Chaos Engineering Report

29 October 2023

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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 | $Linux-5.15.90.1-microsoft-standard-WSL2-x86_64-with-glibc 2.29$ |
| Started | Sun, 29 Oct 2023 09:04:09 GMT |
| Completed | Sun, 29 Oct 2023 09:05:03 GMT |
| Duration | 54 seconds |

Definition

The experiment was made of 2 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 |

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 | Retrieve all incidents repeatedly |
| action | Run load testing when interface is off |

Result

The experiment was conducted on Sun, 29 Oct 2023 09:04:09 GMT and lasted roughly 54 seconds.

Action - Retrieve all incidents repeatedly

| Status | succeeded |
|------------|-------------------------------|
| Background | False |
| Started | Sun, 29 Oct 2023 09:04:09 GMT |
| Ended | Sun, 29 Oct 2023 09:04:19 GMT |
| Duration | 10 seconds |
| | |

The action provider that was executed:

| \mathbf{Type} | python |
|-----------------|--|
| Module | chaosk6.actions |
| Function | stress_endpoint |
| Arguments | {'endpoint': 'https://status.cloud.google.com/incidents.json', |
| | 'vus': 2, 'duration': '5s', 'log_file': 'log/running/k6.log'} |

Action - Run load testing when interface is off

| Status | succeeded |
|------------|-------------------------------|
| Background | False |
| Started | Sun, 29 Oct 2023 09:04:19 GMT |
| Ended | Sun, 29 Oct 2023 09:05:03 GMT |
| Duration | 44 seconds |

The action provider that was executed:

| \mathbf{Type} | python |
|-----------------|---|
| Module | chaosk6.actions |
| Function | run_script |
| Arguments | {'script_path': 'load-testing.js', 'duration': '10s'} |

Appendix

Action - Retrieve all incidents repeatedly

The action returned the following result:

True

Action - Run load testing when interface is off

The ${\it action}$ returned the following result:

None