

DevOps Basic

Effective integration between software Development and IT Operations

by **weIRD**



OBJECTIVES_

Why implement DevOps practices?

In today's technological landscape, effective **integration between software development and IT operations** is essential to ensure speed, efficiency, and quality in product delivery.

This workshop is designed to provide participants with the advanced skills needed to **implement DevOps practices** within their organizations, **enhancing collaboration** between teams and **optimizing development and deployment processes**.



IN PRACTICE_

How does the course work?



6 intensive days



Maximum 7 participants per session
(ensuring personalized attention)

Target audience: software & devops engineers, IT ops specialists, IT architects.

Teaching approach, a mix of theory and hands-on sessions:

- Setup of a **CI/CD pipeline**
- Creation and optimization of a **Docker image**
- Implementation of a **Kubernetes cluster**
- Customization of Kubernetes **manifests using Kustomize**

Practical exercises will be carried out on dedicated virtual machines.

Participants will work on a **project hosted on GitLab**, using a programming language selected based on context (e.g., Java).

This **hands-on approach** ensures that the skills acquired can be **immediately applied in real-world scenarios**.

CONTENTS_

What topics are covered?

During the DevOps workshop, participants will explore a series of key topics to gain a deep and practical understanding of the most advanced technologies and methodologies in the field.



Git

The workshop begins with a **recap of the most useful Git commands**, going beyond the basics to **explore features that optimize workflow**. Various **branching strategies** will be discussed, analyzing how to choose the most suitable approach for a specific team and project.



Continuous Integration e Continuous Delivery (CI/CD)

Participants will learn how to **create and manage effective CI/CD pipelines**. The course will cover how to **automate build, test, and deployment processes**, ensuring that every code change is integrated and delivered securely and quickly.



Containerization

The workshop will cover **Open Container Initiative (OCI)** standards and delve into the use of **Docker** along with other build tools. This section will provide the skills needed to **create consistent and isolated development and production environments**, enabling better **scalability** and **application management**.

Kubernetes

Participants will learn how to **manage clusters**, understanding how to organize and isolate resources within the system. The course will also cover the **creation and management of key components** like pods, deployments, services, volumes, and secrets—providing the skills to **deploy applications in a scalable and resilient way**.

Kustomize

Finally, templating in Kubernetes using Kustomize will be explored. This part of the course will teach how to efficiently **customize and manage Kubernetes manifests, allowing clean and easily adjustable configurations across different environments**.

RESOURCES AND CONTACTS_

To learn more

 [Welld DevOps book](#)



Let's get in touch!



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