

Devops Training



WhatsApp: +91-7530088009 Call: India +91-444-631-1234 USA +1-650-265-2492 Email: <u>training@sparkdatabox.com</u> Web: <u>https://sparkdatabox.com</u> **Spark Databox** is known to be a pre-eminent platform for software certificate training and career development. Through our mission, we are a pioneer or positive change, improve productivity, increase the workforce, and creating a career opportunity for everyone. We are India's #1 software training institute. Apart from receiving excellent live training you will also receive free selfpaced video courses, training materials, placement support, mock interviews and many more.

Program Key Features

- 100% Practical training
- Experienced Trainers
- 100% Placement assistance
- Small batch size
- Customized training content

- Real-time project training
- Fully equipped cloud lab
- 100% Customer support
- 100% Money back guarantee

About Course:

The **DevOps online Training** course will provide you with in-depth knowledge and mastery of multiple DevOps tools like Git, Ansible, Jenkins, Puppet, Docker, Nagios, and Kubernetes. You will be trained with complete hands-on training, and we assist you in becoming a certified DevOps professional through the best practices in Continuous Development, Testing, Integration, Automation of Configuration, and Team collaboration, Deployment and Management and Continuous Monitoring of software throughout its development life cycle. At the end of this course, you will be equipped with all the skills that are necessary to become a DevOps engineer.

Contents

Section 1: Infrastructure setup

- EC2 Basics
- Devops Tools on cloud
- Git
- Docker
- Selenium
- Maven
- Jenkins
- Puppet
- Ansible
- Kubernetes
- Nagios

Section 2: DevOps - Introduction

- Software Development basics
- SDLC Software Development Life Cycle
- Traditional Models for SDLC
- Why DevOps?
- What is DevOps?
- DevOps Lifecycle
- DevOps Tools

Section 3: Software Version Control

- Version Control Basics
- Types of Version Control System
- Introduction to SVN
- Introduction to Git
- Git Lifecycle
- Common Git Commands
- Working with Branches in Git
- Merging Branches
- Resolving Merge Conflicts
- Git Workflow

Section 4: Practicals

- Git Life cycle Commands
- Github integration
- Code Stashing in Github
- Git branches creation and deletion
- Code rollback using Github
- Git Merge Merging branches
- Git rebase Merging branches
- Resolving merge conflicts using git merge tool

Section 5: Containerization using Docker - Part I

- Docker Basics
- Docker Lifecycle Basics
- Docker Ecosystem
- Common Docker Operations
- Creating a DockerHub Account
- Committing changes in a Container
- Pushing a Container Image to DockerHub
- Creating Custom Docker Images using Dockerfile

Section 6: Docker practicals - Part I

- Common Docker Operations
- Creating a DockerHub Account
- Committing Changes to a Container
- Pushing container to DockerHub
- Creating Local Image Repository

• Building an Image using Dockerfile

Section 7: Containerization using Docker - Part II

- What are Docker Volumes?
- Deploying a Multi-Tier Application using Docker Network
- Using Docker Compose to deploy containers
- What is Container Orchestration?
- Container Orchestration Tools
- Container Orchestration Tools
- Deploying a 2-Node Cluster using Docker Swarm

Section 8: Docket Practicals - Part II

- Creating Docker Volumes
- Using Docker Compose to deploy multiple containers
- Deploying a Multi Node Cluster using Docker Swarm
- Deploying a multi-service app on Docker Swarm

Section 9: Configuration Management using Puppet

- Why Configuration Management?
- Configuration Management Tools
- Puppet Introduction
- Puppet Architecture
- Setting up Master-Slave using Puppet
- Puppet Manifests
- Puppet Modules
- Applying configuration using Puppet
- Puppet File Server

Section 10: Practicals - III

- Setting up Master Slave on AWS
- Testing Connection of nodes with Puppet
- Creating a Manifest
- Deploying Manifest on Node
- Creating a Module
- Deploying sample software on nodes using Puppet Modules and Manifests
- Implementing a File Server Module on Puppet

Section 11: Configuration Management using Ansible

- What is Ansible?
- Ansible vs Puppet
- Ansible Architecture
- Setting up Master-Slave using Ansible
- Ansible Playbook
- Ansible Roles
- Applying configuration using Ansible

Section 12: Ansible - Practicals - I

- Installing Ansible on AWS
- Creating a Playbook using YAML
- Creating an Ansible Role
- Using Roles in Playbook

Section 13: Continuous Testing using Selenium

- What is Continuous Testing?
- Introduction to Selenium
- What is Maven?
- Using Maven with Selenium
- Creating Test Cases with Selenium
- Running Test Cases on Chromium Web Driver
- What is Headless Mode?

Section 14: Selenium - Practicals I

- Using Maven to import dependencies in Eclipse
- Create a Sample Test Case for a website using Selenium
- Implementing a headless test in selenium using Chrome WebDriver

Section 15: Continuous Integration using Jenkins

- Introduction to Continuous Integration
- Jenkins Master Slave Architecture
- Understanding CI/CD Pipelines
- Creating an end to end automated CI/CD Pipeline

Section 16: Continuous Orchestration using Kubernetes

- Introduction to Kubernetes
- Docker Swarm vs Kubernetes
- Kubernetes Architecture
- Deploying Kubernetes using Kubeadms
- Alternate ways of deploying Kubernetes
- YAML Files
- Creating a Deployment in Kubernetes using YAML
- Services in Kubernetes
- Ingress in Kubernetes
- Case Study Kubernetes Architecture

Section 17: kubeadm - Practicals

- Setting up Kubernetes using kubeadm
- Installing Kubernetes using kops and GCK
- Creating a Deployment
- Creating Services
- Creating an Ingress
- Demonstrating the use of Ingress, services and deployments together

Section 18: Real-time project

- DevOps project environment setup
- Real-time DevOps project
- Project demonstration
- Expert evaluation and feedback

Section 19: You made it!!

- Spark Databox DevOps certification
- Interview preparation
- Mock interviews
- Resume preparation Knowledge sharing with industry experts
- Counselling to guide you to a right path in DevOps career

You made it!!

Post completion of DevOps Online Course, a proper orientation for placements is done. With this training from experienced trainers, as professionals, you will be equipped with different proficiencies. This is a chance to open up and widen your prospects.

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