Chaos Engineering Report

31 October 2023

Contents

Summary

This report aggregates 1 experiments spanning over the following subjects:

Experiment

Proxy Server is Offline

This experiment is to test the performance & find the errors when the proxy server is turn off (offline)

Summary

Status	completed
Tagged	
Executed From	LAPTOP-A8CQJ1B2
Platform	Linux-5.15.90.1-microsoft-standard-WSL2-x86_64-with-glibc2.29
Started	Tue, 31 Oct 2023 13:51:15 GMT
Completed	Tue, 31 Oct 2023 13:57:45 GMT
Duration	6 minutes

Definition

The experiment was made of 3 actions, to vary conditions in your system, and 0 probes, to collect objective data from your system during the experiment.

Steady State Hypothesis

The steady state hypothesis this experiment tried was "**Normal Load Testing Check**".

Before Run

The steady state was verified

Probe	Tolerance	Verified
Normal load testing log must exists	True	True
We can request text	200	True
We can request image	200	True

After Run

The steady state was not verified.

Probe	Tolerance	Verified

Method

The experiment method defines the sequence of activities that help gathering evidence towards, or against, the hypothesis.

The following activities were conducted as part of the experimental's method:

Type	Name
action	Turn off interface-proxy VM on Google Cloud Platform
action	Run load testing
action	Turn on interface-proxy VM on Google Cloud Platform

Result

The experiment was conducted on Tue, 31 Oct 2023 13:51:15 GMT and lasted roughly 6 minutes.

Action - Turn off interface-proxy VM on Google Cloud Platform

Status	succeeded
Background	False
Started	Tue, 31 Oct 2023 13:52:07 GMT
Ended	Tue, 31 Oct 2023 13:56:36 GMT
Duration	4 minutes

The action provider that was executed:

Type	process
Path	gcloud
Timeout	N/A
Arguments	compute instances stop interface-proxy

Action - Run load testing

Status	succeeded
Background	False
Started	Tue, 31 Oct 2023 13:56:36 GMT
Ended	Tue, 31 Oct 2023 13:57:08 GMT
Duration	32 seconds

The action provider that was executed:

Type	python

Module	chaosk6.actions
Function	run_script
Arguments	{'script_path': 'load-testing.js'}

Action - Turn on interface-proxy VM on Google Cloud Platform

Status	succeeded
Background	False
Started	Tue, 31 Oct 2023 13:57:08 GMT
Ended	Tue, 31 Oct 2023 13:57:33 GMT
Duration	25 seconds

The action provider that was executed:

Type	process
Path	gcloud
Timeout	N/A
Arguments	compute instances start interface-proxy

Appendix

Action - Turn off interface-proxy VM on Google Cloud Platform

The *action* returned the following result:

```
{'status': 0,
 'stderr': 'Stopping instance(s) interface-proxy...\n'
           '......................................................................
           'Updated '
           '[https://compute.googleapis.com/compute/v1/projects/mlops-398205/zones/us-centra
 'stdout': ''}
```

Action - Run load testing

The *action* returned the following result:

```
None
```

Action - Turn on interface-proxy VM on Google Cloud Platform

The *action* returned the following result:

```
{'status': 0,
 'stderr': 'Starting instance(s) interface-proxy...\n'
           '......................................done.\n'
```

              'Updated '
              '[https://compute.googleapis.com/compute/v1/projects/mlops-398205/zones/us-centra
              'Instance internal IP is 10.128.0.7\n'
              'Instance external IP is 34.136.11.63\n',
    'stdout': ''}