



# WhereScape RED 10.7.0.2

## Release Notes

June, 2026

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WhereScape is pleased to announce that WhereScape RED 10.7.0.2 is now available.

This release of RED is compatible with WhereScape 3D 9.0 versions and up.



**Note**

Before upgrading, review the [Important Messages when Upgrading](#) for more information.

Go to <https://www1.wherescape.com> to see available product versions and release notes for older versions.

Log into the [WhereScape Support Portal](#) to access downloads.

# Improvements

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## Batch Application Creation

Batch Application creation via the med.exe command line is now fully headless and no longer interacts with the Windows Desktop.

This enables execution within CI/CD and DevOps pipelines using non-interactive services (e.g., the RED Scheduler).

Additional changes:

- Error and warning dialogs are suppressed.
- All messages are redirected to the standard error stream for capture by the calling process.
- Exit codes remain unchanged.

## Scheduler Installation and Upgrade Process

Improved the Scheduler Installation and Upgrade process by adding additional validation checks and remediation of configuration ensuring users can get up and running with ease.

## 3D Export to RED

Post-load scripts & procedures are now automatically generated during the 3D Export to RED process. UI configured column properties are also included when Exporting from 3D to RED.

## Script Execution

Updated script execution behavior in the RED UI:

- All script files are now written to disk using UTF-8 encoding by default.
- PowerShell scripts executed on Windows now include a Byte Order Mark (BOM), ensuring compatibility with PowerShell 5.x.

Previously, interactive script execution used ANSI encoding, which caused inconsistencies between the RED UI and the Scheduler. This could lead to execution failures when scripts contained accented or non-standard characters.

The RED Scheduler Plugin for Azkaban has been aligned with this behavior and now also adds a BOM to PowerShell scripts executed on Windows.

## Detailed Changes in RED 10.7.0.2

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The following changes have been implemented since 10.7.0.1

### Fixes

JIRA	Release Note
RED-12507	Resolved an issue affecting the secure Azkaban service installation introduced in RED 10.0.7.1, where the service failed to start if the installation path contained spaces.
RED-12475	Deployments from 3D to RED targeting SQL Server tables with surrogate key columns now initialize identity values at 1, aligning with RED's reservation of the zero key for unmatched joins.
RED-12443	Resolved an issue preventing RedJobDependencyMonitor from logging debug messages when debug is enabled in Azkaban Web Server.
RED-12414	Improved synchronization between metadata connection settings and the in-memory profile. Changes to the metadata connection Server, Port, DB and DSN settings are now automatically applied to the in-memory profile when modified in RED.
RED-12284	Enhanced the RED procedure execution experience by improving connection validation, error reporting, and process execution. Invalid metadata connection settings are now detected immediately, missing working directories are reported more clearly, and UNC path execution no longer generates unnecessary warnings.
RED-11755	Updated [METABASE] token expansion for scripts and procedures executed from the RED UI. The token now resolves to schema.database, providing consistency with Scheduler execution behavior.

# Detailed Changes in RED 10.7.0.1

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The following changes have been implemented since 10.7.0.0

## Fixes

JIRA	Release Note
RED-12419	Resolved an issue with track forward diagram creation when including column names greater than 64 characters.
RED-12418	Secured the installation and upgrade process for Azkaban Scheduler Service creation from RED Setup Wizard, preventing possible brief exposure of the service password in the process tree for sc.exe commands.
RED-12394	Resolved an issue in RED Deploy which was preventing adding new targets at the target mapping screen.

# Detailed Changes in RED 10.7.0.0

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The following changes have been implemented since 10.6.0.0

## Improvements

JIRA	Release Note
RED-11028	Batch Application creation via the med.exe command line is now fully headless.
RED-11309	Data Warehouse tables (excluding Load tables) can now be sourced from multiple RED Connections that reference different databases within the same target platform. Previously, this capability was limited to SQL Server-based RED Target Connections; other platforms would fail during update procedure execution.
RED-12391	Added validation checks to ensure the Windows service user can perform DPAPI encryption during scheduler installation.
RED-12386	Added validation checks for the Windows service 'Log On As A Service' right during scheduler installation.
RED-12385	Added validation checks for the Windows service credentials provided during scheduler installation.
RED-12389	Added validation checks for the Executor Server Port provided during scheduler installation.
RED-12390	Added validation checks for the Web Server Port provided during scheduler installation.
RED-12387	Added validation checks for the Installation Location provided during scheduler installation.
RED-12388	Added validation checks for the Job Work Directory provided during scheduler installation.
RED-12392	Added validation checks for the Scheduler Dashboard & Scheduler REST API URLs provided during scheduler installation.
RED-11675	Object limits in Deployment Applications have been increased from 5,000 to a theoretical max of 100,000 objects, however beyond 10,000 objects deployment duration can become impractical.
RED-11804	Source Mappings can now be deleted in bulk via multi-selection in the List Source Mappings View.
RED-11843	Improved RedCli output when listing 'Templates' and 'Scripts' so that the actual Host Script Language name is returned. Previously Python and PowerShell Template and Script Objects would be listed as 'User-defined' instead of the actual script type name. This change allows automated scripts to determine the actual script type for Template and Script Objects via RedCli.exe

## Fixes

JIRA	Release Note
RED-10864	Post-load scripts & procedures are now automatically generated during deployments from WhereScape 3D or another WhereScape RED repository.
RED-11625	UI Configured Column Properties values are now correctly exported from 3D to RED.
RED-12311	The scheduler Installer can now upgrade Azkaban when the existing service user is different to the logged in user.
RED-11805	Adding or removing Projects via drag and drop has been improved to remember the state of the object tree and allow the user to confirm actions before continuing.
RED-11967	Improved Red Setup Wizard handling of Auto Execute files in Enablement Packs.
RED-12276	Improved the RedCli 'Connection Modify' command so that modifications to a connection's default template settings no longer resets other settings.
RED-12415	Resolved an issue when browsing extensible sources where tables with the same name in different schemas incorrectly displayed a combined set of columns from both tables.
RED-12396	Updated script execution behavior in the RED UI: <ul style="list-style-type: none"> <li>- All script files are now written to disk using UTF-8 encoding by default.</li> <li>- PowerShell scripts executed on Windows now include a Byte Order Mark (BOM), ensuring compatibility with PowerShell 5.x.</li> </ul>
RED-12145	When creating Load tables on a Teradata target, the storage property MultiSet is now set to TRUE, restoring consistency with earlier RED versions.
RED-12432	Resolved an issue introduced in 10.5 where the output streams in Azkaban were not consistently flushed leading to python error 'OS Error 22' during execution of Update and Load scripts in some scenarios.

# Important Messages When Upgrading

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When Upgrading from previous versions of RED, the RED metadata, Azkaban metadata or both may need upgrading. For RED the requirement to upgrade is enforced at login when there is an application version mismatch, but it is best practice to validate and upgrade the metadata after every RED application upgrade. Refer to the [Upgrading WhereScape RED](#) section of the RED User Guide for more details.

If there are important updates to the Azkaban metadata these will be indicated in the important upgrade messages that follow. Refer to the [Upgrading Azkaban](#) section of the RED User Guide for more details.

## Important Messages when upgrading to 10.7.0.0

**Note**

Upgrades are cumulative; therefore you should read all upgrade messages for each version between your current RED version and this version of RED.

### Upgrading RED

#### Version 10.7.0.0

- There are no important messages for upgrading RED to this release, but please consider the cumulative upgrade messages below when upgrading.

#### Version 10.6.0.0

- This version adds new RED Metadata indexes to improve query performance, these indexes will be applied automatically when missing during upgrades.

#### Version 10.5.0.0

- There are no important messages for upgrading RED to this release, but please consider the cumulative upgrade messages below when upgrading.

#### Version 10.4.0.0

- There are no important messages for upgrading RED to this release, but please consider the cumulative upgrade messages below when upgrading.

## Version 10.3.0.0

- There are no important messages for upgrading RED to this release, but please consider the cumulative upgrade messages below when upgrading.

## Version 10.2.0.0

10.2 has potentially breaking changes for upgraded repositories; therefore, upgrades should be tested thoroughly before upgrading production environments:

- All ODBC, Database, Extensible Source Connection and Scheduler Configuration credentials have moved to the RED Profile, therefore each user of RED should generate their own local profile file (see the [user guide](#) for details) to continue using RED.
- For new installs, from RED 10.2+, you will find the **wsl\_scheduler\_profile\_maintenance** host script under your Host Script's in your RED metadata repository (see the [user guide](#) for details). For upgraded repositories you will need to load this script into RED manually from `<RED_Installation_Directory>\Administrator\Scripts\wsl_scheduler_profile_maintenance.ps1`
- All Azkaban components require upgrading and the encrypted Scheduler profile records added to `redadmin.wsl_scheduler_profile` (see the [user guide](#) for details) in order for jobs to run.
- Post upgrade it is encouraged to remove all credentials from the metadata since these should now reside in the in-memory session level credentials only. Run the following update on the metadata to achieve this:

### Remove credentials after upgrade

```
-- Remove credentials from Database, ODBC and Extensible Source connections
UPDATE red.ws_dbc_connect
SET dc_extract_userid='', dc_extract_pwd='', dc_admin_userid='', dc_admin_pwd=''
WHERE dc_type IN ('D','O','Z');

-- Remove credentials from Scheduler Configuration
UPDATE red.ws_wrk_external_scheduler
SET wes_dashboard_userid='', wes_dashboard_pwd='', wes_restapi_userid='',
wes_restapi_pwd='';
```

## Version 10.1.0.0

10.1 has potentially breaking changes for upgraded repositories; therefore, upgrades should be tested thoroughly before upgrading production environments. The potential issues after the upgrade are the following:

- Default Routine Template settings might be lost. For object types other than Load and Export these settings have been moved from target connections to the Object Subtypes. During the metadata upgrade process, the first target-enabled connection found is used to populate the new settings under Object Subtypes. If you have multiple target-enabled connections in your repository, the optimal connection may not be used for the settings transfer. Ensure to check the Object Subtypes maintenance wizard after an upgrade to this version and set any missing/incorrect default routine templates as required. Note: this configuration can be exported from test to production once resolved in test.
- [TABLEOWNER] an \$OBJECT\$ token expansion no longer expands empty schemas to an additional '.' in table names. This means from this release onwards you must specify the actual schema name in target location settings when schema is required on your platform. Ensure to check your target location settings for target connections before upgrading and populate the schema field, if required.

## Upgrading Azkaban

Upgrading Azkaban on Windows is handled by the RED Scheduler Installer, however upgrading on Linux is a manual process, please refer to the RED User guide for detailed [upgrade instructions](#).

### Version 10.7.0.0

- RED 10.7.0.0 resolves an issue, introduced in 10.5, where the RED Scheduler Plugin was not completely flushing the output stream leading to errors for some python based scripts. Additionally PowerShell scripts on Windows now include a BOM. The Azkaban Web Server and each Azkaban Executor will need to be upgraded to work with this release.

### Version 10.6.0.2

- RED 10.6.0.2 added support for Job Success and Failure commands. The Azkaban Web Server and each Azkaban Executor will need to be upgraded to work with this release.



If you had already implemented Success and Failure commands via customizations to the scheduler publish script using Azkaban conditional flow logic then these publish script changes should be reverted and those jobs republished, otherwise Success and Failure command execution may be duplicated.

## Version 10.6.0.0

- RED 10.6.0.0 added functionality to enable the new Extensible Authentication fields. The Azkaban Web Server and each Azkaban Executor will need to be upgraded to work with this release.

## Version 10.5.0.0

- RED 10.5.0.0 added functionality to remove interactive scheduler jobs after execution. The Azkaban Web Server, each Azkaban Executor and the scheduler integration script `wsl_scheduler_publish` will need to be upgraded to take advantage of this feature.

## Version 10.4.0.0

- RED 10.4.0.0 improves logging from metadata connection resilience so that the actual reason given by the driver is logged when reconnecting. Additionally improvements have been made to the RED Job Plugin. The Azkaban Web Server and each Azkaban Executor will need to be upgraded to take advantage of these features.
- RED 10.4.0.1 Minor improvements have been made to the RED Job Plugin. Each Azkaban Executor will need to be upgraded to take advantage of these optional fixes.
- RED 10.4.0.2 Minor improvements have been made to the RED Job Plugin. Each Azkaban Executor will need to be upgraded to take advantage of these optional fixes.

## Version 10.3.0.0

- RED 10.3 improves the metadata connection resilience in both the Azkaban Web Server component and RED Job Plugin. Each of the Azkaban metadata, Azkaban Web Server and Azkaban Executors will need to be upgraded to take advantage of these features.

## Version 10.2.0.0

- In RED 10.2 Advanced Connect is always enabled and therefore there are new `azkaban.local.properties` fields (and `response.xml` tags) required that support this feature. Any automated installation scripts will need to take into account these new fields. Each of the Azkaban metadata, Azkaban Web Server and Azkaban Executors will need to be upgraded to work with this release.

## Azkaban Change history

Change history for Azkaban components requiring upgrades (changes are cumulative):

- 10.0.7.0: Resolved an output stream issue with RED Scheduler Plugin and added BOM to Windows PowerShell scripts.

- 10.0.6.2: Added Job Success and Failure command support to the RED Scheduler Plugin.
- 10.6.0.0: Added Extensible Authentication feature affecting the Profile metadata table and script execution.
- 10.5.0.0: Added functionality to remove interactive scheduler jobs after execution.
- 10.4.0.2: SchedulerUtils.jar has a new method that allows running RED script objects standalone.
- 10.4.0.1: Standalone Batch\Unix\Linux script support. Fixes for resolving references to Dim View objects.
- 10.4.0.0: Connection resilience logging improvements. Bug fixes for RED Job Plugin. Component upgrades.
- 10.3.0.0: Azkaban/RED metadata connection resilience improvements. Component upgrades.
- 10.2.0.0: New required fields for azkaban.local.properties and installer resposne.xml for Advanced Connect. Stand-alone script execution enhancements.
- 10.1.0.1: Log4j components upgraded to log4j2 to resolve logging issues.
- 10.1.0.0: Improvements when canceling running jobs. Component upgrades.
- 10.0.1.0: Added procedure support and long host names fix.
- 10.0.0.0: First release.

## Upgrading Scheduler Integration Scripts

The default scheduler integration scripts are often improved, occasionally these improvements are required to work with a new release. Please refer to the change history below and refer to the RED user guide for detailed [upgrade instructions](#).

### Integration Scripts Change History

Change history for integration scripts requiring manual upgrade (changes are cumulative), upgrades are optional unless marked as required:

- 10.7.0.0:
  - No changes
- 10.6.0.0:
  - wsl\_scheduler\_profile\_maintenance - **Required upgrade** - Added support for new Extensible Authentication fields.
- 10.5.0.0:
  - wsl\_scheduler\_publish - Added functionality to remove interactive scheduler jobs after execution.
- 10.4.0.0:

- wsl\_scheduler\_publish - Fallback to script run directory when WSL\_WORKDIR is not set. Cleanse API URL by removing trailing '/' before using it.
- wsl\_scheduler\_lookup - Cleanse API URL by removing trailing '/' before using it.
- wsl\_scheduler\_profile\_maintenance - Added special row for WSL\_SCHEDULER\_API entry, improved connection ordering in UI.
- 10.3.0.0: No changes
- 10.2.0.0:
  - wsl\_scheduler\_publish - **Required upgrade** - Advanced Connect feature added.
  - wsl\_scheduler\_lookup - Added version header and removed unused parameters.
  - wsl\_scheduler\_dashboard - Added version header and removed unused parameters.
  - wsl\_scheduler\_profile\_maintenance - New script for maintaining the scheduler profile.
- 10.0.0.3: wsl\_scheduler\_publish - Support for republishing when existing job not found. Improved logging.
- 10.0.0.2: wsl\_scheduler\_publish - Added support for disabled tasks.
- 10.0.0.0: First release.

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