SVM Event Rate Checker

Cloud Insights

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SVM Event Rate Checker

The Event Rate Checker is used to check the NFS/SMB combined event rate in the SVM before installing an ONTAP SVM data collector, to see how many SVMs one Agent machine will be able to monitor.

Requirements:

- Cluster IP
- Cluster admin username and password

> When running this script no ONTAP SVM Data Collector should be running for the SVM for which event rate is being determined.

Steps:

1. Install the Agent by following the instructions in CloudSecure.
2. Once the agent is installed, run the *server_data_rate_checker.sh* script as a sudo user:

```
/opt/netapp/cloudsecure/agent/install/svm_event_rate_checker.sh
```

3. This script requires *sshpass* to be installed in the linux machine. There are two ways to install it:
   a. Run the fiollowing command:

```
linux_prompt> yum install sshpass
```

   b. If that does not work, then download *sshpass* to the linux machine from the web and run the following command:

```
linux_prompt> rpm -i sshpass
```

4. Provide the correct values when prompted. See below for an example.
5. The script will take approximately 5 minutes to run.
6. After the run is complete, the script will print the event rate from the SVM. You can check Event rate per SVM in the console output:

```
“Svm svm_rate is generating 100 events/sec”.
```

1. Each Ontap SVM Data Collector can be associated with a single SVM, which means each data collector will be able to receive the number of events which a single SVM generates.

Keep the following in mind:

A) A single Agent machine can handle the following:

Agent Machine Configuration	Number of SVM Data Collectors	Max event Rate which the Agent Machine can handle
4 core, 16GB	10 data collectors	20K events/sec
4 core, 32GB	20 data collectors	20K events/sec

B) To calculate your total events, add the Events generated for all SVMs for that agent.

C) If the script is not run during peak hours or if peak traffic is difficult to predict, then keep an event rate buffer of 30%.

B + C Should be less than A, otherwise the Agent machine will fail to monitor.

In other words, the number of data collectors which can be added to a single agent machine should comply to the formula below:

```
Sum of all Event rate of all Data Source Collectors + Buffer Event rate of
30% < 20000 events/second
```

Example

Let us say we have three SVMS generating event rates of 100, 200, and 300 events per second, respectively.

We apply the formula:

```
 (100+200+300) + [(100+200+300)*30%] = 600+180 = 780events/sec
780 events/second is < 20000 events/second, so the 3 SVMs can be monitored
via one agent box.
```

Console output is available in the Agent machine in the file name *fpolicy_stat_<SVM Name>.log* in the present working directory.

The script may give erroneous results in the following cases:

- Incorrect credentials, IP, or SVM name are provided.
- An already-existing fpolicy with same name, sequence number, etc. will give error.
- The script is stopped abruptly while running.

An example script run is shown below:

```
[root@ci-cs-data agent]#
/opt/netapp/cloudsecure/agent/install/svm_event_rate_checker.sh
```

```
Enter the cluster ip: 10.192.139.166
Enter the username to SSH: admin
Enter the password:
Getting event rate for NFS and SMB events.
Available SVMs in the Cluster
-----------------------------
QA_SVM
Stage_SVM
Qa-fas8020
Qa-fas8020-01
Qa-fas8020-02
audit_svm
svm_rate
vs_new
vs_new2
```

```
-----------------------------
Enter [1/5] SVM name to check (press enter to skip): svm_rate
Enter [2/5] SVM name to check (press enter to skip): audit_svm
Enter [3/5] SVM name to check (press enter to skip):
Enter [4/5] SVM name to check (press enter to skip):
Enter [5/5] SVM name to check (press enter to skip):
Running check for svm svm_rate...
Running check for svm audit_svm...
Waiting 5 minutes for stat collection
Stopping sample svm_rate_sample
Stopping sample audit_svm_sample
fpolicy stats of svm svm_rate is saved in fpolicy_stat_svm_rate.log
Svm svm_rate is generating 100 SMB events/sec and 100 NFS events/sec
Overall svm svm_rate is generating 200 events/sec
fpolicy stats of svm audit_svm is saved in fpolicy_stat_audit_svm.log
Svm audit_svm is generating 200 SMB events/sec and 100 NFS events/sec
Overall svm audit_svm is generating 300 events/sec
```

```
[root@ci-cs-data agent]#
```

Troubleshooting

Question: If I run this script on an SVM that is already configured for Cloud Secure, does it just use the existing fpolicy config on the SVM or does it setup a temporary one and run the process?
Answer: The Event Rate Checker can run fine even for an SVM already configured for Cloud Secure. There should be no impact.

Question: Can I increase the number of SVMs on which the script can be run?
Answer: Yes. Simply edit the script and change the max number of SVMs from 5 to any desirable number.
Question: If I increase the number of SVMs, will it increase the time of running of the script?
Answer: No. The script will run for a max of 5 minutes, even if the number of SVMs is increased.
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