CI/CD Pipeline Training

COURSE CONTENT

About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

The CI/CD Pipeline Training offered by Multisoft Systems is meticulously designed to equip professionals with the essential skills needed to master Continuous Integration (CI) and Continuous Deployment (CD) methodologies.

Module 1: Technology Overview

- ✓ Git - Source Control Management
- ✓ Chef - Configuration Management
- ✓ Jenkins - Continuous Integration/Continuous Deployment

Module 2: Git - Source Control Management

- ✓ Purpose overview and use cases
- ✓ Git workflow
- ✓ Configuring git on your local machine
- ✓ Getting help with Git
- ✓ Local vs. Global vs. System configurations
- ✓ Basic Git Commands
- ✓ Creating local git repositories
- ✓ Branching and merging
- ✓ Using remote repositories
- ✓ Pushing code to Github using public and private SSH keys

Module 3: Ansible - Configuration Management

- ✓ Ansible purpose and use cases
- ✓ Architecture and call flow
- ✓ Ansible installation, configuration, and validation
- ✓ Control nodes and managed nodes
- ✓ Ansible managed hosts
- ✓ Host inventory; hosts and groups
- ✓ Repeatable code: Playbooks
- ✓ Introduction to YAML
- ✓ Modularizing code: Roles
- ✓ Ansible variables
- ✓ Dynamic configuration with facts

✓ Finding errors: Ansible unit testing

✓ Ensuring code quality: Ansible integration testing

Module 4: Jenkins - Continuous Integration/Continuous Deployment

✓ CI/CD overview, use cases and history

✓ Plugin architecture

✓ Initializing a Jenkins server

✓ Projects and jobs

✓ Freestyle jobs

✓ CI/CD as Code: Pipeline projects

✓ Declarative vs. scripted pipelines

✓ Jenkins Environment variables and parameters

✓ Distributed architecture: Master and agent nodes

✓ Views and Folders

✓ Managing credentials and secrets

✓ Integrating with git Source Control Management

✓ Triggers: Webhooks and Polling

✓ Notifications: Instant messaging and SMTP Email

✓ Approval inputs

✓ Testing Ansible playbooks in Jenkins

✓ Multibranch Pipelines: Reading entire repositories

✓ Conditional Logic

✓ Deploying Chef cookbooks with Jenkins: An automated end-to-end deployment pipeline