Quest

Quest Recovery Manager for Active Directory
Forest Edition 10.3.2

Quick Start Guide

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Quest Software Inc.

Attn: LEGAL Dept

20 Enterprise, Suite 100

Aliso Viejo, CA 92656

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Licensing

The Recovery Manager for Active Directory (RMAD) license key file 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, RMAD 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**.

The **License** tab has the following elements:

- **Licenses purchased**. Displays the maximum allowed number of user accounts you can back up using the installed license file.
- **Licenses allocated**. Displays the number of user accounts backed up with the installed license file. If this number exceeds the number of purchased licenses, RMAD returns a warning message each time you back up data.
- **License usage**. Displays the number of user accounts backed up in each domain.
- **Revoke**. Revokes licenses from the domain selected in the **License usage** list. Be careful, as revoking licenses from a domain deletes all backups RMAD created for that domain.
- **Install License File**. Allows you to install a new license key file purchased from Quest®.

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, 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**.
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 (RMAD) 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.

IMPORTANT When you revoke licenses from a domain, all backups created by RMAD 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**.

Installing the Recovery Manager Console

The Recovery Manager Console is an MMC snap-in that provides access to the capabilities and functions of Recovery Manager for Active Directory. The Recovery Manager Console can be installed on any computer that meets the system requirements and has a reliable network connection to serviced domain controllers.

With the Recovery Manager Console installed, you can perform such tasks as

- **Backing up data in Active Directory**. This includes backing up Active Directory® objects, AD LDS (ADAM) instances, cross-domain group membership data, managing backup creation settings and schedule. For detailed instructions, see the *Backing Up Data in Active Directory* section in the User Guide.
- **Restoring data in Active Directory**. This includes performing the granular restore of Active Directory® objects, restoring AD LDS (ADAM) instances, Group Policy objects, unpacking Active Directory® backups, and generating reports that show changes occurred in Active Directory® and provide information on the restore operations performed with Recovery Manager. You can also clone production domain controllers to a test lab environment. For detailed instructions, see the *Restoring Data in Active Directory* section in the User Guide.
- **Creating scripts that automate your backup and restoration tasks**. You can use the capabilities provided by Windows PowerShell to create and run scripts that automate your Recovery Manager tasks, such as backing up or restoring data in Active Directory®. For detailed information, see the *Using Management Shell* section in the User Guide.

There are two methods to install the Recovery Manager Console:

- Use the Setup Wizard
- Perform a silent installation

Each of these methods is discussed in the next subsections.

Using the Setup Wizard

By using this installation method, you can install Recovery Manager for Active Directory with either default or custom parameters. For more information on the aspects of the product installation that you can customize, see the table in the next procedure.

To install the product by using the Setup Wizard

1. To install Recovery Manager for Active Directory / Forest Edition, double click on the **RMADFE_10.3.2.xxxxx.exe** to extract the software. Enter a folder path to expand the software into.
2. In the expanded folder, browse into the **Setup** folder and double click the **RMADFE_x64.msi** to start the install.
3. Follow the instructions in the Setup Wizard.
4. On the **User Information** page, specify information that will be used to personalize your installation (optional) and a valid license file.
5. On the **Choose Setup Type** page, select one of the following options:

   Express - Installs Recovery Manager for Active Directory with default parameters. This option also installs the Microsoft SQL Server® 2022 Express Edition supplied with the product.

   Custom - Allows you to customize the product installation by specifying the following:

6. The product features you want to install
7. Default folder for storing backups created by the application.
8. Whether you want to install Microsoft SQL Server® 2022 Express Edition or use Microsoft SQL Server® preinstalled in your environment.
9. An application you want to use for creating and displaying reports

   NOTE: When configuring Recovery Manager for Active Directory to create and display reports using Microsoft SQL Server® Reporting Services, you must start the Setup Wizard under the user account that is assigned the predefined Content Manager role on the target SQL Server®.

10. Follow the instructions in the wizard to complete the installation.

Perform a silent installation

A silent (or unattended) installation of Recovery Manager for Active Directory (RMAD) does not require any user interaction. With this method, you specify the RMAD installation parameters at a command prompt before running the installation.

You can only perform a silent installation of RMAD when all of the following conditions are true:

- One of the Microsoft SQL Server® versions listed in the System Requirements section in the Release Notes is accessible from the computer where you plan to install RMAD.
- One of the Microsoft SQL Server® Reporting Services versions listed in the System Requirements section of the Release Notes is accessible from the computer where you plan to install RMAD or Quest Reports Viewer is installed and accessible on that computer.

To perform a silent installation of Recovery Manager for Active Directory

NOTE You must install all the required software components manually before you run the command-line installation of the product. Otherwise, the installation will fail. For more details, see the System Requirements section in Release Notes.

Enter the following syntax at a command prompt:

```
Msiexec /i "<Path to the Recovery Manager for Active Directory installation
CD> \Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\<InstanceName>"
SQLAUTHENTICATION="0" LICENSE="<LicensePath>"
```

You can explicitly specify RMAD features that you want to install. For that, use the following command line:

```
Msiexec /qn /i RMADFE_x64.msi
ADDLOCAL=RMAD,ForestRecovery,ForestEditionFiles,PowerShellFE,ReportsViewer,
RemoteAPIAccess,Persistence`
```

The table below describes the parameters you can use to perform a silent installation of Recovery Manager for Active Directory.

Silent installation parameters

Parameter	Description	Example
ADDLOCAL	Explicitly specifies RMAD features to install. Available options: RMAD, ReportsViewer, RemoteAPIAccess, PowerShellFE, ForestRecovery, ForestEditionFiles, Persistence, ADVL.Core	`Msiexec /qn /i RMADFE_x64.msi ADDLOCAL=RMAD,ReportsViewer,PowerShel l,RemoteAPIAccess`
BACKUP_PATH	Specifies the location where RMAD will store Active Directory backups. If this parameter is omitted, the backups are stored in %AllUsersProfile%\ Application Data\ Quest\Recovery Manager for Active Directory\Backups. Make sure that the volume hosting the backup storage folder has enough disk space. The backup files could reach several hundred megabytes in size.	`Msiexec /i "E:\Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\ <InstanceName>" BACKUP_PATH="<PathToStoreADBackups>"`
INSTALLDIR	Specifies the RMAD installation folder. If this parameter is omitted, the following default folder is used: %ProgramFiles%\Ques t\Recovery Manager for Active Directory	`Msiexec /i "E:\Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\ <InstanceName>" INSTALLDIR="<PathToInstallationFolder >"`
LICENSE	Specifies the path to the license file.	`Msiexec /i "E:\Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\ <InstanceName>" LICENSE="<LicensePath>"`
REMOVE	Removes specified RMAD features. Available options: RMAD, ReportsViewer,	`Msiexec /qn /i RMADFE_x64.msi REMOVE=RMAD,ReportsViewer,PowerShell, RemoteAPIAccess`

Parameter	Description	Example
	RemoteAPIAccess, PowerShellFE, ForestRecovery, ForestEditionFiles, Persistence, ADVL.Core	
SQLSERVER	Specifies the name and instance of a local or remote SQL Server® to store RMAD data. This is a required parameter.	`Msiexec /i "E:\Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\<InstanceName>"`
SQLDBNAME_REPORTING	Specifies an existing or new database to store RMAD report data. This database resides in the SQL Server® instance defined in the SQLSERVER parameter. If you specify a database that does not exist, it will be created. If the SQLDBNAME_REPORTING parameter is omitted, a new database with the following name is created and used: RecoveryManager-Reporting- <name of the Recovery Manager for Active Directory computer>	`Msiexec /i "E:\Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\<InstanceName>" SQLDBNAME_REPORTING="<DatabaseName>"`
SQLAUTHENTICATION	Specifies the SQL Server® authentication method. You can use one of the following values: 0. Specifies to use Windows authentication credentials of the current user account; 1. Specifies to use the authentication credentials set in the SQLUSERNAME and SQLUSERPASSWORD parameters. If this parameter is omitted, Windows authentication credentials of the current user account are used.	`Msiexec /i "E:\Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\<InstanceName>" SQLAUTHENTICATION="0"`

Parameter	Description	Example
SQLUSERNAME	Specifies the user name for authentication on the SQL Server®. This parameter is required if you set the SQLAUTHENTICATION parameter value to "1".	`Msiexec /i "E:\Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\<InstanceName>" SQLAUTHENTICATION="1" SQLUSERNAME="<UserName>" SQLUSERPASSWORD="<Password>"`
SQLUSERPASSWORD	Specifies the password for authentication on the SQL Server®. This parameter is required if you set the SQLAUTHENTICATION parameter value to "1".	`Msiexec /i "E:\Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\<InstanceName>" SQLAUTHENTICATION="1" SQLUSERNAME="<UserName>" SQLUSERPASSWORD="<Password>"`
VIEWER_APPLICATION_TYPE	Specifies the application to be used for viewing RMAD reports. You can use one of the following values: **local**. Specifies to use Quest Reports Viewer installed on the RMAD computer; **remote**. Specifies to use Microsoft SQL Server® Reporting Services installed on a remote computer.	`Msiexec /i "E:\Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\<InstanceName>" VIEWER_APPLICATION_TYPE="<Value>"`
VIEWER_REPORTING_SERVER	Specifies the HTTP address to access Microsoft SQL Server® Reporting Services. This parameter is required if you set the VIEWER_APPLICATION_TYPE parameter value to "remote".	`Msiexec /i "E:\Setup\RMADFE_x64.msi" /qb SQLSERVER="<SQLServerName>\<InstanceName>" VIEWER_APPLICATION_TYPE="remote" VIEWER_REPORTING_SERVER= "http://<HTTPAddress>"`

Removing Recovery Manager for Active Directory

To remove Recovery Manager for Active Directory

1. In Control Panel, click **Uninstall a program**.
2. In the list, select Quest Recovery Manager for Active Directory, and then click **Change**.
3. Follow the steps in the wizard that starts to remove the program from your computer.

IMPORTANT If an antivirus program is running on the Recovery Manager for Active Directory (RMAD) computer, you may be prompted to restart the computer. To uninstall RMAD without

restarting, disable all antivirus programs on the RMAD computer first, and then uninstall RMAD.

Installing Backup Agent

Recovery Manager for Active Directory allows you to back up computer collections using Backup Agent preinstalled on each target domain controller (DC). The advantages of using preinstalled Backup Agent are as follows:

- Performing a backup without having domain administrator privileges. It is sufficient if Recovery Manager for Active Directory runs under a backup operator's credentials.
- Reducing network traffic when backing up a computer collection.

You can install Backup Agent using the Backup Agent Setup Wizard or perform a silent installation.

Installing Backup Agent using the Setup Wizard

To install Backup Agent using the Backup Agent Setup Wizard

1. On the target DC, run the **Backupagent.msi** file located in the Setup folder (\CD\Setup) on the Recovery Manager for Active Directory Installation media.
2. Follow the instructions in the Backup Agent Setup Wizard.
3. On the Specify Backup Agent Port page, specify the TCP port number Recovery Manager for Active Directory will use to connect to Backup Agent. Click Next and follow the provided instructions to complete the wizard.

IMPORTANT If you have Microsoft Windows Firewall installed, the TCP port you specify must be open. You must specify the same port number for all target DCs to be backed up.

A silent (or unattended) installation of Backup Agent does not require any user interaction. With this method, you specify the Backup Agent installation parameters at a command prompt before running the installation.

Performing a silent installation of Backup Agent

To perform a silent installation of Backup Agent

1. Copy the Backupagent.msi file from the Setup folder on the Recovery Manager for Active Directory Installation to the target DC where you want to install Backup Agent.
2. Enter the following syntax at a command prompt on the target DC:

```
Msiexec /i "<Path to the Backupagent.msi file on the target DC>"
[ERDPORT="<PortNumber>"] [FIREWALL_SETTINGS_CONFIGURE="<Value>"] /qn
```

Optional parameters are surrounded by brackets.

The table below describes the parameters you can use to perform a silent installation of Backup Agent. Note that by default the silent installation process uses a local system account. To install Backup Agent on a remote DC, this account must be given permissions to access that DC.

Silent installation parameters

Parameter	Description	Example
ERDPORT	Specifies the target DC TCP port number to be used for Backup Agent traffic. If this parameter is omitted, TCP port 3843 is used by default.	`Msiexec /i "C:\Backupagent.msi" ERDPORT=3355 /qn`
FIREWALL_SETTINGS_CONFIGURE	Specifies whether or not to configure Windows Firewall on domain controllers to allow Backup Agent traffic. You can use one of the following values: **0**. Specifies not to configure Windows Firewall on the target DC; **1**. Specifies to automatically configure Windows Firewall on the target DC.	`Msiexec /i "C:\Backupagent.msi" FIREWALL_SETTINGS_CONFIGURE= "1" /qn`

Changing Backup Agent port number

Optionally, you can change the TCP port number that Backup Agent uses.

To change the Backup Agent port number

1. On the target DC, start Registry Editor (regedit.exe), and then locate and select the **HKLM\SYSTEM\CurrentControlSet\Services\ErdAgent** registry key.
2. In the details pane, double-click the **ImagePath** value, and use the Value data text box to specify the port number in the following way:

```
%SystemRoot%\RecoveryManagerAD\ErdAgent.exe -I -P:3899
```

In this example, Backup Agent will use port 3899.

3. When finished, click **OK**.
4. Close Registry Editor.
5. Restart the Backup Agent service.

By default, Recovery Manager for Active Directory (RMAD) uses TCP port **3843** to connect to Backup Agent. If you have specified a different port number, or if you have changed the port number after installing Backup Agent, for RMAD to work properly, perform the following steps:

1. Start the Recovery Manager Console (snap-in). In the console tree, select **Recovery Manager for Active Directory**, and click **Settings** on the **Action** menu.
2. On the **General** tab of the **Properties** dialog box, select the **Connect to the backup agent using specific TCP port** check box, and then specify the appropriate port number in the **Port** box.

IMPORTANT If you have Microsoft Windows Firewall installed, the TCP port you specify must be open. You must specify the same port number for all target DCs to be backed up.

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 Microsoft 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.

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