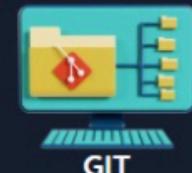


# WELCOME TO CLOUD DEVOPS AND OPEN RAN TECHNOLOGY!

SSL CLOUD COMMUNITY



Private Cloud



GIT



Open RAN and 5G

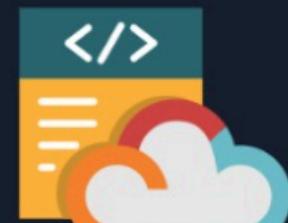
Terraform



Linux Administration



Data Center Virtualisation



DATA CENTER  
VERTULIZATION



PRIVATE CLOUD



SERVER AND  
HARDWARE



LINUX



CI CD

# SSL CLOD Devops

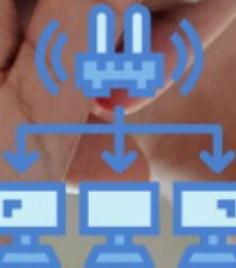
TELCO CLOUD AND NEW DEVOPS



PRIVATE  
CLOUD



GIT



NETWORKING  
SWITCHING & ROUTING

OPEN RAN  
TELCO CLOUD



5G



RESUME BUILDING  
MOCK INTERVIEW  
LINKDIN PROFILE  
BUILDING



Start



Step One

**Linux  
Basics**

Step Two

**Terraform  
+  
Azure**

Step Three

**CI/CD  
Pipelines  
+  
Scripting**



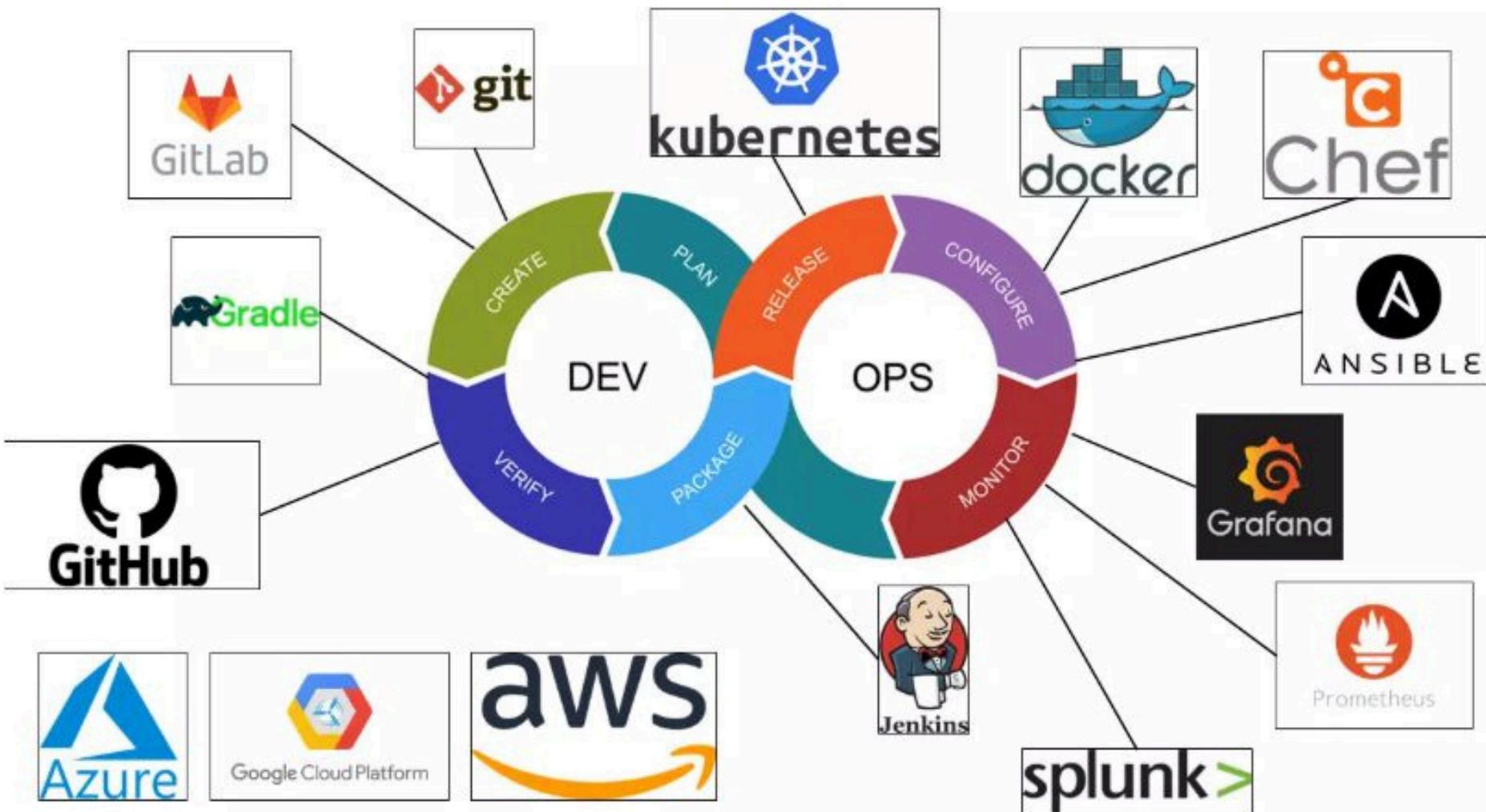
Step Four

**Docker +  
Kubernetes  
+  
DevSecOps  
Tools**



Finish!





# Syllabus



Azure Pipelines



kubernetes

checkov



prometheus



HashiCorp  
Terraform

## Module 1: Linux Basics and Introduction to DevOps and Cloud Computing

- Understanding DevOps: Principles, benefits, and practices
- Cloud Computing Overview: Types (IaaS, PaaS, SaaS), public vs. private clouds
- Popular Cloud Providers: AWS, Azure, Google Cloud, etc.
- DevOps and Cloud Integration: Why they work well together



## Module 2: Version Control Systems

- Introduction to Version Control Systems (VCS)
- Git Basics: Repositories, branching, merging, pull requests
- Collaboration platforms: GitHub, GitLab, Bitbucket
- Best practices for version control in DevOps



## Module 3: Microsoft Azure AZ-104

- Managing Azure Subscriptions and Resource Groups
- Azure Virtual Networks and Network Security
- Overview of Azure Virtual Machines
- Overview of Azure Storage Services
- Secure and Manage Azure Storage
- Configure Virtual Machines for High Availability
- Network Traffic Distribution and Connectivity
- Integrate On-premises Network with Azure Virtual Network
- Monitoring and Access Management for Cloud Resources
- Manage Azure Active Directory (AD)
- Implementing and Managing Hybrid Identities



## Module 4: Terraform

- Infra-as-a-code: Overview
- What is Infrastructure as Code with Terraform
- Manage any infrastructure
- Standardize your deployment workflow
- Track your infrastructure
- Terraform module output
- Terraform state
- Azure key vault integration
- Creating VM images
- Terraform registry
- Azure Virtual Machines
- Azure CLI



## Module 5: Git, Jenkins & Maven Integration

- Branching and merging in Git
- Merge Conflicts
- Stashing, Rebasing, Reverting, and Resetting
- Git Workflows
- Introduction to Maven
- Maven Architecture
- Introduction to Continuous Integration



# Jenkins

## Module 6: Continuous Integration using Jenkins

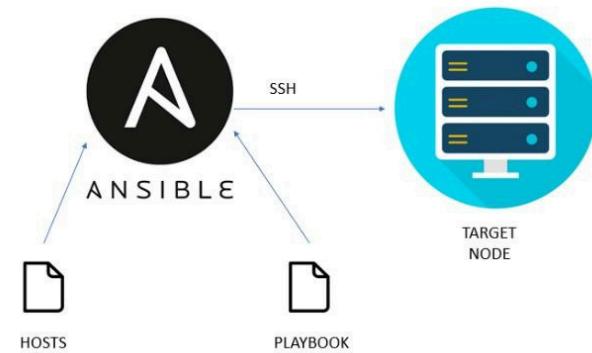
- Jenkins Architecture
- Plugin Management in Jenkins
- Jenkins Security Management
- Notification in Jenkins
- Jenkins Master-slave architecture
- Jenkins Delivery Pipeline
- Jenkins Declarative pipeline



# Jenkins

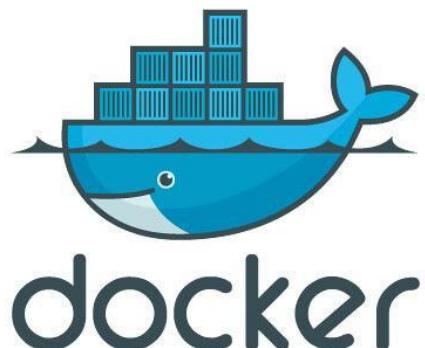
# Module 7: Configuration Management Using Ansible

- Introduction to Configuration Management
- Infrastructure as Code
- Introduction to Ansible
- Ansible Architecture
- Inventory Management
- Ansible Modules
- AD-HOC Commands
- Ansible Playbooks
- Ansible Roles



# Module : Containerization using Docker Part – I

- Containerization
- Namespaces
- Docker
- Docker Architecture
- Container Lifecycle
- Docker CLI
- Port Binding
- Detached and Foreground Mode
- Dockerfile
- Dockerfile Instructions
- Docker Image



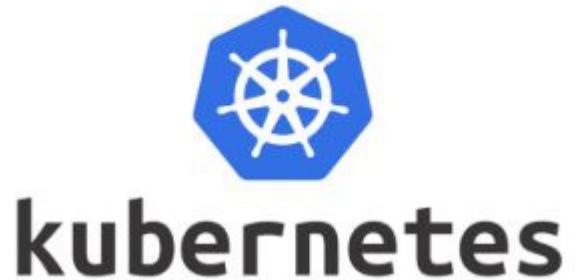
## Module : Containerization using Docker Part - II

- Docker Registry
- Container Storage
- Volumes
- Docker Compose
- Docker Swarm



# Orchestration using Kubernetes Part - I

- Introduction to Container Orchestration
- Kubernetes Core Concepts
- Understanding Pods
- ReplicaSet and Replication Controller
- Deployments
- DaemonSets
- Rolling Updates and Rollbacks
- Scaling Application



## Orchestration using Kubernetes Part - II

- Services
- Persistent Storage in Kubernetes
- Primitives for PersistentVolumeClaims
- Secrets and ConfigMaps
- Headless Services
- StatefulSets
- Helm Charts



**kubernetes**



# Monitoring using Prometheus and Grafana

- Introduction to Prometheus and Grafana
- Prometheus and Grafana Setup
- Monitoring using Prometheus
- Dashboard Visualization using Grafana
- Creating a Dashboard to monitor the Pipeline



**SSL Teclo cloud  
Community**

# **Open Ran & Telco Cloud**

Learn how 5G , Open Ran and Telco Cloud is changing the world  
of communication

# **Open Ran Telco Cloud**

## **Intoduction**

### **Evolution of Telco Cloud**

Evolution of Mobile Generations  
5G 3GPP standards  
All 3GPP standards  
Network Architecture from 4G to 5G

Introduction to open RAN and Telco Cloud  
RAN architecture evolution  
Benefits of open RAN for mobile operator  
Open RAN industry initiatives

## **Architecure**

### **Cloud Ran Architecture**

Open RAN architecture evolution  
Concept of Open RAN  
Spectrum for Open RAN  
Edge network architecture  
Open 4G 5G core  
Use cases of Open RAN  
Platform architecture of Open RAN

Understanding of Datacentre , Public clouds , Hybrid cloud , Edge  
LTE-Advanced-Pro: transition from 4G toward 5G mobile networks  
5G services: mobile ultra-broadband and ultra-reliable low latency services

## **Deployment**

### **Open Ran Deployment**

O-Cloud Deployment Options  
Understanding of Datacentre , Public clouds , Hybrid cloud , Edge  
Principles and Attributes of SDN/NFV Automation and Orchestration

Deployment and operation challenges for network operators and service providers  
Platform Life Cycle Management

## **Open Ran Telco Cloud**

**Telco Cloud**

**Monitoring**

**Troubleshooting**

### **Devops in Open RAN**

Kubernetes in NFV (Telco Cloud)

Cloud Native Network  
Function-Distributed  
Applications

### **Cloud Ran Monitoring**

Graffana  
Prometheus

### **ORAN Troubleshooting**

Network Troubleshooting  
Platform and cloud  
Troubleshooting

Open RAN deployment on  
private , public and Hybrid  
cloud

Virtual Network Functions  
(VNFs)

Monolithic Applications as  
VNFs

Open RAN Monitoring and  
Troubleshooting with Current  
ongoing deployments

General Information  
Known and Resolved Issues  
Revision History



# RESUME WRITTING

# RESUME, COVER LETTER, LINKEDIN PROFILE



A medium shot of a man from the chest up. He is wearing a dark blue suit jacket over a light blue dress shirt and a maroon necktie. His right hand is extended forward, palm facing the viewer, with his index finger pointing directly at the center of the frame. The background is a solid light blue.

THANK YOU