

# ODAT-16 - ORACLE DATABASE 19C: DATA GUARD ADMINISTRATION WORKSHOP

Categoria: Database

#### INFORMAZIONI SUL CORSO











Durata: 5 Giorni

Categoria: Database Qualifica Istruttore:
Oracle Certified
Professional

Dedicato a: Professionista IT Produttore: Oracle

#### **OBIETTIVI**

- -Utilizzare Data Guard per ottenere un database Oracle ad alta disponibilità
- -Utilizzare Data Guard database di standby per supportare funzioni di produzione come la presentazione, l'interrogazione, le prove, e backup spettacolo
- -Creare e gestire database fisici e logici standby
- -Utilizzare Enterprise Manager Cloud Control e l'interfaccia a riga di comando Data Guard (DGMGRL) per mantenere una configurazione Data Guard

## **PREREQUISITI**

## Prerequisiti richiesti:

- -Oracle Database Administration
- -Fondamenti del sistema operativo Linux

#### Prerequisiti consigliati:

-Comprensione di base di PL / SQL e trigger

## **CONTENUTI**

#### 1: Introduction to Oracle Data Guard

- -Introduction to Oracle Data Guard
- -Oracle Data Guard: Architecture (Overview)
- -Demo
- -Practice 1-1: Discovering the Practice Environment
- -Introduction to Oracle Data Guard (Score 80% or higher to pass)

#### 2: Oracle Net Services in a Data Guard Environment

- -Oracle Net Services in a Data Guard Environment
- -Demo
- -Practice 2-1: Configuring the tnsnames.ora File
- -Practice 2-2: Configuring the listener.ora File



-Oracle Net Services in a Data Guard Environment (Score 80% or higher to pass)

## 3: Creating a Physical Standby Database by Using SQL and RMAN Commands

- -Creating a Physical Standby Database by Using SQL and RMAN Commands
- -Combinations for VALID FOR
- -Example: Setting Initialization Parameters on the Primary Database
- -Creating a Physical Standby Database by Using Enterprise Manager
- -Practice 3-1: Prepare the Primary Database to Support Data Guard
- -Practice 3-2: Prepare Host and Create Physical Standby Database
- -Practice 3-3: Start Redo Transport and Verify Operation
- -Creating a Physical Standby Database by Using SQL and RMAN Commands (Score 80% or higher to pass)

## 4: Managing Physical Standby Files After Structural Changes on the Primary Database

- -Managing Physical Standby Files After Structural Changes on the Primary Database
- -Scenario 6: Resetting the TDE Master Encryption Key
- -Practice 4-1: Refreshing the Password File
- -Practice 4-2: Controlling PDB Replication
- -Practice 4-3: Automating Instantiation of a PDB
- -Managing Physical Standby Files After Structural Changes on the Primary Database (Score 80% or higher to pass)

#### 5: Using Oracle Active Data Guard: Supported Workloads in Read-Only Standby

- -Using Oracle Active Data Guard: Supported Workloads in Read-Only Standby
- -Creating an AFTER LOGON Trigger for Synchronization
- -DDL on Global Temporary Tables
- -DML Operations on Active Data Guard Standby Databases
- -Practice 5-1: Enable Active Data Guard Real-Time Query
- -Practice 5-2: Performing DDL/DML on Global Temporary Table
- -Practice 5-3: Managing Private Temporary Table for DDL/DML
- -Practice 5-4: Configuring Automatic Redirection of DML operations
- -Using Oracle Active Data Guard: Supported Workloads in Read-Only Standby (Score 80% or higher to pass)

## 6: Using Oracle Active Data Guard: Far Sync and Real-Time Cascading

- -Using Oracle Active Data Guard: Far Sync and Real-Time Cascading
- -Far Sync: Alternate Design
- -Practice 6-1: Add Far Sync to the Data Guard Environment
- -Practice 6-2: Add 2nd Far Sync to the Data Guard Environment
- -Using Oracle Active Data Guard: Far Sync and Real-Time Cascading (Score 80% or higher to pass)

#### 7: Creating and Managing a Snapshot Standby Database

- -Creating and Managing a Snapshot Standby Database
- -Practice 7-1: Convert Physical Standby to a Snapshot Standby
- -Practice 7-2: Convert Snapshot Standby Back to Physical Standby
- -Creating and Managing a Snapshot Standby Database (Score 80% or higher to pass)

#### 8: Creating a Logical Standby Database

- -Creating a Logical Standby Database
- -Creating a Logical Standby Database by Using SQL Commands
- -Practice 8-1: Identify Unsupported Objects for Logical Standbys



- -Practice 8-2: Create a Logical Standby (Temporarily a Physical)
- -Practice 8-3: Start Redo Transport and Verify Operation
- -Practice 8-4: Convert Physical Standby to Logical Standby
- -Creating a Logical Standby Database (Score 80% or higher to pass)

#### 9: Oracle Data Guard Broker: Overview

- -Oracle Data Guard Broker: Overview
- -Oracle Data Guard Broker: Overview (Score 80% or higher to pass)

#### 10: Creating a Data Guard Broker Configuration

- -Creating a Data Guard Broker Configuration
- -Changing Database Properties and States
- -Practice 10-1: Establishing Local and Remote Connections with DGMGRL
- -Practice 10-2: Create and Enable a Data Guard Broker Configuration
- -Practice 10-3: Verify and Examine the Data Guard Environment
- -Creating a Data Guard Broker Configuration (Score 80% or higher to pass)

#### 11: Monitoring a Data Guard Broker Configuration

- -Monitoring a Data Guard Broker Configuration
- -Viewing Data Guard Diagnostic Information
- -Practice 11-1: Monitoring the Physical Standby Database
- -Practice 11-2: Examining Data Guard Log and Trace Files
- -Practice 11-3: Using the VALIDATE commands
- -Monitoring a Data Guard Broker Configuration (Score 80% or higher to pass)

## 12: Configuring Data Protection Modes

- -Configuring Data Protection Modes
- -Maximum Availability Mode
- -Practice 12-1: Examining the Maximum Availability Protection Mode
- -Practice 12-2: Examining the Maximum Protection Mode
- -Configuring Data Protection Modes (Score 80% or higher to pass)

#### 13: Optimizing and Tuning a Data Guard Configuration

- -Optimizing and Tuning a Data Guard Configuration
- -Tuning Automatic Outage Resolution
- -Practice 13-1: Configuring Network Compression of Redo Data
- -Practice 13-2: Generating AWR Report for an Active Data Guard Instance
- -Practice 13-3: Using ADDM for an Active Data Guard Instance
- -Practice 13-4: Using SQL Tuning Advisor for an Active Data Guard Instance
- -Optimizing and Tuning a Data Guard Configuration (Score 80% or higher to pass)

#### 14: Performing Role Transitions

- -Performing Role Transitions
- -Validating Databases for Switchover by Using DGMGRL
- -Practice 14-1: Performing Switchover
- -Practice 14-2: Keeping Physical Standby Session Connected During Role Transition
- -Performing Role Transitions (Score 80% or higher to pass)

#### 15: Using Flashback Database in a Data Guard Configuration



- -Using Flashback Database in a Data Guard Configuration
- -Practice 15-1: Configuring Flashback Database on the Primary Database
- -Practice 15-2: Configuring Flashback Database on the Physical Standby Database
- -Practice 15-3: Configuring Flashback Database on the Logical Standby Database
- -Practice 15-4: Testing Automatic Flashback of Standby Database
- -Practice 15-5: Performing Flashback of the Logical Standby Database
- -Using Flashback Database in a Data Guard Configuration (Score 80% or higher to pass)

## 16: Enabling Fast-Start Failover

- -Enabling Fast-Start Failover
- -Configuring Automatic Reinstatement of the Primary Database
- -Using Enterprise Manager to Enable Fast-Start Failover
- -Practice 16-1: Configuring Fast-Start Failover in Observer-Only Mode
- -Practice 16-2: Enabling Fast-Start Failover
- -Practice 16-3: Testing Fast-Start Failover
- -Practice 16-4: Switchover to Reinstated Database
- -Enabling Fast-Start Failover (Score 80% or higher to pass)

## 17: Backup and Recovery Considerations in an Oracle Data Guard Configuration

- -Backup and Recovery Considerations in an Oracle Data Guard Configuration
- -Backup and Recovery of a Logical Standby Database
- -Recovering from the Loss of a Data File on the Primary Database
- -Practice 17-1: Enable Change Tracking on the Physical Standby Database
- -Practice 17-2: Creating a Recovery Manager Catalog
- -Practice 17-3: Registering Your Database in the Recovery Catalog
- -Practice 17-4: Configuring RMAN Parameters
- -Practice 17-5: Recovering a Data File on Your Primary Database Over the Network
- -Practice 17-6: Rolling Forward a Standby Database with One Command
- -Backup and Recovery Considerations in an Oracle Data Guard Configuration (Score 80% or higher to pass)

#### 18: Enhanced Client Connectivity in a Data Guard Environment

- -Enhanced Client Connectivity in a Data Guard Environment
- -Data Guard Broker and Fast Application Notification (FAN)
- -Practice 18-1: Creating and Testing Primary Database Services
- -Practice 18-2: Modifying the Primary Database Service for Application Continuity
- -Enhanced Client Connectivity in a Data Guard Environment (Score 80% or higher to pass)

#### 19: Patching and Upgrading Databases in a Data Guard Configuration

- -Patching and Upgrading Databases in a Data Guard Configuration
- -Performing a Rolling Upgrade by Using a Physical Standby Database
- -Rolling Upgrades Using DBMS\_ROLLING and Active Data Guard

**INFO** 

Materiale didattico: Materiale didattico ufficiale Oracle in formato digitale Costo materiale didattico: incluso nel prezzo del corso a Calendario

Natura del corso: Operativo (previsti lab su PC)