# Federator.ai AWS VM Utilization Helper Utility

This utility retrieves information on the resources of AWS virtual machine clusters and recommendations from Federator.ai for optimizing them. A summary of the collected data is then presented in an Excel spreadsheet that displays the current cluster configuration and the recommended configuration from Federator.ai, which includes instance types, resource utilization, and potential cost savings associated with the optimized cluster configuration.

## Utility

* **Juniper\_AWS\_VM\_Recommendation\_20230406.xlsx** – Excel spreadsheet displays the current cluster configuration and the recommended configuration from Federator.ai.
* **vm-resource-collect.sh** – Linux bash script for collecting AWS VM cluster resource data and Federator.ai recommendations for the VM clusters.

Federator.ai AWS VM Resource Collector v1.0.1

vm-resource-collect.sh [options]

Options:

-h, --host='' Federator.ai API host(ip:port) (DEFAULT: '127.0.0.1:31012')

-u, --username='' Federator.ai API user name (DEFAULT: 'admin')

-p, --password='' Federator.ai API password (or read from 'F8AI\_API\_PASSWORD')

-c, --cluster='' Target VM cluster name (all clusters if target VM cluster is not specified)

-g, --granularity='' Resource recommendation granularity (DEFAULT: '21600')

-d, --directory='' Local directory where .csv files will be saved (DEFAULT: '.')

-l, --logfile='' Log file full path (DEFAULT: '/var/log/vm-resource-collect.log')

Examples:

vm-resource-collect.sh --host=127.0.0.1:31012 --username=admin --granularity=21600 --directory=/tmp

## Requirements

* Microsoft Windows 10 and above
* Microsoft Excel 2016 and above, Windows version
* Linux or MacOS with bash version 4 or above

## Steps

The “vm-resource-collect.sh” script helps users to collect AWS VM resource data and save the data to two CSV files, “vm-idv-raw.csv” and “vm-asg-raw.csv”. The “Juniper\_AWS\_VM\_Recommendation\_20230406.xlsx “ spreadsheet is configured to automatically load the resource data from the two CSV files when the spreadsheet is opened.

1. Upload the “vm-resource-collect.sh” script to a Linux or MacOS host which has bash version 4 or above installed.
2. Run the script with the required options, “--host” and “--password”. By default, the two CSV files are saved in the same directory of the script.

~# bash ./vm-resource-collect.sh -h s4.sandbox.prophetstor.com -u admin -p xxx

Federator.ai AWS VM Resource Collector v1.0.1

Start collecting VM resource data.

Successfully created VM CSV: './vm-idv-raw.csv', './vm-asg-raw.csv'.

~#

~# ls -l \*.csv

-rw-r--r--. 1 root root 335 Apr 6 12:26 vm-asg-raw.csv

-rw-r--r--. 1 root root 130 Apr 6 12:26 vm-idv-raw.csv

1. Create a new folder, “C:\Data”, on your Windows desktop, copy the spreadsheet to the folder, and download the two CSV files to the same folder.
2. Open the “C:\Data\ Juniper\_AWS\_VM\_Recommendation\_20230406.xlsx” spreadsheet. The “Individual” and “ASG” sheets should be refreshed with the collected data.

Microsoft Windows [Version 10.0.22621.1194]

(c) Microsoft Corporation. All rights reserved.

C:\>cd c:\Data

c:\Data>dir

Volume in drive C is Windows

Volume Serial Number is BEFF-E40B

Directory of c:\Data

04/06/2023 12:32 PM <DIR> .

04/06/2023 11:26 AM 138,951 Juniper\_AWS\_VM\_Recommendation\_20230406.xlsx

04/06/2023 09:59 AM 335 vm-asg-raw.csv

04/06/2023 11:21 AM 130 vm-idv-raw.csv

3 File(s) 139,416 bytes

1 Dir(s) 385,553,924,096 bytes free

c:\Data>

Note:

It is the limitation of Excel that the spreadsheet can only be configured to automatically load CSV files in a fixed location. This spreadsheet is configured to load the two CSV files in the “C:\Data” folder by default.

If you want to change the location of the two CSV files, the configuration is in

1. “Excel 🡪 Data 🡪 Queries & Connections”.
2. Double-click the “node-raw” in the “Queries & Connections” panel.
3. Click “Source” in the “Query Settings” panel.
4. Change the absolute path in “File.Contents()”
5. Close & Load

Make the same change for another CSV file.

