

Quest® Recovery Manager for Exchange 5.9

Product Overview



© 2024 Quest Software Inc. ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc.

Attn: LEGAL Dept

4 Polaris Way

Aliso Viejo, CA 92656

Refer to our Web site (<https://www.quest.com>) for regional and international office information.

Patents

Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at <https://www.quest.com/legal>.

Trademarks

Quest, the Quest logo, and Join the Innovation are trademarks and registered trademarks of Quest Software Inc. For a complete list of Quest marks, visit <https://www.quest.com/legal/trademark-information.aspx>. All other trademarks and registered trademarks are property of their respective owners.

Legend

 **CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.**

 **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

Recovery Manager for Exchange Product Overview

Updated - April 2024

Version - 5.9

Contents

Features and benefits	5
Key features	5
Rapid e-discovery	6
Message-level, granular restore	6
No need for recovery server	6
Restore entire mailboxes, folders, or public folders	6
Support for existing backups	6
Integration with backup software	7
Support for recovery databases and recovery storage group	7
Support for snapshot backups	8
Access to Exchange database without applying log files	8
Restore data from or to Archive Manager	8
View and restore deleted items	8
Powerful search engine	9
Message and attachment preview	9
Easy-to-use graphical user interface	9
Automated tasks	10
Management Shell	10
Key benefits	10
How Recovery Manager for Exchange works	12
Step 1: Registering source storages	13
Extracting Exchange databases from backups	13
Accessing Exchange backups through existing backup software	14
Accessing offline Exchange or Domino databases, or Personal Folders (.Pst) files	17
Accessing recovery databases and databases	17
Bringing Exchange database to a consistent state	17
Step 2: Searching or browsing registered source storages	18
Step 3: Restoring data	19
What you can do with Recovery Manager for Exchange	21
Restore messages	22
Restore mailboxes	22
Restore public folders	22
Automate your tasks	22
Search for messages, attachments, or folders	23
Find and restore messages, attachments, or folders	24
Browse source storages	25
Preview and restore messages while browsing storages	25

Comparison of Recovery Manager for Exchange editions27

About us29

 Technical support resources29

Features and benefits

Quest® Recovery Manager for Exchange rapidly and efficiently finds and recovers business-critical Exchange and Lotus Domino data. Organizations can reduce the cost of e-Discovery in addition to providing granular, messagelevel data recovery services.

By using Recovery Manager for Exchange, you can selectively retrieve items from online Exchange Servers, offline Exchange Server and Lotus Domino databases, and Personal Folders (.pst) files. The retrieved items can then be directly restored to a production Exchange Server or to .pst, .eml, .msg, or .txt files.

Recovery Manager for Exchange provides a search system to perform context-based searches in live Exchange Server mailboxes and public folders, offline Exchange Server and Lotus Domino databases, and Personal Folders (.pst) files using keywords and other search criteria. Rather than retrieving all data from a server, database, or file, you can retrieve only what is needed.

Recovery Manager for Exchange entirely eliminates the need for a recovery Exchange Server, making it easier for you to gain access to an offline Exchange Server database. You can restore an Exchange Server database from backup to any folder, and then access the database to search and selectively restore the data you need.

Recovery Manager for Exchange integrates with [Quest® Archive Manager®](#), thereby allowing you to quickly and easily restore messages from Exchange Server databases, Lotus Domino databases, and Personal Folders (.pst) files into Archive Manager.

Key features

- [Rapid e-discovery](#)
- [Message-level, granular restore](#)
- [No need for recovery server](#)
- [Restore entire mailboxes, folders, or public folders](#)
- [Support for existing backups](#)
- [Integration with backup software](#)
- [Support for recovery databases and recovery storage group](#)
- [Support for snapshot backups](#)
- [Access to Exchange database without applying log files](#)
- [Restore data from or to Archive Manager](#)
- [View and restore deleted items](#)
- [Powerful search engine](#)
- [Message and attachment preview](#)
- [Easy-to-use graphical user interface](#)
- [Automated tasks](#)
- [Management Shell](#)

Rapid e-discovery

Recovery Manager for Exchange helps you find and retrieve data in minutes, not hours, by enabling you to visually zero in on specific content of interest. You can retrieve items from particular online Exchange mailboxes, public folders, and Exchange Server and Lotus Domino databases, and perform fast searches based on a variety of criteria. Rather than restoring a complete mailbox, folder, or Exchange Server or Lotus Domino database, you restore only what you need.

Message-level, granular restore

When data loss affects only an individual message in a messaging system, a specialized solution is required to restore the lost data. In such a situation, Recovery Manager for Exchange restores individual messages quickly and easily, whereas Exchange native tools and third-party tools can be labor-intensive and time-consuming.

No need for recovery server

Recovery Manager for Exchange performs granular, message-level restores without the need to set up a dedicated Exchange recovery server. Recovery Manager for Exchange can restore an Exchange database from a backup to any folder and then perform message-level searches in the database and retrieve selected messages directly from the database to a production Exchange Server.

With the ability to handle offline Exchange databases, Recovery Manager for Exchange provides an efficient solution for managing enterprise Exchange Server backups. It allows you to easily search, select, and retrieve messages without setting up a dedicated recovery server. This saves both time and hardware resources.

Restore entire mailboxes, folders, or public folders

Recovery Manager for Exchange is capable of restoring or exporting entire mailboxes, folders, or public folders with just a few clicks. You can browse registered source storages for mailboxes, folders, or public folders and quickly and easily restore or export their contents..

Support for existing backups

Recovery Manager for Exchange performs message-level restores from regular Exchange Server backups. Data can be retrieved from any type of backup—full, incremental, or differential. With Recovery Manager for Exchange, message-level or “brick-level” backups are no longer required to restore individual messages.

Recovery Manager for Exchange supports backups created by native Microsoft tools such as Windows Backup (NTBackup) and third-party backup software. This means that existing Exchange Server backups can be used for message-level restores.

By eliminating the need for special message-level or “brick-level” backups, Recovery Manager for Exchange streamlines the backup process and effectively eliminates the storage space, cost, effort, and time required to manage such backups. Support for all types of regular Exchange Server backups means that Recovery Manager for Exchange can be used in conjunction with existing backup repositories. Administrators do not need to modify their backup procedures in order to use the granular restore capabilities of Recovery Manager for Exchange.

Integration with backup software

Recovery Manager for Exchange integrates with a wide range of third-party backup software to locate Exchange Server backups and to retrieve data from backups. By integrating with third-party backup software, Recovery Manager for Exchange provides transparent and easily manageable access to existing Exchange database backups, regardless of backup format, type of media, or storage device.

Recovery Manager for Exchange allows you to use the capabilities of third-party backup software in order to:

- **Locate backups and retrieve data from them.** Third-party backup software provides the ability to quickly locate the backups it created and retrieve data from these backups.
- **Save time on backup media cataloging.** Third-party backup software creates and saves media catalogs during the backup creation process. Recovery Manager for Exchange can reuse data from these media catalogs.
- **Eliminate the need to directly access backup storage devices.** Storage devices are normally configured for use with the existing backup software and should therefore not be used by any other software.

Restoring data from a backup with the same software that created the backup also ensures that Exchange data is correctly retrieved regardless of the backup format. Accessing backup media directly may result in the misinterpretation of data due to possible undocumented characteristics of the format. By integrating with backup software, Recovery Manager for Exchange provides support for various backup formats and eliminates the risk of failures caused by accessing backup media directly.

For a complete list of supported third-party backup software, please refer to the Release Notes supplied with this release of Recovery Manager for Exchange.

Support for recovery databases and recovery storage group

When it comes to finding and restoring items in recovery databases or databases in a recovery storage group, Recovery Manager for Exchange offers unparalleled flexibility and ease of use. With Recovery Manager for Exchange, you can use a multitude of search criteria to find specific email items in recovery databases or databases in a recovery storage group on a live Exchange Server.

You can then preview and restore specific email items directly to online user mailboxes, folders, or one of the many popular file formats supported by Recovery Manager for Exchange. The search and restore tasks can be accomplished by using either the Recovery Manager for Exchange graphical user interface or cmdlets supplied with the Recovery Manager for Exchange Management Shell.

Recovery Manager for Exchange is an ideal tool to carry out e-discovery tasks on recovery databases and databases in a recovery storage group. It provides an easy, flexible, and straightforward means to preview and retrieve the email items that meet your search criteria.

A new feature in Exchange Server 2010, Recovery Database allows you to mount an offline mailbox database (for example, extracted from backup), and selectively restore data from that database to a specific folder, file, or merge it directly to an existing user mailbox.

The Recovery Storage Group (RSG) feature is included in Exchange Server 2007. This feature is designed to help you retrieve mailbox data without having to install and configure a separate Exchange recovery server.

Support for snapshot backups

Recovery Manager for Exchange allows you to restore data from snapshot backups of Exchange data stores. Snapshot technology—the process of making a “point-in-time” copy for backup—reduces the impact on production servers, while reducing the time needed to back up data. Snapshot backups are therefore used by many organizations to eliminate downtime and performance degradation that may result from data protection process. By supporting snapshot backups, Recovery Manager for Exchange allows you to selectively restore email items from any existing backups. There is no need to modify your current backup procedures in order to perform a granular restore.

Access to Exchange database without applying log files

When registering an Exchange Server database with Recovery Manager for Exchange, you have the option to perform a hard repair on the database to bring it to a consistent state without applying log files. This allows you to access an Exchange Server database if it is damaged, or if the database’s log files and .stm file are inaccessible, missing, or corrupted.

This option is especially useful when you need to restore data from a database that was saved following a system failure, and thus the database files are not guaranteed to be free of data corruption. To restore from such a damaged database, you first need to perform a hard repair on the database.

Restore data from or to Archive Manager

Recovery Manager for Exchange supports Archive Manager both as a source and target storage. This allows you to restore messages from an Archive Manager instance registered with Recovery Manager for Exchange to any registered target storage or one of the many formats supported by Recovery Manager for Exchange. You can also quickly and easily restore entire mailboxes or specific email messages from source storages registered with Recovery Manager for Exchange to Archive Manager.

Archive Manager is a platform for archiving. By capturing, indexing, and storing a single instance of messaging data into a scalable and secure repository, IT administrators can be assured of lower storage costs, faster e-Discovery response and strict compliance through the preservation of business-critical messaging data.

For more information about Archive Manager, see the Archive Manager Web page at <http://quest.com/products/archive-manager>.

View and restore deleted items

With Recovery Manager for Exchange you can locate deleted email items in Exchange Server backups. You can even locate items that were deleted before a backup was created for the Exchange Server, and here’s why.

After you delete an email item, it is not immediately purged from the Exchange Server on which it resides. Rather, the deleted item normally remains on the server in a special location known as the Recoverable Items folder (or the Dumpster) for a specified configurable retention period. Therefore, you can use Recovery Manager for Exchange to examine all backed up items, including those located in the Dumpster.

Given that Exchange Server backups are typically created on a daily basis, you can retrieve virtually any deleted message, even if that message was received after a backup was created for the Exchange Server, and then was deleted and put into the Dumpster before the creation of the subsequent backup.

This feature is particularly useful for running audit or legal investigations, when all emails concerning an individual user or subject are required.

Powerful search engine

Recovery Manager for Exchange features a powerful search engine to look for data in source storages—online Exchange Servers, offline Exchange Server and Lotus Domino databases, Personal Folders (.pst) files, and Archive Manager instances. Any combination of search criteria can be used to find messages, attachments, or folders in specific source storages. Searches can be based on such criteria as sender, recipient, date, subject, size of message, attachment, and/or folder, message class, message importance, conversation thread, and keywords. You can search for text similar to the text that you specify.

Recovery Manager for Exchange allows you to limit your search to specific mailboxes or folders, or extend it to multiple source storages. You can run multiple simultaneous searches to look for specific items in mailboxes and folders that are located in different source storages registered with Recovery Manager for Exchange. The items returned by a search can be selected and restored directly from the list of search results.

The search engine streamlines the restore process and minimizes the time needed to locate messages, attachments, and folders matching specific criteria. With Recovery Manager for Exchange, there is no need to restore an entire Exchange Server backup in order to find a single message held in the backup.

Message and attachment preview

Recovery Manager for Exchange integrates with Microsoft Outlook to preview messages and other data retrieved from source storages. Messages and attachments within a source storage can be browsed for and previewed, just as messages and attachments on a live Exchange Server can be previewed in Microsoft Outlook.

Message and attachment preview makes it easier to find the data that needs to be recovered and eliminates the recovery of irrelevant data. Once a message is located, Recovery Manager for Exchange can display the message content and the message attachments, allowing user to decide whether the message and/or its attachments should be restored.

Easy-to-use graphical user interface

The product provides the following user interface:

- A Recovery Manager Console resembling the user interface of Microsoft Outlook. The Recovery Manager Console implements the navigation, search, and preview features in the same way as Outlook does, so there is no need to learn a new interface.

To further simplify the restore process, Recovery Manager for Exchange provides a number of wizards that guide the user through data restore step-by-step, from selecting a source storage to placing a restored message in a particular mailbox, folder, or file.

The Recovery Manager console user interface displays all source and target storages that were used during restore operations. Recovery Manager for Exchange maintains a repository of all registered source and target storages. This means that once a particular storage is used to perform a restore, it can be quickly and simply reused for future restores.

Automated tasks

With large backups, cataloging and restoration can take a long time. Recovery Manager for Exchange provides the Automated Tasks feature that allows you to create, modify, schedule, run, stop, and monitor automated cataloging and restoration tasks.

An automated task holds a set of actions required to catalog a backup or restore specific items. Using automated tasks improves the Recovery Manager for Exchange productivity and saves system resources in situations when you need to catalog extremely large backups or restore significant amounts of data.

Once you create an automated task, you do not have to step through the Recovery Manager for Exchange wizards to perform a recurring restore or cataloging operation. You simply run the task.

Management Shell

The Recovery Manager for Exchange Management Shell feature, built on Microsoft Windows PowerShell technology, provides the scripting platform and command-line tools (cmdlets) that allow you to more efficiently manage backups and search and restore data.

This feature is particularly useful in a situation where you need to perform multi-step actions in the Recovery Manager for Exchange GUI to fulfill a complex task. With the Management Shell feature at hand, you can now easily automate a complex task by creating and running a script using the simplified syntax offered by Windows PowerShell.

The Recovery Manager for Exchange Management Shell is implemented as a Windows PowerShell snap-in, providing an extension to the Windows PowerShell environment. To get acquainted with the basic features of Windows PowerShell, refer to the Windows PowerShell Getting Started Guide available at <http://msdn2.microsoft.com/en-us/library/aa973757.aspx>.

For more detailed information on Windows PowerShell, see the Windows PowerShell Primer document included with the Windows PowerShell installation.

Key benefits

The key benefits of using Recovery Manager for Exchange include:

- **Reduced workload.** Recovery Manager for Exchange eliminates the need for brick-level backups entirely. And because it works with the majority of backup vendors on the market, Recovery Manager for Exchange eliminates the need to maintain costly recovery environments for recovery or discovery purposes.
- Search and recovery for all Exchange content types. With its ability to search backed-up message and attachment content and recover selected public folders and public folder hierarchies, Recovery Manager for Exchange allows you to search and recover all Exchange backup data. Since a significant amount of corporate email data is found within attachments, being able to discover this data is crucial to any operational or compliance-driven recovery effort.
- Preserved company knowledge. Now you can easily find and retrieve Exchange items from years-old backup media and a variety of backup software. This not only aids individual users, but it also serves as an invaluable tool for Human Resources and Legal departments when conducting investigations for internal, legal, or regulatory compliance reasons.

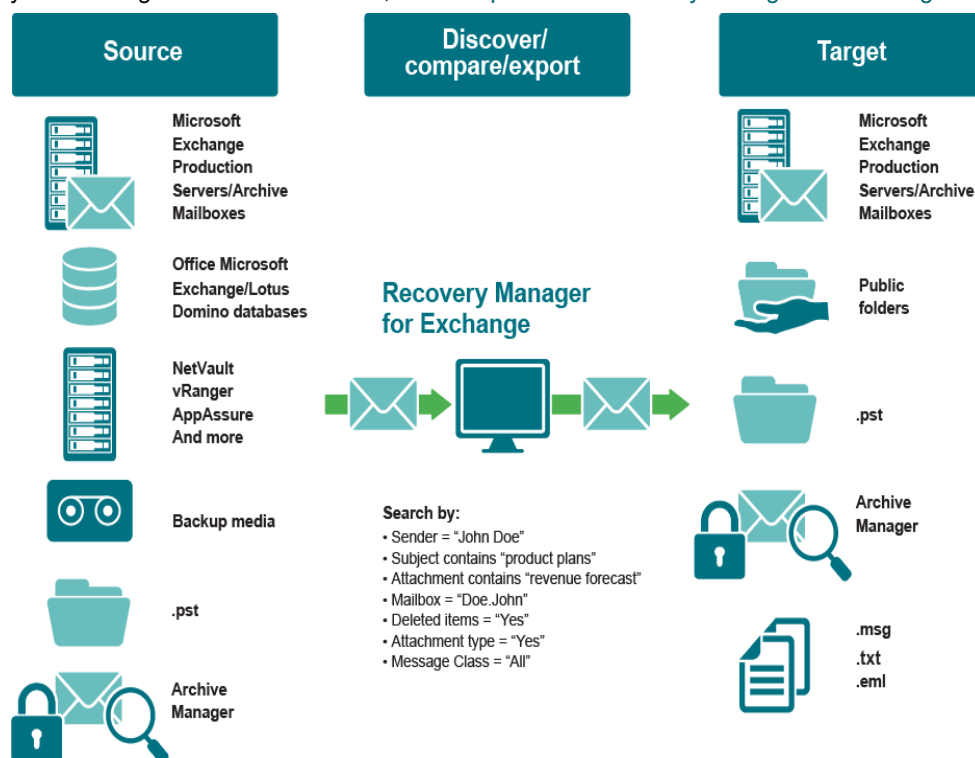
- Lowered discovery and recovery costs. Recovery Manager for Exchange allows for recovery of selected items directly from any online Exchange Server or offline Exchange Server or Lotus Domino database. In turn, the need for recovery environments is eliminated entirely, and organizations can save the time and resources required to manage the recovery environments.
- Improved productivity. With Recovery Manager for Exchange, it is possible to provide message-level recovery services to all users in your organization, not just company executives. You can easily recover anyone's mailbox content from regular backup media and ensure that you have continuous access to information stored in email, at all levels of your business.

How Recovery Manager for Exchange works

Recovery Manager for Exchange is designed to retrieve message-level data from the following types of source storages:

- Online Exchange Servers, including live mailboxes and public folders
- Offline Exchange Server databases (including those held in backups)
- Offline Lotus Domino databases
- Personal Folders (.pst) files
- Archive Manager

Items that are supported as source and/or target storages depend on the Recovery Manager for Exchange edition you are using. For more information, see [Comparison of Recovery Manager for Exchange editions](#).



On a high level, the data restore process includes these steps:

- **Step 1: Registering source storages.** You register an offline database, file, online mailbox, live public folder hierarchy, or Archive Manager instance to retrieve data from. After its registration, such an item becomes a source storage in Recovery Manager for Exchange terminology.
- **Step 2: Searching or browsing registered source storages.** You search or browse the registered source storages for the data to be restored.

- **Step 3: Restoring data.** You restore the data to a target storage. This can be a live Exchange Server (for example, a mailbox or public folder) or specific file (such as .pst, .eml, .msg, or .txt). You can also restore the data to Archive Manager.

The next sections elaborate on each of these steps.

Step 1: Registering source storages

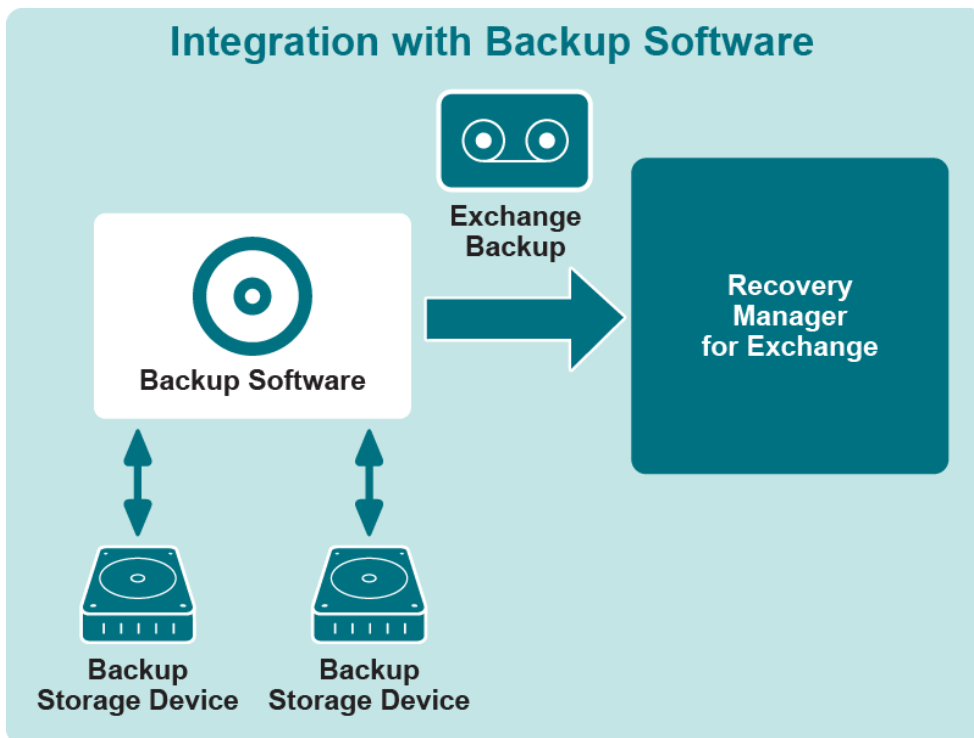
The first step is to register source storages from which to retrieve data. As source storages you can use:

- **Offline Exchange Server databases.** Recovery Manager for Exchange can register the following:
 - databases held in regular backups of Exchange Server, recovery databases on an online Exchange Server,
 - databases in a recovery storage group on an online Exchange Server, or databases held in a folder.
- **Offline Lotus Domino databases.** Recovery Manager for Exchange is capable of registering Lotus Domino databases from a specified folder.
- **Personal Folders (.pst) files.** Recovery Manager for Exchange can register multiple .pst files from different folders at a time.
- **Online Exchange mailboxes.** Recovery Manager for Exchange enables you to selectively register multiple online mailboxes hosted on on-premises Exchange Servers.
- **Online public folder hierarchies hosted on Exchange Servers.** You can selectively restore data from any folder in an online public folder hierarchy registered as a storage.
- **Online Archive Manager instances.** You can register multiple Archive Manager instances as source storages.

Items that are supported as source and/or target storages depend on the Recovery Manager for Exchange edition you are using. For more information, see [Comparison of Recovery Manager for Exchange editions](#).

Extracting Exchange databases from backups

To restore individual messages from a backed up Exchange Server database, Recovery Manager for Exchange first extracts the database to a specified folder.



Recovery Manager for Exchange can extract entire Exchange Server databases (including log files) from regular Exchange Server backups. All backup types are supported: full, differential, and incremental. Recovery Manager for Exchange supports backups created with native Exchange or third-party backup tools. For a complete list of supported third-party backup software, please see the Release Notes supplied with Recovery Manager for Exchange.

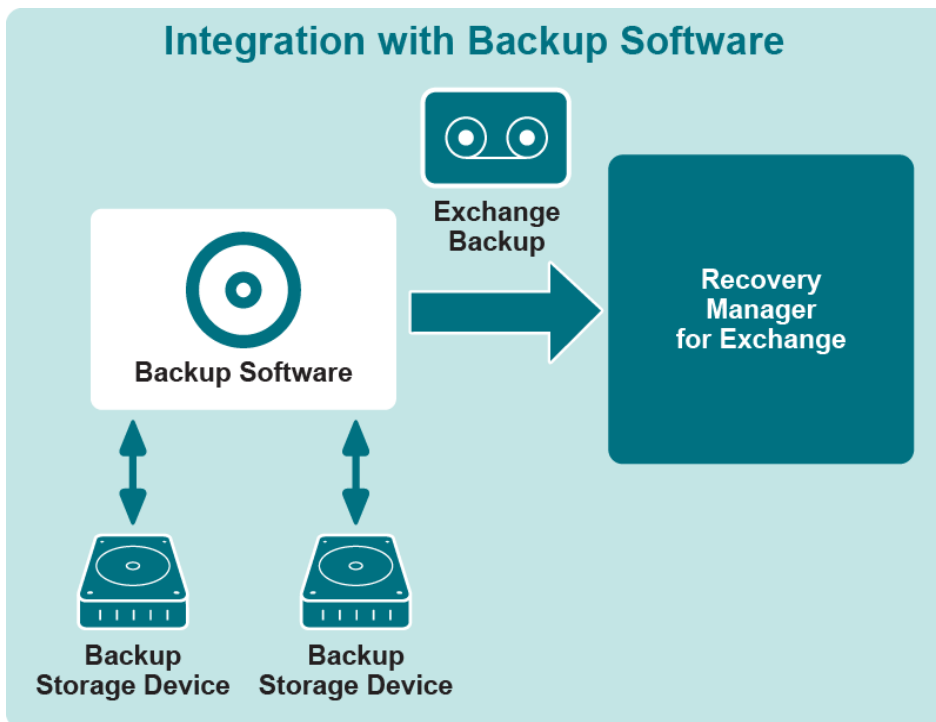
An Exchange Server store database originating from Exchange Server 2010 or later only includes an .edb file. The .edb file contains folders, tables, and indexes for messaging data, and MAPI messages and attachments.

The log files of an Exchange Server database store the changes made to the database, thus providing a way to restore transactions that were committed but not written to the database. While in Exchange Server 2010 storage groups are discontinued, in Exchange Server 2007 each storage group includes a set of log files that apply to all the Exchange store databases within that storage group.

Accessing Exchange backups through existing backup software

Recovery Manager for Exchange can integrate with third-party backup software to locate and access Exchange backups. Recovery Manager for Exchange employs the capabilities of an existing backup management infrastructure, such as:

- Backup management across multiple operating systems and heterogeneous storage devices.
- Access to backups that span multiple media.
- Retrieval of backups by using multiplexing and multi-streaming storage techniques.



To provide interoperability with backup software, Recovery Manager for Exchange uses the following methods:

- **Exchange Server emulation.** The computer running Recovery Manager for Exchange appears as an Exchange Server to the backup software. Exchange backups can be restored to Recovery Manager for Exchange by redirecting the restore to the Recovery Manager for Exchange computer.
- **Access to backup server.** Recovery Manager for Exchange connects to a backup server that is part of the backup infrastructure, issues requests for backups stored on that server, and uses standard protocols to retrieve and restore data from the backup server.

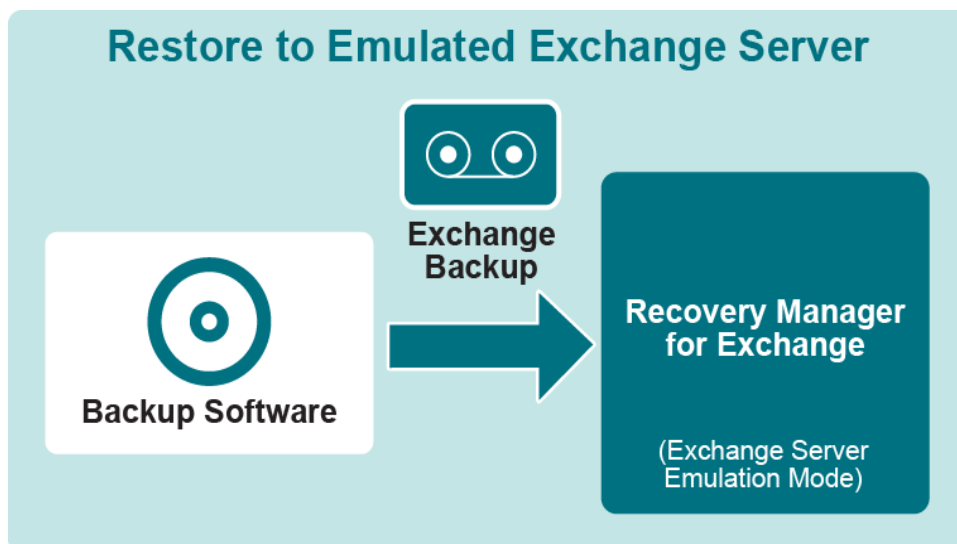
Exchange Server emulation

Recovery Manager for Exchange emulates Microsoft Exchange Server in order to retrieve data from backups created with such software as:

- [Quest® NetVault Backup®](#)
- CA ARCserve Backup
- EMC NetWorker
- HP Data Protector
- IBM Tivoli Storage Manager
- Microsoft Windows Backup
- Symantec Backup Exec
- Symantec NetBackup

For supported versions of third-party backup software, see the [Quest® Recovery Manager for Exchange Release Notes](#).

When it is running in Exchange Server emulation mode, Recovery Manager for Exchange provides all the services required for your backup software to restore Exchange data to the computer running Recovery Manager for Exchange.



The Exchange Server emulation option allows you to restore backups using your backup software, redirecting the restore to the emulated Exchange Server. After you restore a backup to the computer running Recovery Manager for Exchange, Recovery Manager for Exchange registers the database files extracted from that backup, so that you can search and selectively restore data.

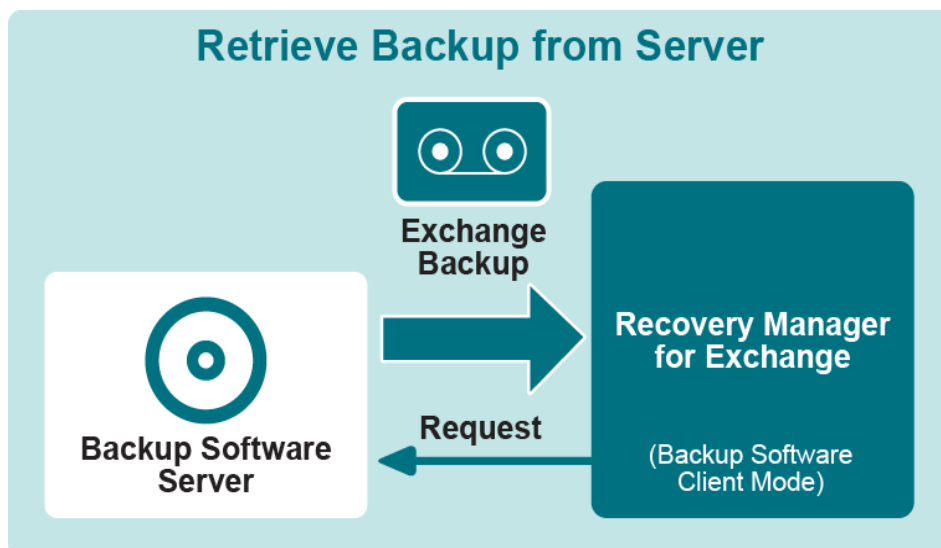
Access to backup server

Recovery Manager for Exchange makes use of an open application programming interface (API) when retrieving data from backups created with the following software:

- [Quest® Rapid Recovery® \(AppAssure®\)](#)
- [Quest® vRanger®](#)
- EMC NetWorker
- IBM Tivoli Storage Manager
- Microsoft Data Protection Manager
- Microsoft Windows Server Backup

For these backup software products, Recovery Manager for Exchange prompts you to specify the backup server that manages the backups from which you want to extract and register databases. Recovery Manager for Exchange then establishes a connection to the server and displays a list of backups managed by that server. You can then select one or more backups to be extracted.

For supported versions of third-party backup software, see the [Quest® Recovery Manager for Exchange Release Notes](#).



Recovery Manager for Exchange sends requests to the backup server for the backups you selected and processes data provided by the server, extracting Exchange Server database files from the backups to the computer running Recovery Manager for Exchange. After that, Recovery Manager for Exchange works with the extracted database files to register them as storages.

Accessing offline Exchange or Domino databases, or Personal Folders (.Pst) files

Recovery Manager for Exchange can access offline Exchange Server and Lotus Domino databases in any location. For example, you can copy database files from an Exchange Server or Lotus Domino computer to an alternate location—a network share, local folder or drive—and then have Recovery Manager for Exchange access the database there to search and restore specific data. Likewise, you can access .pst files to search and selectively restore folders, messages, or attachments these files contain.

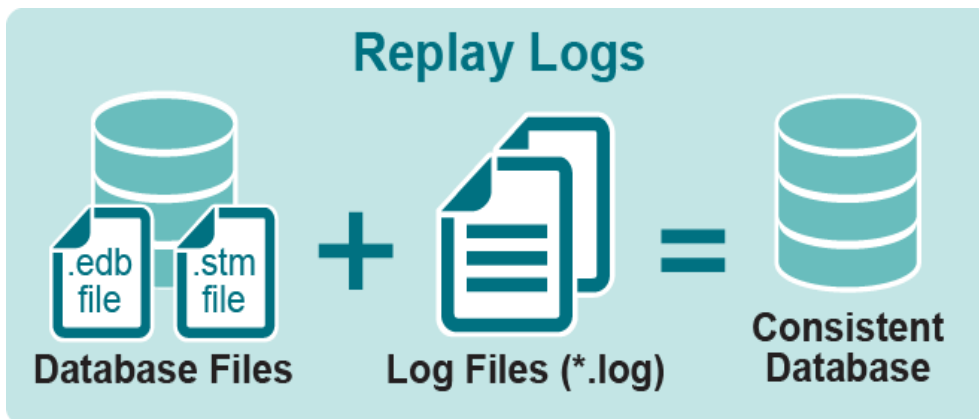
Accessing recovery databases and databases

Recovery Manager for Exchange can access recovery databases (Exchange Server 2010 or later) and databases located in a recovery storage group (Exchange Server 2007) on an online Exchange Server computer. Recovery Manager for Exchange is particularly useful when you need to restore specific email messages in a recovery database or database held in a recovery storage group. By using Recovery Manager for Exchange, you can connect to the database that holds the data you want to restore, search the database for specific message-level items, optionally preview the found items and/or their attachments, and then selectively recover them. Alternatively, you can use Recovery Manager for Exchange to restore the entire database.

Bringing Exchange database to a consistent state

When registering an Exchange Server database from a backup, network share, local folder, or local drive, Recovery Manager for Exchange replays the set of transaction logs associated with that database to ensure that all

transactions have been written to the database files:



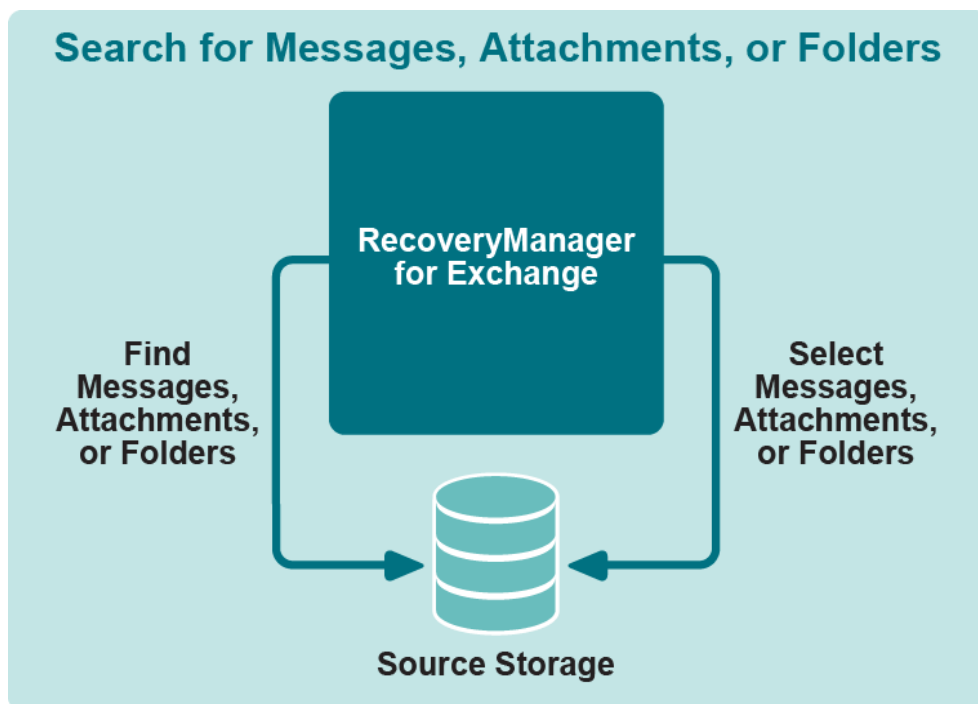
By replaying the logs, Recovery Manager for Exchange provides access to the Exchange store database extracted from backup or located on a network share, local folder, or local drive. Having a consistent database is essential for Recovery Manager for Exchange to be able to mount the database. When a database backup is created during normal operation of an Exchange Server (online backup), the database files may not be completely synchronized with the changes made in memory. The log files are used to reflect such changes.

Log files store a list of data changes that were performed in memory but not written to the database files during backup creation. Replaying the logs brings the database to a consistent state, and the database can then be accessed and searched for items to be restored.

With Recovery Manager for Exchange, you have the option to perform a hard repair on an Exchange Server database in order to bring it to a consistent state without applying log files. With this option, you can perform a restore even if the Exchange Server database is damaged or the database log files and .stm file are inaccessible, missing, or corrupted. Performing the hard repair with Recovery Manager for Exchange is essentially the same process as running the `eseutil /p` command.

Step 2: Searching or browsing registered source storages

Recovery Manager for Exchange is capable of searching registered source storages for the message-level items, attachments, or folders that match the criteria you specify. After the search completes, you can select the messages, attachments, or folders you want to restore from a list of search results.



Recovery Manager for Exchange has a powerful search engine to find messages, attachments, or folders in any registered source storage. The search engine offers a wide range of search criteria based on message, attachment, or folder content, recipients, senders, and dates.

Before running search for the messages to be restored, you can limit your search criteria to particular mailboxes or folders, or extend them to multiple source storages. Additionally, you can search for messages that contain specific attachments. For your search, you can select mailboxes and folders in different source storages registered with Recovery Manager for Exchange. You can also simultaneously run multiple searches with different criteria.

While your searches are running in the background, you can continue using Recovery Manager for Exchange to browse registered source storages, preview specific mailboxes, folders, messages, or attachments, and restore data.

Step 3: Restoring data

After you select the messages, attachments, mailboxes, or folders to be restored, Recovery Manager for Exchange retrieves and restores them from the source storages to the mailbox, folder, or file of your choice.

Recovery Manager for Exchange employs a special engine to retrieve data from Exchange Server databases restored to an alternate location. This engine enables Recovery Manager for Exchange to read data directly from the Exchange Server database extracted from backup, thus eliminating the need to restore the backup to a physical Exchange Server (commonly referred to as Exchange Recovery Server).

To restore messages to a target storage, Recovery Manager for Exchange uses native MAPI. This API provides the ability to append restored messages to the existing contents of a mailbox, folder, or .pst file, so that existing messages in the mailbox, folder, or .pst file are not lost.

By using MAPI, Recovery Manager for Exchange can restore data to a live Exchange Server. This allows the messaging system to work unimpeded while the restore operation is running. There is no need to dismount the entire Exchange store on a production Exchange Server just to restore a portion of data from backup.

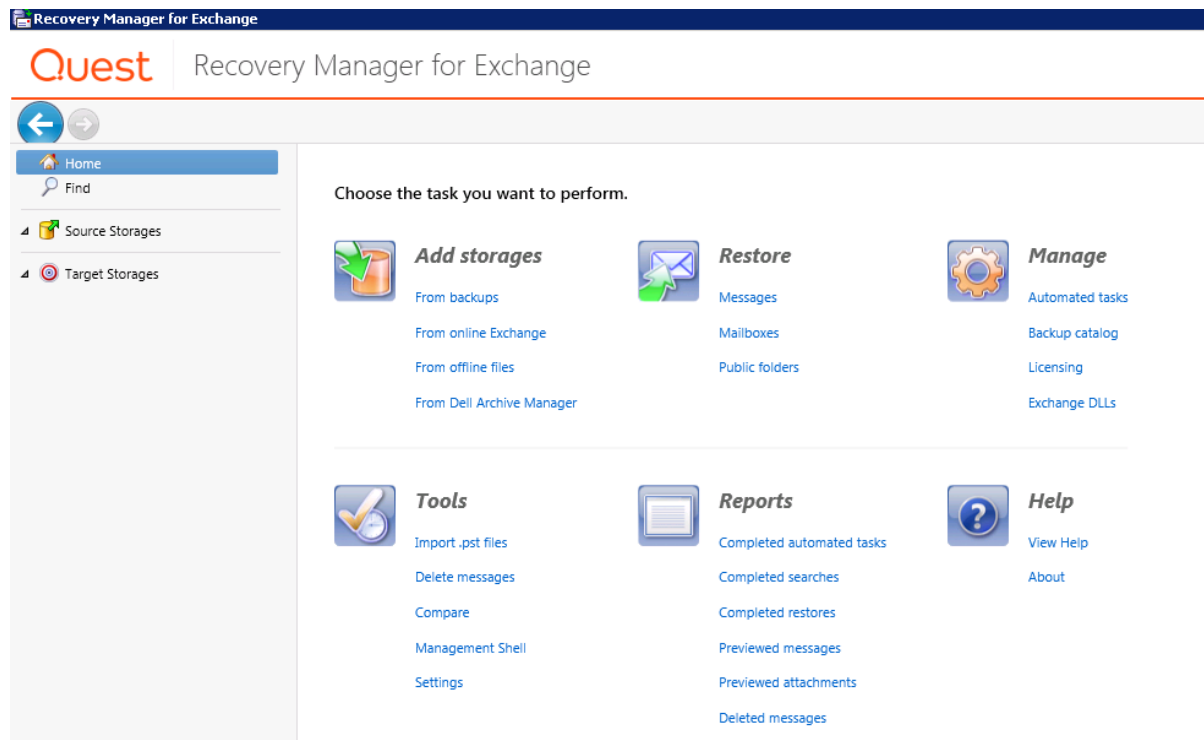
Recovery Manager for Exchange is capable of integrating with [Recovery Manager for Active Directory](#), an Active Directory recovery solution. For example, if the mailbox being restored is for some reason missing from the target

online Exchange Server, you can re-create that mailbox along with its user account or restore that account from an Active Directory database registered with Recovery Manager for Active Directory.

What you can do with Recovery Manager for Exchange

The main function of Recovery Manager for Exchange is to discover and selectively restore Exchange Server and Lotus Domino data. Recovery Manager for Exchange provides a friendly and intuitive user interface that helps you to quickly and easily complete your data search, preview, or restore task.

When started, Recovery Manager for Exchange displays a window called the Recovery Manager Console that looks similar to the following:



The left pane of the window provides a tree with several nodes you can select or expand. When you select the Home node in the left pane, the right pane of the window displays a task pad view in which you can select an action to perform.

With the Recovery Manager Console, you can:

- Restore messages
- Restore mailboxes
- Restore public folders
- Automate your tasks
- Search for messages, attachments, or folders
- Find and restore messages, attachments, or folders
- Browse source storages
- Preview and restore messages while browsing storages

Restore messages

To restore messages, under Restore in the task pad view click Messages. Then, a wizard opens to help you find and selectively restore messages and other message-level items from registered source storages to a registered target storage or new .pst, .eml, .msg, or .txt files.

If the mailbox to which you want to restore messages is not found in the target domain, you can re-create the missing mailbox on any online Exchange Server computer in the domain, and then restore the messages to that mailbox.

Source and target storages for a restore operation can be selected from those registered with Recovery Manager for Exchange. You can also register new source and target storages while using this wizard.

When restoring messages to a registered target storage or new .pst files, you can group the messages being restored by their originating mailboxes or folders.

Restore mailboxes

To restore mailboxes, under Restore in the task pad view click Mailboxes. A wizard guides you through selecting and restoring mailboxes from registered source storages to a registered target storage. You can also restore mailboxes to their home Exchange Servers or individual new Personal Folders (.pst) files. The wizard also lets you export all messages from specific mailboxes to individual .eml, .msg, .txt, or .pst files.

If the mailbox you are restoring to its online home Exchange Server no longer exists in the target domain you specified, you can re-create and restore the mailbox on any online Exchange Server in that domain.

For each restore operation you perform in the Mailbox Restore Wizard, you can register new source and target storages or select from those registered with Recovery Manager for Exchange earlier.

Restore public folders

To restore messages, under Restore in the task pad view click Public folders. A wizard that starts helps you restore or export specific public folders or the entire public folder hierarchy of an Exchange organization. With this wizard, you can restore or export public folders from multiple registered source storages to a registered target storage or new .pst, .eml, .msg, or .txt files.

For each restore operation, you can register new source and target storages or select from those registered with Recovery Manager for Exchange earlier.

Automate your tasks

If you need to perform some data restore or backup cataloging tasks on a regular basis, you can use the Recovery Manager Console to automate them: under Manage in the task pad view, click Automated tasks. The view that opens allows you to manage automated tasks.

An automated task is a set of actions required to catalog backups or restore specific items. Backup cataloging tasks contain lists of backup media that need to be cataloged and rules for cataloging. Restore tasks contain matches between one or more source storages and target storages and rules for restoring. Tasks are based on prepackaged templates, each featuring a specific combination of source and target types.

Automated tasks allow you to:

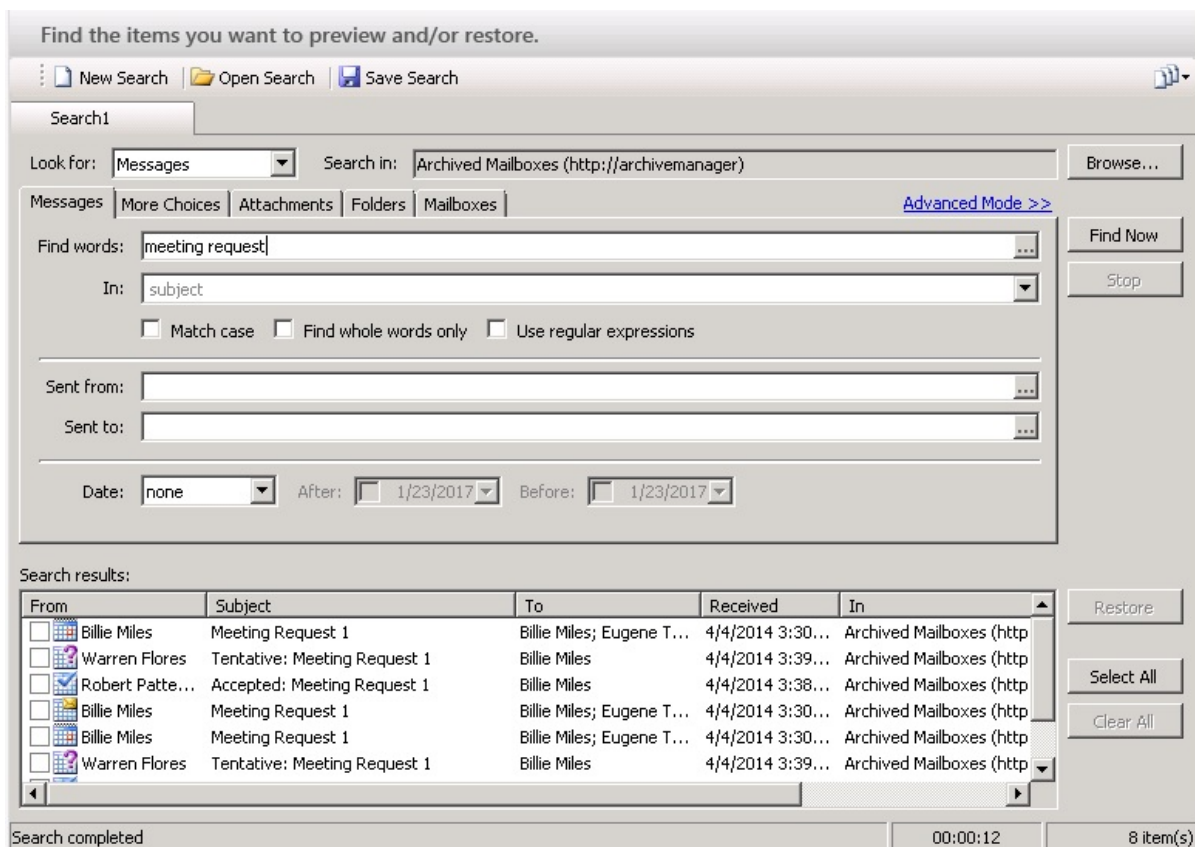
- **Reduce workload and improve performance.** Using automated tasks improves the Recovery Manager for Exchange productivity and saves system resources in situations when you need to catalog extremely large backups or restore significant amounts of data.
- **Automate recurring operations.** Once you create an automated task, you do not have to step through the Recovery Manager for Exchange wizards to perform a recurring restore or cataloging operation. You simply run the task.
- **Perform several restore and/or cataloging operations simultaneously.** You can run several automated tasks in parallel.
- **Schedule operations.** You can schedule restore and/or cataloging operations.

Search for messages, attachments, or folders

The Recovery Manager for Exchange provides a search engine that allows you to look for messages, attachments, or folders, helping you to quickly locate these items in registered source storages. To use the search engine, in the left pane of the Recovery Manager Console, click the **Find** node: The right pane displays the Find View.

You can use the Find View to search source storages for matching keywords in messages, attachments, or folders or use other criteria such as recipients, senders, and dates. Additionally, you have the option to limit your search to certain mailboxes or folders, extend your search to multiple source storages, or simultaneously run several searches using different search criteria.

Once you have specified your search criteria, click **Find Now**. The messages, attachments, or folders that match the search criteria are displayed in the **Search results** list:



You can view the content of a message or attachment by double-clicking the corresponding entry in the **Search results** list.

To search for keywords in files attached to mailbox or public folder items, Recovery Manager for Exchange requires IFilters. An IFilter is a component of the indexing service included with Microsoft Windows. Recovery Manager for Exchange uses IFilters to access textual content of files. To see the list of searchable file types and to download IFilters, go to <http://www.microsoft.com/windows/desktopsearch/technical/searchtype.mspx>.

For more information about a specific IFilter or for installation instructions, contact the software vendor for that IFilter.

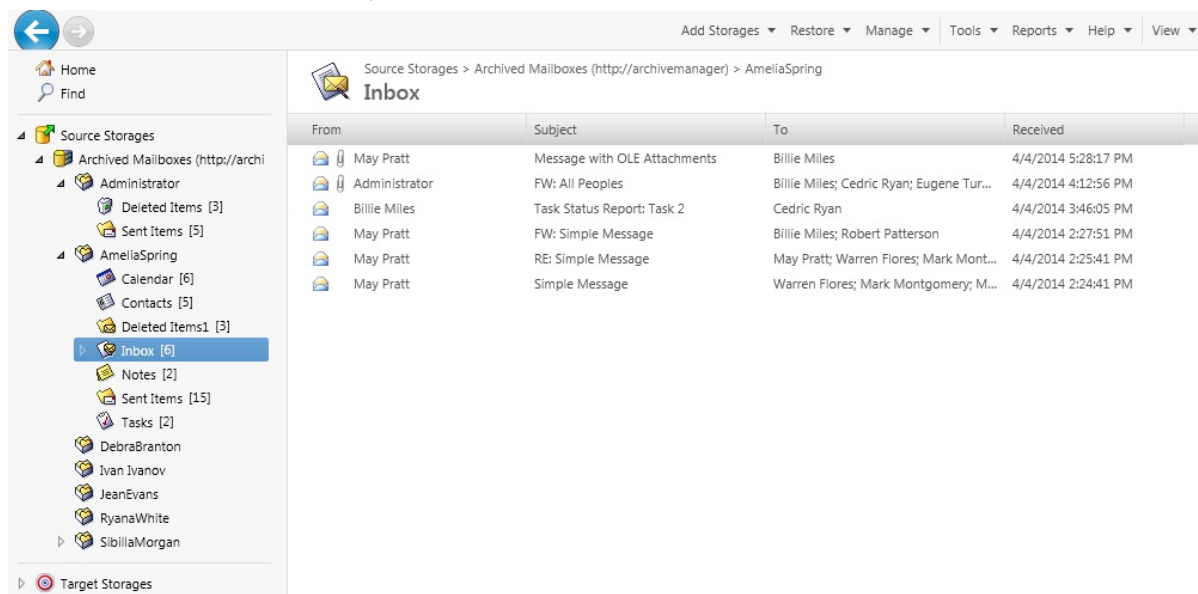
Find and restore messages, attachments, or folders

Not only does the Recovery Manager for Exchange search engine allow you to search for specific items. It also provides the ability to select items from a list of search results and restore them. Once your search is complete, you can perform a restore by selecting the check boxes next to the items in the **Search results** list, and clicking **Restore**. A wizard guides you through the restore process.

Browse source storages

With Recovery Manager for Exchange, you can browse registered source storages for mailboxes, folders, and messages: To view the mailboxes and folders in a storage, expand that source storage in the left pane of the Recovery Manager Console. Similarly, you can view folders within a mailbox by expanding that mailbox in the left pane.

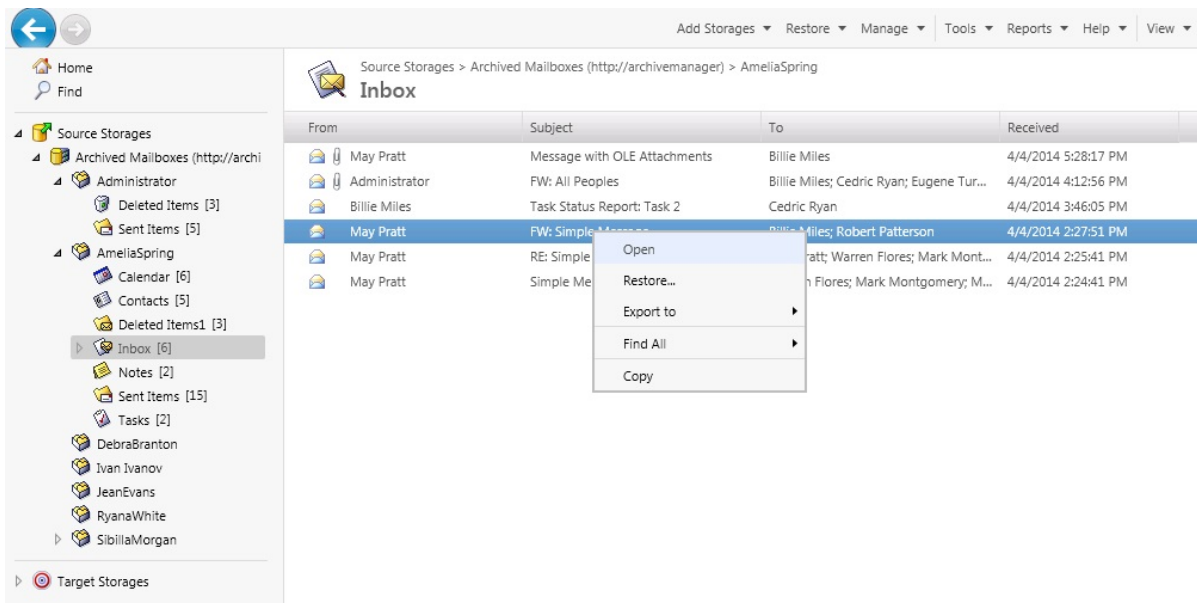
When you select a mailbox or a folder in the Recovery Manager Console tree, the details pane displays the contents of the selected item. For example, you can select the **Inbox** folder as shown below:



When browsing source storages, you can use commands on the Action menu or on the shortcut menu to manage the item you selected. Both the Action menu and the shortcut menu include commands to preview and restore the selected message or its attachments.

Preview and restore messages while browsing storages

Once you have selected a message in the Recovery Manager Console, it is possible to display the message's content: right-click the message and click **Open**. Recovery Manager for Exchange integrates with Microsoft Outlook to display the message content in a standard Outlook window. You can start the restore process by clicking **Restore**:



A wizard then guides you through the message restore process.

You can also restore messages from the details pane to a registered target storage as follows:

- By dragging and dropping selected messages to a target storage folder in the Recovery Manager Console tree.
- By copying and pasting selected messages to a target storage folder in the Recovery Manager Console tree.

Comparison of Recovery Manager for Exchange editions

Currently the following Recovery Manager for Exchange editions are available:

- Recovery Manager for Exchange distributed as a separate product
- Recovery Manager for Exchange shipped with Archive Manager
- Recovery Manager for Exchange shipped with Data Protection solutions: vRanger, Rapid Recovery (AppAssure) and NetVault Backup

These editions only differ by supported source and target storages, as described in the next table.

Table 1: Recovery Manager for Exchange editions comparison

Item	Recovery Manager for Exchange distributed separately	Recovery Manager for Exchange shipped with Archive Manager	Recovery Manager for Exchange shipped with vRanger, Rapid Recovery (AppAssure) and NetVault Backup
Online mailbox (hosted on Exchange Server) NOTE: This includes primary and archive mailboxes if they are supported by Exchange Server.	Supported as source and target storage	Supported as target storage only	Supported as target storage only
Online public folder hierarchy hosted on Exchange Server	Supported as source and target storage	Supported as target storage only	Supported as target storage only
Offline Exchange Server database	Supported as source storage only	Not supported	Supported as source storage only
Offline Lotus Domino database	Supported as source storage only	Not supported	Not supported
Personal Folders (.pst) file	Supported as source and target storage	Supported as source and target storage	Supported as target storage only
Archive Manager	Supported as source and target storage	Supported as source and target storage	Supported as target storage only
Integration with third-party backup software to register storages from backups. NOTE: For a list of	Supported	Not supported	Supported only for vRanger, Rapid Recovery (AppAssure) and NetVault Backup

Item	Recovery Manager for Exchange distributed separately	Recovery Manager for Exchange shipped with Archive Manager	Recovery Manager for Exchange shipped with vRanger, Rapid Recovery (AppAssure) and NetVault Backup
------	--	--	--

supported backup software, see the Recovery Manager for Exchange Release Notes.

About us

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Around the globe, more than 130,000 companies and 95% of the Fortune 500 count on Quest to deliver proactive management and monitoring for the next enterprise initiative, find the next solution for complex Microsoft challenges and stay ahead of the next threat. Quest Software. Where next meets now. For more information, visit www.quest.com.

Technical support resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product