Oracle Database Cloud for DBAs on Oracle Cloud Infrastructure

This is a great starting point to learn everything you need to know about user-managed Oracle Database Cloud Service. It's ideal for DBAs and Data Management Professionals who want to learn how to deploy and administer an Oracle Database in the cloud.

Learn To

Oracle Database Cloud Service offers autonomous and user-managed Oracle Database solutions. User-managed solutions are Bare Metal, Virtual Machine, and Exadata DB systems that you can customize with the resources and settings that meet your needs.

This training is your first step in getting started with Virtual Machine and Bare Metal DB Systems. You also get to learn the essential skills required for a DBA to create and manage Oracle Cloud Infrastructure resources such as network and storage.

This course is ideal for DBAs and Data Management Professionals who are looking to enhance their cloud database administration skills. Taking this hands-on training will prepare DBAs for Cloud DBA certification exams.

Learn To:

- Describe Oracle Cloud Platform for Database in the Cloud
- Understand key terms such as Regions, Availability Domains, VCN, Shapes
- Identify the features of Virtual Machine (VM) DB Systems
- Identify the features of Bare Metal (BM) DB Systems
- Create Virtual Cloud Network (VCN) for DB System
- Describe the steps involved in creating and managing VM & BM DB Systems
- Connect to a DB System on OCI
- Update, Configure, and Patch DB Systems
- Monitor a Database on OCI
- Backup and Recover a Database on OCI
- Identify OCI Security Features
- Identify the process involved in migrating a database to OCI

Prerequisites

Audience

- Administrator
- Cloud Administrator
- Database Administrator

Course Objectives

- Describe what Oracle Cloud Platform has to offer for database deployments in the cloud
- Identify the building blocks of Oracle Cloud Infrastructure (OCI)
- Describe the essentials of Oracle Cloud Infrastructure
- Get familiar with OCI terminology such as tenant, region, availability domain, shapes
- Describe the steps involved in launching Bare Metal and Virtual Machine DB Systems
- Create and manage a Virtual Machine (VM) DB System

- Describe the administrative tasks involved in managing a VM DB System
- Explain how security in implemented in each layer of Oracle Cloud Infrastructure
- Describe what you can do to secure your DB system
- Get an overview of migrating database to Oracle Cloud Infrastructure

Course Topics

Oracle Cloud Platform for Database in the Cloud

- Oracle Database Cloud Services
- Journey to Autonomous Database
- Subscribe to an Oracle Cloud Service

Getting Started with Oracle Cloud Infrastructure

- Regions, Availability Domains, and Backbone Network
- Comprehensive Virtual Network with Off-box Virtualization
- Oracle Cloud Infrastructure Services

Oracle Cloud Infrastructure Essentials

- Virtual Cloud Network (VCN) Service
- Compute Service & Shapes
- Object Storage Service & Block Volume Service
- Load Balancing Service
- DNS Service

Oracle Cloud Infrastructure: Database Service

- Virtual Machine DB Systems
- Bare Metal DB Systems
- Exadata DB Systems

Bare Metal and Virtual Machine DB Systems

- Compute
- Shapes
- Storage Options
- DB Systems Storage Architecture

Creating and Managing Bare Metal and Virtual Machine DB Systems

- Prerequisites to Launch DB System
- Creating Virtual Cloud Network (VCN) for DB System
- Using the Console to Launch DB System
- Using Console to Start, Stop, Reboot, and Terminate DB System
- Using the Console to Manage BYOL Database Licenses
- Using the API Operations & Setting Up DNS for a DB System

Connecting to a DB System on OCI

- Create TNS Entry for PDBs
- Connecting to a DB System with SSH
- Connecting to a Database with Oracle SQL Developer

- Connecting to a Database on 1-Node & Multi-Node DB System

Updating and Configuring a DB System on OCI

- Update a DB System
- Important Guidelines for OS Updates
- Configure a DB System
- Transparent Data Encryption
- Scaling CPU & Storage

Patching a DB System on OCI

- Performing Patch Operations on DB System & on Database Using Console
- Viewing Patch History of a DB System & of a Database
- Performing Patching Using CLI
- Check the Installed Patches & Patch Server Components
- Patch Database Home Components
- Applying Interim Patches
- Identify the Root Cause of the Patching Operation Failure

Configuring and Monitoring a Database on OCI

- Monitoring a Database
- Opening Ports on the DB System
- Updating the Security List for the DB System
- Special Considerations to Create and Configure a New PDB
- Creating and Activating a Master Encryption Key for a New PDB

Backing Up and Recovering a Database on OCI

- Object Storage, Local Storage & Swift Object Storage
- Backing Up to Oracle Cloud Infrastructure Object Storage Using Console & RMAN
- Enable or Disable Automatic Backups for a Database
- Create an On-Demand Full Backup of a Database & Delete a Full Backup from Object Storage
- Installing the Backup Module on the DB System & Configuring RMAN
- Backing Up to Local Storage Using the Database CLI
- Recovering a Database Using Console, RMAN & from a CLI Backup
- Recovering a Database from the Oracle Cloud Infrastructure Classic Object Store

Oracle Cloud Infrastructure Security

- Identity and Access Management Service
- Principals, Authentication, Authorization
- User Authentication
- Instance Isolation
- Network Security
- User Authorization: OCI IAM
- Data Encryption

Migrating Oracle Databases to OCI: Overview

- Considerations for Choosing a Migration Method
- Information Gathering, Analysis and Planning
- Data Transfer Options (Online and Sync, Offline)

- Security Considerations
- Migration Options