



DevOps Course

Who we are

Techeduxon has been a platform for global online technology education since 2015. We are now taking it up a notch higher by introducing ways of advanced learning to up-skill and cross-skill your profession with cutting-edge, customized programs. With our Top Tier IT & Enterprise training Courses, We enable you to the forefront & become 'Industry Ready' in this Advancing & Unforeseen Digital World with your upskill Innovations.

Course Outline

Introduction to DevOps

Cloud Computing for DevOps

Continuous Delivery & Integration - Jenkins

Linux Essentials

Version Control System - GIT

Code Analysis - SonarQube

Orchestration - Kubernetes

Build Management

Maven

Configuration Management - Puppet

Configuration Management - CHEF

Configuration Management & IAAC - Ansible

Monitoring - Nagios

Containerization - Docker

Course Content

Introduction to DevOps

Introduction

What is DevOps?



Waterfall vs Agile vs DevOps

DevOps Tools

SDLC Models

Cloud Computing for DevOps

Introduction

Benefits of Cloud Computing

Google Cloud

AWS

Continuous Delivery & Integration – Jenkins

Introduction

Jenkins Setup

Jenkins Security

DevOps Foundations

Learning Jenkins

Architecture – Jenkins

CI/CD Pipeline

End to End automated CI/CD Pipeline



Automated Builds using Webhooks

Code Quality Integrations

Linux Essentials

Introduction to Linux OS

File & Directory Management

File Permissions

Vi Text Editor

Utility Commands

Archives

Package & Service Management

Version Control System - GIT

Introduction to Version Control System

Centralization & Distributed Version Control System

Introduction to GIT

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GIT Ignore

Stashing & Undoing Changes

Detached Head

Github Remote

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Code Analysis – SonarQube

Introduction



SonarQube Installation & Setup

Analyzing Source Code

Integration with Maven

Orchestration – Kubernetes

Introduction to Kubernetes

Architecture of Kubernetes

Installation & Setup of Kubernetes

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Services

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Networking

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Updates of Kubernetes

Auto Scaling

Deployments

Storage and Running Stateful Applications

Monitoring and Logging

Build Management

Introduction to Build Management

History of Build Tools



What is Ant?

How Ant Works in Build Projects

Maven

Introduction to Maven

Objectives of Maven

Central of Maven

Maven Lifecycle

Maven Project Setup

Build Project using Maven

Configuration Management – Puppet

Introduction to Configuration Management

Configuration Management Tools

Introduction to Puppet

What is Puppet?

Why Puppet?

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Master Slave Setup Using Puppet

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Modules of Puppet

Apply Configuration Using Puppet

Puppet File Server

Configuration Management – CHEF

Introduction to Configuration Management

Benefits of Configuration Management



Comparison Push Based & Pull Based

Infrastructure AS Code

Architecture of CHEF

Server & Work Station Setup of CHEF

Distribution Kit, Resources, Cookbooks, Attributes, Roles

Environment of CHEF

Supermarket & Data bags of CHEF

Configuration Management & IAAC – Ansible

Introduction

What is Ansible?

Comparison with Other Tools

Ansible Setup

Ad-hoc Commands in Ansible

Modules

Playbooks

Templates

Facts

Variables

Roles & Vault

Monitoring – Nagios

Introduction to Monitoring

Nagios Core & Plugins

Nagios Remote Plugin Executor (NRPE)

Containerization – Docker



Introduction to Docker
Micro services Architecture
Monolithic Architecture
Comparison b/w Virtualization & Containerization
Docker Architecture
Docker Registry
Docker Image
Docker Container
Managing Containers Life Cycle
Docker Volumes
Networking with Docker
Setup 3 Tire Application using Docker
Custom Image Building

Projects & Assignments

Our Expert trainers will provide the real time Projects & Assignments.



An illustration of a man with a beard and blue hair, wearing a purple vest over a light purple shirt, sitting at a laptop. He is pointing at the screen with his right hand. The laptop screen shows a simple interface with a white box and a red button. To the left of the man, there is a vertical line with three red dots. Next to the top dot is a red speech bubble with the word 'Help' and a blue speech bubble with the word 'Support'. Below the top dot is a blue icon of a person with a headset. Below that is the email address 'Trainings@techeduxon.com'. Below the bottom dot is a blue globe icon and the website 'www.techeduxon.com'. The background features a large, faint 'TechEDUXON' watermark.