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Oracle Cloud Infrastructure (OCI) Training Course Content

Hands-on Training on Oracle Cloud Infrastructure (OCI)

Course Objectives

Learn All topics with Real Time Use Cases with Practical's Hands on from OCI Industry Expert and dive deeper into Oracle Cloud Infrastructure services like Identity and Access Management (IAM), Compute, Storage, Database,..... etc.

Build expertise in OCI Core Services Networking, Database, Load Balancer, Security , Database Migrations etc.

Design secure networks with disaster recovery options, explore advanced database features on OCI, Resource Manager, OCI CLI, OCI Database Service and Autonomous Database, migrate database from on-premises workloads to OCI and implement a secure and scalable cloud solution that meets HA and DR requirements.

This course helps you gain strong knowledge in architect infrastructure using Oracle Cloud Infrastructure services and Help to attend OCI Foundational , Architect Associate & Professional Certification Exams.

For Any Clarification please feel free to contact @ +91 8655015955 (Vijay) / +91 9867328291 (Ambasa)

Duration: 40Hrs

Part 1: Introduction to Cloud Computing

- What is Cloud Computing
- Service Models & types of Cloud
- Cloud Terminology
- Cloud Providers
- How Cloud Computing converts CAPITAL EXPENDITURE to OPERATIONAL EXPENDITURE?

Part 2: Oracle Cloud Infrastructure Architecture

- Why OCI?
- OCI Global Footprint
- OCI Architecture – Regions, Availability Domains (AD) and Fault Domains (FD)
- OCI Regions with one AD regions
- What factors to consider while choosing a region?
- How to avoid single points of failure?
- How to design High Availability, Scale and Performance Network within AD



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- OCI Services Overview

Part 3: Oracle Cloud Account Sign Up Process & OCI Console Overview

- Oracle Cloud Account Sign Up Process for Free Tier Account
- Oracle Cloud Infrastructure Console Overview

Part 4: Identity and Access Management (IAM)

- Domains, Users and Groups
- Authentication and Authorization in IAM
- IAM Policies, Policy Syntax and Verbs & Permissions
- IAM Common Policies, Advanced IAM Policies & Advanced Policy Syntax
- IAM Compartments, Policy Inheritance and Attachment for Compartments
- Moving Compartments and Policy Implications to consider while moving Compartments.
- Understand how to use Tags and Audit Service effectively

Part 5: Virtual Cloud Network (VCN)

- Introduction to Networking Concepts
- CIDR Basics
- Introduction to Virtual Cloud Network
- IP Address range for VCN, Public and Private IP Addresses
- Subnets, Gateways and Route Tables
- Internet, NAT, Service, Dynamic Gateways
- Peering, Local and Remote Peering
- Transit Routing, Hub and Spoke & private access.
- Security List (SL) and Network Security Group (NSG)
- Stateful and Stateless Security Rules
- Virtual Cloud Network Summary
- Enable secure access with Bastion
- Build a VCN for a multitier configuration
- Peer two VCNs
- Create DRG and resources in another region
- Create remote peering connections and establish connectivity
- Configure connectivity redundancy with VPN
- Connect to on-premises via FastConnect
- Design and implement a real-world network architecture

Part 6: OCI Deploy HA Application using Load Balancers and Configuring Auto Scaling

- Introduction to OCI Load Balancing Service
- Public and Private Load Balancer
- Regional Subnets and AD Specific Subnets
- Create Security List, Route table, and Additional Subnet



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- Create Load Balancer and Update Security List
- Load Balancing Policies and Health Checks
- Configure instance pool and auto scaling
- Test the Autoscaling setups
- Verify High Availability of HTTP Servers

Part 7: OCI Compute Service

- Introduction to OCI Compute Service
- Bare Metal, VM and Dedicated Hosts
- Machine Images, Custom Images and Oracle Provided Images
- Image Import/Export, Bring your own Image (BYOI)
- Generate SSH Key
- Custom Boot Volume, Custom Image versus Boot Volume Backup
- Instance Configurations, Pools, Autoscaling
- Autoscaling Configurations
- Instance Metadata
- Instance Lifecycle
- OCI Compute Service Summary

Part 8: Object Storage

- Introduction to Object Storage Service
- Use cases for Object Storage usage.
- Object Naming
- Object Storage Tiers and Capabilities
- Object Storage Access and Authentication
- Object lifecycle management
- Copying objects from one region to another
- Object Storage Summary

Part 9: Block & Boot Volumes

- Introduction to OCI Storage Services
- Block Volume Service
- Creating and Attaching Block Volumes
- Detaching and Deleting Block Volumes
- Block Volume Resize, Back Up and Restoration
- Clone, Volume Groups & Boot Volumes

Part 10: File Storage Service

- Introduction to OCI Storage Services
- File Storage Service Use Cases
- File Storage service Features
- Mount Target



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- File System, FSS Paths, Mounting an OCI File System
- File Storage Service Security
- Security Lists, Export Option and Snapshots

Part 11: Databases

- Introduction to OCI Database Service
- Virtual Machine (VM) Database (DB) Systems
- VM DB Systems Storage Architecture
- Bare Metal DB Systems
- Bare Metal DB Systems Storage Architecture
- DB Systems – VM, BM, Exadata
- Database Editions, Versions and Options
- Managing & Patching DB Systems
- Patching DB Systems
- Automatic Backup and Restore
- High Availability and Scalability
- Oracle Data Guard
- Managed DB Systems – Exadata, RAC, Bare Metal, VM
- Complete lifecycle automation – Provisioning, Patching, Backup & Restore
- High Availability and DR – RAC & Data Guard
- Scalability – Dynamic CPU and Storage scaling
- Database Security (TDE, Encrypted RMAN backup / Block volume encryption)

Part 12: Autonomous Databases

- Introduction to OCI Database Service
- Autonomous Database Options
- Autonomous Database Cloud Deployment Options
- Autonomous Database – Fully-Managed and Serverless
- Autonomous Data Warehouse: Architecture
- Autonomous Transaction Processing: Architecture
- Getting Started with Autonomous Database
- Auto Scaling & Securing Autonomous Database (ADB)
- Connecting to ADB & troubleshooting connectivity issues
- Scaling Your Database & Monitoring
- Autonomous Database (ADB) Cloud – Backup and recovery
- Autonomous Database Cloud – Cloning

Part 13: High Availability and Disaster Recovery

- Introduction to High Availability Concepts
- Availability Domains & Fault Domains
- Avoid Single Points-of-Failure.
- Regional and AD Specific Subnets



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- High Availability for OCI: Connectivity
- Configure Load Balancer for High Availability

Part 14: Security Best Practices in OCI

- Data Safe
- Security Best Practices in OCI
- OCI Auditing in an Autonomous Database
- OCI Audit Service

Part 15: Cost Management with Budgets and Quotas

- Create and Access OCI Budgets
- Set up Budgets Alert Emails
- Accessing Usage Reports
- Service Limits and Usage
- Compartment Quotas
- Quota Policies with Examples
- Cost Management Best Practices

Part 16: OCI API, SDK, & CLI

- Different Ways to Access OCI
- Developer Tools with OCI
- Command Line Interface (CLI)
- Software Development Tool Kits (SDKs)
- Installing & Configuring Oracle Cloud Infrastructure CLI
- Working with OCI Services with CLI - Check Connectivity

Part 17: OCI Monitoring and Notification Service

- Introduction to OCI Monitoring Service
- Metrics, Metric Queries & Alarms
- Use cases for OCI Monitoring Service
- Introduction to OCI Notification Service
- OCI Notifications Use Cases

Part 18: Tagging in OCI

- Why do I need tags?
- Tags Details & Tag Namespace
- Searching and Securing Tags
- Automating Tag Application
- Working with Defined Tags



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- Defined Tags Work with Policies

Part 19: Migrating Oracle Databases (From On-Premises) To Oracle Cloud Infrastructure(OCI) - All Tools and Topics covered with Practical's

- Database migration to OCI Database Service:
- Planning and assessment
- Migration workflow
- Different Migration Methods Like
- UI-based migration tools
- Remote cloning
- RMAN
- Data pump
- Automated migration methods
- etc...

Part 20: Guidance on Certification and Resume Preparation, Interview and Job Assistance

- Explain certification options available in OCI
- Provide tips on how to clear for OCI Architect Associate & Professional Certification
- Help with Resume Preparation as OCI Infrastructure Specialist
- Discuss common interview questions in OCI

For Any Clarification please feel free to contact @ +91 8655015955 (Vijay) / +91 9867328291 (Ambasa)

Cheers,

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