



## Administration Exadata Cloud at Customer

### Description

**Prix :** Nous consulter

**Durée :** 3 jours

**Code de Référence :** D106559

Catalogue IT Infrastructure

Oracle Database Exadata Cloud at Customer combines cloud simplicity, agility, and elasticity with deployment inside your data center to provide full-featured Oracle Databases hosted on Oracle Exadata Database Machine. This training is your first step towards managing Oracle Cloud services from your data center. Learn the key features of Oracle Cloud at Customer and Exadata Cloud at Customer, the roles and responsibilities, and be prepared for the delivery and initial setup of Oracle Exadata Cloud at Customer at your data center. Get started by deploying an Oracle Database Cloud Service instance and migrate your On-Premises database to cloud.

### Objectifs de la formation

A l'issue de cette formation Oracle Exadata Cloud at Customer, vous serez capable de :

- Identify the components of Oracle Exadata Cloud at Customer
- Identify data center requirements for Oracle Cloud at Customer installation
- Create an Exadata Cloud at Customer Instance and a Database Deployment
- Administer a Database Deployment
- Administer an Exadata Cloud at Customer instance
- Monitor and Troubleshoot an Exadata Cloud at Customer Instance
- Back Up Database Deployments on Exadata Cloud at Customer
- Perform database migration using Oracle Data Pump and RMAN

### Public

Cette formation Oracle Exadata Cloud at Customer s'adresse aux administrateurs



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database, administrateurs cloud, architectes cloud, administrateurs.

## Prérequis

Compréhension de l'anglais et du vocabulaire anglais spécifique IT.

## Programme de la formation

### Introduction to Oracle Cloud at Customer

- Constraints that Prevent Consumption of Public Cloud
- The Oracle Cloud at Customer Solution
- What Is Oracle Cloud at Customer?
- Oracle Cloud at Customer | Architecture Overview

### Getting Started with Oracle Cloud at Customer

- Oracle Cloud at Customer Account
- Available Subscription Models
- Minimum Configurations
- Scaling
- Data Center Physical Requirements
- Data Center Network Requirements
- Preparing for an Oracle Cloud at Customer Delivery
- Oracle Cloud at Customer Deployment Guide
- Initial Configuration and Setup
- Day-to-Day Systems Management
- Remote Gateway
- Who Manages What?
- Universal Platform
- Same User Experience
- Oracle Cloud Account Management
- Oracle Cloud at Customer | Secure Access

### Oracle Exadata Cloud at Customer Overview

- Exadata Overview
- Best Infrastructure for a Database Platform
- Exadata Advantages Increase Every Year



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- Exadata Deployment Model
  - Exadata Cloud at Customer
  - Service Details
  - ExaCC Services Included in Subscription
  - Delivery Process
  - Exadata Cloud at Customer | Deployment Architecture
  - Exadata Cloud at Customer Technical Architecture
  - Specifications: ExaCC X7
  - Service Architecture for Quarter Rack
  - DomU and RAM Capacity in X7 Quarter Rack
  - Storage Capacity in X7 Quarter Rack
  - Exadata Cloud at Customer Deployment: A Large Travel Agency
  - Exadata Cloud at Customer Deployment: Large Financial Institution

## **Oracle Exadata Cloud at Customer : Features**

- Maximum Availability Architecture (MAA)
- Configure Servers to Match Your Workload
- Management and Maintenance
- Most Powerful Database + Platform
- Accelerates Analytics
- Delivers OLTP in Real Time
- Optimizes Mixed Workloads
- Automates and Simplifies Administration
- In-Memory Columnar Caching on Storage Servers
- In-Memory OLTP and Consolidation Acceleration
- Faster Performance for Large Analytic Queries and Large Loads
- Columnar Flash Cache for Encrypted Tablespace
- Rescue Plan
- Automated Cloud Scale Software Updates
- Efficient Rebalance and Restore
- Infrastructure Improvements
- Authentication and Access
- Sizing for Cloud
- Production (Prod) Workload Sizing
- Disaster Recovery (DR) and Development and Test (Dev/Test) Sizing
- Online Scale-up Through Compute Bursting
- Database Backup Options



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- Oracle Cloud Control Plane

## Revisiting Course Scenario

- Exadata Cloud at Customer Review
- Exadata Cloud at Customer Key Benefits

## Getting Started with Exadata Cloud at Customer

- Service Operation
- Roles and Responsibilities in the Cloud
- Administrative Roles in the Cloud
- Cloud Administrator Roles
- Oracle Cloud Administration Tools
- Administration Tool : My Services
- Administration Tool : REST APIs
- Administration Tool : CLI
- Administration Tool : Cloud Monitoring API
- Administration Tool : Oracle Management Cloud
- User and Group Management
- Accessing the My Services Dashboard
- Reviewing the My Services Dashboard
- Object Storage on Oracle Cloud
- Overview of Object Storage
- Ways to Access Object Storage
- How Does Object Storage Work ?
- Object Storage Elements
- Exadata Storage Configuration

## Creating an Exadata Cloud at Customer Instance and a Database Deployment

- Exadata Cloud at Customer Deployment : Overview
- My Services Dashboard : Create Instance
- Accessing the Wizard to Create an Exadata Cloud at Customer Instance
- Creating an Exadata Cloud at Customer Instance
- Database Server Processor Configuration
- Exadata Storage Configuration : Options
- My Services Dashboard : Service Instance Details
- Exadata Storage Configuration : Space Allocation
- Accessing the Wizard to Create a Database Deployment



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- Creating an SSH Key Pair
  - Creating a Database Deployment: Primary Configuration Attributes
  - Creating a Database Deployment: Database Configuration
  - Creating a Database Deployment: Backup and Recovery Configuration
  - Creating a Database Deployment: Initialize Data from Backup
  - Creating a Database Deployment: Confirmation
  - DB Node Subsetting
  - Shareable Oracle Home
  - Oracle Database Cloud Service Console: Overview
  - Oracle Database Cloud Service Console: Database Details
  - Oracle Database Cloud Service Console: Database Administration
  - Using I/O Resource Manager (IORM) With Exadata Service

## **Administering a Database Deployment**

- Connecting to Exadata Cloud at Customer by Using SSH
- Adding an SSH Key
- Connecting by Using the ssh Command
- Connecting by Using the PuTTY Utility
- Removing an SSH Key
- Connecting to Exadata Cloud at Customer by Using Oracle Net
- Using Oracle Net Native Encryption and Integrity
- Verifying Oracle Net Native Encryption and Integrity
- Controlling Network Access to Exadata Cloud at Customer
- Defining a Custom Host Name or Domain Name for Exadata Cloud at Customer
- Defining a Custom SCAN Host Name for Exadata Cloud at Customer
- Exadata Cloud at Customer Database Snapshots : Overview
- Snapshot Masters
- Creating a Snapshot Master
- Snapshot Clones
- Creating a Snapshot Clone
- Listing Clones from a Snapshot Master
- Deleting Snapshot Clones and Snapshot Masters
- Managing the TDE Keystore
- Rotating the Master Encryption Key
- Creating a Master Encryption Key for a PDB
- Exporting and Importing a Master Encryption Key for a PDB



## **Administering an Exadata Cloud at Customer Instance**

- Scaling an Exadata Cloud at Customer Instance : Overview
- Scaling Within an Exadata System : Options
- Scaling Within an Exadata System : Bursting
- Stopping, Starting, and Restarting the Database Servers
- Patching and Updates : Overview and Responsibilities
- Patching and Updates Performed by Oracle
- Patching the Database Server DomU Operating System
- Using the Self-Service Web Interface for Patching
- Using the exadbcpatchmulti Utility for Patching
- Manually Patching Oracle Database and Grid Infrastructure Software
- Updating Cloud Tooling on Exadata Cloud at Customer
- VM Cluster Management and Multiple VM Clusters
- OCPU Oversubscription
- Enable Oversubscription with a Check Box Service Creation
- Cloud Automation for Active Data Guard

## **Revisiting Course Scenario**

- Managing Exadata Cloud at Customer Review
- Managing Exadata Cloud at Customer Key Benefits

## **Monitoring and Troubleshooting Exadata Cloud at Customer**

- System Monitoring and User-Space Monitoring
- About System Monitoring
- About User-Space Monitoring
- Monitoring Resources
- Using Enterprise Manager Cloud Control
- Enterprise Manager Cloud Control (EMCC)
- Using Enterprise Manager: Database Express or Database Control
- Setting Up Enterprise Manager Cloud Control
- Monitoring and Managing Exadata Storage Servers on Exadata Cloud at Customer
- Managing the Log and Diagnostic Files on Exadata Cloud at Customer
- Considerations for Exadata Cloud at Customer Logs
- Types of Cloud at Customer Logs
- Troubleshooting on Exadata Cloud at Customer



## **REST API for Oracle Database Exadata Cloud at Customer**

- What Is REST?
- How Do I Use REST on the Web?
- Practical REST
- Can I Use REST from the Command Line?
- Exchanging Data with REST
- XML Versus JSON in Web Services
- What Is JSON?
- JSON: Overview
- JavaScript Literals in JSON
- What Do I Need to Know to Use REST?
- HTTP Methods
- Accessing the Exadata Cloud at Customer REST Endpoints
- Supported Methods
- Security, Authentication, and Authorization
- Status Codes
- cURL Examples
- REST API for Oracle Database Exadata Cloud at Customer : Examples

## **Backing Up Database Deployments on Exadata Cloud at Customer**

- Database Backup Options with ExaCC
- Automatic Database Backup: Default Configuration
- Local Backup Option with ExaCC
- Recovery Appliance (ZDLRA) Backup Option with ExaCC
- ExaCC Backup & Recovery Configuration: Recovery Appliance
- Object Storage Backup Option with ExaCC
- ExaCC Backup & Recovery Configuration : Object Storage
- Using the Self-Service Web Interface for Backup and Recovery
- Using the bkup\_api Utility for Backup and Recovery
- Backing Up Customer OS
- Customizing Which System Files Are Backed Up
- Customizing Database Configuration Files to be Backed Up
- Instantiating from Backup: Overview
- Creating a New Database by Using Instantiate from Backup
- Replacing an Existing Database by Using Instantiate from Backup
- Restoring from the Most Recent Backup



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- Restoring from the Most Recent Backup by Using the bkup\_api Utility
  - Restoring from a Specific Backup
  - Restoring from a Specific Backup by Using the bkup\_api Utility
  - Restoring from a Specific Backup
  - Restoring to a Specific Point in Time
  - Restoring to a Specific Point in Time by Using the bkup\_api Utility
  - Restoring to a Specific Point in Time

## Revisiting Course Scenario

- Backing Up and Restoring Databases on Exadata Cloud at Customer

## Migrating Oracle Database to Exadata Cloud at Customer

- Why Migrate to Exadata Cloud at Customer?
- What to Migrate to EXACC
- Considerations for Choosing a Migration Method
- Information Gathering
- Migration Methods: Overview
- Migration Life Cycle of a Target EXACC Database
- Migration Life Cycle of a Target EXACC Database : Discovery Phase
- Migration Life Cycle of a Target EXACC Database : Analysis Phase
- Migration Life Cycle of a Target EXACC Database : Planning Phase
- Migration Life Cycle of a Target EXACC Database : Migration Phase
- Migration Life Cycle of a Target EXACC Database: Validation Phase
- Migration Prerequisites: Source Steps – Preparing the On-Premises Database
- Migration Prerequisites: Target Steps – Preparing the EXACC Database
- Migration Strategy: Selection Criteria
- Choosing a Method: Oracle Data Pump
- Choosing a Method: Unplug/Plug and Remote Cloning
- Choosing a Method: RMAN, SQL\*Loader, and GoldenGate

## Migrating an On-Premises Database Using SQL Developer & Data Pump

- Oracle SQL Developer: Overview
- SQL Developer Offerings for Migration
- Migrating by Using SQL Developer
- Migrating Objects by Using SQL Developer
- Migrating Selected Objects by Using SQL Developer INSERT Statements





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- Migrating Selected Objects by Using SQL Developer and SQL\*Loader
  - Migrating PL/SQL Objects
  - Post-Migration Verification Checklist
  - Oracle Data Pump : Overview
  - Oracle Data Pump : Key Features
  - How Does Data Pump Load and Unload Table Row Data?
  - Direct Path Loads and Unloads
  - External Tables
  - Data Pump Migration Compatibility
  - Data Pump Export and Import Modes
  - Migrating an On-Premises 11g to 11g or 12c CDB: Conventional Mode
  - Migrating an On-Premises 11g or 12c Non-CDB to 12c PDB : Conventional Mode
  - Migrating an On-Premises 12c PDB to 12c PDB: Conventional Mode – Part 1
  - Migrating an On-Premises 12c PDB to 12c PDB: Conventional Mode – Part 2
  - Transportable Tablespace (TTS) Mode
  - Full Transportable Mode
  - NETWORK\_LINK Mode: Part 1
  - NETWORK\_LINK Mode: Part 2
  - Special Considerations
  - Post-Migration Verification Checklist

## **Migrating an On-Premises Database by Using Recovery Manager (RMAN)**

- Recovery Manager (RMAN) : Overview
- Transportable Tablespaces
- Transportable Tablespace Sets
- Transportable Database
- RMAN Migration Methods to EXACC and Version Compatibility
- RMAN Backup and Restore/Recover
- Cross-Platform Tablespace Transport
- Tablespace Transport by Using RMAN CONVERT
- Cross-Platform PDB Transport
- Post-Migration Verification Checklist
- Use Case : Migrating a 12c On-Premises Database to EXACC by Using RMAN Cross-Platform Transportable Tablespace
- Cross-Platform Transportable Tablespace to a Different Endian Platform with RMAN Backup Sets
- Migrating by Using RMAN Cross-Platform Transportable Tablespace :



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### Prerequisites

- Migrating by Using RMAN Cross-Platform Transportable Tablespace : Tasks

## Advanced Migration Using Data Guard & Golden Gate

- Near-Zero Down Time Migration by Using Data Guard (Physical Standby) : Setup
- Near-Zero Down Time Migration by Using Data Guard (Physical Standby) : Post Cutover
- Migrating to EXACC database by Using Data Guard (Physical Standby)
- Data Guard Migration Steps
- Migrating to EXACC Database by Using Data Guard (Physical Standby)
- Migration Best Practices
- Using GoldenGate Cloud Service with Exadata Cloud at Customer

## Concluding Course Scenario

- Migrating Your Oracle Database to Exadata Cloud at Customer

## Méthodes pédagogiques

Alternance d'apports théoriques et d'exercices avec un vaste choix d'exercices pratiques et de scénarios d'atelier permettent de mettre en œuvre les connaissances acquises.

La dernière version du support en anglais est accessible en ligne. Vous aurez à votre disposition un accès contenant tous les matériels de cours de votre formation, ainsi qu'un accès à 5 h de visionnage d'une autre formation de votre choix dans la même thématique. L'ensemble sera disponible pendant 90 jours.

## Méthodes d'évaluation des acquis

Afin d'évaluer l'acquisition de vos connaissances et compétences, il vous sera envoyé un formulaire d'auto-évaluation, qui sera à compléter en amont et à l'issue de la formation. Un certificat de réalisation de fin de formation est remis au stagiaire lui permettant de faire valoir le suivi de la formation.