# Federator.ai VM Recommendation Helper Utility

This utility retrieves information on the resources of 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\_vm\_recommendation\_20240112.xlsx** – Excel spreadsheet displays the current cluster configuration and the recommended configuration from Federator.ai.
* **vm-resource-collect.sh** – Linux bash script for collecting VM cluster resource data and Federator.ai recommendations for the VM clusters.

Federator.ai VM Resource Collector v1.0.4

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')

Example:

vm-resource-collect.sh --host=127.0.0.1:31012 --username=admin --password=xxxx --cluster=vm-cluster-1

## 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 VM resource data and save the data to two CSV files, “vm-idv-raw.csv” and “vm-asg-raw.csv”. The “Juniper\_vm\_recommendation\_20240112.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 -c aws1

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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 25 Jan 13 12:26 vm-asg-raw.csv

-rw-r--r--. 1 root root 609 Jan 13 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\_vm\_recommendation\_20240112.xlsx” spreadsheet. The “Individual” and “ASG” sheets should be refreshed with the collected data.

Microsoft Windows [Version 10.0.22631.3007]

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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> .

01/13/2023 11:26 AM 210,913 Juniper\_vm\_recommendation\_20240112.xlsx

01/13/2024 06:14 PM 25 vm-asg-raw.csv

01/13/2024 06:14 PM 609 vm-idv-raw.csv

3 File(s) 210,547 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.

