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# Oracle Database on OpenVMS and Oracle Rdb Product Family Update

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Oracle Database on OpenVMS and Oracle Rdb  
Engineering

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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.

# Ordre du Jour

- Working with VSI and HPE
- Oracle Database sur VMS Mise à Jour
  - Support Dates
  - Plan de Route
- Oracle Rdb Mise à Jour
  - Support Dates
  - Recent Releases
  - What's Under Development
  - Plan de Route

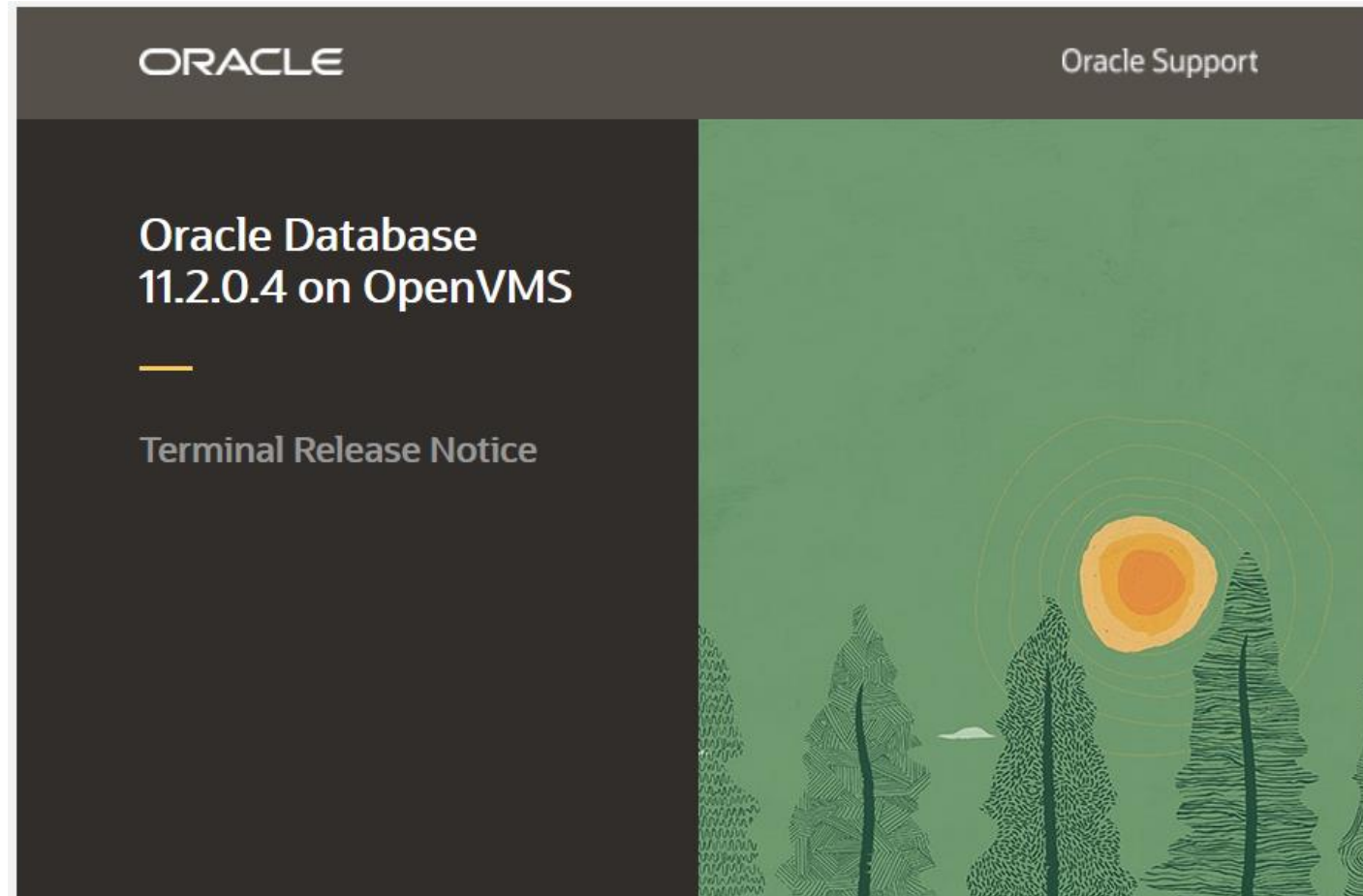
# Working with VSI and HPE

- Oracle remains in close contact with VSI
  - In resolution of customer issues
  - Oracle OpenVMS dependencies
  - Development Projects (e.g. x86 Cross Tools)
  - Quarterly meeting with VSI on the x86 port
    - Frequent other communications day-to-day
- As needed communication with HPE

# 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](#)

# 11.2.0.4 as Terminal Release On OpenVMS Announced in October 2020



# Oracle 11.2.0.4 OpenVMS Support

- 11.2.0.4 Extended Support ended December 31, 2020
  - OpenVMS was covered under and ES fee waiver until this then
  - See Software Technical Support Policies (<http://www.oracle.com/us/support/library/057419.pdf>)
    - section on ‘Exceptions for customers with a current support contract running’
- Patch Support continued for Calendar Year 2021
  - P1 and Security fixes only
  - No extra fees beyond Premier Support costs
- Indefinite Sustaining Support After 2021
  - Access to all prior patches + problem resolution and work arounds



# Oracle 11.2.0.4 Market Driven Support

- 2 year program (2021-2022)
  - Now extended to end of 2023 for approved customers
- P1 and Security patches
  - See <https://www.oracle.com/a/ocom/docs/ds-mds-database-11g-r2.pdf>
- MDS fees apply
- OpenVMS not currently part of MDS
  - If interested please contact us

# Oracle 11g OpenVMS Patch Set Updates (PSUs)

- 11.2.0.4.211019DBPSU – October 2021
- 11.2.0.4.210720DBPSU – July 2021
- 11.2.0.4.210420DBPSU – April 2021
- 11.2.0.4.210119DBPSU – January 2021
- 11.2.0.4.201020DBPSU – October 2020
- 11.2.0.4.200714DBPSU – July 2020
- 11.2.0.4.200414DBPSU – April 2020
- 11.2.0.4.200114DBPSU – January 2020

# 11.2.0.4.211019DBPSU on MOS



## Patch 33128584: DATABASE PATCH SET UPDATE 11.2.0.4.211019

Last Updated 20-Oct-2021 23:57 (25 days ago)

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

Release Oracle 11.2.0.4.0

Platform HP OpenVMS Itanium

Size 204.8 MB

Download Access Software

Classification General

Patch Tag

### 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](#)

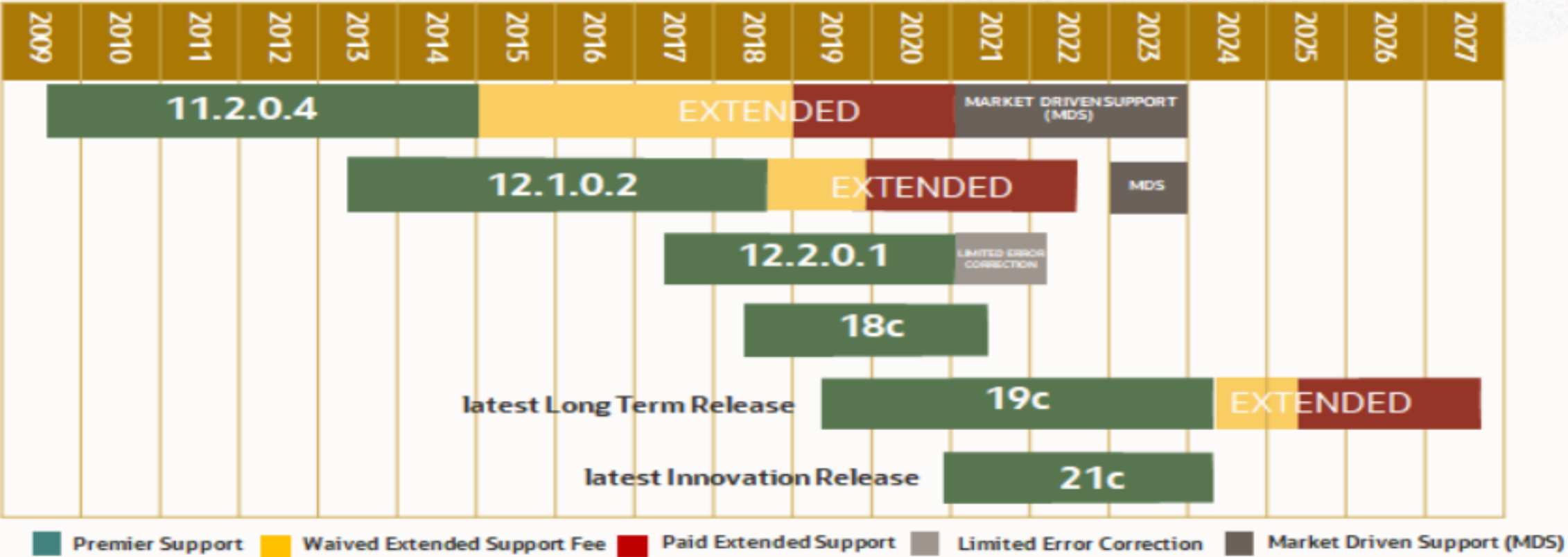
[Open Readme to View all Bugs](#)

# 11g Certifications on VSI OpenVMS Versions

- Itanium (i6)
  - 8.4-2L3
  - 8.4-2L1
- Itanium (i4 and i2)
  - 8.4-2L3
  - 8.4-2L1
  - 8.4-2
  - 8.4-1H1

# Currently Published Oracle Database Support Dates (DOC ID 742060.1)

## Database Releases and Support Timelines



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

Client Version	Server Version						
	21c	19c	18c	12.2.0	12.1.0	11.2.0	11.1.0
21c	Yes	Yes	Was	Was	Was	No	No
19c	Yes	Yes	Was	Was	Was	Yes <sup>#9</sup>	No
18c	Was	Was	Was	Was	Was	Was	No
12.2.0	Was	Was	Was	Was	Was	Was	No
12.1.0	Was	Was	Was	Was	Was	Was	Was
11.2.0	No	Yes <sup>#9</sup>	Was	Was	Was	Yes <sup>#9</sup>	Was
11.1.0	No	No	No	No	Was	Was	Was

## Key:

<b>Yes</b>	Supported
<b>ES</b>	Supported but fixes only possible for customers with Extended Support.
<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

# Oracle Database on OpenVMS 11.2.0.4 Roadmap

Development Stream

H1CY2023

H2CY2023

H1CY2024

H2CY2024

11g



# 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 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
7.4	Aug 2020	Dec 2025	Not Available	Indefinite

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

# Rdb Product Family Lifetime Support Dates

## Oracle **CODASYL** DBMS Database Release

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
7.4	Nov 2021	Dec 2025	Not Available	Indefinite

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

# Oracle Rdb Certifications

## Oracle Rdb Product Family Compatibility Matrix

RDB	SQL/Services	CODASYL DBMS
JDBC	ODBC	CDD/R
Trace	Replication Option	OEM

### Oracle Rdb

Version	Architecture	Release		OpenVMS Version		Processor Minimum	Status
		Number	Date	Minimum	Maximum		
7.4	Itanium	7.4.1.2	8-Aug-2022	8.4	8.4-x	All	Shipping
		7.4.1.0	10-Aug-2020	8.4	8.4-x	All	Superceded
	Alpha	7.4.1.2	8-Aug-2022	8.4	8.4-x	EV56	Shipping
		7.4.1.0	10-Aug-2020	8.4	8.4-x	EV56	Supercede

Source: <https://www.oracle.com/database/technologies/related/rdb-pmatrix.html#rdb>

# Oracle Rdb Certifications (continued)

7.3	Itanium	7.3.3.2.0	25-Nov-2019	8.4	8.4-x	All	Shipping
		7.3.3.1.0	21-Mar-2019	8.4	8.4-x	All	Superseded
		7.3.3.0.0	29-May-2018	8.4	8.4-x	All	Superseded
		7.3.2.1.0	16-Mar-2017	8.4	8.4-x	All	Superseded
		7.3.2.0.0	15-Mar-2016	8.4	8.4-x	All	Superseded
		7.3.1.3.0	10-Sep-2015	8.3	8.4-x	All	Superseded
		7.3.1.2.0	8-Oct-2014	8.3	8.4-x	All	Superseded
		7.3.1.1.0	24-Feb-2014	8.3	8.4-x	All	Superseded
		7.3.1.0.0	23-Sep-2013	8.3	8.4-x	All	Superseded
		7.3.0.0.0	10-Mar-2011	8.3	8.4-x	All	Superseded
	Alpha	7.3.3.2.0	25-Nov-2019	8.4	8.4-x	EV56	Shipping
		7.3.3.1.0	21-Mar-2019	8.4	8.4-x	EV56	Superseded
		7.3.3.0.0	29-May-2018	8.4	8.4-x	EV56	Superseded
		7.3.2.1.0	16-Mar-2017	8.4	8.4-x	EV56	Superseded
		7.3.2.0.0	15-Mar-2016	8.4	8.4-x	EV56	Superseded
		7.3.1.3.1	5-Oct-2015	8.3	8.4-x	EV56	Superseded
		7.3.1.2.1	8-Oct-2014	8.3	8.4-x	EV56	Superseded
		7.3.1.1.1	24-Feb-2014	8.3	8.4-x	EV56	Superseded
		7.3.1.0.1	23-Sep-2013	8.3	8.4-x	EV56	Superseded
		7.3.0.0.1	10-Mar-2011	8.3	8.4-x	EV56	Superseded

Source: <https://www.oracle.com/database/technologies/related/rdb-pmatrix.html#rdb>

# CODASYL DBMS Certifications

Oracle CODASYL DBMS

Version	Architecture	Release		OpenVMS Version		Status
		Number	Date	Minimum	Maximum	
7.4	Itanium	7.4.1.0	16-Nov-2021	8.4	8.4-x	Shipping
	Alpha	7.4.1.0	16-Nov-2021	8.4	8.4-x	Shipping
7.3	Itanium	7.3.3.0	5-Aug-2021	8.3	8.4-x	Shipping
		7.3.1.0	7-Nov-2013	8.3	8.4-x	Superseded
	Alpha	7.3.3.0	5-Aug-2021	8.3	8.4-x	Shipping
		7.3.1.0	7-Nov-2013	8.3	8.4-x	Superseded

Source: <https://www.oracle.com/database/technologies/related/rdb-pmatrix.html#rdb>

# Rdb Product Family Releases Over the Past 2 Years

- **Rdb 7.4.1.2, August 2022**
  - **CODASYL DBMS 7.4.1.0, November 2021**
  - **CODASYL DBMS 7.3.3.0, August 2021**
  - Rdb 7.4.1.1, April 2021
  - Rdb 7.3.3.2 Update 1, December 2020
  - Oracle SQL/Services and OCI Services for Oracle Rdb 7.4.0.0 Update 2, December 2020
  - Oracle SQL/Services and OCI Services for Oracle Rdb 7.3.3.4 Update 2, December 2020
- Rdb 7.4.1.0, August 2020
  - Oracle SQL/Services and OCI Services for Oracle Rdb 7.4.0.0 Update 1, August 2020
  - Oracle SQL/Services and OCI Services for Oracle Rdb 7.3.3.4 Update 1, August 2020

# Rdb 7.4.1.2, August 2022

- Available on My Oracle Support with the following patch set numbers:
  - I64: 34461986
  - Alpha: 34462029
- New Features (partial list)
  - Substring Function Changes
  - Support for EMPTY\_BLOB and EMPTY\_CLOB in SQL
  - Updated Diagnostics for the RMU REPAIR Command
  - Updated Diagnostics for the RMU MOVE\_AREA Command
  - Hash Join Enhancements and Support



## Rdb 7.4.1.2 New Features :

- Substring Function Changes
  - Oracle Rdb now provides native versions of the functions SUBSTR and SUBSTRB
    - Previously provided as external functions in the SQL\_FUNCTIONSnn.SQL script
  - Now accept CHAR and VARCHAR strings up to 65535 octets in length
    - Previously limited to CHAR and VARCHAR inputs of 2000 characters
  - Changes result in much lower virtual memory usage and better run-time performance for queries.
  - Applications using ORACLE dialects (such as those using OCI Services for Rdb) should expect a considerable reduction in query size

## Rdb 7.4.1.2 New Features (continued):

- New SQL functions EMPTY\_BLOB and EMPTY\_CLOB added
  - Return an empty handle that can be used to initialize a LIST OF BYTE VARYING variable or column
  - An EMPTY indication means that the LIST is initialized, but not populated with data.
  - Example:

```
SQL> alter table EMPLOYEES
cont>     add column BADGE_PHOTO list of byte varying
cont> ;
SQL>
SQL> update EMPLOYEES
cont>     set BADGE_PHOTO = empty_blob ();
101 rows updated
SQL>
```

## Rdb 7.4.1.2 New Features (continued):

- Updated Diagnostics for the RMU REPAIR Command
  - RMU Repair command has been updated to output improved messages when changes are made to the database
  - Only output if After Image Journaling is enabled for the
  - Example:

```
$ RMU/REPAIR/ABM MF PERSONNEL  
%RMU-W-FULLAIJBKUP, partially-journaled changes made; database may not  
be recoverable  
%RMU-W-DOFULLBCK, full database backup should be done to ensure future recovery
```

## Rdb 7.4.1.2 New Features (continued):

- Updated Diagnostics for the RMU MOVE\_AREA Command
  - RMU MOVE\_AREA command has been updated to output improved messages when changes are made to the database
  - Warns the user that the actual move of database files to another device or directory is not journaled
  - Example:

```
$ RMU/MOVE_AREA /ROOT=disk:[directory] /NOLOG MF_PERSONNEL
%RMU-W-FULLAIJBKUP, partially-journaled changes made; database may not
    be recoverable
%RMU-I-AIJRSTAVL, 1 after-image journal available for use
%RMU-I-AIJRSTMOD, 1 after-image journal marked as "modified"
%RMU-I-AIJISON, after-image journaling has been enabled
%RMU-W-DOFULLBCK, full database backup should be done to ensure future
    recovery
```

## Rdb 7.4.1.2 New Features (continued):

- Hash Join Enhancements and Support (Beta)
  - Table joins are typically solved using a mix of index and sorting strategies
    - There may not be any suitable index to use resulting in the solution selected by the optimizer requiring an extra sorting step
  - Hash Join eliminates the need to sort data by using an in-memory hash table to filter the join data
  - Changes for this release:
    - Reduced CPU usage during Hash Join operation
    - Relaxed restrictions when Hash Join is using sequential retrieval
    - Improved FULL OUTER JOIN support
    - Improved diagnostics reported when Hash Join is rejected

## Rdb 7.4.1.2 – Bugs Fixed (partial list)

- The RMONSTART74.COM procedure failed to restart the RDBSERVER Service on reboot
  - Erroneously omitted from the Oracle Rdb V7.4.1 and V7.4.1.1 releases
- Unexpected ACCVIO and BUGCHECK dumps for some queries on Integrity servers
- Unexpected COSI-F-EXQUOTA error using buffer objects
  - Occurred when many data page updates were being written to disk concurrently
- Errors from disk writes resulting in a hang
  - An I/O intensive application would sometimes hang in Oracle Rdb in LEF state if an error was encountered when writing data page buffers to disk
- The RMU Backup Parallel SERVER\_TRANSPORT option not working as documented
  - When not set the default is to first use DECnet transport and then re-try using TCP/IP upon failure
  - SERVER\_TRANSPORT allows the choice between DECNET or TCPIP (e.g. SERVER\_TRANSPORT=TCPIP)

# Oracle Rdb 7.4.1.2 Available for Download

## Patch Details



### **Patch 34461986: ORACLE RDB RELEASE 7.4.1.2.0 (IMV)**

Last Updated 08-Aug-2022 20:01 (1+ month ago)

Product Oracle Rdb Server on OpenVMS

Release Oracle Rdb Server 7.4

Platform HP OpenVMS Itanium

Size 89.7 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](#)

# CODASYL DBMS 7.4.1.0, November 2021

- Available on My Oracle Support with the following patch set numbers:
  - I64: 33539679
  - Alpha: 33539668
- New Features
  - POLYCENTER Software Installation (PCSI) registration support.
  - New DBO/RECOVER /PROGRESS\_REPORT qualifier and Ctrl/T display
  - Oracle CODASYL DBMS timer queue limit increased
  - Changed Behavior for the NOEDIT\_FILENAME qualifier in DBO/BACKUP /AFTER\_JOURNAL command
  - Correction to an unexpected change to After Image Journal BACKUP behavior when using the DBO /MODIFY /AIJ\_OPTIONS keyword BACKUP=NONAME
  - If necessary, DBO/MODIFY /JOURNAL\_OPTIONS=ROTATE may create an emergency AIJ
  - DBO/MOVE\_AREA adds /LIVE, /NOLIVE and /NOSNAPSHOTS qualifiers



# CODASYL DBMS 7.4.1.0, November 2021

- Bugs Fixed
  - DBO/BACKUP /AFTER /NOEDIT\_FILENAME Still Applying Edit String
  - Unexpected "Improperly handled condition" Reported by DBO /RESTRUCTURE Command

# CODASYL DBMS 7.4.1.0 Available for Download



## **Patch 33539679: ORACLE CODASYL DBMS 7.4.1.0 FOR OPENVMS ITANIUM**

Last Updated 16-Nov-2021 16:30 (1+ hour ago)

Product Oracle CODASYL DBMS

Release Oracle CODASYL DBMS 7.4.1.0.0

Platform HP OpenVMS Itanium

Size 67.8 MB

Download Access Software

Classification General

Patch Tag

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

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

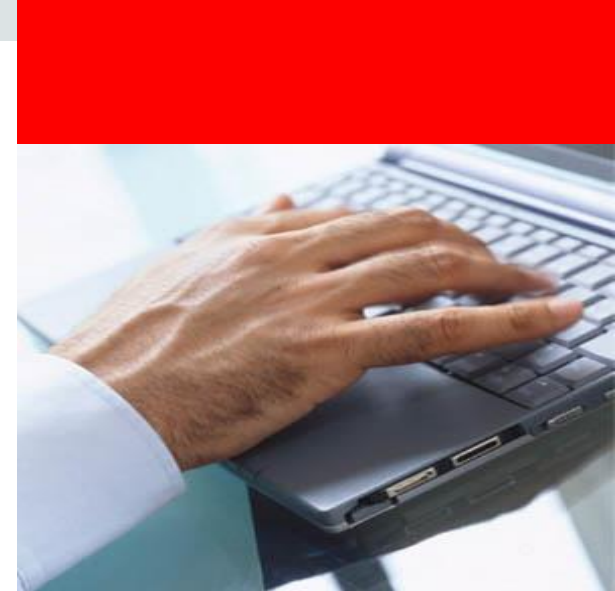
### **View Related Knowledge to this Patch**

# Rdb Documentation Update

- Documentation available at <https://www.oracle.com/database/technologies/related/rdb-doc.html>
- Rollup release notes to RDB\_NEWFEATURES document
  - Included on each kit (.pdf, .txt, .ps)
  - SYS\$HELP:RDB\_NEWFEATURES\_74xx.PDF
  - Oracle Rdb New Features, Release 7.4.x.x, July 2022
- Rollup new features into documentation
  - Revised SQL Reference Manual, September 2021
  - Revised RMU Reference Manual, July 2022
  - Oracle SQL/Services Server Configuration Guide, Release 7.4.0.0, August 2021
  - Guide to Using the Oracle SQL/Services Client API, Release 7.4.0.0, August 2021
- 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 7.4.0.0 and 7.3.2.4 Update 2, December 2020

- Download from My Oracle Support
  - Patch 32215099 for 7.4.0.0 Itanium
  - Patch 32215112 for 7.3.2.4 Itanium
  - Patch 32215130 for 7.3.2.4 Alpha
- Features:
  - Support Added for Oracle Rdb 7.4
    - The OCI Services dictionary prepare and upgrade utility, RDB\$NATCONN\_DIC74, has been updated to support Oracle Rdb 7.4
- Bug Fixes:
  - Oracle JDBC 19C when used with Oracle Rdb OCI Services didn't return data if there were fewer than 10 rows being returned in response to a SELECT.
    - OCI Services now returns the correct values and JDBC 19C recognizes the rows that are returned.

# Oracle SQL/Services and OCI Services 7.4.0.0 and 7.3.2.4 Update 1, August 2020

- Download from My Oracle Support
  - Patch 31721586 for 7.4.0.0 Itanium
  - Patch 31721634 for 7.3.2.4 Itanium
  - Patch 31721651 for 7.3.2.4 Alpha
- Features:
  - Support Added for Oracle Rdb 7.4
    - The OCI Services dictionary prepare and upgrade utility, RDB\$NATCONN\_DIC74, has been updated to support Oracle Rdb 7.4

# 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 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



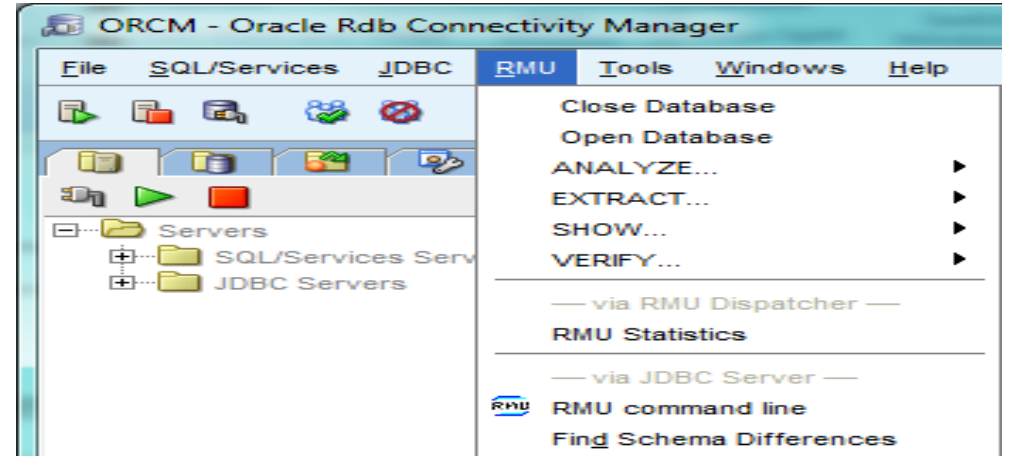
# ORCM 7.3.4.1, June 2020

- Download from My Oracle Support

- Patch 31542398 for Windows
- Patch 31542407 for Generic Kit

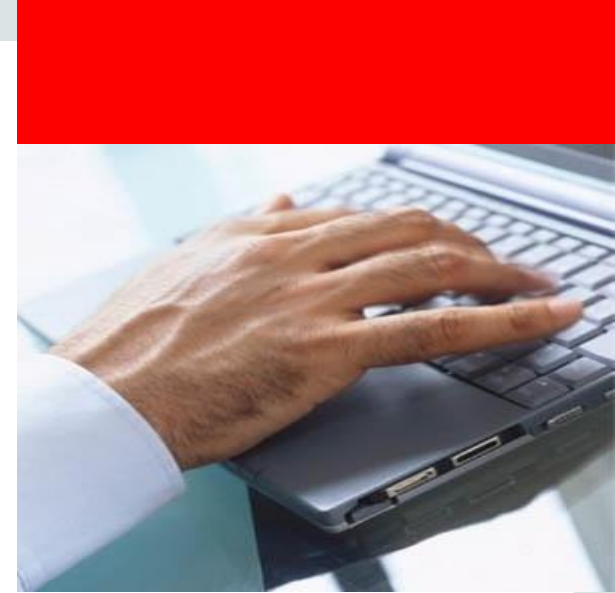
- Problems Fixed (Partial List)

- NullPointerException when Cancelling Remote Tool action
- External Tools with Missing Parameter Format clause
- Rename JDBC Server problem
- Parameters Not Displayed when Editing External Tool
- Event Triggers Deviation and Threshold value Problem
- Create Oracle Trace Threshold problem
- Adding a Port to a SQL/Services Dispatcher
- Incorrect configuration file chosen for update of tool definition



# Oracle Rdb Developer Tools

- 7.4, May 2020
  - Available for download from My Oracle Support
    - Patch 31303758
  - New Features:
    - Windows 64 Bit Support
  - Bugs Fixed
    - See Release Notes



# 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

# What's Under Development

# Next Rdb Versions

- Rdb and DBMS X86 Beta kits
- CDD 7.4
- Trace 7.4

# Oracle CODASYL DBMS x86 Port

- Has been a prime focus of our X86 port
- 7.4 Environment Established
- Have been building successfully with the XTools
- In development and test
- Significant amount of code path now running on x86
  - Create databases is successful
  - Have successfully started the DBMS Monitor and executed a DBO SHOW command
- VLM ported code now in test! (PTE differences on x86 have been resolved)
- Need native Fortran and Cobol compilers for many tests
- Targeted for first x86 Beta



# Oracle CODASYL DBMS – Database Open with VLM Enabled

```
RDB861>dbo /mon start
```

```
RDB861>dbo /open parts
```

```
RDB861>dbo /show users
```

```
Oracle CODASYL DBMS X7.4-00 on node RDB861 7-DEC-2022 10:10:59.27  
- monitor started 7-DEC-2022 10:10:31.00 (uptime 0 00:00:28)  
- monitor log filename is "SYS$SYSROOT:[SYSEXE]DBMMON741.LOG;14"
```

```
database $1$DGA17:[DBMREG.TESTRUN.V74_MJN_DBOGLOBUF]PARTS.R00;10  
- opened 7-DEC-2022 10:10:37.82 (elapsed 0 00:00:21)  
* database is opened by an operator  
- global buffer count is 100; 100 global buffers free  
- maximum global buffer count per user is 10  
- global buffers reside in VLM
```

# Oracle Rdb x86 Port

- 7.4 Environment Established
- 7.4 x86 test changes completed
- Port of the Test System completed and now running on our x86 systems
- Running V9.2 Update 2
- Full Builds Successful
  - Link issues recently resolved with VSI
  - Cross Compilations Completed
    - COSI, KODA, Rdb, SQL, RDO, RMU
- RDO and SQL Running
- Implemented a 64 bit version of exeinterp.c
- Runtime Testing Underway
  - Monitor running
  - Runtime debugging – user mode images

# Oracle Rdb x86 Port – Monitor Started

```
$ rmu/mon start
$ pipe show sys | search sys$input moni
240005CB RDMS_MONITOR741 LEF      15      69      0 00:00:00.07      494      684
$ rmu/show users
Oracle Rdb X7.4-00 on node RDB862 29-SEP-2022 15:48:11.12
  - monitor started 29-SEP-2022 15:48:03.84 (uptime 0 00:00:07)
  - monitor log filename is "SYS$SYSROOT:[SYSEXE]RDMMON741.LOG;1"
  - no databases are accessed by this node
$ rmu/show version db$:personnel
Executing RMU for Oracle Rdb X7.4-00 on OpenVMS x86_64 E9.2
Database BLUGUM_1:[SMITHI.DATABASES.V74]PERSONNEL.RDB;1 requires version 7.4
$ rmu/open db$:personnel
$ rmu/show users
Oracle Rdb X7.4-00 on node RDB862 29-SEP-2022 15:50:34.79
  - monitor started 29-SEP-2022 15:48:03.84 (uptime 0 00:02:30)
  - monitor log filename is "SYS$SYSROOT:[SYSEXE]RDMMON741.LOG;1"

database $1$DGA170:[SMITHI.DATABASES.V74]PERSONNEL.RDB;1
  - opened 29-SEP-2022 15:50:29.73 (elapsed 0 00:00:05)
  * database is opened by an operator
```

# Oracle Rdb x86 Port - issues we have worked on with VSI

- User Mode Images Crashing the System
  - VSI known problem
  - Provided us with a SYS\$VM execlet, same fix in the 9.2 update 2 kit
- Exec Mode System Crashes
- C++
  - Resolved linking issue
  - Waiting to see results of run-time testing
- Macro32 bug
  - We now have a workaround
- Bliss bug
  - We now have a workaround

# Oracle Rdb x86 Port – Some Current Issues Seen in Testing

- Accvios
- Results showing as 0 when it should be another value
- Pthread issue - opened a bug with VSI
- XA/2PC not working

# Other Oracle Rdb Product Family x86 Porting Underway

- CDD
  - Building cleanly with XTools, have built a 7.4 kit
  - CDD needs Rdb to run
  - Using Remote CDD for DBMS testing
- Oracle Trace
  - Building cleanly with Xtools, have built a 7.4 kit
- Oracle SQL/Services & OCI Services for Oracle Rdb
  - Project underway to build x86 version of needed OCI libraries
- Oracle Replication Option
  - Compiling

Q U E S T I O N S  
&  
A N S W E R S

# 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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