Updated 05/28/2024

Sign up

Observability training

3 days (21 hours)

Presentation

Resolve application errors faster, for a flawless user experience. Observability gives you a better overview of your programs and more reliable monitoring of your deliverables.

Thanks to observability, you'll be able to detect undesirable behavior and obtain the information you need to determine the cause of your problems. By applying this method, your workflows will be faster and integrate seamlessly with your DevOps system.

Our observability training course will introduce you to the usefulness of this method, the combination of observability with DevOps, events, project management in Observability-Driven Development mode and the OMM model.

Objectives

- Observability and its applications
- Integrating observability into your projects
- Understanding the OMM model
- Mastering sampling

Target audience

- System administrators
- DevOps
- Infrastructure engineers
- Application Manager
- SDM
- Incident manager
- Load testers
- Developer

- Q/A Manager

Prerequisites

Understanding of general IT, administration and monitoring concepts

Our Observability training program

Introduction to observability

- The definition of observability
- Its various applications
- The importance of observability in the 21st century
- Observability in DevOps, Cloud and SRE
- Why metrics and monitoring are not enough
- The limits of conventional debugging
- Debugging with observability

Overview of observability-based technologies

- Dynatrace
- APM
- New Relic
- Datadog
- Solarwinds

Observability vs Surveillance

- How monitoring data are used
- Debugging with metrics or observability
- Troubleshooting behavior when using dashboards
- The limits of monitoring
- Why use observability?
- When to use these methods?
- How do you use them together?

The events

- Using structured events
- Debugging structured events
- Event properties useful for debugging
- Useful event properties
- The limits of metrics as a basic element
- The limits of unstructured data as a building block
- Distributed tracing
- Tracing components
- Creating traces with events
- Adding custom fields to tracking areas
- Assembling events in traces

Project management in Observability-Driven Development

- Development cycle overview
- How to introduce change
- Identify the main threats
- Buying rather than creating
- Monitoring for improvement
- Continuous improvement through testing
- Knowing where to debug
- Service objectives
- Managing the number of alerts with SLOs
- Analyze the user experience correctly

Sampling

- When to sample?
- Different approaches to sampling
- Good sampling practices
- Determine sampling rate
- Sampling for traffic
- Sampling for events
- Dynamic sampling
- Fixed rate/target rate sampling
- Turning sampling strategies into code

Using observability data to model usable SLOs

- Define time as a sliding window
- Forecasting models
- Create a predictive alert
- The lookahead window

- The baseline window
- Act on SLO combustion alerts
- SLO observability data versus time series data

The Observability Maturity Model (OMM)

- The importance of a maturity model
- Resilience in response to system failures
- Delivering high-quality code
- Deliver regularly
- Understanding user behavior

Companies concerned

This training 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.