

Building CI Pipeline Manually

Welcome to Module 2 of our course on Essentials of Jenkins for DevOps Practitioners! In the previous module, we laid the foundation by understanding the concepts of Continuous Integration and Continuous Delivery (CI/CD), exploring the Jenkins ecosystem, and setting up a Jenkins server using Docker.

In this module, we'll dive into the practical aspects of using Jenkins to build a CI pipeline manually. We'll take a hands-on approach, working with a real-world use case to understand the fundamentals of Jenkins.

Think of this module as your first cooking lesson in the Jenkins kitchen. Just as a chef starts by learning the basics of knife skills, ingredient preparation, and recipe reading, we'll start by mastering the fundamental skills of using Jenkins.

We'll begin by exploring the Jenkins Dashboard and UI, familiarizing ourselves with the various components and navigation. It's like getting acquainted with your kitchen layout and tools.

Next, we'll introduce a use case scenario and guide you through forking a Git repository containing a Node.js application. This is similar to gathering the necessary ingredients for your recipe.

With our code repository ready, we'll dive into the core of this module – creating and configuring Jenkins jobs. We'll create separate jobs for building, testing, and packaging our Node.js application. This is analogous to the different stages of meal preparation – chopping, cooking, and plating.

But a series of isolated jobs doesn't make a complete pipeline. We'll learn how to connect these jobs using upstream and downstream configurations, orchestrating them into a logical flow. It's like sequencing the steps in a recipe to ensure the dish comes together perfectly.

Finally, we'll add a touch of visual appeal to our pipeline using the Build Pipeline plugin. This will give us a graphical overview of our connected jobs, making it easier to understand and monitor the flow of our CI process.

By the end of this module, you'll have gained practical experience in constructing a CI pipeline manually using Jenkins. You'll understand the role of each job, how to connect them, and how to visualize the pipeline.

This hands-on knowledge will form the foundation for the next module, where we'll explore the more advanced concept of defining the entire pipeline as code using Jenkins Pipeline.

So, let's put on our chef's hats and get started with Module 2: Jenkins Fundamentals – Building CI Pipeline Manually. Get ready to get your hands dirty and learn by doing!