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# Oracle Rdb Connectivity Update

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# Safe Harbor Statement

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# Program Agenda

- 1 SQL/Services update
- 2 Oracle JDBC for Rdb update
- 3 Oracle Rdb Developer Tools for Visual Studio update
- 4 Oracle Rdb Connectivity Management update




# Oracle SQL/Services and OCI Services for Oracle Rdb

# SQL/Services

- Release 7.3.2.0
  - Released November 2013

Available on My Oracle Support





# Oracle SQL/Services and OCI Services for Oracle Rdb Release 7.3.2.0

# Oracle SQL/Services 7.3.2.0

## New Features

- Now Emulates the Oracle 10.2.0.5 SQL\*Net
- Updated documentation
  - Server Configuration Guide
  - Guide to using the Oracle SQL/Services Client API
- Updated help
  - SQLSRV\_MANAGE
  - SQL\_SERVICES73
- Updated 32-bit & new 64-bit API kits for Linux
- Desupport of HP Tru64 Unix Platform



# Oracle SQL/Services 7.3.2.0

## New Features (cont.)

- Windows Client API kit updated
  - Supports Windows 8 (32 and 64 bit)
  - Windows 2000 platform is no longer supported
  - NOTE: Oracle SQL/Services IVP fails
    - \*\*\*\*\* Oracle SQL/Services IVP Error \*\*\*\*\*
    - SQLCA: SQLCODE: -2012
    - SQLERRD[0]: 13 SQLERRD[2] 0
  - Workaround in release notes

# OCI Services 7.3.2.0

## New Features

- Oracle 10.2.0.5 Library Support
- Retries for Preparing or Upgrading a Database
  - SQLNET\_DIC\_RETRY\_COUNT
  - SQLNET\_DIC\_RETRY\_PAUSE
- OCI Logging enhancements
  - 2 new OCI Services debug flags B and Y

# OCI Services 7.3.2.0

## Problems corrected

- ALTER SESSION REMOTE\_DEPENDENCIES

- Insert Returning into a Variable

- With limitations

OK

```
insert into tab1 (id,name) values (:id,:nm) returning id into :ii;
```

NOT OK

```
insert into tab1 (id,name) values (:id,:nm) returning id into :id;
```



- Unexpected Read Only Transaction Error

- `alter session set schema emulation strict`



# Oracle JDBC for Rdb

# Oracle JDBC for Rdb

- Release 7.3.3.0
  - Released May 2014
- Release 7.3.3.1
  - Released August 2014




Remember: Patch updates available from Oracle My Support ( not OTN )

# Oracle JDBC for Rdb

- RWINS problem
  - Thin servers only
  - Have installed Rdb V7.3.1 at some time
  - Contact support for details
    - RDBPROD: JDBC for Rdb Thin Server Process In RWINS State
    - (Doc ID 1907622.1)
  - Contact HP for patch for this
    - *Fixed in a IA64 8.4 SYS kit* (scheduled later in 2014?)



A young man with short brown hair is shown in a close-up, looking slightly to the left with a thoughtful expression. He has his right hand resting on his chin, holding a dark blue pen. The background is blurred, showing other people in what appears to be a classroom or meeting setting.

# Oracle JDBC for Rdb Release 7.3.3.0



# Oracle JDBC for Rdb 7.3.3.0

## Problems Fixed

- Controller Start Server NULL POINTER EXCEPTION
  - Controller started without configuration file
  - Also shows parsing error for start server without options
- Executor initialization problem
  - MP Server too quick with executor check
  - Executor images version mismatch, server shr = 73202:20130501 , executor = 0:0
- Idle client termination problem
  - Connection Lost on subsequent connection attempts

# Oracle JDBC for Rdb 7.3.3.0

## Problems Fixed (cont.)

- Hang when using SSL
  - Workaround – set cli.idleTimeout
- Forced client termination crashes server
- Controller Show client raises NullPointerException
- AccessViolation in MP Server
  - RDBJDBCMPSHR73 CJDBCCTX\_M getDaMemUsage
  - Workaround – provide adequate free executors
- ExcuteBatch() problems
  - Statement executed twice

# Oracle JDBC for Rdb 7.3.3.0

## New Features

- Oracle Rdb PID now displayed
  - Same as used in RMU
- SHOW EXECUTORS in controller
- Timestamp precision
  - 100 nanosecond units (ticks)
- @NLSLang on connection string
- Query Header as description

# Oracle JDBC for Rdb Release 7.3.3.1

# Oracle JDBC for Rdb 7.3.3.1

## Problems Fixed

- DatabaseMetadata.getColumns()
  - Default value incorrect
    - Either shows no default value or
    - UnsupportedEncodingException: BLR
- Performance Degradation – MP Servers
- Datetime insertion error
  - Introduced with increased timestamp precision
  - Problem when using setObject()
  - Use setTimestamp() instead
- MP Server become CPU bound
  - concurrentModificationException

# Oracle JDBC for Rdb 7.3.3.1

## Problems Fixed (cont)

- Controller NULL POINTER EXCEPTION
  - When no default server in configuration
- Controller POLL REOPENLOGS hangs
  - Problem if first POLL statement in session
  - Workaround – do simple POLL prior
- Deny User not enforced
  - Workaround add an IP restriction
    - eg. Allow ip = “\*. \*.\*.\*.\*”

# Oracle JDBC for Rdb 7.3.3.1

## Problems Fixed (cont)

- Anonymous User NullPointerException
  - Server config : Anonymous="true" and
  - Blank Username
- UnsupportedEncodingException : Binary
  - Blob data processing
  - Change made for blob character set enhancement



# Oracle JDBC for Rdb 7.3.3.1

## New Features

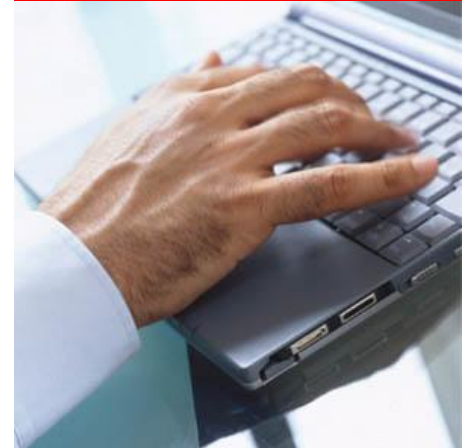
- Change in configuration template file name
  - installs 2 copies
  - RDB\$JDBC\_HOME - RDBJDBCCFG\_TEMPLATE.XML
    - Always replaced
  - RDB\$JDBC\_COM - RDBJDBCCFG.XML
    - Only copied if not already present



# Oracle Rdb Developer Tools for Visual Studio

# Oracle Rdb Developer Tools for .NET

- Release 7.3.3.0
  - Released May 2014



# ORDT 7.3.3.0

## New Features

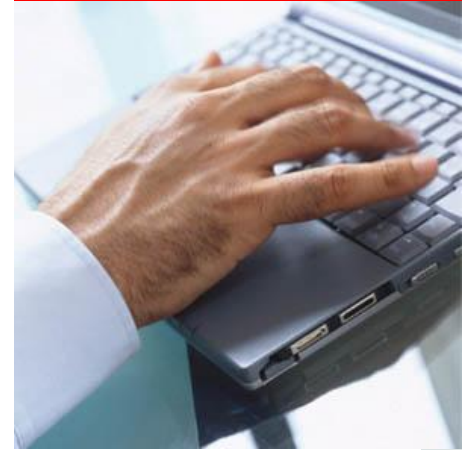
- Visual Studio 2012 Integration
- Visual Studio 2005 no longer supported

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# Oracle Rdb Data Provider for .NET

# Oracle Rdb Data Provider for .NET

- Release 7.3.3.0
  - Released May 2014



# ORDP 7.3.3.0

## Problems Fixed

- Read-Write transaction
  - Occurs for select statement
  - Should be read-only
- Pool connect memory use
  - Slow increment over time
- Minimum free connection Pool problem



# ORDP 7.3.3.0

## New Features

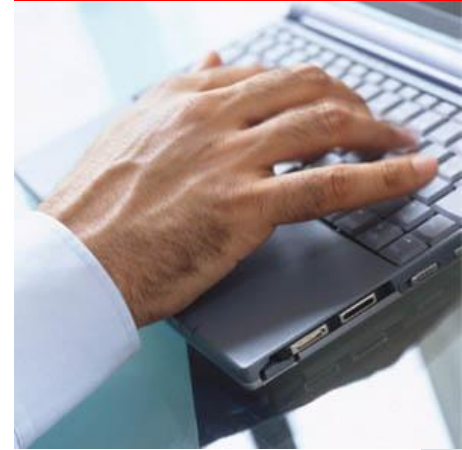
- SSL JDBC connections now supported
  - `@"Server=localhost:1707;Database=db1; UserId=murray;Pwd=secret;SSLmode=Required;"`;
- BIG5 string literals supported
  - `select '測試' FROM rdb$database`;
  - “nlsLang=BIG5” must be added to the connection string
- Batch processing for JDBC connectivity
  - e.g. `adapter.UpdateBatchSize = 5`;

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# Oracle Rdb Connectivity Management

# Oracle Rdb Connectivity Management

- Release 7.3.0.0
  - Released May 2014



# ORCM 7.3.0.0

## Problems Fixed

- Configuration file location
  - Problem with Windows7 and above
  - Old Default location– installation directory
  - Now using the user default document directory
- Incorrect default SQL/Services server port
  - Should be 2199
- Inability to drop Failed services
- Preference change corrupts configuration file
  - Use multiversion cfg backup just-in-case

# ORCM 7.3.0.0

## Problems Fixed (cont.)

- Server Panel refresh problem
  - Some statistic counts not refreshed
  - Seen when JDBC servers are running:
    - under JAVA 7 or above and
    - release 7.3.3.0 build 20140224 or earlier

# ORCM 7.3.0.0

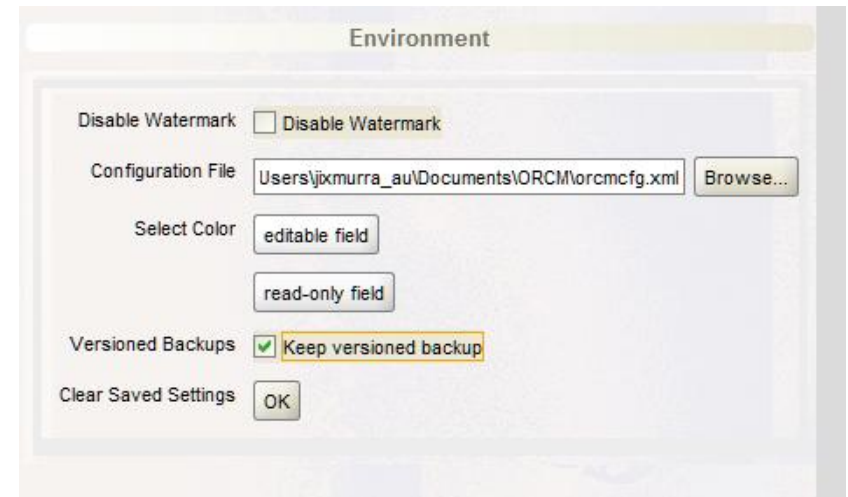
## New Features

- Change JDBC server name
  - Highlight then EDIT
  - SQL/Services Connection name cannot be changed directly
  - Workaround for SQL/Services
    1. In connection manager select existing connection
    2. Change name to create new connection
    3. Delete old connection
    4. Alternatively edit configuration file directly

# ORCM 7.3.0.0

## New Features (cont.)

- Multi-version configuration file backup
- New version created each time you change configuration information
  - e.g. orcmcfg.xml~8
- Preferences/Environment



# For More Information

search.oracle.com



OR

- [www.oracle.com/rdb](http://www.oracle.com/rdb)
- [support.oracle.com](http://support.oracle.com)
- <http://www.hp.com/products/openvms>
- [Jim.murray@oracle.com](mailto:Jim.murray@oracle.com)



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