



presented by 

inboxx for Microsoft® Exchange

Product description

Version 3.3

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inboxx
e-mail. no leak. no loss.

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1 Introduction

inboxx is used for long-term secure archiving of Exchange documents originating from Exchange servers or PST files. Implementing inboxx significantly reduces the volume of data that Exchange Server needs to manage, and after installation data volumes increase at a noticeably slower rate.

When you reduce the amount of space required this makes various improvements possible:

- ✘ You can postpone investment in Exchange Server hardware, often by years, such as is usually required due to increasing space requirements. Often you can even avoid any additional investment.
- ✘ Backup of Exchange server data becomes faster or possible thanks to the reduced quantities of data.
- ✘ Noticeably less administration effort required by users and system administrators, thanks to restrictions on mailbox size, for example, when deleting and reorganising e-mails.

Long-term, secure storage of Exchange documents means that

- ✘ you comply with legal stipulations, which promotes traceability and documentation of internal company processes (increasingly e-mail traffic also includes information that is subject to legal obligations for data retention).
- ✘ all archived documents remain available if you lose an Exchange Server installation or move to another system.
- ✘ searches can also take into account content from data attachments.

Archiving all incoming and outgoing e-mails enables

- ✘ complete traceability of e-mail communication across all mailboxes.
- ✘ you to eliminate data losses due to mistaken or deliberate deletion of e-mails by a user.
- ✘ searches across all existing e-mails for all users with full access to Exchange Journal mailboxes.

When transferring content from PST files, companies can

- ✘ securely maintain all essential information.
- ✘ for the first time comply with any obligations to produce supporting documents, since PST files are often stored unsecure on client computers.
- ✘ create space on file servers where PST files are stored, thus avoiding additional investment.

The applications of inboxx are not just restricted to e-mails, but also cover Exchange documents stored in public Exchange folders. Documents are stored in revision-safe form on a GFT hyparchiv ArchiveServer. You choose your storage technology from the entire range of products supported by ArchiveServer.

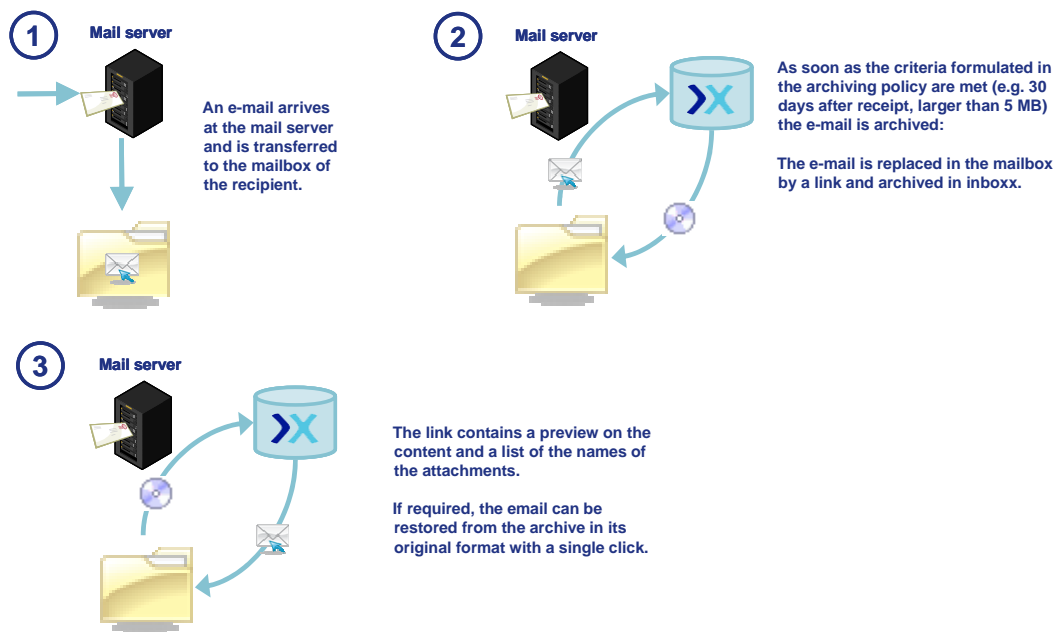
On the client side, the solution is embedded in Outlook and Outlook Web Access, making it incredibly easy to use. The solution's server components function according to centrally defined rules and work through user requests.

Installing this system is very easy and only has to be performed on the server side; the existing Exchange infrastructure is used to distribute software components to the relevant workstations.

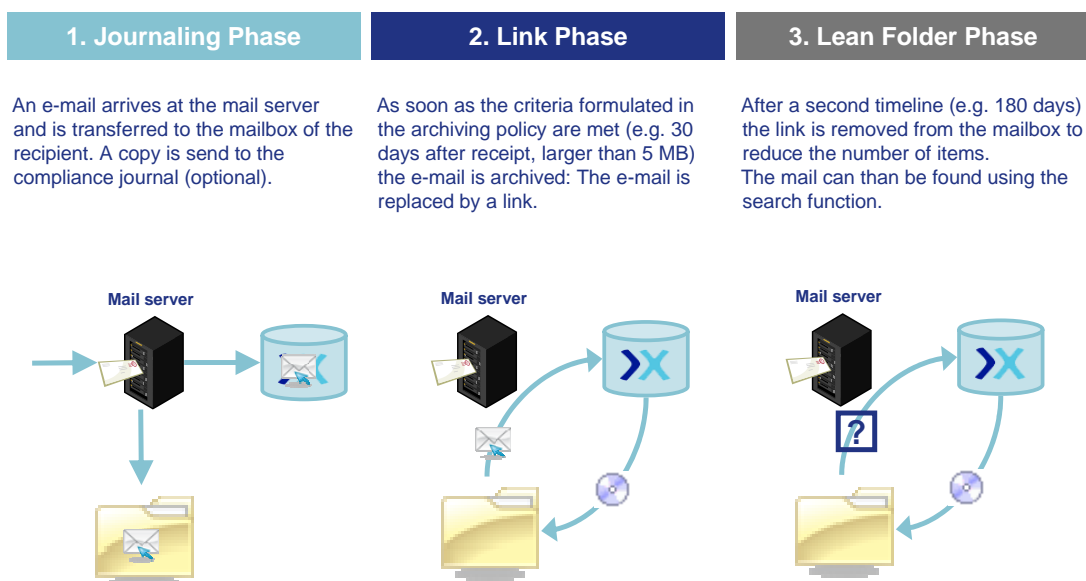
1.1 Functions

1.1.1 Basic Principle

The following illustration describes the basic functional principle of inboxx.



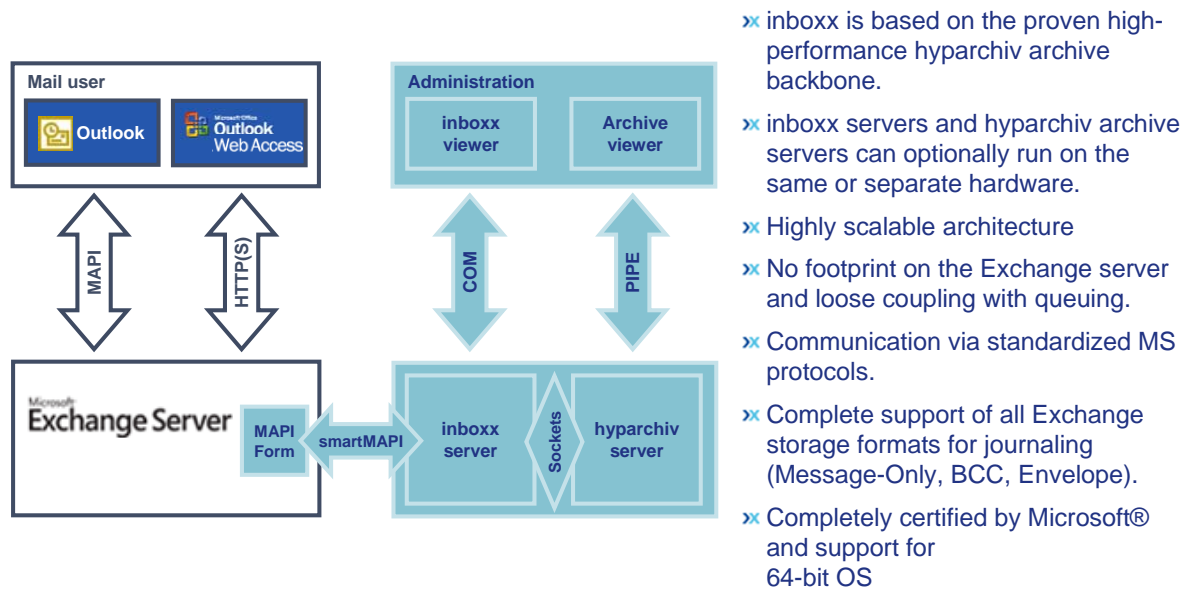
inboxx features a Three Phase Archiving approach to ensure minimal storage usage, full compliance and maximal user comfort.



1.1.2 Architecture

inboxx consists of the inboxx module as server and one client component that is automatically distributed via Microsoft Exchange Server.

Communication between the Exchange client and inboxx, such as document requests or searches, takes place via Microsoft Exchange Server.



inboxx stores documents in a special department of the GFT hyparchiv ArchiveServer. The ArchiveServer does not have to be operated as a dedicated server but can also be used for other archiving applications.

1.1.3 Archiving rules and modes

Rules for archiving Exchange documents are defined centrally using the inboxx server. These rules utilise Exchange document attributes to define whether and how these documents should be archived.

The attributes that can be used in a rule are as follows

- ✕ Minimum age
- ✕ Minimum size
- ✕ Maximum number of recipients
- ✕ A list containing the names of source folders in the mailbox.

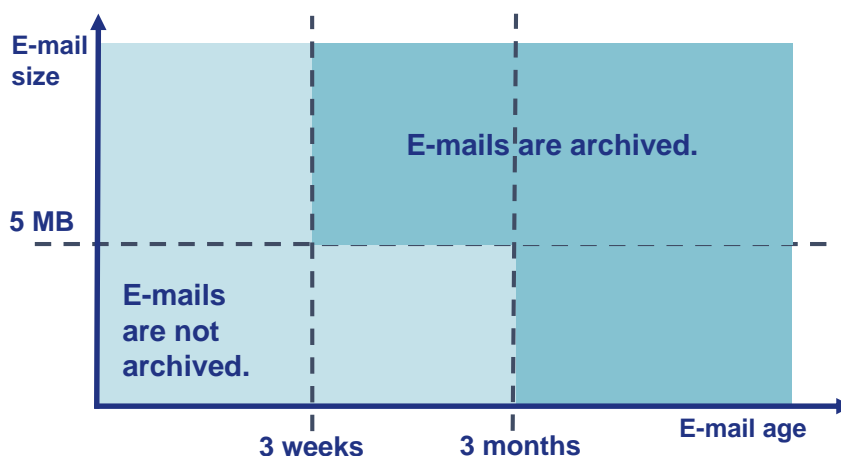
You can enter any of the standard folders as source folder, such as "Inbox", "Calendar" etc. You can also use a name string such as "My*" to describe other folders that should be included or expressly excluded.

When a folder is processed as part of server-side archiving then the system also processes all of its subfolders.

With inboxx you can easily create powerful archiving guidelines by combining various rules.

Examples:

- E-mails are archived after 3 months.
- E-mails larger than 5 MB are archived after three weeks.



These rules are

...



user-specific



specific to a group template



generally valid

By defining rules administrators can use and customize the following archiving modes. In addition to the central journaling for compliance, inboxx offers various user specific modes which can be administered centrally or local. These modes can be combined.

Compliance Journaling Mode	As soon as an e-mail reaches the mail server it is added to the journal.
Mailbox Mode	Mails of specific mail users are archived.
Condition Mode	E-mails are archived based on conditions like age, size, categories etc.
Folder Mode	E-mails within specific folders are archived.
Manually Mode	Users can archive e-mails at anytime within the usual e-mail client.

1.1.4 Archiving documents

After successfully archiving an Exchange document in the GFT *hyparchiv* ArchiveServer you can define whether inboxx

- » should automatically delete the original, or
- » replace it with a link document (see below).

For both variants the system of course guarantees that you can restore any archived documents.

1.1.5 Links

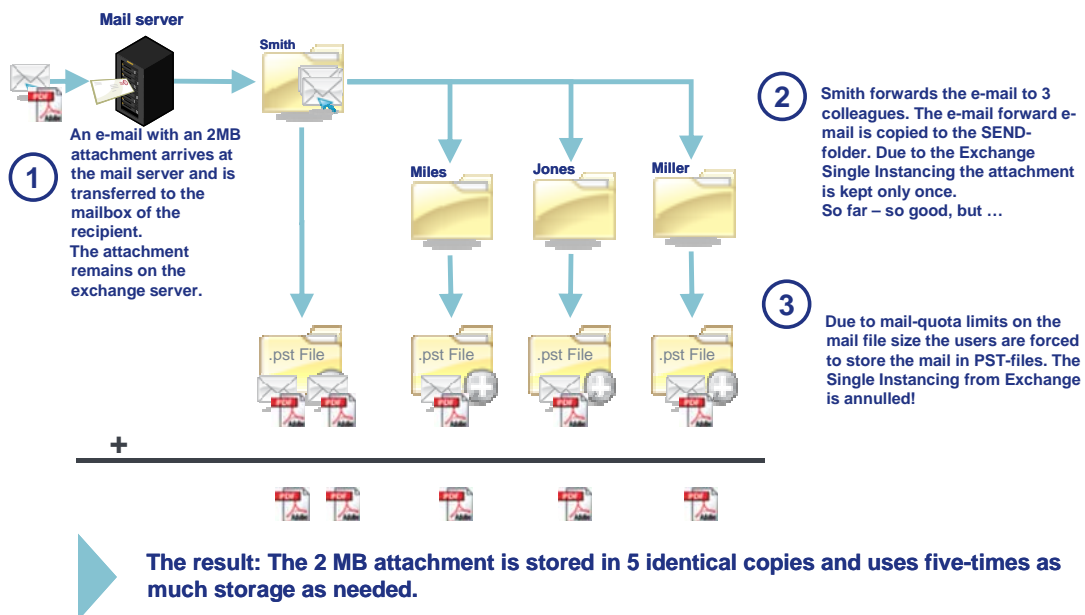
A link is a special type of Exchange document and represents the short form of an archived original. It contains information such as **From**, **To**, **Cc**, **Bcc**, **Received** and **Subject** as well as the body of the original message text, whose length is defined by an administrator. You use links to restore originals immediately with a single click.

If required, links that reach a specified age can be automatically removed. Administrators can define age limits in months, with reference to the receipt date or archive date. Once a link has been deleted it can be found and restored via a search.

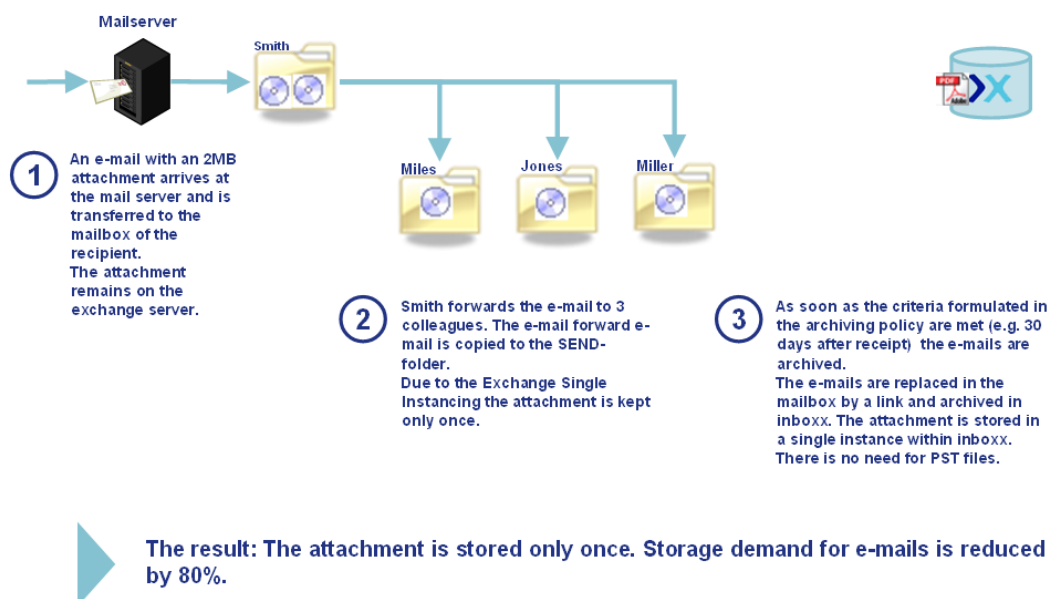
1.1.6 Real single-instance method

Sending an e-mail to multiple recipients and forwarding e-mails creates content redundancies. E-mail file attachments in particular rapidly give rise to huge quantities of data.

Unfortunately, Exchange build-in single-instancing approach falls short due the need to archive e-mails in the inappropriate pst-file format. The following picture illustrates this:



To guarantee optimum utilisation of storage space, inboxx archives file attachments with the same content once only, using the single-instance method. All archived Exchange documents containing the attachment now refer to one single instance of the attachment.

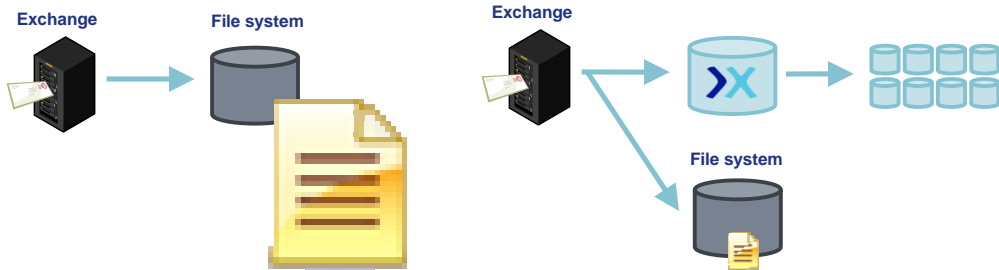


Using journal mailbox archiving means e-mails are also archived using the single-instance method.

1.1.7 Optimized backup and restore

inboxx optimizes the backup and restore of Exchange systems.

Exchange without inboxx	Exchange with inboxx
<ul style="list-style-type: none"> ✘ The Exchange system always generates new transaction files, writing them to a changing database that must always be backed up in its entirety. ✘ Restores are always a very time-consuming process due to the complexity and quantities of data. 	<ul style="list-style-type: none"> ✘ Inboxx stores the data in volumes. These are files that grow to a defined size and are then changed to read-only. In this state they are only backed up once. ✘ Transferring data to inboxx drastically reduces the amount of data for restores, making them faster and simpler. ✘ Inboxx can be seamlessly integrated in the existing backup infrastructure and optimizes it.



1.1.8 Full text database

During archiving the system indexes the content of the fields **From, To, Cc, Bcc, Subject, Message, and Received**.

inboxx supports full text searches in archived documents. It also takes into account all file attachment content.

One special feature of inboxx is the optical character recognition (OCR) option, which enables you to include file attachments in picture format (such as BMP, JPG, TIF) in the full text index.

1.1.9 Log function

User activities such as searches and reloading can be logged. To this end you can define a mailbox folder where, on the server side, an e-mail is created for each user activity that describes the activity in detail.

You can define a retention period for entries in this folder, after which time the log entries are deleted.

1.1.10 Journaling

inboxx supports archiving of all e-mails using the journaling function in Exchange 2000 and 2003. For each mailbox database, this creates a copy in the central archive mailbox of all incoming and outgoing e-mails. inboxx single-instancing ensures here also only a single copy.

inboxx archives e-mails from this Exchange archive mailbox so that the current status of all incoming and outgoing e-mails is securely archived.

Exchange currently offers three options for storing e-mails in the Exchange archive mailbox:

- » Message-Only
- » BCC
- » Envelope

inboxx supports all three variants. If you use Envelope journaling you can archive Envelope e-mails generated by Exchange and the original e-mails separately, so that you can also perform searches taking into account data in the Envelope e-mails.

E-mails that have already been archived into an archive mailbox as part of journaling are stored during further archiving in user mailboxes according to the single-instance method. inboxx carries out changes made to e-mails or adds tracking information to the archive by re-archiving the relevant e-mail after it has been changed.

1.1.11 Archiving PST files

PST files give users the option of storing Exchange documents in the file system instead of on the Exchange server. In many companies PST files are a major problem for various reasons:

- » Locally storing Exchange documents in PST files requires considerably more storage space than central storage on an Exchange server. This is due to the fact that, for example, the Exchange server only physically stores file attachments once where they are identical and used by more than one user (single-instance method). When generating a PST file these attachments are stored once for each PST file, increasing time and costs involved in data storage.
- » Storing existing Exchange documents decentralised or locally often makes it impossible to save data.

inboxx can help here by enabling document archiving from PST files without importing the documents as Exchange server data beforehand. After archiving, all documents from a user's PST files can be searched and reloaded from the user's server mailbox. Additionally, reloading Exchange documents to the original folders means you can also restore folder hierarchies from the PST files to the mailbox.

1.1.12 Documents in public folders

inboxx also supports archiving of Exchange documents in public folders. You handle documents in public folders in the same way as documents in mailboxes, although there is only one Exchange form available for searches, which has been adapted to the structure of public documents.

1.1.13 Access rights and data protection

Users only have access to documents that originate from their own Exchange mailboxes, or for which another user has sent them a link document. All user accesses to archived documents are executed exclusively by the inboxx server process, which monitors compliance with access rights. At the same time this ensures that, in an emergency, appropriately authorised users can access other people's documents, for example, if colleagues have left the company.

2 User view

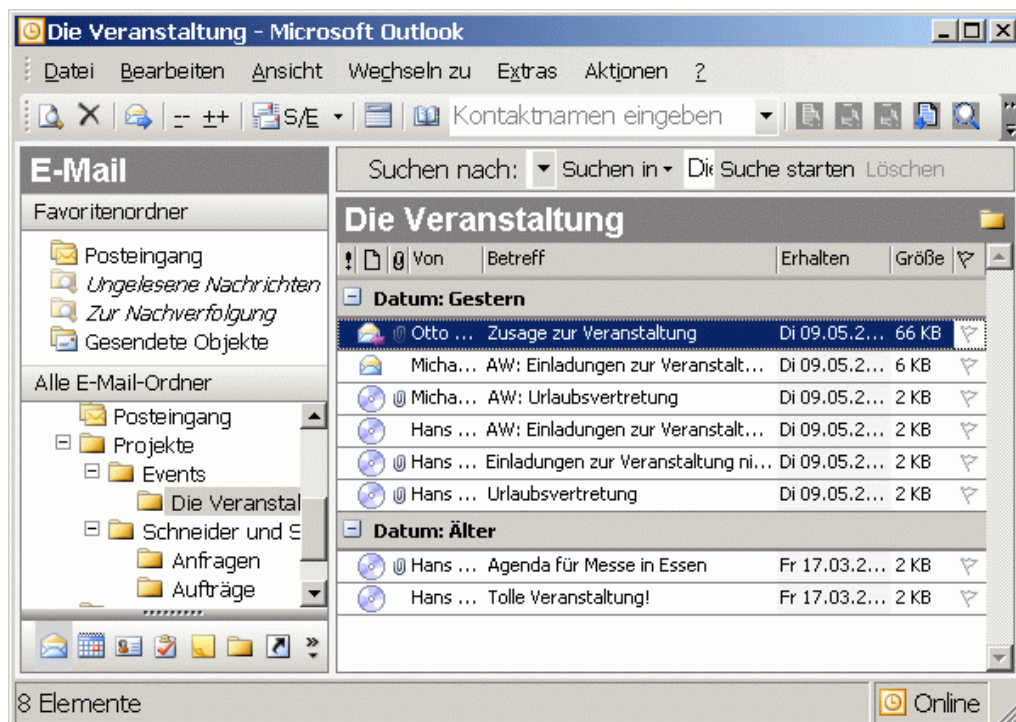
2.1 Simple operation

inboxx is simple for users to operate because it is embedded in Outlook and Outlook Web Access.

2.1.1 Outlook Windows Client

The functions of inboxx can be directly accessed via the toolbar. Thus for example the individual archival of exchange documents, the restoration of archived documents or searches are available at the press of a button.

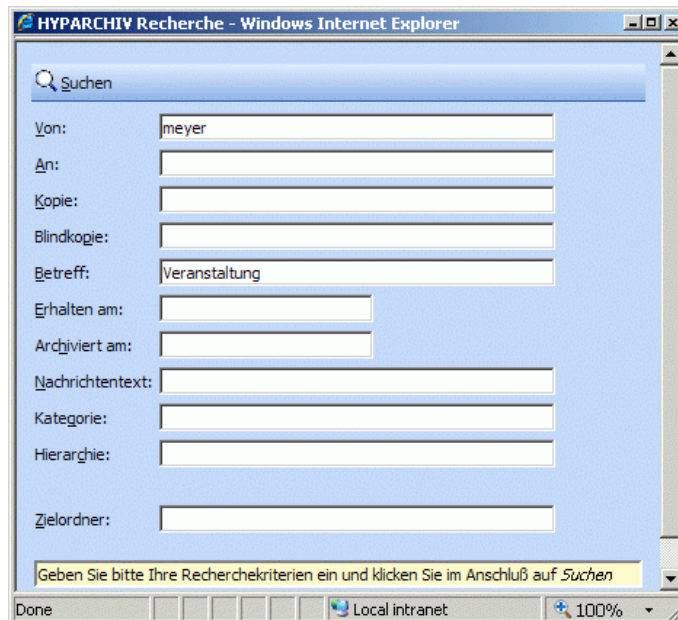
Securely archived documents are replaced by a link and are immediately identifiable by a distinctive symbol.



The user soon finds his way around with the solution integrated in Outlook with its familiar operation, and the costs for training, familiarisation and user support are very reasonable.

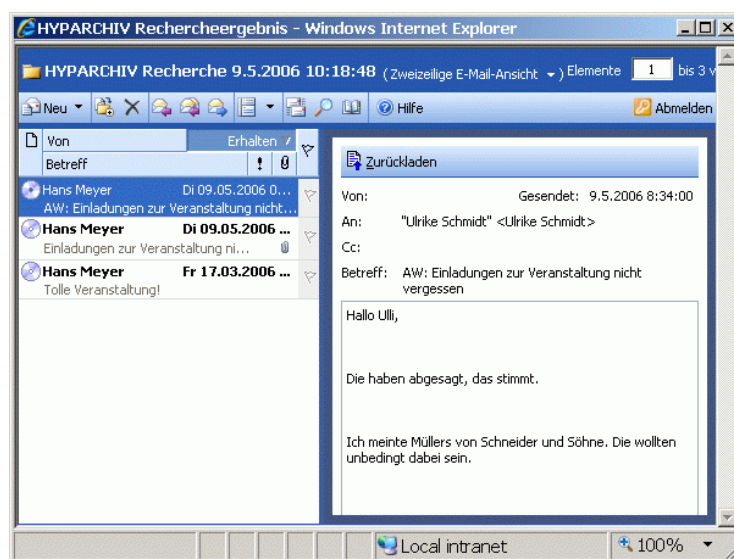
2.1.2 Outlook Web Access

Exchange documents can be searched and reloaded in Outlook Web Access. The following screenshot shows the search screen in a browser window:



After a search is launched, inboxx creates a result folder and fills this with one entry per document found. When this has been done, the system leads the user to this results folder and displays the latter in the browser.

The following screenshot show a search result together with a preview of a linking document. The user can reload the associated original document from the archive with the Reload button.



The solution is designed so that the user does not experience any delays or blocks in Outlook or in Outlook Web Access.

inboxx asynchronously processes user actions in the integrated e-mail clients. This means that the user can immediately continue working after launching a search that takes somewhat longer, for example. Even reloading an e-mail from an optical library or from tape, does not block the user. As soon as the result of the action is available, the Exchange Client signals this to the user.

2.2 Manual archival

In addition to server-controlled archival, Exchange documents can also be individually documented. Each user can archive a marked Exchange document or even an entire folder hierarchy at the click of a button. For individual archival, successfully archived documents are always replaced by links.

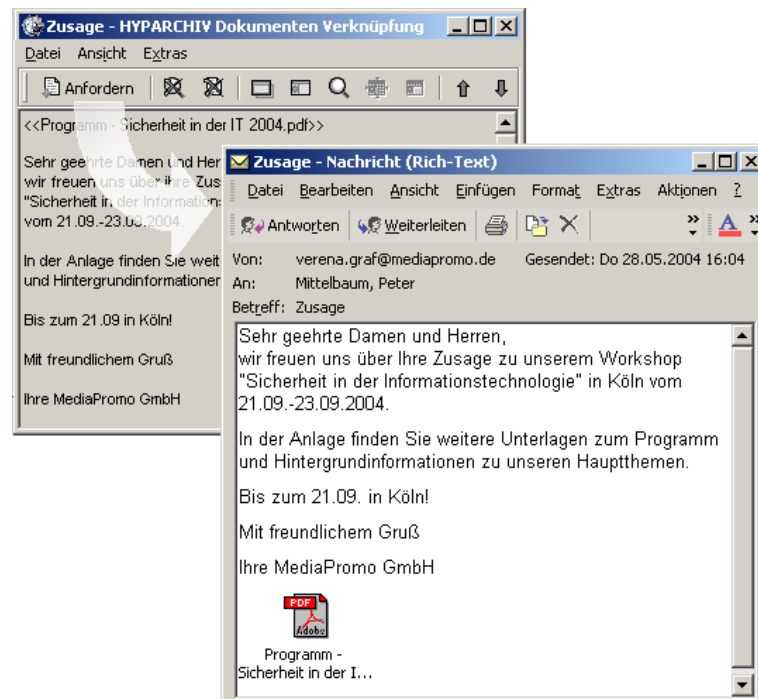
2.3 Display and restoration

When users open a link they get a preview of the content of the original document. This preview does not require the archive to be accessed as the link already contains a text stub of the original Exchange document. In this way key information is made available without time delay. The length of this text stub is centrally defined by the administrator.

If the original document included attachments, the preview will include a list of the names of these files.

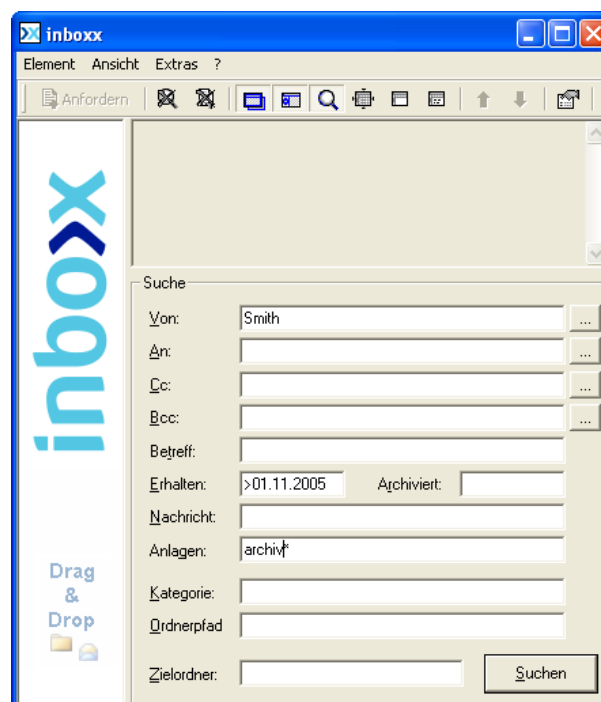
The original document can be directly restored from the link to access the complete message text and the attached files. In the process, the user can decide whether the original is to be loaded into a folder of his choice or the original folder (the source folder is the folder in which the source document was located at the time it was archived).

The next screenshot shows the link and the restored original document:



2.4 Searching for and finding Exchange documents

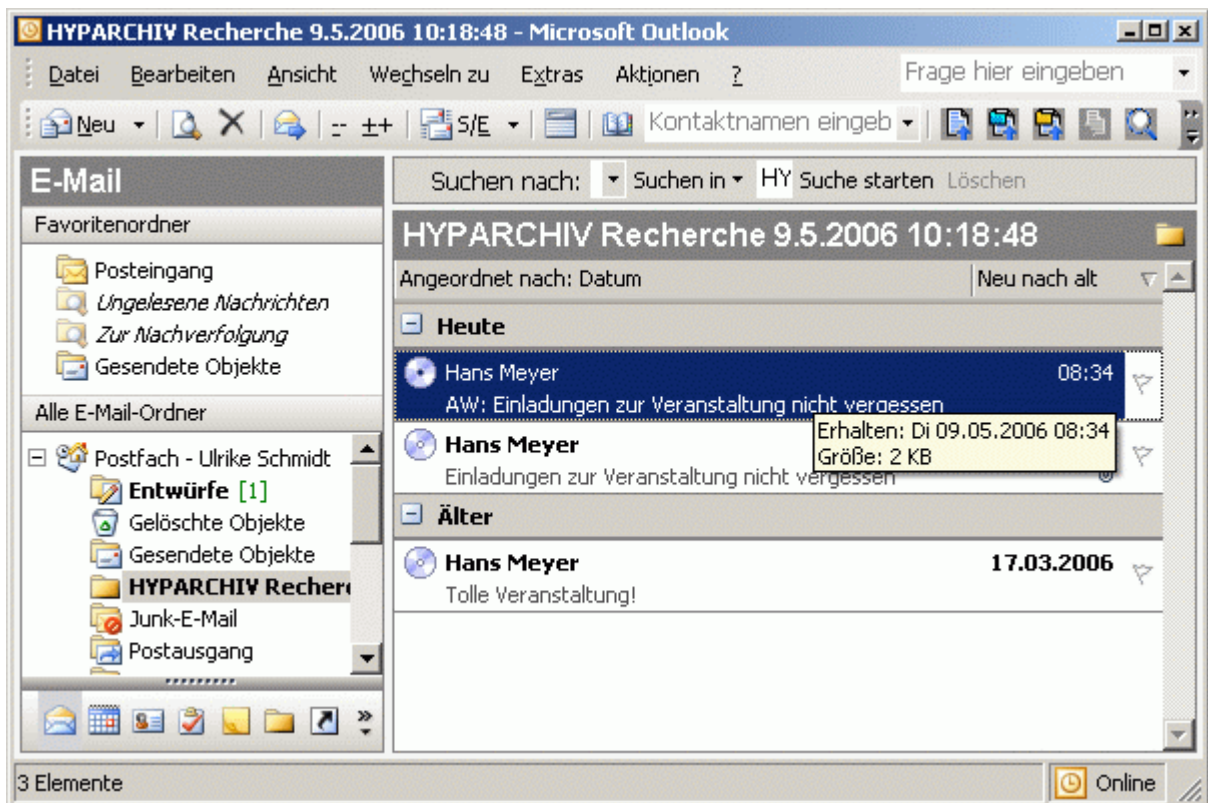
Archived Exchange documents can be located by powerful search functions, which make use of document attributes and full-text criteria. The boxes **From**, **To**, **Cc**, **Bcc**, **Subject**, **Received**, **Archival date**, **Message text**, **Outlook category** and **Folder hierarchy** are available as attributes. Full text searches can also include texts in the attachments.



inboxx supports the use of attribute and full-text criteria in a search. Logical operators such as And, Or, Not as well as parentheses can be used to formulate more complex searches. Depending on the box types prefixes (e.g. all words beginning with "Wood") and range operators (e.g. all values between 01.11.04 and 30.11.04) can be used. Additional operators for the similarity and distance between words are available for full-text searches.

The result of a search is provided as a result folder with link documents, saving space within Outlook.

Users can themselves decide where these result folders should be placed within their file structure.



3 Administration

The application is centrally administered, combining simplicity of operation with a high degree of flexibility.

The system supports a wide variety of settings per mailbox. To keep the associated management outlay within limits, settings are saved as named templates – initially without relation to a specific mailbox. The settings in the template are not used until they have been assigned to one or more mailboxes.

3.1 Installation

inboxx is exclusively installed on servers. On the Exchange server, only the MAPI form for the link has to be notified. All necessary components on client computers are automatically distributed by Exchange.

3.2 User guidelines (policies)

The inboxx client functions available to users can be managed with the aid of user policies. It is possible to define whether the following functions are available for user groups or individual users in the Exchange client.

- » Archive document
- » Restore archived document
- » Search for archive document

4 System requirements

4.1 Software

Prerequisites for operation of this product: Windows 2000 or Windows 2003 Server required

Installation on the Exchange server computer is not recommended. It is possible to run inboxx server and GFT *hyparchiv* ArchiveServer on the same machine.

- ✘ **inboxx 3.3 for Microsoft Exchange**
- ✘ **GFT *hyparchiv* (part of the inboxx package)** Version 6D 08-01 or higher; for full-text support, Version 7A-03 or higher is recommended.
- ✘ **Microsoft Exchange Server** Version 5.5, 2000, 2003 or 2007; for *Outlook Web Access integration*: Version 2000 SP3, 2003 RTM, SP1 and SP2

The mechanism for the automatic distribution from the global form template library (Exchange Server distribution) only works for combinations of the following Windows and Exchange client versions:

- ✘ Windows 2000, XP, Server 2003
- ✘ Outlook 2000, XP, 2003 or 2007

Configuration database

- ✘ Microsoft Data Engine (MSDE) from Version 2000 SP3, or
- ✘ Microsoft SQL Server 2000, or
- ✘ Microsoft SQL Server 2005 (all versions incl. the Express Edition)

4.2 Envelope Journaling

Note: Prerequisite for Envelope Journaling for Exchange Server 2000 is SP3 and an Update Rollup, see <http://support.microsoft.com/kb/870540>. With Exchange Server 2003, Envelope Journaling is available from SP1.

4.3 Microsoft Certification

inboxx has been tested by Microsoft and fulfils the criteria for the Microsoft program *Platform Test for ISV Solutions* in the categories *Windows Server* and *Windows Client*

<http://windowsservercatalog.com/item.aspx?idItem=cf3be8c9-3593-0086-a162-b8e9f847b5f1>