

Ritmo/i Release Notes

Version	Date	Changes
7.1.0.1	7/2/18	 Added support for CCSID 16684 Fixed an issue with Code First (Entity Framework v6) boolean type support
7.1.0.0	5/4/18	 Added support for Code First (Entity Framework v6) Added support for Code First from Existing Database (Entity Framework v6) Added support for Automated and Code-based Migrations (Entity Framework v6) Code First and Migrations are supported in Visual Studio 2013 and 2015 Added support for IASP (Independent Auxiliary Storage Pool) Added support for HKSCS (Hong Kong Supplementary Character Set) Added support for CCSID 836 Added support for Reporting Services web deploy Fixed an issue with column access. Now, if the column name is not found, a case-insensitive search is tried before returning an error
7.0.0.2	03/30/2017	 Fixed an issue with the DBCLOB data typw where data was truncated with character UCS2 (CCSID 13488). Fixed an issue with Trim + FirstOrDefault parameters issue in Entity Framework environments. Fixed an issue that occurred in Entity Framework queries using the LOWER expression. Fixed an issue with using different type of parameters in LINQ expressions. Fixed an issue with Unicode parameters when used with LIKE clause and string SQL functions. Fixed an issue with DbInExpression handling in the Entity Framework environment.
7.0.0.0	08/28/2016	 Added support for . NET framework 4.0 Added support for Entity Framework v6 Added support for Visual Studio 2013 and 2015 integration Enhanced support for Connection Pooling, added a new tab in the Data Source configuration Fixed an issue with Bulk Insert and BINARY/GRAPHIC data types containing NULL values
6.0.0.7	06/03/15	 Fixed a problem in the Toolbox where the CATALOG option was not available even if fully working when set in the connection string. Added full support for DBCS GRAPHIC/VARGRAPHIC/LONG VARGRAPHIC as STRING data types Fixed a problem with Microsoft VS2013 integration



		Fixed the DataReader method GetBytes. An error returned when the size of the data to retrieve was smaller than the available buffer.
6.0.0.6	02/06/15	 Added support for Visual Studio 2013 integration Added new CATALOG (RDBNAME) option Added new IGNORE DECIMAL DATA ERROR option
6.0.0.5	07/24/13	 Added support for Microsoft Entity Framework (v 1.0 and above); Added support for Visual Studio Lightswitch; Added support for Visual Studio 2012 integration; Added support for SQL Server 2012 Data Tools (SSDT); Added support for multivalue parameters in SQL Server Reporting Services (SSRS); Fixed a problem that occurred with connection pooling where the STMT cursor was not closed and the pooling kept it active. The associated error is "Data conversion or mapping error. [SQLCODE: - 802]" which in turn caused a "Prepared statement STMT000x in use" message.
5.0.0.4	10/20/12	 Fixed a "Prepared statement STMT000x in use. [SQLCODE: -519 SQLSTATE: 24506]" error that occurred when using Connection Pooling and after a previous error in a fetch process (the STMT cursor was not closed, and the pooling was keeping it active); Added a hidden connection property "UseZeroNullOutPrm" (token: "Use Zero NullOutPrm"). Default value is false. When set to true, the provider describes the value for the output non-nullable parameter of a stored procedure as non-null even if the application has passed a NULL or no value (for example, with the DescribeParameter method); Fixed a problem with LOB parameters as OUTPUT arguments for stored procedures (the SP using output LOBs was failing to return the output values); Added support for DBMoto version 8.0; Fixed a problem with Arabic text param usage: some values can shorten the buffer; using CHAR fields can result in errors such as "Index was outside the bounds of the array".
5.0.0.1	09/22/11	 Fixed a problem that occurred when parsing a query containing the '@' character. This generated a problem in the parser because it was interpreted as a parameter and generated the following exception "Object synchronization method was called from an unsynchronized block of code"; New look for Ritmo tools
5.0.0.0	07/13/11	 Added support for Visual Studio 2010 integration; Added support for .Net Framework 4.0; Improved locking mechanism for Sql400Connection Close; Added a CancelCommand(jobID) function to the Sql400Connection class. This function requests the database to cancel processing on a statement currently running with the specified jobID;



		 Added the IBM i Job Identifier (Job Name, User Name, Job Number) to the error messages coming from the low level ODBS protocol to provide more information when an error occurs; Added support for custom host code pages using files generated from UCM; Improved catalog queries to support "%" in restrictions; Added support for @ parameters; Added support to override column CCSID using Unicode CCSID (13488); Added support for WITH select statement; Added a split trace file feature. Now it is possible to split the trace file into several files of a specified size; Improved the override codepage feature by introducing support for double byte CCSIDs and for read and write operations (bi-directional mapping); Introduced a workaround for stored procedure catalog queris inside VS2008 when the restrictions are not in the right format; Added support for the IBM i numeric data type (31digits) which is larger than the .NET framework decimal data type. It is possible to get and set the numeric as a string if the size in longer than 28 digits; Fixed a problem where binary data with CCSID 65535 were not managed properly during reading and using parameters when the Convert CCSID 65535 property was enabled; Fixed a problem handling a null BLOB value; Fixed a problem for BLOB/CLOB without a locator size. These values were not sent properly to the IBM i using parametric queries with multiple operations; Fixed a problem where the command was not disposed properly when anExecuteNonQuery failed; Fixed a problem so that Unicode strings for a graphic data types are now padded with blanks when the parameter value is less than the size of the field; Fixed a problem where the simplified connection string of a data source file inside the Toolbox was not returned properly.
4.1.0.0	06/20/08	 This version is specifically for customers using Microsoft Visual Studio 2005 and Microsoft SQL Server 2005. If you are using earlier versions of Visual Studio or SQL Server, please continue to use Ritmo/i version 3.0.0.0. Introduced Mobile edition (client edition only); supports Windows mobile platforms up to Windows Mobile 6.5.x; Added support for Visual Studio 2008 integration; Verified support for .NET Framework versions 3.0 and 3.5 in addition to 2.0; Changed .NET provider name from "Ritmo/i5" to "Ritmo/i"; Modified setup to detect if there is a previous version of Ritmo/i5 and give the option to replace the installed copy with the new one or keep the previous version and also install the new version; Introduced management of traces and data sources from "My Documents" system folder;



		Added case-sensitive user ID/password support; Changed the "Fetch Plack Size" connection property's default value to F12VP from
		• Changed the "Fetch Block Size" connection property's default value to 512KB from 32KB to improve performance;
		Added a feature to override the current codepage when converting character data during read operations;
		a problem with the "Use unqualified table name" option where it was not working
		 properly if there were spaces in the library list that also begins with comma; Modified behavior so that when the System i does not return the CCSID in
		describing a parametric stored procedure, the driver will use the connection Host Code Page as a default CCSID;
		Added support for CCSID 1200 and modified Unicode conversion;
		Added support for Microsoft Enterprise Library integration;
		• Fixed an issue where, in few specific cases, a stored procedure was not executed for
		 a syntax problem because the command text was altered internally by the driver; Made GetSchemaTable() improvements: for some specific situations catalog information can be obtained without need to run additional queries;
		Made Visual Studio 2005 integration improvements: when using the the "Add New"
		Data Source" wizard. VS 2005 does not pass usually library restrictions when
		loading tables/views/stored procedures so all of them are loaded from the System
		i, generating performance issues. If this is the case, the driver now adds the restriction based on the library list specified in the data source or library field of
		the connection string;
		• Fixed a problem when using Unqualified Table Names where some queries did not support completely the *SYS syntax;
		• Fixed an issue when the driver was trying to get the Job Identifier that was not available in versions of the AS/400 prior to V5. This generated a connection problem: "No data available to be read in the network stream";
		Fixed a problem that occurred for parametric queries when the size of the
		parameters was bigger than 32k. The total size was not sent correctly and the System i returned "Error occurred in the i5/OS database server code. [SQLCODE: -101]";
		 a problem using connection pooling where sometimes commands were not closed properly and the System i returned a wrong result set;
		Fixed a problem where the SqlLanguages catalog query returned an error because there was a typo in the name of the table to query;
		Added a Close(bool doNotPool) method to the connection class. If doNotPool is
		true the connection is not released back into the pool, if false it goes back to the pool. The parameter is relevant only if connection pooling is enabled.
4.0.0.0	05/21/07	This version is specifically for customers using Microsoft Visual Studio 2005 and Microsoft SQL Server 2005. If you are using earlier versions of Visual Studio or SQL Server, please continue to use Ritmo/i5 version 3.0.0.0.
		• Implemented ADO.NET 2.0 compliance: added full support for the new base classes and factories;



- Implemented the DDEX .net provider extension to fully integrate with Visual Studio 2005 components like Server Explorer and Designer including custom designers;
- Added support for SQL Server 2005 including Reporting Services and SSIS;
- Added support for the GetSchema() method for the common schema collections:
 MetaDataCollections, DataSourceInformation, DataTypes, Restrictions and
 ReservedWords, and for other 22 specific IBM DB2 i5 common schemas including:
 Tables, Views, Columns, Procedures, Procedure Parameters, Foreign Keys,
 PrimaryKeys, Indexes, Functions, etc;
- Added support for 64-bit .NET Framework;
- Added two new pooling methods: ClearAllPools and ClearPool to the connection class;
- Added JobIdentifier property to the Sql400Connection class. It returns the i5 job information for the connection: Job Name, User Name and Job Number;
- Increased the default size for the .Net framework decimal data type to 31 digits to support the System i (iSeries/AS400) decimal data type. It is now possible to get and set the decimal as a string if the size is greater than than 28 digits;
- Fixed a problem where a BLOB with locator with an empty value but not null was not managed properly;
- Extended support to read/write data from/to System i (iSeries/AS400) with custom CCSID to include CCSID 65535;
- Fixed a problem where bulk insert did not manage null values properly;
- Enhanced connection pooling to manage more than one pool for each connection string;
- Implemented the DDEX .net provider extension to fully integrate with Visual Studio 2005 components like Server Explorer and Designer including custom designers and ReportViewer control.