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Sign up

SRE (Site Reliability Engineering Foundation?) preparation and certification

ALL-IN-ONE: EXAM INCLUDED IN PRICE

2 days (14 hours)

Presentation

SRE (Site Reliability Engineering) brings many benefits, such as greater system observability, improved collaboration between developers and administrators, greater control over the development process and, above all, greater resilience. Users are increasingly demanding when it comes to software, and SRE is the system for guaranteeing functional, high-performance applications by taking advantage of automation and observability. At the end of our SRE training course, you will benefit from :

- Better understanding of how production departments work
- Enhanced user experience and reduced churn
- Less stressful troubleshooting experience and fewer bugs
- Increased productivity thanks to effective use of automation

Our SRE certification training will teach you the principles of SRE, SLOs, how to use automation tools and how to change the structure of your teams to implement site reliability engineering. Once you've attended our SRE training course, you'll be able to take the exam, with certification included in the price. Note: Ambient IT does not own the SRE Foundation? certification, which belongs to DevOps Institute Inc.

Objectives

- Understanding the history of SRE and its emergence at Google
- Master the interrelation of SRE with DevOps and other popular frameworks
- Understanding the principles of SRE
- Understanding service level objectives (SLOs) and their user orientation
- Learn about service level indicators (SLI) and the modern monitoring panel
- Determine error budgets and associated error budget policies
- Understanding toil and its effect on an organization's productivity
- Learn about some practical measures that can help eliminate toil
- Understanding observability as an indicator of service health

- Understand and know SRE tools, automation techniques and the importance of safety
- Mastering antifragility, our approach to error and error testing
- Managing the organizational impact of SRE implementation

Target audience

- Developers
- Architects
- System administrators
- DevOps
- Project Manager
- Engineers

Prerequisites

Being a professional involved in a DevOps context and having knowledge of its concepts is recommended.

Teaching aids

- Workshops to put concepts into practice
- Documents, models, tools, techniques and trainee booklet available
- Access to additional communities and resources

SRE exam preparation program

Introduction

- Objectives
- Planning

SRE principles and practices

- Defining site reliability engineering
- What's the difference between SRE and DevOps?
- SRE principles and practices

Service level objectives (SLOs)

- Service level objectives (SLOs)
- Error budgets
- Error budget policies

Toil reduction

- What is toil?
- Why is toil bad?
- Taking action against toil

Monitoring and service level indicators (SLI)

- Service level indicators (SLI)
- Monitoring and Observability

Tools and automation

- Definition of automation
- Focus on automation
- Hierarchy of automation types
- Secure automation
- Tools

Anti-fragility and learning from mistakes

- Why learn from mistakes?
- The benefits of anti-fragility
- Changing the organizational balance

The organizational impact of SRE

- Why are organizations adopting it?
- Adoption models
- On-demand" requirements
- Post-mortem without reproach
- Scaling

SRE, other frameworks and trends

- SRE and other frameworks
- Trend
- Additional information sources

Exam preparation

- Examination requirements
- Breakdown of questions
- List of concepts and terminology
- Examination example

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.