

Chaos Engineering Report

26 November 2019

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Summary

This report aggregates 1 experiments spanning over the following subjects:

kubernetes, service

Experiment

My application is resilient to admin-instigated node drainage

Can my application maintain its minimum resources?

Summary

Status	completed
Tagged	service, kubernetes
Executed From	C02W20LAHV2V
Platform	Darwin-18.7.0-x86_64-i386-64bit
Started	Tue, 26 Nov 2019 16:55:43 GMT
Completed	Tue, 26 Nov 2019 16:55:43 GMT
Duration	0 seconds

Definition

The experiment was made of 1 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 “**Services are all available and healthy**”.

Before Run The steady state was verified

Probe	Tolerance	Verified
application-must-respond-normally	200	True
pods_in_phase	True	True

After Run The steady state was verified

Probe	Tolerance	Verified
application-must-respond-normally	200	True
pods_in_phase	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
action	drain_node

Result

The experiment was conducted on Tue, 26 Nov 2019 16:55:43 GMT and lasted roughly 0 seconds.

Action - drain_node

Status	failed
Background	False
Started	Tue, 26 Nov 2019 16:55:43 GMT
Ended	Tue, 26 Nov 2019 16:55:43 GMT
Duration	0 seconds

The action provider that was executed:

Type	python
Module	chaosk8s.node.actions
Function	drain_nodes
Arguments	{'name': 'minikube', 'delete_pods_with_local_storage': True}

The *drain_node* action raised the following error while running:

Traceback (most recent call last):

```

File
"/usr/local/lib/python3.7/site-packages/chaoslib/provider/python.py",
line 55, in run_python_activity
    return func(**arguments)
File
"/usr/local/lib/python3.7/site-packages/chaosk8s/node/actions.py",
line 300, in drain_nodes
    for owner in
pod.metadata.owner_references:
TypeError: 'NoneType' object is not
iterable

```

During handling of the above exception, another exception occurred:

```

chaoslib.exceptions.ActivityFailed: TypeError: 'NoneType'
object is not iterable

```

Appendix

Action - drain_node The *action* returned the following result:

None