

Professional DevOps

Duration

2 days

Summary

The DevOps movement is enjoying a wave of unparalleled popularity and the term itself is becoming increasingly overused and abused, to the point of losing its meaning. This course therefore begins with a return to basics and will address the issues and needs that are at the origin of the gap observed between development and operations.

It continues with an overview of the DevOps spectrum which helps to understand the multiplicity of business realities. Finally, several tools, practices and team building strategies are presented in order to compare the advantages and disadvantages. Stimulating workshops then make it possible to unify the concepts presented.

Target Audience

This course is intended for all actors involved in the development, testing, delivery and operations for services, applications and any other components or stages of software development. Due to the organizational nature of the issues, the training is also very beneficial for managers and executives.

- System administrators, Automation Specialists
- Developers, Quality Managers
- IT, Operations and Development Managers and Directors

Prerequisites

- Wanting to know more about the DevOps philosophy, its goals and its implementation within an organization
- Wishing to deliver quality software, repeatedly and in general harmony
- Having openness to change and empathy towards colleagues
- Seeking the unification and convergence of the objectives of the departments of a company

Learning Outcomes

The objective of the course is to provide participants with a solid foundation in order to begin or continue to apply the DevOps approach within their organization. Participants improve their understanding of the issues and problems that DevOps is trying to address.

In addition, they discover strategies for establishing collaboration between the various actors in the

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development process by identifying common key objectives. They get an overview of the available tools and their usefulness in order to accelerate a transition to DevOps.

- The systemic and historical problems that DevOps is trying to solve
- The challenges of development and operations for software products, from the perspective of each of the different players
- Upstream quality improvement (Shift Left) during development
- Best practices and tools for applying the principles of Shift Left
- How to detect and avoid organizational obstacles that hinder regular, fast and smooth delivery of software products
- Set key measurable and common objectives between the operations and development teams

Content

- **DevOps: History, Challenges and Definition**
Exploration of the origins of DevOps and the rationale for this movement. Understand how my organization can benefit from applying the DevOps philosophy. Learn about the different team organizations that help or hinder the application of DevOps strategies.
- **Spectrum of DevOps Activities**
DevOps is associated with a large number of varied activities depending on the company. We make an inventory of activities associated with the DevOps movement to reduce the inherent ambiguity of the term.
- **Quality Metrics**
Identify key metrics that will allow all teams to set measurable goals in order to improve the quality of deliveries.
- **Shift-Left**
Emphasize the benefits of performing certain development activities early in the delivery cycle to improve quality, reduce risk, and most importantly, build trust in the product code.
- **DevOps Tools**
Discuss the different strategies and tools used to establish and monitor the quality of software throughout the development cycle, including operations, and which build mutual trust in the product code. This includes, but is not limited to, automation of compilations and deliveries, active monitoring of application metrics, configuration management, and Infrastructure as Code (IaC).
- **Group Activities**
Group activities in the form of challenges and role plays will serve as a narrative allowing participants to experience a set of situations faced by development and operations teams, in order to illustrate how DevOps can help them.