

Quest® Recovery Manager for Active Directory® 9.0

Release Notes

October 2017

These release notes provide information about the Quest® Recovery Manager for Active Directory release.

- [New Features](#)
- [Resolved Issues](#)
- [Known Issues](#)
- [System Requirements](#)
- [Product Licensing](#)
- [Getting Started with Recovery Manager for Active Directory](#)
- [Globalization](#)
- [Third-Party Contributions](#)

About Recovery Manager for Active Directory

Recovery Manager for Active Directory enables fast, online recovery. Comparison reports highlight what objects an attributes have been changed and deleted in Active Directory enabling efficient, focused recovery at the object or attribute level. Accurate backups and a quicker recovery enable you to reduce the time and costs associated with AD outages and reduce the impact on users throughout your organization.

Recovery Manager for Active Directory is based on patented technology.

Recovery Manager for Active Directory 9.0 is a maintenance release, with new features and functionality. See [New features](#) and [Resolved issues](#).

New features

New features and enhancements in Recovery Manager for Active Directory 9.0:

| New Feature | Request ID |
|--|-------------|
| Quest® Rebranding Recovery Manager for Active Directory has been rebranded as a Quest® product and is now called Quest® Recovery Manager for Active Directory. | |
| Differential backups are not supported for Windows Server 2003 DC From version 9.0, differential backups are no longer supported for Windows Server 2003 domain controllers. | |
| Support for smart card authentication in Online Restore Wizard Added the option to perform the authentication in Online Restore Wizard using smart cards. | |
| Custom TCP ports can be specified for agents You can specify custom TCP ports that will be used by Recovery Manager Console and Forest Recovery Console to communicate with agents. | |
| Microsoft .NET Framework 3.5 is not required From this version, Recovery Manager for Active Directory does not require Microsoft .NET Framework 3.5. | RMADFE-769 |
| Ability to specify maximum backup time for domain controllers The time limit for the domain controller backup can be specified on the Advanced tab of collection properties. | RMADFE-836 |
| Multiple selection is available in the 'Browse and Select Object in Backup' dialog Support for the multi-select feature in the 'Browse and Select Object in Backup' dialog on the Objects to Be Processed page of Online Restore Wizard. | RMADFE-837 |
| Fault tolerance Recovery Manager for Active Directory supports the data replication between multiple instances of Recovery Manager Console to ensure reliability and fault-tolerance in case of any system failure. | RMADFE-1043 |
| Integration with On Demand Recovery Recovery Manager for Active Directory can be integrated with Recovery for Azure Active Directory to restore and undelete on-premises objects that are synchronized with cloud by Azure AD Connect. | RMADFE-1087 |
| Ability to specify a domain controller where backups will be unpacked Now you can specify a domain controller where backups will be automatically unpacked. | RMADFE-1209 |

Resolved issues

The following is a list of issues addressed in this release.

Table 1: General resolved issues

| Resolved Issue | Issue ID |
|---|-----------------|
| Backups may get stuck in the "Working" state. | RMADFE-1069 |
| Recovery Manager Portal does not allow to add the instance of Recovery Manager Console under a Local Administrator account. | RMADFE-1049 |
| RMAD backups take much longer time to complete than Windows Server backups. | RMADFE-1075 |
| After upgrade from version 8.7.1 and older, some domain controllers might not show backup history. | RMADFE-720 |
| Restore of objects from the "Deleted Objects" container fails for an encrypted backup. | RMADFE-716 |
| Recovery Manager Portal may show completed backups in the "In progress" state. | RMADFE-735 |
| Online restore errors may not be shown in the Recovery Manager Console, but present in detailed reports. | RMADFE-1175 |
| The 'directReports' attribute is not restored correctly. | RMADFE-1228 |
| There are no SCOM alerts and no RMAD events about online restore failures. | RMADFE-1183 |

Known issues

The following is a list of issues, including those attributed to third-party products, known to exist at the time of release.

Table 2: Recovery Manager for Active Directory known issues

| Known Issue | Issue ID |
|---|-------------|
| Cannot perform RMAD upgrade if the SQL Server Always On group is enabled for the reporting database. | RMADFE-1146 |
| Unexpected behavior when you upgrade operating system on the domain controller that has the Backup Agent installed from Windows Server 2003 to Windows Server 2008: After the upgrade, the Backup Agent may not work properly. WORKAROUND: Reinstall the Backup Agent on the domain controller. | 163384 |
| You may encounter the following unexpected behavior on the Backup Data Preparation step of the Online Restore Wizard: The wizard may not respond to any user action while it is processing a backup. WORKAROUND: Wait until the backup processing is finished. | 167416 |
| When you select the "Backup Agent Management" node in the Recovery Manager Console, you may observe the following issue: The Recovery Manager Console stops responding, showing the status "Discovering Backup Agent instances, please wait". WORKAROUND: Wait until the Backup Agent discovery completes. | 183965 |
| Unexpected behavior on the Reporting Options step in the Online Restore Wizard: When you select the "Include ChangeAuditor data in reports" check box, select a ChangeAuditor database, and click Next, you may encounter the error "Unable to connect to the ChangeAuditor database: <database>. Details: Login failed for user '<current user>'." This error shows up if the current user account does not have sufficient permissions to access the ChangeAuditor database. The expected behavior in the described situation is that the Online Restore Wizard should prompt you for credentials to access the ChangeAuditor database. WORKAROUND: Run the Online Restore Wizard under an account that has sufficient permissions to access the target ChangeAuditor database. | 192269 |
| You may encounter the following unexpected behavior while using the "Backup Agent Management" view in the Recovery Manager Console to view a list of Backup Agents: The list of Backup Agents may be incomplete. The cause of this behavior is that when you apply a filter on one or more columns in the "Backup Agent Management" view, there is no indication that the filter is applied. WORKAROUND: Check to see if a filter is applied on any columns in the "Backup Agent Management" view. Remove the filter if necessary. | 200274 |
| A compare operation performed in the Online Restore Wizard may take a significant time to complete (30+ minutes). Also, the compare operation may consume a significant amount of RAM. This issue only occurs if the number of objects being compared is 100,000+. WORKAROUND: Wait for the compare operation to complete. | 340796 |

| Known Issue | Issue ID |
|---|-------------|
| <p>The Online Restore Wizard cannot find an object if the object name contains 1-9 digits when searching by the full object name, but can find it by the common mask, for example: 'u01' object can be found by 'u' and cannot by 'u01'.</p> <p>This issue may arise if the operating system version of a domain controller is greater or different from the RMAD Console machine operating system.</p> <p>WORKAROUND: Copy the esent.dll file from the domain controller where the backup was created to the product installation folder on the Recovery Manager Console machine.</p> | 88020172 |
| <p>You may receive the "ASR Error: Fail to exclude disk#1" error when performing the Backup or Restore operation on Windows Server 2008/2008R2-based domain controller.</p> <p>WORKAROUND: This error can be safely ignored because it does not affect the backup or restore process.</p> | 91020268 |
| <p>After the upgrade on the network isolated machine, the Recovery Manager Console is loaded too slowly.</p> <p>WORKAROUND: Uncheck the Check for publisher's certificate revocation option on the Advanced tab in the Internet Option dialog in Microsoft Internet Explorer.</p> | 92444398 |
| <p>Pre-installed Backup Agent can be upgraded during the backup creation.</p> <p>WORKAROUND: Do not upgrade Backup Agent if the backup operation is not finished.</p> | 91682822 |
| <p>When a user cancels the data replication process by Ctrl + C, by logoff, etc, the status of the replication session is stuck at "Running".</p> | RMADFE-1271 |
| <p>Customer can add a few instances of the same RMAD console (by domain name and by IP).</p> | RMADFE-1276 |
| <p>Cannot disable replication schedule when there is no replication console (the replication console was deleted).</p> | RMADFE-1283 |

Table 3: Recovery Manager Portal known issues

| Known Issue | Issue ID |
|---|----------|
| <p>Unexpected behavior when you use the Recovery Manager Portal to delegate restore or undelete permissions to a user or group that is not assigned any role in the Recovery Manager Portal: The delegation operation completes successfully. The expected behavior in this situation is that the Recovery Manager Portal should not allow you to delegate permissions to a user or group that has not been assigned any role in the portal.</p> <p>WORKAROUND: Before delegating restore or undelete permissions, ensure that the target user or group is assigned the appropriate role in the Recovery Manager Portal. For more information about assigning roles to portal users, see the "Using Recovery Manager Portal" chapter in the User Guide.</p> | 308044 |
| <p>The Recovery Manager Portal uninstallation may fail if Microsoft .NET Framework 4.5 is not installed on the Recovery Manager Portal computer.</p> <p>WORKAROUND:</p> <ol style="list-style-type: none"> 1. Install Microsoft .NET Framework 4.5. 2. Uninstall the Recovery Manager Portal. | 314390 |

Known Issue**Issue ID**

3. Uninstall Microsoft .NET Framework 4.5.

The Recovery Manager Portal fails to show the result of a restore or undelete operation if while the restore or undelete is still running you switch to some other tab, and then return to the Recovery tab.

317314

WORKAROUND:

To ensure that all objects have been successfully restored or undeleted:

1. On the Recovery tab, click the button with the name of the operation you have just performed.
2. See the "Objects to restore" or "Objects to undelete" list. This list contains the objects whose restore has failed.

When selecting a backup the Recovery Manager Portal, you may encounter the error "No backup found for the last backup session." This issue occurs if the backup is located on the domain controller and in the Recovery Manager Console its storage location is specified using a UNC path.

340814

WORKAROUND: Select a backup stored locally on the Recovery Manager for Active Directory computer.

Cannot access the Recovery Manager Portal if the portal is installed in the child domain.

91616200

WORKAROUND: In the portal settings file C:\Program Files (x86)\Quest\Recovery Manager Portal\Enterprise.Portal.Console\bin\EnterprisePortalSettings.xml <add key="SimulateLogonForWebDelegation" value="false" /> (default = true)

System requirements

Before installing Recovery Manager for Active Directory 9.0, ensure that your system meets the following minimum hardware and software requirements.

i | **NOTE:** Recovery Manager for Active Directory can backup and restore domain controllers that are running on virtual machines in Amazon Web Services (AWS) or Microsoft Azure.

Recovery Manager for Active Directory requirements

Table 4: Recovery Manager for Active Directory system requirements

| Requirement | Details |
|------------------|--|
| Processor | Minimum: 1.4 GHz Recommended: 2.0 GHz or faster |
| Memory | Minimum: 1 GB Recommended: 2 GB These figures apply only if the Active Directory domains managed by Recovery Manager for Active Directory include 1 million objects or less. Increase RAM size by 512 MB for every additional 1 million objects. |
| Hard disk space | x86 system Full installation including the prerequisite software: 1.5 GB of free disk space In case all the prerequisite software is already installed: 200 MB of free disk space x64 system Full installation including the prerequisite software: 2.7 GB of free disk space In case all the prerequisite software is already installed: 210 MB of free disk space NOTE: Additional storage space is required for a backup repository, at least the size of the backed-up Active Directory database file (Ntds.dit) and the SYSVOL folder plus 40MB for the transaction log files. |
| Display | SVGA at 1024 x 768 or higher |
| Operating system | NOTE: Machine that hosts the Recovery Manager for Active Directory console must have same or higher version of Windows operating system than the processed domain controllers. Otherwise, the online compare and restore operations cannot be performed via the console. Installation |

| Requirement | Details |
|---|---|
| | <ul style="list-style-type: none"> • Microsoft Windows Server 2016 • Microsoft Windows Server 2012 R2 with or without any Service Pack • Microsoft Windows Server 2012 with or without any Service Pack • Microsoft Windows Server 2008 R2 without Service Pack or with Service Pack 1 • Microsoft Windows Server 2008 with Service Pack 1 or Service Pack 2 • Microsoft Windows 10 • Microsoft Windows 8.1 with or without any Service Pack • Microsoft Windows 8 with or without any Service Pack • Microsoft Windows 7 without Service Pack or with Service Pack 1 • Microsoft Windows Vista with Service Pack 2 |
| | <p data-bbox="588 808 1177 837">Targets for backup, restore, or compare operations</p> <ul style="list-style-type: none"> • Microsoft Windows Server 2016 including Server Core installation • Microsoft Windows Server 2012 R2 with or without any Service Pack (including Server Core installation) • Microsoft Windows Server 2012 with or without any Service Pack (including Server Core installation) • Microsoft Windows Server 2008 R2 without Service Pack or with Service Pack 1 (including Server Core installation) • Microsoft Windows Server 2008 with Service Pack 1 or Service Pack 2 (including Server Core installation) • Microsoft Windows Server 2003 R2 without Service Pack or with Service Pack 2 • Microsoft Windows Server 2003 without Service Pack or with Service Pack 1 or Service Pack 2 |
| Microsoft .NET Framework | <ul style="list-style-type: none"> • Microsoft .NET Framework version 4.5 or higher |
| Microsoft SQL Server and its components | <p data-bbox="588 1424 943 1458">Microsoft SQL Server versions</p> <p data-bbox="588 1469 1023 1503">One of the following version is required:</p> <ul style="list-style-type: none"> • Microsoft SQL Server 2016 with or without any Service Pack (Enterprise, Business Intelligence, Standard, Express, Web, or Developer Edition) • Microsoft SQL Server 2014 with or without any Service Pack (Enterprise, Business Intelligence, Standard, Express, Web, or Developer Edition) |

| Requirement | Details |
|---|---|
| | <ul style="list-style-type: none"> Microsoft SQL Server 2012 with or without any Service Pack (Enterprise, Business Intelligence, Standard, Express, Web, or Developer Edition) <p>Microsoft SQL Server components</p> <ul style="list-style-type: none"> Microsoft System CLR Types for SQL Server 2012 If this component is not installed, it will be installed automatically by the RMAD setup. <p>Microsoft SQL Server Reporting Services</p> <p>To display reports, Recovery Manager for Active Directory can integrate with Microsoft SQL Server Reporting Services (SRSS) 2012, 2014 and 2016.</p> |
| Microsoft Windows PowerShell | Microsoft Windows PowerShell version 3.0 or later |
| Microsoft Windows Installer | Microsoft Windows Installer 4.5 |
| Microsoft Management Console | Microsoft Management Console 3.0 |
| Integration with ChangeAuditor for Active Directory | To provide information on who modified particular Active Directory objects, Recovery Manager for Active Directory can integrate with ChangeAuditor for Active Directory from version 4.5 to 6.9. |

If any prerequisite software is not installed, the Setup program automatically installs it for you before installing Recovery Manager for Active Directory. If the prerequisite software to be installed is not included in this release package, it is automatically downloaded.

Recovery Manager Portal requirements

Table 5: Component requirements

| Requirement | Details |
|------------------|--|
| Processor | 1 GHz or faster |
| Memory | 512 MB or more |
| Hard disk space | x86 system: 850 MB or more x64 system: 2 GB or more |
| Display | SVGA at 1024 x 768 or higher |
| Operating system | <p>You can install the Recovery Manager Portal on a computer running one of the following operating systems (both x86 and x64 platforms are supported):</p> <ul style="list-style-type: none"> Microsoft Windows Server 2016 Microsoft Windows Server 2012 R2 with or without any Service Pack Microsoft Windows Server 2012 with or without any Service Pack |

| Requirement | Details |
|---|--|
| | <ul style="list-style-type: none"> • Microsoft Windows Server 2008 R2 with Service Pack 1 or later • Microsoft Windows Server 2008 with Service Pack 2 or later |
| Web browser | To access the Recovery Manager Portal, you can use Microsoft Internet Explorer 8 or higher. |
| Microsoft .NET Framework | Microsoft .NET Framework version 4.5 or higher |
| Microsoft Internet Information Server (IIS) | Microsoft Internet Information Services (IIS) 8.5, 8.0, 7.5, or 7.0. |
| Microsoft SQL Server and its components | <p>Microsoft SQL Server versions</p> <p>One of the following versions is required:</p> <ul style="list-style-type: none"> • Microsoft SQL Server 2016 with or without any Service Pack (Enterprise, Business Intelligence, Standard, Express, Web, or Developer Edition) • Microsoft SQL Server 2014 with or without any Service Pack (Enterprise, Business Intelligence, Standard, Express, Web, or Developer Edition) • Microsoft SQL Server 2012 with or without any Service Pack (Enterprise, Business Intelligence, Standard, Express, Web, or Developer Edition) <p>Required Microsoft SQL Server components</p> <ul style="list-style-type: none"> • Microsoft System CLR Types for SQL Server 2012 If this component is not installed, it will be installed automatically by the RMAD setup. |

Password and SIDHistory Recoverability Tool

You can only use the Password and SIDHistory Recoverability Tool if Microsoft's Active Directory Recycle Bin is not enabled in your environment.

Upgrade and compatibility

i **IMPORTANT:** Upgrade from Recovery Manager for Active Directory version 8.6 is not supported due to specific installation and upgrade issues found in version 8.6. Those issues are resolved in versions since 8.6.1.

Therefore, if version 8.6 is installed, perform the following steps:

1. Export the necessary scheduled backup creation tasks.
2. Remove Recovery Manager for Active Directory 8.6 from your computer.
Note that all your settings and data are preserved, except for scheduled backup creation tasks.
3. Install Recovery Manager for Active Directory 9.0.
4. Create new or import existing scheduled backup creation tasks.

See the [Upgrade and installation instructions](#) section for more details.

Product licensing

The Recovery Manager for Active Directory license specifies the licensed number of user accounts in the Active Directory domains protected with the product. If the actual number of user accounts exceeds the licensed number, Recovery Manager for Active Directory does not stop functioning but displays a warning message each time you back up data. In this case, you need to purchase and install a new license key file allowing you to back up a greater number of user accounts or revoke licenses from the domains whose backups you no longer need.

To view information about and manage the installed license key file, you can use the License tab in the **About** dialog box: in the Recovery Manager Console, right-click the Recovery Manager for Active Directory console tree root, and then click **About**.

Installing license key file

You need to supply a valid license key file when installing Recovery Manager for Active Directory.

To install a license key file

1. In the Setup Wizard, on the **User Information** page, click **Browse license** to display the **Select License File** dialog box.
2. Locate the Quest license file (*.dlv) and click **Open**.

Updating license key file

If you have purchased a new license key file, use the Recovery Manager Console to update the license key file.

To update the license key file

1. In the Recovery Manager Console, right-click the **Recovery Manager for Active Directory** console tree root, and then click **About**.
2. In the **About** dialog box, click the **License** tab, and then click **Install License File**.
3. In the **Update License** dialog box, enter the path and name of the license key file, and then click **OK**.

Revoking licenses

When the actual number of user accounts exceeds the licensed number, Recovery Manager for Active Directory returns a warning message each time you back up data. In this case, you can revoke licenses from the domains whose backups you no longer need. The revoked licenses are returned to the pool of available licenses and you can allocate them to a different domain.

! **CAUTION:** When you revoke licenses from a domain, all backups created by Recovery Manager for Active Directory for that domain get deleted. You should only revoke licenses from a domain if you no longer need backups created for that domain.

To revoke licenses from a domain

1. In the console tree, right-click the root node, and then click **About**.
2. In the About dialog box, click the **License** tab.
3. On the **License** tab, select the domain from the **License Usage** list, and then click **Revoke**.
4. In the confirmation message box, click **Yes**.

Getting started with Recovery Manager for Active Directory

Upgrade and installation instructions

To upgrade, install Recovery Manager for Active Directory on the computer where an upgradeable product version is installed. During the upgrade process, setup transfers the product configuration to the new installation of Recovery Manager for Active Directory.

For your scheduled backup tasks to work properly after the upgrade, install the new version of Recovery Manager for Active Directory to the folder where the earlier version is installed. This assures seamless operation of all backup creation tasks scheduled in the earlier version. If you install the new version of Recovery Manager for Active Directory to a different folder, the backup creation tasks will still refer to the old installation folder. In this case, you will need to re-configure the tasks using Windows Task Scheduler.

Recovery Manager for Active Directory 9.0 is incompatible with earlier versions of Backup Agent. Manually upgrade Backup Agent to version 8.8.1 on every domain controller where an earlier version of Backup Agent is pre-installed.

Additional resources

Additional information is available from the following:

- Online product documentation:
<http://documents.quest.com/recovery-manager-for-ad/>
- Recovery Manager Community
<https://www.quest.com/community/products/recovery-manager/fforum>

Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan.

About us

We are more than just a name

We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation.

Our brand, our vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece — you — to the community, to the new Quest.

Contacting Quest

For sales or other inquiries, visit www.quest.com/contact.

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

Third-party contributions

This product contains the third-party components listed below. For third-party license information, go to <http://quest.com/legal/license-agreements.aspx>. Source code for components marked with an asterisk (*) is available at <http://opensource.quest.com>.

Table 6: List of third-party contributions

| Component | License or acknowledgment |
|--------------------------------------|---|
| Boost 1.34.1 | Boost 1.0 |
| ZLib 1.1.4 | zlib 1.2.3 |
| MinHook 1.3.2.1 | MinHook 1.3.2.1 Copyright 2009 Tsuda Kageyu All rights reserved. |
| Task Scheduler Managed Wrapper 2.5.8 | MIT |

zlib 1.2.3 License

License

```
/* zlib.h -- interface of the 'zlib' general purpose compression library
version 1.2.3, July 18th, 2005
```

Copyright (C) 1995-2005 Jean-loup Gailly and Mark Adler

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Jean-loup Gailly jloup@gzip.org

Mark Adler madler@alumni.caltech.edu

```
*/
```

MinHook - The Minimalistic API Hooking Library for x64/x86

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Legend

WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death.

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

An information icon indicates supporting information.

Recovery Manager for Active Directory Release Notes

Updated - October, 2017

Version - 9.0