Oracle® Rdb Connectivity Management

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Oracle Rdb Connectivity Management, Release 7.3.2.0

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Oracle Rdb Connectivity Management Release Notes, Release 7.3.

Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

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Preface

This document is your primary source of release information for Oracle Rdb Connectivity Management.

This preface contains these topics:

- Audience
- Organization
- Related Documentation
- Conventions

Audience

Oracle Rdb Connectivity Management Release Notes is intended for system and database administrators who are looking after servers and services used by Oracle JDBC for Rdb and/or SQL/Services for Rdb.

To use this document, you must be familiar with Oracle JDBC for Rdb and Oracle SQL/Services management concepts and operations.

Organization

This document contains:

Chapter 1, "Installing and Configuring"

Describes how to install Oracle Rdb Connectivity Management and provides system requirements. Read this chapter *before* installing or using Oracle Rdb Connectivity Management.

Chapter 2, "Enhancements Provided in Oracle Rdb Connectivity Management Release 7.3.2.0"

Describes new and changed features in Oracle Connectivity Management release 7.3.2.0.

Chapter 3, "Problems Corrected"

Describes problems corrected in Oracle Rdb Connectivity Management release 7.3.2.0.

Chapter 4, "Known Problems, Restrictions and Workarounds"

Describes known problems, restrictions, and workarounds Oracle Rdb Connectivity Management release 7.3.2.0.

Chapter 5, "New Features and Corrections in Previous Releases"

Describes new and changed features and problems corrected in previous versions of Oracle Rdb Connectivity Management.

Related Documentation

For more information, see these Rdb resources:

- Oracle SQL/Services Server Configuration Guide
- Guide to Using the Oracle Rdb7 Oracle SQL/Services (tm) Client API
- Oracle JDBC for Rdb Release Notes

To download free release notes, installation documentation, white papers, or other collateral, please visit the Rdb web site:

http://www.oracle.com/technetwork/database/rdb

General information on Java may be found at http://www.oracle.com/technetwork/java/index.html

General information on JDBC may be found at http://www.oracle.com/technetwork/java/index-142838.html

Documentation for HP's Java for OpenVMS system may be found at

http://h18012.www1.hp.com/java/

Documentation for Oracle SQL/Services and Oracle JDBC for Rdb may be found at

http://www.oracle.com/technetwork/products/rdb/documentation/rdb-doc-rlp-523618.html

Conventions

Oracle Rdb Connectivity Management is often referred to as ORCM.

Oracle JDBC for Rdb often referred to as JDBC.

Hewlett-Packard Company is often referred to as HP.

The following conventions are used in this document:

word	A lowercase word in a format example indicates a syntax element that you supply.
[]	Brackets enclose optional clauses from which you can choose one or none.
{ }	Braces enclose clauses from which you must choose one alternative.
	A horizontal ellipsis means you can repeat the previous item
•	A vertical ellipsis in an example means that information not directly related to the example has been omitted.

Conventions in Code Examples

Code examples illustrate SQL or other command-line statements. They are displayed in a monospace (fixed-width) font and separated from normal text as shown in this example:

```
SELECT last_name FROM employees WHERE last_name = 'TOLIVER';
```

Passwords in Code Examples

For simplicity in demonstrating this product, code examples do not perform the password management techniques that a deployed system normally uses.

In a production environment, please follow your corporate password management guidelines and other security recommendations.

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Chapter 1 Installing and Configuring

This chapter describes installation and configuration requirements for Oracle Rdb Connectivity Management (ORCM).

This chapter contains:

- System Requirements
- <u>De-install previous version of Oracle Rdb Connectivity Management</u>
- <u>Installing ORCM</u>

1.1 System Requirements

ORCM requires the following products to be installed on your client system:

Software	Minimum Release
Java tm SE	8u101

If you need to management Oracle SQL/Services , the following product must be installed on your server systems:

Software	Minimum Release		
Software	Alpha	Integrity	
Oracle SQL/Services	7.3.0.1	7.3.0.1	

If you need to management Oracle JDBC for Rdb servers, the following product must be installed on your server systems:

Software	Minimum Release	
Software	Alpha	Integrity

Oracle JDBC for Rdb	7.3.2.0	7.3.2.0	
---------------------	---------	---------	--

1.2 De-install previous version of Oracle Rdb Connectivity Management

If you have a previously installed a version of ORCM you must de-install this prior to installing ORCM release 7.3.2.0.

1.3 Installing ORCM

ORCM may be installed on any client system that has the required minimum version of Java already installed on it.

These steps demonstrate how to install Oracle Rdb Connectivity Management on various system architectures:

- Installing on Microsoft Windows
- Installing on Apple MacOS
- Installing on Other Systems

1.3.1 Installing on Microsoft Windows

To install:

1. Download the Oracle Rdb Connectivity Management installation kit:

- 1) Connect to MyOracleSupport http://support.oracle.com/.
- 2) Navigate to **Patches and Updates**, and locate the Oracle Rdb Connectivity Management, **Release 7.3.2** kit for Microsoft Windows.
- 3) Download the .ZIP file. The ORCM73200WIN.ZIP file contains the following files:

The Release Notes containing the installation guide.

The ORCM User Guide.

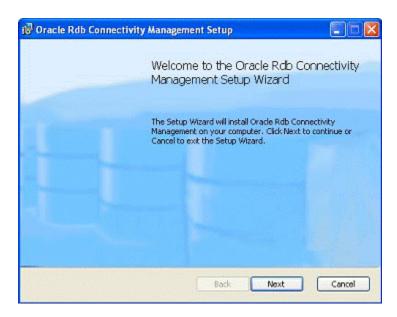
The OracleRdbConMgt73200.msi file

The Setup.exe file.

4) Unzip ORCM73200WIN.ZIP into a temporary directory.

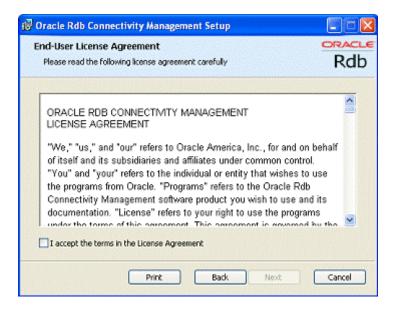
2. Double-click Setup.exe.

Windows Installer launches and the Welcome screen appears.



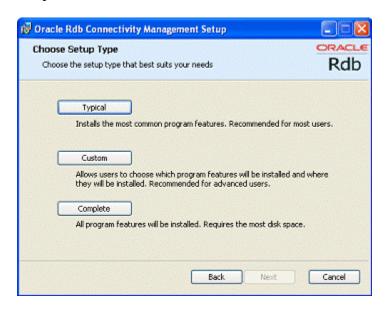
3. Click Next.

An End-User License Agreement will be displayed. If you agree with the license conditions tick the acceptance box.



4. Click Next.

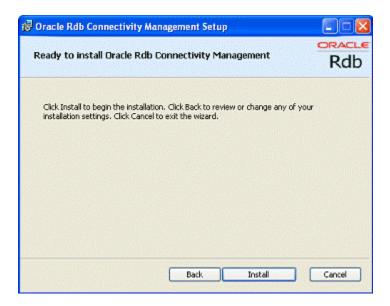
The Choose setup type window appears, allows you to install the different ORCM components.



In this first release off ORCM there are no optional components, so press the **Complete** button.

5. Click Complete.

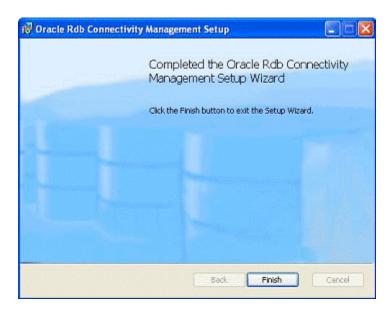
A confirmation screen is displayed allowing you to proceed with the installation or cancel or go to back to change the installation directory.



7. Click Install.

The installation will proceed.

Once complete the finish screen will appear.



8. Click Finish.

1.3.1.1 Post-Installation tasks.

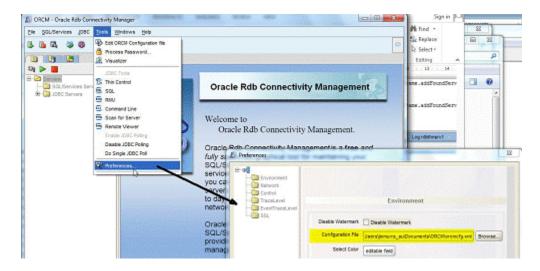
As ORCM maintains configuration information within the Windows registry, it is possible that an earlier installation of ORCM 7.3 may have stored the incorrect configuration file path in the registry. If this has happened it is possible that users may still see a configuration file problem as discussed in release note ORCM Default Configuration
File Problem even when using release Patch 2 of ORCM 7.3.

In order to ensure that the ORCM configuration information is correct on your Windows system, Oracle advises ORCM users to carry out one of the following post-installation steps:

Either:

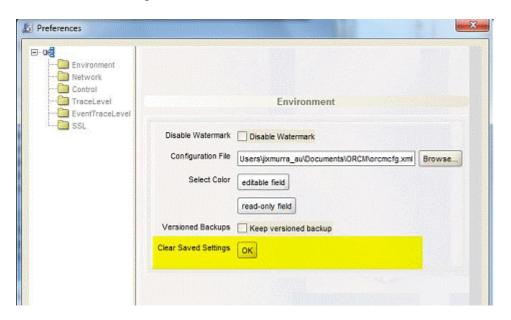
1 /. If you have already saved a valid ORCM configuration file, after invoking ORCM for the first time, if the **First Use** wizard displays, then ORCM has not been able to correctly locate your configuration file.

After cancelling the **First Use** wizard, use the menu option *Tools/Preferences...* to redirect ORCM to your saved configuration file.



Or

2. Use the *Tool/Preferences...* option to bring up the **Preferences** panel and choose the **Clear Saved Settings** OK button to clear the registry information, exit from ORCM and restart ORCM again.



You should be now be prompted for configuration information by the **First Use** wizard.

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Installing on Apple MacOS

Note: As of release 7.3.2.0.0 ORCM no longer ships a specific MacOS installation kit. On MacOS the generic ORCM kit installation may still be used.

To install:

- 1. **Login to the user account in which you will be running ORCM.** Your account must have Administrator privileges (with a non-blank password) and you must be connected to the Internet.
- 2. **You will need a Java runtime**, which is installed by default on all versions of Mac OS X prior to 10.7 Lion. If you are running any version of Mac OS X prior to 10.7 Lion, run **Software Update**; if are running 10.7 Lion (or newer) but don't have a Java runtime, install the Java runtime.
- 3. Download the Oracle Rdb Connectivity Management installation kit:
 - 1) Connect to MyOracleSupport http://support.oracle.com/.
 - 2) Navigate to **Patches and Updates**, and locate the Oracle Rdb Connectivity Management, **Release 7.3.2.0** kit for Apple MacOS.
 - 3) Download the .ZIP file to the Desktop. The ORCM73200MACOS.ZIP file contains the following files:

The ORCM Release Notes containing the installation guide.

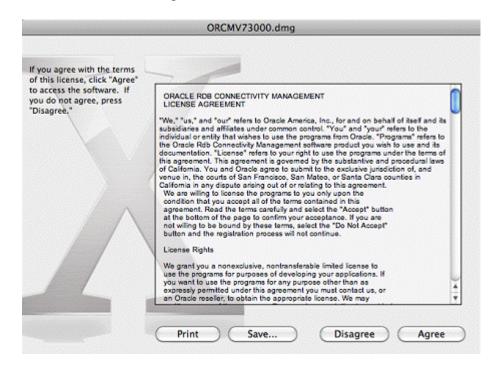
The ORCM User Guide.

The ORCM73000.dmg file.

- 4) If you have Mac OS X 10.8 (Mountain Lion) or 10.9 (Mavericks), temporarily allow applications downloaded from anywhere by selecting System Preferences -> Security and Privacy -> General -> Allow applications downloaded from: Anywhere.
- 4) Double-click ORCM73200MACOS.ZIP to unzip it.
- 4. Move the **ORCM Release Notes** and **User Guide** to your documentation library.

5. Double-click ORCM73200.dmg.

An End-User License Agreement will be displayed. If you agree with the license conditions click the Agree button.



The ORCM installation screen will display.



6. Drag the ORCM bundle over to the Applications folder.

7. If you have Mac OS X 10.8 (Mountain Lion) or 10.9 (Mavericks), select System Preferences -> Security & Privacy -> General -> Allow applications downloaded from: Mac App Store and identified developers.

1.3.2 Installing on Other Systems

To install:

- 1. Download the Oracle Rdb Connectivity Management installation kit:
 - 1) Connect to MyOracleSupport http://support.oracle.com/.
 - 2) Navigate to **Patches and Updates**, and locate the Oracle Rdb Connectivity Management, **Release 7.3.2.0** kit for other systems.
 - 3) Download the .ZIP file. The ORCM73200.ZIP file contains the following files:

The ORCM Release Notes containing the installation guide.

The ORCM User Guide.

The ORCM software kit.

- 4) Create or select a directory to save the ORCM software to.
 - 4) Unzip ORCM73200. ZIP into the chosen directory.

Chapter 2 Invoking the Oracle Rdb Connectivity Management GUI.

Once installed on your client system, ORCM may be invoked by one of the following methods:

- On Any System ORCM Jar invocation
- On Windows
- On MacOS

Once invoke, if this is the first time that ORCM has been invoked on your system a first-use wizard will be displayed to guide you through the initial ORCM setup:

First Use

2.1 On Any System - ORCM Jar invocation

As ORCM is a Java-based application it may be invoked from your system's command line, console or terminal, assuming that the environment on your system has been set up to allow command line Java operations.

Prior to invoking ORCM ensure that the ORCM.JAR is in the CLASSPATH you will be using when invoking Java.

ORCM may be invoked using the following command on most systems:

```
java -jar orcm.jar -cfg #PREF:ORCMCFG
```

Note: The "-cfg" switch and value is required to ensure that ORCM know where to locate the default ORCM configuration file.

If you have multiple Java version installed on your system, you may have to setup your environment to ensure that the correct Java version is chosen when you invoke the Java command. Please refer to your operating system's Java Installation or Users guide to see how to select the Java environment to run under.

Note for Windows Users.

If running under Windows, you may select a specific Java home by changing the user-level PATH variable to place the appropriate Java home directory first.

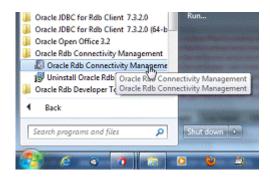
Alternatively, you may specifically invoke the appropriate java executable directly:

```
set java8_home=c:\java_8_112\jdk\jre\bin
%java8_home%\java.exe -jar orcm.jar -cfg #PREF:ORCMCFG
```

During installation ORCM will install an orcm.bat file to the standard ORCM installation directory. This bat file may be used to invoke ORCM and may be modified to choose an alternate Java home or configuration file to be used.

2.2 On Windows

Use the windows Start menu to navigate to *All Programs > Oracle Rdb Connectivity Management* and select the *Oracle Rdb Connectivity Management* entry:



The *Start* menu uses the application executable orcm.exe found in the ORCM installation directory to invoke the ORCM interface.

If you have multiple Java versions installed and do not wish to use the default Java version installed on your Windows system, you will need to make some configuration changes prior to invoking ORCM.

See the following section for details on orcm.exe and changing the environment under which ORCM will be invoked.

2.2.1 ORCM.EXE

The orcm.exe within the ORCM installation directory may be used to invoke ORCM. This executable is a shell application that will in turn invoke Java to execute the orcm.jar.

It is this shell application that is invoked from the Windows *Start* menu. You may also invoke this image directly from the Windows console.

The orcm. exe allows you to configure certain aspects of ORCM execution:

- Which Java image to invoke
- Which ORCM.JAR to use
- Which configuration file to use

2.2.1.1 Specifying which Java to Use

As there may be multiple Java versions installed on your Windows system, you may have to direct orcm. exe to use the Java version you require if it is not the default java environment for your system.

The PATH variable is used by Windows to search the appropriate directories to locate the executable you trying to execute. This variable may be set at the system or user level to provide a directory search list used when locating the executable.

If the Java release you wish to use is not specified in the PATH variable, or is specified after another Java version in the list, then you will have to configure your environment to select this correct Java version.

There are several ways you may select the appropriate Java executable to use:

1/. By changing your user level PATH variable.

By default orcm.exe will try to invoke the first javaw.exe executable found when searching the PATH search list, so one way to ensure the correct Java version is invoked is to ensure that the binary directory for that version occurs at the start of the PATH variable search list.

For example, suppose you have installed Java 9.0 in windows directory:

```
C:\Program Files (x86)\Java\jre-9
```

You may place the following at the start of your user-level PATH variable:

```
C:\Program Files (x86)\Java\jre-9\bin
```

(Note: if you are doing this in a bat file or on the console command line, remember to place double quotes around any path that has embedded spaces.)

2/. Or by using the command line parameter "-Xjava".

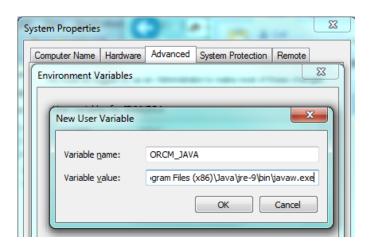
You may specify the javaw executable that orcm.exe will use to invoke the orcm.jar by using "-Xjava":

```
orcm.exe -Xjava="C:\Program Files (x86)\Java\jre-9 \bin\javaw.exe"
```

3/. Or by creating a user environment variable named ORCM_JAVA.

Create ORCM_JAVA environment variable and give it the full file specification of the Java executable, for example:

C:\Program Files (x86)\Java\jre-9\bin\javaw.exe



The third option is the recommended method if you will be invoking ORCM from the Windows *Start* menu and have other users on your Windows system that may not wish to have the PATH variable altered.

2.2.1.2 Specifying an alternate ORCM.JAR to Use

It is possible to install more than one version of ORCM to your Windows system. By default, ORCM will be invoked using the jar file found in the standard ORCM installation directory.

This would typically be the following directory on 64 bit Windows systems:

```
C:\Program Files (x86)\Oracle\ORCM
```

And in the following directory on 32 bit Windows systems:

```
C:\Program Files\Oracle\ORCM
```

If you wish to use a copy of an orcm.jar that is not in the ORCM installation directory you must provide orcm.exe with the file specification of the jar to use.

There are several ways you may select the appropriate jar file to use:

1/. By setting default to the directory that contains the orcm.jar prior to invoking the orcm.exe executable.

The orcm.exe executable will invoke the orcm.jar file from the current default directory.

The Windows *Start* menu invocation of ORCM will set the default directory to the standard ORCM installation directory prior to invoking orcm.exe.

2/. By using the command line parameter "-Xjar".

You may specify the ORCM jar file to use by using "-Xjar":

```
orcm.exe -Xjar="C:\Program Files (x86)\ORCM_TEST\orcm.jar"
```

3/. Or by creating a user environment variable named ORCM_JAR.

Create ORCM_JAR environment variable and give it the full file specification of the ORCM jar file, for example:

```
C:\Program Files (x86)\ORCM TEST\orcm.jar
```

The third option is the recommended method if you will be invoking ORCM from the Windows Start menu.

2.2.1.3 Specifying which Configuration file to use

By default ORCM remembers the configuration file you have already used and will use the same configuration file the next time ORCM is invoked.

The orcm.exe executable is directed to invoke the last invoked configuration file by using the "-Xcfg" command line parameter set to the value "#PREF:ORCMCFG"

```
orcm.exe -Xcfg="#PREF:ORCMCFG"
```

You may wish to instead, always use a specified configuration file by specifying the configuration file specification explicitly:

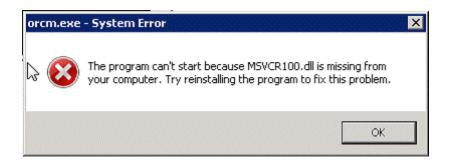
```
orcm.exe -Xcfg="e:\my_orcm\my_orcm_cfg.xml"
```

If you do choose a specific configuration file on the command line, this will always be used each time you invoke ORCM using the ORCM.exe, even if you change the configuration file using the ORCM Preferences menu option during an active session.

2.2.2 Possible Missing DDL Errors

When you start ORCM from the windows programs menu, ORCM uses a small shell program ORCM. exe to invoke the ORCM main jar file in order to start the application.

As ORCM does not ship with any 3rd party DLLs it is possible you may get an error similar to the following when trying to invoke ORCM from the programs menu.



If this happens, please download and install the Microsoft Visual C++ 2010 Redistributable Package.

The Microsoft Visual C++ 2010 Redistributable Package installs runtime components of Visual C++ Libraries required to run applications developed with Visual C++ on a computer that does not have Visual C++ 2010 installed.

Contact Microsoft support or search the web for "The Microsoft Visual C++ 2010 Redistributable Package" for more details.

If you do not wish to install the Microsoft redistributable package, you may still invoke the ORCM from a windows console prompt, see On Any System - ORCM Jar invocation.

2.2.3 Default Configuration file Directory Changes

In the first BETA release of 7.3.0.0 ORCM, by default, ORCM used the ORCM configuration file residing in the installation directory for ORCM. For example:

C:\Program Files (x86)\Oracle\ORCM\ordmcfq.xml

This may raise a problem when using ORCM on Microsoft Windows7 and above as write access to the system directories is restricted.

In some cases, some versions of the first BETA may have used the Application Data directory to store the configurations file:

```
C:\ProgramData\Application Data\Oracle\ORCM\orcmcfg.xml
```

Although the user may have write access to this directory, only one copy of the configuration file will be shared for all users of the Windows system.

ORCM now places the default configuration file in the user's document directory, thus allowing multiple users on the same Windows Server to have their own configuration files.

For example, for the Windows user 'SMITH', the default configuration file will be:

```
C:\Users\smith\Documents\ORCM\orcmcfg.xml
```

If you already have created or modified the ORCM configuration file, you may use this older file after you reinstall ORCM by changing the ORCM configuration file value using the ORCM Preferences menu option.

Alternatively you may replace the contents of the orcmcfg.xml file in your Windows User's document directory with your original configuration file contents.

It is also noted that some of the default settings in the original BETA default configuration file may cause ORCM to slow down or be unresponsive.

Please replace the original "GUI" section of your configuration file (or add it if it does not exist to the end of your configuration file just prior to the last "</config>" token), with the following:

```
<gui name="DEFAULT"
gui.polling="true"
gui.pollTimeout="30"
gui.castTimeout="30"
gui.refreshPeriod="40">

<!-- note with images in visualizer we use URL specifications
    if there is no URL type then the path is relative INSIDE
    the RdbConnect JAR
    eg. vis.background="images/usa.gif"
    but to point to a local or remote file you could use standard
    URL specification syntax
    eg. vis.background="file:/E:/myimages/europe.gif"
-->

<visualizer</pre>
```

```
name="DEFAULT"
vis.title="Visualizer"
vis.JDBCserverimage="images/JDBC_server.png"
vis.SQSserverimage="images/SQS_server.png"
vis.statbox="50,5,20,5"
vis.pollTimeout="30"
vis.castTimeout="30"
vis.refreshPeriod="40"
/>
```

2.2.4 Windows7 and Later Windows Versions

During the startup of ORCM, the user and system preferences are searched to locate the correct configuration file to use.

A change in registry lookup behavior found in Windows7 and later Windows versions may cause Warning messages to be issued to the console used to start the ORCM application.

These warnings will be similar to the following:

```
WARNING: Could not open/create prefs root node
Software\JavaSoft\Prefs at root 0x80000002. Windows
RegCreateKeyEx(...) returned error code 5.

WARNING: Could not open windows registry node
Software\JavaSoft\Prefs at root 0x80000002. Windows
RegOpenKey(...) returned error code 2.
```

These warning messages may be safely ignored as the preference lookup is still successfully carried out. Unfortunately there is no known way for ORCM to programmatically suppress these warnings.

There are general discussions about these warning messages on the Web that do provide some suggestion on how they may be suppressed, including running the application with Administrator privilege.

As the messages do not cause any functional problems with the running of ORCM, Oracle recommends that you simply ignore these messages on ORCM startup.

2.3 On MacOS

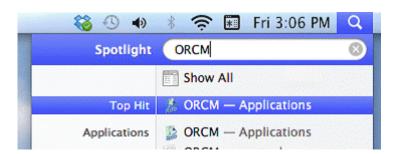
Note: As of release 7.3.2.0.0 ORCM no longer ships a specific MacOS installation kit. On MacOS the generic ORCM kit installation may still be used.

Navigate to your **Application** folder and invoke the ORCM icon:



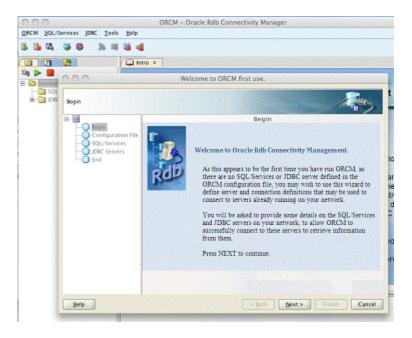
Or

Use the system search tool to locate ORCM in applications.



2.4 First Use

When you start ORCM for the first time a **First Use** wizard will be invoked to help you with the initial setup of your ORCM configuration:



Follow the instructions provided to setup your initial SQL/Services and JDBC Server definitions.

2.5 Examples

During ORCM installation an examples subdirectory mill be created under the ORCM installation directory. This directory will contain example configuration files and code that you may find useful when exploring ORCM features.

Chapter 3 Enhancements Provided in Oracle Rdb Connectivity Management Release 7.3.2.0.

This chapter describes new and changed features in Oracle Rdb Connectivity Management release 7.3.2.0.

3.1 External Tools

ORCM now allows you to invoke external tools from the ORCM user interface. External tools are applications, command procedures or commands that may be used to carry out operations associated with JDBC, SQL/Services, your Rdb database or your operating system.

A new External Tool explorer is now available in the ORCM explorers area.

See the sections **External Tools Explorer** and **External Tools** in your ORCM User Guide.

3.2 RMU Menu Option

There is a new ORCM main menu item, **RMU**.

The RMU Command line option has been moved from the **Tools** menu to this new menu.

In addition to the RMU Command line, two new menu options are available within the RMU menu:

- Database Schema Difference tool
- RMU Statistics

3.3 Database Schema Differences Tool

A new database differences tool has been introduced allowing you to see the schema differences between two databases or two version of the same database.

See the **Database Schema Differences** in your ORCM User Guide for more details.

3.4 RMU Statistics

ORCM now provides a GUI-based interface into Oracle Rdb RMU Statistics.

A new separate **Oracle Rdb Connectivity Manager RMU Statistics User Guide** is now provided during ORCM installation. This guide covers the use of the ORCM RMU Statistics interface and information on the various statistics available.

To facilitate RMU Server connections that are required to access the RMU statistics data, ORCM has also introduced a new connection type RMU Statistics Connection.

See **RMU Statistics Connection** in the **Connection Maintenance** section of your ORCM User Guide for more information.

3.5 SQL/Services Log Timeline

ORCM now allows you to display the events logged in the SQL/Services Server and Dispatcher logs in the form of a selectable **Timeline**.

See the **Timeline Display** section of your ORCM User Guide for more information.

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Chapter 4 Problems Corrected

This chapter describes problems corrected in Oracle Rdb Connectivity Management release 7.3.2.0.

4.1 TCP/IP Timeout on SQS Control Connections

Fixed Release 7.3.2.0.0 Build 20160601

It is possible, depending on your network TCP/IP socket timeout settings that during the creation or edit of SQL/Services Dispatchers or Services, the connection to the SQL/Services server may be terminated by your network timeout watchers.

If this happens the request to the SQL/Services server may never return causing a hang within the ORCM GUI.

In particular, if during the creation of a service or dispatcher, if you take a while to press the SAVE button, and TCP/IP timeouts are being monitored, ORCM may fail to get a return response from the SQL/Services server.

ORCM has now changed when the SQL/Services connection is made to try to minimize the chance that a timeout will occur, however it is still possible that aggressive timeout handling may still cause a similar hang.

In addition to changing connection behavior, ORCM has added the ability to specify a SQL/Services control timeout value that may be used by ORCM to terminate existing connections after a specified period of idleness. As ORCM terminates the connection in a controlled manner, it will correctly re-establish the connection when the operation is requested to proceed.

The control timeout value may be set in the *ORCM Preferences/Network* panel.

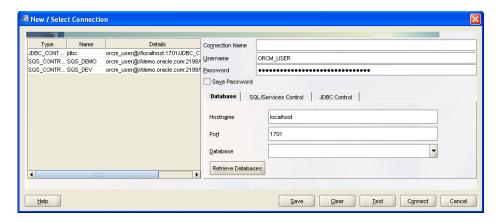
If you have aggressive TCP/IP timeout monitoring, and you find that ORCM SQL/Services operations are hanging, Oracle suggests specifying an appropriate value for **SQL Control Timeout** to ensure that ORCM handles the timeout prior to TCP/IP.

See the *Preference Panel / Network Information* section your **ORCM User guide** for more information.

4.2 Duplicate Connection entries in Connections table

Fixed Release 7.3.2.0.0 Build 20160805

When creating a new connection using the Connection Maintenance pane, pressing the **test** button will check the validity of the connection details you have added.



Due to a problem in the connection table handling, pressing the **test** button may cause the current connection entry to be duplicated in the connection table at the left of the pane.

This problem has now been fixed.

4.3 BADMESSAGE Exception when trying to Load Remote File

Fixed Release 7.3.2.0.0 Build 20160923

ORCM uses the RMU Server to retrieve files when you use the Remote File Popup for file names associated with SQL/Services objects, for example the SQL/Services Server or Dispatcher log files.

A problem in the message format sent to the RMU Server during file load process may cause the RMU Server to abort the request and raise a BADMESSAGE Exception

The ORCM file request will hang and eventually timeout.

The RMU Dispatcher log will show that a BADMESSAGE exception was raised for the request:

---EVENT BEG: EVENT_LOG ------ Thu Sep 22 13:31:16.950 2016--%SQLSRV-I-EVENT_LOG, event logged at line 651 in file MSG_COM_DBS.C;1
%SQLSRV-E-BADMESSAGE, Bad message detected

The problem may happen if the server host name that the RMU Server is running on has a character length greater than 8 or less than 5 characters.

For example a RMU Server running on node name "WELL" may raise this exception, however a server running on "WELLS" will not.

This has now been fixed

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Chapter 5 Known Problems, Restrictions and Workarounds

This chapter describes known problems, restrictions, and workarounds for Oracle Rdb Connectivity Management release 7.3.

This chapter contains:

- Limitations
- Unsupported features.

5.1 Limitations

5.2 Unsupported features.

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Chapter 6 New Features and Corrections in Previous Releases

6.1 New Features for Release 7.3.1.0.

This section describes new and changed features in Oracle Rdb Connectivity Management release 7.3.1.0.

6.1.1 SQL/Services Server Control Connection

(Changed build 20150220)

ORCM will no longer prompt you for connection information for SQL/Services connections that have had a successful connection made to them previously.

Prior to this release, connecting to a SQL/Services control connection by using the popup menu on a Server Explorer node would bring up the connection dialogue allowing you to change connection information before making the connection request.

ORCM will now bypass the connections dialogue, if previously, a successful connection has been made to that server and the connection information has not been changed.

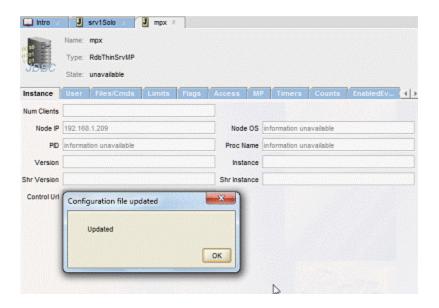
If the connection information is incorrect or requires changing you may still do so by using the **File / Maintain Connections** main menu option or by right-clicking on the server node within the Server Explorer and choosing the **Modify SQL/Services Connection** menu option.

6.1.2 JDBC Server Configuration Update Change

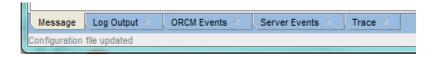
(Changed build 20150220)

ORCM will no longer display an information popup whenever a configuration change is made to a JDBC server.

Previously a popup message would be displayed whenever you saved any changes made to JDBC server configuration information when using the JDBC Server Information pane.



Instead, a message indicating that the configuration file has been modified will now be displayed in the ORCM status area at the bottom of the ORCM frame.



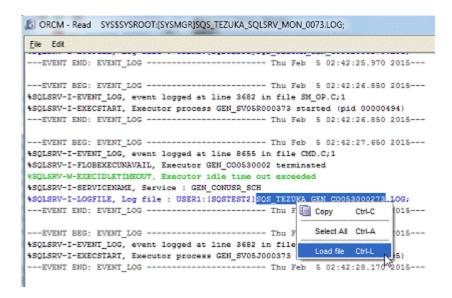
6.1.3 SQL/Services file Display Enhancement

(Added build 20150220)

ORCM allows you to display the contents of files such as log files and command procedures used by the various SQL/Services components. (See the **Popup Menu – Remote File** chapter of the ORCM User Guide.)

When ORCM retrieves the remote content of the file, it will attempt to locate "interesting" file references within the content to allow you to drill down to the referenced files.

While in the remote file editor, if you select a portion of a file specification and right click, the popup menu option **Load File** will be enabled. Selecting this menu option will bring up another editor window with the contents of this referenced file.



Currently ORCM will only recognize file specifications that contain a device or logical name, filename and extension, for example:

```
Mydisk:[dir1]file1.log or
allMyFiles:nam1.com
```

You must select at least 1 character from the intended file reference. If no text is selected at the time you press the **Load File** option, ORCM will try to retrieve the last file specification selected within that editor session. A new editor session is created for each file loaded.

If ORCM cannot determine the required file specification pattern from the text selected by you, the **Load File** popup menu option will not be enabled.

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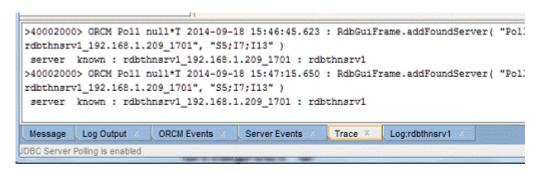
6.3 Corrections in Release 7.3.1.0.

This section describes software errors corrected in Oracle Rdb Connectivity Management 7.3.1.0.

6.3.1 Message Area Panel not Closable

(Fixed build 20140918)

When ORCM is invoked, a number of message area panels are presented in the message area at the bottom of the main GUI window. The tabs associated with most of these areas may be closed by checking the close box (X) on the appropriate tab.



If a message area panel tab is closed and then subsequently re-opened using the Windows\MessageArea... menu option, the tab for the reintroduced message area does not provide a closable check box and cannot be closed again during the current ORCM session.

This has now been fixed.

6.3.2 Message Area ConcurrentModificationException

(Fixed build 20150120)

An error similar to the following may be displayed in the ORCM Message panel during some ORCM operations:

```
java.util.ConcurrentModificationException
.
.
.
.
oracle.rdb.gui.RdbGuiLinks.removeAllReferences
```

This problem does not affect normal ORCM operations and has now been fixed.

6.3.3 Server Explorer not Updated on Add or Remove of SQL/Services Control Connections.

(Fixed build 20150225)

The creation of a new SQL/Services control connection using either the SQL/Services Control Connection wizard or using one of the SQL/Services menu options does not update of the Server Explorer tree to show the newly created connection node.

The connection information is correctly added to the ORCM configuration file and the ORCM connections table but is not displayed on the Server Explorer tree.

A similar problem may be seen when you remove an existing SQL/Services control connection. The configuration file and the connections table is updated correctly but the Server Explorer is not updated leaving the newly removed server node still displayed.

Attempting a second removal of this same node will cause ORCM to raise a NullPointer exception.

A workaround is to close and re-open ORCM after the changes have been made.

6.3.4 NullPointerException when Creating Dispatcher

(Fixed build 20150804)

When creating a new SQL/Services dispatcher definition if you fail to provide a port designation for the dispatcher, ORCM will throw a java.lang.NullPointerException when a SAVE of the dispatcher definition is attempted.

 ${\tt SQL/Services}$ dispatchers require at least one PORT designation.

ORCM will now warn you if no PORT has been defined and will prevent the SAVE action from proceeding if there is no valid designated PORT.

6.3.5 Save Button greyed out during Dispatcher Edit

(Fixed build 20150804)

When the SAVE button is pressed during a dispatcher edit, ORCM will carry out some checks on the validity of dispatcher information, and may raise an error dialog if a problem has been found.

Unfortunately, a bug in the error dialog handling will disable the SAVE button (the button will grayed out) for the edit session preventing the definition from being saved even when valid.

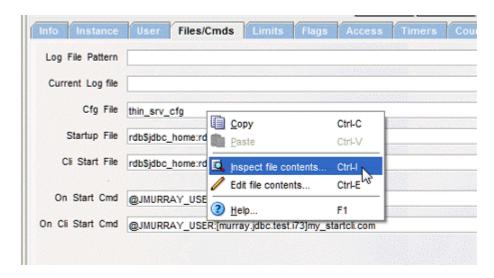
A work-around is to CANCEL the edit window, select the dispatcher again and start a new edit session.

6.3.6 IndexOutOfBounds Exceptions when Accessing Remote Files

(Fixed build 20150807)

Attempting to access a remote file using the file popup menu when the file specification does not contain a file extension, for example in the case of a file specification that is a pure logical name, will result in the following exception:

java.lang.StringIndexOutOfBoundsException



In addition, even when a file extension is present and valid, if the system running the JDBC server is very busy or the file is being accessed from a slow device it is possible that you may also see the following exception during file retrieval:

java.lang.IndexOutOfBoundsException

Both these problems have now been fixed.

6.3.7 Incorrect Status Message for Unavailable JDBC Server

(Fixed build 20150819)

When the current state of a JDBC server is refreshed by either a response to a Poll or by pressing the REFRESH key, the status line shows a "Server information received" message to indicate that all of the information has now been updated.



If the server is not responding to POLL or is not current available, this message may be misleading as the results appear to indicate that information has been sent by the server, which is incorrect. This message has now been changed to indicate that the information has been "updated", rather than "received".

6.3.8 Problem with EventTrigger Creation

(Fixed build 20150820)

Deleting an Event Trigger and the subsequent addition of a new Event Trigger with the same name within the same ORCM session may fail.

During the removal of the existing event trigger, ORCM internal tables were not updated fully causing ORCM to incorrectly determine that the event trigger still exists.

A workaround is to delete the event trigger then exit and restart ORCM prior to adding the new event trigger.

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6.2 New Features for Release 7.3.0.0.

This section describes new and changed features in Oracle Rdb Connectivity Management release 7.3.0.0.

6.2.1 Ability to Rename JDBC Server

(Added build 20140129)

Each JDBC server defined in the ORCM configuration file is required to have a name that is unique within the configuration file.

ORCM will now allow you to change a server name using the server information screen.

Once a server has been highlighted and its definition is displayed in the work area, the name may be altered by pressing the EDIT button, placing the cursor on the server name and making the appropriate change.

When you press the SAVE button, ORCM will check the validity of the name, ensure that it is not blank and that it does not clash with an existing server already defined in the configuration file.

An alternate way to change the server name is to edit the configuration file directly, using the TOOL menu item *Edit ORCM configuration file*, or by using an external editor.

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Currently you cannot modify the name of an existing SQL/Services control connection using the connection entry forms.

If you change the name of the entry in the SQL/Services connection form, and save it, ORCM will save a new connection definition using the existing connection details and apply the new name to it, basically duplicating the connection entry.

You may then right-click the old entry in the connection list table and use the popup menu to delete it.

As in the case of the JDBC server, an alternate way to change the SQL/Services control connection name is to edit the configuration file directly, using the TOOL menu item *Edit ORCM configuration file*, or by using an external editor.

6.2.2 Multi-versioned Configuration Backups

(Added build 20140202)

Whenever you modify the configuration file, ORCM makes a backup copy of the file prior to modification. By default ORCM will only save a single backup version of the configuration file, and the backup file is overwritten each time a backup of the file is made.

ORCM now allows you to specify that versioned backups should be used. With versioned backups, multiple version of the backup configuration file will be saved using the following filename pattern:

```
<cfg file name>~<number>
```

For example:

```
orcmcfq.xml~8
```

If versioned backup is not enabled the backup file pattern is:

```
<cfg file name>~
```

For example:

```
orcmcfq.xml~
```

These backup files will be stored in the same directory the configuration file was loaded from.

6.4 Corrections in Release 7.3.0.0.

This section describes software errors corrected in Oracle Rdb Connectivity Management 7.3.0.0.

6.4.1 ORCM Default Configuration File

(Fixed build 20140129)

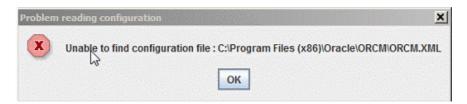
In the first BETA release of 7.3.0.0 ORCM, the ORCM configuration file used by default resided in the installation directory for ORCM.

This may raise a problem when using ORCM on Microsoft Windows7 and above as write access to the system directories is restricted.

When first starting ORCM the following exception may be logged:

```
Problem reading configuration:C:\Program Files (x86)\Oracle\ORCM (Access is denied)
```

Or the following popup error message may be seen:



ORCM has now been changed to default to using the user's default document directory on Microsoft Windows systems.

In addition, on the first invocation of ORCM, the default configuration file, orcmcfg.xml, will be added to your user's default document directory.

6.4.2 Incorrect default SQL/Services Server TCP/IP Port

(Fixed build 20140129)

Although the ORCM User Guide correctly states that the default TCP/IP port used to connect to a SQL/Services server is 2199, various components within ORCM, including the SQL/Services Control Connection wizard incorrectly used the default value of 2198.

This has now been fixed.

6.4.3 Unable to Drop FAILED Services

(Fixed build 20140129)

A problem in service state checking within ORCM will prevent the dropping of SQL/Services services that have a "FAILED" state.

Although you may select a failed service from the server tree and select "drop service" for that service, the service will not be dropped.

Note: ORCM will not allow you to drop a service that is currently running. If a service is running you must stop it before you will be allowed to drop the service definition.

6.4.4 Save Button not Enabled after JDBC Server Save Failure

(Fixed build 20140129)

If during the save of a newly created JDBC server definition , or during the update of an existing JDBC server definition a validation error occurs , the **SAVE** button remains inactive, preventing you from saving the definition even if the validation errors have been rectified.

The only work-around is to cancel the operation and redo the server creation or server modification.

This has now been fixed, on validation failure the **SAVE** button will now remain enabled.

6.4.5 Long Menus not Scrollable

(Fixed build 20140129)

Several options within ORCM allow you to choose an existing ORCM object to base a newly created object on, for example you may create a JDBC Server definition based on an existing server definition.

When creating an object based on an existing object ORCM will display a menu of the names of existing objects that may be used as templates.

If the number of existing objects is large this menu list may extend past the end of the screen, preventing you from selecting some possible menu item choices.

This menu has now been changed to provide an overflow arrow at the top and bottom of a fixed-size list of menu items. These scroll buttons allow you to scroll up and down to allow access to the entire menu item list.

6.4.6 SQL/Services Autoconnect Servers Display on Startup of ORCM

(Fixed build 20140129)

If you have enabled autoconnect for one or more SQL/Services servers, when you open the ORCM application each of the autoconnect server's objects will be displayed in the server tree in a fully expanded state.

If you have a lot of services associated with these servers, this full expanded display may make it more cumbersome to locate servers further down the tree.

ORCM has now been changed to startup with the server tree in its collapsed state.

6.4.7 Preference changes Corrupts Configuration File.

(Fixed build 20140203)

The Preferences panel allows you to see and alter the current environment and settings within ORCM. A bug in the earlier BETA release of ORCM may cause corruption within the GUI section of the configuration file used by ORCM.

It is possible that the whole GUI section may be incorrectly removed when ORCM updates the configuration file.

Prior to saving new configuration changes, ORCM creates a backup copy of the configuration file within the same directory the configuration file was found. The backup file has the same name as your configuration file with an additional tilde "~" character at the end of the filename.

For example:

orcmcfg.xml~

As only one version of this backup is retained, multiple preference changes within the same active ORCM session may lead to the backup file also being corrupt.

If you find the configuration file is corrupt or that preferences set are not retained when restarting ORCM, please check the configuration file using either an external editor, or by selecting **Edit ORCM configuration file** from the **ORCM** Tools menu.

If the file is corrupt, locate the backup configuration file, delete the current configuration file and then rename the backup file by removing the tilde "~" from the end of the filename.

Oracle recommends to keep regular backups of your user environment files including your ORMC configuration file to facilitate recovery of your environment should corruption occur.

This has now been fixed.

6.4.8 PID not Displayed in JDBC Server Instance Sub-panel

(Fixed build 20140209)

ORCM failed to display the server PID in the Instance sub-panel of the JDBC Server display panel.

ORCM has now been fixed, the server PID will now be displayed in the PID field of the Instance sub-panel in both hexadecimal and decimal representation.

6.4.9 JDBC Server Panel Refresh Problem

(Fixed JDBC Release 7.3.3.0 build 20140224)

If a JDBS server is currently running, pressing the **Refresh** button of its JDBC Server information panel should result in the update of displayed information to the latest values received from server.

Due to a change in Java serialization introduced in Java 7.0, some values such as statistic counts were not updated correctly.

This problem only occurs if the JDBC server is running under Java 7.0 or later. Servers running on earlier versions of Java do not show this problem.

This fix requires a change to the JDBC server serialization protocol which will be available from JDBC release 7.3.3.0 build 20140224 onwards.

Servers running earlier version of JDBC will still fail to update the statistics correctly if they are running on Java 7.0 or later.

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