AMBIENT-IT

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Sign up

GreenOps training: Simplify your DevOps experience

2 days (14 hours)

Presentation

Our GreenOps training course will teach you all the skills you need to limit your company's ecological impact. Designed to meet today's ecological challenges, our training course will guide you from the eco-design of your services and products to optimization projects already in place.

In this course, you'll learn how to reconcile IT performance with a reasonable carbon footprint energy optimization and sustainable resource management. You'll also learn about the 3 pillars of eco-design, essential for designing low-impact digital services.

This training course will also teach you how to use essential tools and standards. Familiarize yourself with NegaOctet, Boavizta, the RGESN reference system and ADEME to assess and optimize the energy consumption of your infrastructures.

Objectives

- Understanding the principles of GreenOps
- Mastering the 3 pillars of eco-design
- Know how to use the tools needed for GreenOps

Target audience

- IT and DevOps managers
- Developers
- Project managers/managers

Prerequisites

- Basic knowledge of DevOps.
- Basic knowledge of cloud computing

GreenOps Training Program

Introduction and objectives of GreenOps

- Background and definition
- Optimizing energy efficiency
- Sustainable resource management
- Clean and sustainable technologies
- Awareness-raising and training

Environmental Issues and Digital Infrastructure

- Carbon footprints
- Lifecycle analysis
- Infrastructure impacts
- Choosing a cloud provider
- Future prospects

The Three Pillars of Eco-design

- General principles of digital eco-design
  - Pillar 1 - Sobriety: Deconstructing preconceived ideas, history and concrete examples of "sober" services
  - Pillar 2 - Efficiency: Definition, tools and methods for optimizing performance while reducing consumption
  - Pillar 3 - Observability: Importance of logs, metrics and alerts to measure and adjust the ecological footprint
- Existing tools : Open source solutions and repositories

GreenOps in Practice

- Identify impacts: analyze energy-guzzling components and prioritize actions
- Digital sobriety: Case studies and feedback
- Operational efficiency: maintain infrastructure performance while energy consumption
- Advanced observability: Setting up indicators to measure progress and adapt strategy GreenOps

FinOps and GreenOps

- FinOps vs GreenOps
- Eco-design and CI/CD: Environmental impact of continuous integration and deployment chains
- Sobriety applied to CI/CD: Tips for reducing consumption
- Putting it into practice: Workshop to design a sober, sustainable CI/CD loop
- Examples of tools

Essential Tools and Reference Systems

- NegaOctet: Methods for assessing and optimizing the energy consumption of digital services
- Boavizta: Measuring the environmental impact of ICT, key indicators and practical guides
- ADEME: Government resources for the ecological transition and emissions reduction
- The RGESN standard: presentation, eco-design criteria and application to OPS
- Synergies between tools: how to combine these different reference systems to strengthen the GreenOps approach

Hybrid Cloud, Move to Cloud and Resource Minimization

- Hybrid Cloud resource management
- Move to Cloud strategy
- FinOps integration
- Minimizing resource use
- Feedback: Sharing best practices and concrete success stories from different customers

Governance & Processes

- Aligned roles and responsibilities
- Process definition: selecting and customizing tools for a sustainable IT transition
- Awareness of environmental impact
- Awareness-raising and ongoing training for teams
- Carbon footprint management and monitoring
- Continuous improvement

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 confirmed, 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 with regard to the training to come, within the limits imposed by the format selected. This

The questionnaire also enables us anticipate any connection or internal security (intra-company or virtual classroom) that 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, 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.