WhereScape Enablement Pack for Hive

This is a guide to installing the WhereScape Enablement Pack for Hive for WhereScape RED 8.6.1.x

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Prerequisites

Before you begin the following prerequisites must be met:

- Create Database and ODBC DSN :
    - Supported* version of SQL Server or Azure SQL
        - A database to house the RED Metadata Repository.
          Note : This needs to be Empty Database with optional permissions SELECT,INSERT,UPDATE,EXECUTE
        - A database for the Range Table DB (Optional)
    - Hive (ODBC driver version 2.6.x or higher(64-bit))
        - At least one schema available to use as a RED Data Warehouse Target
        - ODBC Drivers can be downloaded from:
          https://www.cloudera.com/downloads/connectors/hive/odbc/2-6-1.html
          https://www.microsoft.com/en-in/download/details.aspx?id=40886
- Software Installations
    - WhereScape RED version 8.6.1.0 or higher with valid license key entered and EULA accepted
    - WhereScape Enablement Pack for Hive version 8.6.1.0 or higher
    - Linux (Virtual Machine) with Hive installed
    - Download and install Putty
- 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
      ```

* : *RED supports the following versions for the metadata repository: MS SQL SERVER 2012 to 2019 and Azure SQL DB*

Enablement Pack Setup Scripts

The Enablement Pack Install process is entirely driven by scripts. The below table outlines these scripts, their purpose and if "Run as Administrator" is required.

#	Enablement Pack Setup Scripts	Script Purpose	Run as Admin	Intended Application
1	install_New_RED_Repository.ps1	Setup and configure a **new** RED Metadata Repository for Hive	Yes	New RED installations ONLY
2	install_WslPowershell_Modules.bat	Installs or updates WslPowershell Modules on this machine	Yes	New and Existing installations
3	import_powershell_templates.ps1	Imports or updates the Powershell Templates to a RED Metadata Repository. Also includes any Script or Procedure Imports	No*	Existing installations
4	set_default_templates.ps1	Applies the RED Connection defaults in a RED Metadata Repository for Python or Powershell templates	No*	Existing installations

* *Note that on some systems executing Windows Powershell scripts is disabled by default, see troubleshooting for workarounds*

Each Powershell script in the list above provides some help at the command line, this can be output by passing the "-help" parameter to the script.For Example > .\install_New_RED_Repository.ps1 -help

Step-By-Step Guide

Setup and configure a new RED Metadata Repository for Hive

Run Powershell as Administrator:

```
Script 1 > Powershell -ExecutionPolicy Bypass -File .\install_New_RED_Repository.ps1
```

Install or Update WhereScape Powershell Modules

Run Script As Administrator

```
Script 2 > install_WslPowershell_Modules.bat
```

Install or Update WhereScape Powershell Templates (For Existing Installations)

Run Script as Administrator

```
Script 2 > install_WslPowershell_Modules.bat
Script 3 > . .\import_powershell_templates.ps1
Script 4 > . .\set_default_templates.ps1
```

Note : Skip this step for new installations.

Set Connection defaults for a Template Set (For Existing Installations)

```
Script 4x > . .\set_default_templates.ps1
```

Choose either "Powershell" or "Python" when prompted.

Post Install Steps - Optional

If you used the script 'install_New_RED_Repository.ps1' then the following optional post install steps are available

Configure Connections

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

1. Connection: 'Hive' - This connection was setup as per parameters provided in the installation script 1
    a. open it's properties and check extended properties tab, set it up for **JDBC URL** and **JDBC DRIVER**
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
3. Connection: 'Runtime Connection for Scripts Linux' - this connection is Linux Connection to access work dir to run unix scripts,
    * Set Host Name and DB ID
    * Set SSH Command as
    plink.exe -ssh $HOST$ -l $USER$ -pw $PASSWORD$

Enable Script Launcher Toolbar

There are a number of stand-alone scripts which provide some features , these scripts can be added to the Script Launcher menu but you will need to enable the menu toolbar item to see them.

To enable the Script Launcher menu in RED: Select menu item 'View->Toolbars->Script Launcher'

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 batch (.bat) scripts from the administrator prompt by simply typing the name at the prompt and hit enter, for example:

C:\temp\EnablementPack>install_WslPowershell_Modules.bat

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

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

If a valid RED installation can not be found

If you have Red 8.5.1.x or higher installed but the script (install_New_RED_Repository.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.