

ODAT-6 - ORACLE DATABASE: SQL TUNING FOR DEVELOPERS ED 2

Categoria: **Database**

INFORMAZIONI SUL CORSO



Durata:
3 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

Prerequisiti obbligatori:

Oracle Database: Introduction to SQL

Prerequisiti suggeriti :Oracle Database: SQL Fundamentals I

CONTENUTI

Exploring the Oracle Database Architecture

Oracle Database Server Architecture: Overview

Oracle Database Memory Structures: Overview

Background Process Roles

Automatic Shared Memory Management

Automated SQL Execution Memory Management

Automatic Memory Management

Database Storage Architecture

Logical and Physical Database Structures

Introduction to SQL Tuning

Reasons for Inefficient SQL Performance

Performance Monitoring Solutions

Monitoring and Tuning Tools: Overview

EM Performance Pages for Reactive Tuning

CPU and Wait Time Tuning Dimensions

Scalability with Application Design, Implementation, and Configuration

Common Mistakes on Customer Systems

Proactive Tuning Methodology

Introduction to the Optimizer

Structured Query Language

SQL Statement Representation, Implementation & Processing: Overview

SQL Statement Parsing: Overview

Why Do You Need an Optimizer?

Optimization During Hard Parse Operation

Cost-Based Optimizer

Controlling the Behavior of the Optimizer

Optimizer Features and Oracle Database Releases

Optimizer Operators

Row Source Operations

Main Structures and Access Paths

Full Table Scan

Indexes: Overview

Using Indexes: Considering Nullable Columns

Bitmap Indexes, Composite Indexes & Invisible Index

Guidelines for Managing Indexes

Clusters

Interpreting Execution Plans

Execution Plan

Links Between Important Dynamic Performance Views

Automatic Workload Repository (AWR)

Generating SQL Reports from AWR Data

SQL Monitoring: Overview

Reading More Complex Execution Plans

Reviewing the Execution Plan

Looking Beyond Execution Plans

Case Study: Star Transformation

The Star & Snowflake Schema Model

Execution Plan Without Star Transformation

Retrieving Fact Rows from One Dimension All Dimensions

Joining the Intermediate Result Set with Dimensions

Using Bitmap Join Indexes

Star Transformation

Bitmap Join Indexes

Optimizer Statistics

Optimizer Statistics & Types of Optimizer Statistics

Multicolumn Statistics: Overview

Expression Statistics: Overview

Gathering System Statistics

Statistic Preferences: Overview

Optimizer Dynamic Sampling: Overview

Locking Statistics

Using Bind Variables

Cursor Sharing and Different Literal Values

Cursor Sharing and Bind Variables

Bind Variables in SQL*Plus & Enterprise Manager

Cursor Sharing Enhancements

Adaptive Cursor Sharing: Overview

Interacting with Adaptive Cursor Sharing

Using Optimizer Hints

Optimizer Hints: Overview

Types of Hints

Specifying Hints

Rules for Hints

Hint Recommendations

Hint Categories

Optimization Goals and Approaches

Additional Hints

Application Tracing

End-to-End Application Tracing Challenge

Location for Diagnostic Traces

What Is a Service?

Use Services with Client Applications

Trace Your Own Session

SQL Trace File Contents

Formatting SQL Trace Files: Overview

Invoking the tkprof Utility

Automating SQL Tuning

Tuning SQL Statements Automatically

Application Tuning Challenges

SQL Tuning Advisor: Overview

Stale or Missing Object Statistics

SQL Statement Profiling

Plan Tuning Flow and SQL Profile Creation

Database Control and SQL Tuning Advisor

Implementing Recommendations

Oracle Database 11g: Performance Tuning DBA Release 2

Oracle Database 11g: Performance Tuning

Oracle Database 11g: SQL Tuning Workshop - Self-Study Course

INFO

Manuale: Materiale didattico ufficiale Oracle in formato digitale. Il materiale didattico è compreso nel prezzo sia per i corsi a Calendario sia per quelli Dedicati.

Prezzo manuale: 0 € incluso nel prezzo del corso a Calendario

Natura del corso: Operativo (previsti lab su PC)