Flex2SQL Version 16 Release Notes

New Features

- **MS-SQL Server Failover clustering** - Since the undeprecation of OLEDB, Microsoft has added support for connecting to Always On Failover Cluster Instances to the new Microsoft OLE DB Driver for SQL Server. Flex2SQL v16 includes support for connecting to a failover cluster with automatic reconnect in case of a failover.
- **MS-SQL Server Contained DB Mode** - A contained database is one that isolates each database, effectively combining the functionality of the database and the database server instance to improve security and reduce maintenance. There are two new commands in relation to this feature: SET_SQL_CONTAINED_DB, GET_SQL_CONTAINED_DB
- **Console Mode Mertechc.inc** - With all the changes in Dataflex 19 related to 64-bit and Unicode support, some of the commands and code patterns used in console mode dataflex were deprecated. There is now a **mertechc.inc** file that should be used for Dataflex versions earlier than v12 including console mode. This file will continue to be maintained and updated, although not all new features will be available in this version. The more modern versions of Dataflex should continue to use mertech.inc.
- **Support for the latest server versions**
    - MS-SQL 2019
    - Oracle 19c
    - PostgreSQL 12
    - MySQL 8.0.14
    - MariaDB
- **New Linux builds** - We now have distribution specific drivers for Red Hat/CentOS & Ubuntu.
- **PostgreSQL Improved schema support** - There are some Dataflex specific functions that are needed for PostgreSQL support. These have always been stored in the public schema. Some setups, for security reasons wish to store these functions elsewhere. You are now able to specify an alternate schema where we should look to find those functions. This must be called BEFORE logging into the server. If the schema doesn't have the needed functions this command will also try to add them to that specified schema for you.
- **MariaDB Support** - Going forward MariaDB will be supported using the latest Flex2SQL MySQL driver. It is now a fully tested and supported environment for version 16 and greater

- **Cloud Support Extended** - Mertech's drivers are now tested against:
    - Azure:
        - Azure Database for PostgreSQL
        - Azure SQL Database
    - Amazon:
        - Amazon Aurora for MySQL
        - Amazon Aurora for MySQL Serverless
        - Amazon Aurora for PostgreSQL
        - Amazon RDS for MySQL
        - Amazon RDS for PostgreSQL
        - Amazon RDS for MariaDB
        - Amazon RDS for SQL Server

Bugs Fixed

- **Dataflex 19 compatibility:** Mertech.inc no longer causes compiler warnings. Note that due to changes in DFAllEnt.pkg, mertech.inc needs to be included BEFORE DFAllEnt.pkg. In general it should now be the FIRST line of your SRC.
- **FLEX-54 - DF_FIELD_NAME Attribute casing:** This attribute wasn't returning the proper casing for the column name.
- **FLEX-51 - MySQL Parameterized Query Bug:** Embedded SQL that does an update on MySQL was generating a "Prepared Statement contains no metadata" error.
- **FLEX-50 - Timestamp bug related to regional settings:** If regional settings were set to use commas rather than periods as decimal separators, this wasn't being applied when formatting timestamps.
- **FLEX-49 - Oracle Index Creation Error:** When trying to delete and create an index using restructure commands, the driver was attempting to delete the index twice for Oracle which generated an error.
- **FLEX-37 - INVD not created in MySQL:** The migration utility was not creating descending inverse key columns correctly.
- **FLEX-33 - Browsing in Migration Utility:** The migration utility was having trouble browsing tables above a certain number of columns.
- **FLEX-29 - psSQLFilter not properly doing OEM to ANSI conversion:** By not filtering it was preventing the use of different code pages.

- **FLEX-16 - Zombies!** MS SQL can get into a "zombie" state (their term, not ours). We have detected this condition for years, but it turns out that in foreign language Windows, the only way to detect it is by looking for how they translate the term "zombie" which we are now doing for all languages we have in use.
- **FLEX-23 - SQL_GET_COL_ATTRIBUTE fix:** Now returns the correct DFTYPE/SQLTYPE for columns in a results returned by a Stored Procedure.
- **FLEX-7 - Restructure Delete Column bug:** A restructure should only be committed at the end, but if a delete column was done during a restructure, that column would be deleted from the table immediately. This has been fixed.
- **FLEX-5 - Removal of subscription license nag screen:** Subscription licenses no longer display a nag screen when they are approaching renewal.
- **DEF-1051:** RowID table with trigger & Identity column as primary key won't allow insert. Fixed.
- **DEF-1045:** COPY_DATA bug. Fixed.
- **DEF-1047:** Bug creating tables from DF Studio reporting "Incorrect syntax near the keyword 'NOT'" Fixed.
- **DEF-1050:** SET_CURRENT_SQL_SERVER_CONNECTION not "taking". Fixed.
- **DEF-0888:** Default date/datetime for older datatypes should be 01/01/1753 NOT 01/01/0001. Fixed

To take advantage of these new Flex2SQL features, [download Version 16 of Flex2SQL from the Mertech website](#), and then install the application using your typical upgrade process. If you need help upgrading or implementing a feature, refer to the product documentation or contact us at support@mertechdata.com.