JENKINS AUTOMATION SERVER ESSENTIALS

Course Code: 100937

This course covers the fundamentals necessary to deploy and utilize Jenkins Automation Server.

This course covers the fundamentals necessary to deploy and utilize the Jenkins automation server. Jenkins enables users to immediately begin automating both their individual and collaborative workflows. Jenkins is a proven solution for a wide variety of tasks ranging from the helpful automation of scripts (such as Python and Ansible) to creating complex pipelines that govern the technical parts of not only Continuous Integration, but Continuous Delivery (CI/CD) as well. Jenkins is free, open source, and easily controlled with a simple web-based UI- it can be expanded by third party plugins and is deployable on nearly any on-site (Linux, Windows and Mac) or cloud platform.

What You'll Learn

- Automate basic freestyle projects
- Jenkins Pipelines and Groovy Programming
- Software lifecycle management with Jenkins
- Popular plugins
- Scaling options
- Integrating Jenkins with Git and GitHub (as well as other Software Control Management platforms)
- Triggering Jenkins with Webhooks
- Deploying into Docker and Kubernetes
- CI / CD with Jenkins

Who Needs to Attend

- DevOps Engineers
- Software Developers
- Telecommunications Professionals
- Architects
- Quality Assurance & Site Reliability Professionals

JENKINS AUTOMATION SERVER ESSENTIALS

Course Code: 100937

VIRTUAL CLASSROOM LIVE	$1,895 USD	2 Day

Virtual Classroom Live Outline

Day 01

- Overview of Jenkins
- Overview of Continuous Integration and Continuous Deployment (CI/CD)
- Understanding Git and GitHub
- Git Branching
- Methods for Installing Jenkins
- Jenkins Dashboard
- Jenkins Jobs
- Getting Started with Freestyle Jobs
- Triggering builds
- HTTP Web Hooks
- Augmenting Jenkins with Plugins
- Overview of Docker and Dockerfile for Building and Launching Images

Day 02

- Pipeline Jobs for Continuous Integration and Continuous Deployment
- Pipeline Build Stage
- Pipeline Testing Stage
- Post Build actions
- SMTP and Other Notifications
- Programming Pipelines with Groovy
- More Groovy Programming Essentials
- Extracting Jenkins Data Analytics to Support Project Management
- Troubleshooting Failures
- Auditing stdout and stderr with Jenkins

- Jenkins REST API
- Controlling Jenkins API with Python
- Jenkins Security
- Scaling Jenkins
- Jenkins CLI
- Building a Kubernetes Cluster and Deploying Jenkins
- How to start successfully using Jenkins to automate aspects of your job the moment this course ends.

Virtual Classroom Live Labs

1. Welcome to Alta3 Research Labs
2. Using vim
3. Git and GitHub
4. Git Branching
5. Docker and Dockerfile to Build and Run an Image
6. Deploying Jenkins with Docker
7. Jenkins Dashboard
8. Freestyle Projects and Workspaces
9. Triggering Jenkins Builds with WebHooks
10. Installing Jenkins Plugins
11. Docker Build Agents
12. Python Builds
13. Ansible Builds
14. Introduction to CI / CD
15. Creating Jenkins Pipelines
16. Declarative vs Scripted Pipelines
17. Understanding RESTful APIs
18. Backing Up Jenkins
19. Security and Credential Management
20. Jenkins CasC
21. Deploy Kubernetes Using Ansible and Jenkins to Kubernetes
22. Installing Jenkins on Windows
23. Glossary

Aug 14 - 15, 2025 | 10:00 AM - 6:00 PM EST

Nov 24 - 25, 2025 | 10:00 AM - 6:00 PM EST

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

Date created: 7/1/2025 3:18:15 PM