# **Cloudera ODBC Data Connector for Apache Impala 2.6.16**

#### Released 2022-04-14

These release notes provide details of enhancements, features, known issues, and workflow changes in Cloudera ODBC Connector for Impala 2.6.16, as well as the version history.

## **Enhancements & New Features**

#### [IMP-899][00370402] Improvements to idempotent HTTP operations

The connector's ability to retry idempotent HTTP operations when a transport error occurs has been enhanced.

#### [IMP-904][00371927] New mechanism for SAML SSO

The connector now includes a mechanism to close the browser automatically upon successful authentication via SAML SSO.

Note that the browser tab for the authentication session of the first connection that requires the user to enter the credentials does not automatically close. The browser tab for all subsequent connections attempts that do not require the user to enter the credentials will close automatically.

#### [IMP-857] Updated OpenSSL support

The connector now uses OpenSSL 1.1.1n. Previously, the connector used OpenSSL 1.1.1k.

## **Resolved Issues**

The following issues have been resolved in Cloudera ODBC Connector for Impala 2.6.16.

- [IMP-889] In some cases, when executing a complex query that involves multiple joins, aggregations, and searched case statements, the connector terminates unexpectedly.
- [IMP-902][00368911] In some cases, when using HTTP, SSL, or proxy connections, the connector returns an "SSL\_connect: wrong version number" error.

## **Known Issues**

The following are known issues that you may encounter due to limitations in the data source, the connector, or an application.

#### [IMP-843][00294390] Limited support for query translation

The connector does not support query translation if the query contains the "LIMIT x OFFSET y" syntax.

#### Limited support for BINARY, DATE, and TIME data types

- BINARY is not a supported data type in Impala.
- DATE is supported only when you connect to Impala version 3.3 or later.
- As a result of the limitations above, some values of TIME data types are also not supported.

# **Workflow Changes**

The following changes may disrupt established workflows for the connector.

# **Version 2.6.14**

#### [IMP-717][IMP-719] Removed support for Visual Studio 2013

Beginning with this release, the connector no longer supports Visual Studio 2013. For a list of supported Visual Studio versions, see the *Installation and Configuration Guide*.

# [IMP-853][IMP-860][IMP-879][00305355][00352154] Updated HTTPAuthCookies default value

The default value for HTTPAuthCookies is now impala.auth, JSESSIONID, KNOXSESSIONID. Previously, there was no default value. For more information, see the *Installation and Configuration Guide*.

# Version 2.6.12

#### [IMP-829] 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*.

#### [IMP-823] Removed support for earlier versions of AIX

Beginning with this release, the driver no longer supports AIX versions 5.2 through 6.1. For a list of supported AIX versions, see the *Installation and Configuration Guide*.

#### [IMP-713][IMP-715] Removed support for earlier versions of Windows

Beginning with this release, the driver no longer supports the following versions of Windows:

- Windows 7
- Windows Server 2008
- Windows Server 2008r2

For a list of supported Windows versions, see the *Installation and Configuration Guide*.

#### [IMP-728][IMP-730] Removed support earlier versions of macOS

Beginning with this release, the driver no longer supports the following versions of macOS:

- macOS 10.12 "Sierra"
- macOS 10.11 "El Capitan"
- macOS 10.10 "Yosemite"
- macOS 10.9 "Mavericks"

For a list of supported macOS versions, see the *Installation and Configuration Guide*.

# [IMP-732][IMP-744][IMP-816][IMP-818] [IMP-833] Removed support for earlier versions

#### of Linux distributions

Beginning with this release, the driver no longer supports the following versions of Linux distributions:

- CentOS 6
- RHEL 6
- Ubuntu 14.04

- SLES 11
- Debian 6 and 7

For a list of supported Linux versions, see the *Installation and Configuration Guide*.

# **Version 2.6.10**

#### [IMP-778] Removed support for earlier versions of Impala and CDH

Beginning with this release, the driver no longer supports Impala 2.7 and CDH 5.9 to 5.10. For a list of supported versions, see the *Installation and Configuration Guide*.

#### [IMP-713][IMP-717] Deprecated support for earlier versions of Windows

Beginning with this release, support for the following versions of Windows has been deprecated:

- Windows 7
- Windows Server 2008
- Windows Server 2008r2

In addition, beginning with this release, support for Visual Studio 2013 has been deprecated.

Support will be removed in a future release. For a list of supported Windows and Visual Studio versions, see the *Installation and Configuration Guide*.

#### [IMP-728] Deprecated support for earlier versions of macOS

Beginning with this release, support for the following versions of macOS has been deprecated:

- macOS 10.12 "Sierra"
- macOS 10.11 "El Capitan"
- macOS 10.10 "Yosemite"
- macOS 10.9 "Mavericks"

Support will be removed in a future release. For a list of supported macOS versions, see the *Installation and Configuration Guide*.

#### [IMP-732] Deprecated support for CentOS 6 and RHEL 6

Beginning with this release, support for CentOS 6 or Red Hat Enterprise Linux (RHEL) 6 has been deprecated.

Support will be removed in a future release. For a list of supported Linux versions, see the *Installation and Configuration Guide*.

# Version 2.6.8

#### [IMP-680] Removed support for earlier versions of Impala and CDH

Beginning with this release, the driver no longer supports Impala 1.0.1 to 2.6 and CDH 5.0 to 5.8. For a list of supported versions, see the *Installation and Configuration Guide*.

# Version 2.6.0

#### Minimum TLS Version

Beginning with this release, the driver requires a minimum version of TLS for encrypting the data store connection. By default, the driver requires TLS version 1.2. This requirement may cause existing DSNs and connection strings to stop working, if they are used to connect to data stores that use a TLS version earlier than 1.2.

To resolve this, in your DSN or connection string, set the Minimum TLS option (the Min\_TLS property) to the appropriate version of TLS for your server. For more information, see the *Installation and Configuration Guide*.

# **Version History**

# Version 2.6.14

Released 2021-09-17

### **Enhancements & New Features**

#### [IMP-854] SSOIgnoreDriverNoPrompt support

For the SAML\_2.0 browser authentication flow, the connector now displays the web browser used to complete the browser-based authentication flow even when SQL\_DRIVER\_NOPROMPT is passed. To do this, select the Ignore

SQL\_DRIVER\_NOPROMPT check box (set the SSOIgnoreDriverNoPrompt property to true). For more information, see the *Installation and Configuration Guide*.

#### [IMP-857] Updated OpenSSL support

The connector now uses OpenSSL 1.1.1k. Previously, the connector used OpenSSL 1.1.1g.

### **Resolved Issues**

The following issue has been resolved in Cloudera ODBC Connector for Impala 2.6.14.

• [IMP-852][00303650] The cyrus-sasl libraries do not pass the Binskim scan.

# **Version 2.6.13**

#### Released 2021-02-26

## **Enhancements & New Features**

#### [IMP-805][00263785] New authentication method

You can now authenticate your connection using SAML 2.0. For more information, see the *Installation and Configuration Guide*.

#### [IMP-782] Updated authentication mechanism support

The AuthMech property now uses the name of the authentication mechanism instead of the corresponding numbers. The following are the supported authentication mechanisms:

- No Authentication
- Kerberos
- SASL User Name
- User Name and Password
- SAML\_2.0

The driver continues to recognize the corresponding numbers (0, 1, 2, and 3) for backwards compatibility. For more information, see the *Installation and Configuration Guide*.

# **Resolved Issues**

The following issue has been resolved in Cloudera ODBC Connector for Impala 2.6.13.

• [IMP-846][00280482] When HTTP is enabled and two API calls with a time lag between them are made, the server resets the connection and the driver returns an error.

# Version 2.6.12

Released 2020-12-23

## **Enhancements & New Features**

#### [IMP-782][00189899] Updated support for the HTTP transport mode

When using the HTTP transport mode, the driver now retries idempotent API calls to the server.

#### [IMP-801] Updated logging configurations

The logging configurations for a particular connection can now be passed in via the connection string or DSN.

#### [IMP-802] Updated OpenSSL support

The driver now uses OpenSSL 1.1.1g. Previously, the driver used OpenSSL 1.1.1d.

# [IMP-780][IMP-819][IMP-821][IMP-825][IMP-827] [IMP-835] Updated platform support

The driver now supports the following platform versions:

- Windows Server 2019
- macOS 10.15
- AIX 7.2
- Ubuntu 18.04 and 20.04
- SLES 15
- Debian 8 and 9

For a list of supported platform versions, see the *Installation and Configuration Guide*.

#### [IMP-807] Updated CDP support

The driver now supports CDP 7.1. For a list of supported CDP versions, see the *Installation and Configuration Guide*.

## **Resolved Issues**

The following issue has been resolved in Cloudera ODBC Connector for Impala 2.6.12.

• [IMP-806][00265194] When the server returns 0 rows, the driver stops fetching results.

# Version 2.6.11

Released 2020-06-30

## **Enhancements & New Features**

#### [IMP-659][00143882] Support for DML result set count

The driver now reports the correct row count for DML results in server versions that return the correct row count information. Previously, the driver returned "-1".

#### [IMP-783] Server-side properties configuration

You can now configure server-side properties as driver-wide properties via the registry or the.impalaodbc.ini file.

## **Resolved Issues**

The following issues have been resolved in Cloudera ODBC Connector for Impala 2.6.11.

 [IMP-662] [00173663] When an incorrect user ID or password is entered in SASL, the driver returns the error message "Error from the Impala Thrift API: No more data to read."

This issue has been resolved. The driver now returns a more detailed error

message.

• [IMP-691][00146553] The driver returns string data untruncated regardless of the value that the string column length is set to.

This issue has been resolved. The driver now truncates the string data in the result set if the data exceeds the column length.

• [IMP-789][00208980] The driver imposes a minimum (255) and maximum (32,767) character length for the StringColumnLength connection property.

This issue has been resolved. The minimum limit has been set to 1 and values larger than 32,767 can now be set.

# **Version 2.6.10**

Released 2020-03-27

## **Enhancements & New Features**

#### [IMP-656] Updated default value for DisableOptimizedEncodingConverter

The DisableOptimizedEncodingConvert property is now set to false by default. For more information, see the *Installation and Configuration Guide*.

#### [IMP-700] Updated CDH support

The driver now supports CDH versions 5.11 through 5.16 and 6.0 through 6.3.

#### [IMP-752] Support for notarization

The driver now supports notarization on macOS systems, enabling it to be run on macOS versions 10.14.6 and later.

#### [IMP-769] Updated boost library on AIX

The AIX version of the driver now uses boost version 1.59.0. Previously, the AIX version of the driver used version 1.55.0.

#### [IMP-786] Support for CDP 7.0

The driver now supports CDP 7.0.

## **Resolved Issues**

The following issues have been resolved in Cloudera ODBC Connector for Impala 2.6.10.

• [IMP-661] If the server returns invalid UTF-8 characters, the driver throws an exception. In some cases, this causes exceptionally slow performance in certain BI tools.

This issue has been resolved. The driver now replaces the invalid UTF-8 characters.

- [IMP-705][00174966] If the driver calls SQLColumns on a column whose data type name is longer than 128 bytes, it throws a memory management error.
- [IMP-768] The driver exports third-party symbols that, in some cases, cause conflicts with applications.

This issue has been resolved. The driver now hides all third-party symbols.

• [IMP-770][00177089] In some cases, the driver does not log a connection error.

# Version 2.6.9

Released 2020-01-24

## **Enhancements & New Features**

#### [IMP-704][00174819] Improved performance with multiple concurrent connections

The driver now retrieves data much faster in scenarios that involve multiple concurrent connections to the data store. This improves performance when working with applications such as Power BI.

#### [IMP-696][IMP-708][IMP-722] Updated third-party libraries

The driver has been updated to use the following libraries:

- Boost 1.64.0 (previously 1.57.0)
- libcurl 7.66.0 (previously 7.60.0)
- Expat 2.2.9 (previously 2.2.0)
- OpenSSL 1.1.1d (previously 1.1.0j)

## **Resolved Issues**

The following issues have been resolved in Cloudera ODBC Connector for Impala 2.6.9.

- [IMP-699][00173163] In some cases, when the driver submits a query that contains a Boolean value expression, the driver returns an "Unsupported query" error.
- [IMP-724] The driver terminates unexpectedly when both of the following occur:
  - o Multiple database drivers are loaded to the same process.
  - One driver unloads and calls ICU's u\_cleanup() function, while another driver continues to run and tries to access the memory space that has been cleaned up.

Released 2019-09-27

## **Enhancements & New Features**

#### [IMP-636] Updated Impala and CDH support

The driver now supports Impala versions 2.7 through 3.3, and CDH versions 5.9 through 5.16 and 6.0 through 6.2.

#### [IMP-666] Support for DATE data type

The driver now supports the DATE data type for Impala version 3.3 and later. For more information, see "Data Types" in the *Installation and Configuration Guide*.

## **Resolved Issues**

The following issues have been resolved in Cloudera ODBC Connector for Impala 2.6.8.

- [IMP-686] When an AnalysisException error occurs, the driver incorrectly classifies it as a syntax error and returns SQLState 42000.
- [IMP-687] After SQLFetch returns an error, if you attempt to call SQLFetch again, the driver terminates unexpectedly.

Released 2019-08-23

## **Enhancements & New Features**

#### [IMP-678] Reporting the maximum length of database fields

You can now specify the maximum character length that the driver reports for the names of catalogs, columns, schemas, and tables. To do this, set the following connection properties:

- MaxCatalogNameLen
- MaxColumnNameLen
- MaxSchemaNameLen
- MaxTableNameLen

For more information, see the Installation and Configuration Guide.

#### [IMP-634] Thrift transport modes

The driver now enables you to specify the Thrift transport mode used. You can configure the driver to use binary, HTTP, or SASL transport. For more information, see the *Installation and Configuration Guide*.

#### [00139411][IMP-668] Updated driver version information in Linux binary

You can now check the Linux driver's version from the driver binary file. To do this, open the .so file in a text editor, and search for the text "\$driver version sb\$:". The driver's version number is listed after this text.

#### [IMP-677] New name for Enable Simulated Transactions

The configuration option Enable Simulated Transactions (key name EnableSimulatedTransactions) has been renamed to Ignore Transactions (key name IgnoreTransactions). The previous key name continues to be supported for backwards compatibility.

#### [IMP-671] Updated third-party library linking for Linux

In the Linux driver, minor internal improvements have been implemented for the linking between the third-party libraries and the main driver library.

#### [00141891][IMP-645] Internal driver improvements

The driver has been updated with minor internal improvements.

#### [IMP-639] Updated default value for DisableOptimizedEncodingConverter

The DisableOptimizedEncodingConvert property is now set to true by default. This enables the driver to read and replace invalid UTF-8 characters.

### **Resolved Issues**

The following issues have been resolved in Cloudera ODBC Connector for Impala 2.6.7.

• [00142448][IMP-647] When the driver executes a dynamic or parameterized query with OFFSET, it returns an error.

This issue has been resolved. The driver now correctly supports LIMIT x,y query syntax.

- [IMP-654] When query retry is enabled, the driver does not retry queries when a transport or communication link failure occurs.
- [00144299][IMP-660] When you insert a negative value into a TINYINT column, the driver returns an error.
- [00144389][IMP-664] When the driver prepares a query that includes a STRING column cast to a variable-length VARCHAR, a length of 32767 is always returned.
- [IMP-670] When retrieving a DECIMAL value that contains an integer ending with 0, the driver erroneously returns SQL\_SUCCESS\_WITH\_INFO and a truncation error.
- [00145514][IMP-672] When the driver sets the SQLSetConnectAttr attribute SQL\_ATTR\_AUTOCOMMIT to SQL\_AUTOCOMMIT\_OFF, it terminates unexpectedly.

Released 2019-05-10

### **Enhancements & New Features**

#### [IMP-573] unixODBC support on macOS

On macOS, you can now use the driver with version 2.3.1 of the unixODBC driver manager.

#### [IMP-628] Updated OpenSSL support

The driver now uses OpenSSL 1.1.0j.

#### [IMP-636] Updated Impala and CDH support

The driver now supports Impala versions 1.0.1 through 3.2, and CDH versions 5.0 through 5.16 and 6.0 through 6.2.

## **Resolved Issues**

The following issues were resolved in Cloudera ODBC Connector for Impala 2.6.5.

- [00141430][IMP-623] In some cases, queries with a parameterized insert fail.
- [00141992][IMP-629] The driver does not handle scale and precision of decimal type correctly.
- [IMP-612] Driver does not pass a UID into the session when connected using No Authentication.
- [IMP-631] The driver incorrectly translates CHAR and VARCHAR types of INSERT values to CAST(CAST(...)).

This issue is resolved. The driver now translates these values to a single CAST.

Released 2019-03-08

## **Enhancements & New Features**

#### [00138885][IMP-601] SERVER as alias for HOST

The driver now supports the use of SERVER as an alias for the HOST configuration option. The configuration option HOST is still supported.

#### [IMP-607] Updated RapidJSON parser

The driver has been updated to use version 1.1.0 of the RapidJSON parser.

## **Resolved Issues**

The following issue has been resolved in Cloudera ODBC Connector for Impala 2.6.4.

• [00139182] [IMP-603] In some queries that include aliases in subqueries, the driver translates the query to a syntax that is not supported by Impala CDH6.

# **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.