

WHERESCAPE RED RELEASE NOTES

6.8.7.0

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WHERESCAPE RED 6.8.7.0 FEBRUARY RELEASE UPDATE

FEBRUARY 2017

Where Scape is pleased to announce that the Where Scape RED 6.8.7.0 is now available.

UPGRADING TO VERSION 6.8.7.0

Login to **https://www.wherescape.com** and download RED 6.8.7.0 from the downloads page in the **Support** section.

A full list of WhereScape RED's previous release notes is also available for download on the website.

WHERESCAPE RED 6.8.7.0 IMPORTANT MESSAGES

- Cube and Cube Virtual objects are to be deprecated in a subsequent release. Cube objects must be migrated to OLAP Cube objects.
- When exporting a RED design from 3D for use in a RED metadata repository stored in Teradata, it is essential to use 3D version 2.8.0.2 or later in order to avoid potential errors when generating procedures.
- Teradata 13.10 is no longer supported as a metadata repository/target from this major RED release, 6.8.7.0.
- SQL 2005 will no longer be supported as a metadata repository/target from this major RED release, 6.8.7.0. This is in line with Microsoft no longer providing extended support for SQL 2005 from April 12, 2016:

https://www.microsoft.com/en/server-cloud/products/sql-server-2005/

- "Runtime Libraries Error "Missing api-ms-win-crt-runtime-l1-1.0.dll" "
 Our Testing Team has discovered that, in some situations, a system error mentioning missing runtime libraries may occur. These Runtime Libraries are normally installed with the regular Windows Updates but can easily be added manually by following the Microsoft article: https://support.microsoft.com/en-us/kb/2999226
 Without this "Microsoft Visual C++ Redistributable for Visual Studio 2015" update installed, the OLAP, SSIS or MS Tabular Cube functionality may not function correctly.
- Setup Administrator will not import applications that have been exported as XML from old versions of WhereScape 3D. The applications will need to be re-exported from WhereScape 3D version 2.8.0.0 or later, as the XML file structure has changed.
- Analysis Services connections running in Multi-dimensional mode have a new setting named SSAS Client Version, which enables users to target a specific version of the Analysis Services client run-time. If the SSAS Client Version not explicitly set, RED will default to a setting of 2012.

When upgrading RED, please see the following Important Messages:

• When **Upgrading** from previous versions of RED, it is necessary to update each RED metadata repository to complete the upgrade. This is done by completing a **validate and recompile of all metadata procedures** in WhereScape Administrator.

 The Linux Scheduler scripts for Oracle, Teradata and DB2 may have been altered and will need to be applied manually.

Note: Please review and action all the previous version-specific **Important Messages** below, that are relevant for your RED Upgrade.

Important Messages when upgrading from 6.8.6.0, 6.8.6.1 or earlier

- The SQL Block statement terminator has been changed from ';' to <EOS> from 6.8.6.2 onwards. If you have existing SQL Blocks which rely on ';' as the statement terminator you can change the default back to ';' in **Tools/Options/Code Generation**.
- The existing template engine and the old Hive and PDW templates have been replaced with new versions. Any user created templates will need to be redone in the new language. Refer to the Templates chapter in the respective User Guide (chapter 23 for RED; chapter 24 for Teradata)
- License keys issued for version 6.8.6.1 allowing Custom targets or Custom object types are no longer accepted; you will require a new license key from WhereScape.
- If you have created objects stored on Tabular databases in version 6.8.6.0 and wish to Recreate the object(s), you should run **Relationships/Generate Relationships** on each object after upgrading RED. This only needs to be completed once before Recreating the object. See significant New Features and Improvements for more information.

Important Messages when upgrading from 6.8.5.0 or earlier

- Users with Export objects that use double quote character as an enclosing character will need to open and re-save the Properties for each Export Object.
- Customers using cursor based update procedures on SQL Server, Oracle and DB2: Note that
 we have changed the calls to procedures/functions get_<DIM_NAME>_key within the
 updated procedure generation to named notation.
- Changes were made to the WhereScape RED Target Licenses and customers with those licenses will need to have their licenses re-issued.

 Please contact your WhereScape Sales Representative or email sales@wherescape.com.
- **APL users:** All APL XML functionality has been migrated into Setup Administrator, including importing models from WhereScape 3D.

The RED Generated Documentation is now using different images with different sizing. The
format of the company_logo.jpg image has also been changed from .jpg to .png.
Customers that have created their own banners will need to resize the images according to
the table below and also convert the company_logo.jpg image to .png.
 The new .png files can be found in the WhereScape RED DocImages installer folder.

New Image File	Action(s) required
C:\Program Files (x86)\WhereScape\DocImages\company_logo. png new image size: (408 x 134)	company_logo.jpg needs to be converted to company_logo.png and resized.
C:\Program Files (x86)\WhereScape\DocImages\poweredbyred. png new image size: (415 x 134)	poweredbyred.png needs to be resized.
	C:\Program Files (x86)\WhereScape\DocImages\company_logo. png new image size: (408 x 134) C:\Program Files (x86)\WhereScape\DocImages\poweredbyred. png

Important Messages when upgrading from 6.8.4.0 or earlier

No important messages.

Important Messages when upgrading from 6.8.3.0 or earlier

• No important messages.

Important Messages when upgrading from 6.8.2.0 or earlier

 For UNIX/Linux exports and loads in versions after 6.8.2.0, the logic used for defining the SID value for connecting to the repository has been modified. If the ORACLE_SID environment variable is set in your Unix/Linux environment, this will be the variable used. If this environment variable is not set then the value from the Linux/Unix connection object will be used.

For older versions of RED Release Notes, refer to https://www.wherescape.com/support/release-notes/.

SIGNIFICANT NEW FEATURES AND IMPROVEMENTS IN RED 6.8.7.0

New Features and Improvements

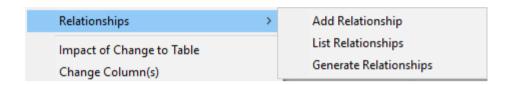
- 1 Template objects can be used to generate code for DDL, update procedures (Hive, PDW and Custom targets only) and host scripts.
 - Refer to the Templates chapter in the respective User Guide for more information (*chapter 23 for RED; chapter 24 for Teradata*).
 - Where Scape recommends that you contact our consulting team to assist with this feature.
- 2 Targets can now be added to custom database connections. This requires a specific target-enabled license. This enables the creation of targets on database platforms which are not natively supported by RED. Note: Custom targets are only supported with the Windows Scheduler.
- **3** Additional environmental variables have been added to provide more comprehensive support when authoring load scripts. Refer to the *Script Environmental Variables* section in the respective User Guide (*chapter 22.13 for RED*; *chapter 24.15 for Teradata*).
- 4 It is now possible to perform load operations from ODBC and Database connections via script execution into any target platform. Note that RED will only generate an outline script and the load commands will need to be written by the RED developer either directly into the script or via template code generation.
- 5 It is now possible to perform load operations from Windows and Linux/Unix files via script execution into any target platform. Note that for some target platforms RED will only generate an outline script and the load commands will need to be written by the RED developer or via template code generation.
- Added data vault object types Hub/Link/Satellite as new object types. Also added new object types Custom1 and Custom2 to enable customers using their own object types to not have to use an existing object type.
- **7** Relationship Maintenance functionality has been enhanced to enable explicit management of joins between tables in more complex environments such as Tabular or Data Vaults.
- **8** Each Object Type's icon can be configured to an arbitrary icon, see Tools/Options/Object Types/Object Type Icon.
- **9** A new option TPT ODBC DSN for Teradata, has been added. This enables the user to use a different DSN for browsing and for TPT loads.
- **10** A row count can be displayed for each table in the Browser Pane (right pane). This option can be set in the source connection dialog for compatible database connections (DB2, Oracle and SQL Server).
- **11** Unused Object Type Groups (those that do not contain objects of that type) are no longer displayed in Projects in the Object Pane. This can be changed in the Project Properties dialog for each project.

- **12** A 'Find' function has been added that can be used to locate objects within the Object and Browser panes. This feature is particularly useful to locate objects within very large lists.
- **13** Improved usability of the Re-create dialog. More information available in the RED User Guide, section *3.2.2 Re-create Dialog*.
- **14** The Oracle provided Oracle ODBC Driver is now supported.
- **15** Added option for configurable end-of-statement indicator to support multi-SQL statement processing in DDL statement and DML statements.
- **16** Hierarchies may be copied from their source table(s) via a new menu item in the Hierarchy sub menu. Dimension Views have been updated to support Hierarchies.
- **17** During an application import, if a job has an associated scheduler, the user is given the choice to associate it with a scheduler on the target system or to retain the existing scheduler.

RELATIONSHIP MAINTENANCE

Relationship Maintenance is available for the maintenance of joins between objects; providing a way to record joins between tables when surrogate keys are not being used. This functionality then enables the generation of **Links Diagrams** for these objects.

Relationship Maintenance options are available in the Relationships sub-menu when right-clicking on an object in the **Object Pane**.



To generate relationships in metadata for an object, right-click on the object in the **Object Pane** and select **Relationships->Generate Relationships**. Results are shown in the **Results Pane**.



CONFIGURABLE ICONS

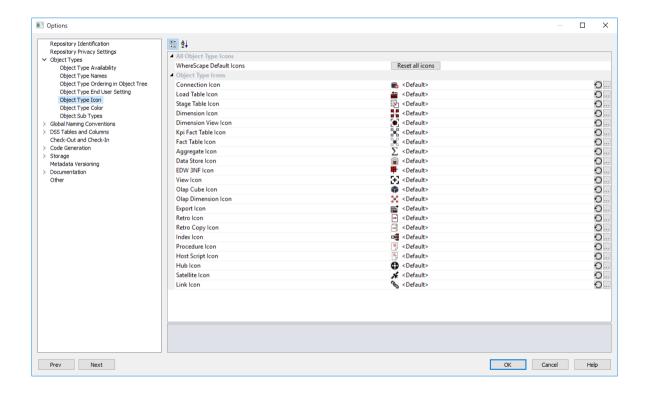
This new feature allows users to configure the **Icons** for all Object Types. Icon files must be copied to the following folder in the WhereScape RED install directory:

C:\Program Files (x86)\WhereScape\Icons

Note1: The folder must be created if it doesn't already exist.

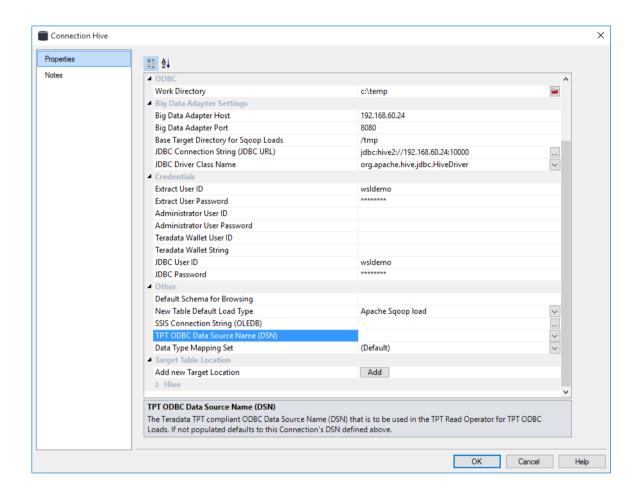
Note2: All RED installations must have a copy of the icon directory.

To configure this feature, go to **Tools>Options>Object Types>Object Type Icon**:



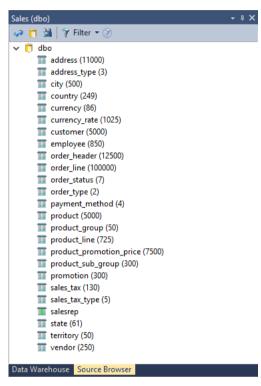
TERADATA TPT ODBC DSN

ODBC Connections in Teradata now allow for a TPT compliant ODBC Data Source Name (DSN) that is to be used in the TPT Read Operator for TPT ODBC Loads. If not populated, this defaults to the ODBC DSN defined at the top of the Connection Properties dialog.

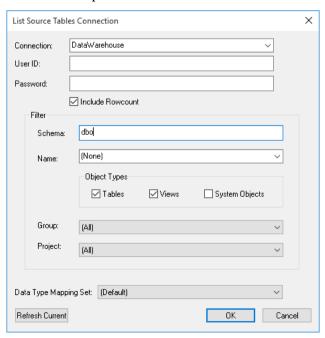


SOURCE TABLE ROW COUNT

Row Counts can now be displayed on source tables in the Browser Pane.

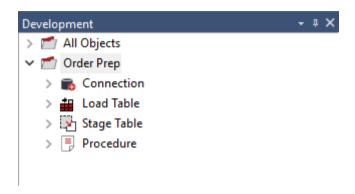


To enable, check the **Include Rowcount** option in the **List Source Tables Connection** dialog (**right-click on a connection in the Object Pane/Browse Connection**). This is only available for databases which update table statistics.



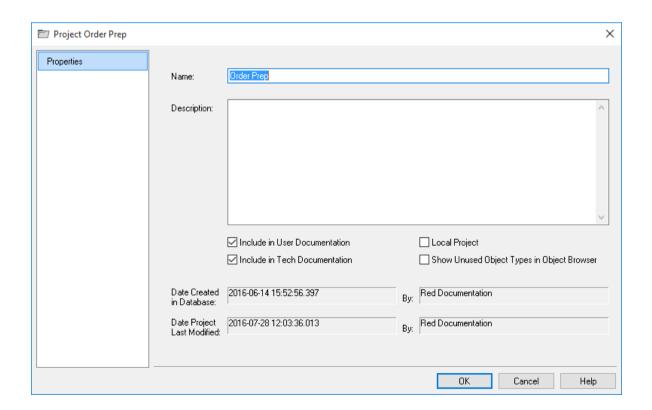
SHOW UNUSED OBJECTS IN PROJECTS

Object Types which are unused are no longer displayed in Projects in the Object Pane.



To *permanently* display unused Object Types in a Project, check the **Show Unused Object Types in Object Browser** option in the **Project Properties** dialog (**right click on the project/Project Properties**).

Alternatively, select the **Show unused Objects** in the right click context menu, to *temporarily* display the unused objects.

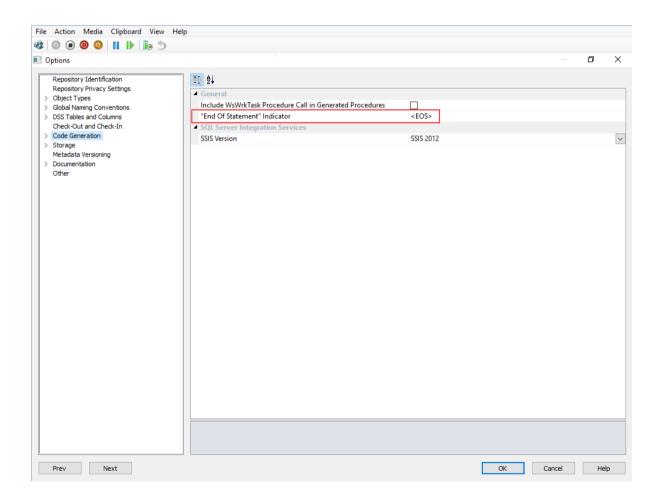


CONFIGURABLE END OF STATEMENT INDICATOR

A configurable end-of-statement indicator has been added to support multi-SQL statement processing in DDL statements and DML statements.

You can optionally set the default terminator to ";" in *RED Tools->Options->Code Generation*.

This enables you to set an end-of-statement indicator that is independent of the database being used.



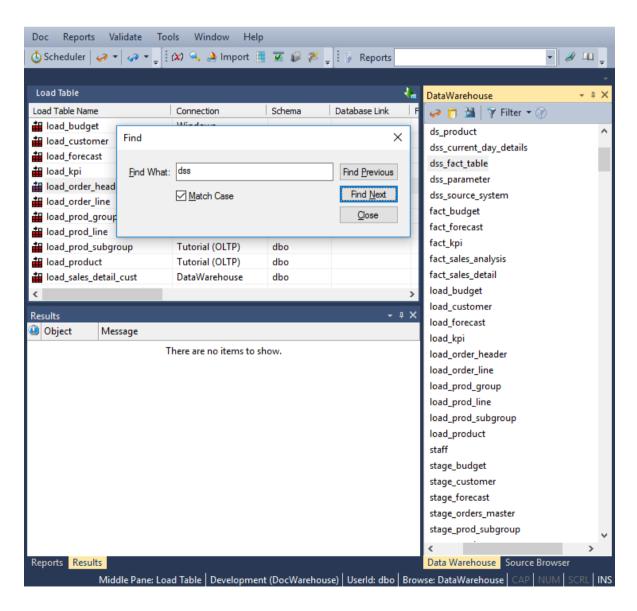
USE THE NEW FIND FUNCTION

A 'Find' function has been added that can be used to locate objects within the Object and Browser panes.

This feature is particularly useful to locate objects within very large lists.

'Ctrl + F' will open the find dialog when either the **Object** or **Browser** panes is active. Enter the partial or full search term, optionally check 'Match Case' and then scroll forwards or backwards through the matching objects in the active pane.

A 'Find' menu item has also been added to the Edit menu. This option will only locate objects within the Object Pane.

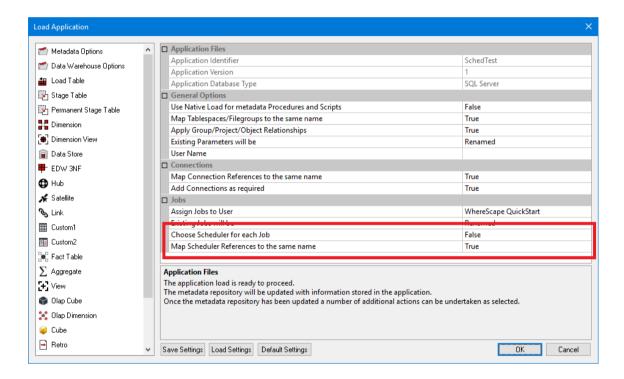


MAP A SCHEDULER NAME DURING APPLICATION DEPLOYMENT

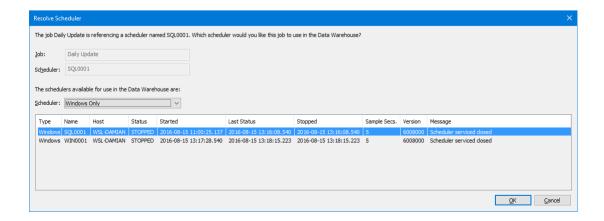
When an exported job containing an assigned scheduler is deployed, the scheduler name is automatically mapped to an appropriate scheduler in the repository being deployed to.

If no suitable mapping is available, the user is prompted to select deployment options for resolving any schedules used by the application.

These import options can be configured.



A suitable scheduler can be selected from the drop-down list when prompted to resolve the Scheduler for the job being imported.



RESOLVED ISSUES IN RED 6.8.7.0

Changes since 6.8.6.0

Database	Key	Release Note
Improvemen	ts	
Common	RED-3102	Stage table Zero Keys report has been improved and is now target aware.
Common	RED-3282	Scheduled tasks now have an option to set to Disabled or Disabled Once. For the later, after the first execution, the state reverts to Enabled.
Common	RED-4160	Added a find function to find objects in Object and Browser panes
		The find is dependent on which pane is 'active' at time of entering 'ctrl + F'
		There is also a Find option added to the main menu (Edit menu). This option will only find the object within the Object Pane
Common	RED-4287	Improved usability of the create/recreate dialog.
Common	RED-4492	Index properties when working with indexes for a selected object now include update -> and update <- buttons to iterate through indexes.
Common	RED-5363	It is now possible to perform load operations from Windows and Linux/Unix files via script execution into any target platform. Note that for some target platforms Red will only generate an outline script and the load commands will need to be written by the Red developer.
Common	RED-5941	When changing away from a history type (Slowly Changing) table, then the history columns will be reset to ensure no unrequired index is auto defined.

Database	Key	Release Note
Common	RED-6626	WhereScape RED allows users to choose a custom icon for each type of object in a Data Warehouse. Users may use the default icons provided in WhereScape RED, or source their own icon files (*.ico) and use them with the software. Custom icon files (*.ico) are not transmitted between different WhereScape RED instances.
Common	RED-6627	Each object type's icon can be configured to an arbitrary icon.
Common	RED-6635	Relationship Maintenance functionality has now moved from Tools/Join Information Maintenance to the Relationship sub-menu. To access Relationship Maintenance, right-click on an Object in the Object Pane and select Relationships. The Relationship Maintenance functionality allows explicit management of joins between tables for more complex environments, for example Tabular or Data Vaults. Some relationships are no longer automatically generated during Create (Recreate) and must be generated manually by running Relationships/Generate Relationships.
Common	RED-6654	New context menu item added to diagrams to link and query a table via SQLAdmin tool.
Common	RED-6712	The message displayed when attempting to save procedures with lines over 256 characters has been improved.
Common	RED-6742	Added data vault object types Hub/Link/Satellite as new object types. Added new object types Custom1 and Custom2 to enable customers using own object types without occupying an existing one.
Common	RED-6749	Hierarchies may be be copied from their source table(s) via a new menu item in the Hierarchy sub menu. Dimension Views have been updated to support Hierarchies. The Hierarchy sub menu has been added to the context menu for Dimension Views.
		When creating OLAP dimensions, RED will not recurse into Dimension View source tables looking for Hierarchies to copy. Instead, it will copy any hierarchy associated with the Dimension View directly.
Common	RED-6763	Projects no longer show object types with no associated objects in Object Browser Pane. This can be changed via individual project property settings. Project context menu now has a 'refresh' option to only refresh the selected Project.

Database	Key	Release Note
Common	RED-6776	AutoAdd of late arriving dimension rows is now shown in diagrams and impact lists
Common	RED-6881	The New Object dialog no longer presents an option named (default) for Data Type Mapping. The dialog has been updated to actually select the relevant Data Type Mapping option.
Common	RED-6887	Objects now have a context menu option to list Projects that the object is a member of. Option is in Project sub menu.
Common	RED-6890	Change to the Filter display on browser pane to make it explicit that is a name only filter. Also removed dependent on source type applicability.
Common	RED-6904	The Backup/Save Create Scripts to Disk functionality has been modified with the following improvements:
		- Generation of Teradata scripts now have the option to provide source table.column comments (previously only present for non-Teradata)
		- Generation of Teradata create table/view scripts now include create index statements (previously only present for non-Teradata)
		- Generation of Sequence Create DDL is now also generated for objects of non-Oracle databases that support sequences (Netezza, Greenplum, Paraccel).
		- Generation of Sequence Create DDL is now generated for all table types that support sequences (previously only generated for Dimensions, Fact Tables, Data Stores, and Normalised tables).
Common	RED-6950	Setup Administrator and RED will warn of the coming deprecation of Cube and Cube Virtual objects in a future release. These objects must be migrated to the OLAP objects.
Common	RED-6980	Padding can now be set for Tree Items wherever Data Warehouse Objects are displayed in a tree. The amount of padding is configurable in Tools/User Preferences/Common/Look and Feel/General. This padding is added to the top and bottom of each tree item. Padding can be set from 0-10 pixels, default value is 2.
Common	RED-6982	Setup Administrator will not import applications that have been exported as XML from old versions of WhereScape 3D. The applications will need to be re-exported from WhereScape 3D version 2.8 or later as the XML file structure has changed.

Database	Key	Release Note
Common	RED-7084	Context menu options added to Tracking and Join Diagrams. Options added include ability to navigate to object in builder pane, display data and produce/read object documentation. Also extended Double click action on diagrams that opened object properties to be supported in both diagram views.
Common	RED-7112	A new command line argument /SO has been added to Setup Administrator. It stands for "Stay Open" and causes Setup Administrator to stay open after running a command.
Common	RED-7201	New code build option from view properties for where clause.
Common	RED-7206	Expand All context menu added to groups/projects.
Common	RED-7217	It is now possible to perform load operations from ODBC and Database connections via script execution into any target platform. Note that Red will only generate an outline script and the load commands will need to be written by the Red developer either directly into the script or via template code generation.
Common	RED-7244	Added option for configurable end-of-statement indicator to support multi-SQL statement processing in DDL statement and DML statements.
Common	RED-7501	DSS Change columns (Version, Start, End) can now be removed.
Common	RED-7546	Export Properties Connection attribute now only shows possible valid connections from the metadata.
Common	RED-7550	Fact Cross reference report now has context menu option to link to the star schema design for the fact of the column where the context menu is initiated.
Common	RED-7556	Usage report added to context menu for template objects.
SQLServer, Oracle, Teradata	RED-6633	The concept of "Local Targets" has been removed. WhereScape RED will no longer present a check box in the options labelled "Enabled Local Targets". All RDBMS platforms except DB2 will always allow Local Targets and will use the [TABLEOWNER] syntax in SQL queries.
SQLServer, DB2, Oracle	RED-6714	For source tables on Oracle/SqlServer/DB2 there is an optional rowcount available in the source tree with the option set in the source connection dialog.
SQLServer	RED-6925	Added Covering Columnstore as an option for FK index default types for SQLServer.
Oracle	RED-5037 RED-6733	Select, Update and Insert hints are now additionally available for Oracle Fact and Stage table procedure generation.

Database	Key	Release Note
Teradata	RED-3560	On setting of an active Primary Index on Teradata, the appropriate default collect statistics clause (COLLECT STATISTICS \$OBJECT\$ INDEX index_name) is also appended to the statistics definition.
Teradata	RED-6268	Support for Table locks on source tables of Teradata generated procedures for selected object types.
Teradata	RED-6697	Teradata view creates now include TITLE clause in select definition so as to flow thru to reporting layers.
Teradata	RED-6770	Added new option TPT ODBC DSN for Teradata. This allows the user to use different DSNs for browsing and the explicit TPT load.
Teradata	RED-6840	Fixed issue with row locks in Teradata.
Teradata	RED-6936	Enabled 'Dimension-Fact Matrix' and 'Records that failed a Dimension Join' reports for Teradata meta repositories.
Teradata	RED-7137	Fixed issue with alias of transformed columns in Teradata.
Teradata	RED-7189	Table name is now included in PI Prompt message when creating a teradata table that hasnt had the PI defined.
PDW	RED-6719	For PDW database type the destination adapter for SSIS load default to use SQLPDW. This did not work for AZURE DW which requires the destination adapter to be set to standard OLEDB. Changes were made to Connection Dialogue to enable user to create correct set up for PDW target connections depending on whether PDW or Azure DW is used. We do not have a way to automatically distinguish between PDW and AZURE DW so this needs to be set up by user manually. The default behaviour is to assume PDW (i.e. both OLEDB and SQLPDW are required). Some changes were also made to Source tab of Load Table Properties dialogue to only show SSIS options relevant for chosen Destination Adapter.
Resolved Iss	ues	
Common	RED-4611	Added "Distinct" keyword for views that have a from-clause explicitly specified and when option "Distinct Data Select" is ticked.
Common	RED-5624	Fixed issue with scheduler log reporting the last parent job as failure reason of a child job; now reporting the first failed parent job as failure reason.
Common	RED-5701	When retrofitting the nullability from the source is now always used and the nullability setting from the datatype mapping is ignored.

Database	Key	Release Note
Common	RED-6167	Reports->Job Reports->Object-Job Matrix now includes scripts and procedures.
Common	RED-6218	HTML Documentation limit of 10,000 objects removed.
Common	RED-6285	Fixed it so that Backup/Save Create Scripts to Disk uses the same script generation logic as that used for Generated DDL. This is fixed for all objects of any database type. This has also resulted is some previously missing properties in scripts to now be present.
Common	RED-6320	Setup Administrator will not allow unlicensed object types to be imported into Data Warehouses.
Common	RED-6371	Loop for connect failure when encounter thread failure via windows scheduler to account for db connectivity issues that can occur with unstable client sites.
Common	RED-6703	New Object dialog now correctly defaults to include selected object type prefix when used from context menu at group level.
Common	RED-6781	Removed forced removal of semi colon from load statement overrides.
Common	RED-6819	Tabular auto-added measures now correctly default to numeric additive.
Common	RED-6820	Duplicating a tabular measure retains measure setting.
Common	RED-6876	Fixed issue with processing of invalid procedures in Linux/Unix scheduler for Teradata.
Common	RED-6878	When an OLAP Cube is partitioned by a string value; this value will be quoted. When an OLAP Cube is partitioned by a numerical value; this value will not be quoted.
Common	RED-6889	Corrected validation of business key requirement using some code generation templates.
Common	RED-6926	When importing an XML file via Setup Administrator, the XML tags <data_type_name>, <size> and <scale> are used to create the value for the data type of the column. No manipulation of the values loaded from these tags is performed (as was done in previous versions) whatever WhereScape 3D has written into these tags is used.</scale></size></data_type_name>
Common	RED-6957	Removed limit for 20,000 objects in documentation generation.
Common	RED-6972	Corrected issue where the default update hint for code generation was not being retained when set via tools/options.
Common	RED-7008	Restore point application now handles deletes.

Database	Key	Release Note
Common	RED-7020	Fixed issue with appearance of unlicensed Data Vault object types in dialog "New Object".
Common	RED-7039	When performing a drag/drop retrofit of individual tables, the popup dialog mentioned in step 4 in the Description will no longer appear.
Common	RED-7079	Reinstated group context menu that was missing in earlier beta.
Common	RED-7100	3D to RED export datatype and column ordering are no longer overwritten during loading.
Common	RED-7110	The Windows Scheduler will perform substitution of the keyword [TABLEOWNER] when executing a procedure of type Block.
Common	RED-7116	Images in Column Track Reports improved.
Common	RED-7122	Setup Administrator will fallback to its normal, dialog based, operating mode if it cannot access or read the parameter file supplied on the command line.
Common	RED-7125	Column Track Back report from menu with option 'Exclude Intermediate Steps' now has source loop protection.
Common	RED-7313	The Template author can now be edited and saved in the properties dialog.
Common	RED-7242	License keys issued for version 6.8.6.1 allowing Custom targets or Custom object types are no longer accepted; you will require a new license key from WhereScape.
Common	RED-7263	The "None" setting in SSIS load identifier encapsulation will now correctly prevent RED adding encapsulation to the columns or tables with space in their names.
Common	RED-7285	Errors in application load of 3D to RED exports including table joins have been resolved.
Common	RED-7330 RED-7526	Icon files added to the Icon directory.
Common	RED-7530	Fixed issue with encapsulation of variables in Linux/Unix scheduler
Common	RED-7571	Corrected meta validate to repair metadata when identity orphaned join index objects.
Common	RED-7592	When execute a SQLBLOCK directly via the UI or procedure editor the execution now correctly uses the default connection associated with that block for execution.
SQLServer, DB2, Oracle	RED-6152	Fixed issue with character escaping for Where-clauses in Windows script exports.

Database	Key	Release Note
SQLServer, DB2, Oracle	RED-6790	Fixed lookup of \$\$TABLE_NAME and \$\$SOURCE_TABLE parameters when using the WsParameterReadG procedure from within a Child job.
SQLServer	RED-7052	Code build default options (eg Hints) now brought through to SQLServer Fact and Stage objects.
SQLServer	RED-6496	When the connection type is "Database" but there was no "Database ID" defined there was no fall back option for picking the source name value and on diagrams and documentation it was displayed as '(no source)'. For Database type connections source value will now be picked in this order of preference: Database ID, DSN name, the connection object name.
		Support for Hadoop load type has been added. Hadoop load type is treated the same as ODBC load type.
SQLServer, Oracle	RED-7375	Fixed issue with generic object string \$OBJECT\$ for user-defined view creation in Windows scheduler for SQL server and Oracle.
SQLServer, DB2, Oracle	RED-7132	The Windows Scheduler will correctly update tables in MSAS when Windows Scheduler is not logged in as an Administrator.
DB2, Oracle, Teradata	RED-4934	JOB_NAME and TASK_NAME parameters now available in UNIX/Linux host scripts when run through scheduler.
Oracle	RED-4550	Corrected Table and Columns with no comments report for Oracle and Teradata to match correctly when using targets. Corrected Table and Columns with no comments report for SQLServer to work correctly for view type objects.
Oracle	RED-6308	Added support for Oracle ODBC driver.
Oracle	RED-6986	When validating oracle user permissions, correct message is now displayed if not able to access user_tab_privs or all_tab_privs.
Oracle, Teradata	RED-7370	Fixed issue with generic object string \$OBJECT\$ for user-defined view creation in Linux/Unix scheduler.
Teradata	RED-5010	When importing a diagram created in WhereScape 3D into WhereScape RED, the connection names are treated case insensitively.
Teradata	RED-6323	The shell used in generated TPT Load Scripts is now controlled by the Script Shell option in the associated ODBC Script Connection rather than always being "/bin/ksh".
Teradata	RED-6610	It is now possible to execute Teradata BTEQ update procedure from Procedure Editor, via object's pop-up menu ("Execute Update Procedure" option) and as a scheduler task.

Database	Key	Release Note
Teradata	RED-6981	Fixed issue with Column Title statement quotes are not escaped for Teradata view creation in Linux/Unix scheduler.
Teradata	RED-7012	Fixed issue with detail logging on success option for TPT file loads in Teradata.
Teradata	RED-7054	Fixed issue with reporting of wrong row counts of TPT file loads in Linux scheduler.
Teradata	RED-7139	Corrected View procedure generation on Teradata where source using view source.
Teradata	RED-7162	Application loads of view alias objects which use database or schema storage attributes will now load successfully.
Teradata	RED-7171	Fixed issue with refresh of statistics for data vault object types.
Teradata	RED-7451	Correctly associating indices to their corresponding tables when the type of table is Hub, Satellite or Link.
Teradata	RED-7528	Fixed issue with number of Amps exceeding a value of 999.
Teradata	RED-7567	Join Index create now correctly substitute [TABLEOWNER] tokens.
PDW	RED-6170	The changes to Backup/Save Create Scripts to Disk to use the same script generation logic as that used for Generated DDL is also fixed for PDW objects.
Hive	RED-6838	Generation of a custom procedure for Hive targets now correctly default to be a SQLBlock rather than Procedure.
Greenplum	RED-5917	For Greenplum and Netezza column 'dss_update_time' is now created with 'timestamp' type and generated update scripts for Stage, Data Store, Normalized, Dimension and Fact will use the variable of 'timestamp' type for assignment to it.
		'dss_start_date' and 'dss_end_date' on Netezza and Greenplum are now both created with 'timestamp' data type instead of 'date'.
Greenplum	RED-5918	For Greenplum and Netezza data type for 'dss_update_time' and 'dss_create_time' will now be set to 'timestamp' instead of 'date'.
Custom	RED-7110	The Windows Scheduler will perform substitution of the keyword [TABLEOWNER] when executing a procedure of type Block.