

Dimensions[®] RM 12.8.1 Installation Guide

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Objective

The purpose of this manual is to describe how to install Dimensions RM, a comprehensive requirements management application that lets development teams capture, engineer, and manage requirements through the entire product life cycle.

Edition Status

The information in this guide applies to *Release 12.8.1* of Dimensions RM. This edition supersedes earlier editions of this manual.

Audience

This manual is primarily intended for system administrators who are responsible for installing Dimensions RM. It presumes that you have knowledge of the operating systems to which you are installing.

Typographical Conventions

The following typographical conventions are used in the online manuals and online help. These typographical conventions are used to assist you when using the documentation; they are not meant to contradict or change any standard use of typographical conventions in the various product components or the host operating system.

italics	Introduces new terms that you may not be familiar with and occasionally indicates emphasis.
bold	Emphasizes important information and field names.
UPPERCASE	Indicates keys or key combinations that you can use. For example, press the ENTER key.
monospace	Indicates syntax examples, values that you specify, or results that you receive.
monospaced italics	Indicates names that are placeholders for values you specify; for example, filename.
monospace bold	Indicates the results of an executed command.

vertical rule	Separates menus and their associated commands. For example, select File Copy means to select Copy from the File menu. Also, indicates mutually exclusive choices in a command syntax line.
brackets []	Indicates optional items. For example, in the following statement: SELECT [DISTINCT], DISTINCT is an optional keyword.
	Indicates command arguments that can have more than one value.

Printing Manuals

As part of your Dimensions license agreement, you may print and distribute as many copies of the Dimensions manuals as needed *for your internal use, so long as you maintain all copies in strict confidence and take all reasonable steps necessary to ensure that the manuals are not made available or disclosed to anyone who is not authorized to access Dimensions under your Dimensions license agreement.*

Contacting Technical Support

Micro Focus provides technical support for all registered users of this product, including limited installation support for the first 30 days. If you need support after that time, contact Micro Focus Support at the following URL and follow the instructions:

http:///supportline.microfocus.com

Language-specific technical support is available during local business hours. For all other hours, technical support is provided in English.

The Micro Focus Support web page can also be used to:

- Report problems and ask questions.
- Obtain up-to-date technical support information, including that shared by our customers via the Web, automatic e-mail notification, newsgroups, and regional user groups.
- Access a knowledge base, which contains how-to information and allows you to search on keywords for technical bulletins.
- Download fix releases for your Micro Focus products.

License and Copyright Information for Third-Party Software

For license and copyright information of third-party software included in this release, check the file Third_Party_Licenses.txt, which can be found in the Dimensions RM installation directory, e.g. C:\Program Files\Micro Focus\Dimensions 12.8.1\RM.

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Introduction

Dimensions RM is a comprehensive requirements management application that lets development teams capture, engineer, and manage requirements through the entire product life cycle.

This guide provides instructions for licensing Dimensions RM, installing and configuring your RDBMS and Administrator Oracle client (where necessary), installing Dimensions RM, and upgrading from previous versions of Dimensions RM, your RDBMS, and Serena License Manager (SLM) or Micro Focus Auto Pass.

The instructions in this guide are *principally* for single-server installations of the Dimensions RM product comprising:

- One of the following database configurations:
 - Oracle:
 - Oracle 12c
 - Oracle 18c
 - Oracle 19c
 - Microsoft:
 - MS SQL Server 2016 SP2 CU 12
 - MS SQL Server 2017
 - MS SQL Server 2019
- A pre-installed Serena License Manager (SLM) or Micro Focus Auto Pass. The installation instructions for this product are provided in the related *Installing the Serena License Manager* guide.
- Pre-installed Microsoft Office (32-bit or 64-bit). For details, see chapter "Microsoft Office Requirements" on page 17.
- A Dimensions RM server, providing the following components:
 - Web Server.
 - SyncEngine.
 - ALF Emitter.
 - RM Mail Service.
 - RM Web Service.

• RM Admin clients.



NOTE Other installation procedures are also discussed or mapped out in this guide, for example:

- Configurations in which your Oracle RDBMS is located on a remote network node.
- Configurations in which an Administrator Oracle client is required.
- Upgrading an existing Dimensions RM server and associated RDBMS (where appropriate).

However, you may want to contact Micro Focus Support for additional help with these more complex installations.

System Requirements

IMPORTANT! For the list of currently supported RDBMS platforms, chip architectures, operating-systems, Web servers, Web browsers, and Micro Focus and third-party integrations, see the Dimensions RM Supported Platform Matrix:

https://www.microfocus.com/documentation/dimensions-rm/drm12.8.1/ matrixdrm_12.8.1.xlsx.zip

The following list includes various requirements and notes not otherwise included on the supported platform Web site:

- UNIX RDBMS must be installed on a remote UNIX network node.
- For Oracle databases:
 - **Oracle Administration Client:** Depending on your environment, you may need to install a supported 64-bit Administrator Oracle Client. For more information, see chapter "The Administrator Oracle Client" on page 64.
- For Microsoft SQL Server:
 - 64-bit ODBC System DSN: You need to set up a 64-bit ODBC System DSN on SQL Server Native Client 11 driver in order to use the following Dimensions RM components:
 - A Dimensions RM server communicating with a *remote* RDBMS.
 - A Dimensions RM server communicating with a local 64-bit Windows RDBMS.
 - A Dimensions RM Admin Client communicating with a Dimensions RM database, no matter where located.
- Serena License Server/Micro Focus Auto Pass: You must pre-install the Serena License Manager (SLM) or Micro Focus Auto Pass if you wish, by default, to fully license your installation of Dimensions RM, rather than exercise the 30-day evaluation option. See the *Installing Serena License Manager* guide and "Licensing Dimensions RM" on page 51.
- Web Server:
 - The Web server must be installed on a Windows machine.

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- When using Oracle databases, a 64-bit Oracle Administrator client must be installed on the same machine as the Web server.
- When using a Microsoft SQL Server database, a 64-bit ODBC System DSN must be configured.
- RAM/CPU/Disk-Space Recommendations: See the Readme.
- Microsoft Office (32-bit or 64-bit): Including .NET Programmability Support, must be installed on the Dimensions RM server. For further information, see chapter "Microsoft Office Requirements" on page 17.

Prerequisites for the Dimensions CM to Dimensions RM Integration

To set up ALM the associations, the following prerequisites must be satisfied:

- Both Dimensions CM and Dimensions RM must have been installed and both must be at compatible release levels. See the Micro Focus Integrations page of the relevant RM release: <u>https://www.microfocus.com/documentation/dimensions-rm/</u> <u>drm12.8.1/matrixdrm_12.8.1.xlsx.zip</u>.
- A Dimensions CM desktop client must be installed on the Dimensions RM web server machine.
- For certain installations (as described in this guide), it is recommended that Dimensions RM databases have exclusive use of their own Oracle instance. In those circumstances, if you are using Dimensions CM against an Oracle RDBMS, you must make sure that it does not share the same Oracle instance as that used by Dimensions RM.
- Before you can begin to establish any of the Dimensions RM to Dimensions CM associations referred to below, the rmcm.xml configuration file on the Dimensions RM web server machine must first be edited to include the URL of the Dimensions CM server. Proceed as follows:
 - a On the Dimensions RM web server machine, navigate to:

<RM-Install-Directory>\conf

b Open the following configuration file in a text editor:

rmcm.xml

This file has the following lines:

```
<project>
    <!-- CMServer url="http://localhost:8080" -->
    <CMServer url="" />
</project>
```

c Update the Dimensions CM URL with the correct information for the Dimensions CM server. If Dimensions CM is installed on the same machine as the Dimensions RM web server and was installed with the default port number 8080, then the commented out URL on the preceding line will be the appropriate URL.

- The following Dimensions RM to Dimensions CM associations must have been established by a Dimensions RM administrator:
 - The requisite Dimensions RM instances to one or multiple Dimensions CM products (see the *Dimensions CM-Dimensions RM ALM Integration Guide*).
 - The requisite Dimensions RM baselines or collections to one or multiple Dimensions CM projects/streams (see *Dimensions CM-Dimensions RM ALM Integration Guide*).

Conversely, to enable Dimensions RM users to look at Dimensions CM requests, after the above steps have been completed, a Dimensions CM user must associate Dimensions RM requirements to Dimensions CM requests.

Upgrade Scenarios and Their Execution

For new installations see chapter "Installing Dimensions RM" on page 37.

There is, strictly speaking, no "upgrade" mechanism for Dimensions RM; the older version must be un-installed before initiating the installation of the 12.8.1 release.

Find the scenario below that best matches your needs:

- **1 Installing Dimensions RM on the Same Server as the Earlier Release:** The high-level steps, are listed below.
 - **a** Perform all pre-upgrade tasks, including backing up the database, all Dimensions RM instances, and un-installing RM.
 - **b** Dimensions RM release 12.8.1 requires one of the following licenses tools to be installed:
 - Serena License Manager (SLM) release 2.3.0: If you are running a previous version of SLM, upgrade the SLM.
 - Micro Focus Auto Pass release 11.5: If you are running a previous version of Auto Pass, upgrade your Auto Pass installation.
 - c Install the new release of Dimensions RM.
 - **d** Copy the security.dat file from the backed-up RM folder into the installation folder under RM. There will exist in that location the security.dat file created as part of the setup that file can be over-written.
 - e Convert / Upgrade all RM Instances.
 - **f** Place saved or backed-up files in their proper locations.



- **CAUTION!** During same-server upgrades you must not change:
- Server names.
- Instance names.
- Database names.

If you wish to do any of these, contact Micro Focus Support.

2 Migrating to a fresh Oracle installation

- **a** Perform all pre-upgrade (pre-migration) tasks, including backing up the database, all Dimensions RM instances, and un-installing RM.
- **b** If the fresh Oracle installation is on the same server:
 - Save TNSames files for both the RDBMS server and the Oracle client.
 - Use the Oracle Universal Installer (OUI) to remove your Oracle products following the Oracle documentation.
 - Uninstall the Oracle client if that is not done as part of Appendix B.
 - Reboot the RDBMS server.
 - Delete both the root Oracle and program files directories.

- Reboot the RDBMS server again.
- **c** Install and configure the new version of Oracle; include the Oracle 64-bit client, if not included with the Oracle install.
- **d** Install the new release of Dimensions RM.
- e Place saved or backed-up files in their proper locations.

Restore all RM Instances.



IMPORTANT! The Dimensions RM installer asks which version of Oracle it is being installed to and installs files specific to the version of Oracle that you specify.

Planning for the Installation

Dimensions RM is a comprehensive requirements management application that lets development teams capture, engineer, and manage requirements through the entire product life cycle.

This guide provides instructions for:

- Installing and configuring the RDBMS
- Installing and configuring the Administrator Oracle client or MS SQL DSN (where necessary)
- Installing Dimensions RM
- Upgrading from previous versions of Dimensions RM

The following are a series of checklists to be used for planning and preparing your upgrade or installation:

	Installation	Upgrade
Server	"Installing Dimensions RM Server" on page 27	"Upgrading Dimensions RM Server" on page 21
Admin Client	"Installing the Dimensions RM Admin Client" on page 35	"Upgrading the Dimensions RM Admin Client" on page 33

Pre-Installation Requirements

To help ensure that your installation is a success, review the following installation requirements and tips.

General Requirements

Before you install, make sure that:

- You have worked through the chapter "Planning for the Installation" on page 16.
- The host names of the server computers that will host the database and the licensing tool (Serena License Manager (SLM) or Micro Focus Auto Pass) have been identified. If a single computer is to be used for all software components, it can host both the Dimensions RM server and client.
- When operating in an IPv6-only environment, IPv4 must be installed on the server running Dimensions RM. It is not required to enable IPv4 after installing it.
- Oracle only: For a Dimensions RM client-only installation (and for various other installation configurations), that the requisite Oracle Administrator client has been installed.



NOTE Oracle only: the Oracle client path must be first in the Windows PATH variable.

- If you will be installing the e-mail notification service, that you know the name of the computer running the service and the name of the SMTP mail server to be used.
- 32-bit or 64-bit edition of Microsoft Office 2019, 2016, 2013, including .NET Programmability Support is installed on the Dimensions RM server to support document export, RM Import and RM Import Designer tools. For further information, see chapter "Microsoft Office Requirements" on page 17.
- No other applications are running.

When Using Oracle with Dimensions RM

Correctly Configuring the Oracle RDBMS

The Oracle RDBMS instance must be configured correctly before you install Dimensions RM. Please see "Installing and Configuring Oracle" on page 63.

Oracle 12 Requirements

- Before installation, make sure that the system drive on your computer has default share configured on it. Use the net use command to verify, for example: C:\>net use \\hostname\c\$ Sending this command should return: The command completed successfully.
- Ensure that the current user, the user in the Administrators group, has all the privileges on the default share.

Please follow the following link to check information about software requirements for Oracle installation http://docs.oracle.com/database/121/NTCLI/ pre_install.htm#NTCLI1255

When Using Microsoft SQL Server with Dimensions RM

The following requisites have to be met before installing Dimensions RM:

- Microsoft SQL Server is installed
- A database instance to receive the data of Dimensions RM exists
- A configured 64-bit System DSN exists on the application server and Web server.

Please follow the following link to check information about hardware and software requirements for installing MS SQL Server: https://docs.microsoft.com/en-us/sql/sql-server/install/hardware-and-software-requirements-for-installing-sql-server#hwswr

Microsoft Office Requirements

It is **highly recommended** that Microsoft Office is installed on the Dimensions RM server. If Microsoft Office is not installed, Dimensions RM is running with the following limitations:

- If Microsoft Word is not installed on the server:
 - DOCX format is not available for export. Documents export to DOC instead.

- PDF format is not available for export. Documents export to DOC instead.
- When exporting to Microsoft Word, the Table of Contents shows page 1 for all chapters.
- Attachments cannot be exported.
- Import of Word files through RM Browser is not available.
- If Microsoft Excel is not installed on the server:
 - XLSX format is not available for export of requirements or documents. Files export to XLS instead.
- If Microsoft PowerPoint is not installed on the server:
 - Dashboards cannot be exported to PPTX or PDF format.

If you want to use Microsoft Office on the Dimensions RM server, the following criteria have to be met:

- The 32-bit or 64-bit edition of Microsoft Office, including .NET Programmability Support, must be installed.
- Microsoft Office must be any of these versions:
 - Microsoft Office 2019
 - Microsoft Office 2016
 - Microsoft Office 2013
- You must install Microsoft Word, Microsoft Excel, and Microsoft PowerPoint.

SSO Considerations

Support for Single Sign On requires either an SSO-enabled Micro Focus Solution Business Manager (SBM) or Dimensions CM server installation.

The SBM or Dimensions CM software and documentation can be downloaded from the Micro Focus web site. For information on installing and enabling an SBM or Dimensions CM SSO server, see the *Installation Guide* and *Administrator's Guide* for the relevant product.



CAUTION!

- When installing Dimensions RM with SSO, specify a host name rather than an IP address. Otherwise SSO may not work correctly with Web applications. The host name must be exactly the same you configured for the gatekeeper in SBM or Dimensions CM.
- The Dimensions RM SSO installation changes many configuration files to ensure that SSO performs correctly. It is difficult to perform these configuration changes manually. We recommend that if non-SSO configuration is to be modified to support SSO, you might consider re-installing the product, or check with Micro Focus RM Support for assistance.

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IMPORTANT!

- The Micro Focus SSO Server component of Dimensions CM or SBM must be installed to a system that is accessible to the RM server.
- The Micro Focus SSO Server must be fully configured and ready to support CAC, LDAP, or any other authentication method you will be using. See the SBM or Dimensions CM documentation for information on installing and configuring a Micro Focus SSO Server.
- If you install Dimensions RM and CM to the same server and enable SSO in RM, then SSO will also be in enabled in Dimensions CM.

General Prerequisites

- The Micro Focus SSO Server component of Dimensions CM or SBM must be installed to a system that is accessible to the RM server.
- The Micro Focus SSO Server must be fully configured and ready to support CAC, LDAP, or whatever authentication method you will be using. See the SBM or Dimensions CM documentation for information on installing and configuring a Micro Focus SSO Server.

Prerequisites for SSO Authentication

Client Prerequisites

The Dimensions RM SSO software is all server side, so there are no client prerequisites.

Server Prerequisites

The following information is requested by the Dimensions RM installer. This information can be determined by examining the configuration of your SBM or Dimensions CM SSO server.

Name of field in RM installer	Description
Host Name	The host name or IP address of the computer that hosts your Micro Focus Single Sign On server.
SSO	The HTTP (default = 8085) or HTTPS (default = 8243) port used by the Serena SSO server.
	NOTE If the specified port is not an HTTPS port, then the Secure (HTTPS) Connection checkbox (see below) <i>must</i> remain unchecked.
Secure (HTTPS) Connection	Enable this checkbox if the Micro Focus SSO Server uses Secure Socket Layer (SSL) communication.
	NOTE Changing this checkbox will reset the SSO port to the default HTTP or HTTPS port.

Prerequisites for SSO with CAC Reader Authentication

Client Prerequisites

The following client side prerequisites are required:

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- Installation of Common Access Card (CAC) ActivClient 6.1 or later software. All configuring of the ActivClient client, if necessary, should be performed as described in the vendor documentation. How to log in using CAC and your PIN in the various Dimensions RM clients is described in the Dimensions RM client documentation.
- Each user has a personal CAC.
- A CAC Reader is attached to the client machine.

Server Prerequisites

The following information is requested by the Dimensions RM installer. This information can be determined by examining the configuration of your SBM or Dimensions CM SSO server.

Name of field in RM installer	Description
Host Name	The host name or IP address of the computer that hosts your Micro Focus Single Sign On server.
SSO	The HTTP (default = 8085) or HTTPS (default = 8243) port used by the Micro Focus SSO server.
	NOTE If the specified port is not an HTTPS port, then the Secure (HTTPS) Connection checkbox (see below) <i>must</i> remain unchecked.
Secure (HTTPS) Connection	Enable this checkbox if the Micro Focus SSO Server uses Secure Socket Layer (SSL) communication.
	NOTE Changing this checkbox will reset the SSO port to the default HTTP or HTTPS port.

Chapter 2

Upgrading Dimensions RM Server

Micro Focus **strongly recommends** to use the following checklist when upgrading Dimensions RM server as to avoid skipping important steps.



IMPORTANT! The check list below requires that your current Dimensions RM installation is of version 12.2 or higher. If you wish to upgrade any version older than 12.2, please contact Micro Focus support.

V	
	Pre-Upgrade Tasks
	Download the Platform Matrix
	Download the Platform Matrix at https://www.microfocus.com/documentation/dimensions-rm/drm12.8.1/ matrixdrm_12.8.1.xlsx.zip
	Downloading the 12.8.1 release of Dimensions RM and Latest Patch
	When downloading the installation zip file, please include the release notes, the ReadMe file, and the associated documentation from the Micro Focus support website. From the release notes and the ReadMe files you will find the most up- to-date list of enhancements and defects corrected in the release. You can't benefit from features you don't know about!
	Micro Focus support website: http://supportline.microfocus.com
	For downloading the latest patch, see "Checking for Latest Updates" on page 103.RAM / CPU / Disk-Space Recommendations
	For recommendations on RAM, CPU power, or Disk space, see the Dimensions RM ReadMe file.
	Supported Windows Operating System
	To check if your version of Windows is supported, please see the Platform Matrix. Supported Databases
	To check if your database is supported, please see the Platform Matrix.
	Note that this upgrade checklist also includes a step when to execute a database version upgrade.
	Supported Microsoft Office version
	To check if your version of Microsoft Office is supported, please see the Platform Matrix.
	Supported Web browsers
	To check if your web browser is supported, please see the Platform Matrix.

✓ Checklist Items for Upgrading Dimensions RM Server

\checkmark	Checklist Items for Upgrading Dimensions RM Server
	Dimensions CM Integration only: Supported Dimensions CM Client version
	To check if your Dimensions CM client version is supported, please see the Platform Matrix. Named Web Service License
	If Dedicated Service accounts are used for Web Services, vs SSO or changing user accounts, a Named License is recommended to ensure a lack of a license does not cause a failure.
	Dimensions RM User Names and Passwords
	Before upgrading, make sure that you know the passwords for the following accounts: ICDBA
	 ICADMIN
	 ICPROJECTS
	If these three passwords are not known to you or to a member of the RM team, then re-set them before moving forward with the install. Schedule RM Work Stoppage
	Each RM instance must be backed-up before the installation is begun. In order to ensure that no changes are applied to RM instances once the backup has started we strongly recommend that the administrator schedule RM downtime and then revoke user access by stopping the RM Pool Manager Service.
	Executing the Upgrade
	Create a Backup of your Dimensions RM instance and Files
	 Create a backup of each Dimensions RM instance using RM Manage. For further information on creating backups with RM Mange, see chapter "Backing Up an Instance Account" in the Administrator's Guide.
	2 Create a backup of your whole Dimensions RM installation. This includes the RM directory (which has sub-directories like bin, logs) as well the Common Tools directory.
	For further information see chapter "Back up Database, Instances, and Necessary Files" on page 84.
	Create a Backup of your Dimensions RM Server and Database Server
	If your Dimensions RM server and database are installed on virtual machines, the easiest way is to make a snapshot (or copy) of the virtual machines.
	Should that not be possible or Dimensions RM or your database is not installed on a virtual machine, use an imaging software to create such a backup.
	Record the Dimensions RM Mail Configuration
	If the current release is configured to use RM Mail, see chapter "Record the Dimensions RM Mail Configuration" on page 84.

✓ Checklist Items for Upgrading Dimensions RM Server

Uninstall your current version of Dimensions RM
Uninstall the current version of Dimensions RM by executing the uninstall routine provided by Windows. Then, restart the machine.
Oracle only: Uninstall 32-bit Oracle Client
Uninstall the 32-bit Oracle client by executing the steps described in chapter "Uninstalling the 32-bit Oracle Client" on page 87.
Admin Approval Mode has been disabled
See "Disabling Admin Approval Mode" on page 39.
.NET Framework 4 has been installed
See "Installing the .NET Framework" on page 39. Upgrade the Serena License Manager
If upgrading from a previous release of Dimensions RM, please be aware that you must upgrade the Serena License Manager to (SLM) to 2.3.0. RM Release 12.8.1 will not function with an older license manager.
See the Installing Serena License Manager guide and chapter "Licensing Dimensions RM" on page 51.
Upgrade your RDBMS to a supported version
IMPORTANT! Ensure that the version of the RDBMS is supported by Dimensions RM. To check which version is supported, see the Dimensions RM Platform Matrix.
For the installation process of the supported version, see chapter "Installing and Configuring Oracle" on page 63. Also see chapter "Create and Restore Instances in New Database" on page 100.
Oracle only: 64-bit Oracle Administrator Client on Application Server
For installation of the 64-bit Oracle Client, see chapter "64-Bit Oracle Client Installation in an Upgrade Scenario" on page 68.
Oracle only: 64-bit Oracle Administrator Client on Web Server
The Web server uses a 64-bit Oracle Call Interface (OCI) to communicate with Dimensions RM; therefore, a 64-bit Oracle Administrator client must be installed on the same machine as the Web server. You can verify if the client components are present by connecting through sqlplus.
For installation of the 64-bit Oracle Client, see chapter "64-Bit Oracle Client Installation with a Fresh Installation" on page 69.
MS SQL Server only: 64-bit ODBC System DSN on Application Server
A 64-bit ODBC System DSN based on SQL Server Native Client 11 driver must be installed on the Dimensions RM application server. For configuration, see chapter "Configuring the System DSN" on page 81.
Upgrade Microsoft Office to a supported version
IMPORTANT! Ensure that the version of the Microsoft Office is supported by Dimensions RM. To check which version is supported, see the Dimensions RM Platform Matrix.

Checklist Items for Upgrading Dimensions RM Server
Start the Installation
Start the installation of Dimensions RM by executing the configuration and setup
steps described in chapter "Installing Dimensions RM" on page 37.
Check Installation has completed successfully
See "Checking That the Installation Has Completed Successfully" on page 90. Check Windows Services are setup correctly and running
See "Checking Windows Services" on page 90. Check License Server is running and Licenses are available
See "Licensing Dimensions RM Products" on page 91.
Set the optional security message if you have installed to a secure
system
See "Setting the Optional Security Message" on page 91.
Install the Latest Patch
Follow the installation instructions provided with the patch.
Ensure Dimensions RM is excluded from Anti-Virus
See "Virus Checkers" on page 91.
Configure Web Server for RM Browser
See chapter "Configuring the Web Server for RM Browser" on page 108. Copying security.dat
Copy the security.dat file from the RM directory of your backup to the RM directory of your server installation.
Copying sts.pem
The sts.pem file only exists if you configured Single Sign-On (SSO). If you are
not using SSO, skip this step.
Copy the sts.pem file from the RM\conf directory of your backup to the RM\conf
directory of your server installation.
Completing Your Installation
Once the installation process has finished, the database and instances must be
converted/upgraded to the new release. Please pay careful attention to the conversion steps.
See chapter "Converting Database and Instances" in the Administrator's Guide. Optional: Configure HTTPS
For secure web connections, configure Tomcat to use HTTPS connections. See
chapter "Working with Secure Socket Layers" in the Administrator's Guide.

1 12 - 4 14 -. . _ . ~

Checklist Items for Upgrading Dimensions RM Server
Copy Configurations
Copy the conf folder (from the backup of the rtmBrowser directory) to your new rtmBrowser setup.
Сору
C:\MyBackup\Dimensions RM\Common Tools #.#.#.#\tomcat\#.#\webapps\rtmBrowser\ conf
to
C:\Program Files\Micro Focus\Dimensions 12.8\Common Tools 1.8.6.0\tomcat\8.5\webapps\rtmBrowser
Copy Forms
When using custom forms, copy the folders inside the forms folder (except the common folder) to your new rtmBrowser setup. The folders to copy have the same name as your database instance. If your database instance is named ORCL, you would have to copy the ORCL folder (if it exists). The example below will use ORCL as database name.
Сору
C:\MyBackup\Dimensions RM\Common Tools #.#.#.#\tomcat\#.#\webapps\rtmBrowser\ forms \ <i>ORCL</i>
to
C:\Program Files\Micro Focus\Dimensions 12.8\Common Tools 1.8.6.0\tomcat\8.5\webapps\rtmBrowser\ forms
Check if RM Browser is accessible
See "Test Browser Access" on page 114. Configure the Server for Export/Import
See "Support for Export/Import" on page 93.

Chapter 3 Installing Dimensions RM Server

Micro Focus **strongly recommends** to use the following checklist when installing Dimensions RM server as to avoid skipping important steps.

✓ Checklist Items for Installing Dimensions RM Server

	Pre-Installation Tasks		
1	Download the Platform Matrix		
<u>c</u> <u>r</u>	Download the Platform Matrix at https://www.microfocus.com/ documentation/dimensions-rm/drm12.8.1/ matrixdrm_12.8.1		
	Downloading the 12.8.1 release of Dimensions RM and Latest Patch		
F V t	When downloading the installation zip file, please include the release notes, the ReadMe file, and the associated documentation from the Micro Focus support website. From the release notes and the ReadMe files you will find the most up- to-date list of enhancements and defects corrected in the release. You can't benefit from features you don't know about!		
1	Micro Focus support website: <u>http://supportline.microfocus.com</u>		
	For downloading the latest patch, see "Checking for Latest Updates" on page 103. RAM / CPU / Disk-Space Recommendations		
F	For recommendations on RAM, CPU power, or Disk space, see the Dimensions RM Readme file.		
9	Supported Windows Operating System		
	To check if your version of Windows is supported, please see the Platform Matrix. Supported Databases		
[]	To check if your database is supported, please see the Platform Matrix.		
	Note that this upgrade checklist also includes a step when to execute a database version upgrade.		
5	Supported Microsoft Office version		
	To check if your version of Microsoft Office is supported, please see the Platform Matrix.		
9	Supported Web browsers		
	To check if your web browser is supported, please see the Platform Matrix.		
	Dimensions CM Integration only: Supported Dimensions CM Client version		
	To check if your Dimensions CM client version is supported, please see the Platform Matrix.		

	Executing the Installation
	Admin Approval Mode has been disabled
	See "Disabling Admin Approval Mode" on page 39.
	.NET Framework 4 has been installed
	See "Installing the .NET Framework" on page 39.
	Licensing Dimensions RM: First Time Install
	If installing a fully licensed release of Dimensions RM, you must install one of the following licensing tools before installing Dimensions RM:
	 Serena License Manager (SLM) version 2.3.0
	 Micro Focus Auto Pass version 11.5
	For evaluations there is a 30-day license option that may be selected during RM installation.
	See the <i>Installing Serena License Manager</i> guide and chapter "Licensing Dimensions RM" on page 51.
	Named Web Service License
	If Dedicated Service accounts are used for Web Services, vs SSO or changing user accounts, a Named License is recommended to ensure a lack of a license does not cause a failure.
_	Installing a Supported Database
	Install a supported database as described in chapter "Installing and Configuring Oracle" on page 63.
	Oracle only: 64-bit Oracle Administrator Client on Application Server
	For installation of the 64-bit Oracle Client, see chapter "64-Bit Oracle Client Installation with a Fresh Installation" on page 69.
	Oracle only: 64-bit Oracle Administrator Client on Web Server
	The Web server uses a 64-bit Oracle Call Interface (OCI) to communicate with Dimensions RM; therefore, a 64-bit Oracle Administrator client must be installed on the same machine as the Web server. You can verify if the client components are present by connecting through sqlplus.
	For installation of the 64-bit Oracle Client, see chapter "64-Bit Oracle Client Installation with a Fresh Installation" on page 69.
T	MS SQL Server only: Database instance has been created
	A database instance on SQL server has been created. MS SQL Server only: 64-bit ODBC System DSN on Application Server
	A 64-bit ODBC System DSN based on SQL Server Native Client 11 driver must be installed on the Dimensions RM application server as described in chapter "Configuring the System DSN" on page 81.

\checkmark Checklist Items for Installing Dimensions RM Server

\checkmark	Checklist Items for Installing Dimensions RM Server
	MS SQL Server only: 64-bit ODBC System DSN on Web Server
	A 64-bit ODBC System DSN based on SQL Server Native Client 11 driver must be installed on the same machine as the Web server as described in chapter "Configuring the System DSN" on page 81. IPv6 Support
	When operating in an IPv6-only environment, IPv4 must be installed on the server running Dimensions RM. It is not required to enable IPv4 after installing it. Server Host Names
	The host names of the server computers hosting the database and the Serena License Manager (SLM) have been identified. If a single computer is to be used for all software components, it can host both the Dimensions RM server and client.
	LDAP Server
	Although this information can easily be added later, if the organization is intending to use the LDAP login source, identify the LDAP server and port.
	Microsoft Office
	Microsoft Office must be installed on the Dimensions RM server to support browser-based Word import, document export, RM Import, and RM Import Designer tools. For further information, see chapter "Microsoft Office Requirements" on page 17.
	Tomcat
	Please check the following:
	1 Ensure that the RM Tomcat port selected does not conflict with any existing Tomcat installations.
	2 The default port is 8080, but an alternate can be specified during installation.
	If Dimensions RM is installed on the same server as SBM or Dimensions CM, you must ensure that the Tomcat installed with RM does not conflict with the ports used by SBM and Dimensions CM.
	Planning your Dimensions RM user names and Passwords
	If this is the first time Dimensions RM will be installed, you should plan for your Dimensions RM user names and define a strategy for managing their passwords, especially those for the ICDBA, ICADMIN, and ICPROJECTS accounts.
	If this is an update, please make sure that you are aware of these passwords.
	E-mail Notification
	If installing the e-mail notification service, you must know the name of the computer running the service and the name of the SMTP mail server to be used. This feature may be implemented at any time following the full installation.

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\checkmark	Checklist Items for Installing Dimensions RM Server
	Installation folders
	All examples in this document assume that Dimensions RM will be installed in:
	C:\Program Files\Micro Focus\Dimensions 12.8.1\RM
	Early in the installation process an option is provided to change the default location.
	Start the Installation
	Start the installation of Dimensions RM by executing the configuration and setup steps described in chapter "Installing Dimensions RM" on page 37.
	Setting RM Instance passwords to not expire
	Once Dimensions RM has been installed and configured, it is important to make sure that the Oracle passwords which were created for the ICDBA, ICADMIN, and ICPROJECTS accounts will not expire. In Oracle, the passwords will expire after 6 months by default. For more information and an example SQL script, see chapter "Password Expiration for Oracle Passwords" on page 99 talks about this and provides an example SQL script to set the passwords so they don't expire. Check Installation has completed successfully
	See "Checking That the Installation Has Completed Successfully" on page 90. Check Windows Services are setup correctly and running
	See "Checking Windows Services" on page 90.
	Check License Server is running and Licenses are available
	See "Licensing Dimensions RM Products" on page 91.
	Set the optional security message if you have installed to a secure system
	See "Setting the Optional Security Message" on page 91.
	Install the Latest Patch
	Follow the installation instructions provided with the patch.
	Ensure Dimensions RM is excluded from Anti-Virus
	See "Virus Checkers" on page 91. Create the ICDBA Account
	See "Creating the ICDBA Account" on page 103. Set up the Database Schema
	See "Managing Instances" in the Administrator's Guide.
-	Create a Dimensions RM instance or import an example Dimensions RM
	instance
	See "Importing a Sample Dimensions RM Instance" on page 107.
	Configure the Web Server for RM Browser
	See "Configuring the Web Server for RM Browser" on page 108.
	Optional: Configure HTTPS
	For secure web connections, configure Tomcat to use HTTPS connections. See chapter "Working with Secure Socket Layers" in the Administrator's Guide.

\checkmark Checklist Items for Installing Dimensions RM Server

Check if RM Browser is accessible
See "Test Browser Access" on page 114.
Configure the Server for Export/Import
See "Support for Export/Import" on page 93.

Chapter 4

Upgrading the Dimensions RM Admin Client

Micro Focus **strongly recommends** to use the following checklist when upgrading the Dimensions RM Admin Client as to avoid skipping important steps.



IMPORTANT! The check list below requires that your current Dimensions RM installation is of version 12.2 or higher. If you wish to upgrade any version older than 12.2, please contact Micro Focus support.

-	
Pre-Upgrade Tasks	
Download the Platform Matrix	
Download the Platform Matrix at https://www.microfocus.com/documentation/dimensions-rm/drm12.8.1/ matrixdrm 12.8.1.xlsx.zip	
Supported Windows Operating System	
To check if your version of Windows is supported, please see the Platform Matrix Supported Databases	<u>.</u>
To check if your database is supported, please see the Platform Matrix.	
Note that this upgrade checklist also includes a step when to execute a database version upgrade.	
Supported Microsoft Office version	
To check if your version of Microsoft Office is supported, please see the Platform Matrix. If your version of Microsoft Office is not supported or you do not have Microsoft Office installed, the RM Import tool will not be available.	
Downloading the 12.8.1 release of Dimensions RM and Latest Patch	
When downloading the installation zip file, please include the release notes, the ReadMe file, and the associated documentation from the Micro Focus support website. From the release notes and the ReadMe files you will find the most up- to-date list of enhancements and defects corrected in the release. You can't benefit from features you don't know about!	
IMPORTANT! The patch level for your Admin Client installation must match the patch level of your Dimensions RM server installation.	
Micro Focus support website: <u>http://supportline.microfocus.com</u>	
For downloading the latest patch, see "Checking for Latest Updates" on page 103	

Checklist Items for Upgrading the Dimensions RM Admin Client

\checkmark	Checklist Items for Upgrading the Dimensions RM Admin Client
	Executing the Upgrade
	Create a Backup of your Dimensions RM Installation
	Create a backup of your whole Dimensions RM directory. By default, the Dimensions < <i>version number</i> > directory, is located in:
	 C:\Program Files (x86)\Micro Focus
	 C:\Program Files (x86)\Serena
	Uninstall your current version of Dimensions RM Client applications
	Uninstall the current version of Dimensions RM by executing the uninstall routine provided by Windows. Then, restart the machine. Oracle only: Uninstall 32-bit Oracle Client
	Uninstall the 32-bit Oracle client by executing the steps described in chapter "Uninstalling the 32-bit Oracle Client" on page 87.
	Oracle only: 64-bit Oracle Administrator Client on Client Machines
	For installation of the 64-bit Oracle Client, see chapter "64-Bit Oracle Client Installation in an Upgrade Scenario" on page 68.
	MS SQL Server only: 64-bit ODBC System DSN on Client Machines
	A 64-bit ODBC System DSN based on SQL Server Native Client 11 driver must be installed on the Dimensions RM application server. For configuration, see chapter "Configuring the System DSN" on page 81.
	Start the Installation
	Start the installation of Dimensions RM by executing the configuration and setup steps described in chapter "Installing Dimensions RM" on page 37
	Check Installation has completed successfully
	See "Checking That the Installation Has Completed Successfully" on page 90. Copying security.dat
	Copy the security.dat file from the RM directory of your backup to the RM directory of your client installation.
	Note: If passwords have changed, copy the security.dat file from your Dimensions RM server to your client installation instead.
	Copying sts.pem
	The sts.pem file only exists if you configured Single Sign-On (SSO). If you are not using SSO, skip this step.
	Copy the sts.pem file from the RM\conf directory of your Dimensions RM server to the RM\conf directory of your client installation.
	Note: If certificates have changed, copy the sts.pem file from your Dimensions RM server to your client installation instead.

Chapter 5

Installing the Dimensions RM Admin Client

Micro Focus **strongly recommends** to use the following checklist when installing the Dimensions RM Admin Client as to avoid skipping important steps.

/	Checklist Items for Installin	g the Dimensions RM Admin Client

Pre-Installation Tasks	
Download the Platform Matrix	
Download the Platform Matrix at https://www.microfocus.com/documentation/dimensions-rm/drm12.8.1/ matrixdrm 12.8.1.xlsx.zip	
Supported Windows Operating System	
To check if your version of Windows is supported, please see the Platform Matrix.Supported Databases	
To check if your database is supported, please see the Platform Matrix.	
Note that this upgrade checklist also includes a step when to execute a database version upgrade.	
Supported Microsoft Office version	
To check if your version of Microsoft Office is supported, please see the Platform Matrix. If your version of Microsoft Office is not supported or you do not have Microsoft Office installed, the RM Import tool will not be available.	
Downloading the 12.8.1 release of Dimensions RM and Latest Patch	
When downloading the installation zip file, please include the release notes, the ReadMe file, and the associated documentation from the Micro Focus support website. From the release notes and the ReadMe files you will find the most up-to-date list of enhancements and defects corrected in the release. You can't benefit from features you don't know about!	
IMPORTANT! The patch level for your Admin Client installation must match the patch level of your Dimensions RM server installation.	
Micro Focus support website: <u>http://supportline.microfocus.com</u>	
For downloading the latest patch, see "Checking for Latest Updates" on page 103.	
Executing the Installation	
Oracle only: 64-bit Oracle Administrator Client on Client Machines	
For installation of the 64-bit Oracle Client, see chapter "64-Bit Oracle Client Installation in an Upgrade Scenario" on page 68.	

\checkmark	Checklist Items for Installing the Dimensions RM Admin Client	
	MS SQL Server only: 64-bit ODBC System DSN on Client Machines	
	A 64-bit ODBC System DSN based on SQL Server Native Client 11 driver must be	
	installed on the Dimensions RM application server. For configuration, see chapter	
	"Configuring the System DSN" on page 81.	
	Start the Installation	
	Start the installation of Dimensions RM by executing the configuration and setup	
	steps described in chapter "Installing Dimensions RM" on page 37.	
	Check Installation has completed successfully	
	See "Checking That the Installation Has Completed Successfully" on page 90.	
	Copying security.dat	
	Copy the security.dat file from the RM directory of your Dimensions RM server	
	to the RM directory of your client installation.	
	Copying sts.pem	
	The sts.pem file only exists if you configured Single Sign-On (SSO). If you are	
	not using SSO, skip this step.	
	Copy the sts.pem file from the RM\conf directory of your Dimensions RM server	
	to the RM\conf directory of your client installation.	

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Chapter 6 Installing Dimensions RM

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Installation Types

Installation Types

The following table describes the three installation options available with the Dimensions RM installer; the server installation installs the admin client and import tools. The installation described in this section is focused primarily on the Server Installation.

Option	Description
Server Installation	This installation type will install the Admin Client, Sync Engine, ALF Emitter Service, RM Pool Service and E-mail Notification Service by default, and will make the RM Browser available to the organization. This option requires Microsoft Office (32-bit or 64-bit).
Admin Client	Choose to install the Admin Client, RM Manage, only. This installation type is selected when making the client available on the administrator's desktop.
RM Import Client	Installs the RM Import client, which is used to import files from Microsoft Office. The Dimensions RM components installed are: This option requires Microsoft Office (32-bit or 64-bit), otherwise RM
	Import will not be available for installation.

Final Checks

IMPORTANT! Before continuing with the section, please be sure that you have read and completed tasks described in chapter "Before Installing" on page 9. This includes a review of the checklist, as well as considerations for SSO and Oracle.

The Following are Assumptions: no action needed:

- 1 Stable OS and Oracle Server
- **2** One of the following licensing tools must be installed with RM Licenses, unless planning to use the 30-day evaluation:
 - Serena License Manager (SLM)
 - Micro Focus Auto Pass
- **3** 32-bit or 64-bit edition of Microsoft Office (Word, Excel, PowerPoint, Office tools) has been installed on the server
- 4 System Administrator access

The installation must be Run As Administrator

 If the individual performing the installation does not have privileges – find someone who does.

- The installation updates the registry, full administrator privileges are absolutely necessary for a successful installation.
- **5** The following examples assume that the product will be installed in:

C:\Program Files\Micro Focus\Dimensions 12.8.1\RM

Browse to a different installation folder if desired and note the path difference as you follow the instructions.

One More Tomcat Reminder



IMPORTANT! All Dimensions RM releases following 12.1.x install with Tomcat – please check the following before proceeding.

- **1** Ensure that the RM Tomcat port selected does not conflict with any existing Tomcat installations.
- **2** The default port is 8080, but an alternate can be specified during installation.

Disabling Admin Approval Mode

- **1** Open a command prompt.
- 2 Type secpol.msc and hit Enter. This opens the local Security Policy Management Console.
- 3 Open the Local Policies folder.
- 4 Select the Security Options folder.
- **5** Double-click **User Account Control: Admin Approval Mode for the Built-in Administrator account**.
- 6 Set the value to **Disabled**.
- 7 Click OK.
- 8 Double-click User Account Control: Run all administrators in Admin Approval Mode.
- 9 Set the value to **Disabled**.

Installing the .NET Framework

- 1 Open Server Manager.
- 2 Click **Next** until **Features** is selected.
- 3 In the **Features** list, expand one of the following:
 - .NET Framework 4.5 Features

- .NET Framework 4.6 Features
- **4** Select one of the following:
 - .NET Framework 4.5
 - .NET Framework 4.6
- 5 Click Next.
- 6 Click Install.



NOTE RM Import requires Microsoft Office 2010 SP1 or higher to be installed. If you are installing Microsoft Office, also see chapter "Support for Export/Import" on page 93.

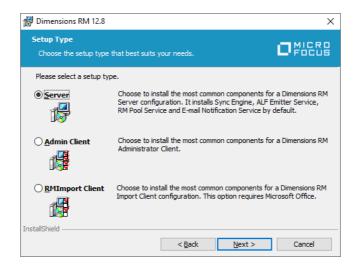
7 Restart the server.

Running a Server Setup



IMPORTANT! If you are running the setup in an environment without Internet connection, you might receive an error message about an invalid file signature. For details, see chapter "Running Setup.exe without Internet Connection" on page 48.

- 1 From the downloaded release package, right-click on the file: setup.exe and choose **Run as administrator** from the context menu. This opens the Dimensions RM installation wizard.
- 2 Click Next.
- 3 Select I accept the terms of the End User License Agreement and click Next.
- 4 Select Server and click Next.



- **5** If desired, change the destination folder:
 - a Click Change... to open the Change Current Destination Folder dialog.

- **b** Select the drive and/or directory to install to.
- c Click OK.
- 6 Click Next.
- 7 In the **Features Setup** dialog, choose the items that should **not** be installed. When running a server install the only option is whether or not to include Single Sign On. Single Sign On (SSO) may be used when using Dimensions CM or Solution Business Manager (SBM) in combination with Dimensions RM. If you do not use those tools or you do not want to use SSO, de-select **Single Sign On (SSO)**.

🖟 Dimensions RM 12.8	×
Features Setup Select the program features you want installed.	
Click on an icon in the list below to change how a fe	ature is installed. Feature Description Installs Single Sign On (SSO) components to provide SSO/CAC support.
InstallShield	This feature requires 0KB on your hard drive.
< <u>B</u>	ack <u>N</u> ext > Cancel

- 8 Click Next.
- 9 Choose the License Server
 - a License Tool: Select if you use the Serena License Manager (SLM) or Micro Focus AutoPass Licensing.
 - **b** If you have a license server installed, select **Specify License Server** and enter IP address or host name into the **Specify License Server** box. This is also required when the license server is running on the same machine as Dimensions RM.

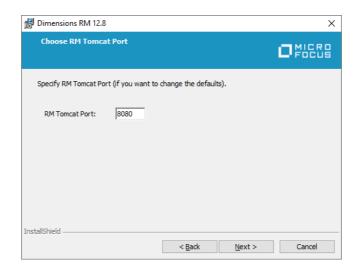
If the license tool has not yet been installed, choose **30 day evaluation**.

🕼 Dimensions RM 12.8	×		
Choose License Server			
	s of the machine the License Server is running on, and ne location of your License Server, contact your		
License Tool: Serena Licen:	se Manager (SLM) 🗸 🗸		
Install a 30 day evaluation lic	ense		
O Specify License Server			
Host Name:			
NOTE: If you choose the evaluation option, you may enter your license server name or address any time during the evaluation period.			
InstallShield	< Back Next > Cancel		

10 Click Next.

11 This dialog allows you to configure the Tomcat port. If you selected the Single Sign On (SSO) feature, this dialog also shows options for the SSO configuration.

a Configuring Tomcat only



• **RM Tomcat Port:** Specify the port under which Tomcat (and thus Dimensions RM) shall be available. The default port is **8080**. If this port is already in use, enter a different port.

b Configuring Tomcat and Single Sign On (SSO).

🛃 Dimensions RM 12.8			×
Choose RM Tomca	t port, SSO H	lost	
Specify RM Tomcat Port	: (if you want I	to change the defaults).	
RM Tomcat Port:	8080		
Specify the Host Name on.	or IP address	of the machine the Single Sign On ser	vices are running
Host Name:			
Port:	8243	Secure (HTTPS) Connection	
InstallShield		< <u>B</u> ack <u>N</u> ext >	Cancel

- **RM Tomcat Port:** Specify the port under which Tomcat (and thus Dimensions RM) shall be available. The default port is **8080**. If this port is already in use, enter a different port.
- Host Name: Specify the IP address or host name under which your SSO server (Dimensions CM or SBM) is available.
- **Port:** Specify port to be used for SSO connections. The default ports are 8243 (HTTPS) and 8085 (HTTP).

• Secure (HTTPS) connection: Keep this option enabled to use HTTPS connections. Clear it to use unsecured (HTTP) connections.

12 Click Next.

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NOTE Setup now checks if Micro Focus Common Tomcat is already installed. If it is not found, continue with the next step.

Installed Tomcat is a 32-bit release

Tomcat needs to be upgraded. This will deactivate all installed web applications. You need to copy the web applications from the webapps directory of the old Tomcat to the webapps directory of the new Tomcat.

Choose from one of these options:

- **OK:** Upgrade Tomcat. This will deactivate all installed web applications. You need to copy the web applications from the webapps directory of the old Tomcat to the webapps directory of the new Tomcat.
- **Cancel:** Exit the setup. Dimensions RM will not be installed.
- Installed Tomcat is a 64-bit release, with correct major and minor version numbers, but build and release version numbers do not match

Choose from one of these options:

- **Yes:** Upgrade Tomcat. This will deactivate all installed web applications. You need to copy the web applications from the webapps directory of the old Tomcat to the webapps directory of the new Tomcat.
- No: Continue without upgrade. This will add all web applications installed with Dimensions RM to your current Tomcat installation.
- **Cancel:** Exit the setup. Dimensions RM will not be installed.
- Installed Tomcat is a 64-bit release, all version numbers match

All web applications installed with Dimensions RM will be added to your current Tomcat installation.

- 13 Select the database version. If you select **MS SQL**, you will continue with step 15.
- **14** Select the Oracle installation. If the list does not contain your Oracle installation, click **Manual Entry**.
 - **a** Enter the Oracle Home path.
 - **b** Enter the Oracle SID.

🖟 Dimensions RM 12.8	3 Installer Information	×
Please enter the lo	cation of your Oracle Home and your Oracle SID.	
Oracle Home:	C:\app\client\Administrator\product\12.2.0\clier	
Oracle SID:	RM	
InstallShield		
	QK	

- 15 Enter the path to the security.dat file. This file must be stored under RM in the installation directory tree, for example: C:\Program Files\Micro Focus\Dimensions 12.8.1\RM\security.dat
- **16** If you want to see shortcuts for the client applications on the desktop for all users, select the **Add Shortcuts** box.
- 17 Click Install to start the installation process.
- **18** Once the *Successfully Completed* install dialog is raised, click **Finish**.

🖟 Dimensions RM 12.8	×
.Ċ.	Dimensions RM 12.8 Installation Completed
Dimensions RM	This installation wizard has successfully installed Dimensions RM 12.8. Click Finish to exit the wizard.
	< <u>B</u> adk <u>F</u>inish Cancel

Running an Admin Client Setup

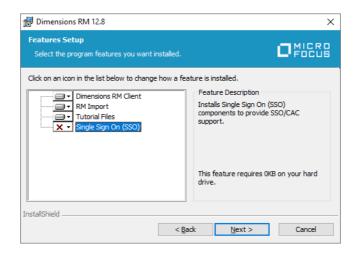


IMPORTANT! If you are running the setup in an environment without Internet connection, you might receive an error message about an invalid file signature. For details, see chapter "Running Setup.exe without Internet Connection" on page 48.

- 1 From the downloaded release package, right-click on the file: setup.exe and choose **Run as administrator** from the context menu. This opens the Dimensions RM installation wizard.
- 2 Click Next.
- **3** Select **I accept the terms of the End User License Agreement** and click **Next**.
- 4 Select **Server** and click **Next**.

🔀 Dimensions RM 12.8.1		×
Setup Type Choose the setup type	that best suits your needs.	Focus
Please select a setup ty	pe.	
) <u>S</u> erver	Choose to install the most common components for a D Server configuration. It installs Sync Engine, ALF Emitt RM Pool Service and E-mail Notification Service by defa	er Service,
Admin Client	Choose to install the most common components for a D Administrator Client.	vimensions RM
O <u>R</u> MImport Client	Choose to install the most common components for a Dimensions RM Import Client configuration. This option requires Microsoft Office.	
InstallShield	< Back Next >	Cancel

- **5** If desired, change the destination folder:
 - a Click Change... to open the Change Current Destination Folder dialog.
 - **b** Select the drive and/or directory to install to.
 - c Click OK.
- 6 Click Next.
- 7 In the **Features Setup** dialog, choose the items that should **not** be installed. When running a server install the only option is whether or not to include Single Sign On. Single Sign On (SSO) may be used when using Dimensions CM or Solution Business Manager (SBM) in combination with Dimensions RM. If you do not use those tools or you do not want to use SSO, de-select **Single Sign On (SSO)**.



- 8 Click Next.
- 9 Choose the License Server
 - a License Tool: Select if you use the Serena License Manager (SLM) or Micro Focus AutoPass Licensing.

45

b If you have a license server installed, select **Specify License Server** and enter IP address or host name into the **Specify License Server** box. This is also required when the license server is running on the same machine as Dimensions RM.

If the license tool has not yet been installed, choose **30 day evaluation**.

體 Dimensions RM 12.8	×
Choose License Server	MICRO Focus
Specify the Host Name or IP address of the machine the License Server is running on, then dick Next. If you don't know the location of your License Server, contact your administrator.	and
License Tool: Serena License Manager (SLM) V	
Install a 30 day evaluation license	
O Specify License Server	
Host Name:	
NOTE: If you choose the evaluation option, you may enter your license server name or address any time during the evaluation period.	
InstallShield	
	Cancel

10 Click Next.

11 If you selected the Single Sign On (SSO) feature, this dialog shows options for the SSO configuration. If you did not select SSO, continue with the next step.

🛃 Dimensions RM 12.8.1	1	×
Choose 550 Host		R D US
Specify the Host Name o on.	or IP address of the machine the Single Sign On services are running	;
Host Name:	myssoserver.mydomain	
<u>P</u> ort:	8243 Secure (HTTPS) Connection	
InstallShield	< <u>B</u> ack <u>N</u> ext > Cance	1

- **Host Name:** Specify the IP address or host name under which your SSO server (Dimensions CM or SBM) is available.
- **Port:** Specify port to be used for SSO connections. The default ports are 8243 (HTTPS) and 8085 (HTTP).
- **Secure (HTTPS) connection:** Keep this option enabled to use HTTPS connections. Clear it to use unsecured (HTTP) connections.

12 This dialog requires you to enter the server name and allows you to configure the Tomcat port.

🖟 Dimensions RM 12	.8.1	×
Choose RM Serv	er and Port	
Specify the Host Nam	e or IP address of the machine Dimensions RM server is runn	ing on.
<u>H</u> ost Name:	myserver.mydomain	
Port (https only):	8443	
InstallShield		
	< <u>B</u> ack <u>N</u> ext >	Cancel

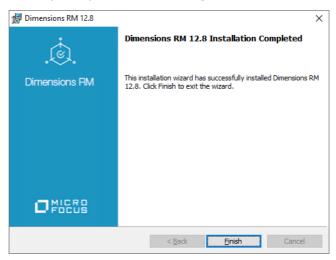
- **Host Name:** Specify the IP address or host name under which your SSO server (Dimensions CM or SBM) is available.
- **Port (https only):** Specify the port under which Tomcat (and thus Dimensions RM) shall be available. The default port is **8443**. If this port is already in use, enter a different port.
- 13 Click Next.
- 14 Select the database version. If you select **MS SQL**, you will continue with step 15.
- **15** Select the Oracle installation. If the list does not contain your Oracle installation, click **Manual Entry**.
 - **a** Enter the Oracle Home path.
 - **b** Enter the Oracle SID.

🚏 Dimensions RM 12.8 Installer Information 🛛 🕹		
Please enter the location of your Oracle Home and your Oracle SID.		
Oracle Home:	C:\app\client\Administrator\product\12.2.0\clier	
Oracle SID:	RM	
InstallShield		
	<u>0</u> K	

16 Enter the path to the security.dat file. This file must be stored under RM in the installation directory tree, for example:

C:\Program Files\Micro Focus\Dimensions 12.8.1\RM\security.dat

- **17** If you want to see shortcuts for the client applications on the desktop for all users, select the **Add Shortcuts** box.
- **18** Click **Install** to start the installation process.



19 Once the *Successfully Completed* install dialog is raised, click **Finish**.

Running Setup.exe without Internet Connection

In general, there is no difference if you run setup.exe in an environment with or without Internet connection. However, as Setup.exe is digitally signed, it can only run if the digital signature can be verified. Should the verification fail, you receive the following error message: Error 1330. A file that is required cannot be installed because the cabinet file *<FILE_PATH>*\Data1.cab has an invalid digital signature. This may indicate that the cabinet file is corrupt. Error 266 was returned by WinVerifyTrust.

In this case, do the following:

- **1** Exit the running Setup.exe.
- **2** Open a command prompt.
- 3 Type mmc and press Enter. This opens a console window.
- 4 From the **File** menu, select **Add/Remove Snap-in**. This opens the **Add or Remove Snap-ins** dialog.
- 5 Select **Certificates** and click **Add**. This opens the **Certificates snap-in** dialog.
- 6 Select the Computer account option and click Next.
- 7 Ensure that option Local computer: (the computer the console is running on) is selected and click Finish.
- 8 Click OK.
- 9 Expand Certificates (Local Computer).
- 10 Expand Trusted Root Certification Authorities.
- 11 Right-click **Certificates** and select **All Tasks** and then **Import...** from the shortcut menu. This opens the **Certificate Import Wizard**.
- 12 Click Next.

- **13** Click **Browse...**. This opens a file selection dialog.
- **14** Navigate to the folder where Setup.exe is located.
- **15** Navigate to the sub-folder **support**.
- **16** Select the certificate Entrust_Root_Certification_Authority_G2.cer and click **Open**.
- 17 Click Next.
- **18** Verify that the **Place all certificates in the following store** option is selected and the **Certificate store** box shows **Trusted Root Certification Authorities**. If the verification fails, click **Cancel** and return to point 10.
- 19 Click Next.
- 20 Click Finish to import the certificate
- **21** Confirm the success message by clicking **OK**.
- 22 Start Setup.exe.

Appendix A Licensing Dimensions RM

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About Serena License Manager

The Serena[®] License Manager (SLM) is the tool you use to obtain and apply the keys that unlock Dimensions RM. SLM enables you to centralize your license management across multiple Dimensions RM environments. SLM can help you keep track of active licenses and versions of the software in use, for example, you can use it to see whether or not all the licenses are in use or to manually track down who is using what version and license.

If you intend to permanently install Dimensions RM rather than install it for just the default 30-day evaluation period, you will need to pre-install SLM and provide its server name or IP address during Dimensions RM installation (however, if you wish to convert an evaluation copy of Dimensions RM into a fully licensed copy, you can install SLM at a later date). The SLM installer also installs the associated Serena License server.

You can install SLM on the same system as Dimensions RM or install it separately on a dedicated license server. If you have other Micro Focus software products installed on a license server that use a compatible version of SLM, for example Version Manager, you can use that with your Dimensions RM license. For installation instructions see the *Installing Serena License Manager* guide.

There is minimal CPU usage required on the server to run SLM.

About Micro Focus Auto Pass

Micro Focus Auto Pass is a licensing tool that can be used with Dimensions RM and many other Micro Focus products. Auto Pass provides a web interface which allows you to manage your licenses with ease.

If you intend to permanently install Dimensions RM rather than install it for just the default 30-day evaluation period, you will need to pre-install Auto Pass and provide its server name or IP address during Dimensions RM installation (however, if you wish to convert an evaluation copy of Dimensions RM into a fully licensed copy, you can install Auto Pass at a later date).

You can install Auto Pass on the same system as Dimensions RM or install it separately on a dedicated license server. If you have other Micro Focus software products installed on a license server that use Auto Pass, you can use that with your Dimensions RM license. For installation instructions see the *Auto Pass License Server*.

There is minimal CPU usage required on the server to run Auto Pass.

Licensing Considerations

Install Serena License Manager (SLM) or Micro Focus Auto Pass on a central server that all related Micro Focus products will be able to access. See the related installation guide for local or remote installation instructions. Dimensions RM requires SLM release 2.3.0 or Auto Pass release 11.5.

If you are licensing users in different locations and you have relatively slow networks, you may want to install a SLM/Auto Pass server and set up the users in each location on the local server computer. When you do so, you need to install SLM/Auto Pass to a server in

each location. If you have faster networks, you can install SLM/Auto Pass on one central network computer and have all Dimensions RM users point to it.



IMPORTANT! There should **NOT** be a firewall or router between the SLM/Auto Pass server and the RM server.

If that configuration is not possible and/or your network is slow, install SLM/Auto Pass and RM to the same server.

About Dimensions RM Licenses

To use Dimensions RM, you must generate and apply license keys. The following table explains the type of license keys that you can obtain and apply for each component:

License Type	Description
Concurrent	Concurrent licenses, also known as floating licenses, can be used by any user. This is advantageous if you are in an organization spread across multiple time zones or have users who infrequently use Dimensions RM, because multiple people can share the same license.
Named	Named licenses can only be used by specific users. This allows you to limit access to the system to only those users whose login IDs are associated with licenses.

Each RM license purchase comprises the following:

- icPWB license: A license for RM Manage and Class Definition.
- icBrowser license: A license for the RM Browser client, RM Import, and web service requests.

This allows each RM license to be used simultaneously across multiple clients. For example. if there is just one available license, a user will be able to log into both RM Browser and RM Manage, without using multiple licenses.

The nature of the requirements process is best served with concurrent licenses, as there are peaks and valleys along the application lifecycle time line during which different teams will require access to the solution; however it is typical for organizations to maintain at least two named licenses. The general use case for these licenses is to assign them to administrator accounts, thereby ensuring administrator access if all concurrent licenses are in use.

In the general case, named licenses should only be purchased for full time analysts - individuals spending 25-30 hours a week in RM or for the Web Service service account to ensure that the Web Service connections are always served with a license.

The Licensing Process with SLM: Checklist

After downloading and installing Serena License Manager (SLM) version 2.3.0, you may proceed with "Web Fulfillment"; the process of accessing the license keys that will unlock the Dimensions RM product.

Determine the number of Dimensions RM licenses you want to use in your organization.
Contact your sales representative to purchase the licenses for your users or ensure that you have an existing Micro Focus Support contract.
Ensure that you have a valid serial number for Dimensions RM.
Ensure that you registered at the Micro Focus Support Web Site, in order to log in and get your license keys.
Get the license key string from Micro Focus Web fulfillment.
Enter the key string in Serena License Manager. Repeat this step if you have more than one serial number to license.
<i>Named licenses only</i> : Manually set up user IDs if you do <i>not</i> want to use the auto-add feature to enter user IDs into SLM.
Set up notification for licensing issues. If notification is enabled and there is a licensing issue, you will receive an e-mail detailing the problem.
If you need to reboot the SLM server machine or set it to run as a service, restart the Windows SLM server (Start Programs Micro Focus SLM Start License Manager Service) or remote UNIX SLM server (run the ./start_license_server script in the directory where you installed the license server).

Licensing Dimensions RM with SLM

Getting and Applying Licenses

To get a license from Micro Focus using SLM:

1 On Windows, open SLM by selecting Start | Programs | Micro Focus | SLM 2.3.0 | License Manager.

On remote UNIX, as user root, launch it by navigating to where you installed it and run the script:

./serenalm



NOTE You must ensure that your UNIX search path environment includes the path to the license server process executable lmgrd. This executable is located in the directory where the Serena License Server is installed.

Then:

- If you already have a license key from Micro Focus, you can select the I have received a license key option and paste the key string in the field, then proceed to "Starting the License Server" on page 57.
- If you don't already have a license key, select the Connect to the web to get a license key option on the Licensing tab and click the Get Key(s) button. The Micro Focus Support Licensing Web site login page appears.
- **2** To obtain the key from the Web fulfillment:
 - **a** Make sure, first, that you copy your license server host identity, which will be displayed in a "scissors" graphics.
 - **b** Click **Click here to continue >>**.
 - **c** Enter your Micro Focus Support account user name and password and log in. If you do not have a Micro Focus Support user name, you will need to register for one using a valid serial number (if you do not have a valid serial number, contact Micro Focus).
 - **d** The Micro Focus Support Web page appears.
 - e Click the Licensing tab or navigate to the following menu item:

Support | Licensing

- f Select appropriately from the (Licensing) Site:, Product:, Serial Number:, and Version: drop down menus.
- **g** Click **Create Licenses** and follow the instructions presented there to obtain you license key or keys.



NOTE If you require additional help, you can run an Adobe Flash video demo. Click the View Demo sub-tab.

h Once you have generated a license, electronically copy the entire license string and return to SLM. An e-mail will be sent to you with details of the license keys for your records.



IMPORTANT! Make sure that you do not copy any extra spaces or SLM will consider the key invalid.

3 On return to the Serena License Manager, select the **I have received a license key** option and paste the keys (just the FEATURE lines) in the field available. The **Apply** button will then become active.

🕍 Serena License Manager	
Licensing Products Notification	
Please choose one of the following options:	
C Thave received a license key from Serena	
Paste the license key(s) into the area below.	key string
	copied and pasted here
	pusted her
Apply	
Connect to the web to get a license key	
You will need a valid SupportNet login to retrieve the license key(s).	
Get Key(s)	
License Server HOSTID = 000c29921018	
Serena License Manager v2.1.4 (Build 2021) Help Clo	ise

- 4 Click **Apply**. Your license will be activated. You can now:
 - For any Named licenses that you added, add valid user IDs into the license server or set the license server to add in user names automatically before logging into Dimensions RM. See "Managing User Names for Named Licenses" on page 57.
 - Set up notification for issues with the licenses and license server. See "Setting Up Notification for Licensing Issues" on page 58.

The license server on Windows will start automatically; if it does not, you can start it manually using Windows Services. On remote UNIX, you will need to start it manually in all cases. See "Starting the License Server" on page 57 for more information.

To get a license from Micro Focus if your server doesn't have Web access:

1 From a different computer with Web access, connect to the Micro Focus Support Web site. Make sure you know the product serial number and the Host ID of the license server machine so you can enter it in the Web fulfillment system.

You can find your license server machine's Host ID at the bottom of the **Licensing** tab of the Serena License Manager dialog box.

- 2 When you access the Web page with your key string, copy that key string into a text editor. Save and copy that file to a portable disk or a location on the network accessible from the license server machine.
- **3** Insert the portable disk in the license server machine or navigate to where the file is stored on the network. Open the file and copy the key string, select the **I have** received a license key option, and paste it in the field.

To get a license from Micro Focus if you don't have Web access at all:

Contact Micro Focus Support for assistance if you cannot use the Web to obtain a license. See "Contacting Technical Support" on page 8.

Adding Licenses

If all the licenses you purchased are not already in use, you can add license keys for seats you have already purchased through SLM.

If you run out of purchased license seats to use, contact your sales representative at Micro Focus to purchase additional licenses to add to your serial number.

To add license keys from your initial purchase:

- **1** Follow steps listed above in "To get a license from Micro Focus using SLM:" on page 54.
- 2 Click **Apply** to restart the license server.

To buy more licenses and add them to your pool of licenses:

Contact your Micro Focus sales representative to purchase additional licenses. Once you have your serial number updated for additional seats, follow the instructions above to obtain additional licenses.

Starting the License Server

If the license server did not start automatically after you have obtained the licenses, start it before installing other Micro Focus products.

On Windows To start and stop the license server:

Start | Programs | Micro Focus | SLM 2.3.0 | Start License Manager Service

To stop the license server:

Start | Programs | Micro Focus | SLM 2.3.0 | Stop License Manager Service

On UNIX To start the license server on UNIX:

At a command prompt, as the Dimensions RM System Administrator user not root run:

<serena_license_server_dir>/<os>/start_license_server

where <serena_license_server_dir>/<os> is the directory in which you installed the Serena License Server, <os> being the platform identifier, for example, aix.

Check the contents of the SLM.log to make sure the service has started correctly.

To stop the license server:

At a command prompt, run:

<serena_license_server_dir>/<os>/stop_license_server

Managing User Names for Named Licenses

If you have purchased named user licenses, you need to specify the Dimensions RM user IDs and the features they are licensed to use in the SLM before that user can log into Dimensions RM. You can add the users' IDs manually by typing their user IDs or manually by accepting the default in the SLM.

To manually assign, reassign, or delete from features:

- 1 On the **Product** tab, select the feature from the **Product Licenses** list and click the **Manage User IDs** button.
- 2 The User Management dialog box opens.
 - To add users manually, click Add User to add a user to the feature by typing in the user ID. You can add as many users as you like by separating the IDs with a space. The user names you enter here must match the users' Dimensions RM login names.
 - To remove users from the list, select the user from the list and click **Remove User**.

To automatically assign named licenses to users who request them:

 On the Products tab, select the feature from the Product Licenses list and select Auto-add user IDs for named licenses to automatically add user IDs to a named license list when users log into Dimensions RM. This option is set by default.

When users log in to a product, the server will check to see if there are licenses available for the feature they are attempting to use. If there is a license available, that user ID will be logged in the license server and that will be the named license assigned to the user.

Setting Up Notification for Licensing Issues

The **Notification** tab gives you the ability to set up notification from the license server. You need to supply the license server your SMTP server address and e-mail address to be notified of licensing issues by e-mail.

You can also suspend your notifications if the notices come in too frequently. It is also recommended that you set up rules in your e-mail application to funnel the incoming messages to an area where you can monitor them and where they won't interrupt your regular e-mail activity.

You can be notified of conditions such as when:

- You are out of licenses
- Users are requesting licenses that are not on the server
- Users are denied a license because they are not on the named list

To receive notification of license activity:

- 1 Enter your SMTP server address in the **SMTP Server IP / Hostname** field.
- 2 Enter your e-mail From address in the **From address** field.
- **3** Enter your e-mail To address in the **To address** field.
- 4 Click Send e-mail notification of licensing issues to enable notification.
- 5 Click Apply Changes.

To suspend notification of license activity:

To put notifications on hold, you can de-select **Send e-mail notification of licensing issues**. Select it again when you are ready to receive notifications.

Managing Your Licenses and the License Server

After you have installed SLM to obtain a license key for your users, you can later modify your SLM implementation, for example to run the SLM server as a service, or to move the SLM server.

Running the License Server as a Service

When the SLM installation is complete, the option to set the run the license server as a service is set by default. When the license server runs as a service the license server will restart automatically when you reboot the machine.

Should you need to stop and restart the service you do so in the Imtools utility.

To run the license server as a service:

On Windows **1** Go to the directory where you installed SLM and double click <code>lmtools.exe</code>.

- 2 Click the Config Services tab and select the **Use Services** check box. If you want the service to be automatic, select the **Start Server at Power Up** check box.
- On UNIX If you are using the license server on remote UNIX, refer to the *FLEXIm User's Guide* (*enduser.pdf*) located in the ./doc/FLEX1m User's Guide sub-directory of the directory where you installed SLM. This third-party document will guide you through the commands necessary for checking the server status and running it as a service.

Moving the License Server

If you need to move the license server to a new machine, you must contact Micro Focus Support for assistance. See "Contacting Technical Support" on page 8.

Upgrading from an Evaluation License

If you installed Dimensions RM and used an evaluation license, it is good for 30 days. After that period, you need to upgrade the evaluation license to a permanent license.



NOTE You must perform this procedure *only* if you evaluated Dimensions RM without an SLM server. If you were already using SLM (for example, with an extended evaluation that included a temporary license key), all that you need to do is add the permanent license keys.

To upgrade to a permanent license:

- **1** Set up SLM and get a permanent license key.
- 2 In RM Manage, select **Options** from the **Workspace** menu.
- 3 Click the License tab.
- **4** Type the name of the license server in the **License Server** field.
- 5 Click OK.

Upgrading Your Serena License Manager

Dimensions RM 12.8.1 requires SLM Version 2.3.0. To upgrade from any previous version of SLM to this requirement version, please proceed as follows:

- **1** Shut down your existing version of SLM.
- **2** Back up the following files in the existing SLM installation directory:
 - Windows
 - merant.opt (if you created such a file)
 - serena.lic
 - UNIX
 - licmgr.ini
 - merant.opt (if you created such a file)
 - serena.lic
 - users.lst
- 3 Uninstall the existing SLM using **Add or Remove Programs** in the Control Panel.
- **4** Install the new version of SLM, see *Installing the Serena License Manager*.
- 5 Restore the files in Step 2 to the new SLM installation directory and start SLM.

Setting Up Redundant License Manager Servers

To help ensure that licenses are always available in case the SLM server fails, you can set up redundant SLM servers. In this scenario, if one of the servers fails or loses network connectivity, the remaining servers will still supply the licenses to users to ensure that they can log in.

To set up redundant servers, you must:

Request redundant server license keys from Micro Focus Support Sales.

Redundant server license keys enable special licenses that redundant servers can share. With these keys, each of the three servers shares common license information, enabling the servers to back each other up should one go down.

When you receive redundant server license keys, you also receive detailed instructions on how to set up the redundant servers and on how to install and use the keys.

Install the License Manager server to three separate systems.

These systems must have continuous, reliable, high quality network connectivity to each other. If one of the servers becomes unavailable, the remaining two will supply the licenses. If two of the three servers become unavailable, no licenses will be supplied.

After Setting Up the Licenses

After getting and setting up licenses, you are ready to start using Dimensions RM with SLM. If you have not already done so, proceed with installing Dimensions RM (see chapter "Installation Types" on page 38). Make sure that the users responsible for installing Dimensions RM know the name or IP address of the SLM server so they can successfully complete their Dimensions RM installation.

Appendix B Installing and Configuring Oracle

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Overview

Dimensions RM can use an Oracle database or a Microsoft SQL Server database. This chapter describes how to install and configure Oracle. For installing and configuring Microsoft SQL Server, see chapter "Installing and Configuring MS SQL Server" on page 75.

Oracle System Requirements

Supported Oracle Versions

The Dimensions RM server requires database connectivity to one of the following supported RDBMS (in which it locates its databases):



IMPORTANT! For the list of currently supported RDBMS platforms, chip architectures, operating-systems, Web servers, Web browsers, and Micro Focus and third-party integrations, see the Dimensions RM Platform Matrix on the Support Download page:

https://www.microfocus.com/documentation/dimensions-rm/drm12.8.1/ matrixdrm_12.8.1.xlsx.zip



NOTE The Dimensions RM server and the Dimensions RM Admin tools are 64-bit applications and require a 64-bit Windows platform to run. RM Import can run on either a 32-bit or 64-bit Windows platform.

- A 64-bit Windows Oracle Standard or Enterprise 12, 18, or 19. This can be located on either the same network node as the Dimensions RM server or a remote network node.
- A 64-bit UNIX Oracle Standard or Enterprise 12, 18, or 19. This can only be located on a network node remote from the Dimensions RM server.

The Administrator Oracle Client

A 64-bit Oracle Administrator Client, supported by the release level of the RDBMS must be installed if any of these conditions is met:

- You are installing Dimensions RM server and the database is installed on a remote machine
- You are installing on a separate web server **and** the database is installed on a remote machine
- You are installing Dimensions RM Admin tools on a client machine

If none of the above conditions matches, **do not** install the Oracle client.



NOTE

- If you have a 64-bit Oracle installed on the same machine as Dimensions RM, you should check to see whether the 64-bit Oracle client components are installed by attempting to connect to the database using sqlplus. Install a 64-bit Administrator Oracle client if the connection test shows that it is currently absent.
- The release levels of the Oracle client must match that of the RDBMS.
- The 64-bit client path must be first in the Windows PATH variable.
- RM Import Client does not require the Oracle client (it communicates to Dimensions RM via Web services).



TIP Oracle provides a client only install. You do not need to do another server installation to obtain the 64-bit Oracle Administrator Client.

About Containers

Oracle introduced the term container database (CDB) with database release 12c. A non-CBD refers to any database created before 12c, or a (12c or higher) database created without the enable pluggable database clause.

Configuring Oracle

If upgrading to a newer release of RM on a server previously hosting RM, you may proceed directly to Chapter E, "Upgrading an Earlier Release of Dimensions RM" on page 99.



NOTE This applies to Oracle ASM users:

Do not use an ASM controlled folder (ASM folders begin with a +') for backup or for restore. A standard operating system path must be used from RM Manage to backup and restore operations.

Microsoft Loopback Adapter For a Windows RDBMS

Many Windows networked systems implement Dynamic Host Configuration Protocol (DHCP) to assign dynamic IP addresses on a computer network. Dynamic addressing allows a computer to have a different IP address each time it connects to the network. This simplifies network administration by letting you add a new computer to the network without having to manually assign that computer a unique IP address.

The Window versions of the Oracle RDBMS, however, require a static IP address. On a DHCP network, the assignment of a static IP address can be achieved by installing a Microsoft Loopback Adapter as the primary adapter. If this is not installed, whenever the DHCP-assigned IP address subsequently changes (for example, at a system reboot), the Oracle Net Listener will no longer work and will have to be recreated using the Oracle Net Configuration Assistant tool.

For instructions on how to install the Microsoft Loopback Adapter, please refer to the Oracle documentation.

Creating the Oracle Database Instance for RM

If there are any questions as you proceed through this setup, please contact Micro Focus Support – they will be happy to assist.

The following is the short answer to the question: "How do I create a database instance for RM?" For additional detail, please refer to The Database Instance Creation Details, below.

- **1** Begin by using Oracle Database Configuration Assistant option to 'Create a Database'.
- **2** Select the template for a General Propose or Transaction Processing Template.
- **3** Use Default settings with the following exceptions:
 - **a** Memory tab: Enable Automatic Memory Management with at least **2GB** of memory.
 - **b** Sizing Tab: Increase Processes from 150 to a minimum of 310.
 - **c** Character sets:
 - NLS_Characterset AL32UTF8
 - NLS_NCHAR_Characterset AL16UTF16
 - **d** Connection must be DEDICATED.

The Database Instance Creation Details

NLS_CHARACTERSET

NLS_CHARACTERESET	Supported/Unsupported
US ASCII	Unsupported
WE81SO8859P1	Supported
AL32UTF8	Supported
UTF8	Unsupported
Double-byte	Unsupported

NLS_NCHAR_CHARACTERSET

NLS_NCHAR_CHARACTERSET	Supported/Unsupported
US7 ASCII	Unsupported
AL16UTF16	Supported
UTF8	Supported
Double-byte	Unsupported

NLS_LANGUAGE

NLS_LANGUAGE	Supported/Unsupported
American	Supported
All Others	Unsupported

Oracle Client - NLS_LANG (Windows Registry Setting)

NLS_LANG	Supported/Unsupported
AMERICAN_AMERICA. WE8MSWIN1252	Supported
All Others	Unsupported

Local Windows Clients Character Set Encoding

	Supported/Unsupported
Western European (English on English Windows Operating System)	Supported
Western European (English on French Windows Operating System)	Supported
Western European (English on German Windows Operating System)	Supported
All Others	Unsupported

Browser Character Set Encoding

	Supported/Unsupported
UTF8	Supported
Windows	Supported
All Others	Unsupported

Memory Management-32 Bit

E

NOTE The following values are not minimum values for Oracle operations but recommended starting points. If you have an Oracle DBA, they should tune these values until they achieve optimum performance for the actual data stored in the Dimensions RM database.

The users referred to in the computations are users simultaneously accessing the server for information.

Attribute	Value to be Set
Shared Memory Management	AUTOMATIC
SGA size	768MB plus 48MB for each simultaneous user over four users
PGA size	256MB plus 16MB for each simultaneous user over four users

67

Attribute	Value to be Set
1-4 simultaneous users SGA/PGA	SGA 768MB; PGA 256MB
5 simultaneous users SGA/PGA	SGA 1056MB; PGA 272MB
10 simultaneous users SGA/PGA	SGA 1536MB; PGA 352MB
20 simultaneous users SGA/PGA	SGA 1536MB; PGA 512MB

Memory Management-64 Bit



NOTE The following values are not minimum values for Oracle operations but recommended starting points. If you have an Oracle DBA, they should tune these values until they achieve optimum performance for the actual data stored in the Dimensions RM database.

The users referred to in the computations are users simultaneously accessing the server for information.

Attribute	Value to be Set
Shared Memory Management	AUTOMATIC
SGA size	1152MB plus 64MB for each simultaneous user over eight users
PGA size	384MB plus 32MB for each simultaneous user over eight users
1-8 simultaneous users SGA/PGA	SGA 1152MB; PGA 384MB
10 simultaneous users SGA/PGA	SGA 1280MB; PGA 448MB
20 simultaneous users SGA/PGA	SGA 1920MB; PGA 768MB

Processes



NOTE For most systems, 310 processes are adequate; but for large systems a greater number of processes are required. For large systems, if you have an Oracle DBA, they should tune these values until they achieve optimum performance for the actual data stored in the Dimensions RM database.

Category	Number of Processes
Each simultaneous user	At least eight
Each sync engine	At least 20
Each ALF or Mashups service	At least 18
Each RM Mail Service	At least four
All categories	A minimum of 768 (must be a multiple of 32)

64-Bit Oracle Client Installation in an Upgrade Scenario

You must install the 64-bit Oracle client if any of these conditions is met:

- You are installing Dimensions RM server and the database is installed on a remote machine
- You are installing on a separate web server and the database is installed on a remote machine
- You are installing Dimensions RM Admin tools on a client machine

Please note that the Oracle client version and patch level must be supported by the server.



CAUTION! Do not install the Oracle 64 bit client into the default 64-bit programs directory (C:\Program Files). If the Oracle client is installed in that directory, Dimensions RM will *not* work.

- 1 Run the Oracle client install (setup.exe) as Administrator, **choosing installation type Administrator**.
- 2 From your backup, copy the tnsnames.ora file to
 ...\64bitClient\product\<version_number>\client_1\network\admin
- **3** Set the PATH environment variable such that the 64-bit client path appears first in the system PATH variable. This path-setting is necessary for a successful RM installation.

64-Bit Oracle Client Installation with a Fresh Installation

You must install the 64-bit Oracle client if any of these conditions is met:

- You are installing Dimensions RM server **and** the database is installed on a remote machine
- You are installing on a separate web server **and** the database is installed on a remote machine
- You are installing Dimensions RM Admin tools on a client machine

Please note that the Oracle client version and patch level must be supported by the server.



CAUTION! Do not install the Oracle 64 bit client into the default 64-bit programs directory (C:\Program Files). If the Oracle client is installed in that directory, Dimensions RM will *not* work.

- 1 Run the Oracle client install (setup.exe) as Administrator, **choosing installation type Administrator**.
- **2** Configure tnsnames.ora
 - a Copy tnsnames.ora file from server to Oracle client install path For example, from ...\Oracle_install\NETWORK\ADMIN\tnsnames.ora To

```
...\64bitClient\product\<version_number>\client_1\network\admin\tns
names.ora
```

b For the client's tnsnames.ora file and a container database, add:

```
CONTAINER_NAME =
(DESCRIPTION =
  (ADDRESS = (PROTOCOL = TCP)(HOST = hostname)(PORT = 1521))
  (CONNECT_DATA =
    (SERVER = DEDICATED)
    (SERVICE_NAME = CONTAINER_NAME)
  )
)
```



NOTE

- Replace CONTAINER_NAME with the actual name of the container. To retrieve a list
 of containers in your database, see chapter "Listing Containers in an Oracle
 database" on page 70.
- After configuration of the container in the client's TNSnames file (and restarting RM Manage), the container name will show like a database entry in RM Manage. Any operation which is usually executed on the database has to be executed with the container, e.g.
 - Creating the ICDBA account
 - Creating RM instances
 - Accessing RM instances
- **3** Set the PATH environment variable such that the 64-bit client path appears first in the system PATH variable. This path-setting is necessary for a successful RM installation.

Listing Containers in an Oracle database

The following steps assume the database connection name RTM. If your database connection name (in the tnsnames.ora file of your Oracle Client) is different, use that name instead.

To list all containers in the database:

- **1** Open a command prompt.
- 2 Type the following command and press Enter: sqlplus
- 3 Enter the following user name and press Enter: sys@RTM as sysdba
- **4** Type the password and press **Enter**. Note that there is no graphical representation for the password characters on the screen.
- 5 Type the following command and press Enter: column name format A8
- 6 Type the following command and press Enter: select NAME, CON_ID from V\$CONTAINERS order by CON_ID;

7 To close the connection to the database, type the following command and press Enter: exit



EXAMPLE

This example uses the database name "rtm". Replace this with the actual name of your database.

C:\>sqlplus

```
SQL*Plus: Release 12.1.0.1.0 Production on Wed May 13 11:04:10 2020
```

Copyright (c) 1982, 2013, Oracle. All rights reserved.

Enter user-name: **sys@rtm** as **sysdba** Enter password:

Connected to: Oracle Database 12c Enterprise Edition Release 12.1.0.1.0 - 64bit Production

With the Partitioning, OLAP, Advanced Analytics and Real Application Testing options

SQL> column name format A8
SQL> select NAME, CON_ID from V\$CONTAINERS order by CON_ID;

NAME CON_ID CDB\$ROOT 1 PDB\$SEED 2 ORCLPDB 3

SQL> exit

With this example, the container name is ORCLPDB.

Preparing an existing Container for Dimensions RM

To allow Dimensions RM to use the container, it must have the status **OPEN**. The following steps assume the container name ORCLPDB and user sys. Change these according to your environment.

To prepare a container:

- **1** Open a command prompt.
- 2 Type the following command and press Enter: sqlplus
- 3 Enter the following user name and press Enter: sys@ORCLPDB as sysdba

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- **4** Type the password and press **Enter**. Note that there is no graphical representation for the password characters on the screen.
- 5 Type the following command and press Enter: select STATUS, DATABASE STATUS from v\$instance;
- 6 If the STATUS column shows **OPEN**, continue with step 10.
- 7 Type the following command and press Enter: alter database open
- 8 Type the following command and press Enter: select STATUS, DATABASE_STATUS from v\$instance;
- 9 Verify that the STATUS column shows **OPEN**.
- **10** To close the connection to the database, type the following command and press **Enter**: exit

Completing the Oracle Configuration

Turning Off the Anonymous User

The way in which Oracle authenticates your anonymous user may prevent you from connecting to the database. If the anonymous user does not exist in the domain, turn the authentication service off in Oracle. To do this, modify the sqlnet.ora file in the network\admin directory as described:

Change:

SQLNET.AUTHENTICATION_SERVICES=(NTS)

to:

SQLNET.AUTHENTICATION_SERVICES=(NONE)



NOTE This problem can occur when you attempt to populate the Instances list on the RM Browser login page.

Setting Up a Local Oracle Net Service Name on the Dimensions RM Server Node

For a Dimensions RM server installation with respect to a supported remotely located Oracle RDBMS, you will need to provide the Oracle Net Service Name. This is the name that the local Windows Oracle client networking software uses to identify particular remote Oracle databases for network operations.

On your local Windows node you need to define the Net Service Name of the remote Oracle database that you want the Dimensions RM server to communicate with. To do this you use the Oracle Net Configuration Assistant as explained below:

1 Start the Oracle Net Configuration Assistant.

- 2 Select Local Net Service Name configuration and click Next.
- 3 Select Add and click Next.
- **4** Each Oracle database or service has a service name. Normally this will be its SID. Enter the SID of the *remote* database you want the *local* Oracle client to communicate with and click **Next**.
- 5 Select TCP and click Next.
- **6** To be able to communicate with the remote database, the local Oracle client needs to know the remote database's hostname. Enter the remote database's hostname. (In most cases you should also accept the standard port number of 1521.) Click **Next**.
- 7 Select **Yes, perform a test** to verify that the remote database can be reached using the information already provided. Click **Next**.
- **8** If the test was successful, you will get the message:

Connecting... Test successful.

If the test fails, you need to repeatedly click **Back** to check that the information you provide and correct it as necessary until this test is successful.

Click Next.

9 Having tested that your local Oracle client can simply communicate through TCP/IP with the remote database whose service name (SID) you provided in Step 4 on page 73, you now need to assign an Oracle Net Service Name. This net service name is the name that your *local Oracle client* will use to identify the *remote* database when performing locally initiated Oracle services with respect to the *remote* database.

By default the net service name will be the same as the service name you provided in Step 4 on page 73 and the **Net Service Name** field will be pre-populated with that name. However, if that name is not unique, for example, say both the local Oracle client and remote databases have an Oracle SID of DIM10, then you would enter a unique net service name for the local Oracle client to use when communicating with the remote database, for example, DIM10R.

Click Next.

- **10** Unless you want to configure another net service name, accept the default **No** and click **Next**.
- 11 Click Next.
- 12 Click Finish.

Appendix C

Installing and Configuring MS SQL Server

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Overview

Dimensions RM can use an Oracle database or a Microsoft SQL Server database. This chapter describes how to install and configure Microsoft SQL Server. For installing and configuring Oracle, see chapter "Installing and Configuring Oracle" on page 63.

MS SQL Server System Requirements

The Dimensions RM server requires database connectivity to one of the following supported RDBMS (in which it locates its databases):



IMPORTANT! For the list of currently supported RDBMS platforms, chip architectures, operating-systems, Web servers, Web browsers, and Micro Focus and third-party integrations, see the Dimensions RM Platform Matrix on the Support Download page:

https://www.microfocus.com/documentation/dimensions-rm/drm12.8.1/ matrixdrm_12.8.1.xlsx.zip



NOTE The Dimensions RM server and the Dimensions RM Admin tools are 64-bit applications and require a 64-bit Windows platform to run. RM Import can run on either a 32-bit or 64-bit Windows platform.

- One of these Microsoft SQL Server releases:
 - MS SQL Server 2016 SP2 with cumulative update 12
 - MS SQL Server 2017
 - MS SQL Server 2019
- A database instance which will receive the data of the Dimensions RM instances to be created.
- A 64-bit System DSN which allows connection to MS SQL Server.

Installing SQL Server



IMPORTANT! For SQL Server, Mixed Mode must be enabled.

Mixed Mode allows to authenticate against SQL Server with domain user accounts and SQL Server user accounts. The following steps are guidelines for installing SQL Server based on the MS SQL Server 2016 SP2 setup. These guidelines are for reference only. Micro Focus may not be held liable for any damages resulting from these guidelines.

To install SQL Server:

1 Right-click **setup.exe** of SQL Server and select **Run as administrator** from the shortcut menu. This opens the **SQL Server Installation Center**.

- 2 Select **Installation** from the pane.
- **3** Click **New SQL Server stand-alone installation or add features to an existing installation**. This opens the SQL Server Setup wizard.
- 4 Enter the product key and click **Next**.
- 5 Select the I accept the license terms. option and click Next.
- 6 If desired, select the Use Microsoft Update to check for updates (recommended) option.
- 7 Click Next.
- 8 Click Next.



NOTE If the Windows Firewall is enabled, you may receive a warning. You should allow SQL Server access through the firewall if

- SQL Server is installed on a different server than Dimensions RM or
- you need to access SQL Server from another machine (e.g. by using Dimensions RM Admin tools or SQL Server Management Studio)

If none of the options above applies, you can ignore the message.

- 9 Select **Database Engine Services** and any other feature desired or required.
- 10 Click Next.
- **11** Ensure that the **Default instance** option is selected.
- **12** If desired, specify a different **Instance ID**. If you do, take a note as the Instance ID is required for connecting to the database. The following chapters assume that you leave the default **MSSQLSERVER**.
- **13** Click **Next** twice.
- **14** Select Mixed Mode (SQL Server authentication and Windows authentication).
- **15** Enter a password for the sa account in the **Enter password** and **Confirm password** boxes. Take a note of the password.
- 16 Click Next.
- **17** Click **Install**.
- **18** After installation is complete, verify that all setup steps have the status **Succeeded**.
- 19 Click Close.

Configuring SQL Server

Before you can use SQL Server, you must configure the method how it can be accessed. There are two options: TCP/IP or Named Pipes. The following steps describe how to Enable TCP/IP and disable Named Pipes.

To configure TCP/IP for SQL Server, do the following:

- **1** From Windows Start menu, start the SQL Server Configuration Manager.
- 2 Expand SQL Native Client 11.0 Configuration (32bit).
 - a Select Client Protocols.
 - **b** If **Named Pipes** is enabled, right-click **Named Pipes** and select **Disable** from the shortcut menu.
 - c If **TCP/IP** is disabled, right-click **TCP/IP** and select **Enable** from the shortcut menu.
- 3 Expand SQL Server Network Configuration.
 - **a** Select **Protocols for MSSQLSERVER**. Note that you may see a different name than MSSQLSERVER if you changed the instance name during setup.
 - **b** If **Named Pipes** is enabled, right-click **Named Pipes** and select **Disable** from the shortcut menu.
 - c If **TCP/IP** is disabled, right-click **TCP/IP** and select **Enable** from the shortcut menu.
- 4 Expand SQL Native Client 11.0 Configuration.
 - a Select Client Protocols.
 - **b** If **Named Pipes** is enabled, right-click **Named Pipes** and select **Disable** from the shortcut menu.
 - c If **TCP/IP** is disabled, right-click **TCP/IP** and select **Enable** from the shortcut menu.
- 5 Select SQL Server Services.
- 6 Right-click **SQL Server (MSSQLSERVER)** and select **Restart** from the shortcut menu. Note that you may see a different name than *MSSQLSERVER* if you changed the instance name during setup.

Installing SQL Server Management Studio

To allow easy management of Microsoft SQL Server, you might want to use SQL Server Management Studio. The following steps are guidelines for installing SQL Server Management Studio based on the Release 18.6 setup. These guidelines are for reference only. Micro Focus may not be held liable for any damages resulting from these guidelines.

- 1 Right-click the SQL Server Management Studio setup and select **Run as administrator** from the shortcut menu.
- 2 Click Install.
- 3 Click Restart.

Creating a Database Instance



CAUTION!

- When creating the database instance, always use an SQL Server user account e.g. the sa user account. Do not use a domain user account.
- You must only use 1 database instance for Dimensions RM per MS SQL Server installation.

To allow Dimensions RM to function, a database instance must be available to Dimensions RM. The following steps assume that SQL Server Management Studio has been installed. The following steps give a guideline for creating a database instance and are for reference only. Micro Focus may not be held liable for any damages resulting from these guidelines.

To create a database instance, execute these steps:

- **1** Start SQL Server Management Studio.
- 2 Server type: Select Database Engine.
- **3 Server name:** If SQL Server is on a different machine, enter the server name or IP address of the server running SQL Server.
- 4 Authentication: Select SQL Server Authentication.
- 5 Log in: Type sa.
- **6 Password:** Type the password for the **sa** user account.
- 7 Click Connect.
- 8 If required, expand the root node in **Object Explorer**.
- **9** Right-click the **Databases** folder and select **New Database...** from the shortcut menu. This opens the **New Database** dialog.
- **10** Enter a database name, e.g. *RTM*.
- **11** Click **OK** to create the database.

Installing and Configuring the ODBC Driver

An ODBC driver for SQL Server, supported by the release level of the SQL Server must be installed in order to use the following Dimensions RM components:

- A Dimensions RM server communicating with a remote 64-bit SQL Server instance.
- A Dimensions RM server communicating with a local 64-bit SQL Server instance.
- A Dimensions RM Admin Client communicating with a Dimensions RM database.
- Web Server



NOTE RM Import Client does not require the ODBC data source (it communicates to Dimensions RM via Web services).

Installing the ODBC Driver for MS SQL Server for Separate Setups

Dimensions RM requires the 64-bit version of Microsoft[®] ODBC Driver 11 for SQL Server[®]. The following steps are guidelines for installing the MS ODBC Driver 11 for SQL Server and are for reference only. Micro Focus may not be held liable for any damages resulting from these guidelines.



IMPORTANT! If database SQL Server and Dimensions RM are installed on the same machine, **do not** execute the instructions below.

To install the ODBC driver for MS SQL Server 2016 SP2, execute these steps:

 Navigate to the support directory of your Dimensions RM setup (X:\RM\win32\support - Replace X with the letter of your DVD drive).

2 Installing the MS ODBC Driver for SQL Server

- a Double-click msodbcsql.msi. This opens the Microsoft ODBC Driver 13 for SQL Server Setup dialog.
- b Click Next.
- c Select I accept the terms in the license agreement and click Next.
- **d** Ensure that **Client Components** is selected (no red x) and click **Next**.
- e Click Install.
- f Click Finish.
- 3 Installing the Microsoft Command Line Utilities 13 for SQL Server
 - a Double-click MsSqlCmdLnUtils.msi. This opens the Microsoft Command Line Utilities 13 for SQL Server Setup dialog.
 - **b** Click **Next**.
 - c Select I accept the terms in the license agreement and click Next.
 - d Click Install.
 - e Click Finish.
- 4 Installing the Microsoft SQL Server 2012 Native Client
 - a Double-click sqlncli.msi. This opens the Microsoft SQL Server 2012 Native Client Setup dialog.
 - **b** Click **Next**.
 - c Select I accept the terms in the license agreement and click Next.

- **d** Ensure that **Client Components** is selected (no red x) and click **Next**.
- e Click Install.
- f Click Finish.

Configuring the System DSN

A System DSN must be created to allow Dimensions RM to connect to the database.

To create a System DSN, execute these steps:

- **1** Open Windows Explorer and navigate to C:\Windows\System32.
- 2 Start odbcad32.exe.This opens the **ODBC Data Source Administrator (64-bit)** dialog.
- 3 Select the System DSN tab.
- 4 Click Add.... This opens the Create New Data Source dialog.
- 5 Select SQL Server Native Client 11.0 and click Finish. This opens the Create a New Data Source to SQL Server.
- 6 Enter a connection name into the **Name** box. Note that the name must all be uppercase.
- 7 If desired, specify a description into the **Description** box.
- 8 In the **Server** box, specify the server by name or IP address.
- 9 Click Next.
- **10** Select option With SQL Server authentication using a login ID and password entered by the user.
- **11** Enter **sa** into the **Login ID** box.
- **12** Enter the password for the "sa" user into the **Password** box.
- 13 Click Next.
- **14** Select the **Change the default database** to option and enter the database instance you created, e.g. *RTM*.
- 15 Click Next.
- 16 Click Finish.
- 17 Click OK to close the ODBC Microsoft SQL Server Setup dialog.
- 18 Click OK to close the ODBC Data Source Administrator (64-bit) dialog.



NOTE RM Import Client does not require the ODBC data source (it communicates to Dimensions RM via Web services).

Appendix D Pre-Upgrade Activities

This section details the activities that must be undertaken prior to initiating the upgrade.

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Record the Dimensions RM Mail Configuration

- **1** Log in to the Dimensions RM server machine as an administrator.
- **2** Record the RM Mail configuration:
 - a Select: (Windows) Start | Micro Focus | Dimensions RM <version> | RM Mail Configuration
 - **b** Click through the **RM Mail** dialog tabs, and take screen shots or write down all of the configuration information, for example:
 - Database location.
 - Instances.
 - Server port number.



NOTE Restoring of e-mail rules to a new database is not supported.

Back up Database, Instances, and Necessary Files



CAUTION!

Before beginning the upgrade, make sure that you have a reliable backup of the RDBMS database installation. This requires that no users are accessing Dimensions RM while instance data is secured. To ensure this, stop these services:

- Micro Focus Common Tomcat
- Micro Focus Dimensions RM Pool Manager
- Micro Focus Dimensions RM E-Mail Notification Service

Note that stopping Micro Focus Common Tomcat will also disable other applications using this service.

1 Backup all RM instances.

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		-		-

NOTE If installing the new release of RM on the same server, without a change in the RDBMS, the backups will only be re-imported in the event of a problem.

- **a** If migrating to a new RDBMS please make a note of the instance / tablespace names as well as the size of each instance's tablespace.
 - At **import time**, you will be prompted to enter the *From User* as well as the *Tablespace Name*. The *From User* refers to the instance name. Assuming that the organization's process was to allow RM to create and manage the tablespace when creating new instances the tablespace name will also be the instance name. **However, if there is an internal process** defined for creating a tablespace for new RM instances the tablespace name may differ from the instance (user) name.

If unsure, from RM Manage, right click on the database name, and select **Administer Tablespaces**. This will list the current tablespace names. You might also check with your DBA.

- Select **Administer Tablespaces**, and check the size of each instance tablespace. If the instance is and will remain active, double the tablespace to be assigned when the new instance is created.
- 2 Using RM Manage, right click on the instance, and select **Backup/Restore Instance** Account

Backup/Restore Insta	nce Dialog
Field	Description
Legacy/Compatibility Mode	Legacy mode formats the backup such that it is compatible with Oracle 10. Legacy must be used when backing up instances from Oracle 10, and must then be used for their import - no matter which release of Oracle the instances are migrated to.
<u>^</u>	CAUTION! If Oracle 10 is not in use: Do not check the legacy box.
Oracle Directory Path	This field is automatically populated with the default backup path on the Oracle server.
File Name	This field is automatically populated with a name for the backup file. The name is based upon the instance name and the current date and time. Edit this name as needed. NOTE In normal mode, the location is relative to the Oracle directory path. In Legacy Mode, the path to the Saved Projects directory of the RM installation is prepended to the file name. TIPS
~\{`	 Note the location to which you saved the files. You may need to browse to that location from the Import dialog of the new RM installation or copy the files to the location expected by the new RM installation. You might want to consider modifying the backup
	file name such that the reason for this backup is clear, for example: RMDEMO_20141029_0946FinalForUpgrade.dmp
Security Data	Exports all the users that have been assigned to this instance, as well as their permissions, so that they may be imported into another database or instance.
Buffer Size	NOTE This sets the temporary space available for the operation, and is used for Legacy Mode only. There is no reason to change the buffer size for the backup.

3 Rename the backup file such that it can be easily differentiated from standard instance backups, e.g., RMDEMO_20141029_0946FinalForUpgrade.dmp.

4 Click the **Backup** button. The backup operation runs.



NOTE The log file is saved in the directory where the backup was created. It has the same name as the instance, but with a .log extension instead of a .dmp extension. It also includes the letters "Exp" and a time stamp based on the backup operation, e.g. *InstanceName_ExpDate_ExpTime_*Exp.log

- **5** Repeat the preceding steps for each instance.
- **6** Because the uninstall and re-install will overwrite necessary files, please copy the following files to a temporary but safe place:
 - a Copy the RM directory tree to a backup. For example (all in one line): copy "C:\Program Files (x86)\Micro Focus\Dimensions 12.6\RM" C:\RM12.6_Backup
 - **b** Copy the tomcat directory tree to a backup. For example (all in one line):

```
copy
"C:\Program Files (x86)\Micro Focus\Dimensions 12.6\Common Tools
1.8.0.0\tomcat"
```

C:\RM12.6_tomcatBackup

7 If there are modified instances in the RM\Saved Projects directory, they too should be backed up.

8 Stop all RM related Services:

- a Micro Focus ALF Event Emitter
- **b** Micro Focus Common Tomcat
- c Micro Focus Dimensions RM E-Mail Notification
- d Micro Focus Dimensions RM Pool Manager
- e Micro Focus SyncEngine
- 9 Stop RM related Processes

rmLicenseAgent.exe

- **10** Uninstall the existing Dimensions RM version using **Add or Remove Programs** from the Windows Control Panel.
- **11** Following the Dimensions RM uninstall, please check that the **Micro Focus Common Tomcat** associated with Dimensions RM has also been uninstalled. If this is not the case, uninstall **Micro Focus Common Tomcat** using **Add or Remove Programs** from the Windows Control Panel.



IMPORTANT! This should be a merging operation, that is, the new sub-directories should be retained and only tailored/modified backup files copied to the new sub-directories. The new sub-directories in their entirety *must not* be replaced with the backup versions.

Uninstalling the 32-bit Oracle Client

As of Dimensions RM version 12.8, RM server and RM Admin tools are 64-bit applications and require the 64-bit access to the Oracle database. Any version before RM 12.8 required a 32-bit Oracle client, which must be removed before installing Dimensions RM.

The following steps assume that you installed a 32-bit Oracle client under the following path: *C:\app\ORCL\client_1*. When executing the steps below, adjust the paths to match your environment.

To uninstall, execute the following steps:

- 1 Remove the path to the 32-bit Oracle client by executing these steps:
 - a Open a command prompt.
 - **b** Type control system and press **Enter**. This opens the **System** dialog.
 - c Click Advanced system settings. This opens the System Properties dialog.
 - d Click Environment Variables.... This opens the Environment Variables dialog.
 - e Under System variables, select the **Path** variable and click **Edit...**. This opens the **Edit environment variable** dialog.
 - f Select the path that points to the bin directory of your 32-bit Oracle client, e.g. C:\app\ORCL\client_1\bin.
 - g Click Delete.
 - h Click OK to close the Edit environment variable dialog.
 - i Click OK to close the Environment Variables dialog.
 - j Click OK to close the System Properties dialog.

2 Create a backup of client files:

- **a** In Windows explorer, navigate to the **network\admin** directory of your 32-bit Oracle Client installation, e.g. *C:\app\ORCL\client_1***network\admin**.
- **b** Backup these files:
 - sqlnet.ora
 - tnsnames.ora

3 Uninstall the 32-bit Oracle Client:

- **a** In Windows explorer, navigate to the **deinstall** directory of your 32-bit Oracle Client installation, e.g. *C:* *app**ORCL**client_1***deinstall**.
- **b** Right-click deinstall.bat and select **Run as administrator** from the shortcut menu.
- c Type y to confirm the message "The following Windows and .NET products will be deconfigured from the Oracle home : ntoledb,odp.net,asp.net

```
Do you want to continue (y - yes, n - no)? [n]:"
```

Upgrade the Serena License Manager



NOTE For additional details concerning the license manager installation see chapter "Licensing Dimensions RM" on page 51.

Dimensions RM 12.8.1 requires SLM Version 2.3.0. To upgrade from any previous version of the *Serena License Manager* (SLM) to this required version, please proceed as follows:

- **1** Shut down your existing version of SLM.
- **2** Back up the following files in the existing SLM installation directory:
 - Windows
 - merant.opt (if you created such a file)
 - serena.lic
 - UNIX
 - licmgr.ini
 - merant.opt (if you created such a file)
 - serena.lic
 - users.lst
- **3** Uninstall the existing SLM.
- **4** Install the new version of SLM, see the *Installing the Serena License Manager* guide.
- **5** Restore the files in Step 2 to the new SLM installation directory and start SLM.

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Chapter Overview

This chapter discusses the post-installation procedures and checks that are required following the fresh installation of a Dimensions RM Server. For a Dimensions RM Admin Client or RMImport Client installation ceratin of these procedures will not be applicable, principally those with reference to the RM Browser and Web Servers.



IMPORTANT! When using RM Manage or RM Class Definition from a client machine, the changes will not take effect until the **Micro Focus Dimensions RM Pool Manager** service is restarted on the RM server.

Checking That the Installation Has Completed Successfully

There is a small possibility that the installation may not have completed successfully even though it may have appeared to have done so. It is recommended that you check that the expected software is listed in the Control Panel | Add or Remove Programs window following the installation. Select the appropriate entry (for example, **Dimensions RM 12.8.1**) and click the **Click here for support information link** to check the version number.

Checking Windows Services

1 Log in as a user with local Windows administrative rights. Access Services by:

Start | Control Panel | Services

or

Start | Control Panel | Administrative Tools | Services

This will display the status of the services for your particular Windows PC.

- 2 Check that the following database and Dimensions RM services have Status Started and Startup Automatic.
 - Dimensions RM services:

```
Micro Focus Dimensions RM Pool Manager
Serena License Server(*)
```

- (*) This service may be absent if you are using Serena License Manager (SLM) on another server. If the service should be present and is not running, refer to "Starting the License Server" on page 57 for instructions on setting it up.
- Oracle only: Oracle services

OracleDBConsoleRM
Oracle<oracle_service_name>TNSListener(*)

OracleService<oracle_service>(**)

- (*) By default this will be OracleDimensionsTNSListener.
- (**) See chapter "The Database Instance Creation Details" on page 66.
- **3** Open Windows Task Manager and check for the following database and Dimensions RM processes:
 - Dimensions RM processes (note that there will be several rmAppServer.exe processes for a default installation):

rmAppServer.exe RMServerPool.exe

When using Oracle only: Oracle Enterprise only processes:

oracle.exe TNSLSNR.EXE

Licensing Dimensions RM Products

See "Licensing Dimensions RM" on page 51 details about licensing Dimensions RM components.

Setting the Optional Security Message

If you are installing to a secure system, you must enable the optional security warning as soon as installation is complete. Please see the topic "Creating Custom Login Alert Pages for RM Browser" in the *RM Administrator's Guide*.

Virus Checkers

Real-time virus checking of certain Dimensions RM and Oracle database files can cause a noticeable slowdown in Dimensions RM server operations. The following list identifies the principal files that can be excluded from real-time virus to improve performance:



IMPORTANT! The files listed below should, of course, still be included in other forms of virus scans—it is only their exclusion from real-time checking for all reads and writes during operation that is being recommended.

File Name	Execution Mode	Risks Introduced by Excluded from Real-Time Virus Checking
Datacacheserver.exe (continued on next page)	 Run as system user continuously once the product is installed. 	This executable is continuously using the active system memory and is accessed by each and every
	 Memory usage of this particular process increases/decreases depending upon the load. 	request over the Internet or intranet.
Datacacheserver.exe (continued)	 Multiple process are launched and run in the memory. 	
Oracle.exe	 Run as system user continuously once the Oracle is installed and the instance is started. 	As above.
	 Memory usage of this particular process increases/decreases depending upon the load. 	
rmAppserver.exe	 Run as system user continuously once the product is installed. 	As above.
	 Memory usage of this particular process increases/decreases depending upon the load. 	
	 Multiple process are launched and run in the memory. 	
RMServerPool.exe	 Run as system user continuously once the product is installed. 	As above.
	 Memory usage of this particular process increases/decreases depending upon the load. 	
	 Multiple process are launched and run in the memory. 	

Support for Export/Import

Dimensions RM provides export functions to Word, Excel, and PowerPoint as well as import functions for Word, and Excel. In order to provide these functionalities, Dimensions RM needs to access Microsoft Office (32-bit or 64-bit). After running the Dimensions RM setup, do the following:

- **1** Ensure that the following paths exist:
 - C:\Windows\System32\config\systemprofile\Desktop
 - C:\Windows\SysWOW64\config\systemprofile\Desktop
 - C:\Windows\System32\config\systemprofile\AppData\Local\Microsoft\Windows\INetCache
 - C:\Windows\SysWOW64\config\systemprofile\AppData\Local\Microsoft\Windows\INetCache
- 2 Create a local administrator account if it does not already exists (see chapter"Creating a Local Administrator Account" on page 93).
- 3 Change the Micro Focus Dimensions RM Pool Manager service to use the local administrator account (see chapter "Using Microsoft Office on Windows Server" on page 95).
- **4** Prepare the server for PDF Import (see chapter "Preparing for PDF Import on Windows Server" on page 96).
- **5** When using Adobe Reader on the server, execute the steps described in chapter "Using Adobe Reader on Windows Server" on page 97.

Creating a Local Administrator Account

To allow Dimensions RM using Microsoft Word, Microsoft Word needs to run under a local administrator account. It is suggested to use a separate account with a user name which identifies its function.

To create a local Administrator account, follow these steps:

- **1** Open Windows Control Panel.
- 2 In Category view, click **Change account type**. In Icon view click **User Accounts**. Then click **Manage User Accounts**.
- **3** Select the **Advanced** tab.
- 4 In the Advanced user managment group, click Advanced. This opens the Local Users and Groups dialog.
- 5 In the Local Users and Groups dialog, right-click the folder Users and select New User... from the shortcut menu. This opens the New User dialog.
- 6 In the **User name** box, enter the account name you want to create, e.g. RmPublish.
- 7 In the **password box**, enter a complex password.
- 8 Repeat the password in the **Confirm password** box.

- **9** Take a note of that password.
- 10 Ensure that the User must change password at next logon box is clear.
- **11** Select the **User cannot change password** box.
- 12 Select the Password never expires box.
- 13 Click Create.
- 14 Click Close.
- **15** Select the **Administrator** option.
- 16 Click Finish.
- 17 In the tree, select Users. This shows a list of users.
- **18** Right-click user *RmPublish* and select **Properties** from the shortcut menu. This opens the *RmPublish* **Properties** dialog.
- **19** Select the **Member Of** tab.
- 20 Click Add...
- 21 Type Administrators into the Enter the object names to select (examples) box and click Check Names. This should show SERVER_NAME\Administrators.
- 22 Click OK.
- 23 Click OK.
- 24 Change to the log on page and log on with user *RmPublish*.
- **25** Start Microsoft Word and confirm any dialogs.
- **26** Open a PDF file in Microsoft Word. This will open a message box with a warning that the layout may not be identical.
- 27 Set the Don't show this message again option and click OK.
- **28** Start any other installed Microsoft Office application and confirm any dialogs.
- **29** Log off user *RmPublish*.
- **30** Log in with your Administrator account to continue with the next steps.



PRIVILEGES To prevent local or remote login, follow these steps:

- 1 From the Start menu, select Administrative Tools | Local Security Policy or open the Control Panel in Icon view and click Administrative Tools. This opens the Local Security Policy dialog.
- 2 In the Local Security Policy dialog, expand Local Policies.
- 3 Select User Rights Assignment.
- 4 Double-click Deny log on locally.
- 5 Click Add User or Group...
- **6** Type *RmPublish* into the **Enter the object names to select (examples)** box and click **Check Names**. This should show SERVER_NAME*RmPublish*.
- 7 Click OK.
- 8 Click OK.
- 9 Double-click Deny log on through Remote Desktop Services.
- 10 Click Add User or Group...
- **11** Type *RmPublish* into the **Enter the object names to select (examples)** box and click **Check Names**. This should show SERVER_NAME*RmPublish*.
- 12 Click OK.
- 13 Click OK.

Using Microsoft Office on Windows Server

To allow Dimensions RM to use Microsoft Office, execute the following steps:

- 1 Ensure that you prepared the server as described earlier.
- **2** Open the command prompt.
- **3** Type services.msc and press Enter.
- 4 From the list, select the **Micro Focus Dimensions RM Pool Manager** service and click **Stop**.
- 5 Double-click the Micro Focus Dimensions RM Pool Manager service.
- 6 Select the Log On tab.
- 7 Select the **This account** option.
- 8 Enter use name and password. For the user name, use the user you created in chapter "Creating a Local Administrator Account" on page 93.
- 9 Click OK.

10 From the list, select the **Micro Focus Dimensions RM Pool Manager** service and click **Start**.

For Microsoft Office 32-bit:

- **1** Open a command prompt.
- 2 Type comexp.msc /32 and press **Enter**. This opens the **Component Services** dialog.
- **3** Navigate to Component Services | Computers | My Computer | DCOM Config
- 4 Right-click Microsoft Word 97 2003 Document, Microsoft Word Document or Microsoft Office Word Document and select Properties.
- **5** Select the **Identity** tab.
- 6 Select The launching user.
- 7 Click OK.

For Microsoft Office 64-bit:

- **1** Open a command prompt.
- 2 Type comexp.msc and press **Enter**. This opens the **Component Services** dialog.
- 3 Navigate to Component Services | Computers | My Computer | DCOM Config
- 4 Right-click Microsoft Word 97 2003 Document, Microsoft Word Document or Microsoft Office Word Document and select Properties.
- **5** Select the **Identity** tab.
- 6 Select The launching user.
- 7 Click OK.

Preparing for PDF Import on Windows Server

With RM release 12.8, PDF documents can be imported. To ensure that PDF documents can be processed, it is essential that the server is prepared accordingly.

To prepare the server for PDF document import, follow these steps:

- **1** Log on with user who is configured for the RM Pool Manager service. If you followed the suggested name, the user name is *RmPublish*.
- **2** Open a PDF file in Microsoft Word. This will open a message box with a warning that the layout may not be identical.
- 3 Set the **Don't show this message again** option and click **OK**.

Using Adobe Reader on Windows Server

If Adobe Reader is installed on the server, exporting documents can cause RM Browser to hang. This occurs if the document you export contains a PDF document (e.g. through a

file attachment of a requirement). Execute the following steps to allow the SYSTEM user account to access Adobe Reader:

- **1** Open a command prompt.
- **2** Type comexp.msc /32 and press Enter.
- 3 Navigate to Component Services | Computers | My Computer | DCOM Config
- 4 Right-click Adobe Acrobat Document and select Properties.
- **5** Select the **Identity** tab.
- 6 Select The interactive user.
- 7 Click OK.

Configuration and the First Instance

The newly created RM database requires configuration before it can be accessed; configuration is performed using the newly installed administration tool: RM Manage.

During configuration the administrator account ICDBA is created. This account is not a log in account, but access to it is required for administrative tasks such as new instance creation. The creation of the ICDBA account requires a database administrator account.

- **Oracle:** An account which belongs to the sysdba group.
- MS SQL Server: An administrator account, such as the built-in sa account or a Windows administrator account for the domain or server.

RM Manage can be accessed from a desktop icon, or from:

Start | All programs | Micro Focus | Dimensions RM 12.8.1 | RM Manage

- RM Manage **1** Right-click on RM Manage, and select **Run as administrator** from the context menu.
 - 2 Create the ICDBA account:
 - **a** Right-click on the database instance configured for RM, RMQP02 in the examples, and select **Create ICDBA Account**.
 - **b** Enter the ICDBA password. The existing SYSDBA account and password must be entered for authentication.
 - **c** Click on **Advanced**: For this initial RM Demo instance 2048 MB is sufficient. When creating production databases, increase the tablespace size to 2 GB for general usage and 4-6 GB for installations with more than 20 users.
 - d Click on Create

If the DBA has chosen to create a tablespace for each RM instance in advance of instance definition (Create in an existing tablespace) use the sizes mentioned above.

3 From RM Manage, create a "New Instance" – as the first instance in the database the process for its creation is unique. The RMDEMO sample instance should be used to "prime" the database. It provides an excellent example of a "typical" instance definition - however it should not be used to initiate an instance.

- **a** Right-click on the database and select **New Instance**.
- **b** The user is prompted to enter the ICDBA account password.
- **c** The user will be prompted to set the ICADMIN password please check the box and set the ICPROJECTS account with the same process, as shown below. These are NOT login accounts.



NOTE The passwords for ICADMIN and ICPROJECTS must be UPPER CASE. It is our best practice recommendation to make the ICADMIN and ICPROJECTS passwords the same.

d The next step is to name the instance, RMDEMO, and to set the RMDEMO instance administrator account password - as shown below. This administrator account allows for a separation of administrator duties between accounts. Using RMDEMO, Enter instance name and establish instance admin password; click OK.



NOTE Make a note of the instance administrator password – you will need this soon.

- e From the Sample Instances tab, select RMDEMO.
- **f** Unless you would like to allow users to "play with this instance" using fake user names, do not check **Include Security Data**.
- g Set Buffer Size to 100.
- h Click Install.
- i If the message *The version of instance* "*RMDEMO*" *is not current. Would you like to update it now?* is displayed click **Yes**.
- **4** Once the RMDEMO instance has been created and populated, a minor version inconsistency.will be displayed. Please convert the database before continuing.
 - **a** To convert, right-click on the database name and select **Convert Database**.
 - **b** Highlight the database, for example RMQP02, and select upgrade.
 - c Click Yes when prompted to re-create procedures.
- **5** After the conversion has completed, the instances within it must be upgraded.
 - **a** Click on the **+ sign** to expand the instance list for an initial installation. There will only be RMDEMO.
 - **b** Highlight the RMDEMO instance and click on **Upgrade**.
 - c When the Conversion Progress dialog is raised, click on Continue.
 - d Click on **Done**, when the selection is no longer grayed out.
- **6** For a new installation, the user will be prompted to *Change User*; change the user to the admin account created with the RMDEMO instance. The user name is *RMDEMOAdmin* and the password is that which was set when the instance was created.

Permissions of the ICDBA Account

The ICDBA account must have the Create Any Context and the Execute on sys.dbms_session rights. By default, ICDBA is created as a database administrator and therefore has these rights. If you create ICDBA manually, you may have to grant these rights with the following commands:

- GRANT CREATE ANY CONTEXT TO ICDBA
- GRANT EXECUTE ON sys.dbms_session TO ICDBA

Password Expiration for Oracle Passwords

The standard security default for passwords on Oracle is to expire after 180 days. If your passwords expire you will receive an ORA-28001 error message. Your DBA should ensure that Oracle accounts are created so that they do not expire. You should also update the security.dat file in < *install directory*>\Micro Focus\Dimensions < *version*>\RM\ on a regular basis.

The passwords for the Dimensions RM database administrator Oracle accounts ICDBA, ICADMIN, and ICPROJECTS can be changed from within RM Manage — see "Changing Database Administrator Account Passwords Using RM Manage" on page 102.

For other Oracle accounts, the following SQL script can be run when creating them such as to disable password expiration, but this will only work if run prior to a password actually expiring.



CAUTION! Micro Focus makes no warranty of any kind in regard to the contents of this script, including but not limited to implied warranties of merchantable quality or fitness for any particular purpose. Micro Focus shall not be liable for errors contained in it or for incidental or consequential damages in connection with the furnishing, performance, or use of this script. The information in this script is subject to change without notice.

```
Script start
```

With Oracle, the security defaults set Oracle Account to expire the passwords after 180 days. This forces the user to change all DB passwords for Oracle accounts sys

```
system
ICDBA
```

/*

ICADMIN

```
ICPROJECTS
```

<RM Instances>

- This is good default security but requires good Oracle knowledge to maintain these accounts. As a work around this script creates a profile where passwords will NOT expire. Then assigns account RM needs to this profile. This must be run before the account have their password expire. Once the passwords expire they must be changed.
- Please be aware that by running this script you are reducing the security of the Oracle database. Be sure you understand the risks and accept them before running this script.

*/

99

CREATE PROFILE "MICROFOCUSNOLOCKOUT" LIMIT CPU PER SESSION DEFAULT CPU PER CALL DEFAULT CONNECT TIME DEFAULT IDLE_TIME DEFAULT SESSIONS PER USER DEFAULT LOGICAL READS PER SESSION DEFAULT LOGICAL READS PER CALL DEFAULT PRIVATE SGA DEFAULT COMPOSITE LIMIT DEFAULT PASSWORD LIFE TIME UNLIMITED PASSWORD GRACE TIME UNLIMITED PASSWORD_REUSE MAX 1 PASSWORD_REUSE_TIME UNLIMITED PASSWORD LOCK TIME 5 FAILED LOGIN ATTEMPTS UNLIMITED PASSWORD VERIFY FUNCTION NULL /* As a minimum the ICADMIN and ICPROJECTS accounts should be set to not expire as these accounts do not receive pending expiration warnings. They are more involved to change than the others requiring generation of a new Security.DAT file. */ ALTER USER ICADMIN PROFILE MICROFOCUSNOLOCKOUT; ALTER USER ICPROJECTS PROFILE MICROFOCUSNOLOCKOUT; /* Next set the primary RM accounts: ICDBA and the INSTANCES to not expire. Below please copy and edit the line ALTER USER RMDEMO PROFILE MICROFOCUSNOLOCKOUT; Change RMDEMO to your first instance name - uppercase Then copy this line so each instance has its own line. */ ALTER USER ICDBA PROFILE MICROFOCUSNOLOCKOUT; ALTER USER RMDEMO PROFILE MICROFOCUSNOLOCKOUT; /* And lastly the Main Oracle accounts. This is where the security starts to get weak if you do not change the passwords on a regular basis. If you do not have a DBA to maintain these for you it may be good to make sure they do not expire and lockout. Especially as the RM admin you will rarely use these accounts. */ ALTER USER SYS PROFILE MICROFOCUSNOLOCKOUT: ALTER USER SYSTEM PROFILE MICROFOCUSNOLOCKOUT; ALTER USER SYSMAN PROFILE MICROFOCUSNOLOCKOUT; ALTER USER DBSNMP PROFILE MICROFOCUSNOLOCKOUT;

Script end

Changing Database Administrator Account Passwords Using RM Manage

The passwords for the Dimensions RM database administrator accounts ICDBA, ICADMIN, and ICPROJECTS can be changed from within RM Manage.

To change the ICDBA, ICADMIN, or ICPROJECTS account password:

- **1** Select the database whose administrator accounts (one or more of ICDBA, ICADMIN, or ICPRPOJECTS) you want to change associated passwords.
- 2 Select File | Change Administrator Password, click the Change Administrator Password button and select Change Administrator Password.
- 3 The Change administrator password dialog box opens.
- 4 In the **Select account to modify area**, select the ICDBA, ICADMIN, or ICPROJECTS account as appropriate from the **Account** drop-down list.
- **5** In the **Change account password** area, type the new password that you want to assign to the chosen account.

IMPORTANT! The password must be in upper case only.

- 6 In the associated **Confirm Password** field, re-type the password.
- 7 In the Enter ICDBA account password area (note for ICDBA, this will be entitled Enter current ICDBA account password), type the current ICDBA password.
- 8 Click Change.



IMPORTANT! For the Oracle RDBMS, Oracle account passwords expire by default after 180 days. Unless your DBA has re-configured such RDBMS to override this default and allow permanent passwords, you must change the ICDBA password before 180 days elapse.

Sample SQL Scripts for Oracle Databases

Dimensions RM installs various sample scripts in the directory:

<install directory>\Micro Focus\Dimensions <version>\RM\sql

for example:

C:\Program Files\Micro Focus\Dimensions 12.8.1\RM\sql\ icadmin-upgrade-RM2009R1.sql

These are primarily intended for knowledgable DBAs and comprise the following:

icadmin-upgrade-RM2009R1.sql

A SQL file that can be used for database upgrade operations with respect to upgrading Dimensions RM 2009 R1 databases to 2010 R1. Please consult Micro Focus support for details.

icadmin-upgrade-RM2009R1SP1.sql

A SQL file that can be used for database upgrade operations with respect to upgrading Dimensions RM 2009 R1SP1 databases to 2010 R1. Please consult Micro Focus support for details.

Checking for Latest Updates

After installing Dimensions RM, periodically ensure that you visit the Micro Focus support Web site at

http://supportline.microfocus.com

to determine the latest patch updates for Dimensions RM, if any. This site requires first time users to register for a user name and password.

Once logged into the support site, under Support | My Downloads you will find an option to download patches (select **Dimensions RM** from the **Please Select Product** dropdown list and then click the **Click here for Patches** link next to the dropdown list). Search the list of patches to see if there are any maintenance patches appropriate to your version of Dimensions RM. If there are any such patches, it is normally recommended that you download them together with the associated patch readme and apply them. Each patch download normally includes the patch binary, an integral patch installer, and the associated patch readme that includes instructions for running the patch installer.

Creating the ICDBA Account

Before you can log in to Dimensions RM, you have to create an ICDBA database account and password in the database instance that is to be used for Dimensions RM.

There are two methods of doing this:

Using RM Manage "Create ICDBA Account" (Recommended)

For further details, see chapter "Creating the ICDBA Account From Within RM Manage" on page 103.

- Creating the ICDBA account through a database script:
 - Oracle: See chapter "Oracle: Creating the ICDBA Account by Script" on page 104
 - **SQL Server:** See chapter "SQL Server: Creating the ICDBA Account by Script" on page 105

Creating the ICDBA Account From Within RM Manage

To create the ICDBA account:

1 Select the database in which you want to create the ICDBA account, e.g. RM.

- 2 To open the Create ICDBA account dialog, do one of the following:
 - From the File menu, select Create ICDBA Account;

or

- Right-click the database and select Create ICDBA Account from the shortcut menu.
- **3** Specify the ICDBA password in the **Create ICDBA account** section:
 - **a** In the **Password** field, type the password that you want to assign to the Dimensions RM ICDBA account.
 - **b** In the associated **Confirm Password** field, re-type the password.
- **4** Specify SYSDBA user name and password in the **Enter SYSDBA account password** section:
 - **a** In the **Account Name** field, enter the appropriate SYSDBA account that you want to use. The following account names are the RDBMS defaults:
 - Oracle: SYS
 - MS SQL Server: sa
 - **b** In the associated **Password** field, type the associated password for the SYSDBA account name.
- 5 By default, the ICDBA account is created in a new SERENA_RM_ADMIN tablespace for the ICDBA account and its size is set to 1024 MB. To set a different size or create the ICDBA account in an existing tablespace, click the **Advanced** button. The dialog expands to display the advanced features.
 - To set a different size for the SERENA_RM_ADMIN tablespace, set the Tablespace and Units values as desired.
 - To create the ICDBA account in an existing tablespace, select the Create in existing tablespace option, and select the desired tablespace from the list.
 - If you wish to resize one of the tablespaces or create a new one with a specific name, click the Administer Tablespaces button and complete the fields as necessary.
- 6 Click Create.



IMPORTANT! Oracle Password Expiration

By default, Oracle account passwords expire after 180 days. Unless your DBA has reconfigured such RDBMS to override this default and allow permanent passwords, you must change the ICDBA password before 180 days elapse using RM Manage. For details, see "Database Administrator Accounts: Changing Passwords and Unlocking" in the Administrator's Guide.

Oracle: Creating the ICDBA Account by Script

Follow these steps to create the ICDBA account:

1 Open a Windows command prompt window as administrator.

- 2 Navigate to <u>RM_Install</u>\RM\sql\oracle (e.g. C:\Program Files\Micro Focus\Dimensions 12.8.1\RM\sql\oracle).
- **3** Type notepad create_icdba.sql and press **Enter**.
- 4 Replace **change_me** with the desired password for the ICDBA user account.
- **5** Save the file and close notepad.
- 6 In the command prompt, type sqlplus and press Enter.
- **7** For the user name, enter the following and press Enter: sys@*DBNAME* as sysdba Replace *DBNAME* with the name of your database, e.g. ORCL.
- **8** Type the password and press **Enter**. Note that when the password, no characters are shown on the screen).
- 9 Type @create_icdba.sql and press Enter.
- **10** After the user account has been created, type exit and press **Enter**. This terminates SQLPlus.
- 11 Type the following (all on one line) and press Enter: ...\..\bin\icManage.exe cmd_install_icdba -location DBNAME -icdba_password password Replace DBNAME with the name of your database, e.g. ORCL. Replace password with the password you specified in point 4.
- **12** For security purposes, it is recommended to change the password in the create_icdba.sql file back to change me by executing these steps:
 - **a** In the command prompt, type notepad create_icdba.sql and press **Enter**.
 - **b** Replace the password for the ICDBA user account to **change_me**.
 - c Save the file and close notepad.

SQL Server: Creating the ICDBA Account by Script

Follow these steps to create the ICDBA account:

- **1** Start SQL Server Management Studio.
- 2 Server type: Select Database Engine.
- **3 Server name:** If SQL Server is on a different machine, enter the server name or IP address of the server running SQL Server.
- 4 Authentication: Select SQL Server Authentication.
- 5 Log in: Type sa.
- 6 **Password:** Type the password for the **sa** user account.
- 7 Click Connect.
- **8** If required, expand the root node in Object Explorer.
- **9** Change to the Windows desktop and open Windows Explorer.

- **10** In Windows Explorer, navigate to *RM_Install*\RM\sql\oracle (e.g. C:\Program Files\Micro Focus\Dimensions 12.8.1\RM\sql\mssql).
- **11** Open the create_icdba.sql file with Notepad.
- **12** Select the whole file content and copy it to the clipboard (Ctrl+C).
- **13** Change back to SQL Server Management Studio.
- 14 Click New Query.
- **15** Paste the clipboard content into the new query window (Ctrl+V).
- **16** Replace the following values in the **DECLARE** section:
 - Replace change_me with the desired password for the ICDBA user account.
 - Replace **RM** with the name of your database.

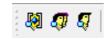
17 Click Execute.

- **18** After the user account has been created, close SQL Server Management Studio.
- **19** Open a Windows command prompt window as administrator.
- **20** Navigate to *RM_Install*\RM\sql\oracle (e.g. C:\Program Files\Micro Focus\Dimensions 12.8.1\RM\bin).
- 21 Type the following (all on one line) and press Enter: icManage.exe cmd_install_icdba -location DBNAME -icdba_password password Replace DBNAME with the name of your connection specified in the System DSN, e.g. RTM. Replace password with the password you specified in point 16.

Creating the First Administrator

There are three views in RM Manage, the view is changed by clicking on one of three icons, which are, from left to right: the instance icon, the group icon, and the user icon.

RM Administrator Information



The Instance and User icons must be accessed in order to create the initial RM administrator. The administrator will, typically, be the person who creates new user accounts, creates and/or manages new instance schema and oversees the general care and feeding of RM. Complete documentation concerning user and group management can be found in the RM Administrator's Guide; as part of the installation we are including only the steps necessary to add a user account in the Administrators group.

The first account must be assigned to the already existing Administrators **group.** Please note that, even if the organization is using LDAP accounts – this RM login account should be created and used by the person(s) administering RM. To create the Administrator Account:

- **a** Click on the User icon (single head).
- **b** Right click on **Users** and select **New User**.
- c Enter the name of the Administrator into the box presented.

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•	-			
		7	-	

NOTE If the **Include Security Data** box was checked when the instance was created, demo users will have been created – users with names like "Joe" and "Ephoto". These names can be used for testing - or simply deleted.

- **d** Once the user name has been entered, the details may be entered into the *New User* dialog on the right.
- e From the **Group Membership** tab, highlight the **Administrators** group and click on the **Add** button to move the group to the left which will make jfogerty a member of the Administrators group.
- **f** From the Password tab, assign a password.
- **g** The next step is to add the user to an instance. Click on the **Instance Icon**, and from the **Group Assignment** tab, click on **Administrators** which will add the Administrators group to the RMDEMO instance. Since jfogerty is a member of the Administrators group, his name will be moved to the **Assigned** box on the left.
- h From Default Access tab right-click Administrators and select Grant All from the context menu. This setting will not actually grant all access to the administrator (this is explained in the Administrator's Guide), however it will grant all useful access.
- i Open a new RM Manage (without closing the old one) to test login with the password settings for the administrator account.

Importing a Sample Dimensions RM Instance

After you install Dimensions RM, you must create an instance from a provided sample instance or an existing instance backup (but see "Special Considerations When Restoring Existing Instances With E-mail Rules" on page 108). The following steps explain how to create an instance from a provided sample instance. This is just an example; you can use these steps with other instances.



NOTE There are other options available for importing and creating instances, such as importing a saved instance or creating a blank instance. For information about these options, see the *Dimensions RM Administrator's Guide*.

Do NOT use the QLARIUS or RMDEMO sample instances as a starting point for an actual production instance. Always start with the BLANK instance or an instance of your own that was created from the BLANK instance and then saved (see the Saved Instances tab).

For further information about importing sample instances or backups, see chapters "Restoring an Instance Account from a Backup" and "Managing Instances" in the Administrator's Guide.

Special Considerations When Restoring Existing Instances With E-mail Rules

If you create a new instance from the back up of an existing instance, there are special considerations that need to be taken into account if the existing instance uses e-mail rules.

If you back up an instance that uses e-mail rules and then restore it to a different Dimensions RM database, the restored instance will:

- Miss out some of the rules.
- Assign some of the rules to the wrong user.

If you wish to back up and restore an instance that uses e-mail rules, please contact Micro Focus Support who will work with you to overcome these issues and successfully back up and restore the instance.

Configuring the Web Server for RM Browser

Access to Windows System TEMP Directory

If your Dimensions RM log in hangs, one possible reason may be that the user account running Tomcat does not have the requisite:

- read,
- modify, and
- delete

access to the Windows system ${\sf TEMP}$ directory. You must have such access for Dimensions RM log in to occur.

Allowing File Name Extensions for Internet Information Services (IIS)

When using Internet Information Services (IIS), you must allow certain file name extensions. If you are not using IIS, skip this chapter.

To allow file name extensions, do the following:

- 1 From the Windows Start menu, select Windows Administrative Tools | Internet Information Services (IIS) Manager.
- **2** Expand the server.
- 3 Expand Sites.
- 4 Select the desired web site, e.g. **Default Web Site**.
- 5 Double-click **Request Filtering**. This opens the **Request Filtering** dialog.

- 6 In the Actions pane, click Allow File Name Extension.... This opens the Allow File Name Extension dialog.
- 7 Enter **bmp**.
- 8 Click OK.
- **9** Repeat steps 6-8 for these file extensions:
 - CSS
 - cur
 - eot
 - exe
 - gif
 - htm
 - html
 - js
 - json
 - jsp
 - otf
 - png
 - svg
 - ttf
 - woff
 - woff2
 - wsdl
 - xml
- **10** In the **Actions** pane, click **Allow File Name Extension...**. This opens the **Allow File Name Extension** dialog.
- **11** Type the period (.).
- 12 Click OK.

Upgrading Existing RM Instances

When upgrading from a previous RM release, the database and the instances contained within it must be upgraded to reflect the functionality and corrections delivered with the new release.

Move the security.dat file, stored away prior to the upgrade, into the directory specified to hold the file during installation, for example:

C:\Program Files\Micro Focus\Dimensions 12.8.1\RM

Wait to return the forms and javascript files until after the basic functionality has been tested.



CAUTION!

Before beginning the upgrade, make sure that you have a reliable backup of the RDBMS database installation. This requires that no users are accessing Dimensions RM while instance data is secured. To ensure this, stop these services:

- Micro Focus Common Tomcat
- Micro Focus Dimensions RM Pool Manager
- Micro Focus Dimensions RM E-Mail Notification Service

Note that stopping Micro Focus Common Tomcat will also disable other applications using this service.

Create and Restore Instances in New Database

To complete the migration, new instances must be created and populated using the .dmp files exported from original database. If the organization has special rules for naming each instance tablespace – have the DBA create a tablespace for each of the instances to be transferred – defining a tablespace consistent with the size in the *OldDB*.

- **1** Move all backed-up . dmp files onto the new Oracle server. We recommend moving them into a special "migration" folder on the Oracle Server.
- 2 Start RM Manage.
- **3** Login to the new database as the RM Administrator.
- **4** Right click on the database name and create the first instance on the list of instances to be restored.
- **5** Enter new instance information.
- 6 Click OK.
- 7 Click **OK** on the *Success* dialog
- 8 Click **EXIT** on the *Import* dialog. The instance will be listed as pre 3.7.2 as it is essentially empty.

- **9** Set sizes for tablespaces (Administer Tablespaces) consistent with those used in the previous database. If this is an instance with growth potential, increase the size.
- **10** Right click on the newly created instance, and select **Backup/Restore Instance Account**.
- **11** Enter (copy and paste) the name of the folder in which the migration files are stored, and the name of the file to be restored.
- 12 Click on Restore.
- **13** When prompted for *From User* and *Tablespace*, enter the instance name and the name of the tablespace from the previous database (OldDB).
- 14 The From user refers to the OldDB instance name. If the organization's process was to allow RM to create the tablespace when a new instances were created the tablespace name to be entered will also be the instance name. Check the notes created during the process "Back up Database, Instances, and Necessary Files" on page 84.
- **15** If a message indicating that the instance is not current is displayed, you can click on **Yes** to update.
- **16** Close the open dialogs, the instance should be displayed as *Current*.
- **17** Check group assignment and default access if both backup and restore were performed with security, all access rights should be set as they were. Do make sure that the RM Administrator has access to the new instance.
- **18** Right-click on the database name and select **Change user** from the context menu. Log in as an instance administrator user.

After the first instance has been restored, check to see that all is functioning as expected from the browser before returning to Step 4 on page 110 and repeating the steps until all instances have been created and populated.

Restoring Certain Dimensions CM Files

In "Back up Database, Instances, and Necessary Files" on page 84 you were advised to back up certain files. You can now restore your backed up versions of Saved Projects to the new Dimensions RM 12.8.1 installation directory.

Restoring Tomcat Files

During the setup process, a new Tomcat has been installed. This requires to carry over any modification made to the previous Tomcat installation, e.g. templates. To avoid overwriting, the Common Tools folder has been renamed bearing the extension .backup. If the folder originally had the name Common Tools 1.5.2.0 it is renamed to Common Tools 1.5.2.0.backup. Please note that the rtmBrowser directory within Tomcat's webapps directory has been renamed to rtmBrowser.bak. Using the directory name from above, an installation path might be: C:\Dimensions RM\Common Tools 1.5.2.0.backup\tomcat\6.0\webapps\rtmBrowser.bak. If upgrading from RM 12.1.x, the forms and jscript folders will be located under Common Tools, for example: C:\Program Files (x86)\Serena\Dimensions 12.1.0\Common Tools 1.5.2.0\tomcat\6.0\webapps\rtmBrowser\jscript

IMPORTANT! This should be a merging operation, that is, the new sub-directories should be retained and only tailored/modified backup files copied to the new sub-directories. The new sub-directories in their entirety *must not* be replaced with the backup versions.

RM 12.1-12.7.1	RM 12.8-12.8.1
<i>RM_Install</i> \RM\conf	<pre>RM_Install\RM\conf</pre>
<pre>RM_Install\Common Toolsx.x \tomcat\x.x\webapps\rtmBrowser \forms</pre>	<pre>RM_Install\Common Tools x.x \tomcat\x.x\webapps\rtmBrowser \forms</pre>
<pre>RM_Install\Common Toolsx.x \tomcat\x.x\webapps\rtmBrowser \jscript\</pre>	<pre>RM_Install\Common Tools x.x \tomcat\x.x\webapps\rtmBrowser \rm*\</pre>
<pre>RM_Install\Common Tools x.x \tomcat\x.x\webapps\rtmBrowser \jscripts\</pre>	<pre>RM_Install\Common Toolsx.x \tomcat\x.x\webapps\rtmBrowser \rm*\</pre>

Modified forms, stored under rtmBrowser\forms in a database/class definition structure can be copied. Publish templates, stored under

rtmBrowser\conf\Database_Name\Instance_Name can also be copied.

Restoring Custom Headers and Footers of RM Browser Interface

This chapter applies when upgrading from Dimensions RM 12.1 or higher.

To restore your headers and footers of the RM Browser interface, follow these steps:

- In Windows Explorer, navigate to your rtmBrowser backup directory. If you are installing a **regular upgrade**, this is the rtmBrowser.bak directory (refer to chapter "Restoring Tomcat Files" on page 111). In case you are installing a **patch**, this is the directory to which you backed up your rtmBrowser directory tree (refer to chapter "Upgrading Existing RM Instances" on page 110).
- **2** Open the WEB-INF folder.
- **3** Open the spring.xml file in a text editor.
- 4 Locate the last "bean id" in the file. It begins :

 / bean id="rmHeaderAndFooterText"
- **5** Beneath this entry, there are two property tags:
 - <property name="header"></property name="header">
 - <property name="footer">
- **6** Copy the above two property tags to the Clipboard.
- 7 In Windows Explorer, navigate to your RM_Install\Common Tools #.#\tomcat\#.#\webapps\rtmBrowser\WEB-INF directory.

- 8 Locate the last "bean id" in the file. It begins :

 id="rmHeaderAndFooterText"
- **9** Beneath this entry, there are two property tags:
 - <property name="header"></property name="header">
 - <property name="footer">
- **10** Replace the above two property tags with the Clipboard content.
- **11** Save the file.

Copy the files referenced in the property tags from your rtmBrowser backup to the same location of your new installation.

Example:

```
Your "header" property tag looks like this:
<property name="header"><value>/rtmBrowser/html/myheader.htm
</value></property>
```

In this case, you would copy the file myheader.htm from C:\rtmBrowser12.8.1_Backup\html to RM Install\Common Tools #.#\tomcat\#.#\webapps\rtmBrowser\html.

Updating a Dimensions CM/RM Integration

If you had an integration between Dimensions CM and Dimensions RM 11.x, you must modify the integration in order for it to work with Dimensions RM 12.8.1 or newer.

To update a Dimensions CM/RM integration:

1 Open the following sql file in a text editor:

RM_Install\Dimensions\RM\sql\upgrade_cmrm_integration_for_12.1.sql

2 Edit the following line replacing *RM* with the name of the Dimensions RM Oracle database:

C_DB_NAME CONSTANT VARCHAR2(32) := '*RM*';

3 Edit the following line replacing *8080* with the Dimensions RM Tomcat port:

C_PORT CONSTANT VARCHAR2(5) := '8080';

- 4 Save your changes to the sql file.
- **5** Open an SQL Plus or SQL Developer connection to the Oracle database for the Dimensions CM integration.



NOTE By default, the database is named **cm_typical** and there is a user ID of the same name that has the required permissions.

6 Run the sql script.



TIP See the comments in the sql file for details about what the script does.

ALF Enabling a Dimensions RM Instance

Before a Dimensions RM instance can be used in conjunction with Application Lifecycle Framework (ALF) events, the instance must be enabled to emit ALF events and send notifications to the ALF event Manager. This is done by using the RM Manage File | Configure ALF options menu item. PLease see the *Administrator's Guide* for details of this menu item and how to install and configure the ALF Emitter Service.

Test Browser Access

- **1** Open a web browser.
- **2** Enter the URL to your Dimensions RM server into the URL box. The following URLs should work on the server:
 - http://localhost:*8080*/rtmBrowser/
 - https://localhost:8443/rtmBrowser/

If you modified the ports during installation, use the ports you specified.

Try also to connect from a client machine. If this fails, open the ports (8080, 8443, or the ports you specified) on the server.



IMPORTANT! For first installations, there may be no instance available and no users for web login available. If this is the case, do the following:

- Import a sample instance with the security data; or
- Create your own instance and user account(s).

See chapters "Managing Instances" and "Managing Users and Groups" in the Administrator's Guide for details.

	DRM DIMENSIONS RM	Discus
	Username	Contraction of the state of the
	Password RTM V	TALCONSTRUCTION INCOME.
	Click to populate	
2	Login	8

Figure E-1. Dimensions RM Login Screen

Once you are sure that the passwords are functioning, and the browser can be accessed, step through chapter "In-Depth Check of the Dimensions RM Server" on page 115.

If there are any issues, please contact Micro Focus Support.

In-Depth Check of the Dimensions RM Server

This section describes some quick checks that you can perform to establish that your Dimensions RM server installation is functioning correctly:

- **1** For the check you require an RM instance. Please choose from the following scenarios:
 - **Upgrade:** Ensure that you converted database and instance (see chapter *"Converting Database and Instances"* in the *Administrator's Guide*).
 - Fresh Install Production Environment:

1. Create the ICDBA account (see chapter "*Creating the ICDBA Account*" in the *Administrator's Guide*).

2. Create a new RM instance (see chapter "Managing Instances" in the Administrator's Guide).

3. Create a new user (see chapter *"Creating a New User"* in the *Administrator's Guide*).

4. Assign the new user to the **Administrators** group (see chapter "Adding a User to a Group" in the Administrator's Guide).

5. Grant all rights to the **Administrators** group (see chapter "*Setting Default User Access*" in the *Administrator's Guide*).

6. Start the class Definition tool (see chapter "*Starting Class Definition*" in the *Administrator's Guide*).

7. Create a generic class using the Class Definition tool (see chapter "Adding a New Class" in the Administrator's Guide) and save the class definition.

Fresh Install Test Environment: Either follow the steps for the production environment, or execute these steps:

1. Create the ICDBA account (see chapter "*Creating the ICDBA Account*" in the *Administrator's Guide*).

2. Import the **RMDEMO** sample instance (see chapter "Importing a Sample Dimensions RM Instance" on page 107). Ensure that you select the **Include Security Data** option as this will enable you to include user accounts, user groups, and access right definitions in the sample instance. The chapter "Sample Databases" in the Administrator's Guide includes a list of users with their passwords for the RMDEMO sample instance.

- 2 In RM Manage, assign a password to existing user EPHOTO:
 - **a** Log in to the Dimensions RM database (for example, RM) using:

User Name: MyInstanceADMIN

Password: *MyPassword*

- b Click the View User Information toolbar button
- c In the left hand navigation tree, select user EPHOTO.
- d Select the Password tab.
- e Assign and confirm password of RTM and check Password Never Expires.
- f Click Accept Changes. In some circumstances the password may already be RTM.
- **3** In RM Manage, define an instance schema for EPHOTO and view the class definition:
 - a Click the View Instance Information toolbar button
 - **b** In the left hand navigation tree, right click the Dimensions RM database name, for example RM.



NOTE Make sure you right click on the database name (for example, RM) not the instance name (for example, MYINSTANCE).

- c Select Change User. The Logon Information dialog box appears.
- **d** Enter the following:
 - User Name

Ephoto

Password

RTM

e In the left hand navigation tree, right click the Dimensions RM instance name based on the imported RMDEMO sample instance, for example MYINSTANCE.

- Test product
 Product</
- **f** Select **Define Instance Schema**. After a short delay the **Class Definition** tool will open.

- g Save the class definition and exit the Class Definition tool:
 - File | Save
 - File | Exit
- **h** Log out of RM Manage.
- **4** In RM Browser, do the following:
 - a Log in to RM Browser.
 - **b** Export a traceability report as a Word document.
 - c Save the generated Word document.
 - d Log out of RM Browser.
- **5** In RM Manage, create a new group:
 - **a** Log in to the Dimensions RM database (for example, RM) using:
 - User Name

MYINSTANCEADMIN

Password

MYINSTANCE

b In the left hand navigation tree, single click the Dimensions RM database name, for example RM.



NOTE Make sure you single click on the database name (for example, RM) not the instance name (for example, MYINSTANCE).

- c Click the View Group Information toolbar button
 - n 🐬
- **d** In the left hand navigation tree, select user **Groups <database_name>** (for example, **Groups RM**).

- e (Right click) | New Group
- f Type the name of a new group, for example, TEST.
- g Fill in a description if desired, and click Accept Changes.
- 6 In RM Manage, create a new user and assign it to the new group TEST:
 - a Click the View User Information toolbar button
 - **b** In the left hand navigation tree, select user **Users <database_name>** (for example, **Users RM**).
 - c (Right click) | New User
 - **d** Type the name of a new user, for example, TEST99.
 - e Fill in a descriptions if desired, and click Accept Changes.
 - **f** In the left hand navigation tree, select the new user TEST99.
 - **g** Click the Group Membership tab.
 - **h** Select the new group TEST in the **Not a Member** list and click **Add** to make the new user TEST99 a member of the new group TEST.
 - i Click the Password tab.
 - **j** Assign a permanent password to the new user TEST99, for example, TEST99.
- 7 In RM Manage, assign the new group TEST and new user TEST99 to the MYINSTANCE instance and grant all access:
 - a Click the View Instance Information toolbar button [3] or View | Instances.
 - **b** In the left hand navigation tree, right click the Dimensions RM instance name based on the imported RMDEMO sample instance, for example MYINSTANCE.
 - c Click the Group Assignment tab.
 - **d** In the **Assign groups/users to instance MYINSTANCE** region, check the new group TEST.
 - e Click the Default Access tab.
 - **f** Right click on the new group TEST and select **Grant All**.
 - g Right click on the new user TEST99 and select Grant All.
 - h Log out of RM Manage.
- 8 In RM Browser, export a traceability report for the new user TEST99:
 - **a** Log in to RM Browser with user TEST99.
 - **b** Export a traceability report as a Word document.
 - **c** Save the generated Word document.
- **9** In RM Browser, create a requirement for the logged in user TEST99 and log out of RM Browser.
- **10** The Dimensions RM server quick installation checks are now complete. If there are any problems, please contact Micro Focus Support.

Appendix F Migrating Oracle to MS SQL Server

For migrating your Oracle database to MS SQL Server, please contact Micro Focus support.

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