Cloudera JDBC Connector for Apache Impala 2.6.33

Released 2023-12-08

These release notes provide details of enhancements, features, workflow changes, and known issues in Cloudera JDBC Connector for Apache Impala 2.6.33, as well as the version history.

Enhancements & New Features

[IMPJ-747] Improved fetch performance

The connector can now move data conversion to the fetch thread. This boosts performance when the connector retrieves the result set from the server faster than the JDBC application can consume the result set. To do this, set the <code>DataConversionInFetchThread</code> to 1. For more information, see the Installation and Configuration Guide.

Performance improvements have also been made when retrieving timestamp values and null values.

[IMPJ-750] Multi-socket fetch support

You can now retrieve multiple row set from the server concurrently using multiple client connections. To do this, set the <code>EnableMultiSocketFetch</code> to 1. For more information, see the *Installation and Configuration Guide*.

[03327352][IMPJ-743] Updated connector jar

The connector now supports a lean connector jar that excludes log4j.

Resolved Issues

The following issues have been resolved in Cloudera JDBC Connector for Apache Impala 2.6.33.

- [IMPJ-746] When passing LoginTimeout in the connection string, the connector submits the option as a query option in Impala.
- [03466395][IMPJ-743][IMPJ-748] When connecting from Beeline, the connector returns errors and warnings.

Workflow Changes

The following changes may disrupt established workflows for the connector.

Version 2.6.28

[00387819][00387820][IMPJ-707][IMPJ-708] Updated logging levels

Some log entries logged at the WARNING level are now logged as DEBUG. To see these log entries, increase the log level from WARNING to DEBUG.

Version 2.6.27

[IMPJ-685] Removed slf4j-log4j12 dependency

Beginning with this release, the connector no longer includes the slf4j-log4j12 library in the JAR file.

Version 2.6.24

[IMPJ-661] Removed third-party libraries

Beginning with this release, the connector no longer includes the ZooKeeper and Jute libraries in the JAR file.

Version 2.6.23

[IMPJ-536] Removed support for JDBC 4.0 (Java 6)

Beginning with this release, the driver no longer supports JDBC 4.0 (Java 6). For a list of supported JDBC versions, see the *Installation and Configuration Guide*.

Version 2.6.20

[IMPJ-612] Removed support for earlier versions of CDH

Beginning with this release, the driver no longer supports CDH versions 5.11 through 5.16. For a list of supported CDH versions, see the *Installation and Configuration Guide*.

[IMPJ-597] Removed support for Cloudera Altus

Beginning with this release, the driver no longer supports Cloudera Altus.

Version 2.6.17

[IMPJ-553] Removed support for earlier versions of Impala and CDH

Beginning with this release, the driver no longer supports Impala 2.7 and CDH 5.0 to 5.10. For a list of supported versions, see the *Installation and Configuration Guide*.

Version 2.6.16

[IMPJ-501] Removed support for Impala 1.0.1 to 2.6

Beginning with this release, the driver no longer supports Impala 1.0.1 to 2.6. For a list of supported Impala versions, see the *Installation and Configuration Guide*.

Version 2.6.15

New default port

Beginning with this release, if the port is not specified in the connection URL, the driver uses a default port depending on the specified transport mode:

- If the transport mode is specified as HTTP, the driver uses port 28000 as the default.
- If the transport mode is specified as SASL or binary, or is not specified, the driver uses port 21050 as the default.

Previously, the driver always used port 21050 as the default port.

Version 2.6.1

Removed support for JDBC 3 (Java 5)

Beginning with this release, the driver no longer supports JDBC 3 (Java 5). Only JDBC 4 (Java 6) and JDBC 4.1 (Java 7) are supported.

Version History

Version 2.6.32

Released 2023-06-30

Enhancements & New Features

[IMPJ-740] Updated Jackson library

The connector has been upgraded with the following third-party libraries:

- jackson-annotations 2.15.2 (previously 2.13.4)
- jackson-core 2.15.2 (previously 2.13.4)
- jackson-databind 2.15.2 (previously 2.13.4.2)

Resolved Issues

The following issue has been resolved in Cloudera JDBC Connector for Apache Impala 2.6.32.

 [02642284][IMPJ-719] On CHAR and VARCHAR types, the CAST statement fails.

Version 2.6.31

Released 2023-04-26

Enhancements & New Features

[00400768] [IMPJ-721] Native GSS-API support

The connector now supports the native GSS-API feature in the JDK without the need to set the AllowTgtSessionKey property in the Windows registry. For more information, see the *Installation and Configuration Guide*.

[00420456] [IMPJ-733] Support for JWT authentication

You can now authenticate your connections to clusters with JWT authentication. To do this, select JWT Authentication from the Mechanism drop-down list (set the AuthMech property to 14). For more information, see the *Installation and Configuration Guide*.

[IMPJ-736] Updated third-party library

The connector has been upgraded with the following third-party libraries:

- Apache HttpClient 4.5.14 (previously 4.5.13)
- Apache HttpCore 4.4.16 (previously 4.4.14)
- log4j-api 2.20.0 (previously 2.17.1)
- log4j-core 2.20.0 (previously 2.17.1)
- log4j-slf4j-impl 2.20.0 (previously 2.17.1)
- slf4j 1.7.36 (previously 1.7.30)
- thrift 0.17.0 (previously 0.13.0)

Version 2.6.30

Released 2022-12-16

Enhancements & New Features

[00406889][IMPJ-723][IMPJ-724] Updated Jackson library

The connector now uses the following Jackson versions:

- jackson-annotations 2.13.4 (previously 2.13.2)
- jackson-core 2.13.4 (previously 2.13.2)
- jackson-databind 2.13.4.2 (previously 2.13.2.2)

Version 2.6.29

Released 2022-07-29

Enhancements & New Features

[00371927][IMPJ-697] Updated SAML SSO authentication behavior

When using SAML SSO authentication, the connector now automatically closes the browser tab opened by the connector. By default, the tab closes five seconds after successfully authenticating. Note that the tab does not automatically close after login credentials are entered during the first authentication attempt. Only

tabs opened during subsequent authentication attempts, where login credentials are not required, are closed automatically. If a browser window is not already opened, SAML SSO authentication attempts always prompt the user for credentials.

Resolved Issues

The following issue has been resolved in Cloudera JDBC Connector for Apache Impala 2.6.29.

• [00391275][IMPJ-713] After closing HTTP connections, the connector does not clean up native threads.

Version 2.6.28

Released 2022-06-30

Enhancements & New Features

[IMPJ-696] Updated query behavior

You can now configure the connector to return a regular result set, rather than a row count. To do this, set the NonRowcountQueryPrefixes property to a comma-separated list of queries. For more information, see the *Installation and Configuration Guide*.

[IMPJ-702] Updated Jackson library

The connector now uses the following Jackson versions:

- jackson-annotations 2.13.2 (previously 2.13.1)
- jackson-core 2.13.2 (previously 2.13.1)
- jackson-databind 2.13.2.2 (previously 2.13.1)
- jackson-dataformat-cbor 2.13.2 (previously 2.13.1)

Resolved Issues

The following issues have been resolved in Cloudera JDBC Connector for Apache Impala 2.6.28.

- [00384532][IMPJ-706] In some cases, the connector calls the CloseImpalaOperation API twice, then calls the CloseOperation API in the same query, causing the server to return an error and the application workflow to fail.
- [00387819][00387820][IMPJ-707][IMPJ-708] In some cases, log entries are logged at the WARNING level instead of the DEBUG level.
- [00388538][IMPJ-709] When the server closes the TCP connection due to an idle timeout, the connector attempts to reuse a TCP connection for an HTTP request afterwards, resulting in a "Communication link failure" error.

Released 2022-03-04

Enhancements & New Features

[IMPJ-673] Updated log4j third-party libraries

The JDBC 4.2 version of the connector has been updated to version 2.17.1 of the log4j third-party libraries.

The JDBC 4.1 version of the connector has been updated to version 2.12.4 of the log4j third-party libraries. To address security vulnerabilities, do one of the following:

- In PatternLayout in the logging configuration, replace Context Lookups like \${ctx:loginId} or \$\${ctx:loginId} with Thread Context Map patterns (%X, %mdc, or %MDC).
- Otherwise, in the configuration, remove references to Context Lookups like \${ctx:loginId} or \$\${ctx:loginId} where they originate from sources external to the application such as HTTP headers or user input.

[IMPJ-688] Updated Jackson library

The connector now uses version 2.13.1 of the Jackson library. Previously, the connector used Jackson version 2.12.3.

Resolved Issues

The following issue has been resolved in Cloudera JDBC Connector for Apache Impala 2.6.27.

 [IMPJ-691] When close() is not called on the connection object, the connector prevents the JVM from exiting.

Released 2021-12-24

Enhancements & New Features

[IMPJ-673] Updated log4j third-party libraries

The JDBC 4.2 version of the connector has been updated to version 2.17.0 of the log4j third-party libraries.

The JDBC 4.1 version of the connector has been updated to version 2.12.2 of the log4j third-party libraries. To address security vulnerabilities, do one of the following:

- In PatternLayout in the logging configuration, replace Context Lookups like \${ctx:loginId} or \$\${ctx:loginId} with Thread Context Map patterns (%X, %mdc, or %MDC).
- Otherwise, in the configuration, remove references to Context Lookups like \${ctx:loginId} or \$\${ctx:loginId} where they originate from sources external to the application such as HTTP headers or user input.

Version 2.6.25

Released 2021-12-03

Resolved Issues

The following issue has been resolved in Cloudera JDBC Connector for Apache Impala 2.6.25.

• [IMPJ-668] When using the WITH clause and column names in a query, the connector returns incorrect results.

Released 2021-08-20

Enhancements & New Features

[IMPJ-630] Ignore transactions support

You can now ignore transaction-related operations. To do this, set the IgnoreTransactions property to 1. For more information, see the *Installation and Configuration Guide*.

[IMPJ-633][IMPJ-655] Updated third-party libraries

The connector has been upgraded with the following third-party libraries:

- Apache Commons Codec 1.15 (previously 1.9)
- Apache HttpClient 4.5.13 (previously 4.5.3)
- Apache HttpCore 4.4.14 (previously 4.4.6)
- Jackson 2.12.3 (previously 2.10.1)

Resolved Issues

The following issues have been resolved in Cloudera JDBC Connector for Apache Impala 2.6.24.

- [00300232][IMPJ-648] When executing INSERT queries, the connector casts empty strings to CHAR(1).
- [IMPJ-652] The ImpalaJDBCDataEngine does not check getFunctions and returns an empty result set.
- [IMPJ-653] In some cases, when using Safari, SSO authentication fails and returns a 302 error.

Released 2021-02-26

Enhancements & New Features

[IMPJ-604] SSO authentication

You can now authenticate using single sign-on (SSO) via SAML 2.0 on supported servers. For more information, see the *Installation and Configuration Guide*.

Contact Us

If you are having difficulties using the driver, our <u>Community Forum</u> may have your solution. In addition to providing user to user support, our forums are a great place to share your questions, comments, and feature requests with us.

If you are a Subscription customer you may also use the <u>Cloudera Support Portal</u> to search the Knowledge Base or file a Case.

Important: To help us assist you, prior to contacting Cloudera Support please prepare a detailed summary of the client and server environment including operating system version, patch level, and configuration.