



Oracle Database 12c: Administration Workshop

- **Formato do curso:** Presencial
- **Localidade:** Porto
- **Data:** 18 Nov. 2019 a 22 Nov. 2019
- **Preço:** 2250€
- **Horário:** Laboral - das 09h30 às 17h30
- **Nível:** Intermédio
- **Duração:** 30 horas

Este curso aborda os detalhes sobre a arquitectura de uma Base de Dados Oracle, onde se descobre como efectivamente gerir uma instância, configurar um ambiente Oracle Network e fazer manutenção da Base de Dados.

Destinatários

Para quem quer aprender as bases para se tornar um DBA.

Pré-requisitos

- Conhecimentos práticos de Sql e uso de packages de Pl/sql
- Conhecimentos básicos de Linux

Objectivos

No final da ação de formação os participantes deverão estar aptos a:

- Criar e gerir uma instancia Oracle
- Criar e gerir estruturas de armazenamento
- Configurar o ambiente de Oracle Network
- Criar e gerir utilizadores
- Monitorização da Base de Dados
- Aprender técnicas básicas de Backup e Recovery

Programa

Introduction

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

Exploring the Oracle Database Architecture

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

Managing the Database Instance

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

Configuring the Oracle Network Environment

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

Managing Database Storage Structures

- Understanding Storage of Data
- Database Block Contents
- Exploring the Storage Structure
- Creating a New Tablespace
- Overview of Tablespaces Created by Default
- Managing Tablespaces

- Viewing Tablespace Information
- Using Oracle Managed Files

Administering User Security

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

Managing Data Concurrency

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

Managing Undo Data

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

Implementing Oracle Database Auditing

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

Performing Database Maintenance

- Database Maintenance

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

Managing Performance

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

Managing Performance: SQL Tuning

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

Managing Resources by Using Database Resource Manager

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

Automating Tasks by Using Oracle Scheduler

- Simplifying Management Tasks
- Understanding a Simple Job
- Core Components
- Basic Work Flow

- Persistent Lightweight Jobs
- Using a Time-Based or Event-Based Schedule
- Creating a Time-Based Job
- Creating an Event-Based Schedule

Managing Space

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

Backup and Recovery Concepts

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

Moving Data

- Moving Data: General Architecture
- Oracle Data Pump
- SQL*Loader
- External Tables

Working with Oracle Support

- Using the Support Workbench
- Using Enterprise Manager
- Working with Oracle Support
- My Oracle Support Integration
- Researching an Issue
- Logging Service Requests
- Managing Patches
- Applying a Patch Release