Orderly Ape

An Open Source k6 Cloud Alternative

A Review Signal LLC Open Source Project

Goal

The primary goal of the project is to build an open source k6 cloud replacement capable of running the benchmarks for **wphostingbenchmarks.com**, and presenting the results to users in a manner similar to k6 cloud test results. This will allow the WordPress Hosting Performance Benchmarks ("WPHPB") to continue being run. It will also give hosting companies and individuals a fully functioning system to replicate the WPHPB tests and build/extend their own load testing capabilities.

Why

This project is needed because k6 cloud became Grafana cloud and increased pricing dramatically. To get enough credits to run the same amount of tests as 2023, it would cost roughly \$270,000. It will be a fraction of the cost to build a DIY replacement instead of paying for Grafana cloud. The additional benefit is that all the benchmarking work and code produced for WPHPB has been open source, and this project would be no exception. Having an open source solution to run distributed k6 load tests will save users money, give more flexibility and offer them a building block to create more complex infrastructure.

Technical Details

There are four core pieces of the project:

- 1. Execution k6 needs to run on a distributed system able to scale load in a single geographical location or many locations.
- 2. Data collection data from execution needs to be collected and stored in a system that is capable of capturing and storing it all. The system also needs to be durable and keep/save/export the data for long term storage and visualization.
- 3. Visualization data needs to be visualized with access control so some results can be made publicly available for the long term. The visualization needs to be able to show core metrics from k6 along with custom metrics defined by the script being executed. The data should be viewable on a per test basis which aggregates all the data from all testing

locations/nodes and presents a unified result that can be broken down and analyzed by users.

4. Control interface - The application and tests will need an interface to setup, configure and execute load tests.

The components in each piece will utilize existing open source projects (k6, grafana open source, kubernetes, etc) as well as create the glue necessary to replicate the k6 cloud functionality of running distributed load tests, capturing the results and visualizing them for users to analyze.

Deliverable

The deliverable is a complete system consisting of the technical details above and the documentation necessary to install, setup, and execute it on a public cloud. It will utilize existing open source projects and build the necessary glue to connect them into a useful tool.

Team

This project will be led by Kevin Ohashi, founder of Review Signal LLC and WordPress Hosting Performance Benchmarks (wphostingbenchmarks.com). Bitpoke Soft SRL ("Bitpoke") will be contracted to develop the project. The team from Bitpoke have experience as a former CEO and CTO of Presslabs, who participated in the benchmarks in the past. They bring their experience and knowledge of running a WordPress hosting company, participating in the benchmarks, building custom load testing infrastructure, and now they have a focus on kubernetes based software development consulting.

Benefits

- Helps WordPress Hosting Performance Benchmarks continue to benchmark the industry
- Allows web hosting companies to run their own benchmarks at scale while reducing the costs of hardware provisioning.
- Enables sponsors to showcase their open source contributions in the WordPress and broader open source communities.

Ask

The goal is to raise enough money to build this project. The base goal is to raise **\$50,000-75,000** with sponsors donating between **\$5,000-\$25,000** each in exchange for putting the sponsor's logo/link on the GitHub repo where the code will be published; and on any other website(s) built to promote or document the project. Additional benefits based on the amount donated will also be offered. If the project raises more than necessary or has budget left over, we will look at at adding additional features to the project with sponsor input.

Sponsorship Tiers

Platinum Tier (\$25,000)

- Top Sponsorship Logo Spots
- Platinum Onboarding Session*
- 1 Feature/Integration Request**

Gold Tier (\$10,000)

- Sponsorship Logo
- Gold Onboarding Session*

Silver Tier (\$5,000)

- Sponsorship Logo
- Silver Onboarding Session*

All Sponsors Also Get:

- Future Feature Development Input
- Early Access
- Logos ordered by tier and date of sponsorship

*Onboarding Sessions are a chance for the sponsor to have a call, or multiple calls, to setup, deploy, and use the project with help from the development team. Each session could be booked for one or two hours. The number of hours available depends on the sponsorship tier. Platinum - 10. Gold - 4. Silver 2. Onboarding sessions must be used within 1 year of project launch.

**Feature/Integration requests will be negotiated with the sponsor. There is a cap of 30 hours estimated development time for the feature/integration.

FAQ

Will sponsorship have any impact on participating in the WordPress Hosting Performance Benchmarks?

No. The open source project is separate from the benchmarks except for the fact the project will be used to conduct the benchmarks. Sponsorship will not give any benefits for companies participating in the benchmarks. Sponsors will pay to participate and be evaluated no differently from any other company participating.

What license will the code be released under?

Unless there is a compelling legal reason, all the code will be released under the MIT license allowing anyone to use it the code how they wish.

How long will the sponsorship last?

The sponsors will be listed for a minimum of 3 years on the GitHub repo and any other website(s) created to support the project. The secondary goal of the project is that it creates a community who contribute, improve and maintain it. To not limit the flexibility in the future, a 3 year listing minimum for sponsorship is being offered with the intention of keeping the sponsors listed as long as possible. There is also no recurring commitment to maintain sponsorship for the three year period.

When will this project start and finish?

The estimated time for an initial version is 2 months. As with all software development, this is a rough estimate. Budget allowing, there will hopefully be incremental improvements after a working version is created.

What will the money be used for?

The money will be used to pay for the development, documentation, maintenance and all costs related to building and publishing the open source project.

Why is it called Orderly Ape?

The name is a play on Chaos Monkey. While Chaos Monkey randomly destroys infrastructure to help engineers plan for random infrastructure failures, Orderly Ape is the opposite. Orderly Ape is a load testing tool to help simulate traffic in a manner that is expected (or hoped for) to see how the infrastructure responds under expected stress.