Devops Professional



DevOps Master Program Certification is fast becoming the must havecertificates for any IT professional working with DevOps. This course is designed to help you pass the DevOps Certified All Tools Exam.

Introduction to Devops

- Understanding Devops
- Devops Problems & Solutions
- Understanding Devops Infrastructure Layouts
- Challenges with the Traditional Approach
- Addressing Challenges Through DevOps
- DevOps Approach to the Challenges
- Overview of DevOps Tools
- Best Practices for DevOps
- Categories of DevOps Tools
- Devops Concepts at Enterprise Levels

Module 1: Automation with Ansible

- Introduction About Automation
- Understanding Ansible architecture
- Ansible Modules and Inventory
- Task Management with Ad-hoc commands
- How to write Playbooks
- Notify & Handlers In playbook
- Roles Structure and Ansible Galaxy
- Vault Encryption In Ansible for security
- Aws Instance create used by AnsAws Instance start & stop used by Ansible
- Aws Instance terminate used by Ansible

Module 2: Version Control with GIT

- Introduction VCS
- Need of Version Control in Devops
- Type of VCS Tools and working Style
- GIT Work Flow
- Working Locally with Git
- Working Remotely with GitHub
- Deploy the Files to GitHub via Git
- Branching and Merging
- Resolve merge Conflict
- GIT reset and Stash operation
- How to setup Git on Premises Hardware

Module 3: Containerization with Docker

- Introduction to Docker
- Understanding Docker Components
- Installing Docker
- Managing Docker Images
- Working with Container Commands
- Using Docker file
- Understanding Docker Volume
- Backing Up Docker Images
- Restore Operations in Docker
- Understanding Docker Networking
- Working with Docker Swarm
- Docker Compose

Module 4: Continous Integration with Jenkins

- Introduction to Jenkins
- Install and Setup Jenkins
- Plugin Management in Jenkins
- Project Test and Auto deployment on Application Server
- Build Pipeline View Project
- Configure Remote tasks Using Jenkins
- Jenkins Slave Node Configuration
- Generate Reports & Enable Mail Notification
- Integrations with Ansible, Docker & GIT Server

Module 5: Kubernete

- Introduction to Kubernetes
- Kubernetes Cluster Architecture
- Installing Kubernetes Cluster
- Exploring your Cluster
- Creating a Deployment in Kubernetes
- Creating a Service in Kubernetes
- Understanding Pod in Kubernetes
- Replication & Deployment Configuration in Kubernetes
- Using Rolling Updates in Kubernetes

Module 6: Monitoring with Nagios

- Nagios Overview
- Understand Nagios Architecture
- Install and Setup Nagios On Linux
- Install And Setup NRPE Client
- Setup Monitoring
- Enable Email Alert

Module 7: Grafana Monitoring

- Introduction to Grafana, Installing Grafana on Linux.
- Installing Grafana on Docker.
- Grafana User Interface Overview.
- Creating Grafana dashboards.
- Monitoring URLs using Grafana.
- Monitoring Docker containers using Grafana.
- Monitoring Kubernetes clusters using Grafana

Module 8: Terraform Automation

- Introduction to IAC Infrastructure as Code
- Introduction to Terraform
- Working with Terraform CLI
- Exploring Terraform commands
- Terraform modules, Terraform workflow
- Planning & Writing in Terraform
- Terraform Create & Destroy,
- Terraform state on local backend
- Terraform state on S3 buckets

- Terraform create VPC
- Terraform authentication methods,
- Variables, Available configurations in Terraform
- Functions in Terraform

Module 9: Maven

- Core concepts of MAVEN
- MAVEN build automation
- MAVEN dependency management
- MAVEN deployment automation
- Detail examples of building, packaging and deploying the web and enterprise application projects using MAVEN
- Maven IDE integration

DevOps Project

DevOps Production Based Projects



WORKFORCE DEVELOPMENT PROGRAM







Java



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