

DO400

Red Hat DevOps Pipelines and Processes: CI/CD with Jenkins, Git, and Test Driven Development

Duration: 4 Days

Course description

Build essential skills to implement agile and DevOps development processes and workflows.

DevOps practices have enabled organizations to undergo a digital transformation, moving from a monolithic waterfall approach to a rapidly deploying cloud-based agile process. This transformation requires a team of developers trained to use tools that enable them to spend more time coding and testing and less time troubleshooting. Red Hat DevOps Pipelines and Processes: CI/CD with Jenkins, Git, and Test-Driven Development (TDD) is a practical introduction to DevOps for developers that teaches students the necessary skills and technologies for automated building and deploying of cloud-native applications.

Outline for this course

Introduction to continuous integration and continuous deployment (CI/CD)
Describe the principles of DevOps and the role of Jenkins.

Integrate source code with version control
Manage source code changes with Git version control.

Test applications
Describe the foundational principles behind comprehensive application testing and implement unit, integration, and functional testing.

Build applications with test-driven development
Implement and build application features with TDD.

Author pipelines
Create basic pipelines to run Jenkins jobs.

Deploy applications with pipelines

Safely and automatically deploy applications to Red Hat OpenShift Container Platform.

Implement pipeline security and monitoring

Manage the security and monitor the performance of pipelines.

Consume pipelines

Work with (or “Use”) and troubleshoot CI/CD pipelines for automated deployment and automated testing.