

## HiT OLEDB/400 and HiT OLEDB Server/400 Release Notes

Version	Date	Changes
7.0.0.2	4/24/17	<ul style="list-style-type: none"> <li>Fixed an issue that occurred in x64 environments where using INSERT queries with linked servers sometimes caused the query to fail with “Unknown provider error.”</li> </ul>
7.0.0.1	4/28/16	<ul style="list-style-type: none"> <li>Fixed a problem with the “Catalog” option where it could cause issues browsing standard catalogs</li> </ul>
7.0.0.0	1/3/16	<ul style="list-style-type: none"> <li>Introduced new “Catalog” option for iASP environments</li> <li>Introduced new option “Ignore decimal error”</li> <li>Added support for Microsoft Windows 10 and SQL Server 2014 Data Tools</li> <li>Introduced support for native Unicode data</li> <li>Introduced performance improvements for HSTABLES</li> </ul>
6.0.0.0	11/14/13	<ul style="list-style-type: none"> <li>Added support for Windows 8, Windows Server 2012 and SQL Server 2012 Data Tools;</li> <li>Introduced a set of x64-compliant (x64 edition) APIs ;</li> <li>Introduced an option in the Data Source Configuration to Update packages always. This option allows users to store frequently used SQL statements in packages for efficiency in execution;</li> <li>Improved conversion support for Japanese (CCSID 5026 and 5035);</li> <li>Improved conversion support for Hebrew/Arabic;</li> <li>Introduced security settings for HiT Toolbox. It is now run as administrator by default;</li> <li>Improved support for IBM i GRAPHIC/VARGRAPHIC data types in SSIS;</li> <li>Fixed a trace issue that occurred when running HiT OLEDB/400 in a task without admin privileges: no trace was created.</li> </ul>
5.1.0.0	02/23/11	<ul style="list-style-type: none"> <li>Added a C# Toolkit for the developer editions;</li> <li>Added support for Arabic in the 64-bit version;</li> <li>Created an update pack for the 64-bit version;</li> <li>Fixed an issue that occurred with stored procedure calls with output parameters;</li> <li>Fixed a problem with the installation for the 64-bit client version.</li> </ul>
5.0.0.0	10/11/10	<ul style="list-style-type: none"> <li>support for trace settings to allow Windows Vista and Windows 2008 Server to store traces in common documents folder;</li> <li>Added a new default folder to store Microsoft Data Link files for Windows Vista/2008 and above;</li> <li>Added DBSCHEMA_VIEWS support for IDBSchemaRowset. This is used by Visual Studio to show the list of views inside the Server Explorer;</li> </ul>

		<ul style="list-style-type: none"> <li>Added support for case-sensitive user ID and password.</li> </ul>
4.0.0.0	10/22/07	<ul style="list-style-type: none"> <li>Added support for Microsoft Windows Vista and passed Windows Vista certification;</li> <li>Added support for the New Data Source View wizard in Visual Studio 2005 (Integration Services Project);</li> <li>Fixed a problem where the Foreign Keys Catalog did not manage errors properly.</li> </ul>
3.0.0.5	09/02/05	<ul style="list-style-type: none"> <li>Fixed a problem where HiT Server Manager was not included in the HiT OLEDB Server/400 releases;</li> <li>Added support for Microsoft Windows 64-bit environments.</li> </ul>
3.0.0.4	08/12/05	<ul style="list-style-type: none"> <li>Fixed a problem for C++ exception in ICommand::Execute, ICommand::Prepare and other ICommand methods. This unpredictable memory problem occurred specially when running application servers or web servers;</li> <li>Fixed a SQL Server lock problem that occurred when using V5R3. V5R3 sometimes behaves like versions V3R7 or below by not using extended formats, due to an unexpected problem in setting attributes. This caused lock problems in SQL Server;</li> <li>Fixed a problem where a PWS0001 error was generated for every query when running on V3R7 or below. Query Timeout (CommandTimeout) is no longer used for versions V3R7 and below;</li> <li>Added a workaround to completely disable Query Timeout (CommandTimeout) settings. Add a minus sign (-) to the value set in the Communications tab Timeout Value field (data link configuration dialog);</li> <li>Modified update pack setup to enable updating of OLEDB/400 when installed with DB Moto;</li> <li>Fixed a problem where the number of rows affected from an update statement was not returned properly;</li> <li>Changed the Primary Key catalog support where a query used a SELECT statement instead of a ROI database request because, for primary key column names longer than 10 characters, the primary key name returned by the AS/400 was the internal one (a short form of just 10 characters) instead of the real one.</li> </ul>
3.0.0.2	02/02/05	<ul style="list-style-type: none"> <li>Fixed a problem with DBCS characters as output parameters of stored procedures. Part of the resulting string in some cases was corrupted;</li> <li>Fixed conversion problem for characters '~' and '\ ' with CCSID 5026 - Japanese Katakana-Kanji Host Mixed;</li> </ul>
3.0.0.1 Update	07/27/04	<ul style="list-style-type: none"> <li>Improved TCP/IP performance by changing the way the connection timeout value is handled;</li> <li>Fixed a problem with SQL Server when calling a stored procedure through a linked server;</li> </ul>

Pack Only		<ul style="list-style-type: none"> <li>Fixed a locking problem when running 1PC (single phase commit) transactions in objects created in .NET running under COM+ and requiring transactions.</li> </ul>
3.0.0.0	05/28/04	<ul style="list-style-type: none"> <li>Improved performance of insert, update and delete statements;</li> <li>Added support for LOB data types of small size (the length is between 1 and 32KB) where the Lob locator cannot be used to reference the LOB value;</li> <li>Added full support for the CommandTimeout property: its value was not properly used and the timeout for the command was set to the AS/400 job's query timeout;</li> <li>Fixed some concurrency issues with two-phase commit;</li> <li>Introduced a new form for inserting the HiT license key during setup;</li> <li>Updated the installation process for silent installation (no GUI or user input during installation).</li> </ul>
2.1.1.6 Update Pack Only	04/21/04	<ul style="list-style-type: none"> <li>Fixed a problem with some specific DBCS characters;</li> <li>Improved performance when working with OS/400 V4R5, especially for INSERT/UPDATE/DELETE statements.</li> </ul>
2.1.1.5	03/29/04	<ul style="list-style-type: none"> <li>Fixed a problem with double byte parameters where the length was not set correctly.</li> </ul>
2.1.1.4	02/26/04	<ul style="list-style-type: none"> <li>Fixed problems and extended support for direct statements with double byte characters (DBCS);</li> <li>Updated the SSL support with the latest cipher suites;</li> <li>Fixed problems with bookmarks encountered using static cursors in VB6 with ADO and SELECT statements. The number of returned rows was in general about 500 rows less than the real number - and it was 0 if the number of rows to be returned was less than 500;</li> <li>Improved SystemInfo trace.</li> </ul>
2.1.1.3	12/29/03	<ul style="list-style-type: none"> <li>Fixed performance regression retrieving (SELECT) DECIMAL/NUMERIC SQL types. The regression has been introduced in version 2.1.0.7. Writing DECIMAL/NUMERIC was not affected.</li> </ul>
2.1.1.2	12/01/03	<ul style="list-style-type: none"> <li>Added a checkbox in the Data Source General tab to enable the driver to override the CCSID settings for the Catalog functions. Setting the checkbox will force the driver to use the CCSID connection instead of the column connection when performing a Catalog function. This will allow the use of non-standard characters for table/column names;</li> <li>Fixed a problem with 2PC. The problem occurred when abort requests were initiated by a host other than OLEDB/400. Another synchronizing event was added to avoid race conditions;</li> </ul>

		<ul style="list-style-type: none"> <li>Fixed a number of problems with connection properties: LocalSettings property and 2PC enabling property were exchanged in GetAllProperty procedure. Also fixed GetDataSourceProperty procedures because some property offsets were mixed up.</li> </ul>
2.1.1.1	09/18/03	<ul style="list-style-type: none"> <li>Fixed a problem with double-byte string: The length of some returned values was bigger than the actual field's length;</li> <li>Fixed a regression in EbcDicToAnsi conversion that freezes an application when it retrieves UCS2 fields.</li> </ul>
2.1.1.0	08/06/03	<ul style="list-style-type: none"> <li>Added support for BIGINT data type. Now the driver fully supports the 64bit length integer values;</li> <li>Fixed a problem in tokens management that causes a unhandled C++ exception when an unrecognized command text is entered;</li> <li>Fixed bug in IDBInfo::GetKeywords procedure that occurred when using HiT WinAllora. An access violation occurred when releasing the shared buffer containing the keywords string. The bug made the calling application hang because the shared buffer was on stack and not in system memory;</li> <li>Added a new tracing feature to the high-level trace. In the trace you can now see the actual value of each output parameter;</li> <li>Fixed a problem with the high-level trace related to GetNextRows API. Now all the input/output values of this API are traced correctly;</li> <li>Introduced Multi-language support for literals and data fields.</li> </ul>
2.1.0.9	07/07/03	<ul style="list-style-type: none"> <li>Fixed _mbslen problem under Windows XP;</li> <li>Added application name recognition for HiT DBMoto;</li> <li>Fixed problem reading DECIMAL/NUMERIC with scale = 0 introduced in version 2.1.0.7</li> </ul>
2.1.0.7	06/19/03	<ul style="list-style-type: none"> <li>Improved DECIMAL and NUMERIC precision. DECIMAL and NUMERIC fields can be respectively 38 and 25 digits long;</li> <li>Fixed problems with LONGVARCHAR fields management as ISequentialStream in SQL Server InProcess Linked Server;</li> <li>Improved low level error management in multithreading - mode;</li> <li>Fixed problem in UCS2 fields management : now you can read and write correctly into that kind of fields;</li> <li>Fixed a problem in DPC Support related that causes failure in the connection to the server;</li> <li>Fixed a problem EBCDIC to ANSI conversion related to conversion tables loading;</li> <li>Improved Alias Management in positional insert/update/delete statements;</li> <li>Improved Alias Management in IcolumnsRowswet interface;</li> <li>Fixed a problem in catalog query related to GRAPHICS and VARGRAPHICS UCS2 fields management;</li> </ul>

		<ul style="list-style-type: none"> <li>• Fixed a bug in GetData management that causes a C++ Unhandled Exception in retrieving columns rowset;</li> <li>• Low level trace improvement : now Process ID, Thread ID and timing are traced;</li> <li>• Added a workaround in stored procedure management : the provider exits with no errors and warnings when the OS/400 returns a warning about the numbers of recordset returned by the SP execution;</li> <li>• Now it is possible to execute Catalog Queries using Case Sensitive restrictions;</li> <li>• Fixed a problem in accessor management : when the accessor is created after the prepare and not after the execute, the getdata doesn't find valid binding informations;</li> <li>• Removed memory leaks in accessor management.</li> </ul>
2.1.0.6	04/14/03	<ul style="list-style-type: none"> <li>• Added Parameters CCSID management: now the EbcDicToAnsi &amp; AnsiToEbcDic are performed using the conversion table related to parameter CCSID;</li> <li>• Improved performance in column CCSID management;</li> <li>• Improved Two Phase Commit Support : Can now correctly process read-only transactions;</li> <li>• Fixed memory leaks in low-level trace file management;</li> <li>• Fixed concurrency problems in error management;</li> <li>• Solved concurrency issues in Two Phase Commit Management ;</li> <li>• Added asynchronous management for ItransactionResourceAsync Interface;</li> <li>• Improved Performance in RLE Compression Management;</li> <li>• Added RLE Compression for AS/400 hosts older than V5R1 (starting from V4R3);</li> <li>• Improved handling of SQL stored procedure and external stored procedure user-defined error codes. Specific errors codes (return codes) are also returned;</li> <li>• Fixed bug: Stored procedure not using parameters with multiple result sets only returned one result set. Rowset object was closed when set to MultipleResults. The fix now checks for statements and rowset is closed for statements other than stored procedure calls.</li> </ul>
2.1.0.5	02/07/03	<ul style="list-style-type: none"> <li>• Removed a defect that caused unwanted cursor thrashing when performing non-parametrical inserts/updates/deletes using ADO on connection objects (using commands the defect did not show up);</li> <li>• Added RLE Compression Support for V5R1 Hosts;</li> <li>• Fixed a problem in Remote Program Call with unqualified program name (Error Description: HiTOLEDB400: a C++ exception occurred in the Ole Db Provider.Caller function: COleDb400Command::Prepare);</li> <li>• Fixed a sporadic problem with Date Time fields and Convert Date Time option enabled. The problem occurred when running four level select query in Microsoft SQL Server (metadata changed at execution time);</li> <li>• Improved performance regarding the communication with OS/400 through ODBS;</li> <li>• Improved Graphics / VarGraphics DBCS only field management : catalog management;</li> </ul>

		<ul style="list-style-type: none"> <li>• LoadAliases: cursor did not close properly. There were unexpected effects when used with HiT Server Manager;</li> <li>• PrimaryKey support: Fixed problems with the returned index name for older version of OS/400.</li> </ul>
2.1.0.4	10/28/02	<ul style="list-style-type: none"> <li>• Fixed problems in the management for Graphics and VarGraphics DBCS only field;</li> <li>• Fixed a sporadic problem with GetData while reading data, caused by a format conversion on the bookmark field;</li> <li>• You can now enable or disable the Use of Local Settings using data link properties;</li> <li>• You can now enable or disable Two Phase commit support using data link properties;</li> <li>• Fixed a sporadic problem with the Toolbox: The creation or the editing of a data link file didn't create a valid data link file under some specific conditions;</li> <li>• From the Toolbox, you can now insert the connection password to save in the UDL file;</li> <li>• Fixed a problem with output parameters for stored procedure. Previously, the length of the output parameter wasn't returned, so the value was not returned properly;</li> <li>• Fixed a problem with Two Phase Commit Support: When we are in a distributed transaction, only xa_commit has to be sent;</li> <li>• Fixed a problem in column CCSID management : When column CCSID is not supported, the provider uses default CCSID;</li> <li>• Fixed a problem in large trace files management : Sometimes a trace didn't start;</li> <li>• Fixed a problem in retrieving data from AS/400 : A random C++ Unhandled Exception occurred in CNewRowset::GetData when the binding points to the bookmark;</li> <li>• Modified RowsetChange/InsertRow/DeleteRows methods of the IRowset interface to handle fields whose name contains lower case characters (used double-quotes in the SQL statement of positional queries);</li> <li>• Remove use of RowsetCreated command property (it created an OLEDB exception when used by the OLEDB consumer software - winAllora) and replaced with an instance variable in the command class.</li> </ul>
2.1.0.3	09/06/02	<ul style="list-style-type: none"> <li>• Added management for large trace files.</li> </ul>
2.1.0.2	08/22/02	<ul style="list-style-type: none"> <li>• Added C# (C-Sharp) Toolkit (Developer Edition only);</li> <li>• Added Two Phase Commit Support with Recovery Management;</li> <li>• Fixed a bug in IColumnRowset::GetColumnRowset : now all interfaces and cursors are released correctly;</li> <li>• Fixed a lock problem during execution of parametric distributed program call;</li> <li>• Introduced UCS-2 support for CCSID 13488 data and for GRAPHIC data types;</li> <li>• Added Two Phase Commit support with Recovery Management (DB2 Server V5R1 or later required);</li> </ul>

		<ul style="list-style-type: none"> <li>Fixed a problem where in some sequence of executions and preparations (SetData and regular SELECTS) cursors got closed while the positional update believed them to be still open and usable at the next SetData call: This fix creates a new ODBS cursor every time a command is prepared.</li> </ul>
2.0.1.3	06/10/02	<ul style="list-style-type: none"> <li>HiT OLEDB/400 is now compatible with .Net DataSet Update commands and OLEDB Adapter Wizard for Visual Studio .Net;</li> <li>When Crystal Report calls a Stored Procedure with a DBTYPE_STR or DBTYPE_WSTR parameter, it does not pass the length of the parameter. To get it we need to force a strlen or wcslen for the parameter;</li> <li>Bug Fix: using ADO Recordsets to retrieve multiple result sets returned by a Stored Procedure right after finished retrieving another result set by a SELECT query caused the provider to loop indefinitely, retrieving an infinite number of result sets, as with the SELECT result set. The problem typically appeared in VB (or VBS) + ADO environments;</li> <li>Now possible to call a Stored Procedure even if the driver is read-only. Removed the “Window's Name Loop...” problem, there is no need to do a loop anymore to detect the calling application;</li> <li>Added support for the following additional columns in: GetColumnsRowset method of IColumnsRowset: DBCOLUMN_BASECATALOGNAME, DBCOLUMN_BASECOLUMNNAME, DBCOLUMN_BASESCHEMANAME, DBCOLUMN_BASETABLERNAME and DBCOLUMN_KEYCOLUMN. Now the provider supports updates through the Client Cursor Engine. Problems related to “Insufficient base table information for updating or refreshing” error message;</li> <li>Fixed a problem in getting correct character parameter length;</li> <li>Fixed the following problem: when using the toolbox and changing the trace file; name, in the past one could not trace anything until the toolbox was restarted. Now that can be done without restarting the toolbox;</li> <li>Fixed a problem related to trace file: A trace file is created and eventually existing file is overwritten only when the DLL is loaded.</li> </ul>
2.0.1.2	03/05/02	<ul style="list-style-type: none"> <li>Fixed a problem in field conversion using CCSID: now the driver does it instead of OS/400.</li> <li>Fixed a problem in Convert CCSID 65535.</li> <li>Add “Remote Command Call” feature: now it is possible to call a remote command with the following syntax: {{ command }};</li> <li>Fixed a problem with parsing the blanks before EXEC CALL statement: now the blanks are skipped correctly;</li> <li>Resolved a C++ exception, detected only when executing a parametric statement without having set the parameters;</li> <li>Fixed a problem with Positional Operations when table name is in the following format : &lt;catalog name&gt;.&lt;lib name&gt;.&lt;table name&gt;.</li> </ul>

		<ul style="list-style-type: none"> <li>• Fixed a problem with the low traces file creation.</li> <li>• Introduced a structured management in using HSTABLEs: sometimes a delay is needed because concurrent threads can access the same table at the same time returning “ODBS error: Conversion table not found” errors.</li> </ul>
2.0.1.1	01/02/02	<ul style="list-style-type: none"> <li>• Fixed problems while retrieving messages in Distributed Program Call</li> <li>• Added Columns CCSID Conversion.</li> <li>• Fixed the start problem of the low traces;</li> <li>• Added Update License Key menu item to Toolbox for updating product license keys.</li> </ul>
2.0.1.0	12/04/01	<ul style="list-style-type: none"> <li>• We now permit a stored procedure to be called even if the setting is read-only, but only for Crystal Reports. Previously, Crystal Reports 8 set the driver to read-only before calling a stored procedure, which caused the driver to malfunction;</li> <li>• ALIAS Support : Corrected error in SELECT statement using ORDER BY clause and ALIAS;</li> <li>• Introduced support for OUT OF PROCESS work mode;</li> <li>• Fixed a problem with SQL Server DTS: When executing an Import DTS twice, data wasn't correctly replicated the second time. The SQL target tables contained only blanks and 0s instead of the correct data;</li> <li>• Added support for insert/update of BLOB fields and for inline bindings (other than ISequentialStream bindings);</li> <li>• Introduced early memory release in update/insert/delete operations;</li> <li>• Fixed a memory leak using recordsets with IMultipleResults interface.</li> <li>•</li> </ul>
2.0.0.2	10/11/01	<ul style="list-style-type: none"> <li>• Setup verifies if Microsoft Visual Basic is installed on the system, before proceeding to HiT OLEDB/400's installation and the use of HiT VB Toolkit;</li> <li>• Added silent installation.</li> </ul>
2.0.0.1b	09/07/01	<ul style="list-style-type: none"> <li>• AS/400 Password Expired: now after changing the expired password, the new password is visible in Properties.</li> <li>• Fixed a problem (in debug mode): if the connection failed, another error occurred, caused by the notification to the agent of the connect function's termination;</li> <li>• Fixed an error in PROCEDURE_PARAMETERS schema rowset: the schema was filled using 15 columns instead of 17, as the OLE standard requires.</li> </ul>
2.0.0.1	07/31/01	<ul style="list-style-type: none"> <li>• Resolved memory leak problems during insert command. Making a loop of inserts either with the ICommand or the IRowsetChange interfaces, the memory allocation used by the process grew up, caused by accessor bindings not freed after their use;</li> <li>• Resolved problems with GetKeywords command. Now OLEDB/400 works with VISIO 200X in order to do DB reverse engineering;</li> </ul>

		<ul style="list-style-type: none"> <li>Resolved a C++ exception, detected only in debug mode, running a CALL of a stored procedure which returns no resultsets;</li> <li>Fixed a synchronization problem detected with Microsoft Web Application Stress Tool running a number of threads greater than 1.</li> <li>It's now possible upgrade HiT OLEDB Server/400 version 1.0 to version 2.0.</li> </ul>
2.0.0.0	06/01/01	<ul style="list-style-type: none"> <li>Added "Convert Date Time" checkbox in the Advanced tab: this feature enables the client application to read date/time fields as char fields. This can be useful any time users set the date/time field to non-date/time values (like 0, NULL, or a very old date) to a NULL data. This behavior is allowed by the AS/400 server, but sometimes can create problems if applications (like those using ADO, for instance) try to read that field expecting a correct date/time value. The ADO error is usually the following: "Multiple-step OLE DB operation generated errors. Check each OLE DB status value, if available. No work was done." Converting the date/time field to char, we avoid this error;</li> <li>Added the feature "4 part naming for SQL queries" to the Advanced tab as "Skip Catalog Field" check;</li> <li>Added HiT Server Manager to HiT OLEDB Server/400 to provide services for monitoring server activity and connection pooling;</li> <li>Added support for large binary objects: BLOB and CLOB;</li> <li>Added Change License Key menu item to Toolbox for updating product license keys;</li> <li>Removed Workshop. Both Client and Server versions include the Toolbox;</li> <li>Updated installation to include Microsoft Data Access Components (MDAC) version 2.6.</li> <li>Added COLUMN ALIAS support for Positional Update Request where performing a Positional Update using ALIAS on Columns that contain special chars in their names.</li> <li>Added support for FOREIGN_KEYS and PRIMARY_KEYS schema rowset.</li> <li>Added support for AS/400 Password Expired</li> </ul>
1.1.2.10	07/31/01	<ul style="list-style-type: none"> <li>Resolved a C++ exception, detected only in debug mode, running a stored procedure CALL which returns no result sets.</li> </ul>
1.1.2.9	06/21/01	<ul style="list-style-type: none"> <li>Resolved memory leak problems during insert command. Making a loop of inserts either with the ICommand or the IRowsetChange interfaces, the memory allocation used by the process grows, caused by accessor bindings not being freed after their use.</li> </ul>
1.1.2.8	01/23/01	<ul style="list-style-type: none"> <li>Added a feature to use 4 part naming for SQL queries from Microsoft SQL Server, excluding the catalog name, like in the example below: select * from linked_server..libname.tabname</li> <li>If the value of the RegKey "SkipCatalogField" = 1, the Catalog name (RDBNAME) will be returned as NULL; if the key does not exist or the value is set to 0 (Default), the actual value on the AS/400 will be returned by our OLE DB provider.</li> </ul>

		<ul style="list-style-type: none"> <li>Resolved a multithreading problem in ODBS32.dll in ODBS_Transact.</li> <li>Resolved a memory leak problem caused by non deallocated property strings after calling an IDBProperties::GetProperty.</li> </ul>
1.1.2.7	11/16/00	<ul style="list-style-type: none"> <li>Resolved a parser problem using stored procedures CALL statements with Use Unqual. Table Name property: using 3-level qualifications (like Crystal Reports does) caused problems, because the CALL query wasn't checked for the UUT parsing option.</li> <li>Added a feature using ADO to call stored procedures: if SP is the stored procedure name, the ADO command text "call SP" was accepted only by setting the command Type property to adCmdText and not to adCmdStoredProc.</li> <li>Fixed a problem with sp_columns_ex and SQLserver/QueryAnalyzer for char fields.</li> <li>Fixed an error calling INewRowset::ReleaseRows, causing a C++ exception.</li> <li>Modified error messages due to invalid key and added expiration date and max number of connections in the About dialog in the Workshop.</li> <li>Added a feature to resolve queries containing column aliases in the SELECT clause, but referring to them by the column name (and not by alias) in the ORDER BY clause. The query parser has been modified in order to send the correct query to the server;</li> <li>Resolved an error calling IDBInfo::GetLiteralInfo OLE DB function. Using Seagate Crystal Reports, it's important to create a registry key (under [HKEY_LOCAL_MACHINE\SOFTWARE\HiT Software\HiT OLE DB/400]) called DisableWindowLoop, DWORD type and value 1.</li> </ul>
1.1.2.6	08/04/00	<ul style="list-style-type: none"> <li>Introduced use of decimal separator symbol depending on the user locale settings.</li> <li>Fixed a problem with Catalogs returning Unhandled Exception when working with V4R3M2 and V4R5. it's related to ODBS400.DLL only.</li> <li>Fixed a problem where a warning during Fetch in ODBS was treated as an error.</li> <li>Sometimes EBCDIC data were not converted to ASCII when running catalog queries or select queries. This happened because the AS/400 optimized server sometimes returns the wrong information about the number of rows returned.</li> </ul>
1.1.2.5	07/14/00	<ul style="list-style-type: none"> <li>Introduced alias support for AS/400 multimember tables: several aliases can be defined on the same table for different members with the same set of columns.</li> </ul>
1.1.2.4	07/05/00	<ul style="list-style-type: none"> <li>Resolved a backward compatibility problem with Connect Timeout property: old DTS packages did not recognize the new property; the problem has been resolved introducing a</li> </ul>

		<p>provider-specific property named Init Timeout which can be saved statically and whose value is used as socket timeout value;</p> <ul style="list-style-type: none"> <li>• Fixed an error with memory allocation. In the case where Rowset Locate was selected, some memory blocks were not reused.</li> <li>• Resolved an update error with decimal types, with a precision greater than 19: length of field was not always correctly calculated.</li> <li>• Fixed a problem with DPC introduced in build 1.1.2.0: DPC parameters were provided to the AS400 DPC server padded with ODBS Null Indicators causing errors.</li> </ul>
1.1.2.3	06/19/00	<ul style="list-style-type: none"> <li>• Resolved a setting problem with Use Unqual. Table Name property: connecting with prompt during initialization set always to FALSE the value of this property;</li> <li>• Fixed an error, when Use Unqual. Table Name property was checked, calling one of the following schema rowsets: COLUMNS, PROCEDURES and PROCEDURE_PARAMETERS rowset: the parser was not correctly called to support *SYS NAMING OPTION syntax;</li> </ul>
1.1.2.2	06/16/00	<ul style="list-style-type: none"> <li>• Fixed a problem updating BINARY data with Convert CCSID 65535 checked: correct values were displayed but not effectively sent to the database;</li> <li>• Fixed a problem updating CHAR OLE data (DBTYPE_STR, DBTYPE_BSTR, DBTYPE_WSTR) with values exceeding the maximum length: an error occurred returning results into the consumer's buffer;</li> <li>• Resolved a compatibility problem with MS SQL Server DTS: Connect Timeout property was not recognized in old DTS packages saved in provider version preceding the 1.1.2.0;</li> <li>• Implemented IRowsetUpdate interface in order to manage delayed updates;</li> <li>• Fixed an error for Mode property: it was always set to Write value;</li> <li>• HSTABLEs 420 – Arabic and 838 – Thai added to the tables list;</li> <li>• Fixed an error in schema columns with aliases: the TABLE_NAME column retrieved always the original table name, instead of the alias one (and this brought about an error when DbXpress was enabled);</li> <li>• Fixed a small problem in parsing a CALL DPC query: calling a program with a string without blanks before “?” was not recognized as a parametric query.</li> </ul>
1.1.2.1	05/09/00	<ul style="list-style-type: none"> <li>• Memory exception during the execution of a select statement performing the following operations: <ul style="list-style-type: none"> <li>• - create a command</li> <li>• - run a select with a number n of result columns</li> <li>• - run a select with a number m&gt;n of result columns</li> <li>• - C++ exception.</li> </ul> </li> <li>• Toolbox: global trace value into oledb400.ini was set wrong;</li> <li>• Resolved a memory exception in CreateAccessor when trace is active</li> </ul>

1.1.2.0	04/27/00	<ul style="list-style-type: none"> <li>• Fixed a problem with MDAC 2.5 saving Connect Timeout and Port Number fields into a UDL file (HiT Toolbox/Workshop saves these properties);</li> <li>• Introduced alternative memory management, only when Rowset Locate is checked: every request for new memory for the local rowset allocate an entire block of a fixed number of fixed size rows, in contrast of the standard method of allocating single rows every time is needed;</li> <li>• Unqualified table names support – behavior is the same than ODBC/400;</li> <li>• Support SSL Strong released for all versions;</li> <li>• Setup: updated MDAC version (2.50.4403.12);</li> <li>• Toolbox: only one level of global trace.</li> </ul>
1.1.1.1	02/25/00	<ul style="list-style-type: none"> <li>• Introduced dbXpress feature.</li> <li>• Updated trace structure. Now trace file (level 3) contains also info about local machine, some MDAC files version and last writing time, version and key of the installed product.</li> <li>• Using trace option will be available only if the toolbox is active. Closing the toolbox all traces (global or local) will be disabled.</li> <li>• Fixed a problem with packages into the workshop, the isolation level was always “0 - None”.</li> <li>• Fixed a problem with DECIMAL type: formatting function was not correct, particularly in case with leading zeros and with precision major then 19.</li> <li>• Added DBCS support;</li> <li>• Updated conversion table 280 and 37 and added euro-conversion tables from 1140 to 1149 and for double byte 933, 935, 937, 4039, 5026 and 5025;</li> <li>• Introduced Performance Tab into Data Source Configuration and changed the position of some entries.</li> <li>• License key now visible from “About” of Toolbox/Workshop</li> <li>• Added handling of packages and debug from Toolbox;</li> <li>• Setup: The runtime version can be installed only on machines with Microsoft Windows 95/98, Windows NT4.0 Workstation and Windows 2000 Professional;</li> <li>• Setup: Dcom 98 replaced from Dcom95 latest version (1.3).</li> </ul>
1.1.0.2	12/03/99	<ul style="list-style-type: none"> <li>• Updated help files</li> </ul>
1.1.0.1	11/22/99	<ul style="list-style-type: none"> <li>• Fixed problem with SCHEMA_COLUMNS and Alias Tables (especially for member defined as Aliases).</li> <li>• Added new Data Source property called “Alias Support” – when set to true Alias Catalog info is cached.</li> <li>• Added support for performance counter (available only on recompilation).</li> <li>• Fixed memory leak problem (only for DB_MEM_PROVIDER options) – detected only by running queries with varchar fields and QueryAnalyzer.</li> </ul>

		<ul style="list-style-type: none"> <li>• Changed registry setting for OLEDB_SERVICES – set to supporting everything but distributed transactions.</li> <li>• Fixed problem with the INIT_PROVIDER_STRING property: now it can handle the field “Data Source” set to point to a udl file.</li> <li>• Fixed a problem with udl files having an empty string for the “Libraries” property.</li> <li>• Changed the default value for the OLEDB_SERVICES Data Source property.</li> <li>• Removed support for SCHEMA_INDEXES catalog rowsets (rather than being taken as key descriptions, they were mistakenly taken for record level access indexes).</li> <li>• Fixed a memory leak with Column Names (following release of a select resultset)</li> <li>• Fixed problem related to converting large precision decimal fields to char (0’s were converted to blanks).</li> <li>• Fixed more memory leak related to _HSMModule collections.</li> </ul>
1.1.0.0	11/05/99	<ul style="list-style-type: none"> <li>• SSL Support – New Release</li> </ul>
1.0.1.24	09/22/99	<ul style="list-style-type: none"> <li>• Added support for the IMultipleResults interface</li> <li>• Added support to call stored procedures using MS Sql7 Query Analyzer.</li> <li>• Added support to call stored procedures that returns multiple result sets and that support output parameters.</li> <li>• Fixed a number of problems related to cursors not being released (within a single connection).</li> <li>• Fixed problem when preparing queries in sequence reusing the same cursor number. Now, before re-preparing a cursor, the cursor is closed and released.</li> <li>• Fixed problem when either a Prepare or an ExecDirect fail: now the generated cursor is closed and released.</li> <li>• Fixed problem with InsertRows (IRowsetChange interface): sometimes the “*N substringing function error” happened. To fix the problem NULL values are submitted as parameters.</li> <li>• Fixed a problem with output parameters: they are only processed when stored procedures are queried.</li> <li>• Fixed problem with SetCommandText: cursors are closed and released only when a rowset is created.</li> <li>• Fixed problem with output parameters that are set to NULL on input to a parametric query.</li> <li>• Added support for the ?=call xxx(?,?,...?);1 syntax for stored procedures (as generated by SqlServer 7).</li> <li>• The IMultipleResults rowset interface is supported only by rowsets that are not generated by the GetResult method (IMultipleResults interface and ADO 6.0).</li> <li>• Columns Schema queries had a consistency problem with binary data and the ConvCCSID flag set to true.</li> </ul>

		<ul style="list-style-type: none"> <li>• Fixed problem with UDL file support (as provide in the data source property) and UserID, Password and Library properties.</li> <li>• Fixed problem with uppercase conversion and ConnectTPN, Package Name and Package Library properties;</li> <li>• Fixed some problems with VB toolkit and installation of Msvbvm50.dll in windows system if not exist;</li> <li>• Updated MDAC version to 2.1.2.4202.3</li> </ul>
1.0.1.23	09/02/99	<ul style="list-style-type: none"> <li>• Fixed the infamous “invalid operation” problem. The problem was due to having Sql 7 requesting transactions on non-journaled tables. The problem was fixed by not starting a transaction when no-commit was selected in the connection string.</li> <li>• When running COLUMN_SCHEMA Schema Rowset queries, column catalogs are now sorted based on the ordinal position (Sql 7 has a problem when sorting on ordinal positions is not in place).</li> <li>• OpenRowset now does not fail on invalid rowset properties (Sql 7 has problems when that happens).</li> <li>• The BookmarkType rowset property was added.</li> <li>• Fixed the column info trace (there was a problem when bookmarks are used).</li> <li>• The trace was improved in a number of different areas.</li> <li>• Added the LITE version support.</li> <li>• License keys with the read-only flag set are now properly handled.</li> <li>• Sql Server 7 stored procedures Sql syntax is now handled by the driver.</li> <li>• Data sources using UDL files had a problem when the full path was specified.</li> <li>• Fixed a problem with package names when UDL files are supplied as Data Sources.</li> <li>• Fixed an unlikely problem: combination of stored procedures with result sets/isolation level != 0/hold cursors=off è the end result was that no resultset was obtained.</li> <li>• The Remove Blanks feature (as for the ODBC driver) was added to Connection dialog box and the set of connection properties</li> </ul>
1.0.1.22	08/12/99	<ul style="list-style-type: none"> <li>• Fixed problem double quote support and CrystalReport Designer</li> <li>• Added updated help file and release notes.</li> </ul>
1.0.1.21	08/09/99	<ul style="list-style-type: none"> <li>• Fixed problem with NULL and InsertRow method of IrowsetChange.</li> <li>• Fixed problem with error strings being cleared unnecessarily by a QueryInterface call.</li> <li>• Added support for connection property settings within the datasource property</li> <li>• Added support for data link settings within the datasource property</li> <li>• Fixed problem with Rollback/Commit during transaction with Isolation Level != from 0</li> </ul>
1.0.1.20	06/28/99	<ul style="list-style-type: none"> <li>• Added support for bookmarks</li> </ul>

		<ul style="list-style-type: none"> <li>Added support for IrowsetLocate to handle Sql7 QueryAnalyzer Update/Insert/Delete statements on LinkedServers</li> </ul>
1.0.1.19	06/15/99	<ul style="list-style-type: none"> <li>Added support for IrowsetChange for Update and Delete</li> <li>Added support for ISequentialStream (binary data with Sql7 linked servers).</li> <li>Improved trace to handle more interfaces and properties</li> <li>Fixed multi-thread problems for concurrent update/delete/insert in the same connection.</li> </ul>
1.0.1.18	05/27/99	<ul style="list-style-type: none"> <li>Added support for IRowsetChange for Insert Rows only;</li> <li>Fixed problem with parsing parameter markers (?) if not preceded by blanks;</li> <li>Created new parsing tool based on stack of identifiers;</li> <li>Inserted MDAC 2.1 during setup.</li> </ul>
1.0.1.17	05/04/99	<ul style="list-style-type: none"> <li>Fixed problem with input parameters: when field is char and binding is of type Variant, the parameter string was truncated to 16 chars;</li> <li>Fixed problems with locks on input parameters: there was a situation when a critical section object was not released;</li> <li>Fixed problem with char fields containing the Null char (0x00): the string was truncated to the first null - now the entire char content is returned;</li> <li>Fixed problem with the Conv CCSID Data Source: sporadically the input parameter was set either to true or false randomly</li> </ul>