

## Introduction to Devops

- What is Devops?
- History of Devops
- Dev and ops
- Devops definitions
- Devops and Software Development Life Cycle Devops main objectives Infrastructure As A Code
- 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
- Shell Decision Making
- Shell Test Conditions
- Shell Loops
- Shell Redirectors
- Shell Exit status

## Revision Controls System

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

## Configuration Management

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

## Environments

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

## Build Automation

- Introduction with Maven
- Maven structure
- Maven Phases
- Installation of Maven
- Configuration
- 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
- User Management
- Security Management
- Plugins Management
- Builds Setup
- Integration with Git

## Future Q Technologies

- Integration with Maven
- Integration with Tomcat
- Integration with Maven

## **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
- MySQL Hands-on
- MySQL GUI Tools

## **Installation of WordPress with LAMP**

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

## **Working with Docker**

- Introduction to Docker
- Docker Terminologies
- Installation of Docker
- Docker image creation
- 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