

## Flex2SQL Version 15 Release Notes

## **New Features**

Upgrading to Flex2SQL 15 allows you to take advantage of a number of exciting, asked-for new features, including:

- Smarter Troubleshooting with Flex2SQL's New Debugging Interface. Flex2SQL now supports sending trace output to the Windows Debug Output. This allows you to:
  - Use a program like <u>DebugView</u> or <u>DebugView++</u> to precisely split and/or wrap your logging.
  - Leave your trace output enabled but not actually capture the output (and affect your application's performance) until necessary.
  - Perform remote monitoring so you can view your trace output over a network in real time (using DebugView or DebugView++).

Additionally, when you use the Debug Output alongside web and Thriftly-enabled applications, you will no longer lose trace output due to buffered writing, and the trace will clearly identify which process contributed the trace output.

- Quickly Enable/Disable Tracing for All Mertech Products. The Flex2SQL installation now includes Mertech's Trace Utility, which allows you to easily toggle Debug Output tracing for not just Flex2SQL, but also any other Mertech products you use (such as Thriftly).
- Support for Microsoft SQL Server's Latest OLE DB Driver. After more than six years, Microsoft released a new version of their OLE DB Driver on March 30. Flex2SQL 15 has been tested alongside and fully supports Microsoft's exceptionally stable new driver.
- Parameterized Query Support Obsoletes String Concatenated Embedded SQL Calls,
  Prevents SQL Injection Attacks. You can now create parameterized queries, rather
  than using string concatenation, when making embedded SQL calls within your
  application. Parameterized queries allow you to create templated embedded SQL calls
  as part of your application, rather than on-the-fly, and pass query values in as
  parameters. Also, parameterized queries limit your application's vulnerability to SQL
  injection attacks, as values passed in through parameters are inherently sanitized.
  Look for more information on how to implement this feature in an upcoming Mertech
  blog post.
- Add Multiple Result Set Stored Procedures to Oracle and PostgreSQL-based
  Applications. Our Oracle and PostgreSQL drivers now support stored procedures that
  return multiple result sets using REFCURSORs (joining our MS SQL driver's existing
  support for this feature). To begin using REFCURSORs, refer to our new Flex2SQL
  Command Reference documentation on the SQL\_NEXT\_RESULT\_SET and RSET options
  included within the SQL\_SET\_PROCEDURE\_PARAMETER commands.



- All Embedded SQL Calls Are Now Up to 5x Faster. Additionally, when using Flex2SQL with Microsoft SQL Server, you can dramatically increase the speed of your read-only calls by specifying a client cursor within the SQL\_PREPARE\_STMT command. By default, embedded SQL calls continue using a server cursor, to maintain compatibility.
- Easier Index Name Mapping Using the INDEX\_NAME Directive. Instead of describing each segment of an index in your .INT files, you can now map index names directly to DataFlex index numbers using the new INDEX\_NAME directive. To do so, you invoke the INDEX\_NAME directive right after invoking the INDEX\_NUMBER directive. Additionally, if you also use the INDEX\_NUMBER\_SEGMENTS directive to describe your index, Flex2SQL enforces a new "strict" mode that requires both a matching index name and matching index segments, to ensure your index segments are in sync.
- Save and Retrieve Up to 2GB of Data per Field. Flex2SQL's new VarChar(Max) and VarBinary(Max) support allows you to save and retrieve larger amounts of data using the file buffer interface.
- Modify the Properties of Your Microsoft SQL Database Connection from Your Code
  Using New Connection Commands. Flex2SQL's new SET\_CONNECTION\_OPTION,
  GET\_CONNECTION\_OPTION, and CLEAR\_CONNECTION\_OPTION commands allow you
  to modify your MS SQL database connection on-the-fly. For example, you could use
  these commands to run an application in Read-Only mode by modifying your
  connection's ApplicationIntent property. Note that you must use these commands
  after the Flex2SQL driver loads, but the commands affect your application's next
  executed Login command. Commands won't affect currently active connections.

To take advantage of these new Flex2SQL features, <u>download Version 15 of Flex2SQL from the Mertech website</u>, 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 <u>support@mertechdata.com</u>.