1. Record Nr. UNINA9910790466903321

Autore Fiorillo Ciro

Titolo Oracle Database 11gR2 performance tuning cookbook [[electronic

resource]]: over 80 recipes to help beginners achieve better

performance from Oracle Database applications / / Ciro Fiorillo

Pubbl/distr/stampa Birmingham, U.K., : Packt Enterprise, 2012

ISBN 1-283-45344-4

9786613453440 1-84968-261-5

Edizione [1st edition]

Descrizione fisica 1 online resource (543 p.)

Disciplina 005.75/85

005.7575

Soggetti Relational databases

Database management

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Includes index.

"Quick answers to common problems"--Cover.

Nota di bibliografia Includes index.

Nota di contenuto Cover; Copyright; Credits; About the Author; Acknowledgement; About

the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter

1: Starting with Performance Tuning; Introduction; Reviewing the performance tuning process; Exploring the example database;

Acquiring data using a data dictionary and dynamic performance views; Analyzing data using Statspack reports; Diagnosing performance issues

using the alert log; Analyzing data using Automatic Workload

Repository (AWR); Analyzing data using Automatic Database Diagnostic

Monitor (ADDM); A working example

Chapter 2: Optimizing Application DesignIntroduction; Optimizing connection management; Improving performance sharing reusable code; Reducing the number of requests to the database using stored procedures; Reducing the number of requests to the database using sequences; Reducing the number of requests to the database using

materialized views; Optimizing performance with schema

denormalization; Avoiding dynamic SQL; Chapter 3: Optimizing Storage

Structures; Introduction; Avoiding row chaining; Avoiding row

migration; Using LOBs; Using index clusters; Using hash clusters Indexing the correct wayRebuilding index; Compressing indexes; Using reverse key indexes; Using bitmap indexes; Migrating to index organized tables: Using partitioning: Chapter 4: Optimizing SQL Code: Introduction; Using bind variables; Avoiding full table scans; Exploring index lookup; Exploring index skip-scan and index range-scan; Introducing arrays and bulk operations: Optimizing joins: Using subqueries; Tracing SQL activity with SQL Trace and TKPROF; Chapter 5: Optimizing Sort Operations; Introduction; Sorting-in-memory and ondisk; Sorting and indexing; Writing top n queries and ranking Using count, min/max, and group-byAvoiding sorting in set operations: union, minus, and intersect; Troubleshooting temporary tablespaces; Chapter 6: Optimizing PL/SQL Code; Introduction; Using bind variables and parsing: Array processing and bulk-collect: Passing values with NOCOPY (or not); Using short-circuit IF statements; Avoiding recursion: Using native compilation; Taking advantage of function result cache; Inlining PL/SQL code; Using triggers and virtual columns; Chapter 7: Improving the Oracle Optimizer; Introduction; Exploring optimizer hints; Collecting statistics; Using histograms Managing stored outlinesIntroducing Adaptive Cursor Sharing for bind variable peeking; Creating SQL Tuning Sets; Using the SQL Tuning Advisor; Configuring and using SQL Baselines; Chapter 8: Other Optimizations; Introduction; Caching results with the client-side result cache; Enabling parallel SQL; Direct path inserting; Using create table as select; Inspecting indexes and triggers overhead; Loading data with SQL*Loader and Data Pump; Chapter 9: Tuning Memory; Introduction; Tuning memory to avoid Operating System paging; Tuning the Library Cache; Tuning the Shared Pool Tuning the Program Global Area and the User Global Area

Sommario/riassunto

In this book you will find both examples and theoretical concepts covered. Every recipe is based on a script/procedure explained step-by-step, with screenshots, while theoretical concepts are explained in the context of the recipe, to explain why a solution performs better than another. This book is aimed at software developers, software and data architects, and DBAs who are using or are planning to use the Oracle Database, who have some experience and want to solve performance problems faster and in a rigorous way. If you are an architect who wants to design better applications, a DBA who is