Release Notes

Cloudera ODBC Connector for Apache Hive 2.6.13

Released 2022-06-03

These release notes provide details of enhancements, features, and known issues in Cloudera ODBC Connector for Apache Hive 2.6.13, as well as the version history.

Enhancements & New Features

[HAR-1225][HAR-1227][HAR-1228] Updated platform support

The connector now supports the following platform versions:

- macOS 10.15

- Ubuntu 18.04 and 20.04

- SLES 15

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

[00371927] [HAR-1288] 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.

[00374764] [HAR-1289] Override SQL_ATTR_QUERY_TIMEOUT

You can now configure the connector to override SQL_ATTR_QUERY_TIMEOUT. To do this, set the `QueryTimeoutOverride` property to the desired amount of time in seconds. For more details, see the *Installation and Configuration Guide*.

[HAR-1294] Updated OpenSSL library

The connector now uses version 1.1.1n of the OpenSSL library. Previously, the connector used version 1.1.1l.

[HAR-1302] Heartbeat messages

The connector now attempts to send heartbeat messages to the server while fetching query results to keep the query operation active.

[HAR-1303] Configure query translation for CTAS syntax

You can now configure the connector to perform a query translation for theCTAS syntax. To do this, select the Enable Translation For CTAS check box (set the `EnableTranslationForCTAS` property to `1`). For more information, see the *Installation and Configuration Guide*.

[HAR-1305] Configuring the DSN file

On Windows, the connector can now read configuration names from the DSN file. To do this, set the `ConfigsFromFileDSN` property to a comma-separated list of configuration names. For more information, see the *Installation and Configuration Guide*.

Resolved Issues

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

- [HAR-1220] When using a new TCP connection to make a HTTP request, the connector does not honor cookies.

- [HAR-1287] The HTTP connection client does not reinitialize after an SSL_read error.

- [HAR-1300] In some cases, when using Linux, the connector terminates unexpectedly when resolving host names.

- [HAR-1301] When using UnixODBC on Linux, error messages are truncated.

  The value of `ErrMsgMaxLen` can now be changed, but this may cause the connector to terminate unexpectedly in some cases. This is due to a limitation of UnixODBC.

- [HAR-1304] The connector does not allow the use of server and intermediate certificates that do not have a CRL distribution points (CDP) entry.

- [HAR-1306] When using a proxy, the connector sets the incorrect host name for SSL Server Name Indication (SNI).

- [HAR-1307] In some cases, when using 32-bit Solaris, the connector terminates unexpectedly when retrieving UTF-8 strings.

- [HAR-1308] In some cases, when using an HTTP, SSL, and proxy connection, the connector returns an "SSL_connect: wrong version number" error.

Known Issues

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

- [HAR-1171] The Hive server does not currently support using scientific notation for FLOAT type.

  As a workaround, to use scientific notation, cast the data to a DECIMAL. For example:

  SELECT CAST(3.33333e-07 AS DECIMAL)

- On Hive 3.0 and later, when the server does not set the metastore schema reader properly, the driver returns the following error:

  ```
  Error from server: error code: '0' error message:
  'MetaException(message:java.lang.UnsupportedOperationExcept
  ion: Storage schema reading not supported)'
  ```

  To resolve this issue, set the following in the Hive server:
  `metastore.storage.schema.reader.impl=org.apache.hadoop.hive`
  `.metastore.SerDeStorageSchemaReader`

Workflow Changes

The following changes may disrupt workflows from earlier versions.

Version 2.6.13

[HAR-1087][HAR-1089][HAR-1224][HAR-1229][HAR-1230][HAR-1231] Removed support for OS platforms

Beginning with this release, the connector no longer supports the following OS platforms:

- macOS 10.9, 10.10, 10.11, and 10.12

- CentOS 6 / RHEL 6

- SLES 11

- Ubuntu 14.04 and 16.04

- Debian 6 and 7

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

[HAR-1095] Removed support for Visual C++ Redistributable for Visual Studio 2013

Beginning with this release, the connector no longer supports this version of the dependency and requires Visual C++ Redistributable for Visual Studio 2015 instead. For information about the supported Visual C++ Redistributable for Visual Studio versions, see the *Installation and Configuration Guide*.

Version 2.6.11

[HAR-1205] 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*.

Version 2.6.9

Removed support for Apache Hive versions earlier than 1.0.0

Beginning with this release, the driver no longer supports Apache Hive versions earlier than 1.0.0. For a list of supported Apache Hive 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 2.6.11

Released 2021-03-26

Enhancements & New Features

[HAR-1180] Updated logging configurations

You can now configure logging for the current connection by setting the logging configuration properties in the DSN or in a connection string. For more information, see the *Installation and Configuration Guide*.

[HAR-1184] Updated OpenSSL support

The driver now uses OpenSSL 1.1.1g for encryption of data. Previously, the driver used OpenSSL 1.1.1d.

[HAR-1185] Updated DSN password configuration

On Windows, when configuring an existing or creating a new system DSN, the driver no longer saves the encrypted version of any password configuration value (`PWD`, `ProxyPWD`, `ClientPrivateKeyPWD`, etc.) by default.

To save the encrypted version of any password configuration value, you must now explicitly select a password encryption option for the corresponding password configuration.

[00263784][HAR-1191] 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*.

[HAR-1195] CDP 7.1 support

The driver now supports CDP 7.1.

Resolved Issues

The following issue has been resolved in Cloudera ODBC Connector for Apache Hive 2.6.11.

- [00309611][HAR-1214] When reconnecting to a Kerberized cluster using ZooKeeper, the driver does not connect.

Version 2.6.9

Released 2020-07-17

Enhancements & New Features

[00211293][HAR-1156] Updated HiveServer2 connection

The driver now supports the Active Passive HS2 Interactive HA mode. For more information, see the *Installation and Configuration Guide*.

[HAR-1080] macOS X notarization

The driver now supports notarization on macOS versions 10.14.6 and later.

[HAR-1081] Code sign support

The Windows and macOS versions of the driver are now code-signed.

[HAR-1135] Upgraded boost library version

On AIX, the driver now uses boost version 1.59.0. Previously, on AIX, the driver used boost version 1.55.0.

[HAR-1146] Updated Windows Server support

The driver now supports Windows Server 2019.

[HAR-1144] CDH 6.3 support

The driver now supports CDH 6.3.

[HAR-1154] CDP 7.0 support

The driver now supports CDP 7.0.

[HAR-1043][HAR-1048][HAR-1056][HAR-1083] 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)

[HAR-1036] Updated Debian installation package

The file names of the Debian installation package and its contents have been updated for consistency.

[HAR-1024] 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.

[HAR-1029] 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.

[HAR-1002] Internal driver improvements

The driver has been updated with minor internal improvements.

[HAR-928] Support for Oracle Linux

The driver now supports Oracle Linux 7.5 and 7.6.

[HAR-966] Updated zlib version

The driver now uses zlib version 1.2.11. Previously, the driver used zlib version 1.2.8.

[HAR-985] unixODBC support on macOS

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

Resolved Issues

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

- [HAR-986] In some cases, the driver delivers ambiguous SSL-related error messages.

- [00147018][HAR-1053] On AIX, when using a different OpenSSL version, the driver terminates unexpectedly.

- [00220828][HAR-1158] When the `SQLBindCol` property is called with a NULL pointer, the driver throws an error.

- [HAR-1045] In some cases, when attempting to continue an interrupted fetch operation after losing contact with the server, the driver might return result sets with missing rows.

  This issue has been resolved. If the server supports FETCH_FIRST or FETCH_PRIOR fetch orientations, the driver now correctly resumes fetch operations after reconnecting to the server. If FETCH_FIRST or FETCH_PRIOR is not supported and the driver is unable to continue a fetch operation, it returns an error.

- [HAR-1046] In some cases, when there is a connection issue during `OpenSession` calls to the server, the driver terminates unexpectedly.

- [HAR-1066] The driver terminates unexpectedly when both of the following occur:

  o   Multiple database drivers are loaded to the same process.

  o   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.

- [HAR-1123] On Windows, if the GSSAPI MIT Kerberos library is present in the environment, the driver cannot be configured to use Active Directory Kerberos via SSPI in HTTP mode.

- [HAR-990] If a scalar function has an escape sequence that contains comparisons to literal values, the driver fails to run the query and returns an error.

- [HAR-1027] When retrieving a DECIMAL value that contains an integer ending with 0, the driver erroneously returns SQL_SUCCESS_WITH_INFO and a truncation error.

- [HAR-1023] In some cases, when calling `SQLBindCol` on every row in a table, driver performance is lower than expected.

- [HAR-989] The driver does not correctly handle LIMIT x,y syntax.

Version 2.6.4

Released 2019-03-15

Enhancements & New Features

[00135108][HAR-921] Cookie-based authentication

The driver now supports cookie-based authentication as part of the authentication process. To do this, set the `HTTPAuthCookies` configuration option to a list of authentication cookies. For more information, see the *Installation and Configuration Guide*.

[HAR-965] Updated RapidJSON parser

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

[HAR-923] Updated ICU version

The driver now uses ICU version 58.2. Previously, the driver used ICU version 53.1.

[HAR-937] Dynamically linked libraries for Linux

To reduce the footprint of the Linux driver, the OpenSSL and ICU libraries are now dynamically linked.

[HAR-930] Updated OpenSSL version

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

[HAR-984] CDH 6.2 now supported

The driver now supports CDH versions 5.0 through 6.2.

Resolved Issues

The following issues have been resolved in Cloudera ODBC Connector for Apache Hive 2.6.4.

- [00138945][HAR-959] When SQLTables is called, the driver does not correctly display views.

- [HAR-926] The driver fails to parse queries that contain the keyword "LIMIT".

- [00136282][HAR-936] The driver fails to parse queries that contain a non-reserved keyword as the column name.

- [00133310][HAR-886] The driver fails to parse queries that contain a CAST function.

- [00137092][HAR-935] The driver fails to parse queries that contain an EXTRACT or FLOOR function.

- [00132674][HAR-882] EnableUniqueColumnName can produce unexpected results for certain locale settings.

- [00134046][HAR-902] The driver unexpectedly returns an error that is not handled by some BI tools.

  This issue has been resolved. The driver now returns empty result sets for these queries.

- [HAR-900] The message returned by the driver when an invalid Port value is specified in a DSN or connection string is insufficiently detailed.

- [HAR-899] The driver does not support the TIMESTAMPADD and TIMESTAMPDIFF functions.

   This issue has been resolved. You can now call the TIMESTAMPADD and TIMESTAMPDIFF functions when working with data of type TIMESTAMP. For more information, see the *Installation and Configuration Guide*.

- [HAR-908] Kerberos authentication fails when using Keyring on Linux.

- [HAR-912] In some situations, HTTP requests fail with a "Couldn't refill buffer" error message.

   This issue has been resolved. The error message is caused by the driver attempting to make HTTP requests on connections that have been closed by the server. Now, when the driver makes a request, it checks if the "Connection" HTTP header field is set to "close". If so, the driver closes and reopens the connection.

Version 2.6.1

Released 2018-08-03

Enhancements & New Features

[HAR-898] CDH 5.15 now supported

The driver now supports CDH versions 5.0 through 5.15.

[HAR-883] Hive 3.1 now supported

The driver now supports Apache Hive versions 0.11 through 3.1.

Resolved Issues

The following issue has been resolved in Cloudera ODBC Connector for Apache Hive 2.6.1.

- [00119275][HAR-833] CAST AS VARCHAR(n) returns incorrect metadata.

Version 2.6.0

Released 2018-07-13

Enhancements & New Features

[HAR-732] Minimum TLS support

You can now specify the minimum version of TLS the driver accepts when authenticating the connection to the data source.

[HAR-822] Updated OpenSSL version

The driver now uses OpenSSL version 1.1.0h. Previously, the driver used OpenSSL version 1.0.2n.

[HAR-807] More informative SSL error messages

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

[HAR-820] Catalog configuration improvements

Internal improvements were made to the way the driver configures the catalog, schema, table, and column name lengths.

[00092073][HAR-657] Configuration instructions for Delegation UID

The driver documentation now provides additional configuration instructions for enabling the Delegation UID function on a clustered server or when using Kerberos authentication.

Resolved Issues

The following issue has been resolved in Cloudera ODBC Connector for Apache Hive 2.6.0.

- [HAR-853] HiveServerType value is incorrect in some documentation examples.

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.