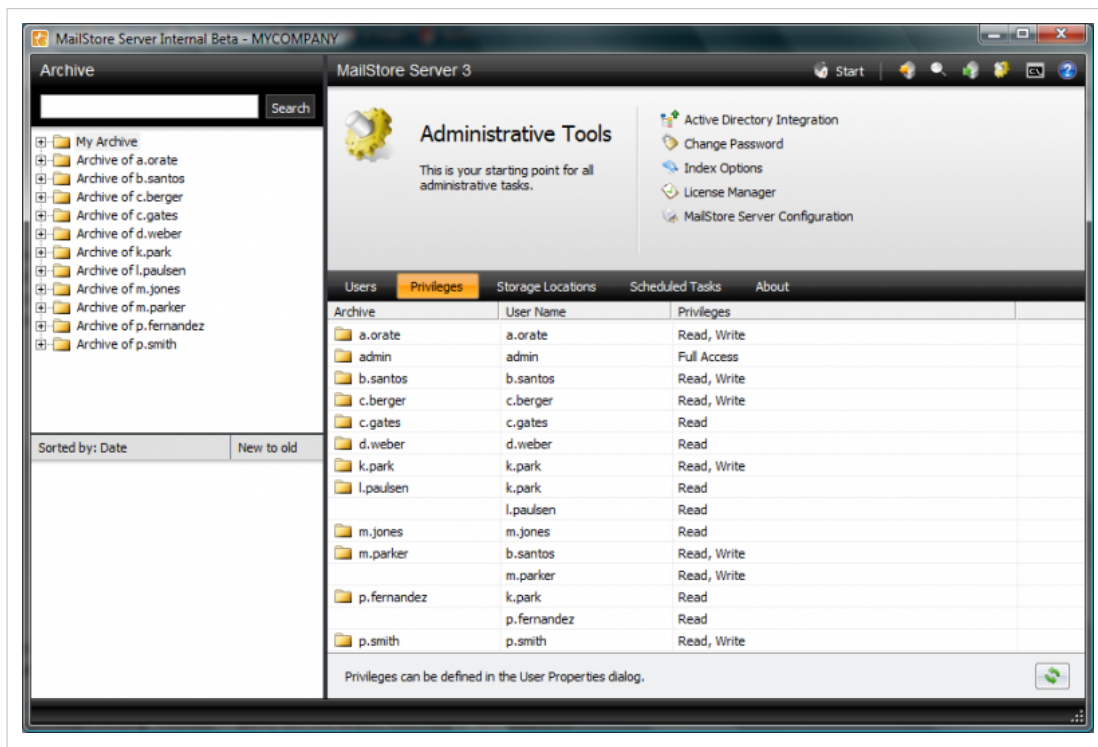The following options are available:

- 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 chapter 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* and then on *Privileges*.

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).

4.4 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.

Accessing Active Directory Integration

Log on to MailStore Client as administrator. Click on *Administrative Tools* and then on *Active Directory Integration*.

Specifying Connection Settings

Before the synchronization can be started, MailStore requires information on how to connect to the Active Directory server. In most cases it should be sufficient to click on *Auto-Detect All Settings*. If successful, the following fields are filled out automatically.
Under Authentication, specify which user identification is to be used to access Active Directory.

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:

- **Automatically create new users in MailStore**
  Clear this checkbox if, during Active Directory synchronization, no new users are to be created in MailStore. In this case, only the data of already existing MailStore users is updated.
- **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**
  Clear this Checkbox and enter a group name, if you want only members of that Active Directory group to be synchronized with you Mailstore Server.

To start, click on *Synchronize Now*.

Click on *Simulate Only* to see what would happen during actual synchronization. Background: Which information is copied?

Synchronization Background Information

If a user who does not yet exist in MailStore is located in Active Directory, the following steps are executed:

- A new MailStore user is created with the login name (SAM account name) of the Active Directory user.
- LDAP Authentication is configured for the new MailStore user. Additional information about this topic is available in section Login with Window Access Data.
- The MailStore user has the following privileges: Logging on to MailStore Server through MailStore Client, archiving new emails for his or her own user archive, browsing his or her archive and viewing the emails contained therein. The user does not have the privilege to delete emails from the archive.
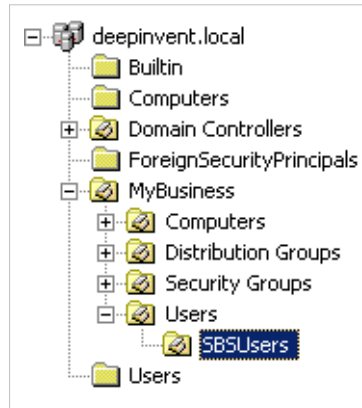
The following steps are executed for all users (new and existing) during synchronization:

- The full name of the MailStore user is replaced with the full name of the Active Directory user.
- All email addresses assigned to the MailStore user are replaced with the email addresses entered in Active Directory:

  - If the user is a Microsoft Exchange user, this concerns all his or her SMTP addresses.
  - If the user is not a Microsoft Exchange user, this concerns the address entered under Email Address.

Synchronizing Small Business Server Users Only

When using Microsoft's Small Business Server, Windows system users are added to MailStore's user management along with the settings that are automatically specified. In most cases, adding Windows system users to MailStore is undesirable.

To limit the synchronization process to the users created with the Small Business Server Assistant, specify the organizational unit SBUsers as base DN:

Simply add the corresponding branches to the left of the automatically recognized base DN:

```
OU=SBSUsers,OU=Users,OU=MyBusiness,DC=deepinvent,DC=local
```

Automating the Synchronization with ADS_SYNC

To automate the synchronization, the command ads-sync can be used in MailStore's Management Shell. Information about how to use and automatically execute management shell commands is available in chapter The MailStore Management Shell.

ads-sync has the following parameters:

```
--server=<ldap-server>
```

Indicates the LDAP-Server (Active Directory) to be contacted

```
--domain=<netbiosdomain>
```

Indicates the NETBIOS domain name (prior to Windows 2000)

```
--user=<username>
```

Indicates the user to be used in the LDAP connection

```
--pass=<password>
```

Indicates the password to be used in the LDAP connection

```
--allow-create
```

Use the allow-create switch if new users are to be created in MailStore. If this switch is not set, only the information of already existing users will be updated.

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 LDAP (Active Directory).

Background Information: How MailStore Proceeds Internally when Using LDAP Authentication

The following section describes how MailStore proceeds during LDAP authentication. This description is addressed to users interested in technical details.

- The user logs on; access data is sent to MailStore Server.
- MailStore Server verifies that this is a user for whom LDAP-Authentication is configured.
- MailStore establishes a secure LDAP connection to the Active Directory Server configured in Active Directory Integration. MailStore uses a user name consisting of the Domain (NetBIOS), also specified under Active Directory Integration, and the MailStore user name (DOMAIN\user).
- If the connection can be opened, MailStore Server searches for the user name (sAMAccountName) under Base DN which is configured in Active Directory Integration. If the name is found, MailStore Server regards the access data as being correct.
- If the LDAP authentication was successful, the user is logged on to MailStore Server as usual.

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.

4.5 Generic LDAP Integration

Enable Generic LDAP Authentication

To activate the generic LDAP Server authentication open the MailStore Management Shell and execute the following command:

```
store-setprop --name="public.ldap.type" --value="LdapGeneric"
```

Now you are able configure your LDAP server settings at **Management | LDAP Integration**.

Please note: In order to change the mode back to Active Directory, please set the value to ActiveDirectory instead of LdapGeneric.

Synchronizing LDAP users

Since MailStore Server 4.5 it is possible to automatically sync user account from a generic LDAP server (e.g. OpenLDAP). For that purpose the MailStore Management command `ldap-sync` is available.

```
ldap-sync --parameter1="value" --parameter2="value"
```

The attr-* values depend on the chosen attribute names of you LDAP server.

```
Parameter        Meaning
================================================================================
server           IP address or hostname of your LDAP server
auth-type        optional: Authentification method (None or SecureSocketsLayer)
user             LDAP DN for username used for synchronization
pass             password used for synchronization
base-dn          LDAP Base-DN, e.g. dc=mycompany,dc=local
filter           optional: LDAP filter string, e.g. (objectclass=posixAccount)
allow-create     no value. If given, new users will be created in MailStore
dry-run          no value. If given, simulate execution.
                       Only valid in conjunction with allow-create
attr-user        LDAP attribute for usernames, e.g. cn or uid
attr-disp        optional: LDAP attribute for displayed name, e.g. displayName
attr-mail        optional: LDAP attribute for SMTP mail address, e.g. mail
```

Example 1: Testing the creation of new users

```
ldap-sync --server="ldapserver.mycompany.local" \
--user="uid=mailstore,dc=mycompany,dc=local" --pass="secret123" \
--base-dn="ou=users,dc=mycompany,dc=local" --allow-create --dry-run
```

Example 2: Create new users in MailStore

```
ldap-sync --server="ldapserver.mycompany.local" \
--user="uid=mailstore,dc=mycompany,dc=local" --pass="secret123" \
--base-dn="ou=users,dc=mycompany,dc=local" --allow-create
```

Example 3: Sync existing users with MailStore

```
ldap-sync --server="ldapserver.mycompany.local" \
--user="uid=mailstore,dc=mycompany,dc=local" --pass="secret123" \
--base-dn="ou=users,dc=mycompany,dc=local" \
--attr-user="cn" --attr-disp="displayName" -attr-mail="mail"
```

4.6 Storage Locations

Structure of the MailStore Database

A MailStore database consists of the following:

The Master Database

Every MailStore Server installation has exactly one master database where general information such as users, email folders and settings are stored. Compared with file groups (see below), the master database has a very small storage space requirement.

The master database is included in the setup of MailStore Server and is installed and set up automatically. Through the MailStore Server Configuration, the storage location of the master database can be determined and changed, if desired. Please keep in mind that the database has to be stored on a local drive; network drives on other computers are not supported.

The master database is integrated in MailStore Server (embedded database) and can be run concurrently with other database systems.

File Groups

The actual data - the archived emails - is stored in file groups. During the initial installation of MailStore Server, a first file group is created automatically. To distribute the archive among several storage locations, any number of additional file groups can be added at any time. In addition to allowing for flexible management of the storage space, the creation of new file groups has a positive influence on the performance of the archive.

A file group consists of:

Database - The database stores a list of the individual emails, including header information, as well as a list of indexes.

Content - The actual email content is stored in .DAT files. Generally, these files have a manageable size of approximately 8 MB each, but individual files can vary considerably in size.

Index - One index per user is created, which makes extremely fast searches possible within MailStore. In addition, indexes are used for navigation within the tree structure.

More information about this topic is available in the following chapter: Managing Storage Locations.
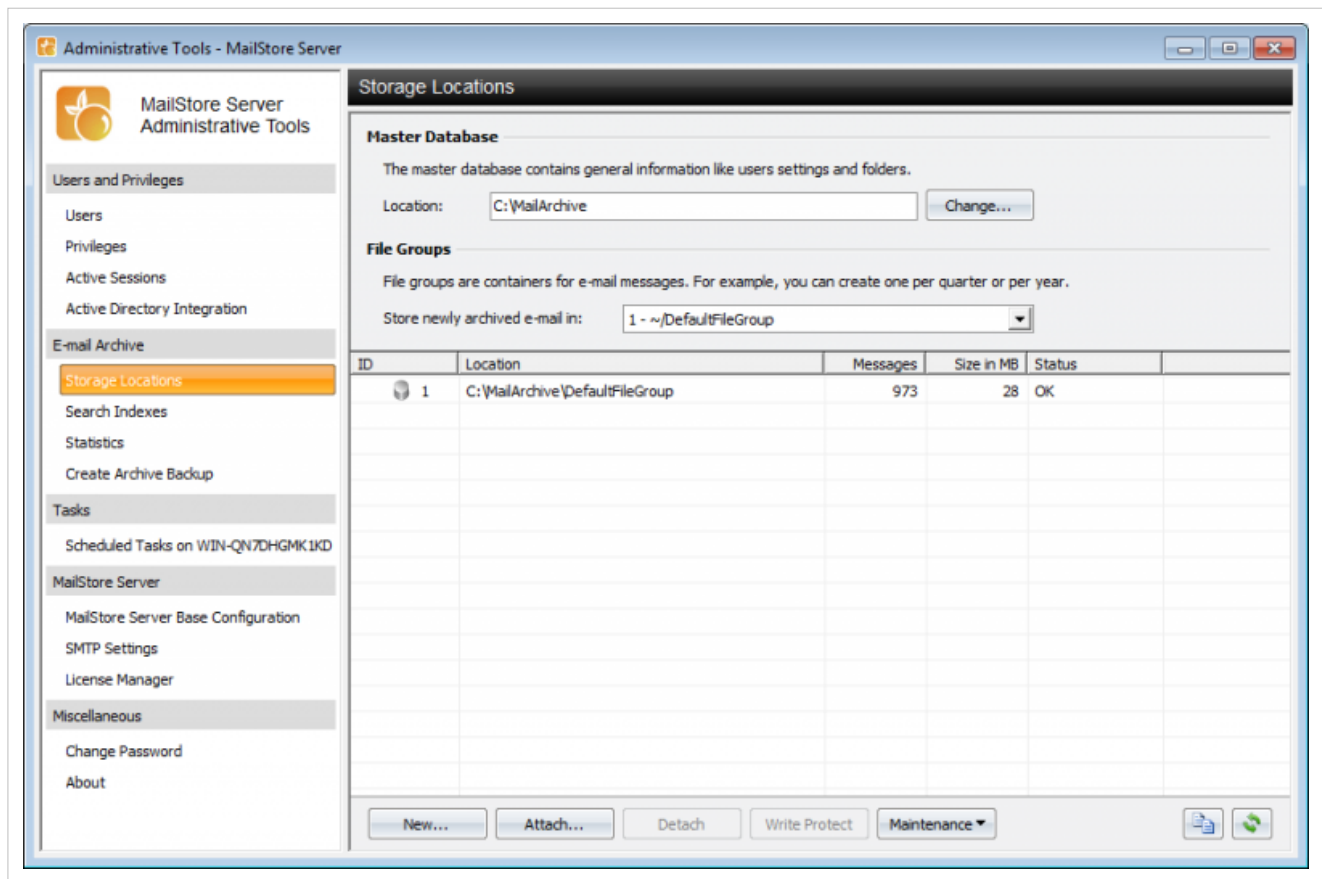
Managing Storage Locations

In Storage Locations Management, the location of the master database can be viewed and the file groups of the archive can be managed. The file groups contain the actual data, the archived emails; by creating new file groups the complete archive can be distributed among different storage locations (e.g. different hard drives); existing file groups can always be moved at a later time.

Learn more about the master database, file groups and the differences between these types of storage in the previous chapter: Structure of the MailStore Database.

Accessing Storage Locations Management

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

Changing the Storage Location of the Master Database

Here, the storage location of the master database can only be viewed. By clicking on *Change*, only a summary of the steps (as described below) required to change the location is displayed:

Start the MailStore Server Base Configuration which is located in the MailStore Server program folder in the Windows Start menu (on the MailStore Server PC). Select the storage location of an existing master database (e.g. to restore a backup). If an empty directory is chosen, a new master database will be created. After each change, restart the MailStore Server Windows service by clicking on *Restart* in the same window.

Store Newly Archived Email In...

Below File groups, there is the option to Store Newly Archived Emails In. Select the file group into which new emails are to be archived. Only file groups that are not write-protected can be chosen; their status can be changed at runtime.

Creating a New File Group

To create a new file group, click on *New* in the menu bar at the bottom of the window. Select an empty directory and click on *OK*.

Write-Protecting a File Group

Select a file group from the list and, in the menu bar on the bottom of the window, click on Write Protect.

The emails stored in a write-protected file group remain fully available to MailStore users and can be located through the folder structure or by running a search. However, neither can new emails be archived into this file group nor can existing ones be deleted from it. Please keep in mind that the file system still requires write access to the file group.

After a file group has been write-protected, it is marked in the list with a lock symbol next to it.

To remove the write-protection, select the appropriate file group and click on Write Protect again.

Attaching and Detaching File Groups

Existing file groups can be detached from the archive: Simply select a file group from the list and click on Detach in the menu bar on the bottom of the window. Once detached, the file group and the emails contained therein are no longer available in the archive. This feature can be used for taking old parts of the archive out of storage, for example.

A detached file group can be reattached to the archive at any time: by clicking Attach, the file group becomes fully available again. Please note: Only file groups which originated from the same archive can be attached; file groups from external archives cannot be integrated.

Moving File Groups

To move a file group, please proceed as follows:
- Detach the file group to be moved: Select the appropriate group from the list and click on *Detach*.
- Use Windows Explorer to move the file group to a different directory on any local(!) network.
- Reattach the file group: Click on *Attach* and select the new storage location of the file group. Click on *OK* to confirm.

Maintenance of the Storage Locations

The following features are available through Maintenance in the menu bar on the bottom of the window:
- **Master Database - Cleanup (FB Sweep)**
  Simple cleanup of the master database.
- **Master Database - Rebuild (FB Backup+Restore)**
  Complete rebuilding of the master database (e.g. if structural problems occur).
- **File Group - Free Unused Disk Space**
- **File Group - Check Data Integrity**
- **File Group - Cleanup (FB Sweep)**
  Simple cleanup of a file group database.
- **File Group - Rebuild (FB Backup+Restore)**
  Complete rebuilding of a file group database (e.g. if structural problems occur).
- **File Group - Recalculate Statistics of all File Groups**

Creating File Groups Automatically

MailStore Server can be configured to create and activate new file groups in regular intervals, e.g. monthly or quarterly. Please proceed as follows:

- Start MailStore Client and log on as MailStore administrator (admin).
- Click on Management Shell.
- Enter the following:

```
schedule filegroup-create-auto --basedir="D:\FileGroups"
```

Instead of "D:\FileGroups" enter the directory in which new file groups are to be created. File groups, including subdirectories, that are created automatically by MailStore are named using the format Year-Month, for example 2009-04.

- A dialog window appears.
- Click on *Other Trigger*.
- Click on *OK*.
- In the window *Schedule* click on *New*.
- Under *Schedule Task* select *Monthly*.
- If new file groups are to be created quarterly, click on *Schedule Task Monthly* and select *only January, April, July and October*, for example.
- Click on *OK* and follow the directions on the screen.

Storage Strategies

Performance: For every 500,000 emails, a new file group should be created. This ensures a consistently high access speed when searching emails.

One-time backup: Older file groups can be write-protected (see above). These file groups remain available to users (with the exception of moving or deleting emails) but do no longer have to be backed up constantly. Write-protected file groups can be kept on cost-efficient storage media without any risks.

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
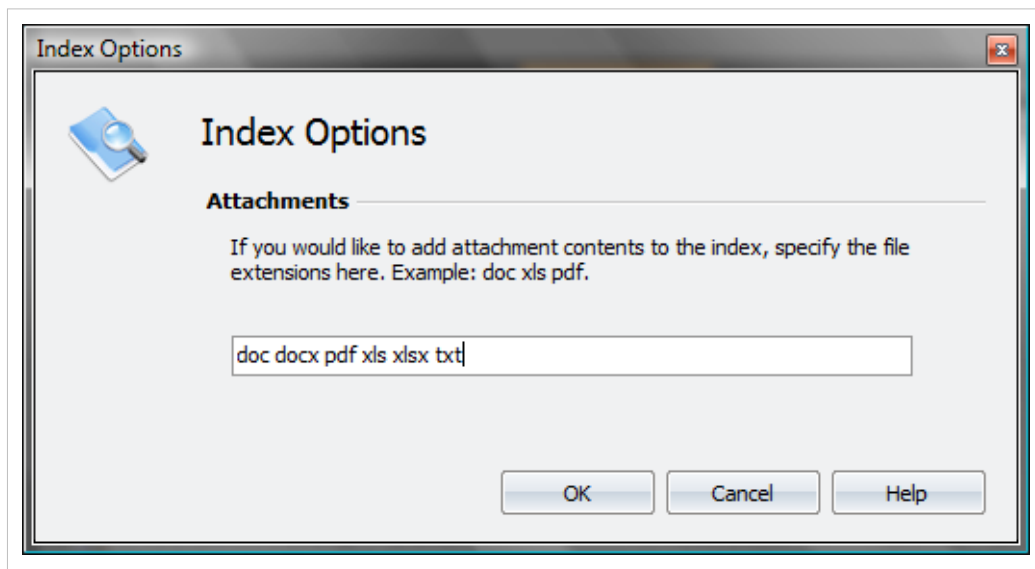- because of changes to the index configuration (see below).

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*.
- Open the page *Search Indexes*.
- Click on *Options*.
- 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.

If, for example, Microsoft Office 2007 is installed, the corresponding IFilter drivers for Mirosoft Office documents are installed as well. IFilter drivers can also be installed independently from their applications. To learn more, please enter IFilter into any search engine.

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.
- Open the page 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.

Frequently Asked Questions Regarding Search Indexes

Why are the contents of file attachments not indexed in the standard configuration?

Indexing the contents of file attachments slows down the archiving process and increases the size of the search indexes significantly. Because of this, the contents of file attachments are not indexed in the standard configuration.

Everything was set up correctly but I still cannot find some text within the archived file attachments. What could be the reason?

First, this may be because, due to performance and stability, MailStore Server only indexes the first 10,000 Words (not characters!) of file attachments. In most cases, keywords are contained within the first 10,000 Words. If an email has multiple file attachments, at most 10,000 words are indexed overall. Of course, the file attachments themselves are archived in their entirety and can be searched in full with the appropriate application.
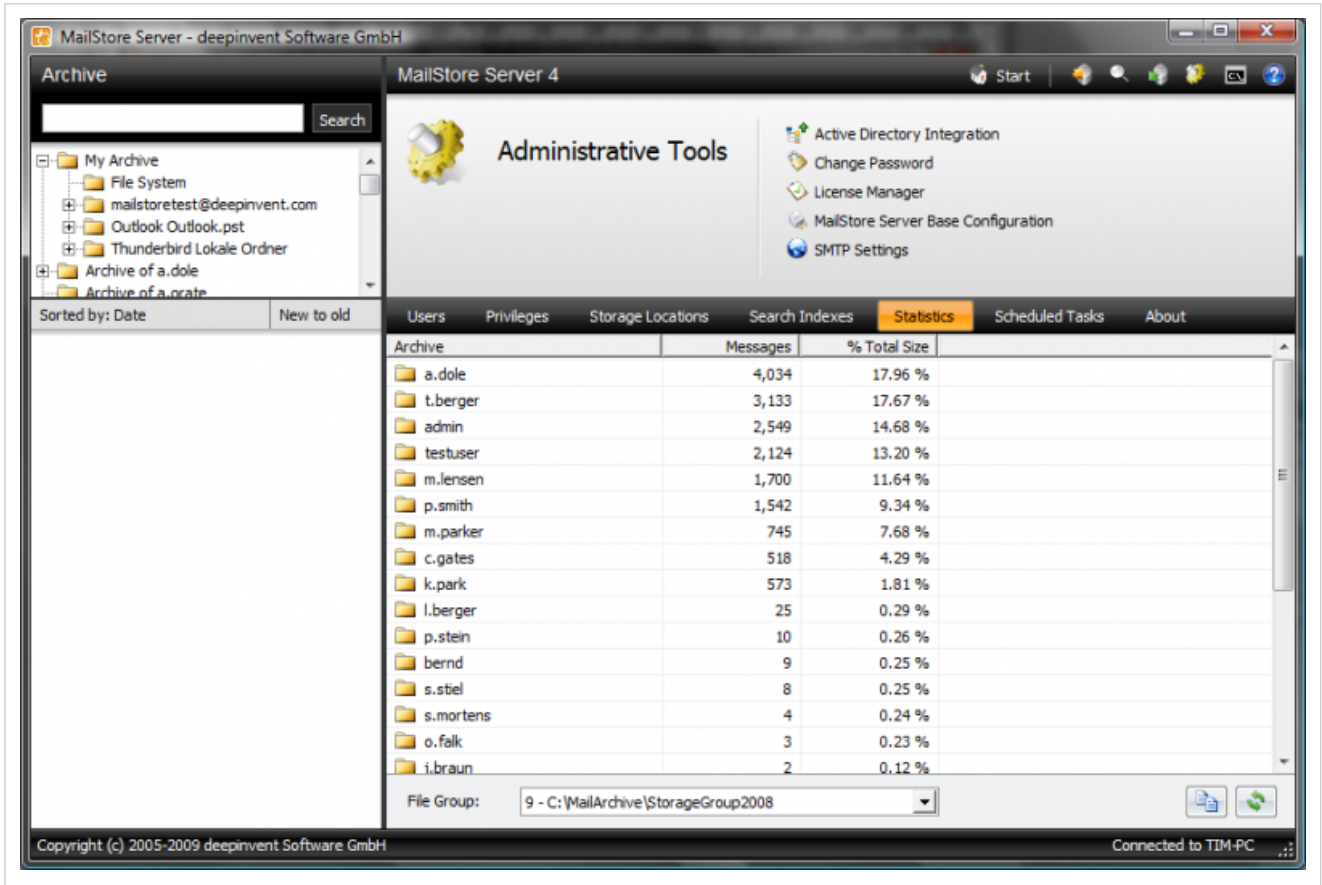
Another reason could be that MailStore Server was unable to read the corresponding file because no IFilter driver was available or because the file was DRM protected (copy protection), for example.

In the Status column, *OK* (Compatibility mode) is displayed. What should be done?

The search index was created with an older version of MailStore Server and has an internal structure different from indexes which were built using the current version. No action is required. However, these indexes can be upgraded by rebuilding them. This significantly increases indexing and search performance.
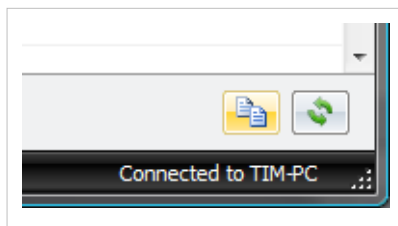
4.7 Archive Statistics

To view the statistics, log on to MailStore Client as administrator. Click on *Administrative Tools* and and then on *Statistics*. The statistics always refer to a specific file group which can be selected in the lower area of the application window.

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.
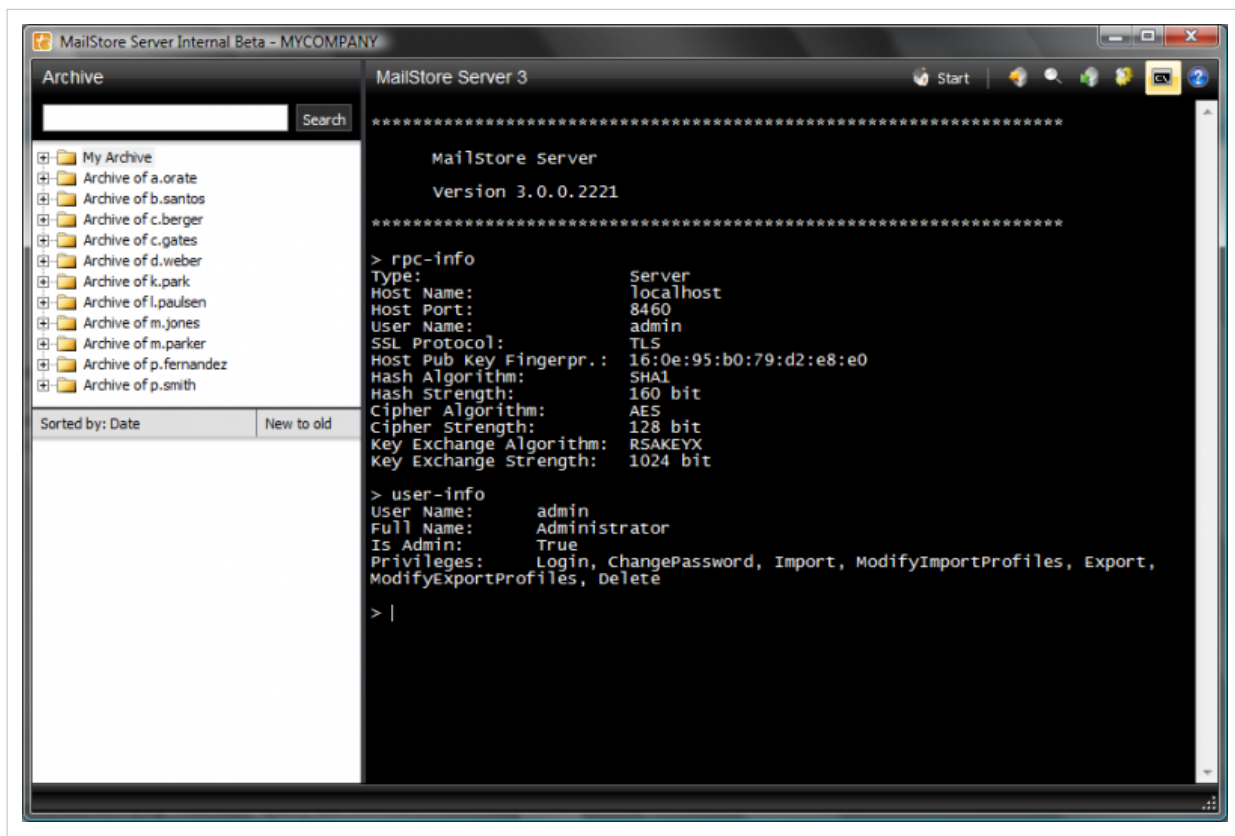
4.8 MailStore Server Management Shell

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.

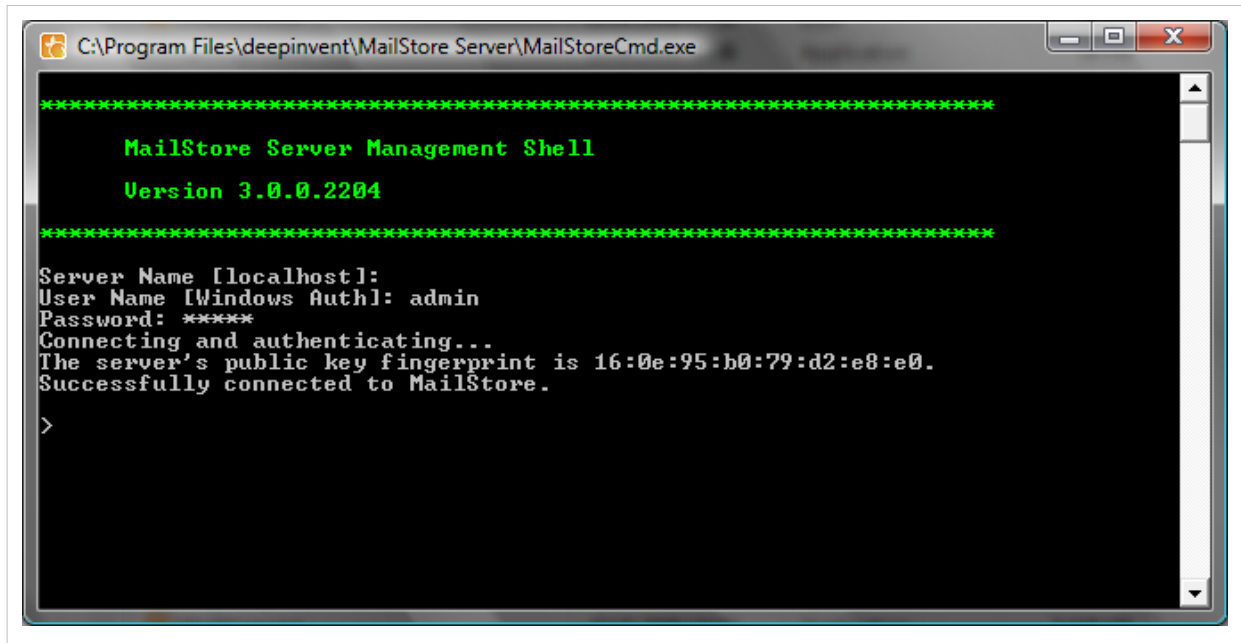## Option 1: Starting the Management Shell in MailStore Client

The management shell can be started directly from MailStore: Log on to MailStore Client as administrator and click on *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 exit the management shell.

Using MailStoreCmd.exe in Non-Interactive Mode

In non-interactive mode, the management shell logs on with the access data passed, executes the command passed, and automatically terminates upon execution. If the login and the execution of the command were successful, the exit code (ERRORLEVEL) of the process is set to 0 (zero), otherwise it is set to any value other than 0.

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

```
clear
```

Clears the texts currently displayed improving visibility.

```
help
```

Displays a list of all available commands and their parameters.

```
debuglog-enable, debuglog-browse, debuglog-disable
```

Activates, displays or deactivates the global debug protocol (within computer scope).

```
export-list
```

Displays a list of all existing export profiles (ID and profile name).

```
export-execute [--name=<profilename>] [--id=<profileid>] [--verbose]
```

Executes the export profile with the name or the ID specified (only one of these parameters is required). The parameter --verbose activates a detailed status display on the console.

```
import-list [--user=<username>]
```

Displays a list of all existing archiving profiles (ID and profile name).

```
import-execute [--name=<profilename>] [--id=<profileid>] [--verbose] [--user=<username>]
```

Executes the archiving profile with the name or the ID specified (only one of these parameters is required). The parameter --verbose activates a detailed status display on the console.

```
filegroup-attach --directory=<directory>
```

With this command a file group, which has been removed from MailStore using filegroup-detach, can be reattached to MailStore.

```
filegroup-detach --gid=<filegroupid>
```

In Administrative Tools under Storage Locations, the status of a file group can be set to inactivate. The file group (along with the emails it contains) is no longer available until it is reactivated but remains in the list of existing file groups. By using the command filegroup-detach, a file group is completely removed from MailStore but physically remains on the hard drive.

```
process-info
```

Provides information about the MailStore-Windows process.

```
rpc-info
```

Provides information about the connection with the MailStore Server process.

```
statistics-refresh
```

Recalculates all statistics.

```
maintain-db [--gid=<filegroupid>] --command=[backup-restore|sweep]
```

```
maintain-ix --gid=<filegroupid> --command=[list|optimize|reload|verify|] [--ixid=<indexid>]
```

```
folder-reindex [--folder=<userfolder>] --gid=<filegroupid>
```

```
filegroup-verify --gid=<filegroupid>
```

Information about these commands can be found in the chapter Maintenance and Repair.