WhereScape Source Enablement Pack - Amazon S3

This is a guide for installing Source Enablement Packs for WhereScape RED 8.6.1.x

Prerequisites

- Python 3.8 or higher
  - Download python installer from https://www.python.org/downloads/
  - Select "Add Python 3.8 to PATH" from installation Window
- PIP Manager
  - From Command Prompt (Run As Administrator) run below command

PIP Manager Install

```
python -m pip install --upgrade pip
```

- Amazon S3
  - At least one bucket created
  - Access Key and Secret Key
  - Region
  - From Command Prompt (Run As Administrator) run below command

Install Python Package

```
pip install boto3
```

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_Source_Enablement_Pack.ps1	Install Python scripts and UI Config Files for browsing files from Amazon S3, Azure Data Lake Gen2,Google Drive	Yes	New and Existing installations

Powershell script above provides some help at the command line, this can be output by passing the "-help" parameter to the script.

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

Source Enablement Pack Installation

Run Windows Powershell as Administrator

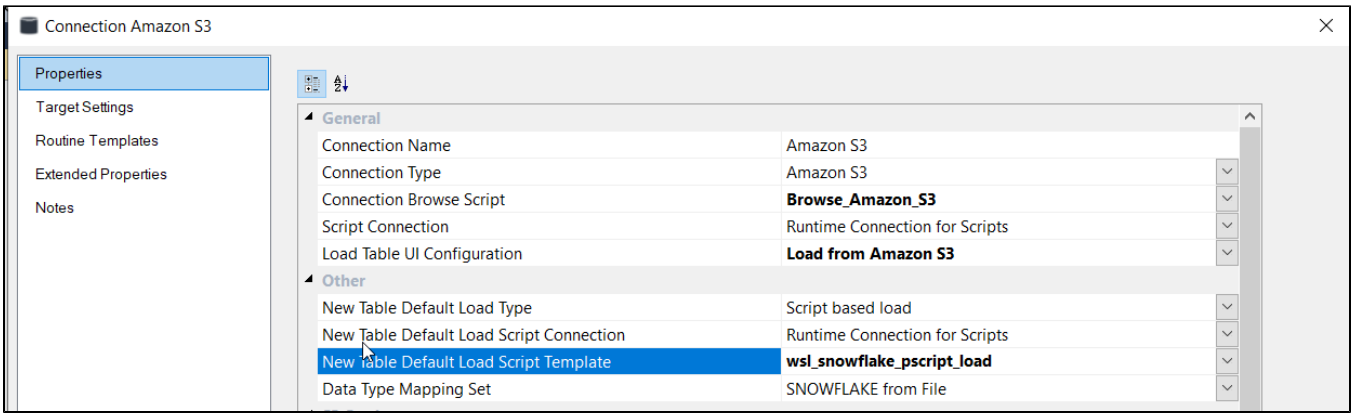
Install Source Connectivity Packs

```
<Script1 Location > Powershell -ExecutionPolicy Bypass -File .\install_Source_Enablement_Pack.ps1
```

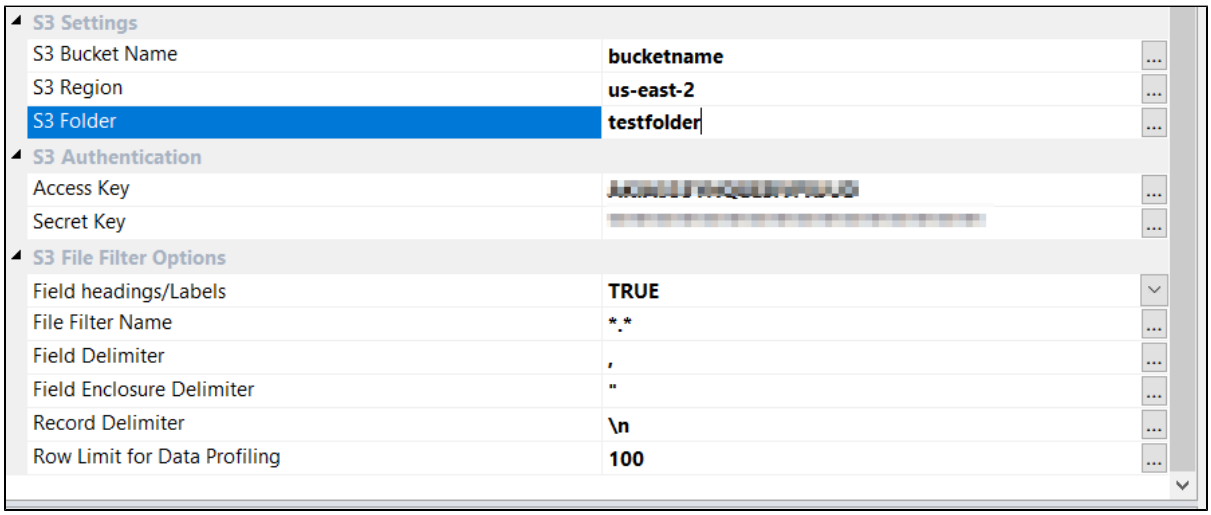
If prompted enter source enablement pack as **'Amazon'**

Amazon S3 Connection Setup

1. Login to RED
2. Check in **Host Script** Browse_Amazon_S3.py in objects list.
3. Check UI Configurations in Menu, Tools UI Configurations Maintain UI Configurations
4. Create new connection in RED
5. Select properties as shown in below screenshot



- Property Section **S3 Settings**
    - S3 Bucket Name : Bucket name without url.The token used to read bucket name in the scripts is *$WSL_SRCCFG_s3Bucket$*
    - S3 Region : Region of the bucket in, e.g., us-west-2.The token used to read region in the scripts is *$WSL_SRCCFG_s3Region$*
    - S3 Folder: This is the directory created on amazon bucket,if left blank the files from bucket will be displayed
- Property Section **S3 Authentication**
    - Access Key : AWS access key used to make programmatic calls to AWS.The token used to read access key in the scripts is *$WSL_SRCCFG_s3AccessKey$*
    - Secret Key : AWS secret key used to make programmatic calls to AWS.The token used to read secret key in the scripts is *$WSL_SRCCFG_s3SecretKey$*
- Property Section **S3 File Filter Option**
    - Field Heading/Labels: Indicates first line of the file contains headings for each field.
        - The options are TRUE and FALSE
        - The token used to read Field Heading in the scripts is *$WSL_SRCCFG_s3FirstLineHeader$*
    - File Filter Name: Provide S3 filename pattern.The file list filters with file extensions,file name patterns.
        - *.*
        - *.<File Extension>
        - <File Name>.<File Extension>
        - <File Name Start>*
        - The token used to read File Filter Name in the scripts is $WSL_SRCCFG_s3FileFilterName
    - Field Delimiter : This is a character that separates the fields within each record of the source file.The field delimiter identifies end of each field.For Example, comma (,),pipe(|).
      For token replacement in scripts use: *$WSL_SRCCFG_s3FieldDelimiter$*
    - Field Enclosure Delimiter: This is a character that delimits BOTH start and end of field value i.e. encapsulates value. A double quote is common enclosure delimiter.
      For token replacement in scripts use: *$WSL_SRCCFG_s3FieldEnclosureDelimiter$*
    - Record Delimiter : This is to identify how each line/record in source file is ended/terminated/delineated.Default is '\\n' .
      For token replacement in scripts use: *$WSL_SRCCFG_s3RecordDelimiter$*
    - Row Limit for Data Profiling : Number of records to scan for Data Profiling.Data profiling is used to get the column names and data types from the source file.By default 100 records will be scanned.
      The token used to read record delimiter value in the script is *$WSL_SRCCFG_s3RowLimit$*



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 Source 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 .\install_Source_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.

If a valid RED installation can not be found

If you have Red 8.6.1.x or higher installed but the script (install_Source_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