

Quest® Recovery Manager for Active Directory® 9.0.1

Release Notes

March 2018

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 9.0.1 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 9.0.1:

New Feature	Request ID
Limited edition of Quest Recovery Manager for Active Directory SCOM Pack Limited RMAD Management Pack for SCOM monitors the backup and restore operations performed by Recovery Manager for Active Directory, but the number of monitored properties is limited to reduce network load. For more details, see the <i>Monitoring Recovery Manger for Active Directory</i> section in <i>User Guide</i> .	RMADFE-1220
Support for environments where TLS 1.0 is disabled From this version, Recovery Manager for Active Directory supports environments where TLS 1.0 is disabled.	RMADFE-1386

Resolved issues

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

Table 1: General resolved issues

Resolved Issue	Issue ID
Upgrade of Recovery Manager Portal does not fix broken Hybrid PowerShell scripts.	RMADFE-1223
If multiple objects are selected for restore and there is Directory Synchronization Service Account among them, the restore operation will fail for all objects with the warning "Failed on-premise restore. Error: Value cannot be null". Fix: Now the Directory Synchronization Service Account is skipped with the warning "Failed to find the on-premises object <object name> with invalid SID" and the restore operation will be completed successfully.	RMADFE-1256
Upgrade to version 9.0 does not remove the Dell.RecoveryManager.AD.PowerShell snap-in.	RMADFE-1305
Recovery Manager for Active Directory (Forest Edition) setup does not check the PowerShell 3.0 or later prerequisite.	RMADFE-1330
RMAD shortcut may not work if different accounts are used to launch Recovery Manager Console and to install the product.	RMADFE-1353
Replication does not work if the Recovery Manager for Active Directory (Forest Edition) installation path in the master and slave console are different.	RMADFE-1371
The "Invalid Pointer" error may occur when the scheduled task (used to configure backup schedule) has been modified.	RMADFE-1373
The Group Policy Restore Wizard shows differences to the Group Policy objects which do not have any changes.	RMADFE-1383
Now Recovery Manager for Active Directory supports LSA Protection on servers with the latest "Meltdown" hotfix. For more details, see https://support.microsoft.com/en-us/help/4057142/windows-10-update-kb4057142 .	RMADFE-1388
If you select the Do not unpack backups option on the Unpacked Backups tab in Collection Properties, the option is not applied. If you reopen the dialog, the Use global settings option will be selected.	RMADFE-1390
Now the Recovery Manager Remote API Access service is optional. To install it, you need to select Recovery Manager Remote API Access in the Setup Wizard. This feature enables the following Recovery Manager for Active Directory functionality: integration with Recovery Manager Portal, Recovery Manager Console fault tolerance and support for hybrid environment.	RMADFE-1413
Recovery Manager Console cannot be launched from Forest Recovery Console.	RMADFE-1434

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 9.0.1, 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**

- 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

Targets for backup, restore, or compare operations

- 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

- Microsoft .NET Framework version 4.5 or higher

Microsoft SQL Server and its components

Microsoft SQL Server versions

One of the following version is required:

- 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 9.0.1.
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 9.0.1 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

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly jloup@gzip.org

Mark Adler madler@alumni.caltech.edu

```
*/
```

MinHook - The Minimalistic API Hooking Library for x64/x86

Copyright (C) 2009-2016 Tsuda Kageyu.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions

are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright 2018 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, and the Quest logo are trademarks and registered trademarks of Quest Software Inc. in the U.S.A. and other countries. For a complete list of Quest Software trademarks, please visit our website at <https://www.quest.com/legal>. All other trademarks, servicemarks, registered trademarks, and registered servicemarks are the property of their respective owners.

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 - March, 2018

Version - 9.0.1