

Introduction to DevOps

1. Configuration tool GIT

What is Git?

Difference between Distributed version control system and centralized version control system.

Advantages of Git

Git Installations on windows/Linux.

The details of the commit objects

Commit references

Git Tooling.

Installation of the Git command line tooling.

Git configuration

Configure files and directories to ignore.

Performing a local Git workflow

Remote repositories

Branching strategy

Tags in Git.

Merging in Git.

2. Build Tool Ant

Apache Ant Overview

Installation

Using Apache Ant

Useful Ant Tasks

Examples

3. Maven Build Tool

Overview

Installations

Maven life cycle

Running Maven Build

Examples

4. Jenkins Orchestration Tool

Introduction of Jenkins

Installation of Jenkins

Configuration of Jenkins

Jenkins management.

Integration with Control Version Tools

Creating Jenkins jobs

Creating pipelines

Jenkins backups and copying files

5. Code Analysis/Quality tool Sonar Qube

Introduction to Sonar Qube 4.5

Installation of Sonar Qube

Code quality Check

Plugins installation

Importing the Custom rules

6. Nexus Artifactory tool

Introduction of Nexus

Installation and Configuration

Creating Repository

Uploading Artifacts to Nexus

7. Cloud Environment AWS

Introduction to Cloud

Iaas, Paas, Saas

Creating of EC2 instance in Aws

S3 Bucketing

8. Infrastructure Automation Tools

Introduction to Chef

Installation of Chef

Bootstrapping of Instances

Creating of Cookbooks

9. Monitoring Tool Sensu

Introduction of Sensu

Installation of Sensu Server and client

10. Container Management Docker

Overview of Docker

Installation of Docker

Basic Docker commands

Creating Docker file

Creating image

Creating a container using a Docker image