

# ODAT-6 - ORACLE DATABASE 19C: SQL TUNING WORKSHOP

Categoria: **Database**

## INFORMAZIONI SUL CORSO



**Durata:**  
4 Giorni



**Categoria:**  
Database



**Qualifica Istruttore:**  
Oracle Certified  
Professional



**Dedicato a:**  
Sviluppatore



**Produttore:**  
Oracle

## OBIETTIVI

- Identificare i problemi nelle istruzioni SQL
- Modificare un'istruzione SQL per eseguirla al meglio
- Effettuare la traccia di un'applicazione
- Capire come il Query Optimizer prende decisioni sulle modalità di accesso ai dati
- Interpretare i piani di esecuzione
- Utilizzare hint di ottimizzazione efficace
- Generare un test di carico

## PREREQUISITI

Oracle Database 19c: SQL Workshop

## CONTENUTI

### 1: Course Introduction

- Course Introduction
- Workshop 1: Enhancing the Performance of a SQL Query Statement

### 2: Introduction to SQL Tuning

- Introduction to SQL Tuning
- Quick Solution Strategy
- Workshop 2: Reviewing the Execution Steps of the SQL Statement
- Practice 2-1: Using SQL Developer

### 3: Using Application Tracing Tools

- Using Application Tracing Tools
- trcsess Utility
- Workshop 3: Learn to Tune Sort Operation Using an Index in the ORDER BY Clauses
- Practice 3-1: Tracing Applications (Part 01)
- Practice 3-1: Tracing Applications (Part 02)

#### **4: Optimizer Fundamentals**

- Optimizer Fundamentals
- Query Estimator: Selectivity and Cardinality
- Plan Generator
- Workshop 4: Identifying and Tuning a Poorly Written SQL Statement
- Practice 4-1: Understanding Optimizer Decisions (Optional)

#### **5: Generating and Displaying Execution Plans**

- Generating and Displaying Execution Plans
- AUTOTRACE
- Automatic Workload Repository
- Workshop 5: Effects of Changing the Column Order in a Composite Index
- Practice 5-1: Extracting an Execution Plan by Using SQL Developer
- Practice 5-2: Extracting Execution Plans

#### **6: Interpreting Execution Plans and Enhancements**

- Interpreting Execution Plans and Enhancements
- Workshop-6: Using Information in the 10053 File to Tune a SQL Statement
- Practice 6-1: Using Dynamic Plans

#### **7: Optimizer: Table and Index Access Paths**

- Optimizer: Table and Index Access Paths
- Indexes: Overview
- Bitmap Indexes
- Common Observations
- Workshop 7: Understanding the Optimizer's Decision
- Practice 7-1: Using Different Access Paths (Part 01)
- Practice 7-1: Using Different Access Paths (Part 02)
- Practice 7-1: Using Different Access Paths (Part 03)
- Practice 7-1: Using Different Access Paths (Part 04)

#### **8: Optimizer: Join Operators**

- Optimizer: Join Operators
- Workshop 8: Tuning Strategy
- Practice 8: Using Join Paths

#### **9: Other Optimizer Operators**

- Other Optimizer Operators
- Workshop 9: Using SQL Plan Baseline to Manage a Better Execution Plan
- Practice 9-1: Using the Result Cache
- Practice 9-2: Using Other Access Paths (Optional)

#### **10: Introduction to Optimizer Statistics Concepts**

- Introduction to Optimizer Statistics Concepts
- Column Statistics: Histograms
- Session-Specific Statistics for Global Temporary Tables
- Practice 10-1: Index Clustering Factor
- Practice 10-2: Creating Expression Statistics
- Practice 10-3: Enabling Automatic Statistics Gathering Optional (Part 01)

- Practice 10-3: Enabling Automatic Statistics Gathering Optional (Part 02)
- Practice 10-4: Using System Statistics (Optional)

### 11: Using Bind Variables

- Using Bind Variables
- Cursor Sharing Enhancements
- Practice 11-1: Using Adaptive Cursor Sharing
- Practice 11-2: Using CURSOR\_SHARING (Optional)

### 12: SQL Plan Management

- SQL Plan Management
- Configuring SQL Plan Management
- Possible SQL Plan Manageability Scenarios
- Practice 12-1: Using SQL Plan Management SPM (Part 01)
- Practice 12-1: Using SQL Plan Management SPM (Part 02)

### 13: Workshops

- Workshops

## 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)