



Mastering DevOps

Introduction

DevOps - is a software engineering practice that aims at unifying software development (Dev) and software operation (Ops). The main characteristic of the DevOps movement is to strongly advocate automation and monitoring at all steps of software construction, from integration, testing, releasing to deployment and infrastructure management. DevOps aims at shorter development cycles, increased deployment frequency, more dependable releases, in close alignment with business objectives.

Objectives

In This Course You will learn how to automate and build configurations for infrastructure servers and then address areas of automation, continuous deployment, containers, and monitoring. You will create impressive changes to how you deliver software and services.

This course will help all those who wish to work in a DevOps culture, who are responsible for delivering both new features and stability. Such teams will work closely across the entire organization to ensure a shared responsibility, which is no longer just ops or dev territory, most importantly, they work together in areas like continuous delivery, automated deploys, and infrastructure/configuration management.

With the help of this course, such teams no longer need to wait for other teams to solve a problem: fixes can be made quickly, all by learning tips and techniques to succeed with DevOps.

Duration: 16 hours



Target Audience

- This Course targets system administrators, developers, and IT professionals who would like to employ DevOps techniques and best practices to manage IT infrastructures or would like to acquire the necessary skills needed to work in DevOps teams in a practical, tool-driven manner.

Prerequisites

- Some IT industry work experience or those pursuing a degree in the IT field
- System Administration Linux & Windows
- Scripting Language skills (Python, Perl)

Contents – Day 1

- **What is DevOps?**
- **DevOps Overview**
- **The CAMS model – DevOps Thinking**
 - **Culture**
 - **Automation**
 - **Measurement**
 - **Sharing**
- **Establishing a DevOps Culture**
- **Traditional Versus DevOps SDLC**
- **Automation – Configuration Management**

Contents – Day 2

- **Configuration Management with SaltStack**
- **Configuration Management for Distributed Systems**
- **Building and Running a Docker Container**
- **Automation – Continuous Delivery**
- **What is Continuous Delivery?**
- **Configuring and Launching with Vagrant**
- **Testing with Serverspec**
- **Measurement & Monitoring**
- **Actionable Data**