

# **Oracle Database 12c: Administration Workshop**



**Durata:** 5 giornate

**Finalità:** Corso per fornire le conoscenze dell'architettura del database Oracle, eseguire la manutenzione del database, gestire in modo efficace una istanza di database Oracle e configurare l'ambiente di rete Oracle.

## **Obiettivi:**

- Eseguire Jobs e programmi all'interno o all'esterno del database
- Gestire l'istanza del database Oracle
- Configurare il database per il backup e operazioni di recupero
- Gestire strutture di archiviazione del database Oracle
- Configurare Oracle Net Services
- Gestire le prestazioni dei database
- Implementare Auditing del Database
- Descrivere l'architettura del Database Oracle
- Monitorare il database
- Creare e gestire account utenti
- Configurare l'istanza di database in modo tale che le risorse siano stanziare tra Sessioni e attività

## **Contenuti:**

### **Introduction**

- Overview of Oracle Cloud
- Overview of the HR Schema
- Course Schedule
- Course Objectives
- Overview of Oracle Database 12c

### **Exploring the Oracle Database Architecture**

- Process Architecture
- Oracle Database Memory Structures
- Connecting to the Oracle Database Instance
- Database Storage Architecture
- Oracle Database Instance Configurations
- Process Structures
- Oracle Database Architecture: Overview
- Process Startup Sequence

### **Working with Oracle Support**

- Managing Patches
- Applying a Patch Release
- My Oracle Support Integration
- Researching an Issue
- Logging Service Requests

### **Backup and Recovery Concepts**

- Configuring for Recoverability
- Using the MTTR Advisor
- Understanding Instance Recovery
- Phases of Instance Recovery
- Categories of Failures
- Media Failure
- Flashback Technology
- Tuning Instance Recovery

### **Managing Space**

- Space Management Overview
- Creating Tables Without Segments
- Row Chaining and Migration
- Allocating Space
- Block Space Management
- Types of Segments
- Allocating Extents
- Free Space Management Within Segments

### **Automating Tasks by Using Oracle Scheduler**

- Simplifying Management Tasks
- Core Components
- Understanding a Simple Job
- Using a Time-Based or Event-Based Schedule
- Creating a Time-Based Job
- Basic Work Flow
- Creating an Event-Based Schedule
- Persistent Lightweight Jobs

### **Managing Resources by Using Database Resource Manager**

- Database Resource Manager Overview
- Using the Resource Manager
- Default Plan Example
- Database Resource Manager Concepts
- Resource Manager Workflow
- Specifying Resource Plan Directives
- Resource Allocation Methods for Resource Plans
- Default Maintenance Resource Manager Plan

### **Managing Performance: SQL Tuning**

- SQL Tuning Advisor
- Oracle Optimizer
- SQL Tuning
- Adaptive Execution Plans
- SQL Advisors
- Automatic SQL Tuning Results
- SQL Plan Directives
- Implement Automatic Tuning Recommendations

## Managing Performance

- Monitoring Performance
- Instance Tuning
- Performance Tuning Data
- Performance Monitoring
- Tuning Activities
- Performance Planning
- Performance Tuning Methodology
- Managing Memory

## Managing the Database Instance

- Using SQL Developer
- Using the Enterprise Manager Database Express Home Page
- Logging in to Oracle Enterprise Manager Database Express
- Using Enterprise Manager Cloud Control
- Initialization Parameter Files
- Using SQL\*Plus
- Understanding the Enterprise Manager Management Framework
- Introducing Oracle Database Management Tools

## Performing Database Maintenance

- Database Maintenance
- Enterprise Manager and Advisors
- Statistic Levels
- Automatic Workload Repository (AWR)
- Automatic Database Diagnostic Monitor (ADDM)
- Advisory Framework
- Viewing the Alert History
- Terminology

## Configuring the Oracle Network Environment

- Oracle Net Services Overview
- Using Enterprise Manager Cloud Control
- Tools for Configuring and Managing the Oracle Network
- Establishing Oracle Network Connections
- Using Oracle Net Configuration Assistant
- Using Oracle Net Manager
- Oracle Net Listener Overview
- Using the Listener Control Utility

## Managing Database Storage Structures

- Using Oracle Managed Files
- Managing Tablespaces
- Viewing Tablespace Information
- Overview of Tablespaces Created by Default
- Understanding Storage of Data
- Database Block Contents
- Creating a New Tablespace
- Exploring the Storage Structure

## Managing Data Concurrency

- Overview of Locks
- Locking Mechanism
- Data Concurrency
- DML Locks
- Enqueue Mechanism
- Lock Conflicts

### Administering User Security

- Profiles
- Unlocking a User Account and Resetting the Password
- Authentication
- Predefined Administrative Accounts
- Creating a User
- Privileges
- Roles
- Database User Accounts

### Implementing Oracle Database Auditing

- Separation of Responsibilities
- Specifying Audit Options
- Configuring the Audit trail
- Unified Audit Data Trail
- Database Security
- Monitoring for Compliance
- Standard Database Auditing
- Separation for Duties for Audit Administration (AUDIT\_ADMIN and AUDIT\_VIEWER roles)

### Managing Undo Data

- Configuring Undo Retention
- Comparing Undo Data and Redo Data
- Undo Data Overview
- Changing an Undo Tablespace to a Fixed Size
- Managing Undo
- Transactions and Undo Data
- Storing Undo Information
- Guaranteeing Undo Retention

### Moving Data

- Oracle Data Pump
- Moving Data: General Architecture
- Using Enterprise Manager
- External Tables
- Working with Oracle Support
- Using the Support Workbench
- SQL\*Loader

**Prezzo: € 2.000**