

Oracle Cloud Infrastructure Architect Professional Workshop

1 : Course Introduction

- Introduction

2 : Oracle Cloud Free Tier Account

- Demo: Oracle Cloud Free Tier Sign-up
- Demo: OCI console walk-through
- Demo: Setting up your tenancy
- Demo: MFA and Budget setup

3 : OCI Architect Associate Refresher

- Identity and Access Management (refresher)
- Virtual Cloud Network (refresher)
- Compute (refresher)
- Block Storage (refresher)
- Object Storage (refresher)
- File Storage (refresher)
- Database (refresher)
- Observability & Management (refresher)
- Security (refresher)

4 : Cloud-Native, Microservices, and Serverless Architecture

- API Gateway : Introduction to API Management
- API Gateway : Networking and Security Policies
- API Gateway : Creating an API
- API Gateway : Validating API Requests
- API Gateway : Authorizing Requests
- API Gateway : Using Context Variable
- API Gateway : Transforming API Requests and Responses

- API Gateway : Monitoring APIs
- Container Registry: Fundamentals Review
- Container Registry: OCIR Concepts: Images
- Container Registry: OCIR Concepts: Repositories
- Container Registry: Pushing and Pulling Images
- Container Registry: Image Management
- OKE: Introduction
- OKE: Create Clusters
- OKE: Manage Clusters
- OKE: Understanding and Using Autoscaling Features
- OKE: Cluster Access & Security
- Functions: Intro
- Functions: Service Overview
- Functions: Triggers
- Functions: Use Cases
- Functions: Concepts
- Demo - Functions: Setting the Context: Modernize Legacy Book Store Application
- Demo - Functions: Publishing of Books Catalog Updates
- Demo - Functions: Reimplementing the Customer-Facing Books Catalog
- Streaming: Introduction
- Streaming: Features
- Streaming: Fundamentals
- Streaming: Use Cases
- Events: Fundamental Concepts
- Events: Event Messages and Event Types
- Events: Rule Actions
- Demo: Actions
- Events: Working with Rules
- Demo: Rules

- Events: Use Cases
- Hands-On Activity: Deploy an OKE Cluster
- Hands-On Activity: Configure Oracle Functions

5 : Design Scalable and Elastic Solutions for HA & DR

- High Availability
- Disaster Recovery
- Load Balancer Refresher
- Load Balancer - Session Persistence
- Load Balancer - Request Routing
- Load Balancer - SSL Handling
- Demo: Load Balancer
- DNS Zone Management - What is DNS
- DNS Zone Management - DNS Overview and Demo
- DNS Zone Management – OCI Private DNS and DNS Resolver Lab
- DNS Traffic Management - Overview and Failover Lab
- Hands-On Activity: Design Scalable and Elastic Solutions for HA & DR

6 : Deliver Infrastructure-as-code

- Terraform Configuration Files:OCI Provider
- Terraform Install
- Terraform Plan
- OCI Resource Manager
- Demo: Resource Manager
- Hands-On Activity: Deliver Infrastructure-as-code

7 : Oracle Database Cloud Service

- Database Cloud Service Overview
- Database Lifecycle Management
- Monitoring Database Cloud Service

- Maximum Availability Architecture

8 : Oracle Autonomous Database

- Provisioning
- Demo: Provisioning
- Start and Stop ADB
- Demo: Start and Stop ADB
- Scaling
- Auto Scaling
- Demo: Scaling
- Move ADB to another compartment
- Demo: Move ADB to another compartment
- Create a ADB clone
- Demo: Create a ADB clone
- Managing Users
- Connecting to Autonomous Database - Part 1
- Connecting to Autonomous Database - Part 2
- Demo: Connect to ADB
- Create alarms and events
- Demo: Create events and alarms
- Manage ADB backup and restores
- Demo: Backup and Recovery
- Autonomous Data Guard
- Dedicated Infrastructure Overview
- Describe Workflows and Functionality
- Provision Dedicated Resources: Exadata, Container Database and VM Cluster
- Creating OCI Policies for Autonomous Dedicated
- Monitoring Dedicated Infrastructure
- Hands-On Activity: Oracle Autonomous Database

9 : Design for Hybrid Cloud Architecture

- OCVS - Introduction to Oracle Cloud VMware Solution
- OCVS - VMware Products Overview
- OCVS - Use Cases Benefits Values
- OCVS - SDDC Deployment
- OCVS - Design Hybrid Cloud
- OCVS - Network Topology
- Demo : OCVS
- Demo : Accessing SDDC
- Access to Microsoft Azure
- Demo: Access to Microsoft Azure
- Introduction to IPv6 with Oracle
- Demo: IPv6

10 : Migrate On-Premises Workloads to OCI

- Planning your Data Migration to OCI
- Data Migration - Offline Transport - Data Transfer Service
- Data Migration - Online Transport - Storage Gateway
- Database Migration - Methods and Best Practices
- Database Migration - Migrating to Autonomous Database
- Database Migration - Zero Downtime Migration

11 : Design for Security and Compliance

- IAM- Federation
- Understanding Sign-In Options
- Demo: Federation
- WAF - Concepts and Use Cases
- WAF - Architecture Review

12 : Real-World Architectures

- Reference Architecture 1: Architecture Overview

- Reference Architecture 2: Hub-Spoke Architecture
- Reference Architecture 3: HPC Architecture
- Reference Architecture 4: Security Architecture

13 : What's New in OCI Architect Professional

- Networking: IPv6 - support for Load Balancer
- Networking: Certificates
- Demo: Certificates
- Demo: Certificate Authority - Part 1
- Demo: Certificate Authority - Part 2
- API Gateway: OCI Certificates Integration
- API Gateway: Network Security Groups
- API Gateway: Mutual TLS Support
- API Gateway: Customize Trust Store
- SCH: Dimensions
- OKE: Tagging Cluster Resources
- OKE: User-Managed Keys
- OKE: Custom cloud-init Scripts
- OKE: File Storage for PVCs
- OKE: Capacity Reservations
- OKE: Network Security Groups
- OCI DevOps Overview
- DevOps Components
- OCI DevOps CICD
- Environment
- Oracle ADB-S: Oracle DB APIs for MongoDB
- Oracle ADB-S: Cloning Enhancements
- Oracle ADB-S: IAM Integration
- Oracle ADB-S: Other Enhancements
- Oracle ADB-D: Enhancements
- Oracle ADB-S: Autonomous Data Guard Enhancements