S Oracle Cloud Infrastructure Migration Architect Professional (2025) ELS

Oracle Cloud Infrastructure

DURATION	MODULES	COURSE CODE
3 Days	**12 Lectures**	**—**

Course Overview

After completing this course, you should be able to: Plan and execute workload migrations from on-premises environments to Oracle Cloud Infrastructure (OCI). Design and configure OCI networking to ensure secure, high-performance connectivity for migration scenarios. Migrate workloads from on-premises to OCI and Oracle Cloud VMware Solution (OCVS). Move containerized applications to OCI Container Engine for Kubernetes (OKE). Transfer workloads between OCI regions. Migrate Oracle databases to OCI using best practices to ensure high availability, security, and seamless integration.

What You Will Learn

Module 1: Cloud Migration Fundamentals

- Migration Fundamentals
- Business Drivers
- Technical Drivers
- Cloud Migration Strategies
- Migration Workflow
- Defining the Business Case
- Core of Migrations
- Migration Phases
- Migration Scenarios
- On-Premises Deployments Overview
- Application Summary

Module 2: Virtualization and Source Discovery

- Hypervisor Layer: VMware vSphere
- Virtual Resources and Attributes
- VMware Virtual Switching
- Network Virtualization

- Storage Types: External NAS/SAN, Hyperconverged vSAN
- Understanding Source Discovery
- Discovery Methods
- Assessment Types & Goals
- Application Assessments
- Infrastructure Details
- Operational Assessment
- Compute Assessments: Physical to Virtual
- Storage and Data Assessment
- Storage Types Recap
- Assessment Factors
- Network Assessment
- Security & Compliance Assessments
- Security Assessment Factors
- Compliance Assessment
- Other Assessments

Module 3: OCI Networking and Cloud Connectivity

- Virtual Cloud Network (VCN) Basics
- Allowed Sizes and Address Ranges
- Routing & Route Tables
- Security: Network Security Groups (NSG), Security Lists
- Load Balancer Concepts & Shapes
- Content-Based Routing: Host & Path Based
- VCN Connectivity Options
- Local Peering vs Remote Peering
- Connecting On-Premises to OCI
- Site-to-Site VPN: Overview, Use Cases, Tunnel Modes
- FastConnect Overview & Setup
- Networking Considerations for Migration
- Bring Your Own IP (BYOIP)
- DNS

Module 4: Migrating Workloads to OCI

- Introduction to Oracle Cloud Migrations
- Key Concepts & Terminologies
- Assets
- Oracle Cloud Migrations Phases
- Discovery and Inventory
- Oracle Cloud Bridge
- Prerequisites for OCB
- Source Environment & Agents
- Discovery with Asset Source & Inventory
- Migration Projects
- Migration Assets & Plans

- Replicate and Launch
- Replication Process
- Launch Process
- Migrations Flow & Architecture
- Service Architecture & Components
- Migration End-to-End Process

Module 5: Migrating AWS Workloads to OCI

- AWS Migration Introduction
- OCM Migrations Workflow
- Migration Readiness
- AWS Source Environment & IAM Policies
- OCI Prerequisites
- Managing Assets: Discovery, Inventory, Launch & Validation
- Migration Final Steps: Planning & Execution

Module 6: Migrating to Oracle Cloud VMware Solution (OCVS)

- Introduction to OCVS
- Partnership & SDDC Overview
- Product Overview & Use Cases
- Key Benefits of OCVS
- Core Aspects and Values
- SDDC Products Overview
- vSphere, vSAN, NSX-T
- Storage Options, Compute Shapes, Multi-Clusters
- SDDC Deployment
- Determine Target Environment
- VLANs & HA Deployment
- Connecting On-Premises and OCVS
- Hybrid Cloud Extension (HCX)
- Overview, Components, MON
- License Editions & Features
- Configuration: Network & Compute Profiles
- Migration Types & Benefits

Module 7: Migrating Containers to OCI

- Introduction to Containerization
- Benefits & Comparison to Virtualization
- Oracle Cloud Infrastructure Registry (OCIR)
- Concepts and Terminology
- Container Engine for Kubernetes (OKE)
- Overview & Components
- Cluster Types: Basic & Enhanced
- Supported & Unsupported Features

- Creating Clusters
- Serverless Kubernetes with Virtual Nodes
- Managed & Virtual Nodes Overview
- Navigating Migration to OKE Cluster
- Evaluation, Planning, Implementation, Optimization

Module 8: Cross-Region & Cross-AD Workloads

- Object Storage Replication
- Benefits, Policies, Limitations
- Block Volume: Cross-Region & Cross-AD Replication
- Enabling Replication
- Block Volume Backups & Clones
- Backup vs Clone Operations
- File System Cloning Concepts
- Full Stack Disaster Recovery (FSDR)
- Supported Resources & Concepts

Module 9: Data Transfer to OCI

- Data Transfer Service
- Offline & Online Migration
- Types of Transfers
- Petabyte Scale Offline Data Transport Service
- Disk-Based Data Transfer: Concepts, Import
- Appliance-Based Data Transfer: Export & Import
- How Data Transfer Works

Module 10: Oracle Database Migration to OCI

- Database Migration Overview
- Factors Influencing Migration
- Oracle DB Migration Recommendations
- Database Targets in OCI
- Autonomous Database, Exadata, Base Database
- Deployment Options (Public Cloud vs Customer Data Center)
- Choosing DB Targets & Deployment Options
- Migration Types, Modes, and Methods
- Migrating Oracle Data Sources to OCI DB Services
- Migrating Non-Oracle Data Sources to OCI DB Services

Module 11: Migration Tools and Advisors

- Migration Advisors Overview
- OCI Database Service Advisor
- Oracle Migration Methods Advisor
- Cloud Premigration Advisor Tool (CPAT)
- Cloud Migration Advisor Tool & Workflow

- Oracle Estate Explorer Tool

Module 12: Oracle Database Migration Methods

- RMAN Migration Method
- Options & Process
- Data Pump Migration Method
- Utility, Transportable Tablespaces, Full Transportable
- Remote Cloning Migration Method
- Unplug and Plug Migration Method
- Source PDB to OCI DB Service
- Non-CDB to OCI DB Service
- UI-Based Tools
- Enterprise Manager Migration Workbench & Workflow
- Data Guard Migration Method
- Oracle Golden Gate Migration Method
- Zero-Downtime Migration Method
- Overview, Support Matrix, Workflow
- OCI Database Migration Service Overview