



DEVOPS FOUNDATION CURRICULAM

1. Linux OS and Shell Scripting - 12 hours
2. Maven - 3 hours
3. GIT - 3 hours
4. Jenkins - 3 hours
5. Chef - 3 hours
6. Puppet - 3 hours
7. Virtualization, cloud computing basics and AWS- 3 hours
8. Docker – 3 hours
9. Nagios – 3 hours

Linux_OS_Basics and Shell Scripting

- Linux_Commands
- File_System
- vi editor
- Advanced_Linux_Commands
- System_Administration
- Advanced_System_Administration
- Grep
- Shell_Scripting with examples(All types of loops)
- Regular_Expressions
- SED
- AWK

Maven

- Maven basics
- Difference between Ant and Maven
- Installation and Setup of Maven
- Maven lifecycles

- First Maven project
- How to compile application source
- How to compile test source and run unit test
- SNAPSHOT version
- How to use plugins
- How to add or remove resources from jar
- dependency management
- Deploy jar in remote repository

Jenkins

- Basics of CI
- Fresh instance of Jenkins installation and configuration
- How to create a job and configure it
- A walk-through of different features of Jenkins
- Jenkins plugins installation and configuration
- Practical Jenkins administration issues
- How to integrate different build and release tools like Ant, Maven, Gradle, GIT, Perforce, SVN, Tomcat, Chef etc
- Devise a strategy for the candidate's organization build and release process

GIT

- GIT basics
- branching strategy
- Difference between versioning control tools and GIT
- Git installation
- Getting and creating projects: initialize a directory as Git repository and copy a Git repository
- Basic snapshotting: Adding file contents to staging area
- view status of your files in the working directory and the staging area
- show diff at various stages
- record snapshot of staging area
- undo changes and commits
- remove files from staging area
- stashing changes

- Branching and merging
- sharing and updating projects
- Inspection and Comparison

Chef

- Basics of Chef and Infrastructure management tools
- Definitions of Chef Components
- Installation and Configuration of various Chef components
- Overview of Chef elements like Cookbooks, Recipes, Resources etc
- Demonstration of Chef operations using few examples

Puppet

- Basics of Puppet
- Installations and Configuration of Puppet components
- Overview of Puppet elements like Modules, Manifests, Templates etc
- Downloading modules from Puppet-Forge
- Demonstration of Puppet operations using few examples

AWS

- Basics of virtualization
- Basics of cloud computing
- AWS services

EC2, S3, DynamoDB

Docker

Introduction to Docker

- What is Docker
- Containers vs virtual machine
- Docker platform overview and terminologies



- Docker Engine
- Images
- Registry
- Repositories
- Docker Hub
- Docker Orchestration Tools
- Introduction to Images
- Getting started with Containers

Docker Fundamentals:

- Building Images
- Dockerfile
- Managing Images and Containers
- Distributing Images on Docker Hub
- Docker Volumes
- Basic Container networking

Nagios

- Nagios core installation and configuration
- Creations of objects
- Alert configuration
- Email Notification configuration