

## Oracle Database Cloud for Oracle DBAs Ed 3

**Duration:** 3 Days

### What you will learn

Note: No hands-on lab environment for the Training On Demand course format This Oracle Database Cloud for Oracle DBAs training teaches you how to administer the Oracle Database Cloud Service. It's ideal for existing DBAs who want to learn how to administer Oracle Database in the cloud.

**Learn To:**

- Sign in to Oracle Database Cloud Service.
- Deploy an Oracle Database 12c Release 2 environment.
- Manage different areas of database administration such as storage, backups, recovery, security, performance and monitoring through the Oracle Database Cloud Service consoles and Cloud tooling.
- Create, delete, stop, restart, patch and upgrade a database deployment.
- Monitor the database deployment by using the DBaaS Monitor utility.
- Manage users at all levels (Oracle Cloud Service, compute node and database).

### Benefits to You

You will benefit from interactive instruction that covers these three areas: Database Deployment Expert Oracle University instructors will provide an overview of what the Oracle Public Cloud offers in terms of services. Learn how to sign in to an Oracle Public Cloud account, create a database deployment and learn how to delete, stop, restart, patch and upgrade a database deployment. Furthermore, you'll develop the knowledge and skills to add storage for the database deployment, containers, and perform on-demand backup and recovery operations. Instructors will deep-dive into security information, which includes configuring network access rules from tools and other database deployments, managing database deployment security at the compute node and the database levels, managing encryption of data at rest and in transit, and auditing the operations performed on the database deployment. You will also get an overview of various migration methods available for migrating Oracle Database to Oracle Cloud. Finally, you'll learn what can be tuned in a database deployment, along with how to use the DBaaS Monitor. Instructors will focus on the Waits, Sessions, and Alerts section, as well as how to access Enterprise Manager Database Express and use the Performance Hub and Tuning Advisor. You'll also walk away with the ability to scale the database deployment to get more CPU and RAM resources. Ideal for DBAs This course is ideal for existing DBAs who are looking to enhance their skills to become cloud DBAs. Taking this hands-on training will prepare DBAs for Cloud DBA certification exams.

### Audience

- Cloud Administrator
- Cloud Architect
- Cloud Data Architects
- Cloud Database Administrators

Cloud Technical Consultants  
Cloud User  
Database Administrators  
Security Administrators

## Related Training

### *Required Prerequisites*

Experience in Oracle Database 11g and / or 12c Administration

Oracle Database 12c R2: Administration Workshop Ed 3

### *Suggested Prerequisites*

Oracle Database 12c R2: Managing Multitenant Architecture Ed 2

## Course Objectives

Audit operations performed on the database deployment

Access Enterprise Manager Database Express

Add storage for the database deployment

Configure network security rules

Tune a database deployment by using DBaaS Monitor utility

Use the Oracle Cloud services consoles

Create and manage a database deployment

Grant privileges and roles to users at all levels, Oracle Cloud Service, compute node and database

Manage encryption of data at rest and in transit

Manage database deployment security access at the compute node and the database

Describe various migration methods

Monitor the database deployment by using the DBaaS Monitor utility

Perform on-demand backups and recovery of the database deployment

Scale the database deployment to get more CPU and RAM resources

## Course Topics

### **Overview of Cloud Services**

Cloud Services

Oracle Database Cloud Offerings

Subscribe to an Oracle Cloud Service

### **Creating a Database Deployment**

Comparing a Database Deployment and a Database Instance

Database Cloud Service Architecture

Features and Tooling

Automated Database Provisioning

Comparison: Database Deployment and an On-Premises Database

Using the Wizard to Create a Database Deployment

How SSH Key Pairs are Used & Creating an SSH Key Pair

Storage Used for Database Files & File System Layout

### **Administering a Database Deployment**

Using the Oracle Cloud My Services Dashboard

Viewing the Service Details & Using the Database Cloud Service Console

Configuring Connections to the Compute Node

Oracle Cloud User Roles and Privileges & Administering Users, Roles, and Privileges

Managing Compute Node Users

Managing Database Users and Privileges

Scaling a Database Deployment

Patching & Upgrading a Database Deployment

### **Backing Up and Recovering**

Backing Up and Recovering Database Deployments

Using Utilities to Back Up and Recover the Database Deployment

Choosing a Backup Destination & Default Backup Configuration

Creating an On-Demand Backup

Changing the Backup Destination

Customizing the Backup Configuration

Performing Recovery by Using the Console

Performing Recovery by Using the dbaascli Utility

### **Use Case: Create a Database Deployment by Using a Production Database Backup**

### **Overview of Oracle Cloud Security**

Cloud Security Guidelines

Enforcing Security in a Database Deployment

Physical and Operating System Security of the Compute Node

User Authentication: Services and Compute Node Access

User Authentication: Database Access

### **Configuring Network Access to a Database Deployment**

Describing Network Access to the Compute Node and Database

Creating Security Lists & Configuring Connections to the Compute Node

Implementing Fine-Grained Control of Network Traffic

Controlling Network Traffic & Network Security

Defining Security Rules

Accessing the Database Using Various Tools

### **Using Oracle DBaaS Monitor**

- Managing the Database
- Monitoring the Database
- Managing and Monitoring the Listener
- Monitoring the Operating System

### **Implementing Database Deployment Security**

- Secure Access to Configuration Files on the Compute Node
- Backing Up Operating System and Database Configuration Files
- Restricting Access to the Database
- Protecting Data in the Database Deployment
- Tablespace Encryption by Default
- Transparent Data Encryption (TDE): Overview
- Auditing: Compute Node Connections and Actions
- Auditing: Database

### **Use Case: Configure Network Isolation**

### **Overview of Migrating to Oracle Database Cloud Service**

- Choosing a Migration Method: Considerations
- Choosing a Migration Method: Information Gathering
- Choosing a Method: Oracle Data Pump Considerations
- Choosing a Method: Unplug/Plug and Remote Cloning Considerations
- Choosing a Method: RMAN, SQL\*Loader, and GoldenGate Considerations
- Applicable Migration Methods

### **Using SQL Developer to Migrate**

- Overview of Using SQL Developer
- Using SQL Developer and INSERT Statements to Migrate Selected Objects
- Using SQL Developer and SQL\*Loader to Migrate Selected Objects

### **Use Case: Automated Patching of Database Cloud Service**

### **Overview of DBCS Performance Management**

- Performance Management in the Database Cloud Environment
- Performance Monitoring and Tuning
- Tuning Methodology
- Effective Tuning Goals
- General Tuning Session
- What Can be Tuned in a DBCS Environment?

### **Tuning Performance Issues**

- Tools for Performance Management
- DBaaS Monitor: Database Information & Operating System Information
- Identifying Performance Issues by Using the DBaaS Monitor
- Using the Enterprise Manager Database Express Performance Hub
- Identifying Performance Issues by Using Enterprise Manager Database Express
- Identifying Performance Issues by Using SQL Developer
- Using ADDM to Diagnose Performance Issues
- Using the SQL Tuning Advisor

### **Performance Management**

- Database Deployment Scaling: Overview

Database Resource Manager

Using Resource Manager to Control PDB Resource Usage

Controlling Resource Usage by Consumer Groups

Determining When to Scale Up the Database Deployment

Scaling Up CPU and Memory

### **Using REST APIs to Manage Oracle Database Cloud Service**

What is Oracle REST Data Services (ORDS)?

Key Principles of Representational State Transfer (REST)

What Does ORDS Do?

ORDS and Database Cloud Service

Using REST APIs in Oracle Cloud

Using REST APIs with Database Cloud Service

Using cURL and REST APIs

Reference: REST API HTTP Status Codes

### **Deleting a Database Deployment**

What Happens When You Delete a Database Deployment?

How Can You Delete a Database Deployment?

### **Use Case: Creating a Cloned Database Deployment from a Snapshot**