How to install & configure MSSQL-Scripter & Python

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1. Pre-Requisites

- Python 3.6
- mssql-scripter
- Windows PowerShell – Version 5 or superior
- Azure subscription

2. Guidelines on products installation

2.1 How to install Python on Windows 10

a) Visit the official Python download page and grab the Windows installer for the latest version of Python 3. A couple of notes:

- Python is currently available in two versions — Python 2 and Python 3. For beginners, that can be confusing. In short, Python 3 is where the language is going; Python 2 has a large base of existing users but isn't developing beyond bug fixes. Read this for more.

    https://www.python.org/downloads/

- By default, the installer provides the 32-bit version. There's also a 64-bit version available. I recommend you stick with the 32-bit version

b) Run the installer. You'll have two options — choose "Customize Installation."
c) On the next screen, check all boxes under "Optional Features." Click next.
d) Next, under "Advanced Options," set the location where you want to install Python. For ease, I use:
        C:\Python36-32

That refers to an installation of 32-bit Python 3.6

e) Next, set the system's PATH variable to include directories that include Python components and packages we'll add later. To do this:
- Open the Control Panel (easy way: click in the Windows search on your task bar and type "Control Panel" then click the icon).
- In the Control Panel, search for Environment; click Edit the System Environment Variables. Then click the Environment Variables button.
- In the User Variables section, we will need to either edit an existing PATH variable or create one. If you are creating one, make PATH the variable name and add the following directories to the variable values section as shown, separated by a semicolon. If you're editing an existing PATH, the values are presented on separate lines in the edit dialog. Click New and add one directory per line.

C:\Python36-32
C:\Python36-32\Lib\site-packages\
C:\Python36-32\Scripts\

f) Go back to the Python install and finish the installation

g) Now, you can open a command prompt (Start Menu | Windows System | Command Prompt) and type:

Python

That will load Python interpreter:

2.2 How to install MSSQL-SCRIPTER on Windows 10

a) To Install mssql-scripter, you should run:

pip install mssql-scripter

b) Guidelines on how to install it in MacOS and Linux:

https://github.com/Microsoft/sql-xplat-cli/blob/dev/doc/installation_guide.md

2.3 How to install PowerShell on Windows 10

You probably will have PowerShell installed if you are running Windows 10.
In case this is missing for some reason, please find below guidelines on how to install it.

a) Recommendation:

- Go to search on windows and type PowerShell
- Pin to taskbar

3. How to run Schema Deployment PowerShell scripts

Pre-Requisite: Please download folder enMasse_schemadeployment

https://microsoft.sharepoint.com/teams/sqlaa/jumpstart/Shared%20Documents/Forms/AllItems.aspx?viewpath=%2Fteams%2Fsqlaa%2Fjumpstart%2FShared%20Documents%2FForms%2FAllItems%2Easpx&id=%2Fteams%2Fsqlaa%2Fjumpstart%2FShared%20Documents%2FJumpstart%2DArtifacts%2FIP%2FCapita%20Group%20%2D%20EMEA%20%2D%20UK

a) Fire up PowerShell as administrator
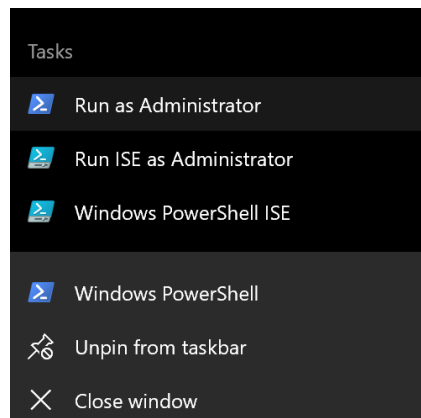
b) Connect to your Azure subscription:
Run:
Login-AzureRmAccount

It will open a pop window. You need to enter credentials for the Azure Subscription:

c) Run PowerShell to prepare empty databases:

In order to prepare the environment, three scripts should be run:
--- preparing environment
& "C:\MyPS\create_rg.ps1"
& "C:\MyPS\create_sqlserver.ps1"
& "C:\MyPS\create_sqldb.ps1"

Optional:
--- add databases to elastic pool. This can be done after the schema is deployed.

        & "C:\MyPS\add_elastic.ps1"

d) Run PowerShell to export DDLs from source databases:
    ---- generate
    & "C:\MyPS\schema_generator.ps1"

e) Run PowerShell to deploy DDLs to target databases:
    ---- schema deployment
    & "C:\MyPS\schema_deploy.ps1"

4. How to undo

f) Delete resource group from the subscription

    ---- delete the resource group
    & "C:\MyPS\remove_rg.ps1"

Feedback and suggestions

If you have feedback or suggestions for improving this data migration asset, please contact the Data Migration Jumpstart Team (askdmjfordmtools@microsoft.com). Thanks for your support!

Note: For additional information about migrating various source databases to Azure, see the Azure Database Migration Guide.