



DEVOPS COURSE CONTENT

Self-Learning & Online Training

Duration: 25+ (Hours)

✓ How long will it take to learn Devops?

25+ hours

It actually depends on how much time that you going to put in and at what level you want to learn.



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(WhatsApp Available)

✓ What is a prerequisite of DevOps?

Basic prerequisite for DevOps.

- Basic scripting language like python.
- Good knowledge of Linux.
- Cloud computing.
- Jenkins.
- GitHub.
- Docker.
- Chef.
- Puppet.



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Practicle Training

About SVR Technologies

Our certified faculty focused on IT industry based curriculum for Datapower Training Online. Hands-on training with tutorial videos real-time scenarios and certification guidance that helps you to enhance your career skills.

Real-time Working Faculty | Real-time Scenarios

Main Topics

- Introduction to DevOps
- Linux basics
- Shell Scripting
- Chef
- Puppet
- Ansible
- Nagios
- Git
- Maven
- Jenkins
- Dockers
- Cloud Computing
- AWS

Linux

- What is Operating system
- Types of Operating System
- Structure of Operating System
- History of Linux & Unix
- Difference between Linux and Unix
- Difference between Linux and Windows
- Linux Features
- Linux Flavours
- Redhat Linux Installation
- Linux File System Hierarchy
- Linux Bash Command Line Utilities
- GUI editors V/s CLI Editors
- Linux Partition Management
- Runlevels
- Linux Boot process
- VMware overview



Shell Scripting

- Need of scripting
- Scripting with schedulers
- Variables
- Loops
- grep
- Awk
- Sed
- Real time scripts

Configuration Management Tools

Chef

- Introduction to Chef
- What is chef
- Difference between Chef open source and enterprise
- Architecture Design of Chef
- Resources of Chef
- Overview of Chef server, Organisation and Starter-Kit
- Overview of Chef Workstation
- Overview of Chef Client
- Access to Chef Server
- Installation of Chef work station
- Installation of Chef clients
- Chef Boot strap
- Addition of chef client to chef server
- Introduction to cook book and recipe
- Cookbook creation and writing recipes
- Locating chef clients from server
- Knife commands
- Executing cookbooks on clients



Puppet

- Introduction to Puppet
- Difference between puppet open source and enterprise
- Architecture of Puppet
- Resources of Puppet
- Installation and configuration of Puppet Master
- Installation and configuration of Puppet Agent
- Addition of agents to Puppet Master
- Puppet manifests
- How to write basic manifests
- Executing manifests from Agents

Ansible

- Introduction to Ansible
- Architecture of Ansible
- Installation of Ansible Server
- SSH key generation on Ansible Server
- Key Based connection to Ansible Nodes
- Introduction to Playbooks
- Executing playbooks on Ansible nodes

Version Control Tools

- SVN v/s GIT
- Local Repository V/s Online Repository
- Installation of GIT
- GIT Initialization
- Tracked v/s Untracked files
- Git Commit
- Git Logs
- Branches in GIT
- GIT Merge
- Git Clone
- Git Push



- Git Pull

Build Tool

Maven

Introduction to Maven
Introduction to POM.xml
Generating POM.xml
Execution of Maven Life Cycle

Continuous Integration Tools

Jenkins

- Introduction to Jenkins
- Installation and configuration of Jenkins
- Overview of Jenkins Dashboard
- Continuous Integration with Jenkins
- Creating jobs with Jenkins
- Maven integration with Jenkins
- Java integration with Jenkins
- Git integration with Jenkins
- Jenkins Plugins
- Jenkins Build Pipeline
- Jenkins Upstream and Downstream

Dockers

- Overview of Containers
- Containers v/s HyperVisors
- Installation of Docker
- Docker commands
- Managing DockerHub
- Introduction to Swarm Manager
- Installation of Docker Swarm manager



- Adding Docker Noders to Swarm Manager

Monitoring tools

PROJECT 1: OVERSEAS using NAGIOS

Knowledge Transfer:

- Definition of Monitoring, Benefits and types of Monitoring tool
- Process based concepts on Threshold value, Alerts, Priority levels and Escalation Format

Roles of Linux Engineer:

- Worked as a Linux Engineer in 24/7 team responsible to maintain servers and provide FCR at any point of time.
- Monitoring / Troubleshooting the following alerts / issues.
 1. CPU
 2. Load Average
 3. Memory Usage
 4. Network Issues
 5. Disk Space issues
 6. Service Status
 7. Website Blips
- Perform the TRIAGE with regards to the alerts by following SOP and find the RCA.
- Escalating the alerts to level-2 team incase unable to provide resolution.
- Creating a production ticket for each and every alert.
- Open trouble tickets with the 3rd party service provider for any network outages, site blips, database issues & Disk failed issues.



Cloud Computing

- Understanding of Cloud Computing
- Overview of On-Premises Data Centre
- Types of Cloud Computing
- Services of Cloud Computing

AWS Overview

EC2 INSTANCES and its types

- Spot Requests
- Reserved Instances
- Dedicated Hosts
- Scheduled Instances

IMAGES

- AMIs

ELASTIC BLOCK STORE

- Volumes
- Snapshots

NETWORK & SECURITY

- Security Groups
- Elastic IPs
- Placement Groups
- Key Pairs, Network Interfaces

LOAD BALANCING

- Load Balancers
- Target Groups

VPC

