

### Day - 1

- **Lets understand Continuous Integration**

- What is Continuous Integration
- Benefits of Continuous Integration
- What is Continuous Delivery
- What is Continuous Deployment
- Continuous Integration Tools
- Jenkins Vs TeamCity Vs Bamboo

- **What is Jenkins**

- Object Properties and Method
- Accessing and Displaying the Object
- Primitive and Reference Type and Primitive Wrapper Type
- Class ,Constructor and new Operator
- Inheritance
- Getter and Setter Method
- Static Class

- **Jenkins Installation**

- Prerequisites
- Installing Jenkins using Yum
- Installing Jenkins using Apt
- Installing Jenkins using MSI

- **Jobs Scheduling in Jenkins**

- Manually Building
- Build Trigger based on fixed schedule
- Build Trigger by script
- Build Trigger Based on pushed to git

- **Useful Jobs Configuration**

- Jenkins Jobs parameterised
- Execute concurrent builds
- Jobs Executors
- Build Other Projects
- Build after other projects are built
- Throttle Builds

- **Reports in Jenkins**

- Junit Report
- SonarQube Reports
- Jacoco Reports
- Coverity Reports
- Selenium Reports
- Test Results
- Cucumber Reports

- **Jenkins Integration with other tools**

- **Notification & Feedback in Jenkins**

- CI Build Pipeline & Dashboard
- Email Notification
- Advance Email Notification
- Slack Notification

- **Jenkins Advance**

- Security in Jenkins
- Authorization in Jenkins
- Authentication in Jenkins
- Managing folder/subfolder
- Jenkins Upgrade
- Jenkins Backup
- Jenkins Restore
- Jenkins Command Line
- Jenkins Api Programming
- Deep dive into Jenkins Pipeline
- Jenkins Multi-configuration Project
- Jenkins Multibranch Pipeline

- Installing Jenkins using Tomcat
- Installing as a Service
- Starting and Stopping Jenkins

- **Jenkins Dashboard Tour**

- Understand Freestyle Project
- Freestyle General Tab
- Freestyle Source Code Management Tab
- Freestyle Build Triggers Tab
- Freestyle Build Environment
- Freestyle Build
- Freestyle Post-build Actions
- Manage Jenkins
- My Views
- Credentials
- People
- Build History

- **Creating a Simple Job**

- Simple Java and Maven Based Application
- Simple Java and Ant Based Application
- Simple Java and Groovy Based Application

- Jira
- Git
- SonarQube
- Maven
- Junit
- Chef
- Puppet
- Ansible
- Docker
- AWS
- Jacoco
- Coverity
- Selenium