

Oracle Cloud Infrastructure Foundations (2025): Hands-on Workshop

Oracle Cloud Infrastructure

DURATION

1 Days

MODULES

7 Lectures

COURSE CODE

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Course Overview

The Oracle Cloud Infrastructure (OCI) Foundation course is perfect for beginners and IT professionals new to cloud computing. It covers the basics of OCI, including architecture, identity and access management (IAM), and networking. You'll also learn about compute services, container orchestration, serverless functions, storage options, database services, and security features. Moreover, the course offers invaluable insights into cost management strategies, empowering you to optimize your cloud expenditures. Through hands-on exercises, you'll learn setting up of tenancies, manage compute instances, deploy container workloads, and implement basic security measures.

What You Will Learn

Module 01: OCI Introduction

- Overview
- OCI Services
- Complete Cloud Infrastructure Platform
- OCI Cloud Regions
- Powerful Core Infrastructure Services
- Comprehensive Database Services
- Broad Data Management and Data Science Capabilities
- Manage, Secure, and Operate at Scale
- Build and Run Cloud Native Applications and Extend Existing Apps
- Robust Oracle Analytics and Third-Party Support
- Comprehensive Horizontal and Industry SaaS Portfolio
- OCI Architecture
- Distributed Cloud
- Oracle Database@Azure
- Hybrid Cloud
- Dedicated Region
- Hands-on

- Demo: OCI Console Walk-through

Module 02: Identity and Access Management (IAM)

- Overview
- Introduction to OCI IAM
- What is OCI IAM?
- OCI Identity Concepts
- Resource Management
- Resources and How to Identify Them
- Compartments
- Resource Compartments
- Compartment Access
- Interaction of Resources
- Movement of Resources
- Multiple Regions
- Nested Compartments
- Set Quotas and Budgets on Compartments
- Authentication & Authorization
- Principals
- AuthN (Authentication)
- AuthZ (Authorization)
- AuthZ in OCI
- Hands-on
- Demo: Compartments and Identity Domains
- Demo: AuthN
- Demo: AuthZ
- Administration
- Tenancy Setup

Module 03: Networking

- Overview
- Introduction to Networking in OCI
- Virtual Cloud Networks (VCN)
- VCN Address Space
- Hands-on
- Demo: VCN Creation Using Wizard
- Routing
- Route Tables
- Peering
- Dynamic Routing Gateway v2
- Security
- Security Lists
- Network Security Group (NSG)
- Hands-on
- Demo: VCN Basics

- Load Balancing
- Load Balancer Concepts
- Network Load Balancer
- Hands-on
- Demo: Load Balancing

Module 04: Compute

- Overview
- Introduction to Compute Services
- Flexible Shapes and Processor Choices
- Price-Performance and Cost Savings
- Instance Management
- Instance Basics
- Live Migration Between Hosts
- Hands-on
- Demo: Getting Started with Cloud Shell
- Demo: Creating a Compute Instance
- Scaling
- Vertical Scaling
- Autoscaling
- Cloud-Native Compute Services
- OCI Kubernetes Engine (OKE)
- Container Orchestration Overview
- Components of a Cluster
- Cluster Management
- Container Instances Overview
- Oracle Functions (FaaS)

Module 05: Storage

- Overview
- Introduction and Storage Requirements
- OCI Storage Services
- OCI Data Migration Services
- Object Storage
- OCI Object Storage Overview
- Object Storage Scenarios
- Object Storage Resources & Tiers
- Auto-Tiering and Automatic Data Transition
- Versioning and Encryption
- Accessing Stored Data
- Hands-on
- Demo: Object Storage
- Block Volume
- Block Volume Overview and Tiers
- Encrypted Volumes

- Read/Write Shareable
- Resize and Replication Across Regions
- Volume Groups
- Hands-on
- Demo: Block Volume
- File Storage
- File Storage Overview and Use Cases
- OCI File Storage Service

Module 06: Security

- Overview
- Introduction and Shared Security Model
- Security Services
- Cloud Guard
- Scenario: Public Bucket
- Security Zones and Security Advisor
- Hands-on
- Demo: Security Zone and Security Advisor
- Data Protection
- Encryption Basics
- Hardware Security Module (HSM)
- Vault
- OCI Vault Overview
- Keys and Vault Management
- Hands-on
- Demo: Vault

Module 07: Governance and Administration

- Cost Management
- Pricing and Pricing Models
- Factors That Impact Pricing
- Data Transfer Costs
- OCI Budgets
- Cost Analysis and Usage Reports
- Service Limits and Usage
- Compartment Quotas
- Hands-on
- Demo: Cost Management
- Demo: Cloud Advisor
- Resource Organization
- Tagging and Tag Namespaces
- Support
- Oracle Support Rewards
- Overview
- Earning Oracle Support Rewards