

Oracle Core: Essential Internals For DBAs And Developers: Essential Internals For DBAs And Developers (Expert's Voice In Databases)

Learn how to write high-quality kernel module code, solve common Linux kernel programming issues, and understand the fundamentals of Linux kernel internals Key Features Discover how to write kernel code using the Loadable Kernel Module framework Explore industry-grade techniques to perform efficient memory allocation and data synchronization within the kernel Understand the essentials of key internals topics such as kernel architecture, memory management, CPU scheduling, and kernel synchronization Book Description Linux Kernel Programming is a comprehensive introduction for those new to Linux kernel and module development. This easy-to-follow guide will have you up and running with writing kernel code in next-to-no time. This book uses the latest 5.4 Long-Term Support (LTS) Linux kernel, which will be maintained from November 2019 through to December 2025. By working with the 5.4 LTS kernel throughout the book, you can be confident that your knowledge will continue to be valid for years to come. This Linux book begins by showing you how to build the kernel from the source. Next, you'll learn how to write your first kernel module using the powerful Loadable Kernel Module (LKM) framework. The book then covers key kernel internals topics including Linux kernel architecture, memory management, and CPU scheduling. Next, you'll delve into the fairly complex topic of concurrency within the kernel, understand the issues it can cause, and learn how they can be addressed with various locking technologies (mutexes, spinlocks, atomic, and refcount operators). You'll also benefit from more advanced material on cache effects, a primer on lock-free techniques within the kernel, deadlock avoidance (with lockdep), and kernel lock debugging techniques. By the end of this kernel book, you'll have a detailed understanding of the fundamentals of writing Linux kernel module code for real-world projects and products. What you will learn Write high-quality modular kernel code (LKM framework) for 5.x kernels Configure and build a kernel from source Explore the Linux kernel architecture Get to grips with key internals regarding memory management within the kernel Understand and work with various dynamic kernel memory alloc/dealloc APIs Discover key internals aspects regarding CPU scheduling within the kernel Gain an understanding of kernel concurrency issues Find out how to work with key kernel synchronization primitives Who this book is for This book is for Linux programmers beginning to find their way with Linux kernel development. Linux kernel and driver developers looking to overcome frequent and common kernel development issues, as well as understand kernel internals, will benefit from this book. A basic understanding of Linux CLI and C programming is required.

Oracle RMAN for Absolute Beginners is a gentle introduction to the use of Oracle's Recovery Manager software to make backups of an Oracle database, and to restore all or part of a database in the event that data loss occurs. It is often said that a database administrator's #1 job responsibility is to be able to recover from data loss. If you're new to the Oracle platform, or you're new to database administration in general, you can hardly go wrong by making it your first priority to learn to backup and recover the database that has been entrusted into your hands. This book is short and sweet at just 200 pages. Focus lies on the mainstream use cases. Recovery Manager, or RMAN as it is called, is a powerful and complex tool that can be intimidating at first. Author Darl Kuhn understands the need to focus on the core use cases, building your confidence in the tool, and in your ability to recover from lost database files, and even to recover your entire database should that become necessary. Oracle RMAN for Absolute Beginners shows how to backup your database. That's the first job. You'll learn to backup the entire database, and to create incremental backups that in turn can speed restore and recovery operations. Then you'll learn to recover from lost data files, lost redo log files, lost control files, and even to restore the entire database from scratch. You'll even learn how to clone a database for development and test purposes by backing the database up on one system and restoring it onto another. Author Darl Kuhn has a decade and a half of experience in writing about, and teaching Oracle Database backup and recovery. If you are newly responsible for an Oracle Database, you can hardly do better than to pick up a copy of Oracle RMAN for Absolute Beginners.

Expert Oracle Exadata, 2nd Edition opens up the internals of Oracle's Exadata platform so that you can fully benefit from the most performant and scalable database hardware appliance capable of running Oracle Database. This edition is fully-updated to cover Exadata 5-2 and Oracle Database 12c. If you're new to Exadata, you'll soon learn that it embodies a change in how you think about and manage relational databases. A key part of that change lies in the concept of offloading SQL processing to the storage layer. In addition there is Oracle's engineering effort in creating a powerful platform for both consolidation and transaction processing. The resulting value proposition in the form of Exadata has truly been a game-changer. Expert Oracle Exadata, 2nd Edition provides a look at the internals and how the combination of hardware and software that comprise Exadata actually work. Authors include Martin Bach, Andy Colvin, and Frits Hoogland, with contributions from Karl Arao, and built on the foundation laid by Kerry Osborne, Randy Johnson, and Tanel Poder in the first edition. They share their real-world experience gained through a great many Exadata implementations, possibly more than any other group of experts today. Always their goal is toward helping you advance your career through success with Exadata in your own environment. This book is intended for readers who want to understand what makes the platform tick and for whom—"how" it does what it is does is as important as what it does. By being exposed to the features that are unique to Exadata, you will gain an understanding of the mechanics that will allow you to fully benefit from the advantages that the platform provides. This book changes how you think about managing SQL performance and processing. It provides a roadmap to successful Exadata implementation. And it removes the "black box" mystique. You'll learn how Exadata actually works and be better able to manage your Exadata engineered systems in support of your business. This book: Changes the way you think about managing SQL performance and processing Provides a roadmap to successful Exadata implementation Removes the "black box" mystique, showing how Exadata actually works

Written as a practical Cookbook, the recipes in this essential guide will help you make the most out of Oracle Data Integrator 11g. This book is meant for people who already possess a basic understanding of Oracle Data Integrator and want to take it to the next level by learning how to better leverage advanced ODI features and functionality as they continue to develop and manage their data integration projects.

Into the Core

Oracle Data Integrator 11g Cookbook

The Java Virtual Machine Specification

Oracle Database 11g A Beginner's Guide

Oracle Database Administration from the Oak Table

Database Internals

An Expert Guide for Solving Complex Oracle Database Problems Oracle Database Problem Solving and Troubleshooting Handbook delivers comprehensive, practical, and up-to-date advice for running the Oracle Database reliably and efficiently in complex production environments. Seven leading Oracle experts have brought together an unmatched collection of proven solutions, hands-on examples, and step-by-step tips for Oracle Database 12c, 11g, and other recent versions of Oracle Database. Every solution is crafted to help experienced Oracle DBAs and DMAs understand and fix serious problems as rapidly as possible. The authors cover LOB segments, UNDO tablespaces, high GC buffer wait events, poor query response times, latch contention, indexing, XA distributed transactions, RMAN backup/recovery, and much more. They also offer in-depth coverage of a wide range of topics, including DDL optimization, VLDB tuning, database forensics, adaptive cursor sharing, data pumps, data migration, SSDs, indexes, and how to go about fixing Oracle RAC problems. Learn how to Choose the quickest path to solve high-impact

problems Use modern best practices to make your day more efficient and predictable Construct your "Call 9-1-1 plan" for future database emergencies Proactively perform maintenance to improve your environment's stability Save time with industry-standard tools and scripts Register your product at informit.com/register for convenient access to downloads, updates, and corrections as they become available.

This book starts with an introduction to the core concepts of .NET memory management and garbage collection, and then goes through several layers on additional details and intricacies. Once you're up to speed, you can dive into the guided troubleshooting tour, and then into engineering your application to maximise performance. And to finish off, take a look at some more sophisticated considerations and even a peek inside the Windows memory model.

Pro Oracle Database 11g RAC on Linux provides full-life-cycle guidance on implementing Oracle Real Application Clusters in a Linux environment. Real Application Clusters, commonly abbreviated as RAC, is Oracle's industry-leading architecture for scalable and fault-tolerant databases. RAC allows you to scale up and down by simply adding and subtracting inexpensive Linux servers. Redundancy provided by those multiple, inexpensive servers is the basis for the failover and other fault-tolerance features that RAC provides. Written by authors well-known for their talent with RAC, Pro Oracle Database 11g RAC on Linux gives you a rock-solid and technically flawless foundation on which to build your RAC-management skills. Authors Julian Dyke and Steve Shaw share their hard-won experience in building RAC clusters, showing you how to build for success using the very latest Oracle technologies, such as Automatic Storage Management (ASM) and Oracle Clusterware. You'll learn to troubleshoot performance and other problems. You'll even learn how to correctly deploy RAC in a virtual-machine environment based upon Oracle VM, which is the only virtualization solution supported by Oracle Corporation. RAC is a complex and powerful technology. It demands expertise in its deployment. You can't just "wing it" in creating a RAC solution. Julian and Steve have earned the right to term themselves expert—in Pro Oracle Database 11g RAC on Linux, they offer a rigorous and technically-correct treatment of RAC that helps you build a solid foundation of expertise and achieve success. Rigorous and technically accurate content Complete coverage of RAC, from planning to implementation to rollout to ongoing maintenance and troubleshooting Up-to-date with the latest RAC features

Oracle Core: Essential Internals for DBAs and Developers by Jonathan Lewis provides just the essential information about Oracle Database internals that every database administrator needs for troubleshooting—no more, no less. Oracle Database seems complex on the surface. However, its extensive feature set is really built upon upon a core infrastructure resulting from sound architectural decisions made very early on that have stood the test of time. This core infrastructure manages transactions and has the ability to commit and roll back changes, protects the integrity of the database, enables backup and recovery, and allows for scalability to thousands of users all accessing the same data. Most performance, backup, and recovery problems that database administrators face on a daily basis can easily be identified through understanding the essential core of Oracle Database architecture that Lewis describes in this book. Provides proven content from a world-renowned performance and troubleshooting expert Emphasizes the significance of internals knowledge to rapid identification of database performance problems Covers the core essentials and does not waste your time with esoterica

Oracle Wait Interface: A Practical Guide to Performance Diagnostics & Tuning

Oracle Database Foundations

Discovering and Improving a Great Database

The Practical Guide to Storing, Managing and Analyzing Big and Small Data

Oracle Exadata Recipes

97 Things Every Cloud Engineer Should Know

When your database application isn't running fast enough, troubleshooting is usually your first move. Finding the slow part of an application is often easy, but discovering a solution can prove much more difficult. Troubleshooting Oracle Performance helps by providing a systematic approach to addressing the underlying causes of poor database application performance. Written for developers by an application developer who has learned by doing, this book shows you how to plan for performance as you would for any other application requirement.

Written by experienced Oracle insiders, this essential guide distills a vast amount of information into an easy-to-read volume that covers every aspect of the Oracle database. Readers of all technical levels will learn about Oracle's features and technologies, including the product line, architecture, data structures, networking, concurrency, tuning and much more. Augmented with illustrations and helpful hints, the fifth edition of Oracle Essentials offers a valuable one-stop overview of Oracle Database 12c, Oracle's newest database release. More comprehensible than huge complete references, and more detailed than most primers, this book gives current Oracle users the conceptual background they need to understand how the Oracle database truly works. For those new to Oracle, this all-in-one guide provides an essential introduction that will get them up to speed.

Oracle Core: Essential Internals for DBAs and DevelopersApress

Grid architecture is Oracle's strategy for high-end computing and RAC is the stepping stone into this arena. This book focuses on current technology including all valid RAC features up through Oracle Database 10g Release 2, with a primary focus on deploying it in a high-end grid environment. The book discusses this technology at length which users will find beneficial when researching, implementing or monitoring a RAC environment. The author covers workshop implementation of services and the distribution of workload across instances, with threshold definitions and the new load balancing algorithms. In addition it includes detailed discussions on ASM that complements the implementation of RAC in Oracle Grid strategy. The book also includes discussions on new Oracle Clusterware, its components and its integration with RAC. Oracle 10g RAC focuses on RAC-specific topics including ASM, operating system configuration, installation and configuration of RAC and much more. Coverage includes network configuration for high availability, FAN, TAF, ONS, implementation of maximum availability architecture (MAA), EM Grid Control, AWR, ADDM and other performance-related tools. The author includes several scripts for performance tuning and implementation that the reader can use to configure a RAC environment either on a 2, 4, 8, 60 or 99

node configuration. Focuses on implementing, testing and tuning features of Real Application Clusters (RAC) database version 10g Release 2 Provides extensive coverage of usage, day-to-day functions and operations Includes tips and techniques such as script samples to illustrate various features of RAC A jumpstart into all the key features of 10g R2 RAC

Linux Kernel Programming

Real-Time Data and Stream Processing at Scale

A Problem-Solution Approach

An In-Depth Guide to Android's Security Architecture

Oracle SQL Tuning with Oracle SQLTXPLAIN

Optimizing Oracle Performance

Oracle SQL Tuning with SQLTXPLAIN is a practical guide to SQL tuning the way Oracle's own experts do it, using a freely downloadable tool called SQLTXPLAIN. Using this simple tool you'll learn how to tune even the most complex SQL, and you'll learn to do it quickly, without the huge learning curve usually associated with tuning as a whole. Firmly based in real world problems, this book helps you reclaim system resources and avoid the most common bottleneck in overall performance, badly tuned SQL. You'll learn how the optimizer works, how to take advantage of its latest features, and when it's better to turn them off. Quickly tune any SQL statement no matter how complex. Build and tune test cases without affecting production. Use the latest tuning features with confidence.

Oracle system performance inefficiencies often go undetected for months or even years--even under intense scrutiny--because traditional Oracle performance analysis methods and tools are fundamentally flawed. They're unreliable and inefficient. Oracle DBAs and developers are all too familiar with the outlay of time and resources, blown budgets, missed deadlines, and marginally effective performance fiddling that is commonplace with traditional methods of Oracle performance tuning. In this crucial book, Cary Millsap, former VP of Oracle's System Performance Group, clearly and concisely explains how to use Oracle's response time statistics to diagnose and repair performance problems. Cary also shows how "queueing theory" can be applied to response time statistics to predict the impact of upgrades and other system changes. Optimizing Oracle Performance eliminates the time-consuming, trial-and-error guesswork inherent in most conventional approaches to tuning. You can determine exactly where a system's performance problem is, and with equal importance, where it is not, in just a few minutes--even if the problem is several years old. Optimizing Oracle Performance cuts a path through the complexity of current tuning methods, and streamlines an approach that focuses on optimization techniques that any DBA can use quickly and successfully to make noticeable--even dramatic--improvements. For example, the one thing database users care most about is response time. Naturally, DBAs focus much of their time and effort towards improving response time. But it is entirely too easy to spend hundreds of hours to improve important system metrics such as hit ratios, average latencies, and wait times, only to find users are unable to perceive the difference. And an expensive hardware upgrade may not help either. It doesn't have to be that way. Technological advances have added impact, efficiency, measurability, predictive capacity, reliability, speed, and practicality to the science of Oracle performance optimization. Optimizing Oracle Performance shows you how to slash the frustration and expense associated with unraveling the true root cause of any type of performance problem, and reliably predict future performance. The price of this essential book will be paid back in hours saved the first time its methods are used.

Summary Cloud Native Patterns is your guide to developing strong applications that thrive in the dynamic, distributed, virtual world of the cloud. This book presents a mental model for cloud-native applications, along with the patterns, practices, and tooling that set them apart.

Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Cloud platforms promise the holy grail: near-zero downtime, infinite scalability, short feedback cycles, fault-tolerance, and cost control. But how do you get there? By applying cloud-native designs, developers can build resilient, easily adaptable, web-scale distributed applications that handle massive user traffic and data loads. Learn these fundamental patterns and practices, and you'll be ready to thrive in the dynamic, distributed, virtual world of the cloud. About the Book With 25 years of experience under her belt, Cornelia Davis teaches you the practices and patterns that set cloud-native applications apart. With realistic examples and expert advice for working with apps, data, services, routing, and more, she shows you how to design and build software that functions beautifully on modern cloud platforms. As you read, you will start to appreciate that cloud-native computing is more about the how and why rather than the where. What's inside The lifecycle of cloud-native apps Cloud-scale configuration management Zero downtime upgrades, versioned services, and parallel deploys Service discovery and dynamic routing Managing interactions between services, including retries and circuit breakers About the Reader Requires basic software design skills and an ability to read Java or a similar language. About the Author Cornelia Davis is Vice President of Technology at Pivotal Software. A teacher at heart, she's spent the last 25 years making good software and great software developers. Table of Contents PART 1 - THE CLOUD-NATIVE CONTEXT You keep using that word: Defining "cloud-native" Running cloud-native applications in production The platform

for cloud-native software PART 2 - CLOUD-NATIVE PATTERNS Event-driven microservices: It's not just request/response App redundancy: Scale-out and statelessness Application configuration: Not just environment variables The application lifecycle: Accounting for constant change Accessing apps: Services, routing, and service discovery Interaction redundancy: Retries and other control loops Fronting services: Circuit breakers and API gateways Troubleshooting: Finding the needle in the haystack Cloud-native data: Breaking the data monolith

This second edition of the official, definitive description of the Java Virtual Machine covers the many fundamental changes incorporated into the newest version of the Java Development Kit.

Oracle 10g RAC Grid, Services and Clustering

Cost-Based Oracle Fundamentals

Expert One-on-One Oracle

Designing change-tolerant software

The Essential Guide to Oracle Automatic Storage Management

Oracle RMAN for Absolute Beginners

Troubleshoot, tune, and optimize your Oracle database efficiently and successfully every time. This book explains how to take full advantage of the revolutionary Oracle Wait Interface to quickly pinpoint--and solve--core problems and bottlenecks, and increase productivity exponentially.

Build and manage your Oracle Database XE environment with this fast paced, practical guide

When it comes to choosing, using, and maintaining a database, understanding its internals is essential.

But with so many distributed databases and tools available today, it's often difficult to understand what each one offers and how they differ. With this practical guide, Alex Petrov guides developers through the concepts behind modern database and storage engine internals. Throughout the book, you'll explore relevant material gleaned from numerous books, papers, blog posts, and the source code of several open source databases. These resources are listed at the end of parts one and two. You'll discover that the most significant distinctions among many modern databases reside in subsystems that determine how storage is organized and how data is distributed. This book examines:

Storage engines: Explore storage classification and taxonomy, and dive into B-Tree-based and immutable Log Structured storage engines, with differences and use-cases for each

Storage building blocks: Learn how database files are organized to build efficient storage, using auxiliary data structures such as Page Cache, Buffer Pool and Write-Ahead Log

Distributed systems: Learn step-by-step how nodes and processes connect and build complex communication patterns

Database clusters: Which consistency models are commonly used by modern databases and how distributed storage systems achieve consistency

Perform fast interactive analytics against different data sources using the Trino high-performance distributed SQL query engine. With this practical guide, you'll learn how to conduct analytics on data where it lives, whether it's Hive, Cassandra, a relational database, or a proprietary data store. Analysts, software engineers, and production engineers will learn how to manage, use, and even develop with Trino. Initially developed by Facebook, open source Trino is now used by Netflix, Airbnb, LinkedIn, Twitter, Uber, and many other companies. Matt Fuller, Manfred Moser, and Martin Traverso show you how a single Trino query can combine data from multiple sources to allow for analytics across your entire organization. Get started: Explore Trino's use cases and learn about tools that will help you connect to Trino and query data Go deeper: Learn Trino's internal workings, including how to connect to and query data sources with support for SQL statements, operators, functions, and more Put Trino in production: Secure Trino, monitor workloads, tune queries, and connect more applications; learn how other organizations apply Trino

Secrets of the Oracle Database

Expert Oracle Practices

Android Security Internals

Oracle Core: Essential Internals for DBAs and Developers

Expert Oracle Database Architecture

Database Cloud Storage

Oracle Core: Essential Internals for DBAs and Developers

Expert Oracle Database Architecture

Database Cloud Storage

** A proven best-seller by the most recognized Oracle expert in the world. * The best Oracle book ever written. It defines what Oracle really is, and why it is so powerful. * Inspired by the thousands of questions Tom has answered on his <http://asktom.oracle.com> site. It tackles the problems that developers and DBAs struggle with every day. * Provides everything you need to know to program correctly with the database and exploit its feature-set effectively.*

This book is an anthology of effective database management techniques representing the collective wisdom of the OakTable Network. With an emphasis upon performance—but also branching into security, national language, and other issues—the book helps you deliver the most value for your company's investment in Oracle Database technologies. You'll learn to effectively plan for and monitor performance, to troubleshoot systematically when things go wrong, and to manage your database rather than letting it manage you.

A painfully true family drama of loss and denial.

Now in its third edition, this best-selling book continues to bring you some of the best thinking on how to apply Oracle Database to produce scalable applications that perform well and deliver correct results.

Tom Kyte and Darl Kuhn share a simple philosophy: "you can treat Oracle as a black box and just stick data into it, or you can understand how it works and exploit it as a powerful computing environment." If

you choose the latter, then you'll find that there are few information management problems that you cannot solve quickly and elegantly. This fully revised third edition covers the developments up to Oracle Database 12c. Significant new content is included surrounding Oracle's new cloud feature set, and especially the use of pluggable databases. Each feature is taught in a proof-by-example manner, not only discussing what it is, but also how it works, how to implement software using it, and the common pitfalls associated with it. Don't treat Oracle Database as a black-box. Get this book. Get under the hood. Turbo-charge your career. Revised to cover Oracle Database 12c Proof-by-example approach: Let the evidence be your guide Dives deeply into Oracle Database's most powerful features

A Practitioner's Guide to Optimizing Response Time

Pro Oracle Database 11g RAC on Linux

Oracle Database XE 11gR2 Jump Start Guide

Kafka: The Definitive Guide

A Deep Dive into How Distributed Data Systems Work

Oracle Database 12c

Introductory, theory-practice balanced text teaching the fundamentals of databases to advanced undergraduates or graduate students in information systems or computer science. Although MySQL's source code is open in the sense of being publicly available, it's essentially closed to you if you don't understand it. In this book, Sasha Pachev -- a former member of the MySQL Development Team -- provides a comprehensive tour of MySQL 5 that shows you how to figure out the inner workings of this powerful database. You'll go right to heart of the database to learn how data structures and convenience functions operate, how to add new storage engines and configuration options, and much more. The core of Understanding MySQL Internals begins with an Architecture Overview that provides a brief introduction of how the different components of MySQL work together. You then learn the steps for setting up a working compilable copy of the code that you can change and test at your pleasure. Other sections of the book cover: Core server classes, structures, and API The communication protocol between the client and the server Configuration variables, the controls of the server; includes a tutorial on how to add your own Thread-based request handling -- understanding threads and how they are used in MySQL An overview of MySQL storage engines The storage engine interface for integrating third-party storage engines The table lock manager The parser and optimizer for improving MySQL's performance Integrating a transactional storage engine into MySQL The internals of replication Understanding MySQL Internals provides unprecedented opportunities for developers, DBAs, database application programmers, IT departments, software vendors, and computer science students to learn about the inner workings of this enterprise-proven database. With this book, you will soon reach a new level of comprehension regarding database development that will enable you to accomplish your goals. It's your guide to discovering and improving a great database.

Furnishes indepth, authoritative data about Oracle internal services, including data structures, algorithms, hidden parameters, and undocumented system statistics, with new sections on latches, memory use and management, waits, and locks. Original.

(Intermediate)

Jonathan Lewis is one of the world's foremost authorities in this field (he is frequently quoted and reference by other leading experts, such as Tom Kyte - see for example http://asktom.oracle.com/pls/ask/download_file?p_file=3067171813508366601 Book will be strongly co-promoted with Tom Kyte's Expert Oracle Database Architecture (1-59059-530-0) Highlights traps for those migrating from Oracle 8i to 9i to 10g, potentially averting often disastrous performance issues and downtime (=lost revenue) The first comprehensive book written to investigate, describe, and demonstrate the methods used by the Cost Based Optimizer Jonathan is one of very few Oracle authors to maintain online enhancements, errata and addenda pages, so the reader will be supported long after the book is published

Expert Oracle Exadata

Cloud Native Patterns

Technology Fundamentals for IT Success

Oracle Internals: An Introduction

Under the Hood of .Net Memory Management

Introduction to Storage Area Networks

There are more than one billion Android devices in use today, each one a potential target. Unfortunately, many fundamental Android security features have been little more than a black box to all but the most elite security professionals—until now. In Android Security Internals, top Android security expert Nikolay Elenkov takes us under the hood of the Android security system. Elenkov describes Android security architecture from the bottom up, delving into the implementation of major security-related components and subsystems, like Binder IPC, permissions, cryptographic providers, and device administration. You ' ll learn: – How Android permissions are declared, used, and enforced – How Android manages application packages and employs code

signing to verify their authenticity – How Android implements the Java Cryptography Architecture (JCA) and Java Secure Socket Extension (JSSE) frameworks – About Android ' s credential storage system and APIs, which let applications store cryptographic keys securely – About the online account management framework and how Google accounts integrate with Android – About the implementation of verified boot, disk encryption, lockscreen, and other device security features – How Android ' s bootloader and recovery OS are used to perform full system updates, and how to obtain root access With its unprecedented level of depth and detail, Android Security Internals is a must-have for any security-minded Android developer.

Oracle Exadata Recipes takes an example-based, problem/solution approach in showing how to size, install, configure, manage, monitor, optimize, and migrate Oracle database workloads on and to the Oracle Exadata Database Machine. Whether you ' re an Oracle Database administrator, Unix/Linux administrator, storage administrator, network administrator, or Oracle developer, Oracle Exadata Recipes provides effective and proven solutions to accomplish a wide variety of tasks on the Exadata Database Machine. You can feel confident using the reliable solutions that are demonstrated in this book in your enterprise Exadata environment. Managing Oracle Exadata is unlike managing a traditional Oracle database. Oracle ' s Exadata Database Machine is a pre-configured engineered system comprised of hardware and software, built to deliver extreme performance for Oracle Database workloads. Exadata delivers extreme performance by offering an optimally balanced hardware infrastructure with fast components at each layer of the engineered technology stack, as well as a unique set of Oracle software features designed to leverage the high-performing hardware infrastructure by reducing I/O demands. Let Oracle Exadata Recipes help you translate your existing Oracle Database knowledge into the exciting new growth area that is Oracle Exadata. Helps extend your Oracle Database skillset to the fast-growing, Exadata platform Presents information on managing Exadata in a helpful, example-based format Clearly explains unique Exadata software and hardware features What you ' ll learn Install and configure Exadata Manage your Exadata hardware infrastructure Monitor and troubleshoot performance issues Manage smart scan and cell offload processing Take advantage of Hybrid Columnar Compression Deploy Smart Flash Cache and Smart Flash Logging Ensure the health of your Exadata environment Who this book is for Oracle Exadata Recipes is for Oracle Database administrators, Unix/Linux administrators, storage administrators, backup administrators, network administrators, and Oracle developers who want to quickly learn to develop effective and proven solutions without reading through a lengthy manual scrubbing for techniques. Readers in a hurry will appreciate the recipe format that sets up solutions to common tasks as the centerpiece of the book. Table of Contents Exadata Hardware Exadata Software How Oracle Works on Exadata Workload Qualification Sizing Exadata Preparing for Exadata Administration and Diagnostics Utilities Backup and Recovery Storage Administration Network Administration Patching and Upgrades Security Monitoring Exadata Storage Cells Host and Database Performance Monitoring Smart Scan and Cell Offload Hybrid Columnar Compression I/O Resource Management and Instance Caging Smart Flash Cache and Smart Flash Logging Storage Indexes Post-Installation Monitoring Tasks Post-Install Database Tasks

Learn how to take full advantage of Apache Kafka, the distributed, publish-subscribe queue for handling real-time data feeds. With this comprehensive book, you will understand how Kafka works and how it is designed. Authors Neha Narkhede, Gwen Shapira, and Todd Palino show you how to deploy production Kafka clusters; secure, tune, and monitor them; write rock-solid applications that use Kafka; and build scalable stream-processing applications. Learn how Kafka compares to other queues, and where it fits in the big data ecosystem. Dive into Kafka's internal design Pick up best practices for developing applications that use Kafka. Understand the best way to deploy Kafka in production monitoring, tuning, and maintenance tasks. Learn how to secure a Kafka cluster.

The superabundance of data that is created by today's businesses is making storage a strategic investment priority for companies of all sizes. As storage takes precedence, the following major initiatives emerge: Flatten and converge your network: IBM® takes an open, standards-based approach to implement the latest advances in the flat, converged data center network designs of today. IBM Storage solutions enable clients to deploy a high-speed, low-latency Unified Fabric Architecture. Optimize and automate virtualization: Advanced virtualization awareness reduces the cost and complexity of deploying physical and virtual data center infrastructure. Simplify management: IBM data center networks are easy to deploy, maintain, scale, and virtualize, delivering the foundation of consolidated operations for dynamic infrastructure management. Storage is no longer an afterthought. Too much is at stake. Companies are searching for more ways to efficiently manage expanding volumes of data, and to make that data accessible throughout the enterprise. This demand is propelling the move of storage into the network. Also, the increasing complexity of managing large numbers of storage devices and vast amounts of data is driving greater business value into software and services. With current estimates of the amount of data to be managed and made available increasing at 60% each year, this outlook is where a storage area network (SAN) enters the arena. SANs are the leading storage infrastructure for the global economy of today. SANs offer simplified storage management, scalability, flexibility, and availability; and improved data access, movement, and backup. Welcome to the cognitive era. The smarter data center with the improved economics of IT can be achieved by connecting servers and storage with a high-speed and intelligent network fabric. A smarter data center that hosts IBM Storage solutions can provide an environment that is smarter, faster, greener, open, and easy to manage.

This IBM® Redbooks® publication provides an introduction to SAN and Ethernet networking, and how these networks help to achieve a smarter data center. This book is intended for people who are not very familiar with IT, or who are just starting out in the IT world.

Trino: The Definitive Guide

Troubleshooting Oracle Performance

A comprehensive guide to kernel internals, writing kernel modules, and kernel synchronization

Understanding MySQL Internals

The Six-days World

Oracle Performance Survival Guide

Implement a Centralized Cloud Storage Infrastructure with Oracle Automatic Storage Management Build and manage a scalable, highly available cloud storage solution. Filled with detailed examples and best practices, this Oracle Press guide explains how to set up a complete cloud-based storage system using Oracle Automatic Storage Management. Find out how to prepare hardware, build disk groups, efficiently allocate storage space, and handle security. Database Cloud Storage: The Essential Guide to Oracle Automatic Storage Management shows how to monitor your system, maximize throughput, and ensure consistency across servers and clusters. Set up and configure Oracle Automatic Storage Management Discover and manage disks and establish disk groups Create, clone, and administer Oracle databases Consolidate resources with Oracle Private Database Cloud Control access, encrypt files, and assign user privileges Integrate replication, file tagging, and automatic failover Employ pre-engineered private cloud database consolidation tools Check for data consistency and resync failed disks Code examples in the book are available for download

Oracle Performance Survival Guide A Systematic Approach to Database Optimization The fast, complete, start-to-finish guide to optimizing Oracle performance Oracle Performance Survival Guide offers a structured, systematic, start-to-finish methodology for optimizing Oracle performance as efficiently as possible. Leading Oracle expert Guy Harrison shows how to maximize your tuning investment by focusing on causes rather than symptoms, and by quickly identifying the areas that deliver the greatest "bang for the buck." Writing for DBAs and developers with all levels of experience, Harrison covers every area of Oracle performance management, from application design through SQL tuning, contention management through memory and physical IO management. He also presents up-to-the-minute guidance for optimizing the performance of the Oracle 11g Release 2. You'll start by mastering Oracle structured performance tuning principles and tools, including techniques for tracing and monitoring Oracle execution. Harrison illuminates the interaction between applications and databases, guides you through choosing tuning tools, and introduces upfront design techniques that lead to higher-performance applications. He also presents a collection of downloadable scripts for reporting on all aspects of database performance. Coverage includes □ "Tuning by layers," the most effective, highest-value approach to Oracle performance optimization □ Making the most of Oracle's core tools for tracing, monitoring, and diagnosing performance □ Highly efficient database logical and physical design, indexing, transaction design, and API use □ SQL and PL/SQL tuning, including the use of parallel SQL techniques □ Minimizing contention for locks, latches, shared memory, and other database resources □ Optimizing memory and physical disk IO □ Tuning Real Application Cluster (RAC) databases guyharrison.net informit.com/ph

If you create, manage, operate, or configure systems running in the cloud, you're a cloud engineer--even if you work as a system administrator, software developer, data scientist, or site reliability engineer. With this book, professionals from around the world provide valuable insight into today's cloud engineering role. These concise articles explore the entire cloud computing experience, including fundamentals, architecture, and migration. You'll delve into security and compliance, operations and reliability, and software development. And examine networking, organizational culture, and more. You're sure to find 1, 2, or 97 things that inspire you to dig deeper and expand your own career. "Three Keys to Making the Right Multicloud Decisions," Brendan O'Leary "Serverless Bad Practices," Manases Jesus Galindo Bello "Failing a Cloud Migration," Lee Atchison "Treat Your Cloud Environment as If It Were On Premises," Iyana Garry "What Is Toil, and Why Are SREs Obsessed with It?", Zachary Nickens "Lean QA: The QA Evolving in the DevOps World," Theresa Neate "How Economies of Scale Work in the Cloud," Jon Moore "The Cloud Is Not About the Cloud," Ken Corless "Data Gravity: The Importance of Data Management in the Cloud," Geoff Hughes "Even in the Cloud, the Network Is the Foundation," David Murray "Cloud Engineering Is About Culture, Not Containers," Holly Cummins

Secrets of the Oracle Database is the definitive guide to undocumented and partially-documented features of the Oracle Database server. Covering useful but little-known features from Oracle Database 9 through Oracle Database 11, this book will improve your efficiency as an Oracle database administrator or developer. Norbert Debes shines the light of day on features that help you master more difficult administrative, tuning, and troubleshooting tasks than you ever thought possible. Finally, in one place, you have at your fingertips knowledge that previously had to be acquired through years of experience and word of mouth through knowing the right people. What Norbert writes is accurate, well-tested, well-illustrated by clear examples, and sure to improve your ability to make an impact on your day-to-day work with Oracle.

Principles of Database Management

A Systematic Approach to Database Optimization

Oracle Essentials

Oracle Database Problem Solving and Troubleshooting Handbook

Get a Solid Foundation in Oracle Database Technology Master Oracle Database 11g fundamentals quickly and easily. Using self-paced tutorials, this book covers core database essentials, the role of the administrator, high availability, and large database features. Oracle Database 11g: A Beginner's Guide walks you, step by step, through database setup,

administration, programming, backup, and recovery. In-depth introductions to SQL and PL/SQL are included. Designed for easy learning, this exclusive Oracle Press guide offers: Core Concepts--Oracle Database 11g topics presented in logically organized chapters Critical Skills--Lists of specific skills covered in each chapter Projects--Practical exercises that show how to apply the critical skills learned in each chapter Progress Checks--Quick self-assessment sections to check your progress Notes--Extra information related to the topic being covered Mastery Checks--Chapter-ending quizzes to test your knowledge

Written by Oracle insiders, this indispensable guide distills an enormous amount of information about the Oracle Database into one compact volume. Ideal for novice and experienced DBAs, developers, managers, and users, Oracle Essentials walks you through technologies and features in Oracle's product line, including its architecture, data structures, networking, concurrency, and tuning. Complete with illustrations and helpful hints, this fifth edition provides a valuable one-stop overview of Oracle Database 12c, including an introduction to Oracle and cloud computing. Oracle Essentials provides the conceptual background you need to understand how Oracle truly works. Topics include: A complete overview of Oracle databases and data stores, and Fusion Middleware products and features Core concepts and structures in Oracle's architecture, including pluggable databases Oracle objects and the various datatypes Oracle supports System and database management, including Oracle Enterprise Manager 12c Security options, basic auditing capabilities, and options for meeting compliance needs Performance characteristics of disk, memory, and CPU tuning Basic principles of multiuser concurrency Oracle's online transaction processing (OLTP) Data warehouses, Big Data, and Oracle's business intelligence tools Backup and recovery, and high availability and failover solutions