

Updated 12/30/2024

Sign up

# DevOps Foundation? training (DOFD)

ALL-IN-ONE: EXAMINATION INCLUDED IN PRICE

2 days (14 hours)

# Presentation

Apply DevOps to reduce your delivery times while ensuring the quality of your products.

DevOps is a movement that emerged in Belgium in 2007. This approach aims to reconcile two IT professions: developers (Dev) and administrators (Ops). With DevOps, communication between these different departments is strengthened. Today, this discipline has proved its worth, and its practices are widespread throughout the world.

DevOps Foundation certification is the certificate to prove your DevOps skills. The exam tests your theoretical knowledge of :

- Application of DevOps and its methods (CI/CD, workflow, continuous testing, etc.).
- The benefits of the DevOps framework
- Your ability to combine DevOps and agility
- Maintaining this approach in large organizations
- Strengthening collaboration between the various technical teams
- Setting up automation and deployment pipelines

Our DevOps Foundation certification course will teach you the principles and best practices of DevOps, the associated tool chain, how to reconcile DevOps and agility, and how to optimize development using KPIs.

Note: Ambient IT does not own the DevOps Foundation? certification, which belongs DevOps Institute Inc.

# Objectives

- · Gain an in-depth understanding of DevOps concepts, issues and practices
- The benefits of DevOps
- Understanding the different terms associated with DevOps
- Identify performance indicators to measure the success of a DevOps framework
- Applying DevOps within an organization
- Strengthen collaboration and apply improved feedback loops
- Use automation tools
- Preparing for DevOps Foundation certification

### Target audience

- Developers
- Architects
- System administrators
- DevOps
- Project Manager
- Engineers
- Anyone involved in the development and provision of IT services, with a view to improving the quality of these services.

### Prerequisites

- Basic knowledge of Agile, Scrum, Lean and ISTM principles is desirable
- Initial experience in IT development and/or production is recommended

### DevOps Foundation training program

### Day 1 - Morning

Kick-Start (approx. 1h30)

- Start-up (approx. 30 minutes), explanation, life rules, sign-in, etc.
- Training rules: schedules, breaks, pedagogical\* and technical\* assistance, etc.
- Presentation of training objectives and program
- Introducing participants and debriefing their expectations
- Download
- Getting started

Module 1: Exploring DevOps (approx. 1h30)

- Exploring DevOps
- Defining DevOps
- Discussion: individual reflections on the level of DevOps knowledge
- Why is DevOps important?
- From a business point of view
- From an IT perspective

• End of Module MCQ

#### Module 2: Key DevOps principles (approx. 1h30)

- Three ways
- Chaos Monkey
- Fostering a learning culture
- Case study: reflection on collaboration and communication models

### Day 1 - Afternoon

Start-up (approx. 15 minutes): questions, answers, sign-in Module 3: Main

#### DevOps practices (approx. 1h45)

- Continuous testing
- Continuous integration, continuous delivery, continuous deployment
- Screening of an educational video illustrating integration and continuous delivery with Github
- Site Reliability Engineering (SRE)
- DevSecOps
- Case study : Capital one and continuous integration
- ChatOps
- Kanban
- End of Module MCQ

#### Module 4: Business Frameworks and Technologies (approx. 1h30)

- Agile
- Screening of an educational video (first part) on the organization of information and experience sharing at Spotify
- Discussion: Agility in Operations
- Lean
- Lean tools
- Case study : Alaska Air (managing operations efficiently)
- Simulation: identifying and eliminating waste
- End of Module MCQ

### Day 2 - Morning

Warm-up (approx. 15 minutes): questions, answers, sign-in Module 5:

Culture, behaviors and operational models (approx. 1h45)

- Defining culture
- DevOps and culture

- Screening of an educational video (second part) on the organization of information and experience sharing at Spotify
- Discussion: positioning yourself on the change curve
- Culture change
- Simulation: evaluating and improving the Westrum model
- Case study: Target (ask permission or act proactively)
- End of Module MCQ

Module 6: DevOps automation and architecture (approx. 1h30)

- Automation
- Important terminology
- Architecture
- Practices, communication, improvement
- Discussion: applying the DevOps definition
- DevOps Toolchains
- Screening of an educational video on the DevOps Toolchain
- Simulation: architecting your devOps Toolchain
- Case study: Fannie Mae (rethinking to facilitate cooperation)
- End of Module MCQ

### Day 2 - Afternoon

Start-up (approx. 15 minutes): questions, answers, sign-in Module 7:

Measurement, indicators and reporting (approx. 1h45)

- The importance of measuring
- Screening of an educational video on DevOps indicators for improving delivery performance
- DevOps indicators
- Guidelines
- Discussion: the indicators used today
- Simulation: the most significant indicators
- Case study: Société Générale (speed measurement indicators)
- End of Module MCQ

#### Module 8: Sharing, observing and evolving (approx. 1h30)

- DevOps Days
- DevOps in the enterprise
- Roles
- DevOps Leadership
- Organizational considerations
- Start
- Screening of an educational video entitled "A Culture of Sharing".
- Discussion: what is your Open Space topic
- Simulation: drawing up your action plan
- Case study: Disney (Reducing costs to offer more)
- End of Module MCQ

• Independent, individual preparation for the Certification exam

### 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, 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.