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Sign up

Gremlin preparation and certification

ALL-IN-ONE: EXAMINATION INCLUDED IN PRICE

2 days (14 hours)

Presentation

[Gremlin](#) Certified Chaos Engineering is a platform that provides a library of attacks for injecting a fault into a system simply, safely and securely.

With Gremlin expertise, you can not only create models, but also program regular or one-off attacks, while displaying your failure reports. With [Chaos Engineering](#) becoming increasingly popular, Gremlin certification is an easy way to learn the basics and put them to use on your platform.

By reducing system and application downtime, Chaos Engineering also helps minimize lost revenue.

At the end of this preparation, you can take the Gremlin Professional certification free of charge.

This Gremlin training course will teach you the latest version of [Gremlin v2.4](#).

Objectives

- Test and improve the reliability of distributed systems
- Orchestrate chaos experiences across your environment
- Reduce the risk of system failure
- Tracking reliability improvements

Target audience

- DevOps
- Directors
- Developers
- Infrastructure architects
- Safety engineers

Prerequisites

Knowledge of Kubernetes

Gremlin preparation program

Chaos Engineering Theory

- The limits of Traditional Quality Assurance
- Chaos Engineering principles
 - Define your system's "normal"
 - Building a hypothesis around normal behavior
 - Designing real-world events
 - Conducting production experiments
 - Minimizing blast radius
 - Automate chaos engineering
- Complex systems
 - Navigating complex systems
- Principles in action
 - Slack
 - Google DiRT: disaster recovery test
 - Variation and prioritization of experiences at Microsoft
 - LinkedIn
 - Capital One

Experiences of Chaos Engineering

- Experiment 1: Resource depletion
- Experiment 2: the unreliability of the network
- Experiment 3: data store saturation
- Experiment 4: DNS unavailability
- Experiment 4: FireDrill execution plan

Creating a cloud server

- GraphComp
- Open Minds, Open Science and Open Chaos
- HOP
- Chaos Engineering with Kubernetes
- Amazon EC2

Stackstorm controlled automation

- CLI ST2
- Detecting bugs and antipatterns with SonarQube

MTTD reduction

- Incident classification
- Monitoring critical services
- Service ownership and metrics
- On-call principles
- Gremlin Helm graphic

Simian Army:

- Chaos kong
- Chaos Monkey
- Chaos gorilla
- Latency

Chaos Engineering ROI

- Kirkpatrick Model
 - Level 1: Reaction
 - Level 2: Learning
 - Level 3: Transfer
 - Level 4: Results

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 training: 60% Practical, 40% Theory. Training material distributed in

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.