

# WhereScape® RED

## Release Notes

Version 9.0.1.2 | November 2023

# Table of Contents

<b>Table of Contents</b> .....	<b>3</b>
<b>WhereScape RED 9.0.1.2 Release Update</b> .....	<b>4</b>
Upgrading to version 9.0.1.2 .....	4
<b>Significant New Features and Improvements in this Release</b> .....	<b>5</b>
Advanced Authentication Methods .....	5
3D Integration - New Merge Settings for Source Mappings .....	6
Stand-alone Script Improvements .....	6
Other improvements .....	7
<b>Important Messages when Upgrading from Earlier Versions</b> .....	<b>8</b>
Important Message when upgrading from 8.6.1.2.....	8
Important Messages when upgrading from 8.2.1.1 or earlier.....	8
Important Messages when upgrading from 8.1.1.0 or earlier.....	8
Important Messages when upgrading from 8.0.1.0 or earlier.....	9
Important Messages when upgrading from 6.9.1.0 or earlier.....	9
Important Messages when upgrading from 6.8.7.0 or earlier.....	9
<b>Detailed Changes</b> .....	<b>10</b>
Changes in 9.0.1.0 .....	10
Changes in 9.0.1.1 .....	12
Changes in 9.0.1.2 .....	12

## WhereScape RED 9.0.1.2 Release Update

WhereScape is pleased to announce that WhereScape RED 9.0.1.2 is now available.

### Upgrading to version 9.0.1.2

Login to <https://www.wherescape.com> and download RED 9.0.1.2 from the downloads page in the **Support** section.

Kind Regards,  
WhereScape RED Team

## Significant New Features and Improvements in this Release

WhereScape presents a new version of RED with new capabilities and features to enhance the user experience. This release includes Advanced Authentication Methods, an improved 3D Integration for Source Mapping Objects and increased in DDL Limits. In addition, over 50 customer requested improvements and fixes are included in this release.

### Advanced Authentication Methods

The Advanced Connect feature provides a new way to manage connection security and modify ODBC connection attributes in RED enabling a wide variety of authentication mechanisms for your metadata, source and target connections. This feature combines session-based authentication, complete control over ODBC connection strings and secure encrypted storage of passwords.

Advanced Connect is enabled through the properties screen of connections, once enabled a connection string must be defined which will be used when establishing a connection.

RED Login Screen showing the new Logon Method:

**REPOSITORY LOGIN**

**DATABASE**

Data Sources: sql15\_9010 (64-bit) ▾

Logon Method: Advanced Connect ▾

Profile: sql15\_9010 ▾

Database Login ID: reduser

Password: \*\*\*\*\*

Connection String: DSN=\$DSN;\$USER\$

**METADATA REPOSITORY**

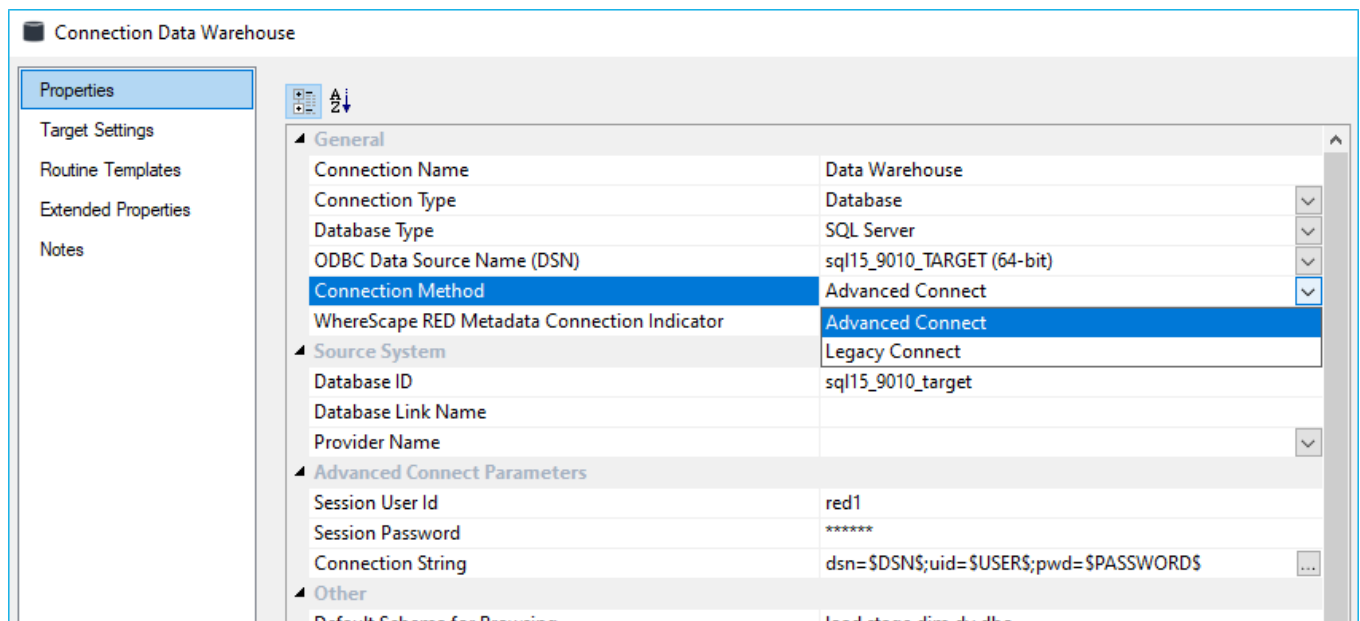
RED User Name: RED Doc

**CONNECT** **CANCEL** **HELP**

WhereScape<sup>®</sup>  
RED

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RED Connection Properties Screen showing the new Connection Method:



This feature is designed with security in mind and adds even more ways for enterprises to secure their metadata, sources and targets for a wide variety of authentication methods such as OAuth, Azure Active Directory and multi-factor authentication (depending on vendor driver capabilities). Please see the User and Installation Guides for more details.

This feature is only available for SQL/Azure SQL targets and Enablement Pack target platforms, refer to your specific Enablement Pack platform on the WhereScape downloads page for compatibility.

### 3D Integration - New Merge Settings for Source Mappings

When deploying Objects with multiple Source Mappings via 3D Export to RED you can now control the merge behavior when updating existing Objects Source Mapping Sets. There is now a new option with three settings when deploying from 3D to RED.

Option: 'Existing Source Mapping Sets will be'

- **Replaced:** [Default] Replaces the entire Source Mapping Set (Source Mappings can be removed in this mode)
- **Merged using Application:** Merges the Sets, resolving conflicts by deploying Source Mappings from this Application - Add and Update.
- **Merged using Repository:** Merges the Sets, resolving conflicts by retaining Source Mappings in the Repository - Add only.

This feature will be particularly useful to organizations with multiple development teams or projects affecting the same objects in RED, allowing them to deploy only the new Source Mappings that they have added and avoid deploying out-of-date changes to existing Source Mappings.

### Stand-alone Script Improvements

Stand-alone windows scripts can now be associated to Database/ODBC and Extensible Source Connections providing access to the associated connection settings and Credentials in your scripts.

This feature is particularly useful for "High Water Mark" scripts that require access to target connection properties. When combined with Advanced Connect this provides a secure way to run scripts directly against source and target connections in RED. Previously you could only associate a Windows connection to a script.

## Other improvements

### Added Support

- Windows Server 2022
- MS SQL Server 2022

### Increased Limits

- Increased DDL size limit to 64,000 chars for Tables and Views for RED on SQL metadata.
- You can now export Where Clauses up to 12000 chars from 3D to RED.

### DevOps

- RedCli now allows you to accept the EULA with the license install command.
- Improved options and template import commands in RedCli.

### Platforms

- You can now override the default 'Table Exists Check SQL' which can improve performance on some target platforms.
- Extended Property scopes now configurable for all database and connection types.

### Components

- The Java components in the RED installation have moved from Oracle JDK 8 to Open JDK 11.
- The Pebble template engine version has been upgraded.

### Over 50 improvements

This release includes 50+ improvements and accumulated customer requested fixes since the previous release. Please refer to the detailed changes section.

## Important Messages when Upgrading from Earlier Versions

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.

### Notes:

If upgrading from a previous version:

1. Please ensure you also upgrade the WhereScape scheduler at the same time. Details for this process are outlined in the WhereScape RED Installation Guide—Upgrading WhereScape RED and Scheduler Installation and Configuration sections.
2. Please review and action all the previous version-specific **Important Messages** below, that are relevant for your RED Upgrade.

### Important Message when upgrading from 8.6.1.2

- You must reenter any encrypted field values in your existing Extensible Source Connections when using this release for the first time.

### Important Messages when upgrading from 8.2.1.1 or earlier

- A new metadata service attribute for the DSN architecture has been added in the RED 8.3.1.0 release. Any existing templates that include authentication to the RED repository must be updated to include this attribute, if the RED repository is migrated to a 64 bit ODBC DSN (if the attribute is not defined, then a 32-bit architecture is assumed).  
For example: [WslMetadataServiceClient.Architecture]::\_64bit
- The **Unix** and **Linux Scheduler scripts for Oracle, Teradata** have been altered and need to be applied manually.

### Important Messages when upgrading from 8.1.1.0 or earlier

- Teradata customers upgrading from RED versions prior to RED 8.0.1.0 please be aware that later versions of Setup Administrator have functionality to test the RED metadata tables' primary indexes. When sub-optimal primary indexes are detected Setup Administrator creates a copy of the affected table with the recommended primary index, copies the data to the new table and finally removes the old table. Please note that sufficient free space in the metadata database is required to temporarily duplicate the largest metadata table that requires migration. Also, any custom statistics on these tables will need to be reapplied.
- WhereScape from the RED 8.2.1.1 version have added certification for the following metadata and target databases:
  - Oracle 12C Release 2
  - Teradata 16.20
  - Microsoft SQL Server 2017
- Cube and Cube Virtual objects are to be deprecated in a subsequent release. Cube objects must be migrated to OLAP Cube objects.
- Microsoft is deprecating support for their Microsoft OLE Driver for Oracle. WhereScape recommends that customers currently using this software migrate to the Oracle OLE Driver.
- WhereScape recommends that you use an Oracle or SQL Server metadata repository and the Windows Scheduler, if you wish to use Custom database targets.
- WhereScape wish to advise customers that work is underway to migrate RED to a 64-bit application over the next 12 months. While the transition is planned to minimize the impact to customers, there may be a requirement to transition to 64-bit ODBC data sources, as part for the upgrade path for this future release of

WhereScape RED. No changes are required in the interim. More details will be made available closer to the time the work is completed.

## Important Messages when upgrading from 8.0.1.0 or earlier

- SQL Server customers taking advantage of the multiple database support feature are recommended to apply three-part naming in their references to SQL Server tables. For example, in a custom procedure please refer to a data warehouse table using the format `<database name>.<schema name>.<table name>`. This will offset the impact of different users or machines having different default databases set.
- Customers using custom database targets to support RedShift or Snowflake are advised to contact their WhereScape representative for information on taking advantage of RED's enhanced custom database support features.
- The Data Vault hash key functions for Teradata and Oracle repositories have been changed in the templates (`wsl_teradata_utility_dv` and `wsl_oracle_utility_dv`). Data Vault customers running on Teradata or Oracle who were using these templates from the RED 6.9.1.0 release are advised to retain that version of the template, unless they migrate any key generated using the previous hash key function.
- The Windows and the UNIX/Linux generated Load and Export scripts for Teradata have been updated to use the new environment variables for identifying the TDPID, the user name and the password to connect to the metadata repository, the target database and the source database for Loads and Exports. Please refer to the section Script Environment Variables of the WhereScape RED User Guide for more information.

## Important Messages when upgrading from 6.9.1.0 or earlier

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

## Important Messages when upgrading from 6.8.7.0 or earlier

- In RED, File and Script-based loads from Windows connections creates a format file for the BULK INSERT operation in the Work Directory of the Windows Connection. This only applies when loading into an SQL Server target. This directory must be accessible to both the machine running SQL Server and the machine running the WhereScape RED Scheduler. Unless these are always the same machine, a UNC path or mapped network path will be required.
- **Legacy hub, link** and **satellite** objects, created in RED 6.8.7.0 or earlier are still supported in subsequent releases. However, they do not utilize the Data Vault enhancements introduced in release 6.9.1.0.



## Detailed Changes

### Changes in 9.0.1.0

The following changes have been implemented since 8.6.6.3.

JIRA Ticket	Metadata Type	Description
<b>Improvements</b>		
RED-9152	Common	The 'table' node in the template engine now correctly populates the source join settings from Custom update routine generation.
RED-10210	Common	The Java components in the RED installation have moved from Oracle JDK 8 to Open JDK 11
RED-10801	SQL Server PostgreSQL	Increased DDL limit for User Defined Views.
RED-11020	Common	You can now export Where Clauses up to 12000 chars from 3D to RED.
RED-11142	Common	Improvements to DSS_LOAD_SOURCE transformation string when using Extensible Source Connections.
RED-11144	Common	Added a new scope to Extended Property visibility for Extensible Source Connections.
RED-11158	Common	You can now start RED with command line parameters to automatically populate login screen.
RED-11176	Common	RedCli can now be forced to accept the license agreement for unattended installs.
RED-11244	Common	Relaxed licensed object checks for RedCli connection set-default-template commands to reduce Enablement Pack installation complexity.
RED-11246	Common	Windows Scheduler will now report a failure when a script runs but return no return status, commonly caused by virus scanning on the run directory.
RED-11248	Common	Added merge mode to application deployment for Source Mappings when deploying from WhereScape 3D.
RED-11254	Common	Extended Properties can now be scoped to any of the inbuilt database types regardless of license.
RED-11274	Common	Default Transform Function Set can now be set on all Target Connections individually.
RED-11302	Common	Changed default for 'SSIS Row Count Log' to 'off' for new SSIS Load table objects.
RED-11303	SQL Server	Stand-alone windows scripts can now be associated to Database and Extensible Source Connections providing access to target settings and credentials.
RED-11314	SQL Server PostgreSQL	RedCli Template Import operations now default the database type to 'Custom' when not specified and cannot be derived.
RED-11315	Common	RedCli Template Import operations now also parse the database type from the template header for automatic assignment on import.
RED-11328	SQL Server PostgreSQL	Application deployment on SQL Server now checks for the required database user permissions before deployment begins.
RED-11331	Common	Added support for Windows Server 2022 and MS SQL Server 2022.

JIRA Ticket	Metadata Type	Description
RED-11386	Teradata	Improved performance of object properties storage tab initialization on Teradata metadata repositories.
RED-11428	Common	Pebble template engine updated to version 3.1.5.
<b>Issues</b>		
RED-4861	SQL Server	Increased the limit of DDL size on SQL and PostgreSQL metadata from 16,000 to 64,000 chars.
RED-10049	Common	Fixed deployment issue from WhereScape 3D when column names containing 'XX' would have names modified during deployment.
RED-10640	Common	Resolved issue using StringUtils function in templates.
RED-10792	Common	Improved 3D Export of documentation subjects to RED.
RED-10819	SQL Server	When exporting from 3D to RED with Multi-Database SQL Targets the defaults of Target Connection are now honored for generated procedures storage location.
RED-10993	Teradata	Resolved LOCK TABLE FOR ACCESS statements issue on multi sourced Views in Teradata.
RED-11006	Common	Enhanced deployment options for generated indexes.
RED-11094	Common	Export Object Properties UI Improvements.
RED-11155	Common	Fixed a RED crash when browsing Extensible Source Connections in some conditions.
RED-11173	Common	Resolved issue with Source Mapping Maintenance not prompting to save source mapping changes in some scenarios.
RED-11174	Common	Fixed issues in Options Import where some settings were not being imported correctly.
RED-11189	Common	Fixed issue Deleting Views via Application Deployment on Custom Targets.
RED-11193	Common	Fixed crash when selecting a function to use while building reusable transformations.
RED-11195	SQL Server	Fixed truncation of export options for File Based Exports on SQL Server.
RED-11203	Common	Fixed an issue where you could not add a new dependency to the end in the dependency management screen.
RED-11210	Common	When exporting to RED from 3D all generated update routines are now correctly associated with the groups of the parent object.
RED-11251	Common	Fixed an issue where Documentation Generation could lead to application crash in some cases when using remote desktop software.
RED-11253	Common	Fixed issue in the script editor when saving script lines ending with a backslash character '\
RED-11259	Common	Fixed a 3D export to RED issue where complex table joins occasionally lead to a metadata insert error.
RED-11262	Common	Fixed issue with browsing Linux Connections, introduced in RED 8.6.6.0.
RED-11263	Teradata	Linux File Loads on Teradata could fail if the work directory did not have a trailing forward slash.
RED-11269	Common	Fixed a template issue with 3D export to RED when loading objects associated to Extensible Source Connections without any extensible attributes.

JIRA Ticket	Metadata Type	Description
RED-11288	Common	Added RedCli set-default-template commands for Post Load Routine and Export Scripts.
RED-11317	Common	Fixed an issue with RedCli PowerShell install-module command.
RED-11318	Common	RedCli Options Export\Import improved.
RED-11370	Common	Fixed template evaluation issue in RED 8.6.6.0 in some cases.
RED-11379	Common	Fixed a file locking issue in the Scheduler when operations involving SQL Block execution were inheriting file locks from other tasks.
RED-11385	Custom	Provided a way to override the SQL for the Table Exists check for Objects on Custom Targets.
RED-11572	Common	Fixed RedCli deployment issue when deploying UI Config field values to existing objects.

### Changes in 9.0.1.1

The following changes have been implemented since 9.0.1.0.

JIRA Ticket	Metadata Type	Description
<b>Issues</b>		
RED-11621	SQL Server	Fixed Documentation Generation crash when Extensible Source Connections are included.
RED-11623	Common	Fixed an issue with 3D export to RED when using deployment setting 'Object Source Mapping Sets will be Merged' and extended properties.
RED-11642	SQL Server	Extensible Source Connections load scripts now set environment variables for Advanced Connect credentials via the Scheduler.
RED-11606	SQL Server	Extensible Source Connections load scripts now set environment variables for Advanced Connect credentials for interactive loads.
RED-11604	SQL Server	Extensible Source Connections now set environment variables for Advanced Connect credentials while browsing.
RED-11573	Common	Resolved deployment issue with UI Configuration values metadata leaving orphaned metadata rows.
RED-11610	Common	Resolved a RedCli deployment DML/DDDL logging issue where view objects where not producing logs for Custom Targets.

### Changes in 9.0.1.2

The following changes have been implemented since 9.0.1.1.

JIRA Ticket	Metadata Type	Description
<b>Issues</b>		
RED-11684	Common	Fixed performance issue with ODBC load via the Windows Scheduler introduced in RED 9.0.1.0
RED-11624	Common	Source tab fields are now transferred correctly from 3D export of Loads from Extensible Source Connections.
RED-11644	Common	Fixed issue with very wide tables where load script generation during deployment from 3D could fail.
RED-11570	Common	Fixed issue with Extensible Source Connection Scripted Browse workflow where the display name was used for schema name leading to insert failures.

JIRA Ticket	Metadata Type	Description
RED-11648	Common	Fixed issues with Source Mapping Set Merge mode in ADM.exe. Note: RedCli.exe doesn't have this feature yet.
RED-11596	Common	Fixed issue on List Source Mapping pane context menu, Source Mapping update routines can now be executed via the scheduler.
RED-11674	Common	Fixed "The specified connection could not be found" warning for operations on local storage objects affecting some repositories.

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