

ORACLE®



# Oracle Database on OpenVMS and Oracle Rdb Product Family Update

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# Safe Harbor Statement

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

# Agenda

- Working with VSI and HPE
- Customer Focus
- Oracle Database on VMS Update
  - Support Dates
  - Oracle 19, 11g , 10g
  - What's Under Development
  - Roadmap
- Oracle Rdb Update
  - Support Dates
  - Recent Releases
  - What's Under Development
  - Roadmap

# Working with VSI and HPE

- Oracle remains in close contact with both VSI and HPE
  - In resolution of customer issues
  - Oracle OpenVMS dependencies
  - Development Projects (e.g. VSI TCP/IP, x86 Cross Tools)
  - Customer Events
  - Bi-monthly conference calls with HPE
  - As needed communication with VSI (often weekly)
  - Hardware, Software
  - Staffing
- Participation in User Group events, e.g. London, May, 2019
- Monthly meetings with HPE Japan

# Oracle on OpenVMS and Oracle Rdb Marketing Focus

- Focus on meeting our customers' needs
- [Rdb Web page](#), Rdb Web Journal, My Oracle Support, OTN
- Rdb management personal customer visits /meetings
- Events
  - HPE and VSI Events
  - OpenVMS SIG Groups
- **Customer Events (2019)**
  - North American Update Sessions, Jan/Feb
    - New York, Washington, Chicago, Toronto, Redwood Shores, Seattle, Dallas
  - Connect Deutschland, May
  - UK OpenVMS SIG, May
  - Swedish OpenVMS SIG, May
  - North American Update Sessions, October
    - Scottsdale, Irvine
  - Asian Customer Visits, November
    - Japan, China
  - EMEA Update Sessions, December
    - Netherlands, Belgium, France, Austria

# Oracle's Lifetime Support Policy

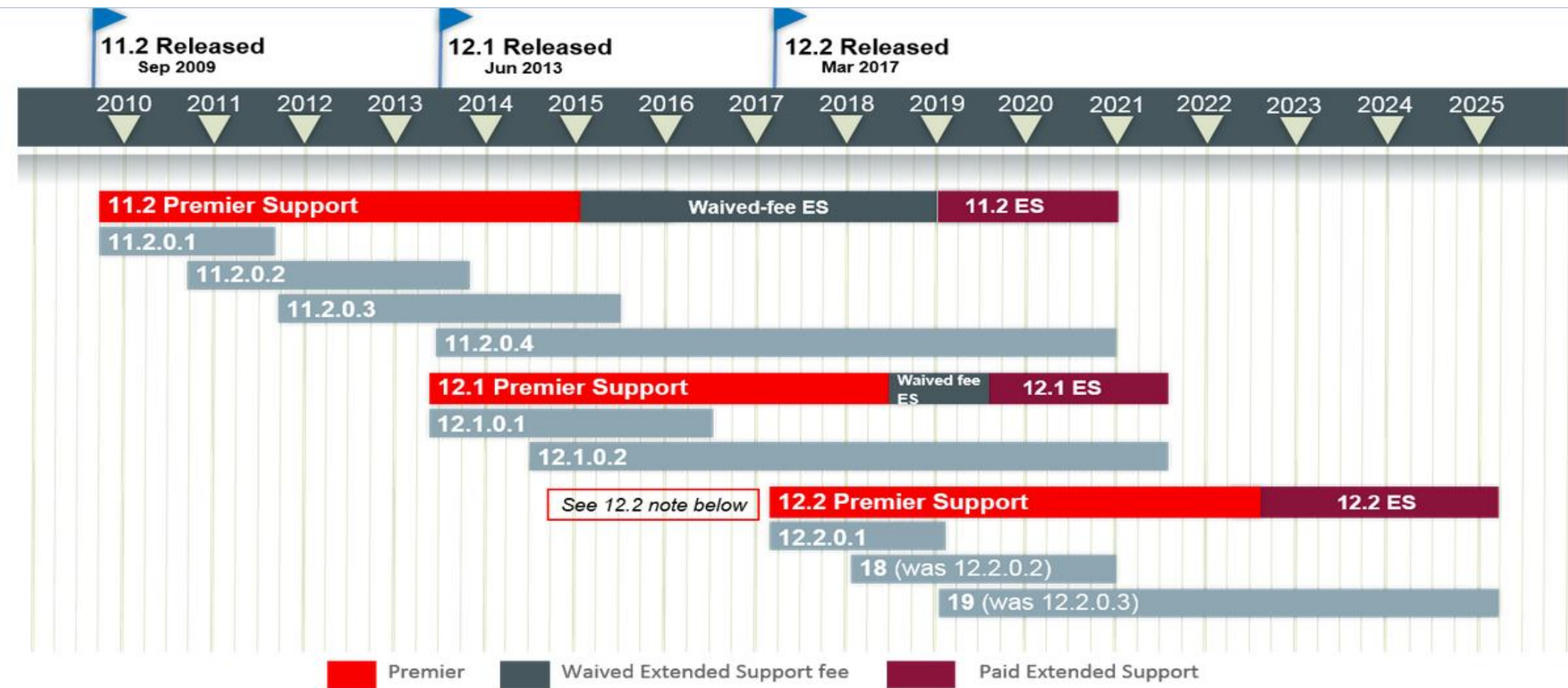
- **Oracle Premier Support** provides customers with maintenance and support of Oracle software on Itanium servers for five years from the general availability date of the software release.
- **Oracle Extended Support** provides customers with an extra three years of support for specific Oracle releases for an additional fee. Customers benefit from the same quality of service received with Oracle Premier Support, with the security of knowing they can migrate their software to a new platform when the time is right.
- **Oracle Sustaining Support** customers will receive technical support for as long as they operate their Itanium-based systems—including access to online support tools, knowledge bases, pre-existing fixes and assistance from technical support experts.
- [Oracle Lifetime Support](#)

# Oracle Database 10gR2 Support Dates

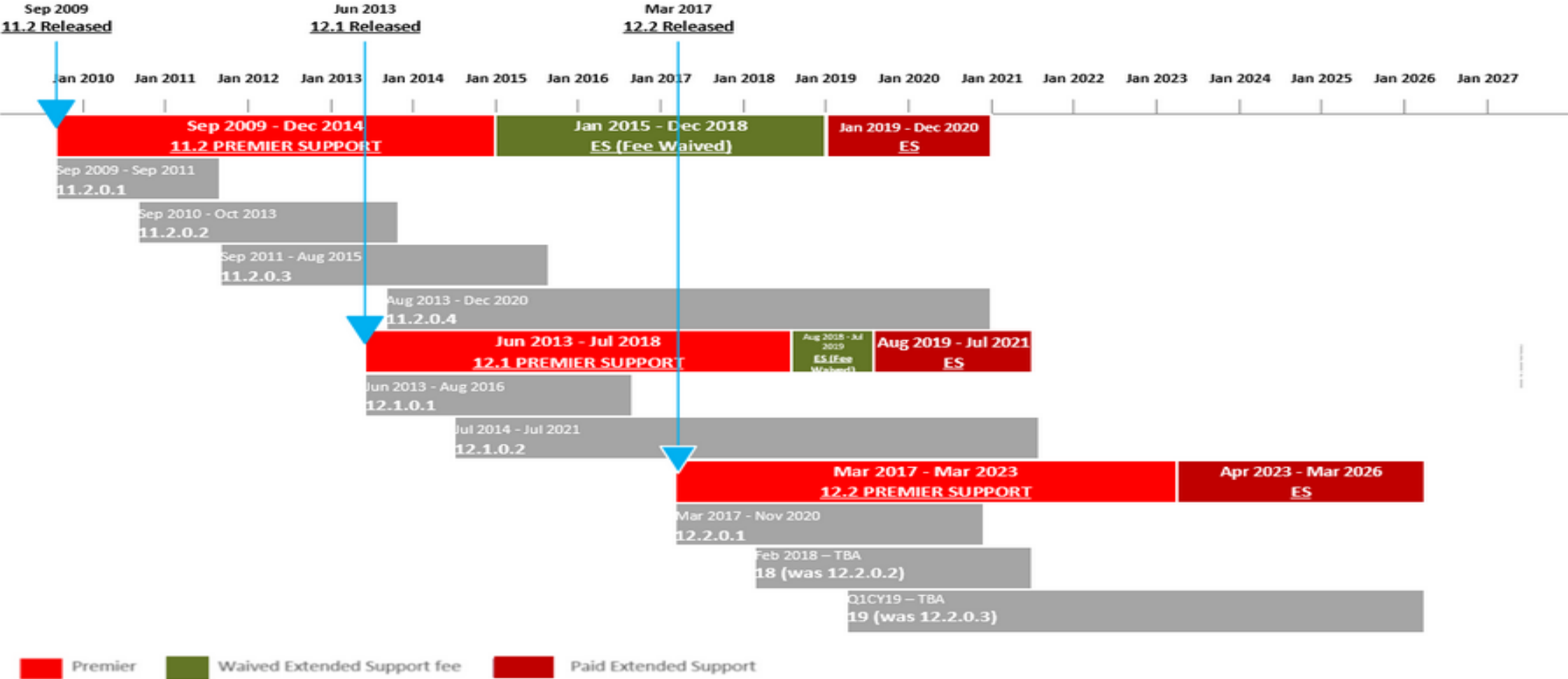
Integrity Platforms	
Platform	Additional Extended Support: S1 Fixes Only
HP OpenVMS on Integrity	August 2013 – July 2017
HP OpenVMS on Alpha	August 2013 – July 2015
HP-UX	August 2013 – Dec 2015
Linux Integrity	August 2013 – Dec 2015
Windows Integrity	August 2013 – Dec 2015



# Previously Published Oracle 11g & 12c Support Dates



# Currently Published Oracle 11g & 12c Support Dates



# Oracle 11g OpenVMS Patch Set Updates (PSUs)

- 11.2.0.4.191015DBPSU – October, 2019
- 11.2.0.4.190716DBPSU – July, 2019
- 11.2.0.4.190416DBPSU – April, 2019
- 11.2.0.4.190115DBPSU – January, 2019
- 11.2.0.4.181016DBPSU – November, 2018
- 11.2.0.4.180717DBPSU – July, 2018
- 11.2.0.4.180417DBPSU – April, 2018

# Oracle 11g OpenVMS Patch Set Updates (PSUs) – cont.

- 11.2.0.4.180116DBPSU – January, 2018
- 11.2.0.4.171017DBPSU – October, 2017
- 11.2.0.4.170718DBPSU – July, 2017
- 11.2.0.4.170418DBPSU – April, 2017
- 11.2.0.4.161018DBPSU - October, 2016
- 11.2.0.4.160719DBPSU - July, 2016
- 11.2.0.4.10 - April, 2016
- 11.2.0.4.9 - January, 2016
- 11.2.0.4.8 - October, 2015
- 11.2.0.4.7 - July, 2015

# 11.2.0.4.191015DBPSU on MOS



## Patch 29913194: DATABASE PATCH SET UPDATE 11.2.0.4.191015

**Last Updated** 15-Oct-2019 06:20 (11 days ago)

**Size** 154.1 MB

**Product** Oracle Database - Enterprise Edition  
([More...](#))

**Download Access** Software

**Classification** Security

**Patch Tag** All Database

**Release** Oracle 11.2.0.4.0

**Platform** HP OpenVMS Itanium

### Recommendations / Certifications

Recommended for Oracle Database 11.2.0.4.0

### Bugs Resolved by This Patch

10136473	CELLSRV FAILS DUE TO ORA-7445 [KAF4F0RST9IR2SRP1]
11733603	ORA-54 WITH SELECT STATEMENT USING NOWAIT CLAUSE WITH NO CONCURRENT ACTIVE TX
11786053	SR11.2.0.3ASM - TRC - KFMDXGRPREGMON
11883252	REDO TRANSPORT STREAMING NOT SUPPORTED WITH ALL MIXED VERSION CONFIGURATIONS
12364061	QUERY FAILS INTERMITTEND WITH ORA-30054
12611721	ARCHIVELOG DELETION POLICY BACKED UP N TIMES TO 'SBT_TAPE' IGNORED
12747740	NODE JOIN RECONFIGURATION (PCMREPLAY) DOES NOT SCALE WITH MORE LMS'S
12816846	INTERNAL ERROR WHILE UPDATING COLUMN OF UPDATABLE JOIN VIEW ON EV AND TABLE/VIEW
12905058	REBOOT 2 CELL NODES, CHECKFILE FOUND CORRUPTION BLOCK IN 3 UNDO DATAFILES
12982566	ORA-06550: DBMS_DRS PACKAGE DOES NOT EXIST ON NEW STANDBY DB AFTER SWITCHOVER

[Open Readme to View all Bugs](#)

# 11g and 10g Certifications on VSI OpenVMS Versions

- Itanium (i6)
  - 8.4-2L1
- Itanium (i4 and i2)
  - 8.4-2L1
  - 8.4-2
  - 8.4-1H1
- Alpha (Oracle Rdb Only)
  - 8.4-2L1
  - 8.4-2L2 (optimized for EV56 and higher)
    - Certification completed

# Itanium OpenVMS Certification Matrix (Doc ID 377470.1)

Support Matrix for hp ITANIUM OpenVMS versions and Oracle Server releases  
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Last Update: 10-May-2018  
Updated by: Dave Hayter

ITANIUM/OpenVMS (Refer to [Note:377480.1](#) for recommended OpenVMS ECO levels)

|            |              |            |              |              |              |              |
|------------|--------------|------------|--------------|--------------|--------------|--------------|
| -----      |              |            |              |              |              |              |
| 8.2-1      | 8.3          | 8.3-1H1    | 8.4          | 8.4-1H1      | 8.4-2        | 8.4-2L1      |
|            |              |            | **see Note A | **see Note B | **see Note B | **see Note C |
| -----      |              |            |              |              |              |              |
|            |              |            | 11.2.0.4.0   | 11.2.0.4.0   | 11.2.0.4.0   | 11.2.0.4.0   |
|            |              |            | **see Note D |              | **see Note H | **see Note H |
| -----      |              |            |              |              |              |              |
|            |              |            | 10.2.0.5.0   | 10.2.0.5.0   | 10.2.0.5.0   | 10.2.0.5.0   |
|            |              |            | **see Note E |              |              | **see Note J |
| 10.2.0.4.0 | 10.2.0.4.0   | 10.2.0.4.0 | 10.2.0.4.0   |              |              |              |
| 10.2.0.2.0 | 10.2.0.2.0   | 10.2.0.2.0 |              |              |              |              |
|            | **see Note F |            |              |              |              |              |
| =====      |              |            |              |              |              |              |



# Itanium OpenVMS Certification Matrix (Doc ID 377470.1)

(For hp ALPHA OpenVMS Certification matrix - see [Note:62150.1](#))

Please refer to the following document for information on release schedules:

[Document 742060.1](#) Release Schedule of Current Database Releases

Please note that at this time, we do not support the Oracle RDBMS and related products running on OpenVMS as a guest operating system (e.g Virtual Machines)

- A. OpenVMS 8.4 Oracle certification includes HP Integrity i2 (Tukwila) hardware.
- B. OpenVMS 8.4-1H1 and 8.4-2 Oracle certification includes HP Integrity i4 (Poulson) and i2 (Tukwila) hardware.
- C. OpenVMS 8.4-2L1 Oracle certification includes HP Integrity i6 (Kittson), i4 (Poulson) and i2 (Tukwila) hardware.
- D. Oracle Server/Client Release 11.2.0.4 (11gR2) for Itanium OpenVMS was released on 23rd July 2015.

This release requires a minimum of OpenVMS 8.4

The install kits are currently available for download on Oracle Technology Network :

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

Please note that Oracle Clusterware/RAC 11gR2 will be released at a later date.

- E. Patch set 10.2.0.5 was announced 31st October 2012 and is now available from the MyOracleSupport (MOS) patches down



# Alpha OpenVMS Certification Matrix (Doc ID 62150.1)

ALPHA/OpenVMS (Refer to [Note:170199.1](#) for recommended OpenVMS ECO levels)

|       |     |               |               |            |               |
|-------|-----|---------------|---------------|------------|---------------|
| ----- |     |               |               |            |               |
| 7.1   | 7.2 | 7.3           | 8.2           | 8.3        | 8.4           |
|       |     | ** see Note L | ** see Note M |            |               |
| ----- |     |               |               |            |               |
|       |     |               |               |            | 10.2.0.5.0    |
|       |     |               |               |            | ** see Note A |
|       |     |               | 10.2.0.4.0    | 10.2.0.4.0 | 10.2.0.4.0    |
|       |     |               | 10.2.0.2.0    | 10.2.0.2.0 |               |
|       |     |               | ** see Note B |            |               |
| ===== |     |               |               |            |               |
|       |     | 10.1.0.5.0    | 10.1.0.5.0    | 10.1.0.5.0 |               |
|       |     | 10.1.0.3.0    | 10.1.0.3.0    | 10.1.0.3.0 |               |
|       |     | ** see Note C |               |            |               |
| ----- |     |               |               |            |               |

# What Oracle 11g Client Kit Provide to OpenVMS

- Client/Server Interoperability Support to future database releases
- Standard Supported client tools (next slides)
- Upgraded Security Functionality
- Gives you the ability to continue to run your application on VMS while connecting to the database server platform of your choice (either to a VMS server or to other platforms supported by Oracle).

# Client / Server / Interoperability Support Matrix For Different Oracle Versions [ID 207303.1]

| Client Version       | Server Version    |                   |                       |                      |                      |                      |                    |                   |                   |
|----------------------|-------------------|-------------------|-----------------------|----------------------|----------------------|----------------------|--------------------|-------------------|-------------------|
|                      | 19c               | 18c               | 12.2.0 <sup>#10</sup> | 12.1.0               | 11.2.0               | 11.1.0               | 10.2.0             | 10.1.0            | 9.2.0             |
| 19c                  | Yes               | Yes               | Yes                   | Yes                  | Yes <sup>#9</sup>    | No                   | No                 | No <sup>#3</sup>  | No <sup>#3</sup>  |
| 18c                  | Yes               | Yes               | Yes                   | Yes                  | Yes <sup>#9</sup>    | No                   | No                 | No <sup>#3</sup>  | No <sup>#3</sup>  |
| 12.2.0               | Yes               | Yes               | Yes                   | Yes                  | Yes <sup>#9</sup>    | No                   | No                 | No <sup>#3</sup>  | No <sup>#3</sup>  |
| 12.1.0               | Yes               | Yes               | Yes                   | Yes                  | Yes                  | Was                  | MDS <sup>#7</sup>  | No <sup>#3</sup>  | No <sup>#3</sup>  |
| 11.2.0               | Yes <sup>#9</sup> | Yes <sup>#9</sup> | Yes <sup>#9</sup>     | Yes                  | Yes                  | Was                  | MDS <sup>#7</sup>  | No                | Was <sup>#5</sup> |
| 11.1.0               | No                | No                | No                    | Was                  | Was                  | Was                  | Was <sup>#7</sup>  | Was <sup>#6</sup> | Was <sup>#5</sup> |
| 10.2.0               | No <sup>#11</sup> | No <sup>#11</sup> | No <sup>#11</sup>     | MDS <sup>#7#11</sup> | MDS <sup>#7#11</sup> | Was <sup>#7#11</sup> | MDS <sup>#11</sup> | Was               | Was <sup>#5</sup> |
| 10.1.0 <sup>#4</sup> | No                | No                | No                    | No                   | Was <sup>#6</sup>    | Was <sup>#6</sup>    | Was                | Was               | Was               |
| 9.2.0                | No                | No                | No                    | No <sup>#8</sup>     | Was <sup>#5</sup>    | Was <sup>#5</sup>    | Was <sup>#5</sup>  | Was               | Was               |

## Key:

|            |                                                                                                                                                                                                                      |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Yes</b> | Supported                                                                                                                                                                                                            |
| <b>ES</b>  | Supported but fixes only possible for customers with <a href="#">Extended Support</a> .                                                                                                                              |
| <b>MDS</b> | Supported, but fixes only possible for customer with a valid Market-Driven Support contract.                                                                                                                         |
| <b>Was</b> | Was a supported combination but one of the releases is no longer covered by any of Premier Support, Primary Error Correct support, Extended Support, nor Extended Maintenance Support. Fixes are no longer possible. |
| <b>No</b>  | Has never been Supported                                                                                                                                                                                             |

# 11g Client Kit Contents

- Oracle SQLJ
- Oracle Database Utilities
- Oracle Java Client
- SQL\*Plus
- Oracle JDBC/THIN Interfaces
- Oracle Internet Directory Client
- Oracle Call Interface (OCI)
- Oracle Programmer
- Oracle XML Development Kit
- Oracle Advanced Security
- Enterprise Manager Minimal Integration
- OLAP Analytic Workspace Manager and Worksheet
- Oracle Net

# 11g Client Kit Contents (cont.)

- Oracle Connection Manager
- Oracle Net Listener
- Oracle Multimedia Client Option
- Oracle ODBC Driver
- Oracle Clusterware High Availability API
- Oracle SQL Developer
- Oracle Scheduler Agent
- Oracle Services For Microsoft Transaction Server
- Oracle Administration Assistant for Windows
- Oracle Counters for Windows Performance Monitor
- Oracle Objects for OLE
- Oracle Provider for OLE DB
- Oracle Data Provider for .NET
- Oracle Providers for ASP.NET

# Oracle Rdb Product Family Update

# What Products Make up The Rdb Product Family?

- Oracle Rdb Server
- Oracle CODASYL DBMS
- Oracle Trace
- Oracle CDD/Repository
- Oracle JDBC for Rdb
- Oracle Rdb Developer Tools for Visual Studio
- Oracle Rdb Connectivity Manager
- Oracle Rdb Extension for SQL Developer
- Oracle Rdb Extension for Oracle Enterprise Manager
- Oracle ODBC Driver for Rdb
- Oracle SQL/Services & OCI Services for Oracle Rdb
- Oracle Replication Option

# Rdb Product Family Lifetime Support Dates

## Oracle Rdb and Oracle CODASYL Database Releases

| Release | GA Date  | Premier Support Ends | Extended Support Ends | Sustaining Support Ends |
|---------|----------|----------------------|-----------------------|-------------------------|
| 7.0     | Oct 1996 | Aug 2007             | Aug 2009              | Indefinite              |
| 7.1     | Jul 2001 | Dec 2007             | Dec 2010              | Indefinite              |
| 7.2     | Jan 2006 | Jul 2015             | Jul 2017              | Indefinite              |
| 7.3     | Mar 2011 | Sep 2020             | Sep 2023              | Indefinite              |

See: <http://www.oracle.com/us/support/library/lifetime-support-technology-069183.pdf>



# Oracle Rdb Certifications

Oracle Rdb V7.3

| Release | Release Date                                                            | Version  | Alpha |         |                        | Itanium               |                         |                           | <a href="#">Update</a> |
|---------|-------------------------------------------------------------------------|----------|-------|---------|------------------------|-----------------------|-------------------------|---------------------------|------------------------|
|         |                                                                         |          | Min   | Max     | <a href="#">Kits 1</a> | Min                   | Max                     | Newest Processor          |                        |
| 7.3.3.1 | Mar 2019                                                                | V7.3-310 | 8.4   | 8.4-2L2 | <a href="#">.1</a>     | <a href="#">8.4</a>   | <a href="#">8.4-2L1</a> | i6 (Kittson) <sup>2</sup> | None                   |
| 7.3.3.0 | June 2018<br><b>REPLACEMENT</b><br>see <a href="#">Doc ID 2408303.1</a> | V7.3-300 | 8.4   | 8.4-x   | <a href="#">.1</a>     | <a href="#">8.4</a>   | <a href="#">8.4-x</a>   | i6 (Kittson) <sup>2</sup> | 1                      |
| 7.3.3.0 | May 2018<br><b>WITHDRAWN</b>                                            | V7.3-300 |       |         |                        |                       |                         | i6 (Kittson) <sup>2</sup> |                        |
| 7.3.2.1 | Mar 2017                                                                | V7.3-210 | 8.4   | 8.4-2L2 | <a href="#">.1</a>     | <a href="#">8.4</a>   | <a href="#">8.4-2L1</a> | i6 (Kittson) <sup>2</sup> | 3                      |
| 7.3.2.0 | Mar 2016                                                                | V7.3-200 | 8.4   | 8.4-2L1 | <a href="#">.1</a>     | <a href="#">8.4</a>   | <a href="#">8.4-2L1</a> | i4 (Poulson)              | 5                      |
| 7.3.1.3 | Oct 2015                                                                | V7.3-130 | 8.3   | 8.4-x   | <a href="#">.1</a>     | <a href="#">8.3</a>   | <a href="#">8.4-2L1</a> | i4 (Poulson)              | 1                      |
| 7.3.1.2 | Oct 2014                                                                | V7.3-120 | 8.3   | 8.4-x   | <a href="#">.1</a>     | <a href="#">8.3</a>   | <a href="#">8.4-1H1</a> | Tukwila                   | 2                      |
| 7.3.1.1 | Feb 2014                                                                | V7.3-110 | 8.3   | 8.4-x   | <a href="#">.1</a>     | <a href="#">8.2-1</a> | <a href="#">8.4</a>     | Tukwila                   | 1                      |
| 7.3.1.0 | Sep 2013                                                                | V7.3-100 | 8.3   | 8.4-x   | <a href="#">.1</a>     | <a href="#">8.2-1</a> | <a href="#">8.4</a>     | Tukwila                   | None                   |

**Rdb V7.3 is in premier support.**

<sup>1</sup>The ALPHA version is optimized for EV56 or later processors and shown as V7.3-nn1. Older, pre-EV56 processors are not supported.

<sup>2</sup>Minimum OpenVMS for i6 systems is 8.4-2L1

Source: Comprehensive Rdb Versions and Compatibility Matrix (MOS Doc ID 66729.1)

# Oracle Rdb Certifications (cont.)

## Oracle Rdb V7.2

| Release | Release Date | Version  | Alpha |       |                                         | Itanium               |                         |           | <a href="#">Update</a> |
|---------|--------------|----------|-------|-------|-----------------------------------------|-----------------------|-------------------------|-----------|------------------------|
|         |              |          | Min   | Max   | Kits <a href="#">1</a>                  | Min                   | Max                     | Processor |                        |
| 7.2.5.8 | May 2017     | V7.2-580 | 8.2   | 8.4-x | <a href="#">.0</a> / <a href="#">.1</a> | <a href="#">8.2-1</a> | <a href="#">8.4-1H1</a> | i2        | None                   |
| 7.2.5.7 | Aug 2015     | V7.2-570 | 8.2   | 8.4-x | <a href="#">.0</a> / <a href="#">.1</a> | <a href="#">8.2-1</a> | <a href="#">8.4-1H1</a> | Tukwila   | None                   |
| 7.2.5.6 | Apr 2015     | V7.2-560 | 8.2   | 8.4-x | <a href="#">.0</a> / <a href="#">.1</a> | <a href="#">8.2-1</a> | <a href="#">8.4-1H1</a> | Tukwila   | None                   |
| 7.2.5.5 | Jun 2014     | V7.2-550 | 8.2   | 8.4-x | <a href="#">.0</a> / <a href="#">.1</a> | <a href="#">8.2-1</a> | <a href="#">8.4</a>     | Tukwila   | None                   |
| 7.2.5.4 | Feb 2014     | V7.2-540 | 8.2   | 8.4-x | <a href="#">.0</a> / <a href="#">.1</a> | <a href="#">8.2-1</a> | <a href="#">8.4</a>     | Tukwila   | None                   |
| 7.2.5.3 | July 2013    | V7.2-530 | 8.2   | 8.4-x | <a href="#">.0</a> / <a href="#">.1</a> | <a href="#">8.2-1</a> | <a href="#">8.4</a>     | Tukwila   | None                   |

Source: Comprehensive Rdb Versions and Compatibility Matrix (MOS Doc ID 66729.1)

# Oracle CODASYL DBMS Certifications

## Oracle CODASYL DBMS V7.3

| Release | Release Date | Version | Alpha |         |                             | Itanium             |                         |                               | <a href="#">Update</a> |
|---------|--------------|---------|-------|---------|-----------------------------|---------------------|-------------------------|-------------------------------|------------------------|
|         |              |         | Min   | Max     | Kits <a href="#">1</a>      | Min                 | Max                     | Processor                     |                        |
| 7.3.1   | Nov 2013     | V7.3-10 | 8.3   | 8.4-2L2 | <a href="#">8.3/8.4-2L1</a> | <a href="#">8.3</a> | <a href="#">8.4-2L1</a> | i6(Kittson) <a href="#">2</a> |                        |

**DBMS V7.3 is in premier support.**

<sup>1</sup>The ALPHA version is optimized for EV56 or later processors. Older, pre-EV56 processors are not supported.  
<sup>2</sup>Minimum OpenVMS for i6 systems is 8.4-2L1

Source: Comprehensive Rdb Versions and Compatibility Matrix (MOS Doc ID 66767.1)

# Rdb Product Family Releases Over the Past 2 Years

- **RDB 7.3.3.1, Update 1, May, 2019**
- **Rdb 7.3.3.0, Update 3, May, 2019**
- **Oracle ODBC Driver for Rdb V 3.3.2.7, April, 2019**
- **JDBC for Oracle Rdb 7.3.5.2, April, 2019**
- **Rdb 7.3.3.1 , March, 2019**
- **CDD/Repository 7.3.0, March, 2019**
- **Oracle Rdb ODBC 3.3.2.6 , February, 2019**
- **Rdb Connectivity Management, 7.3.4.0, February, 2019**
- **SQL/Service 7.3.2.4, January, 2019**
- **RMU and SQL Reference Manuals, November, 2018**
- Rdb 7.3.3.0 , Update 2, September, 2018
- Rdb 7.3.3.0 , Update 2, September, 2018
- Rdb 7.3.3.0 , Update 1, July, 2018
- Oracle Rdb Extension for SQL Developer 7.3.3, June, 2018
- Rdb 7.3.3.0 , May, 2018
- Oracle Rdb Developer Tools for Visual Studio, 7.3.6.0, March 2018
- Oracle JDBC for Rdb 7.3.5.1, March, 2018
- Rdb 7.3.2.1 , Update 3, November, 2017
- Rdb 7.3.2.1, Update 2, September, 2017
- Oracle JDBC for Rdb 7.3.5, August, 2017

## Rdb 7.2.5.8, May, 2017

- Download from My Oracle Support
  - Patch 26167807 for Itanium
  - Patch 26167817 for Alpha
- Problems fixed in this release include::
  - Unexpected Alignment Faults When Converting Floating Values to Text
  - Unexpected SQL Bugchecks When the Logical RDM\$BIND\_KODA\_DEBUG is Defined
  - Unexpected Bugcheck After an Exception is Reported Inserting LIST OF BYTE VARYING Column
  - Unexpected Bugcheck Generated When NOT LIKE Used With a Literal

# Oracle Rdb 7.3 Releases

- V7.3.1 - September 2013
- V7.3.1.1 - February 2014
  - Update 1, OCT, 2014
- V7.3.1.2 - October 2014
  - Update 1, October, 2014
  - Update 2, January, 2015
  - Update 3, February, 2015
- V7.3.1.3 – September, 2015
  - Update 1 – October, 2015
- V7.3.2 – March, 2016
  - Update 1, May, 2016
  - Update 2, September, 2016
- V7.3.2 – March, 2016 (cont.)
  - Update 3, November, 2016
  - Update 4, March, 2017
- V7.3.2.1, March, 2017
  - Update 1, June, 2017
  - Update 2, September, 2017
  - Update 3, November, 2017
- V7.3.3.0 – May, 2018
  - Update 1, July, 2018
  - Update 2, September, 2018
  - Update 3, May, 2019

# Oracle Rdb 7.3 Releases (cont.)

- V7.3.3.1 – March, 2019
  - Update 1, May, 2019
- V7.3.3.2 – Coming soon

# Rdb 7.3.3.1 Update 1, May, 2018

- Available on My Oracle Support with the following patch set numbers:
  - I64: 29797413
  - Alpha: 29797404
- Problem Fixed
  - Unexpected Routine Call Failure Reporting RDB-E-OBSOLETE\_METADATA
    - Some applications built with the SQL Pre-compiler or the SQL Module Language compiler would fail with an obsolete metadata error.
  - Updated support for RDMS\$BIND\_CODE\_OPTIMIZATION
    - This logical name can be used to enable an optimization on Oracle Rdb systems executing on emulated Alpha hardware.



# Oracle Rdb 7.3.3.1, March, 2019

- Download from My Oracle Support
  - Patch 29514236 for Itanium
  - Patch 29514207 for Alpha
- Emulation Enhancement
  - Boosts performance in the Oracle Cloud and in other emulated environments
- Audit
  - Improved RMU Extract Item=SECURITY to display complete auditing setup DCL script of RMU commands
    - Now generated layout allows larger number of objects and identifiers without exceeding DCL command line length limits
  - CREATE DEFAULT AUDIT, ALTER DEFAULT AUDIT, Drop DEFAULT AUDIT Statements
    - Creates/Alters/Drops a system template object that is used to provide the audit and alarm characteristics for a newly created object of that type.
- CREATE OR REPLACE support to PROFILE, VIEW and SEQUENCE objects

# Oracle Rdb 7.3.3.1, March, 2019 (cont.)

- RMU Load now supports user defined conversion routines
  - Can now associate a user written SQL or external routine to transform the data during RMU Load
- New `/OUTPUT QUALIFIER` to `WRITE OUTPUT` to a `FILE`
  - Backup, Restore, RMU `MOVE_AREA` and `COPY_DATABASE`
  - This qualifier will redirect log output, which can be voluminous, from `SYS$OUTPUT` to the specified file.
- RMU `SHOW STATISTICS LOGICAL AREA STATISTICS` Zoom Menu Fix
  - Problem fixed where starting position of the menu was not adjusted when the Logical Area Statistics screen changed to accommodate terminal page sizes less than 48 rows
- Compression
  - All Backup Data Compression Information is now in the ABS Process Logs
- `UNDECLARE CURSOR` statement for interactive SQL
  - Closes the named cursor, removes the declared cursor name from the known cursor list

# Oracle Rdb 7.3.3.1 Update 1 Available for Download



## **Patch 29797413: ORACLE RDB RELEASE 7.3.3.1 UPDATE 1 (IMV)**

Last Updated 17-May-2019 15:36 (5+ months ago)

Product Oracle Rdb Server on OpenVMS

Release RDB 7.3

Platform HP OpenVMS Itanium

Size 17.8 MB

Download Access Software

Classification General

Patch Tag

### **Bugs Resolved by This Patch**

List of bugs fixed is not available. Consult the Readme.

### **View Related Knowledge to this Patch**

# Oracle Rdb 7.3.3.1 Available for Download

## Patch Details



### Patch 29514236: ORACLE RDB RELEASE 7.3.3.1 (IMV)

Last Updated Mar 21, 2019 9:25 AM (1+ month ago)

Product Oracle Rdb Server on OpenVMS

Release RDB 7.3

Platform HP OpenVMS Itanium

Size 87.8 MB

Download Access Software

Classification General

Patch Tag

## Bugs Resolved by This Patch

List of bugs fixed is not available. Consult the Readme.

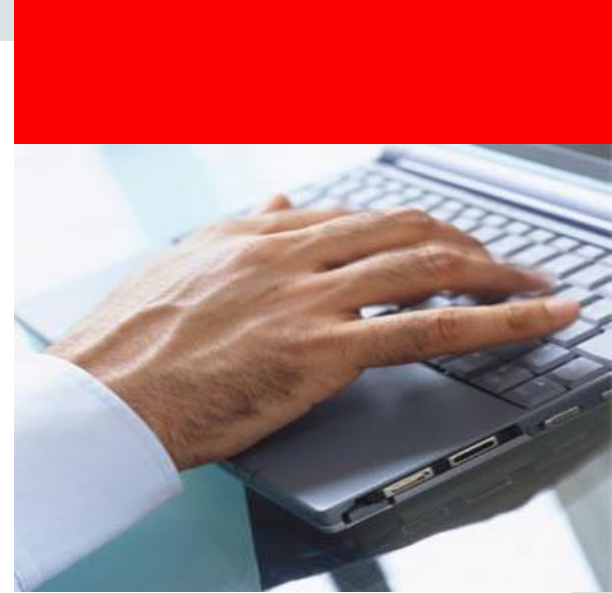
[View Related Knowledge to this Patch](#)

# Rdb 7.3.3.0, Documentation Update

- Now available at <https://www.oracle.com/technetwork/database/database-technologies/rdb/documentation/index.html>
- Rollup release notes to RDB\_NEWFEATURES document
  - Included on each kit (.pdf, .txt, .ps)
  - SYS\$HELP:RDB\_NEWFEATURES\_73xx.PDF
- Rollup new features into documentation
  - Revised SQL Reference Manual \*\* Released November, 2018
  - Revised RMU Reference Manual \*\* Released November, 2018
- Generated new HELP for RMU and SQL

# Connectivity: Most Recent Releases

- Oracle SQL/Services
- OCI Services for Oracle Rdb
- Oracle ODBC Driver for Rdb
- Oracle JDBC for Rdb
- Oracle Rdb Connectivity Management (ORCM)
- Oracle Rdb Developer Tools (ORDT)



# Oracle SQL/Services and OCI Services 7.4.0, May, 2019

- Support for Oracle 11g Libraries and Oracle 11g Oracle Net Protocol
- OCI Authentication without LDAP
  - Users are defined in the USER\$ table
  - We store an encoded password (different encoding to that used by OpenVMS and LDAP servers)
  - This password is used to authenticate with the Oracle server
  - RDB\$NATCONN\_CUPP Utility used to add, modify, remove, and show users enabled for OCI access and to sync with updated VMS passwords
- OCI Authentication with LDAP
  - Specify the password "GLOBAL", indicates (as it does for Oracle users) that authentication will be done using LDAP
  - Users with the password "GLOBAL" in the USER\$ table will be authenticated using the LDAP directory defined in LDAPACME\$INIT, the same LDAP directory used by Rdb for external authentication

# Oracle SQL/Services and OCI Services 7.3.2.4, January, 2019

- Download from My Oracle Support
  - Patch 29259482 for Itanium
  - Patch 29259511 for Alpha
- SQL Services Authentication using LDAP Username/Password
  - Creation of Executor using service owner with LDAP credentials
- OCI time zone compatibility fix
  - Issue occurred because Rdb does NOT support Oracle time and timestamp data types with time zone
- Added 'DECLARE TRANSACTION'
  - Databases with "SECURITY IS INTERNAL" could not be prepared for OCI Services without it.
- Allowed Oracle conversion functions to be run without OCI Services.
  - Functions are: TO\_CHAR, TO\_DATE, TO\_NUMBER, TO\_ROWID, ROWID\_TO\_CHAR, TO\_TIMESTAMP, DATE\_ROUND, DATE\_TRUNC



# Oracle SQL/Services and OCI Services 7.3.2.4 (Cont.)

- MLOG\$ and V\$LICENSE tables
    - Added these tables as part of PREPARE in response to a customer bug where MS SQL/Server 2016 using SSMA utility didn't connect because these 2 tables were missing
  - MLOG\$ Information about activity related to materialized views
  - V\$LICENSE Information about current limits of license settings, number of sessions, maximum number of users, cpu and cpu core counts
- \* NOTE: Neither Rdb nor OCI Services inserts rows into either of these tables

# Oracle ODBC Driver for Rdb 3.3.2.7, April, 2019

- Download from My Oracle Support
  - Patch 29630527 (64 bit)
  - Patch 29630509 (32 bit)
- Fix for an unexpected error with the Microsoft OLEdb driver
- Fix for an invalid handle error returned from SQLSetDescField

# Oracle ODBC Driver for Rdb 3.3.2.6, February, 2019

- Download from My Oracle Support
  - Patch 29356646 (64 bit)
  - Patch 29356626 (32 bit)
- New Help File
- Workaround for OpenText BIQuery (Memory Access Violation when SQLSetStmtAttr(SQL\_ATTR\_MAX\_LENGTH) is set to 4294967295)
- Functionality to redirect ODBC driver logs to a specific location

# Oracle JDBC for Rdb 7.3.5.2, April, 2019

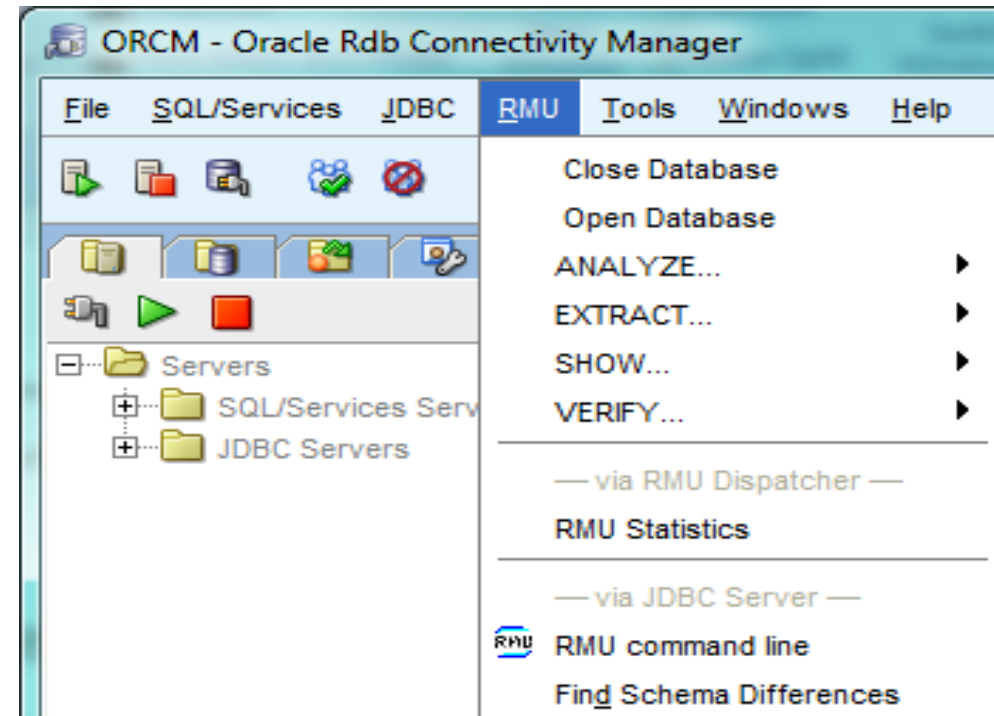
- Download from My Oracle Support
  - Patch 29623931 for Itanium
  - Patch 29623919 for Alpha
- Features
  - A new connection option `suppressAddingDbkey`
  - The various log names used by the JDBC server have been expanded to include the node name where the respective JDBC server was started.
  - The server log file is now unlocked by default, allowing it to be read while the server is running. Prior to this release the file was always locked. You can choose to revert to 'locked' as the default if desired.
- Bug Fixes (partial list):
  - ACCVIO during MP Server shutdown
  - Manager Server fails to Respond to Poll Request

# Oracle JDBC for Rdb 7.3.5, August, 2017

- Download from My Oracle Support
  - Patch 26630544 for Itanium
  - Patch 26630533 for Alpha
- Features
  - JAVA 8.0 support on Integrity Systems
  - Versioned JDBC driver jars
  - Change in SQL/Services JDBC Dispatcher naming
  - Changes to SHIFT\_JIS JAVA encoding
- Bug Fixes:
  - Small Memory leak with GetTables()
  - DEFAULTSSL definition not inherited
  - Incorrect value for Client and Executor Free Shared Memory

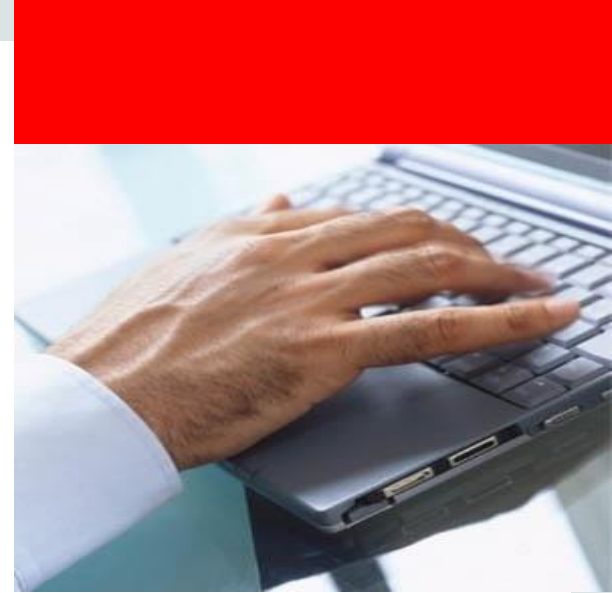
# ORCM 7.3.4.0, February, 2019

- Download from My Oracle Support
  - Patch 29323748 for Windows
  - Patch 29323755 for Generic Kit
- Features
  - Oracle Trace Player – New!
    - Replay trace data
  - New RMU Menu category
  - RMU Statistics
  - Find Schema Differences
  - External Tool Enhancements
- Bug Fixes:
  - See release notes



# Oracle Rdb Developer Tools

- 7.3.6, March, 2018
  - Available for download from My Oracle Support
    - Patch 27647428
    - Also available on OTN at:  
<http://www.oracle.com/technetwork/database/database-technologies/rdb/downloads/othersoft-087176.html>.
  - Features:
    - Visual Studio 2017 Integration
  - Bugs Fixed
    - Entity Framework6 internal SQL queries returning string truncation error



# Other Oracle Rdb Family Products: Latest Versions

- Oracle CDD/Repository
- Oracle Rdb Extension for SQL Developer





# Oracle CDD/Repository 7.3.0.0, March, 2019

- Available on My Oracle Support
  - Patch 29442602 for Itanium
  - Patch 29442614 for Alpha.
- Features:
  - Can now integrate into CDD a database that has been prepared for OCI Services
    - added support for Join Clauses in a relational selection expression
    - added support for Value List Expressions
  - Coalesce
    - returns the first non-NULL value from a series of value expressions; otherwise, returns NULL
- Problems Fixed:
  - See Release Notes

# Oracle Rdb Extension for SQL Developer Release 7.3.3.0, June, 2018

- Download from My Oracle Support
  - Patch 28135854 (under Generic Platform)
- Features
  - Allows you to run with SQL Developer 17.4.0.355 and 4.1.3
- Requirements:
  - Oracle JDBC for Rdb release 7.3.4.0.4

# Oracle Rdb: What's Under Development

# Oracle Rdb 7.3.3.2 – New Features

- New PCSI Support for Rdb Kit Installation and Deinstallation
  - Will allow use of PCSI PRODUCT SHOW HISTORY and PRODUCT SHOW PRODUCT commands
- Updated Support for RDMS\$BIND\_CODE\_OPTIMIZATION
  - All generated code now stored in separate read-only code pages
- DUPLICATES ARE NOT ALLOWED Clause Added to ALTER INDEX Statement
- New RMU/SET\_DATABASE Qualifier /ACCESS=[UN]RESTRICTED
- New RMU Verify Validate Qualifier for FLOAT Data Type Error
- New /ABORT Qualifier for the RMU/SET DATABASE Command
- Smaller After Image Backup Files

# Oracle Rdb 7.3.3.2 – Bugs Fixed

- RCS Bugchecks in DIO\$LACB\_AIP\_ENT\_REFRESH After Drop Table or Index
- Unexpected Routine Call Failure Reporting RDB-E-OBSOLETE\_METADATA.
- Unable to DECLARE a LIST CURSOR When Table Cursor Renames the Columns
- Unexpected Value in SQLCHRONO\_SCALE When SQLDA2 is Reused
- Possible Wrong Result Returned From Aggregate Subselect Clauses
- Unexpected SYSTEM-F-ACCVIO When Processing Complex Query
- Unexpected Ordering of Fields in Extract Records From RMU Extract
- Unexpected Corrupted Files From NFS (TCPIP) Mounted Device
- Unexpected Data Type of Fields in Extract Records From RMU Extract

# Database Vault

- Changes the way Rdb handles OpenVMS privileges
- `ALTER DATABASE ...  
DATABASE VAULT IS ENABLED;`
- Requires SECURITY privilege to enable
- No longer inherit overrides from current system user
- **\*WARNING\*** Ensure there is a SECURITY user defined in the database because once DATABASE VAULT is enabled you can not use a OpenVMS privilege to change it externally

# Oracle Trace 7.3.0

- Updating the BLR translator to the 7.3.3 BLR level
  - Will allow Trace to understand new features such as the Trim and Rtrim functions
- Bug Fix: Error condition that wasn't handled correctly when an RUJ file could not be accessed or was improperly specified.
  - Result was a an ACCVIO and Bugcheck

# Oracle Replication Option (ROR) 7.3.0

- Bringing ROR up-to-date with new Rdb 7.2 and 7.3 features
  - Currently some tables can't be replicated due to lack of support for features such as Identity Columns



# Oracle Message Queue Update

- OMQ 5 on OpenVMS 8.4-2L1 (IA) Certified (October, 2019)
- OMQ 5 on OpenVMS 8.4-2 (IA) Certified (August, 2016)
- See [http://docs.oracle.com/cd/E17973\\_01/platforms/mqplatforms/mqplats/mqplats.html#wp1087062](http://docs.oracle.com/cd/E17973_01/platforms/mqplatforms/mqplats/mqplats.html#wp1087062)

# QUESTIONS & ANSWERS

# Training Partner List

- **Europe, Asia, Middle East and Africa**

- VX Company

- Baarn, The Netherlands

- <http://www.vxcompany.com/rdbtrainingcourses>



- **Americas**

- JCC Consulting, Inc.

- Granville, Ohio, United States

- <http://www.jcc.com/>



- **Oracle CODASYL DBMS Worldwide**

- Software Concepts International

- Nashua, New Hampshire, United States

- <http://www.sciinc.com/>



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