Chaos Engineering Report

25 February 2021

Contents

Summary

This report aggregates 1 experiments spanning over the following subjects:

kubernetes

Experiment

What are the possibility's of using the Chaos Toolkit in OpenShift at DUO

Check what parts of the Chaos Toolkit are usable on the platform of DUO

Summary

Status	completed
Tagged	kubernetes
Executed From	chaos-toolkit-test-79cdb9fc78-x2bmw
Platform	Linux-4.18.0-193.29.1.el8_2.x86_64-x86_64-with-redhat-8.3-Ootpa
Started	Thu, 25 Feb 2021 13:12:26 GMT
Completed	Thu, 25 Feb 2021 13:12:27 GMT
Duration	1 second

Definition

The experiment was made of 0 actions, to vary conditions in your system, and 1 probes, to collect objective data from your system during the experiment.

Steady State Hypothesis

The steady state hypothesis this experiment tried was "**Verifying services are healthy and pod accepts api request**".

Before Run

The steady state was verified

Probe	Tolerance	Verified
pod-is-not-available	True	True

After Run

The steady state was verified

Probe	Tolerance	Verified
pod-is-not-available	True	True

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
probe	pods-in-conditions

Result

The experiment was conducted on Thu, 25 Feb 2021 13:12:26 GMT and lasted roughly 1 second.

Probe - pods-in-conditions

Status	failed
Background	False
Started	Thu, 25 Feb 2021 13:12:26 GMT
Ended	Thu, 25 Feb 2021 13:12:27 GMT
Duration	1 second

The probe provider that was executed:

Type	python
Module	chaosk8s.pod.probes
Function	pods_in_conditions
Arguments	{'label_selector': 'app=spring-config-client', 'ns': 'cmst-test', 'conditions': ['Running', 'Pending']}

The *pods-in-conditions* probe raised the following error while running:

```
Traceback (most recent call last):
  File "/usr/local/lib/python3.6/site-
packages/chaoslib/provider/python.py", line 55, in run_python_activity
    return func(**arguments)
  File "/usr/local/lib/python3.6/site-
packages/chaosk8s/pod/probes.py", line 152, in pods_in_conditions
    condition=condition
chaoslib.exceptions.ActivityFailed: pod cpqq-testinpipeline-spring-
config-client-6fd9fb56fc-t6m4k does not match the following given
condition: Running


During handling of the above exception, another exception occurred:
```

```
chaoslib.exceptions.ActivityFailed:
chaoslib.exceptions.ActivityFailed: pod cpqq-testinpipeline-spring-
config-client-6fd9fb56fc-t6m4k does not match the following given
condition: Running
```

Appendix

Probe - pods-in-conditions

The *probe* returned the following result:

```
None
```