# **VirtualWisdom Import Utilities**

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#### **Overview**

The VirtualWisdom Import Utilies consist of the following three scripts:

- 1. vw\_csv\_nicknames\_to\_json
- 2. vw\_csv\_relations\_to\_json
- 3. vw\_import\_entities

vw\_csv\_nicknames\_to\_json generates importable JSON from a CSV file containing WWN to nickname (alias) mappings.

### **Input format**

WWN,nickname

Example:

248d00059b2b78c0,hba1port1 5001438002b0dbb4,hba1port2

vw\_csv\_relations\_to\_json generats importable JSON from a CSV file containing entity definitions.

### **Input Format**

Type,Name,Tags,Item1,Item2,...,ItemN

Type is one of: application, hba, host, storagearray, storagecontroller, iomodule.

Tags is a semicolon-separated list of words.

Example:

```
hba, hba1, tag1; tag2, hba1port1, hba1port2
hba, hba2,, hba2port1, hba2port2
host, host1, tag3; tag4, hba1
host, host2,, hba2
application, app1, tag5, host1, host2
```

vw\_import\_entities imports JSON into VirtualWisdom.

See the Usage section below for information on how to use each script.

# Support

These scripts are provided "as is" and are not supported by VirtualInstruments.

### **Installation**

These scripts require Python 3.7+ (64-bit), two Python packages, 'click' and 'requests', and a version of OpenSSL that supports TLSv1.2. The easiest and recommended method for setting up to run the scripts is as follows.

After item 1 below, the remaining command line demonstrations will be done on a Unix-like system, macOS in this case.

1. Create a virtual environment:

Unix/Linux/macOS	Windows
<pre>\$ python3 -m venv venv \$ venv/bin/activate (venv) \$</pre>	<pre>c:\<dir> py -3 -m venv venv c:\<dir> venv\Scripts\activate (venv) c:\<dir></dir></dir></dir></pre>

2. Install the package.

```
(venv) $ pip install https://github.com/Virtual-Instruments/vwimportutils/archive/v1.0.1-1.zip
```

3. Validate that the package installed correctly.

```
(venv) $ vw_import_entities --help
```

## vw\_csv\_nicknames\_to\_json

```
Usage: vw_csv_nicknames_to_json.py [OPTIONS] CSV_IN JSON_OUT
 This script generates an importable JSON file from a CSV file containing
 WWN to nickname (alias) mappings.
 Input is a CSV file formatted as follows:
 WWN1, nickname1
 WWN2, nickname2
 Output is a JSON file that can be imported into VirtualWisdom, either via
 the UI or via the command line using the vw_import_entities script.
 The --etype (-t) argument must be either hostport or storageport.
 The command is pipeable; simply replace either the input file, output
 file, or both with a dash (-).
 Examples (Linux/macOS/Unix):
  (venv) $ vw csv nicknames to json -t hostport aliases.csv import.json
```

# vw\_csv\_relations\_to\_json

```
Usage: vw csv relations to json [OPTIONS] CSV IN JSON OUT
 This script generates an importable JSON file from a CSV file containing
 entity definitions.
 Input is a CSV file formatted as follows:
  Type, Name, Tags, Item1, Item2, ..., ItemN
 Type is one of: application, hba, host, storagearray, storagecontroller,
 iomodule.
 Tags is a semicolon-separated list of words.
  Example
  hba, hba1, tag1; tag2; tag3, hba1port1, hba1port2
 hba, hba2, , hba2port1, hba2port2
 host, host1, tag4; tag5, hba1
 host, host2, , hba2
  application, appl, tag6; tag7, host1, host2
  Output is a JSON file that can be imported into VirtualWisdom, either via
  the UI or via the command line using the vw_import_entities script.
```

```
The command is pipeable; simply replace either the input file, output file, or both with a dash (-).

Examples (Linux/macOS/Unix):

(venv) $ vw_csv_relations_to_json relations.csv import.json

(venv) $ cat relations.csv | vw_csv_relations_to_json - - |

vw_import_entities ... -

Options:

--help Show this message and exit.
```

## vw\_import\_entities

```
Usage: vw_import_entities [OPTIONS] JSON_IN

This script imports entities (or aliases) into VirtualWisdom. It does so using VW's Public REST API. As such, it requires two things: (1) a token generated from the VW UI (see Ch. 8 in the VW User Guide), and (2) a REST API SDK license, properly installed in the target VW Appliance.

Input is a properly constructed JSON import file (see Ch. 8 in the VW User Guide).

The command is pipeable; simply replace the input file with a dash (-).

Examples (Linux/macOS/Unix):

(venv) $ vw_import_entities -h 10.20.30.40 -t <token> entities.json

(venv) $ cat aliases.csv | vw_csv_nicknames_to_json - - |
```

```
vw_import_entities -h 10.20.30.40 -t <token> -
 If your input file has any errors, they will be listed to the screen.
 You can set two environment variables to simplify the use of this script:
 On Mac/Linux/Unix:
 export VI IPADDR=10.20.30.40
 export VI TOKEN=<token>
 On Windows:
 set VI IPADDR=10.20.30.40
 set VI_TOKEN=<token>
 Doing so eliminates the need to use the -h and -t options.
Options:
 -h, --host TEXT
 -t, --token TEXT
 -F, --force
 --help
                 Show this message and exit.
```