

Release Notes

Cloudera ODBC Driver for Impala 2.6.10

Released 2020-03-27

These release notes provide details of enhancements, features, known issues, and workflow changes in Cloudera ODBC Driver for Impala 2.6.10, as well as the version history.

For information about upcoming support deprecations or removals, see the "Workflow Changes" section. Deprecated features will not receive any updates, but will continue to be usable in their current state until support is removed in a future release.

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.

Resolved Issues

The following issues have been resolved in Cloudera ODBC Driver 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.

Known Issues

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

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 driver.

In addition to changes that are already implemented in the current version of the driver, this section describes potentially disruptive changes that will be implemented in a future version of the driver, so that you can plan accordingly.

Upcoming

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

As early as June 2020, the driver will no longer support the following versions of Windows:

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

In addition, as early as June 2020, the driver will no longer support Visual Studio 2013.

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

[IMP-728] Removing support for earlier versions of macOS

As early as June 2020, the driver will no longer support 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] Removing support for CentOS 6 and RHEL 6

As early as June 2020, the driver will no longer support CentOS 6 or Red Hat Enterprise Linux (RHEL) 6.

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

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[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 2.6.9

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 Driver 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:
 - 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.

Version 2.6.8

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 Driver 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.

Version 2.6.7

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 Driver 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.

Version 2.6.5

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 Driver 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.

Version 2.6.4

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 Driver 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.

Version 2.6.3

Released 2019-02-15

Enhancements & New Features

[00137626][IMP-567] Impala 3.0 support

The driver now supports Apache Impala 1.0.1 through 3.0, and CDH versions 5.0 through 6.0. Previously the driver supported Apache Impala 1.0.1 through 2.12, and CDH versions 5.0 through 5.15.

[00135683][IMP-569] Oracle Linux support

The driver now supports Oracle Linux RHCK and UEK 7.5.

[00136413][IMP-580] Support for driver-wide configuration on Windows

On Windows, the driver can now read driver-wide configuration settings from the `[vendor].impalaodbc.ini` file. This file must be present in the `\lib` subfolder inside the driver installation directory.

[00136789][IMP-592] Support for invalid UTF-8 characters

The driver can now read and replace invalid characters in UTF-8 data. To do this, set the `DisableOptimizedEncodingConverter` option to `true`. For more information, see the *Installation and Configuration Guide*.

[IMP-589] Dynamically linked third-party libraries

The Linux driver has been updated to use dynamically linked libraries for ICU and OpenSSL. The installation directory now includes a `/ThirdParty` directory which contains all required runtime libraries for the driver.

[IMP-566] Updated ICU library

The driver has been updated to use version 58.2 of the ICU library.

Resolved Issues

The following issues have been resolved in Cloudera ODBC Driver for Impala 2.6.3.

- [IMP-570] When the driver is installed on a machine that uses Turkish locale settings, if you try to connect using a connection string where one or more of the property names contains a lower-case "i" character, the driver does not connect to the server.
- [00135746][IMP-581] If the comments for a table are longer than 256 characters, the driver returns the following error: (20030) Memory management error.
- [00135988][IMP-582] In some cases, the driver returns the following error: (20030) Memory management error.
- [00136067][IMP-583] In some cases when the Use SQL Unicode Types property is disabled, after SQL_PREPARE the driver incorrectly returns SQL_WCHAR and SQL_WVARCHAR for SQL_CHAR and SQL_VARCHAR.

Version 2.6.2

Released 2018-11-14

Resolved Issues

The following issue was resolved in Cloudera ODBC Driver for Impala 2.6.2

- [00134149] [IMP-565] The driver reports transport-related errors using the generic error code 10000, instead of reporting them more specifically using error code 08S01.

Version 2.6.1

Released 2018-10-05

Enhancements & New Features

[IMP-474] Support for native scalar functions

The driver now defaults to using native Impala scalar functions, provided that those functions are supported by the Impala server.

[IMP-550] More informative Port value error messages

The driver now provides more detailed error messages when an invalid value is specified for the Port connection property.

[IMP-576] Updated OpenSSL version

The driver now uses OpenSSL version 1.1.0i. Previously, the driver used OpenSSL version 1.1.0h.

Resolved Issues

The following issues were resolved in Cloudera ODBC Driver for Impala 2.6.1.

- [00134149] [IMP-553] The driver translates Winsock error 10053 into generic error 10000.

This issue has been resolved. The drive now translates the Winsock error into error 08S01.

- [00115866] [IMP-475] The driver treats strings with the literal value "NULL" as NULL values.

- [00133890] [IMP-552] The driver does not honor the SQL_ATTR_LOGIN_TIME attribute when connecting, which may cause the driver to behave unexpectedly.

Version 2.6.0

Released 2018-07-25

Enhancements & New Features

[IMP-533] Support for Impala 2.12 and CDH 5.15

The driver now supports Impala versions 1.0.1 through 2.12, and CDH versions 5.0 through 5.15.

[IMP-478] Updated SSL support

The driver now uses OpenSSL 1.1.0h.

[IMP-519] Minimum TLS support

You can now specify the minimum level of TLS the driver will accept when authenticating into the data source.

[IMP-472] TLS Server Name Indication

The driver now supports TLS Server Name Indication (SNI).

[IMP-508] Standardized log file names

When logging is enabled, the driver now produces the following log files:

- A `[vendor]impalaodbcdriver.log` file that logs driver activity that is not specific to a connection, where `[vendor]` is the name of the driver vendor.
- A `[vendor]impalaodbcdriver_connection_[Number].log` for each connection made to the database, where `[Number]` is a number that identifies each log file and `[vendor]` is the name of the driver vendor. This file logs driver activity that is specific to the connection.

[IMP-462] More informative SSL error messages

The driver now provides more detailed error messages for TLS/SSL errors.

[00116516] [IMP-484] Renamed keytab property

The key name for the UPN Keytab Mapping File configuration property has been changed to `keytab`.

[IMP-520] Linux installation workflow improvement

A single set of RPMs now work for all supported Linux distributions. Previously, a set of RPMs for each supported Linux distribution was required.

[IMP-317] Support for result set cache and query retry

The driver can now be configured to set a limit on the result set cache size, and to retry queries to the server. For details, see the Installation and Configuration guide.

Resolved Issues

The following issues were resolved in Cloudera ODBC Driver for Impala 2.6.0.

- [00131357] [IMP-511] In some cases queries are not properly closed on the server, negatively impacting server resources.
- [IMP-486] In some cases, CAST AS VARCHAR does not function correctly.
- [00119275] [IMP-503] Connections from a machine with large amounts of RAM are slower than expected.
- [00132211] [IMP-523] Driver wide properties cannot be read from the `.ini` file.

Contact Us

If you are having difficulties using the driver, our [Community Forum](#) 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 [Cloudera Support Portal](#) 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.