DevOps

DevOps Course Overview

This DevOps Training is to make an individual expert in all DevOps Concepts form the Basics. This Course is Provided by the Real-Time professionals to make you understand the Real-Time IT Scenario's and Problems. DevOps Training makes you master in the various aspects of the principles of continuous development and deployment, software development operations, continuous integration, automation of configuration management and learn the various tools like Git, Docker, Jenkins, Nagios, Puppet, Ansible and Kubernetes.

Objectives of the Course

- To understand the DevOps Concepts and DevOps Tools
- Deploying the main DevOps tools
- To implement automated system update and DevOps lifecycle
- To understand virtualization and performance
- Providing the perfect security for the entire infrastructure

Pre-requisites

- Basic knowledge of object-oriented programming is enough

Who Should do the course

- Software Developers
- Project Managers
- IT Managers
- Development Managers
- Architects

DevOps Training Duration

- 45 Days

DevOps Course Content

Introduction to DevOps

- What is **DevOps**?
- History of DevOps
- **Dev and Ops**
- DevOps definitions, Software Development Life Cycle and main objectives of the DevOps
- Infrastructure As A Code

DevOps

- Prerequisites for DevOps
- Tools (Jenkins, Chef, Docker, Vagrant and so on.)
- Continuous Integration and Development

Linux Concepts

- Linux Installation
- User Management
- Package Management
- Networking

Automation Concepts

- OS Basics
- Scripting Introduction
- Learn Shell Scripting
- Database Concepts
- Shell Variable, Decision Making and Shell Test Conditions
- Shell Loops, Re-directors, Exit status

Revision Controls System

- Subversion Controls/Git
- Working with local repositories, remote repositories
- branching
- merging
- cloning
- fetch/pull
- Installation of Git Server

Configuration Management

- Chef/Puppet/Ansible Introduction
- Chef server Hands-on, workstation setup, Chef Distribution Kit and Concepts

Environments

- Attributes
- Resources
- Cookbook
- Run list
- Recipes
- Supermarket

Build Automation

- Introduction with Maven
- Maven structure and Phases
- Installation of Maven
- Configuration

DevOps

- jar/war project structure

Tomcat Web Server

- Installation and Configuration
- Tomcat Manager
- Application Management
- App Deployment Methods

Nexus Artifacts/Proxy Tool

- Introduction to Nexus
- Installation and Configuration
- Repository Management
- Proxy Management
- Integration with Maven

Jenkins Framework

- Introduction to Jenkins
- Jenkins Installation
- User Profile and Management
- Security and Plugins Management
- Builds Setup
- Integration with Git, Maven, Tomcat

LAMP Setup

Apache/HTTPD Web Service

- Installation of Apache
- Configuration of Apache
- Static Pages
- Dynamic Pages
- PHP Integration

MySQL Database

- Working with Database
- Introduction to MySQL Database
- Configuration
- User management
- Permission management
- Creating Database
- Data insertion/update
- MySQL Data Backup, Hands-on and MySQL GUI Tools

Installation of WordPress with LAMP

- Vagrant

DevOps

- Introduction to Vagrant
- Vagrant Terminologies
- Installation of Vagrant
- Vagrant Proxy Project and hands-on

Working with Docker

- Introduction to Docker
- Docker Terminologies
- **Installation of Docker**
- Docker image creation and Docker hands-on

System Monitoring

- Introduction to Nagios
- Concepts behind Nagios
- Nagios Installation
- Hands-on

DevOps Project Work

- Project LAMP Setup
- Web layer
- DB Layer
- App Layer
- Monitoring