

# JChem Oracle Cartridge History of Changes

⚠ See also [JChem Base History of Changes](#).

⚠ JChem Oracle Cartridge will not work with **OJVM\_UPDATE (2017 Oct)** Oracle DB patch. For more details see [here](#).

JChem Oracle Cartridge will not work with **OJVM\_UPDATE (2019 July)** Oracle DB patch. For more details see [here](#).

## November 29th 2019: JChem Oracle Cartridge 19.25.0

No changes.

## November 15th 2019: JChem Oracle Cartridge 19.24.0

No changes.

## November 8th 2019: JChem Oracle Cartridge 19.23.0

No changes.

## October 21th 2019: JChem Oracle Cartridge 19.22.0

### Regeneration

Regeneration of Markush structures type tables and indexes is needed to use JChem 19.22.0. Please, regenerate Markush structures type JChem tables and indexes after upgrade. The new table and index version is 19.22.0.0.

The version number of the other type JChem tables and indexes has not changed.

**Long Term Supported Release - October 18th, 2019: JChem Oracle Cartridge 19.21.1 (Europium.1)**

## October 7th 2019: JChem Oracle Cartridge 19.21.0

## **Regeneration**

Full regeneration is needed to use JChem 19.21.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 19.21.0.0

### **September 18th 2019: JChem Oracle Cartridge 19.20.0**

No changes.

### **September 2nd 2019: JChem Oracle Cartridge 19.19.0**

## **Regeneration**

Full regeneration is needed to use JChem 19.19.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 19.19.0.0

### **August 3rd 2019: JChem Oracle Cartridge 19.18.0**

No changes.

### **July 16th 2019: JChem Oracle Cartridge 19.17.0**

## **Regeneration**

Full regeneration is needed to use JChem 19.17.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 19.17.0.0

### **July 4th 2019: JChem Oracle Cartridge 19.16.0**

No changes.

### **June 27th 2019: JChem Oracle Cartridge 19.15.0**

No changes.

### **June 24th 2019: JChem Oracle Cartridge 19.14.0**

No changes.

### **June 17th 2019: JChem Oracle Cartridge 19.13.0**

No changes.

## **June 3rd, 2019: JChem Oracle Cartridge 19.12.0**

No changes.

## **May 21st, 2019: JChem Oracle Cartridge 19.11.0**

No changes.

## **May 7th, 2019: JChem Oracle Cartridge 19.10.0**

### **Bugfixes**

- Chemterm *traditionalName* gave the same output for all columns if it was calculated on a table.

### **Regeneration**

Full regeneration is needed to use JChem 19.10.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 19.10.0.0

## **April 8th, 2019: JChem Oracle Cartridge 19.9.0**

### **Bugfixes**

- Calibration of indexed JChem tables was not implemented correctly.

## **March 18th, 2019: JChem Oracle Cartridge 19.8.0**

No changes.

**Long Term Supported Release - July 30th, 2019: JChem Oracle Cartridge 19.7.3 (Deuterium.3)**

**Long Term Supported Release - June 3rd, 2019: JChem Oracle Cartridge 19.7.2 (Deuterium.2)**

**Long Term Supported Release - April 11th, 2019: JChem Oracle Cartridge 19.7.1 (Deuterium.1)**

## **March 8th, 2019: JChem Oracle Cartridge 19.7.0**

## Regeneration

Regeneration of Markush structures type tables and indexes is needed to use JChem 19.7.0. Please, regenerate Markush structures type JChem tables and indexes after upgrade. The new table and index version is 19.7.0.0.

The version number of the other type JChem tables and indexes has not changed.

### **February 28th, 2019: JChem Oracle Cartridge 19.6.0**

No changes.

### **February 13th, 2019: JChem Oracle Cartridge 19.4.0**

No changes.

### **February 4th, 2019: JChem Oracle Cartridge 19.3.0**

No changes.

### **January 23rd, 2019: JChem Oracle Cartridge 19.2.0**

No changes.

### **January 11th, 2019: JChem Oracle Cartridge 19.1.0**

#### **Bugfixes**

- Reaction fingerprint parameters at indexing were not cached and caused slowdown

### **December 14th, 2018: JChem Oracle Cartridge 18.30.0**

No changes.

### **December 6th, 2018: JChem Oracle Cartridge 18.29.0**

No changes.

### **November 28th, 2018: JChem Oracle Cartridge 18.28.0**

No changes.

### **November 14th, 2018: JChem Oracle Cartridge 18.27.0**

No changes.

### **November 12th, 2018: JChem Oracle Cartridge 18.26.0**

No changes.

### **October 31st, 2018: JChem Oracle Cartridge 18.25.0**

No changes.

### **October 9th, 2018: JChem Oracle Cartridge 18.24.0**

No changes.

### **September 25th, 2018: JChem Oracle Cartridge 18.23.0**

No changes.

**Long Term Supported Release - July 22nd, 2019: JChem Oracle Cartridge 18.22.6 (Carbon.6)**

**Long Term Supported Release - May 8th, 2019: JChem Oracle Cartridge 18.22.5 (Carbon.5)**

**Long Term Supported Release - February 1st, 2019: JChem Oracle Cartridge 18.22.4 (Carbon.4)**

**Long Term Supported Release - December 19th, 2018: JChem Oracle Cartridge 18.22.3 (Carbon.3)**

**Long Term Supported Release - November 29th, 2018: JChem Oracle Cartridge 18.22.2 (Carbon.2)**

**Long Term Supported Release - September 25th, 2018: JChem Oracle Cartridge 18.22.1 (Carbon.1)**

### **September 7th, 2018: JChem Oracle Cartridge 18.22.0**

No changes.

## **August 29th, 2018: JChem Oracle Cartridge 18.21.0**

No changes.

## **August 21st, 2018: JChem Oracle Cartridge 18.20.0**

No changes.

## **August 10th, 2018: JChem Oracle Cartridge 18.19.0**

No changes.

## **August 3rd, 2018: JChem Oracle Cartridge 18.18.0**

### **Regeneration**

Full regeneration is needed to use JChem 18.18.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 18.18.0.0

## **July 24th, 2018: JChem Oracle Cartridge 18.17.0**

### **Bugfixes**

- Some target structures with E/Z stereo data were not found in case stereo select from dual type searches.

## **July 9th, 2018: JChem Oracle Cartridge 18.16.0**

No changes.

## **June 28th, 2018: JChem Oracle Cartridge 18.15.0**

No changes.

## **June 22th, 2018: JChem Oracle Cartridge 18.14.0**

No changes.

## **June 12th, 2018: JChem Oracle Cartridge 18.13.0**

No changes.

## **June 1st, 2018: JChem Oracle Cartridge 18.12.0**

No changes.

## **May 23th, 2018: JChem Oracle Cartridge 18.11.0**

### **Bugfixes**

- PNG export with atomFont settings was not working.

## **April 13th, 2018: JChem Oracle Cartridge 18.10.0**

No changes.

## **April 4th, 2018: JChem Oracle Cartridge 18.9.0**

No changes.

**Long Term Supported Release - November 29th, 2018: JChem Oracle Cartridge 18.8.3 (Barium.3)**

**Long Term Supported Release - August 3rd, 2018: JChem Oracle Cartridge 18.8.2 (Barium.2)**

**Long Term Supported Release - April 6th, 2018: JChem Oracle Cartridge 18.8.1 (Barium.1)**

## **March 14th, 2018: JChem Oracle Cartridge 18.8.0**

### **Regeneration**

Full regeneration is needed to use JChem 18.8.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 18.8.0.0

## **February 17th, 2018: JChem Oracle Cartridge 18.5.0**

### **Regeneration**

Full regeneration is needed to use JChem 18.5.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 18.5.0.0

## February 13th, 2018: JChem Oracle Cartridge 18.4.0

No changes.

## January 30th, 2018: JChem Oracle Cartridge 18.3.0

### Improvements

- Cached connection pool properties changed, PoolDataSource is used to set up the connection cache in the JChem Server. The properties that can be given to the connection cache have been changed. Only those deprecated properties that were mentioned in the documentation will work after upgrade. [Documentation](#)

## January 18th, 2018: JChem Oracle Cartridge 18.2.0

No changes.

## January 12th, 2018: JChem Oracle Cartridge 18.1.0

### Improvements

- Oracle jdbc driver has been upgraded to ojdbc8-12.2.0.1
- Reaction search is sped up in cases of queries without reaction properties and mapping.

### Bugfixes

- Cancelling a search query did not stop the search running in the background at indexes with Reactions and Markush structureType.
- Upgrade from pre 17.24.0 releases to 17.27.0, 17.28.0 and 17.29.0 fails; to 18.1.0 works.

## December 8th, 2017: JChem Oracle Cartridge 17.29.0

### Improvements

- JChem runs in Java 8 Environment from now on. [Documentation](#)

### Bugfixes

- Known issue relating invalid SYS\_\* indexes on JCHEMPROPERTIES table has been fixed.

### Known issues



- Upgrade of older versions than 17.24.0 can be executed only in two steps. 1st step: upgrade to 17.24.0 (or 17.25.0 or 17.26.0); 2nd step: upgrade to 17.29.0

## Regeneration

Full regeneration is needed to use JChem 17.29.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 17.29.0.0

## November 9th, 2017: JChem Oracle Cartridge 17.28.0

### Known issues

- Invalid SYS\_\* indexes must be manually rebuilt on JCHEMPROPERTIES table.
- Upgrade of older versions than 17.24.0 can be executed only in two steps. 1st step: upgrade to 17.24.0 (or 17.25.0 or 17.26.0); 2nd step: upgrade to 17.28.0

## October 26th, 2017: JChem Oracle Cartridge 17.27.0

### Improvements

- The data type of the PROP\_VALUE\_EXT column in the JCHEMPROPERTIES table has been changed from LONG RAW to BLOB.

### Known issues

- Invalid SYS\_\* indexes must be manually rebuilt on JCHEMPROPERTIES table.
- Upgrade of older versions than 17.24.0 can be executed only in two steps. 1st step: upgrade to 17.24.0 (or 17.25.0 or 17.26.0); 2nd step: upgrade to 17.27.0

## October 19th, 2017: JChem Oracle Cartridge 17.26.0

No changes.

## October 13th, 2017: JChem Oracle Cartridge 17.25.0

### Bugfixes

- maxResults and maxHitCount search parameters were not available in function mode.

**Long Term Supported Release - February 23th, 2018: JChem Oracle Cartridge 17.24.3 (Argon.3)**

**Long Term Supported Release - February 16th, 2018: JChem Oracle Cartridge 17.24.2 (Argon.2)**

**Long Term Supported Release - October 18th, 2017: JChem Oracle Cartridge 17.24.1 (Argon.1)**

## **September 22th, 2017: JChem Oracle Cartridge 17.24.0**

### **Regeneration**

Full regeneration is needed to use JChem 17.24.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 17.24.0.0

## **September 14th, 2017: JChem Oracle Cartridge 17.23.0**

### **Regeneration**

Full regeneration is needed to use JChem 17.23.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 17.23.0.0

## **September 1st, 2017: JChem Oracle Cartridge 17.22.0**

### **Regeneration**

Full regeneration is needed to use JChem 17.22.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 17.22.0.0

## **August 18th, 2017: JChem Oracle Cartridge 17.21.0**

### **Regeneration**

Regeneration of "Markush" type tables and indexes is needed to use JChem 17.21.0. Please, regenerate the "Markush" type JChem tables and indexes after upgrade. Their new table and index version is 17.21.0.0.

## **August 9th, 2017: JChem Oracle Cartridge 17.20.0**

No changes.

## **JChem Oracle Cartridge 17.19.0**

Not released.

### **August 3rd, 2017: JChem Oracle Cartridge 17.18.0**

No changes.

### **July 25th, 2017: JChem Oracle Cartridge 17.17.0**

No changes.

### **July 21st, 2017: JChem Oracle Cartridge 17.16.0**

No changes.

### **July 14th, 2017: JChem Oracle Cartridge 17.15.0**

No changes.

### **July 6th, 2017: JChem Oracle Cartridge 17.14.0**

#### **Regeneration**

Full regeneration is needed to use JChem 17.14.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 17.14.0.0

### **June 20th, 2017: JChem Oracle Cartridge 17.13.0**

No changes.

### **June 15th, 2017: JChem Oracle Cartridge 17.12.0**

No changes.

### **June 8th, 2017: JChem Oracle Cartridge 17.11.0**

No changes.

### **June 1st, 2017: JChem Oracle Cartridge 17.10.0**

## Bugfixes

- Tautomer duplicate search missed hits in some rare cases. Versions 17.5.0 - 17.9.0 need manual regeneration in order to fix database searches influenced by this bug.

## May 26th, 2017: JChem Oracle Cartridge 17.9.0

No changes.

## May 9th, 2017: JChem Oracle Cartridge 17.8.0

### Improvements

- JChem Oracle Cartridge is supported on Oracle 12.2.

## May 5th, 2017: JChem Oracle Cartridge 17.7.0

### Bugfixes

- ORA-20003 error during calibration when scanresult.timeout is set.

## April 26th, 2017: JChem Oracle Cartridge 17.6.0

### Bugfixes

- The use of FilterQuery search option with FINE or more detailed logging failed with ArrayIndexOutOfBoundsException.

## April 20th, 2017: JChem Oracle Cartridge 17.5.0

### Improvements

- New version numbering system has been introduced. [Blog](#)

### Regeneration

Full regeneration is needed to use JChem 17.5.0. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 17.5.0.1

## April 3rd, 2017: JChem Oracle Cartridge 17.4.3

## Bugfixes

- Duplicate search could result missing hits directly after update of chemical structures in the table.

## March 27th, 2017: JChem Oracle Cartridge 17.3.27

No changes.

## JChem Oracle Cartridge 17.3.20

Not released.

## March 13th, 2017: JChem Oracle Cartridge 17.3.13

### Bugfixes

- Double bond stereo was not always taken into account in tautomer duplicate search of molecules containing H atoms with stereo information.
- Tautomer duplicate search could give false negative results when valence property was present on an atom within the tautomer region.

## JChem Oracle Cartridge 17.3.6

Not released.

## February 27th, 2017: JChem Oracle Cartridge 17.2.27

### Bugfixes

- [DissimilarityMetric](#) search parameter was not available in function mode.

## February 20th, 2017: JChem Oracle Cartridge 17.2.20

No changes.

## February 13th, 2017: JChem Oracle Cartridge 17.2.13

No changes.

## February 6th, 2017: JChem Oracle Cartridge 17.2.6

No changes.

### **January 30th, 2017: JChem Oracle Cartridge 17.1.30**

No changes.

### **January 23rd, 2017: JChem Oracle Cartridge 17.1.23**

No changes.

### **January 16th, 2017: JChem Oracle Cartridge 17.1.16**

No changes.

### **January 9th, 2017: JChem Oracle Cartridge 17.1.9**

No changes.

### **January 2nd, 2017: JChem Oracle Cartridge 17.1.2**

#### **Bugfixes**

- Tautomer duplicate search, tautomer full structure and tautomer full fragment search in database could result missing hits.

#### **Regeneration**

Full regeneration is needed to use JChem 17.1.2. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 17.1.2.0

### **December 26th, 2016: JChem Oracle Cartridge 16.12.26**

No changes.

### **December 19th, 2016: JChem Oracle Cartridge 16.12.19**

#### **Regeneration**

Full regeneration is needed to use JChem 16.12.19. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 16.12.19.0

## **December 12th, 2016: JChem Oracle Cartridge 16.12.12**

No changes.

## **December 5th, 2016: JChem Oracle Cartridge 16.12.5**

### **Improvements**

- Speed of search has been increased by improving the selectivity in the screening search phase, especially in case of query structures with [Generic query atoms](#) or with [Any bonds](#)

### **Regeneration**

Full regeneration is needed to use JChem 16.12.5. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 16.12.5.0

## **November 28th, 2016: JChem Oracle Cartridge 16.11.28**

No changes.

## **November 21st, 2016: JChem Oracle Cartridge 16.11.21**

No changes.

## **November 14th, 2016: JChem Oracle Cartridge 16.11.14**

No changes.

## **November 7th, 2016: JChem Oracle Cartridge 16.11.7**

No changes.

## **October 31st, 2016: JChem Oracle Cartridge 16.10.31**

No changes.

## **October 24th, 2016: JChem Oracle Cartridge 16.10.24**

No changes.

## **October 17th, 2016: JChem Oracle Cartridge 16.10.17**

No changes.

## **October 10th, 2016: JChem Oracle Cartridge 16.10.10**

No changes.

## **October 3rd, 2016: JChem Oracle Cartridge 16.10.3**

### **Bugfixes**

- Index creation froze for molecules containing extreme number of rings.

## **September 26th, 2016: JChem Oracle Cartridge 16.9.26**

### **Bugfixes**

- Similarity search for reactions returned false results.

### **Regeneration**

Full regeneration is needed to use JChem 16.9.26. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 16.9.26.0

## **JChem Oracle Cartridge 16.9.19**

Not released.

## **September 12th, 2016: JChem Oracle Cartridge 16.9.12**

No changes.

## **September 5th, 2016: JChem Oracle Cartridge 16.9.5**

### **Bugfixes**

- Handling of task timer threads has been improved fixing occasional freezing of searches in big tables.

## **August 29th, 2016: JChem Oracle Cartridge 16.8.29**



## Bugfixes

- Wedge bonds were not always recognized within the rings causing missing hits in search.

## Regeneration

Full regeneration is needed to use JChem 16.8.29. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 16.8.29.0

### **August 22th, 2016: JChem Oracle Cartridge 16.8.22**

No changes.

### **August 15th, 2016: JChem Oracle Cartridge 16.8.15**

No changes.

### **August 8th, 2016: JChem Oracle Cartridge 16.8.8**

No changes.

### **August 1st, 2016: JChem Oracle Cartridge 16.8.1**

## Bugfixes

- Windows service could not be upgraded.
- Name export through `jc_molconvert` could return unreadable characters if Oracle was not in unicode encoding.
- Reacting center query properties were not correctly persisted in the database.

## Regeneration

Regeneration of "Query structures" and "Any structures" type JChem tables and indexes is needed to use JChem 16.8.1. Please, regenerate the "Query structures" and "Any structures" type JChem tables and indexes after upgrade. Their new table and index version is 16.8.1.0.

### **July 25th, 2016: JChem Oracle Cartridge 16.7.25**

No changes.

### **July 18th, 2016: JChem Oracle Cartridge 16.7.18**

No changes.

### **July 11th, 2016: JChem Oracle Cartridge 16.7.11**

No changes.

### **July 4th, 2016: JChem Oracle Cartridge 16.7.4**

#### **Regeneration**

Full regeneration is needed to use JChem 16.7.4. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 16.7.4.0

### **June 27th, 2016: JChem Oracle Cartridge 16.6.27**

No changes.

### **June 20th, 2016: JChem Oracle Cartridge 16.6.20**

No changes.

### **June 13th, 2016: JChem Oracle Cartridge 16.6.13**

No changes.

### **June 6th, 2016: JChem Oracle Cartridge 16.6.6**

No changes.

### **May 30th, 2016: JChem Oracle Cartridge 16.5.30**

No changes.

### **May 23th, 2016: JChem Oracle Cartridge 16.5.23**

#### **Regeneration**

Full regeneration is needed to use JChem 16.5.23. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 16.5.23.0.

## **May 16th, 2016: JChem Oracle Cartridge 16.5.16**

### **Bugfixes**

- Syn, anti, endo, exo information were calculated for ambiguous cases resulting inconsistent search results.

### **Regeneration**

Full regeneration is needed to use JChem 16.5.16. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 16.5.9.0.

## **May 2nd, 2016: JChem Oracle Cartridge 16.5.2**

No changes.

## **April 25th, 2016: JChem Oracle Cartridge 16.4.25**

### **Bugfixes**

- *Equal keys in cache* error has been fixed. Affected versions are from 15.5.11.

## **April 18th, 2016: JChem Oracle Cartridge 16.4.18**

No changes.

## **April 11th, 2016: JChem Oracle Cartridge 16.4.11**

No changes.

## **April 4th, 2016: JChem Oracle Cartridge 16.4.4**

No changes.

## **March 28th, 2016: JChem Oracle Cartridge 16.3.28**

No changes.

## **March 21st, 2016: JChem Oracle Cartridge 16.3.21**

No changes.

## **March 14th, 2016: JChem Oracle Cartridge 16.3.14**

No changes.

## **March 7th, 2016: JChem Oracle Cartridge 16.3.7**

No changes.

## **February 29th, 2016: JChem Oracle Cartridge 16.2.29**

No changes.

## **February 22nd, 2016: JChem Oracle Cartridge 16.2.22**

### **Bugfixes**

- Indexing columns storing chemical structures in InChI format could have been frozen in case of incorrect structures.

### **Regeneration**

Full regeneration is needed to use JChem 16.2.22. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 16.2.22.0.

## **February 15th, 2016: JChem Oracle Cartridge 16.2.15**

No changes.

## **February 8th, 2016: JChem Oracle Cartridge 16.2.8**

### **Bugfixes**

- The **Known issues** of version 16.2.1 has been fixed.

## **February 1st, 2016: JChem Oracle Cartridge 16.2.1**

### **Known issues**

- Some slowdown in indexing and in searches can be experienced.
- Tables must be reindexed if tautomer duplicate and tautomer full structures searches are planned to be executed.

## **January 25th, 2016: JChem Oracle Cartridge 16.1.25**

No changes.

## **January 18th, 2016: JChem Oracle Cartridge 16.1.18**

### **Bugfixes**

- In some cases, `jc_evaluate_x` operator handled reactions badly.

### **License handling**

- JChem Oracle Cartridge and JChem Base licenses are separated.

## **January 11th, 2016: JChem Oracle Cartridge 16.1.11**

No changes.

## **January 4th, 2016: JChem Oracle Cartridge 16.1.4**

No changes.

## **December 14th, 2015: JChem Oracle Cartridge 15.12.14**

### **Bugfixes**

- Queries with some cartridge-only search options failed in function mode.

## **December 7th, 2015: JChem Oracle Cartridge 15.12.7**

No changes.

## **November 30th, 2015: JChem Oracle Cartridge 15.11.30**

### **Bugfixes**

- If system user did not grant `CREATE ANY SYNONYM` privilege to a custom user, any `CREATE SYNONYM` command had no effect, though no error messages were sent. No remote exceptions are hidden now, but a proper error message is produced.

## **November 23rd, 2015: JChem Oracle Cartridge 15.11.23**

### **Bugfixes**

- Aromatic stereo bonds were not imported properly from SMARTS strings.
- `tautomerSearch:is` parameter of `jc_compare` operator did not work

### **Regeneration**

Full regeneration is needed to use JChem 15.11.23. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 15.11.23.0.

## **November 16th, 2015: JChem Oracle Cartridge 15.11.16**

No changes.

## **November 9th, 2015: JChem Oracle Cartridge 15.11.9**

### **Bugfixes**

- `jcSearchThreadsPerCall` property in the `jcart.properties` file was only accepted in lowercase. Now both lowercase and camelCase properties are accepted.

## **November 2nd, 2015: JChem Oracle Cartridge 15.11.2**

No changes.

## **October 26th, 2015: JChem Oracle Cartridge 15.10.26**

No changes.

## **October 19th, 2015: JChem Oracle Cartridge 15.10.19**

No changes.

## **October 12th, 2015: JChem Oracle Cartridge 15.10.12**

No changes.

## **October 5th, 2015: JChem Oracle Cartridge 15.10.5**

## Regeneration

Regeneration of "Reactions" type JChem tables and indexes is needed to use JChem 15.10.5. Please, regenerate the "Reactions" type JChem tables and indexes after upgrade. Their new table and index version is 15.10.5.0.

## September 28th, 2015: JChem Oracle Cartridge 15.9.28

### Regeneration

Regeneration of "Query structures" type JChem tables and indexes is needed to use JChem 15.9.28. Please, regenerate the "Query structures" type JChem tables and indexes after upgrade. Their new table and index version is 15.9.28.0.

## September 21th, 2015: JChem Oracle Cartridge 15.9.21

No changes.

## September 14th, 2015: JChem Oracle Cartridge 15.9.14

### Improvements

- The default value of the search option *vague bond level* is modified. Its new default is *half*.  
[Documentation](#)

## September 7th, 2015: JChem Oracle Cartridge 15.9.7

No changes.

## August 31st, 2015: JChem Oracle Cartridge 15.8.31

No changes.

## August 24th, 2015: JChem Oracle Cartridge 15.8.24

No changes.

## August 17th, 2015: JChem Oracle Cartridge 15.8.17

No changes.

## **August 10th, 2015: JChem Oracle Cartridge 15.8.10**

No changes.

## **August 3rd, 2015: JChem Oracle Cartridge 15.8.3**

No changes.

## **July 27th, 2015: JChem Oracle Cartridge 15.7.27**

No changes.

## **July 20th, 2015: JChem Oracle Cartridge 15.7.20**

### **Improvements**

- Search speed up can be achieved in JChem index tables filled with numerous structures having small, stereo-configured rings. To attain this speed-up, `ALTER INDEX <indexname> REBUILD` must be executed.

## **July 13th, 2015: JChem Oracle Cartridge 15.7.13**

No changes.

## **July 6th, 2015: JChem Oracle Cartridge 15.7.6**

### **Improvements**

- Indexing of large molecules has been speed up.

## **June 29th, 2015: JChem Oracle Cartridge 15.6.29**

No changes.

## **June 22nd, 2015: JChem Oracle Cartridge 15.6.22**

No changes.

## **June 15th, 2015: JChem Oracle Cartridge 15.6.15**

No changes.



## **June 8th, 2015: JChem Oracle Cartridge 15.6.8**

No changes.

## **June 1st, 2015: JChem Oracle Cartridge 15.6.1**

No changes.

## **May 25th, 2015: JChem Oracle Cartridge 15.5.25**

No changes.

## **May 18th, 2015: JChem Oracle Cartridge 15.5.18**

No changes.

## **May 11th, 2015: JChem Oracle Cartridge 15.5.11**

### **Bugfixes**

- Erroneous search results were obtained in some cases of chemical structures in cdx format because of incorrect character encoding.

## **May 4th, 2015: JChem Oracle Cartridge 15.5.4**

### **Improvements**

- Cardinality calculation has been improved in all search types except substructure.

## **April 27th, 2015: JChem Oracle Cartridge 15.4.27**

### **Improvements**

- New calibration procedure of JChem Oracle Cartridge costs - used by the Oracle Optimizer - is provided. [Documentation](#)
- UTF-8 encoding has been implemented instead of mixing ASCII and operating system default encoding.

## **April 20th, 2015: JChem Oracle Cartridge 15.4.20**

No changes.

## **April 13th, 2015: JChem Oracle Cartridge 15.4.13**

No changes.

## **April 6th, 2015: JChem Oracle Cartridge 15.4.6**

### **Improvements**

- Molecular descriptor caching can be switched on resulting in a 1-2 orders of magnitude speed-up of similarity search with molecular descriptors. [Documentation](#)

## **March 30th, 2015: JChem Oracle Cartridge 15.3.30**

### **Bugfixes**

- The known NullPointerException in reaction similarity search has been fixed.

## **March 23th, 2015: JChem Oracle Cartridge 15.3.23**

### **Bugfixes**

- The known slow-down in similarity search from previous week has been eliminated.

### **Known issues**

- NullPointerException may be thrown in some cases of reaction similarity search.

## **March 16th, 2015: JChem Oracle Cartridge 15.3.16**

### **Bugfixes**

- The use of `requireCommit:n` parameter of `jc_compare` operator could produce false hit results.

### **Known issues**

- Similarity search has a slow-down of about 50-60% compared to the previous releases.

## **March 9th, 2015: JChem Oracle Cartridge 15.3.9**

### **Regeneration**

Full regeneration is needed to use JChem 15.3.9. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 15.3.9.0.

## **March 2nd, 2015: JChem Oracle Cartridge 15.3.2**

### **Bugfixes**

- CDXML query threw exception in cartridge.

### **Deprecations**

- Deprecated user-defined functions in JChem Oracle Cartridge: `jchem_core_pkg.send_user_func` and `jchem_blob_pkg.send_user_func`. The same functionality can be achieved by chemical terms. [Documentation](#)

### **Regeneration**

Full regeneration is needed to use JChem 15.3.2. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 15.3.2.0.

## **February 23rd, 2015: JChem Oracle Cartridge 15.2.23**

No changes.

## **February 16th, 2015: JChem Oracle Cartridge 15.2.16**

No changes.

## **February 9th, 2015: JChem Oracle Cartridge 15.2.9**

No changes.

## **February 2nd, 2015: JChem Oracle Cartridge 15.2.2**

No changes.

## **January 26th, 2015: JChem Oracle Cartridge 15.1.26**

No changes.

**January 19th, 2015: JChem Oracle Cartridge 15.1.19**

No changes.

**January 12th, 2015: JChem Oracle Cartridge 15.1.12**

No changes.

**January 5th, 2015: JChem Oracle Cartridge 15.1.5**

No changes.

**December 15th, 2014: JChem Oracle Cartridge 14.12.15**

No changes.

**December 8th, 2014: JChem Oracle Cartridge 14.12.8**

No changes.

**December 1st, 2014: JChem Oracle Cartridge 14.12.1**

No changes.

**November 24th, 2014: JChem Oracle Cartridge 14.11.24**

No changes.

**November 17th, 2014: JChem Oracle Cartridge 14.11.17**

No changes.

**November 10th, 2014: JChem Oracle Cartridge 14.11.10**

No changes.

**November 3rd, 2014: JChem Oracle Cartridge 14.11.3**

No changes.

## **October 27th, 2014: JChem Oracle Cartridge 14.10.27**

### **Bugfixes**

- `jc_dissimilarity` function threw 'ORA-29902: error in executing `ODCIIndexStart()` routine' caused by `java.lang.NumberFormatException`.

## **October 20th, 2014: JChem Oracle Cartridge 14.10.20**

### **Regeneration**

Full regeneration will be required in case of "Any structures" and "Query structures" type JChem tables and indexes after upgrade. Their new table version will be 14.10.20.0.

## **October 13th, 2014: JChem Oracle Cartridge 14.10.13**

### **Regeneration**

Full regeneration is needed in case of specific tables and indexes to use JChem 14.10.13. Please, regenerate "Any structures" and "Query structures" type JChem tables and indexes after upgrade.

## **October 6th, 2014: JChem Oracle Cartridge 14.10.6**

No changes.

## **September 29th, 2014: JChem Oracle Cartridge 14.9.29**

No changes.

## **September 22th, 2014: JChem Oracle Cartridge 14.9.22**

No changes.

## **September 15th, 2014: JChem Oracle Cartridge 14.9.15**

No changes.

## **September 8th, 2014: JChem Oracle Cartridge 14.9.8**

No changes.

## **September 1st, 2014: JChem Oracle Cartridge 14.9.1**

### **Regeneration**

Full table regeneration is needed to use JChem 14.9.1. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 14.9.1.0.

## **August 25th, 2014: JChem Oracle Cartridge 14.8.25**

No changes.

## **August 18th, 2014: JChem Oracle Cartridge 14.8.18**

### **Bugfixes**

- Cache was not always reloaded after recreating table or index

## **August 11th, 2014: JChem Oracle Cartridge 14.8.11**

No changes.

## **August 4th, 2014: JChem Oracle Cartridge 14.8.4**

No changes.

## **July 28th, 2014: JChem Oracle Cartridge 14.7.28**

### **New features and Improvements**

- Option `productStandardizer` has been removed from `jc_react` and `jc_react4` operators.

## **July 21st, 2014: JChem Oracle Cartridge 14.7.21**

No changes.

## July 14th, 2014: JChem Oracle Cartridge 14.7.14

No changes.

## July 7th, 2014: JChem Oracle Cartridge 14.7.7

### New features and Improvements

- Option `method:a` of `jc_react` operator is deleted.

### Regeneration

Full table regeneration is needed to use JChem 14.7.7. Please, regenerate all JChem tables and indexes after upgrade. The new table and index version is 14.7.7.0.

### Oracle support

Oracle 10g is not supported hereafter.

#### Older versions

Please visit [this page](#) for History of changes relating older JChem versions.