# Chaos Engineering Report

20 September 2020

## Contents

# Summary

This report aggregates 1 experiments spanning over the following subjects:

*pod, k8s*

# Experiment

## What happens if we terminate a Flux?

If a Flux Pod is terminated, a new one should be created in its places.

### Summary

| | |
|---|---|
| **Status** | completed |
| **Tagged** | k8s, pod |
| **Executed From** | Blanka |
| **Platform** | macOS-10.15.5-x86_64-i386-64bit |
| **Started** | Sun, 20 Sep 2020 18:05:40 GMT |
| **Completed** | Sun, 20 Sep 2020 18:06:13 GMT |
| **Duration** | 33 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 "**Flux Pod exists**".

### Before Run

The steady state was verified

| Probe | Tolerance | Verified |
|---|---|---|
| pod-exists | 1 | True |
| pod-in-phase | True | True |
| pod-in-conditions | True | True |

### After Run

The steady state was verified

| Probe | Tolerance | Verified |
|---|---|---|
| pod-exists | 1 | True |
| pod-in-phase | True | True |

| Probe | Tolerance | Verified |
|---|---|---|
| pod-in-conditions | 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 | terminate-pod |

**Result**

The experiment was conducted on Sun, 20 Sep 2020 18:05:40 GMT and lasted roughly 33 seconds.

**Action - terminate-pod**

| | |
|---|---|
| **Status** | succeeded |
| **Background** | False |
| **Started** | Sun, 20 Sep 2020 18:05:42 GMT |
| **Ended** | Sun, 20 Sep 2020 18:05:42 GMT |
| **Duration** | 0 seconds |
| **Paused After** | 30s |

The action provider that was executed:

| | |
|---|---|
| **Type** | python |
| **Module** | chaosk8s.pod.actions |
| **Function** | terminate_pods |
| **Arguments** | {'label_selector': 'app=flux', 'rand': True, 'ns': 'admin'} |

**Appendix**

**Action - terminate-pod**

The *action* returned the following result:

`None`