Install Guide - SetupWizard - Redshift

WhereScape Enablement Pack for Redshift - RED 10

This is a guide to installing the WhereScape Enablement Pack for Redshift for WhereScape RED10

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Prerequisites For PostgreSQL Metadata

Before you begin the following prerequisites must be met:

- Create Database and ODBC DSN :
    - Supported* version of PostgreSQL (PostgreSQL 12 or higher)
        - A database to house the RED Metadata Repository.
        - A database to house scheduler (Optional)
- Software Installations
    - WhereScape RED10.1.x.x with valid license key entered and EULA accepted
    - WhereScape Enablement Pack for target database version RED10.1.x.x

- Windows Powershell (64 bit) version 4 or higher
    - To check Windows Powershell Version:
        - Run below command in Windows Powershell

```
Get-Host|Select-Object Version
```

        - Run below command in Command Prompt

```
powershell $psversiontable
```

- Run the following command using PowerShell
    - The security protocol TLS 1.0 and 1.1 used by PowerShell to communicate with PowerShell gallery has deprecated and TLS 1.2 has been made mandatory

```
[Net.ServicePointManager]::SecurityProtocol = [Net.ServicePointManager]::
SecurityProtocol -bor [Net.SecurityProtocolType]::Tls12
Register-PSRepository -Default -Verbose
Set-PSRepository -Name "PSGallery" -InstallationPolicy Trusted
```

    - Progress bar placeholder info line

```
Install-Module -Name PoshProgressBar -SkipPublisherCheck -Force
```

* : *RED supports the following versions for the metadata repository: PostgreSQL 12 or higher*

Prerequisites Target Database

Before you begin the following prerequisites must be met:

1. Access to a Redshift System, with the following connectivity information:
   - Server Name

- Database Name
- Port
- User Name
- Password

2. Access to an S3 bucket in the same region as your Redshift system to be used for temporary files while load data from windows files and database tables.
   Specifically, you need to know:
   - Access Key, Secret Key, Region
   - S3 storage location in this format: s3://bucketName/folderName

3. Create Database and ODBC DSN Redshift ODBC driver (64-bit)
   - Redshift (64-bit ODBC driver version 1.5.9)
   - Add ODBC DSN for Redshift Target Database

4. Redshift software installed
   - Amazon Redshift ODBC driver (64-bit)
   - ODBC DSN created to connect to your RED Data Warehouse on Redshift.

5. Python 3.8 or higher

   - Select "Add Python 3.8 to PATH" from installation Window
   - Pip Manager Install with command : *python -m pip install --upgrade pip*
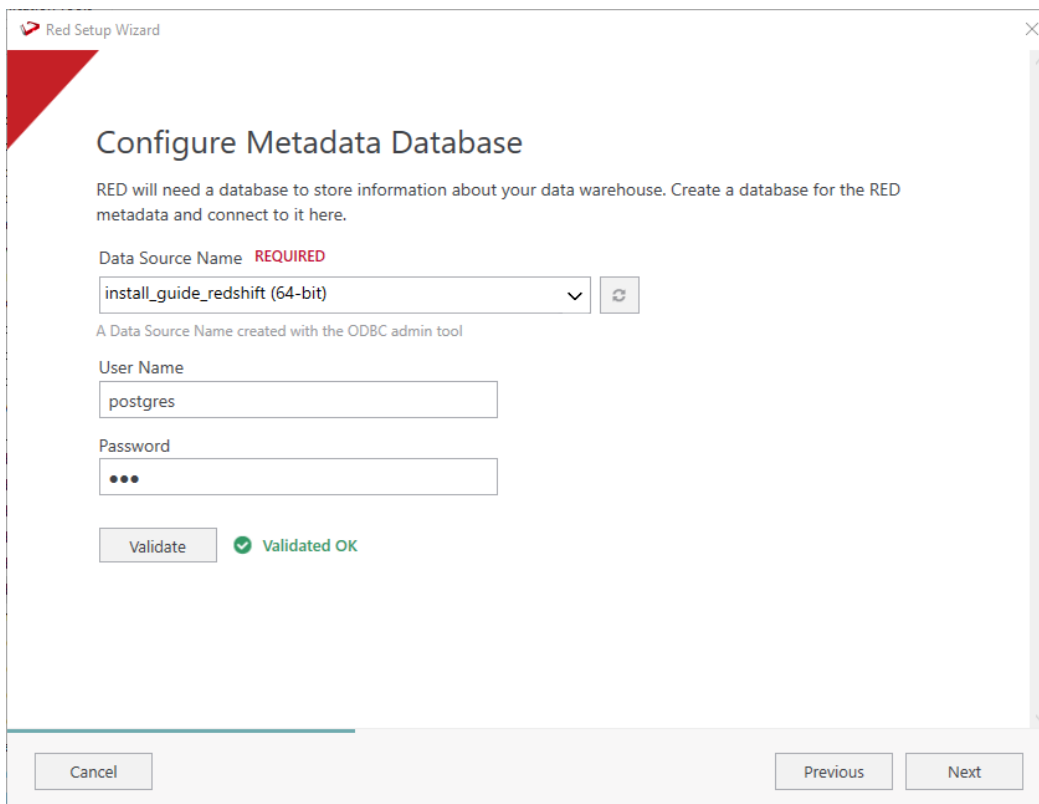
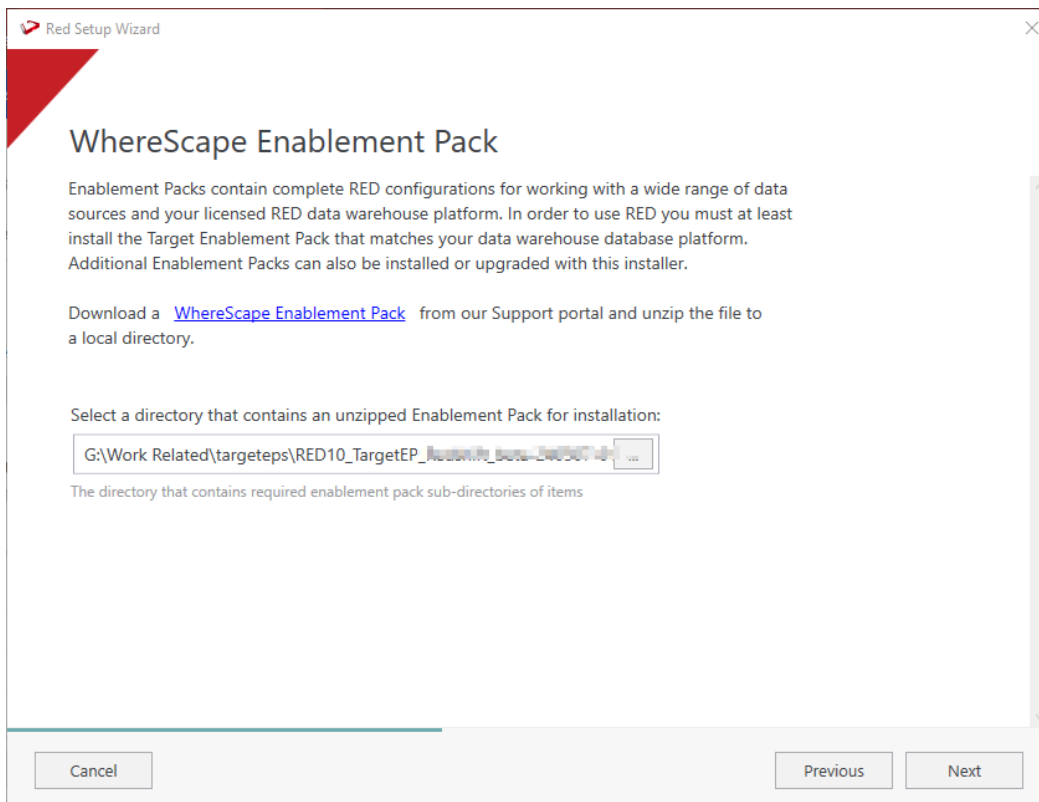# Installation Through Setup Wizard

Run Setup Wizard as administrator
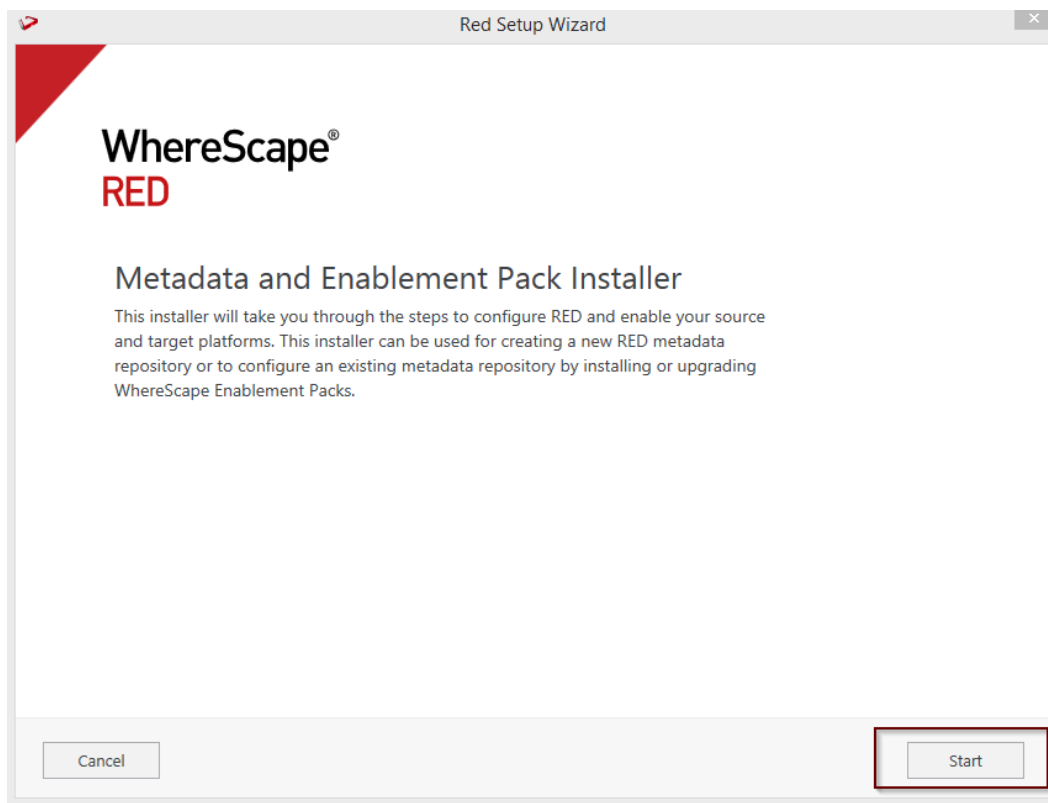
Create new repository or upgrade already existing repository.
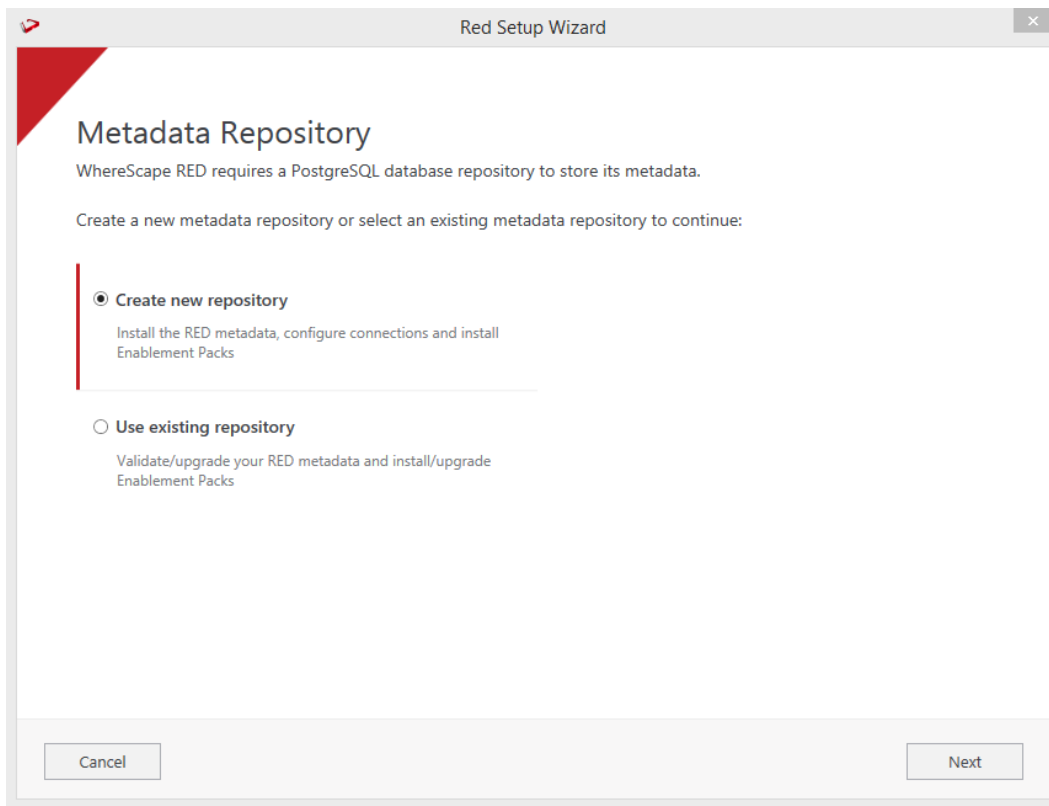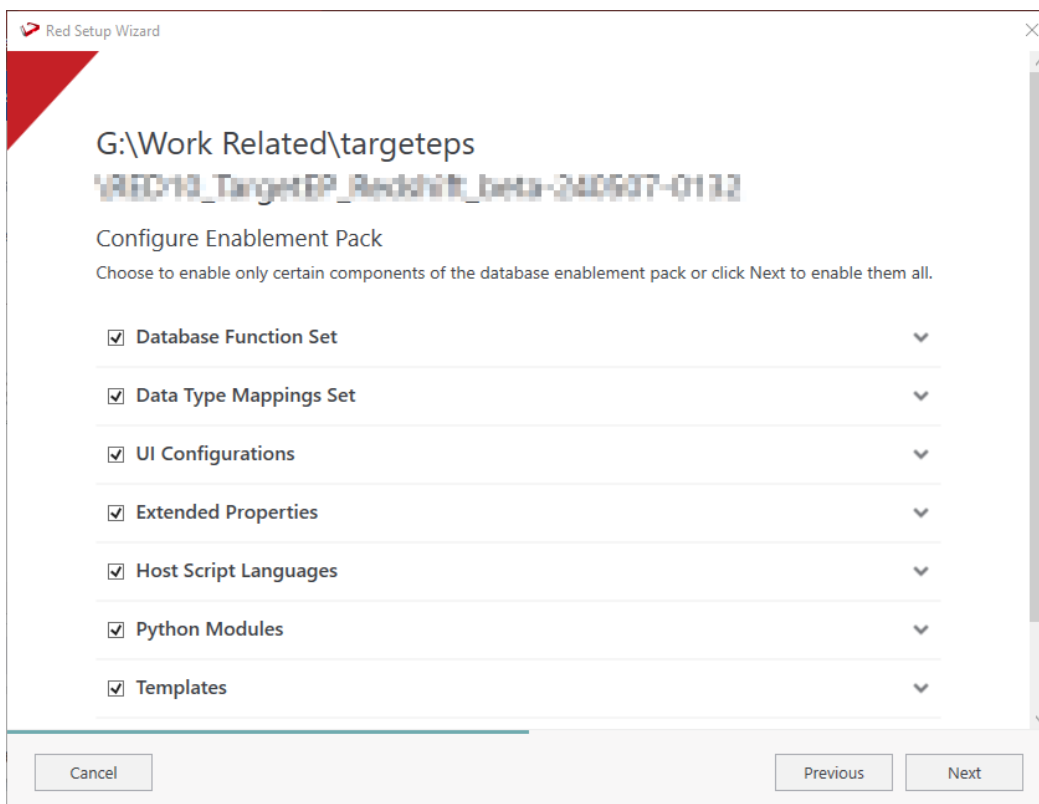
Select the created ODBC DSN, input login details and then select "Validate". Press Next

Select the directory that contains unzipped Enablement Pack for installation. Press Next

Using the check boxed list, include or exclude the components that are to be installed. Press Next.

Configure a target connection (example, Data Warehouse) and its target locations. Validate and press ADD.

When done, press ADD and then Press Next to advance.
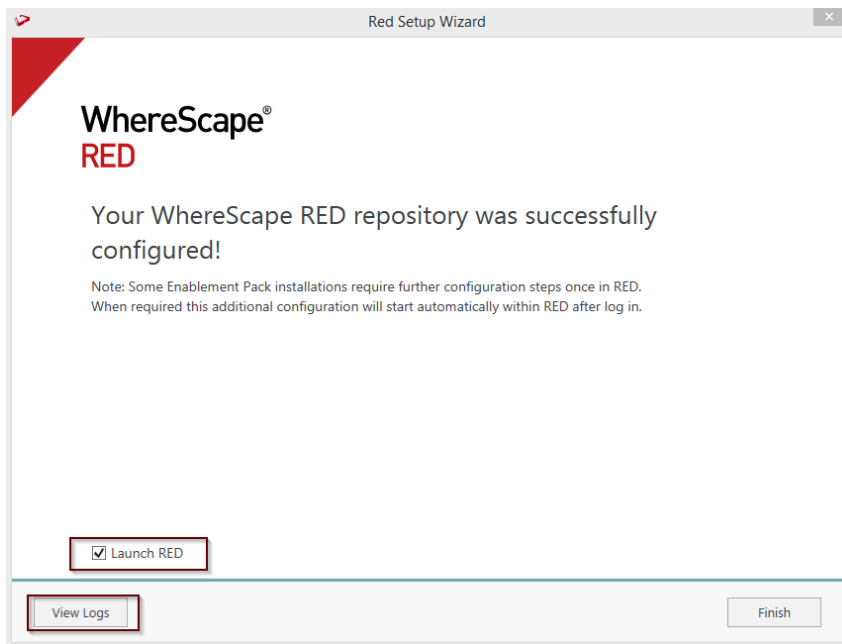

Configure a data source connection (optional) and its target locations. Validate and press ADD. Press Next to advance.
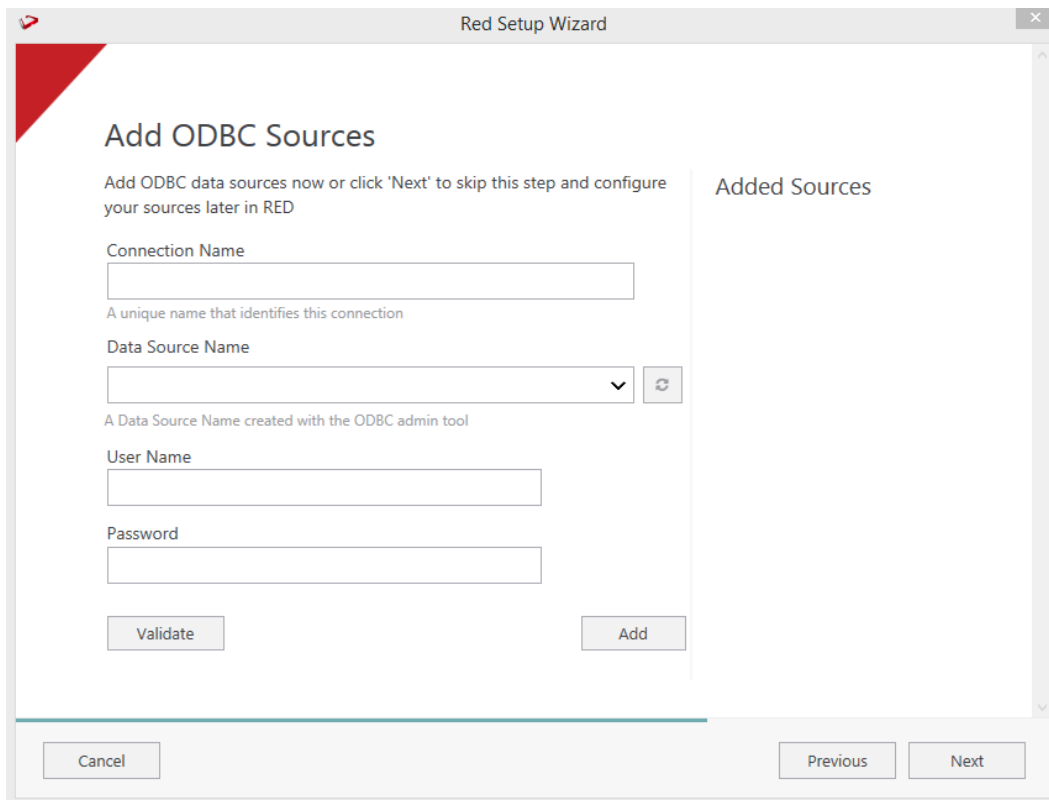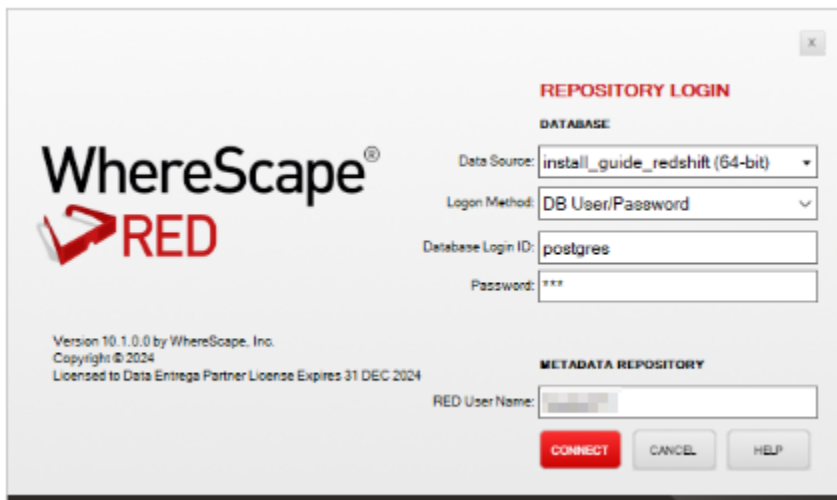
Review the installation summary and click Install

Clicking on the View Logs will take to the installation log. Click on Finish once the installation is completed successfully.

Login to WhereScape RED.

Note: There is a post-install script that will run at the first login to RED10 to complete the post setup wizard installation process.
You will be directed to below PowerShell window which will give brief explanation about post installation process.
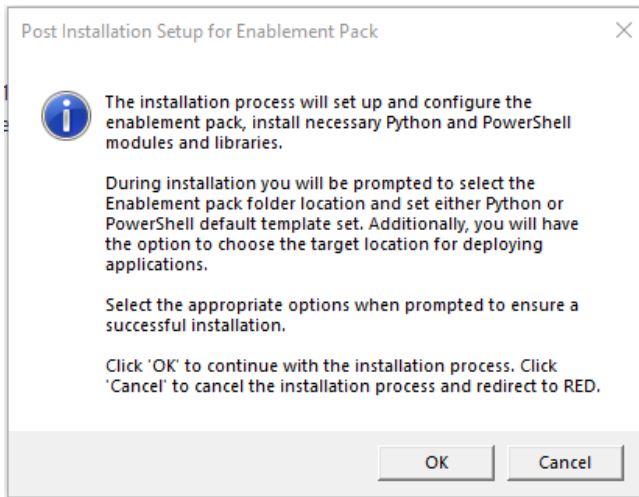
Press OK to start the post installation. If pressed Cancel installation will stop and user will be directed to RED.

The user will be directed to the window below, where they have to select the target connection to be configured. Additionally, by deselecting the provided options, the user can choose not to install a particular option.
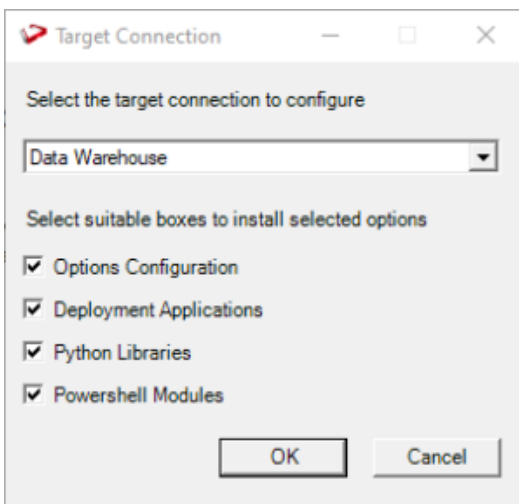
You will be directed to below PowerShell window. Provide the directory that contains unzipped Enablement Pack.
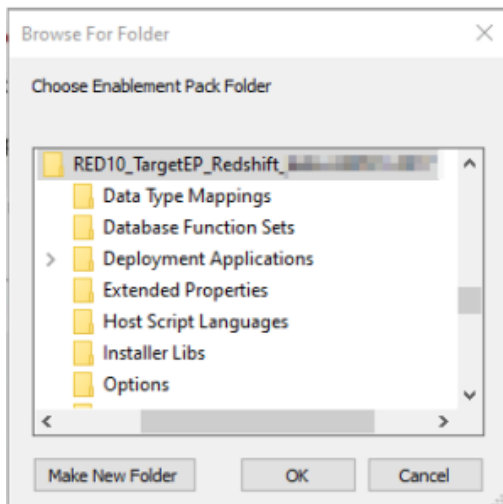
Press OK

The progress bar will show the post installation progress.
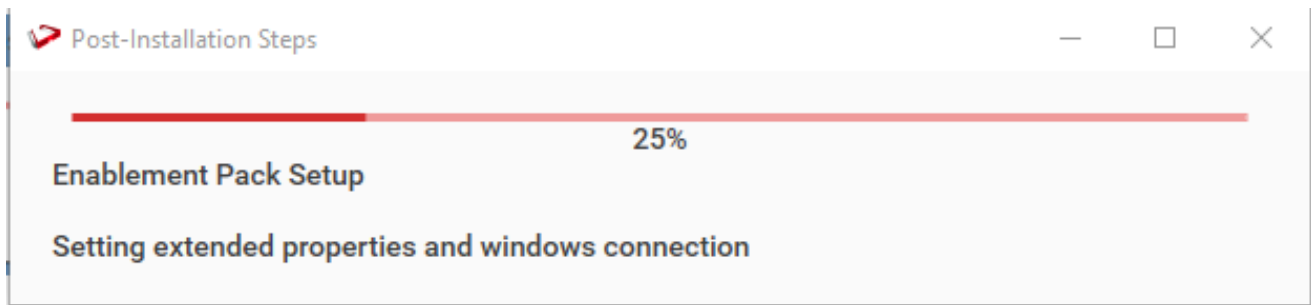
User will have to choose the database for the target setting that were provided. One pop up will come for setting default target for Date Dimension.
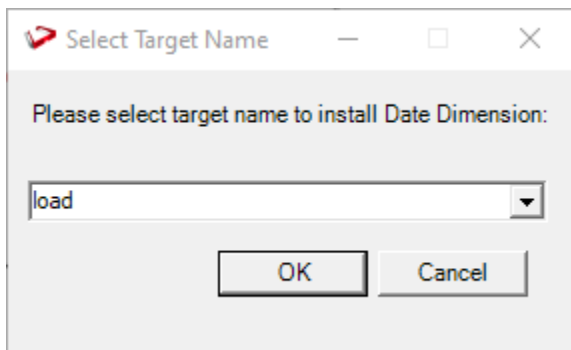
After selecting the target progress bar will show the progress for the installation and once it's completed, you will get the below pop up.
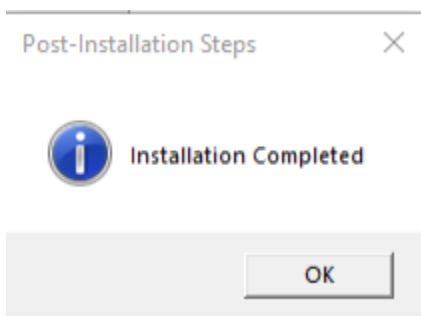
After pressing OK RED10 will open automatically.
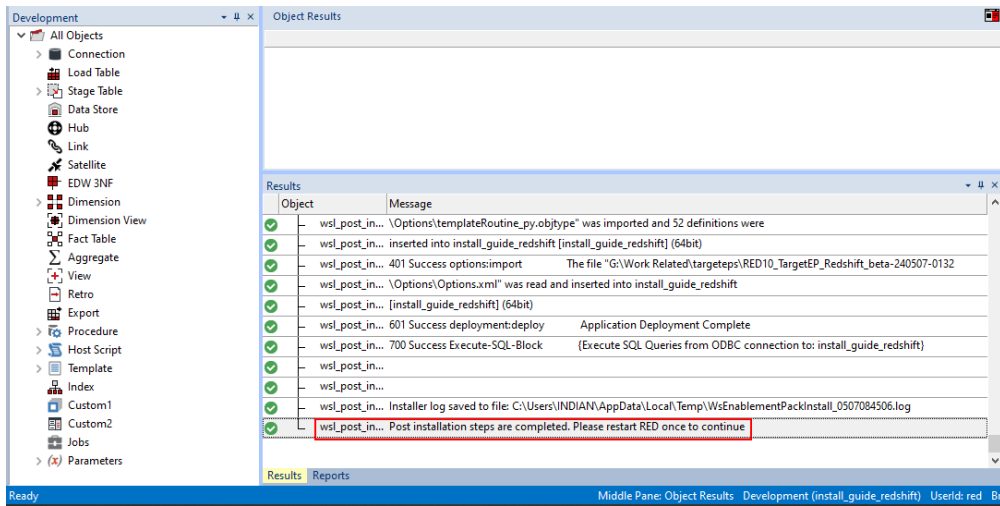
User will need to restart RED once.

Upgrade Of Existing Repository

For upgrade of existing repository

- From host script set script type of *wsl_post_install_enablement_pack* as Auto Execute - PowerShell Script
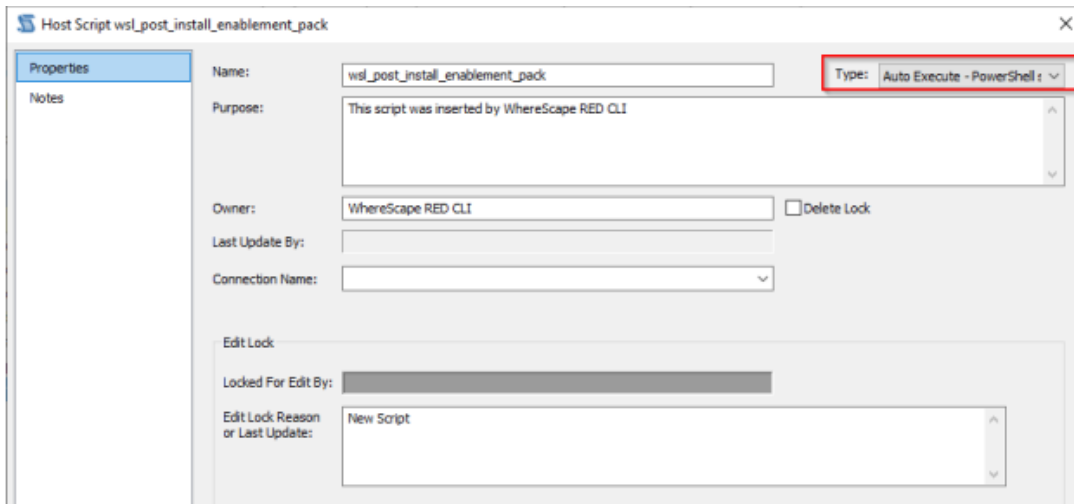
Important Upgrade Notes

If RED upgrade the repository option is chosen.

This enablement pack will overwrite any existing Source Enablement Pack UI Configs:

Connection UI Config	Load UI Config
Amazon S3	Load From Amazon S3
Azure Data Lake Storage Gen2	Load From Azure Data Lake Storage Gen2
Google Cloud	Load From Google Cloud

To ensure existing Source Enablement Pack connections and associated Load Tables continue to browse and load:

Go into UI Configuration Maintenance in RED prior to installing this Enablement Pack and rename the affected UI Configurations. While the updated Load Template will work with previous Source Enablement Pack's we recommend moving these previous versions of Load Tables to newly created Parser based connections following this install. The earlier versions of the Source Enablement Pack will be deprecated following this release.

Post Install Steps – Optional

If you used the script Setup Wizard for installation then the following optional post install steps are available.

Configure Connections

There were two connections added that will optionally require your attention :

1. Connection: Data Warehouse ('Redshift')- This connection was setup as per parameters provided in Setup Wizard
    - open it's properties and check extended properties tab, set it up for **Access Key, Secret Key,S3 Region** and **S3 Storage Location**
2. Connection: 'Database Source System' - this connection was setup as an example source connection,
    - open it's properties and set it up for a source DB in your environment
    - or you can remove it if not required

Source Enablement Pack Support

Source Pack Name	Supported By Redshift	Supported Features	Prerequisites/Permissions Required for Redshift
Google Cloud Storage	Yes	Download to local and load	None
Azure Data Lake Storage Gen2	Yes	Download to local and load	None
Amazon S3	Yes	Download to local and load	None
Windows Parser	Yes	Load Template, Source Properties will have option to select parser type to load the files.	Refer to Windows Parser Guide

Troubleshooting and Tips

Run As Administrator

Press the Windows Key on your keyboard and start typing cmd.exe, when the cmd.exe icon shows up in the search list right click it to bring up the context menu, select "Run As Administrator"

Now you have an admin prompt navigate to to the folder where you have unpacked your WhereScape Red Enablement Pack to using the 'cd' command:

> C:\Windows\system32> cd <full path to the unpacked folder>

Run Powershell (.ps1) scripts from the administrator prompt by typing the Powershell run script command, for example:

> C:\temp\EnablementPack>Powershell -ExecutionPolicy Bypass -File .\Setup_Enablement_Pack.ps1

Notes: In the event you can not bypass the Powershell execution policy due to group policies you can instead try "-ExecutionPolicy RemoteSigned" which should allow unsigned local scripts.

Windows Powershell Script Execution

On some systems Windows Powershell script execution is disabled by default. There are a number of workarounds for this which can be found by searching the term "Powershell Execution Policy".

Here is the most common workaround which WhereScape suggests, which does not permanently change the execution rights:

Start a Windows CMD prompt as Administrator, change directory to your script directory and run the WhereScape Powershell scripts with this command:

- cmd:>Powershell -ExecutionPolicy Bypass -File .\<script_file_name.ps1>

Restarting failed scripts

Some of the setup scripts will track each step and output the step number when there is a failure. To restart from the failed step (or to skip the step) provide the parameter "-startAtStep <step number>" to the script.

Example:

Powershell -ExecutionPolicy Bypass -File .\<script_file_name.ps1> -startAtStep 123

Tip: to avoid having to provide all the parameters again you can copy the full command line with parameters from the first "INFO" message from the beginning of the console output.

Python requirements for offline install

Additionally to the base Python installation being required, the WhereScape Python Template set also requires certain additional Python libraries. The install scripts uses the PIP (package manager) to download these libraries, however for offline installs you will need to install the required libraries yourself.

Required Python libraries/add-ons:

- pywin32-ctypes
- python-tds
- pywin32
- glob2
- gzip-reader
- regex
- pyodbc

If a valid RED installation can not be found

If you have RED 10.x or higher installed but the script (Setup_Enablement_Pack.ps1) fails to find it on you system then you are most likely running PowerShell (x86) version which does not show installed 64 bit apps by default. Please open a 64 bit version of Powershell instead and re-run the script.