ORADB_12c - Oracle Database 12c Administration Workshop

Oracle - Oracle - Sistemistica

Durata:	Lingue:	Certificazione:
5 Giorni	**Italiano**	**-**

Descrizione del corso

This course describes the architecture of Oracle database. The course teaches how to efficiently manage an Oracle database instance, configure the Oracle environment and perform the database maintenance.

Programma

1. Introduction
    - Course Objectives
    - Course Schedule
    - Overview of Oracle Database 12c
    - Overview of Oracle Cloud
    - Overview of the HR Schema
2. 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
3. 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

4. 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
5. 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
6. Administering User Security
   - Database User Accounts
   - Predefined Administrative Accounts
   - Creating a User
   - Authentication
   - Unlocking a User Account and Resetting the Password
   - Privileges
   - Roles
   - Profiles
7. Managing Data Concurrency
   - Overview of Locks
   - Locking Mechanism

- Data Concurrency
- DML Locks
- Enqueue Mechanism
- Lock Conflicts

8. 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
9. 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
10. 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
11. Managing Performance
    - Performance Monitoring
    - Tuning Activities
    - Performance Planning
    - Instance Tuning

- Performance Tuning Methodology
- Performance Tuning Data
- Monitoring Performance
- Managing Memory

12. 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
13. 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
14. 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
15. 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

16. 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 Recoverabilità
17. Moving Data
    - Moving Data: General Architecture
    - Oracle Data Pump
    - SQL*Loader
    - External Tables
18. 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