

Oracle® R Enterprise

Release Notes

Release 1.4.1 for Windows, Linux, Solaris, and AIX

E57006-04

February 2015

This document contains the following important topics about Release 1.4.1 of Oracle R Enterprise:

- [Updates to Oracle R Enterprise 1.4.1 Documentation](#)
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Updates to Oracle R Enterprise 1.4.1 Documentation

- Instructions for installing Oracle R Distribution and Oracle R Enterprise Server on Exadata have been updated.

See: "Installing Oracle R Enterprise on Exadata" in *Oracle R Enterprise Installation and Administration Guide*.

- The list of RPMs required for Oracle R Enterprise is now provided for both Oracle R Distribution 3.1.1 and 3.0.1 on both Oracle Linux 5 and Oracle Linux 6.

See: "Installing Oracle R Distribution on Linux Using RPMs" in *Oracle R Enterprise Installation and Administration Guide*.

New Features in Oracle R Enterprise 1.4.1

Oracle R Enterprise 1.4.1 introduces the following new features:

- Installation and administration of Oracle R Enterprise Server are significantly enhanced.

A single script, `server.sh` or `server.bat`, performs all administrative operations that affect Oracle R Enterprise Server. You can run the script to install, upgrade, or uninstall the server or to create or configure Oracle R Enterprise users. The script can be run interactively or in batch or hybrid mode.

See Also: "Installing Oracle R Enterprise Server" in *Oracle R Enterprise Installation and Administration Guide*

- The Multitenant Container Database (CDB) feature of Oracle Database 12c is supported.

You can install support for Oracle R Enterprise Server in a multitenant environment. The server must be installed in a pluggable database, not in the root database.

See Also:

- *Oracle Database Concepts* for an introduction to multitenant architecture.
- *Oracle Database Administrator's Guide* for information about managing a multitenant environment.

- Oracle R Enterprise 1.4.1 includes two new supporting packages: `arules` and `statmod`. The Oracle R Enterprise 1.4.1 supporting packages are:

```
arules 1.1-3
cairo 1.5-5
DBI 0.2-7
png 0.1-7
ROracle 1.1-12
statmod 1.4.20
```

See Also: "About the Oracle R Enterprise Supporting Packages" in *Oracle R Enterprise Installation and Administration Guide*

- The `ore.glm` function now accepts offset terms in the model formula and the function can now be used to fit negative binomial and tweedie families of generalized linear models.
- The `ore.sync` function has an additional optional argument, `query`, that creates an `ore.frame` object from an optimized SQL `SELECT` statement without creating a view in the database. You can use this argument to create a query even when you do not have the `CREATE VIEW` system privilege for the current schema.

See Also: "Using `ore.sync` to Add `ore.frame` Proxy Objects to an R Environment" in *Oracle R Enterprise User's Guide*

- The new global option for serialization, `ore.envAsEmptyenv`, specifies whether referenced environments in an object should be replaced with an empty environment during serialization to an Oracle Database. This option is used by the following functions:
 - `ore.push`, which for a list object accepts `envAsEmptyenv` as an optional argument
 - `ore.save`, which has `envAsEmptyenv` as a named argument
 - `ore.doEval` and the other embedded R execution functions, which accept `ore.envAsEmptyenv` as a control argument.

The default values of the above arguments are regulated by the global option `ore.envAsEmptyenv`, but by using the argument you can override the global option value for a function.

See Also:

- "Oracle R Enterprise Global Options" in *Oracle R Enterprise User's Guide*
- "Optional and Control Arguments" in *Oracle R Enterprise User's Guide*

Oracle R Enterprise 1.4.1 Requirements

Oracle R Enterprise runs on 64-bit platforms only. Both client and server components are supported on each of the platforms described in Table 1.

Table 1 Oracle R Enterprise Platform Requirements

Operating System	Hardware Platform	Description
Linux x86-64	Intel and AMD	64-bit Red Hat Enterprise Linux Release 5 update 6 through Red Hat Enterprise Linux 6 64-bit Oracle Linux Release 5 update 6 through Oracle Linux 6 <i>Note:</i> Oracle Linux may be running on Oracle Exadata Database Machine.
Oracle Solaris	Intel and SPARC	64-bit Oracle Solaris 10 update 10 through Oracle Solaris 11 for both SPARC and x86-64 (Intel) platforms Oracle SPARC SuperCluster Oracle Solaris Studio (formerly Sun Studio) 12u3 or later <i>Note:</i> Oracle Solaris may be running on Oracle Exadata Database Machine.
IBM AIX	IBM	64-bit IBM AIX 5.3 or higher
Microsoft Windows	Intel	64-bit Microsoft Windows

The supported configurations of Oracle R Enterprise, Oracle R Distribution, and Oracle Database are shown in Table 2.

Table 2 Oracle R Enterprise Configuration and Support Matrix

Oracle R Enterprise Version	R/Oracle R Distribution Version	Oracle Database Version (See Note)
1.0	2.13.2	11.2.0.3, 11.2.0.4, 12.1.0.1
1.1	2.13.2	11.2.0.3, 11.2.0.4, 12.1.0.1
1.2	2.15.1	11.2.0.3, 11.2.0.4, 12.1.0.1
1.3	2.15.1	11.2.0.3, 11.2.0.4, 12.1.0.1
1.3.1	2.15.1, 2.15.2, 2.15.3	11.2.0.3, 11.2.0.4, 12.1.0.1
1.4	3.0.1, 3.1.1	11.2.0.3, 11.2.0.4, 12.1.0.1
1.4.1	3.0.1, 3.1.1	11.2.0.3, 11.2.0.4, 12.1.0.1

Note: Oracle Database versions 11.2.0.1 and 11.2.0.2 are supported on Linux if patched. See "Patching Oracle Software With OPatch" *Oracle Universal Installer and OPatch User's Guide for Windows and UNIX* for instructions.

About Oracle R Enterprise and Oracle Database

Oracle R Enterprise 1.4.1 supports Oracle Database 11.2 and 12.1. However, both versions of Oracle Database ship with earlier releases of Oracle R Enterprise. If you are using an earlier release of Oracle R Enterprise, you should upgrade to release 1.4.1.

See Also:

- *Oracle R Enterprise Installation and Administration Guide* for upgrade instructions
- Oracle R Enterprise Downloads page on the Oracle Technology Network

<http://www.oracle.com/technetwork/database/database-technologies/r/r-enterprise/downloads/index.html>

About Oracle R Enterprise and R

Oracle R Enterprise 1.4.1 requires R 3.0.1 or 3.1.1. Oracle recommends that you use Oracle's own distribution of R with Oracle R Enterprise. Oracle R Distribution automatically resolves dependencies and offers other significant advantages. See "Why Oracle R Distribution?" in *Oracle R Enterprise Installation and Administration Guide* for details.

Oracle R Distribution is available for download free of charge from this website:

<http://www.oracle.com/technetwork/database/database-technologies/r/r-distribution/downloads/index.html>

If you use open source R with Oracle R Enterprise, then you must build it from source. Follow the instructions in "Open Source R and Oracle R Enterprise" in *Oracle R Enterprise Installation and Administration Guide*.

See Also: "Installing R for Oracle R Enterprise" in *Oracle R Enterprise Installation and Administration Guide*

Bugs Fixed in Oracle R Enterprise 1.4.1

Oracle R Enterprise Release 1.4.1 fixes the problems listed in [Table 3](#).

Table 3 *Bugs Fixed in Oracle R Enterprise 1.4.1*

Number	Description
14760430	R: ORE: ERROR IN ORE.EXTEND WHEN USING ARGUMENT "METHODS"
14760443	REMOVE ORE.EXTEND FROM THE PRODUCT
16865497	INVALID ORE.*APPLY ORE.PNG SETTINGS ARE IGNORED
17344464	ADD AN ARG TO ORE.SYNC TO FORM AN ORE.FRAME OBJECT OUT OF A USER SUPPLIED QUERY
17655158	DATASTORE - SERIALIZING MODEL IN EMBEDDED R INCLUDES FULL ENVIRONMENT
17823492	ABLE TO ASSIGN NA VALUE TO ORE FRAME FOR ALL COLUMN CASE
17854494	R: ORE: ORE.NEURAL WORKING FOR WRONG NUMBER OF ACTIVATION FUNCTIONS

Table 3 (Cont.) Bugs Fixed in Oracle R Enterprise 1.4.1

Number	Description
17856083	R:: ORE: ORE.NEURAL WORKING FOR NEGATIVE VALUE OF NEURONS
18092584	SUBSET METHOD FOR ORE.FRAME IGNORES THE ORE.NA.EXTRACT GLOBAL OPTION SETTING
18106497	ORE.NEURAL IGNORES FORMULA TRANSFORMATIONS OF THE TARGET VARIABLE
18253086	ORE.PREDICT FOR ORE.LM AND ORE.GLM CAN PRODUCE LONG QUERIES WHEN SE.FIT=TRUE
18253529	ORE.CREATE INCURS DATA.FRAME COPY OVERHEAD IN COLLECTING METADATA
18263136	ORE.PUSH() FAILS ON DATETIME OBJECTS GENERATED BY SEQ() IN A CERTAIN WAY
18317057	ORE.SCRIPTCREATE DOES NOT SUPPORT MORE THAN 1000 CHARACTER EXPRESSIONS
18415765	DATASTORE IS INACCESSIBLE WHEN USING AUTOCONNECT INSIDE A STORED PROCEDURE
18477849	USE 17 DIGIT REPRESENTATION OF BINARY DOUBLE VALUES IN TRANSPARENCY LAYER
18551035	ORE.GLM CITES "FOR MORE INFORMATION SEE 'ORE.OPTIONS("ORE.PARALLEL")"
18601251	ADD FORMULA, ORE.FRAME METHOD FOR T.TEST, VAR.TEST, WILCOX.TEST
18688814	ORE: ORE.PULL ON SUBSETTED RULES OBJECT ERRORS FOR ARULES 1.1-2
18721005	RORACLE INTERNAL ERROR [RODBIRESTERM, 1, -2]
18745762	ORE.FREQ PRODUCES DEBUG MESSAGE
18788228	THE COR METHOD FOR ORE.FRAME CAN PRODUCE VALUE OF 1.000000000000009769963
18831573	ORE.PULL(ORE.PUSH(DATA.FRAME)) SHOULD RECOGNIZE VIRTUAL ROW NAMES
18865065	ADD COR, COV, VAR SUPPORT FOR X=ORE.NUMBER, Y=ORE.NUMBER IN TRANSPARENCY LAYER
18887137	ORE.ODMNB: ADD EXAMPLES USING NEW PRIORS
18888037	ORE.SAVE DOESN'T WORK WITH INSTANCES OF REFERENCE CLASSES
18899003	COR ON PUSH/PULL IS SLOW
18906184	ORE.PULL METHODS ORE.FRAME AND ORE.INTEGER CREATES DOUBLES INSTEAD OF INTEGERS
18908645	RORACLE: DEFAULT ROW NAMES FOR DATA.FRAME SHOULD FOLLOW [NA, -NROWS] CONVENTION
18908648	EMBED R: DEFAULT ROW NAMES FOR DATA.FRAME SHOULD FOLLOW [NA, -NROWS] CONVENTION

Known Issue in Oracle R Enterprise 1.4.1

Bug Number: 18386225

Title: R:ORE: OLDER LIBS NEED TO BE CLEANED ON ORE UPGRADE FROM 1.3.1 TO 1.4

Description: The uninstall script for Oracle R Enterprise Server 1.3.1 removes the following libraries:

```
libimf.so  
libintlc.so  
libiompprof5.so  
libiompstubs5.so  
libirc.so  
libomp_db.so  
libsvml.so
```

Starting with release 1.4, these libraries no longer ship with the product. The uninstall script for Oracle R Enterprise Server 1.4 does not remove them. If you upgrade from 1.3.1 to 1.4, then uninstall 1.4 and reinstall 1.3.1, the installation fails.

Workaround: Manually remove the libraries before reinstalling Oracle R Enterprise 1.3.1 if you have already upgraded and uninstalled 1.4.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit

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