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Sign up

Grafana k6 training: Load testing for engineers

2 days (14 hours)

Presentation

Perform load tests with confidence thanks to our Grafana k6 training. You'll be able to run reliable tests written in JavaScript on your own machine or in the cloud.

Our training program is designed to introduce you to this powerful tool and teach you good load testing practices. You'll learn about the [metrics to monitor](#) for optimum performance and the different types of tests to perform.

During this course, we'll also teach you how to measure and interpret your performance using native or customized metrics. We'll also introduce you to scenario creation for k6 and k6 browser.

By the end of this course, you'll have mastered k6 and its concepts, including the [lifecycle](#), checks, variables and options. You'll also know how to create optimized HTTP requests.

Objectives

- Good load testing practices
- Installing and running tests with k6
- Master the use of the Grafana k6 tool
- Learn to measure and interpret results

Target audience

- DevOps system administrators
- Developers

- Infrastructure architects
- SRE
- QA engineers

Prerequisites

Basic knowledge of a Unix/Linux system.

Software requirements

Have a Grafana advanced account.

Grafana k6 training program

Introduction

- What is Grafana k6?
- Best practices in load testing
- Installation
- Launch your first test

The different types of load test

- Smoke testing
- Stress testing
- Soak testing
- Spike testing
- Breakpoint testing

Using the tool

- Lifecycle overview
 - init
 - Setup
 - Vu code
 - Teardown
- Creating HTTP requests
 - The methods
 - Query tags
 - Group urls
- Using checks
- Options
- How to use options
- The modules

- Cookie management
- Environment variables
- Context variables
- Exporting results
- Export results in real time to databases

Measuring performance

- Interpreting results
- Good measurement practices
- Overview of basic metrics
- Create a custom metric
- Setting thresholds
- Creating scenarios
 - Mistakes to avoid
 - Executors

k6 browser

- Run a test from the browser
- Browser metrics

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.