



## DevOps



**The Best Training Institute in Hyderabad**





## Devops:

### 1. Linux Admin Commands(Basics)

- Basic Commands
- Create Files and Directories
- File Permissions (chmod)
- File Ownership (chown, chgrp)
- User & Group creation
- Memory Management (df, free, du)
- Process Management (ps, top, kill, pkill)
- File Compression and Extraction (Tar, Zip, UnZip)
- Linux Filters (grep, sed, awk)
- Linux Editors (Vi/Vim)

### 2.VERSION CONTROL - GIT

- Version Control System
- Centralized and Distributed Systems
- Differences between SVN & GIT
- GIT
- GIT Hub Remote Respositoy
- Signup on GIT Hub
- GIT - Clone / Commit / Push





- GIT Rebase & Merge
- GIT Stash, Reset, Checkout
- GIT Clone, Fetch, Pull
- GIT Branch Strategy
- GIT Branch Management
- GIT Hard& Soft reset

## 3.CI/CD- JENKINS

- Introduction to Jenkins
- Continuous Integration with Jenkins
- Configure Jenkins
- Jenkins Management
- Scheduling build Jobs
  - POLL SCM
  - Build Periodically
- Maven Build Scripts
- Support for the GIT version control System
- Different types of Jenkins Jobs
- Jenkins Build Pipe Line
- Parent and Child Builds Sequential Builds
- Jenkins Master& Slave Node Configuration





- Jenkins Workspace Management
- Securing Jenkins
  - Authentication
  - Authorization
  - Confidentiality
  - Creating Users
- Jenkins Plugins
  - Installing Jenkins Plugins
  - SCM plugin
  - Build and test

## 4. TERRAFORM

- Terraform Basic
- Introduction to Terraform
- Syntax and Interpolation
- Terraform CLI - Console
- Building AWS Infrastructure - Getting Started
- Building AWS Infrastructure —EC2 Instance





## 5. ANSIBLE

- Introduction to Ansible
- Ansible Server Configuration
- ansible.cfg configuration
- Infrastructure Management
- SSH Connection in Ansible Master
- YAML Scripts
- YAML Data types
- Host Inventory
  - Hosts and Groups
  - Host Variables
  - Group Variables
  - Host and Group Specific Data
- Ad-hoc Commands
- Playbooks
  - Variables
  - Conditionals
  - Loops
  - Blocks
  - Handlers
  - Templates





- Modules
  - Core Modules
  - Extra Modules
- Ansible Roles
- Ansible Role Directory Structure

## 6. DOCKER

- How to get Docker Image?
- What is Docker Image?
- Docker Installation
- Working with Docker Containers
  - What is Container?
  - Docker Engine
  - Creating Containers with an Image
  - Working with Images
- Docker Command Line Interface
- Docker Compose
- Docker Hub
- Docker Trusted Registry
- Docker swarm
- Docker attach
- Docker File & Commands





## 7.KUBERNETES

- Kubernetes intro and Architecture
- Kubernetes Setup
- Running Docker containers on Kubernetes
- Kubectl
- What is Pod, Service, Controller and Deployment in Kubernetes
- Difference between Docker Swarm and Kubernetes Orchestration
- Service running on manage node and minions
- Deploying the application through PODs
- Building multiple pods with high availability





# CLOUD VISION TECHNOLOGIES

