

# DevOps Project - 2022: CI/CD with Jenkins Ansible Kubernetes

★★★★☆ [21 reviews](#)

By [Valaxy Technologies](#)



Start

**TIME TO COMPLETE:**  
6h 15m

**LEVEL:**  
Advanced

**TOPICS:**  
[Jenkins](#)

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In this learning journey, you will be introduced to tools such as GitHub, Jenkins, Maven, Docker, Ansible, and Kubernetes and learn how to integrate these tools to run a project in the real world.

You will start with building and deploying it on the Tomcat server. You will set up CI/CD with GitHub, Jenkins, Maven, and Tomcat. Initially, there is no environment; therefore, you start with setting up Jenkins, configuring Maven and Git, Tomcat server, integrating GitHub, Maven, Tomcat server with Jenkins, creating a CI and CD job, and testing the deployment.

Next, we will cover deploying artifacts on a Docker container as well as with the help of Ansible. For that, first set up Docker environment, write Dockerfile, create an image and container on Docker host, integrate Docker host with Jenkins, and create CI/CD job on Jenkins to build and deploy on a container.

Finally, deploy artifacts on Kubernetes. Almost all the environment is ready by now except for Kubernetes, so we will start with setting up the Ansible server, integrating Docker host with Ansible, Ansible playbook to create an image, Ansible playbook to create container, integrating Ansible with Jenkins, and CI/CD job to build code on Ansible and deploy it on Docker container.

By the end of this course, you will be able to confidently set up and complete CI/CD pipeline to build and deploy a Java application on AWS.

## What You Will Learn

- Go through the resources required to set up DevOps CI/CD pipeline
- Set up CI/CD pipeline using Git, Jenkins, and Maven
- Integrate and deploy DevOps project on Tomcat server
- Integrate and deploy artifacts on a Docker container
- Integrate and deploy it on a container with the help of Ansible
- Set up Kubernetes on AWS

Downloading "Run First Jenkins Job.srt"...

**Audience**

This course is designed for individuals who want to build CI/CD pipeline tools on various DevOps tools and anyone who wants to enhance their skills in the DevOps domain.

Professionals who want to know how a DevOps project works and want to do a complete DevOps real-world project on their own will also benefit.

Basic knowledge of AWS, Git, Maven, Jenkins, Docker, Ansible, and Kubernetes is required.

A desire to learn DevOps workflow would be beneficial.

## About The Author

**Valaxy Technologies:** Valaxy Technologies is recognized as one of the top Cloud and DevOps trainers. A.R. Shankar is the owner, founder, and one of the many instructors at Valaxy Technologies. While he has worked with various technologies in his career, he specializes in Cloud and DevOps.

Valaxy Technologies has exponentially grown ever since its inception in 2013. The instructors at Valaxy Technologies have trained over 100,000 global learners.

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## About the Publisher

Packt helps real-world developers put software to work in new ways with over 7,500 practical books and videos covering over 1,000 technologies. With coverage ranging from introductory programming to new and emerging technologies, as well as expert advice from industry-leading figures, Packt has great content for any technical professional looking to stay relevant and keep their skills up-to-date.

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## Resources

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