

Introduction to Jenkins / Jenkins Quick Start - TTDV7520

A two-day, lab intensive hands-on training course geared for experienced programmers, combining expert lecture, real-world demonstrations and group discussions with machine-based practical labs and exercises.

Duration: 5 Days

Skill Level: Introductory

Available Format: Instructor-Led Online; Instructor-Led, Onsite In Person ; Blended;
On Public Schedule

Introduction to Jenkins is a two-day, lab intensive hands-on training course geared for experienced programmers

What You'll Learn

Overview

Introduction to Jenkins is a two-day, lab intensive hands-on training course geared for experienced programmers who need to learn how to:

- Install and configure Jenkins in a servlet container
- Create Jenkins builds
- Configure and use Apache Ant and Apache Maven with Jenkins
- Use Jenkins to generate Java coding standards reports, code coverage reports, and change notices
- Use Jenkins to automatically deploy software into a testing environment.

Objectives

This course is approximately 50% hands-on, combining expert lecture, real-world demonstrations and group discussions with machine-based practical labs and exercises. Working in a hands-on learning environment guided by our expert practitioner, students will explore:

- Introduction to Continuous Integration, Continuous Deployment and Jenkins-CI
- Installing and Running Jenkins
- Job Types in Jenkins
- Securing Jenkins
- Jenkins Plugin
- Distributed Builds with Jenkins
- Continuous Deployment and the Jenkins Pipeline
- Best Practices for Jenkins

Audience

This audience includes DevOps engineers, software developers, and IT professionals interested in continuous integration, continuous delivery, and automating the software development lifecycle.

Pre-Requisites

In order to be successful in this course, attending students are required to have practical Java programming experience to a basic level. This course can also be modified to suit the incoming skill levels or unique learning goals of your students and organization.

Agenda

- Introduction to Continuous Integration, Continuous Deployment and Jenkins-CI
- Agile Development
- Agile Development (cont'd)
- What is Continuous Integration
- What is Continuous Integration (cont'd)
- What is Continuous Integration (cont'd)
- Typical Setup for Continuous Integration
- Continuous Deployment
- Continuous Deployment (cont'd)
- DevOps and Continuous Deployment
- Continuous Deployment Challenges
- Jenkins Continuous Integration
- Jenkins Features
- Running Jenkins
- Installing and Running Jenkins
- Downloading and Installing Jenkins
- Running Jenkins as a Stand-Alone Application

- Running Jenkins as a Stand-Alone Application (cont'd)
- Running Jenkins on an Application Server
- The Jenkins Home Folder
- Installing Jenkins as a Windows Service
- Initial Configuration
- Configuration Wizard
- Configuration Wizard (cont'd)
- Configuring Tools
- Configuring Tools - Best Practices
- Job Types in Jenkins
- Different types of Jenkins Items
- Different types of Jenkins Items (cont'd)
- Configuring Source Code Management(SCM)
- Working with Subversion
- Working with Subversion (cont'd)
- Working with Git
- Storing Credentials
- Storing Credentials (cont'd)
- Build Triggers
- Schedule Build Jobs
- Polling the SCM
- Maven Build Steps
- Securing Jenkins
- Jenkins Security - Overview
- Jenkins Security
- Authentication
- Authorization
- Confidentiality
- Activating Security
- Configure Authentication
- Using Jenkins's Internal User Database
- Creating Users
- Authorization
- Matrix-Based Security
- Note - Create the Administrative User
- Project-based Matrix Authorization
- Project-Based Authentication
- Jenkins Plugin
- Introduction

- Jenkins Plugins - SCM
- Jenkins Plugins - Build and Test
- Jenkins Plugins - Analyzers
- Jenkins for Teams
- Installing Jenkins Plugins
- Distributed Builds with Jenkins
- Distributed Builds - Overview
- Distributed Builds - How?
- Slave Machines
- Configure Jenkins Master
- Configure Projects
- Continuous Deployment and the Jenkins Pipeline
- Continuous Deployment
- Continuous Deployment (cont'd)
- DevOps and Continuous Deployment
- Continuous Deployment Challenges
- Continuous Deployment with Jenkins
- The Pipeline Plugin
- The Pipeline Plugin (cont'd)
- Defining a Pipeline
- A Pipeline Example
- Pipeline Example (cont'd)
- Parallel Execution
- Creating a Pipeline
- Invoking the Pipeline
- Interacting with the Pipeline
- Best Practices for Jenkins
- Best Practices - Secure Jenkins
- Best Practices - Backups
- Best Practices - Reproducible Builds
- Best Practices - Testing and Reports
- Best Practices - Large Systems
- Best Practices - Distributed Jenkins

For More Information

Please [contact us](#) or call 844-475-4559 toll free for more information about our training services (instructor-led, self-paced or blended), coaching and mentoring services, public course enrollment or questions, partner programs, courseware licensing options and more.