WaMDaM Directions and Use Cases

By Adel M. Abdallah, Feb 2022

Step 2: Install WEAP and set up its API

You need to have WEAP already installed on your machine

First make sure to have a copy of the Water Evaluation And Planning" system (WEAP) installed on your local machine (Windows). If you don't have it installed, download and install the WEAP software which allows you to run the Bear River WEAP model and its scenarios for Use Case 5. https://www.weap21.org/. You need to have a WEAP License. See here (https://www.weap21.org/index.asp?action=217). If you're interested to learning about WEAP API, check it out here: http://www.weap21.org/WebHelp/API.htm

Install dependency and register WEAP

2.1. Install pywin32 extensions which provide access to many of the Windows APIs from Python.

Choose on option

- a. Install using an executable basedon your python version. Use version for Python 2.7 https://github.com/mhammond/pywin32/releases

OR

- b. Install it using Anaconda terminal @ https://anaconda.org/anaconda/pywin32

Type this command in the Anaconda terminal as Administrator

```
conda install -c anaconda pywin32
```

OR

- c. Install from source code (for advanced users) https://github.com/mhammond/pywin32

2.2. Register WEAP with Windows

This use case only works on a local Jupyter Notebook server installed on your machine along with WEAP. So it does not work on the online Notebooks in Step 2.1. You need to install Jupyter Server in Step 2.2 then proceed here.

- **Register WEAP with Windows to allow the WEAP API to be accessed**
  Use Windows "Command Prompt". Right click and then **run as Administrator**, navigate to the WEAP installation directory such as and then hit enter

```
cd C:\Program Files (x86)\WEAP
```

Then type the following command in the command prompt and hit enter

```
WEAP /regserver
```

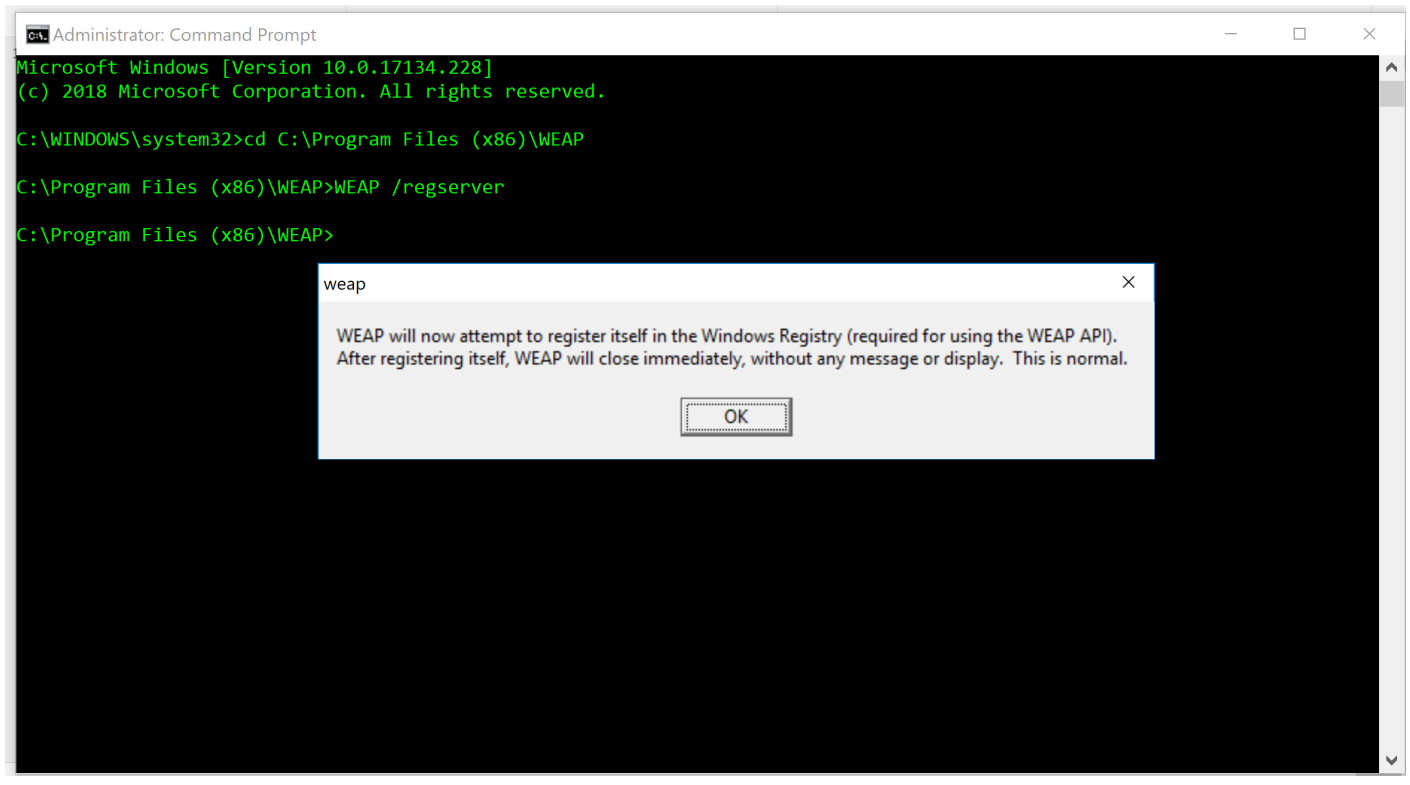

Figure 1: Register WEAP API with windows using the Command Prompt (Run as Administrator)

Get the Bear and Weber models ready

Clone or download all this GitHub repo
https://github.com/WamdamProject/WaMDaM_UseCases/ In your local repo folder, go to the folders here
WaMDaM_UseCases/1_Original_Datasets_preperation_files/Bear_Weber_WEAP_models

Unzip or extract the WEAP and Weber folders and copy them to the **WEAP Areas** folder on your local machine. For example, it is at

```
C:\Users\Adel\Documents\WEAP Areas
```

Now your WEAP software will be able to read and run both models. Next, we will use the WaMDaM Wizard to extract the network and data of both models

Congratualtions!