

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

Duration: 4 Days Course Code: DO400

Overview:

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.

Target Audience:

This course is designed for application developers.

Objectives:

- Version control with Git
- Build and execute Jenkins pipelines
- Release strategies
- Build applications with Test Driven Development
- Security scanning and code analysis of applications
- Monitor applications and pipelines
- Consume and troubleshoot pipelines

Prerequisites:

- AD183 - Red Hat Application Development I: Programming in Java EE
- DO101 - Introduction to Red Hat OpenShift Applications

Follow-on-Courses:

- DO500 - DevOps Culture and Practice Enablement
- DO180 - Red Hat OpenShift I: Containers & Kubernetes
- DO288 - Red Hat OpenShift Development II: Containerizing Applications

Content:

Introduction to continuous integration and continuous deployment (CI/CD)	Build applications with test-driven development	Implement pipeline security and monitoring
Describe the principles of DevOps and the role of Jenkins.	Implement and build application features with TDD.	Manage the security and monitor the performance of pipelines.
Integrate source code with version control	Author pipelines	Consume pipelines
Manage source code changes with Git version control.	Create basic pipelines to run Jenkins jobs.	Work with (or “Use”) and troubleshoot CI/CD pipelines for automated deployment and automated testing.
Test applications	Deploy applications with pipelines	
Describe the foundational principles behind comprehensive application testing and implement unit, integration, and functional testing.	Safely and automatically deploy applications to Red Hat OpenShift Container Platform.	

Additional Information:

Technology considerations

Internet access required.

You will use your own machines and must be able to install software on your device. If you are unable to do so, you may use the embedded virtual machine in ROL or be provided a machine in ILT.

Further Information:

For More information, or to book your course, please call us on Head Office Tel.: +974 40316639

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