

Postgresql 10 Vol1 The Sql Language Volume 1

IBM® Informix® is a low-administration, easy-to-use, and embeddable database that is ideal for application development. It supports a wide range of development platforms, such as Java™, .NET, PHP, and web services, enabling developers to build database applications in the language of their choice. Informix is designed to handle RDBMS data and XML without modification and can be extended easily to handle new data sets. This IBM Redbooks® publication provides fundamentals of Informix application development. It covers the Informix Client installation and configuration for application development environments. It discusses the skills and techniques for building Informix applications with Java, ESQL/C, OLE DB, .NET, PHP, Ruby on Rails, DataBlade®, and Hibernate. The book uses code examples to demonstrate how to develop an Informix application with various drivers, APIs, and interfaces. It also provides application development troubleshooting and considerations for performance. This book is intended for developers who use IBM Informix for application development. Although some of the topics that we discuss are highly technical, the information in the book might also be helpful for managers or database administrators who are looking to better understand their Informix development environment.

Explains how to access and create MySQL databases through PHP scripting, including discussion of authentication, network connectivity, sessions, and content management.

Learn how to build dynamic web applications with Express, a key component of the Node/JavaScript development stack. In this hands-on guide, author Ethan Brown teaches you the fundamentals through the development of a fictional application that exposes a public website and a RESTful API. You'll also learn web architecture best practices to help you build single-page, multi-page, and hybrid web apps with Express. Express strikes a balance between a robust framework and no framework at all, allowing you a free hand in your architecture choices. With this book, frontend and backend engineers familiar with JavaScript will discover new ways of looking at web development. Create webpage templating system for rendering dynamic data Dive into request and response objects, middleware, and URL routing Simulate a production environment for testing and development Focus on persistence with document databases, particularly MongoDB Make your resources available to other programs with RESTful APIs Build secure apps with authentication, authorization, and HTTPS Integrate with social media, geolocation, and other third-party services Implement a plan for launching and maintaining your app Learn critical debugging skills This book covers Express 4.0. Even small applications have dozens of components. Large applications may have thousands, which makes them challenging to install, maintain, and remove. Docker bundles all application components into a package called a container that keeps things tidy and helps manage any dependencies on other applications or infrastructure. Docker in Action, Second Edition teaches you the skills and knowledge you need to create, deploy, and manage applications hosted in Docker containers. This bestseller has been fully updated with new examples, best practices, and entirely new chapters. You'll start with a clear explanation of the Docker model and learn how to package applications in containers, including techniques for testing and distributing applications. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

Switching database vendors is often considered an exhausting challenge for database administrators and developers. Complexity, total cost, and the risk of downtime are often the reasons that restrain IT decision makers from starting the migration project. The primary goal of this book is to show that, with the proper planning and guidance, converting from MySQL to IBM® DB2® is not only feasible but straightforward. If you picked up this book, you are most likely considering converting to DB2 and are probably aware of several of the advantages of converting to DB2 data server. In this IBM Redbooks® publication, we discuss in detail how you can take advantage of this industry leading database server. This book is an informative guide that describes how to convert the database system from MySQL™ 5.1 to DB2® V9.7 on Linux® and the steps that are involved in enabling the applications to use DB2 instead of MySQL. This guide also presents the best practices in conversion strategy and planning, conversion tools, porting steps, and practical conversion examples. It is intended for technical staff that is involved in a MySQL to DB2 conversion project. This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Database Systems: The Complete Book is ideal for Database Systems and Database Design and Application courses offered at the junior, senior and graduate levels in Computer Science departments. A basic understanding of algebraic expressions and laws, logic, basic data structure, OOP concepts, and programming environments is implied. Written by well-known computer scientists, this introduction to database systems offers a comprehensive approach, focusing on database design, database use, and implementation of database applications and database management systems. The first half of the book provides in-depth coverage of databases from the point of view of the database designer, user, and application programmer. It covers the latest database standards SQL:1999, SQL/PSM, SQL/CLI, JDBC, ODL, and XML, with broader coverage of SQL than most other texts. The second half of the book provides in-depth coverage of databases from the point of view of the DBMS implementor. It focuses on storage structures, query processing, and transaction management. The book covers the main techniques in these areas with broader coverage of query optimization than most other texts, along with advanced topics including multidimensional and bitmap indexes, distributed transactions, and information integration techniques.

This book constitutes the proceedings of the 17th IFIP International Conference on Distributed Applications and Interoperable Systems, DAIS 2017, held in Neuchâtel, Switzerland, in June 2017. The 11 papers presented together with 4 short papers in this volume were carefully reviewed and selected from 23 submissions. The papers are organized in topical sections on running system efficiently, storing data smartly, roaming in graph, building collaborative services, and making things safe.

Explores options for using J2EE technologies in the creation of scalable software, providing a case study on a database and focusing on selecting leading-edge technologies and implementing the sample system.

Data Science and Big Data Analytics is about harnessing the power of data for new insights. The book covers the breadth of activities and methods and tools that Data Scientists use. The content focuses on concepts, principles and practical applications that are applicable to any industry and technology environment, and the learning is supported and explained with examples that you can replicate using open-source software. This book will help you: Become a contributor on a data science team Deploy a structured lifecycle approach to data analytics problems Apply appropriate analytic techniques and tools to analyzing big data Learn how to tell a compelling story with data to drive business action Prepare for EMC Proven Professional Data Science Certification Corresponding data sets are available from the book's page at Wiley which you can find on the Wiley site by searching for the ISBN 9781118876138. Get started discovering, analyzing, visualizing, and presenting data in a meaningful way

today!

A practical guide to administer, monitor and replicate your PostgreSQL 11 database Key Features Study and apply the newly introduced features in PostgreSQL 11 Tackle any problem in PostgreSQL 11 administration and management Catch up on expert techniques for monitoring, fine-tuning, and securing your database Book Description PostgreSQL is a powerful, open source database management system with an enviable reputation for high performance and stability. With many new features in its arsenal, PostgreSQL 11 allows you to scale up your PostgreSQL infrastructure. This book takes a step-by-step, recipe-based approach to effective PostgreSQL administration. The book will introduce you to new features such as logical replication, native table partitioning, additional query parallelism, and much more to help you to understand and control, crash recovery and plan backups. You will learn how to tackle a variety of problems and pain points for any database administrator such as creating tables, managing views, improving performance, and securing your database. As you make steady progress, the book will draw attention to important topics such as monitoring roles, backup, and recovery of your PostgreSQL 11 database to help you understand roles and produce a summary of log files, ensuring high availability, concurrency, and replication. By the end of this book, you will have the necessary knowledge to manage your PostgreSQL 11 database efficiently. What you will learn Troubleshoot open source PostgreSQL version 11 on various platforms Deploy best practices for planning and designing live databases Select and implement robust backup and recovery techniques in PostgreSQL 11 Use pgAdmin or OmniDB to perform database administrator (DBA) tasks Adopt efficient replication and high availability techniques in PostgreSQL Improve the performance of your PostgreSQL solution Who this book is for This book is designed for database administrators, data architects, database developers, or anyone with an interest in planning and running live production databases using PostgreSQL 11. It is also ideal if you're looking for hands-on solutions to any problem associated with PostgreSQL 11 administration. Some experience with handling PostgreSQL databases will be beneficial

Designing Clinical Research sets the standard for providing a practical guide to planning, tabulating, formulating, and implementing clinical research, with an easy-to-read, uncomplicated presentation. This edition incorporates current research methodology—including molecular and genetic clinical research—and offers an updated syllabus for conducting a clinical research workshop. Emphasis is on common sense as the main ingredient of good science. The book explains how to choose well-focused research questions and details the steps through all the elements of study design, data collection, quality assurance, and basic grant-writing. All chapters have been thoroughly revised, updated, and made more user-friendly.

An interactive guide to Oracle's intensive query tool, SQL* Plus, discusses its powerful features, furnishes a syntax quick reference, and explains how to write and execute script files, generate reports, extract data from the database, utilize new administrative features, query data dictionary tables, and more. Original. (Intermediate)

Sams Teach Yourself SQL in 10 Minutes offers straightforward, practical answers when you need fast results. By working through the book's 22 lessons of 10 minutes or less, you'll learn what you need to know to take advantage of the SQL language. Lessons cover IBM DB2, Microsoft SQL Server and SQL Server Express, MariaDB, MySQL, Oracle and Oracle express, PostgreSQL, and SQLite. Full-color code examples help you understand how SQL statements are structured Tips point out shortcuts and solutions Cautions help you avoid common pitfalls Notes explain additional concepts, and provide additional information 10 minutes is all you need to learn how to... Use the major SQL statements Construct complex SQL statements using multiple clauses and operators Retrieve, sort, and format database contents Pinpoint the data you need using a variety of filtering techniques Use aggregate functions to summarize data Join two or more related tables Insert, update, and delete data Create and alter database tables Work with views, stored procedures, and more

Organization: The book is divided into five parts: Getting Starated with MySQL and Relational Databases; Understanding SQL Through MySQL; MySQL Administration; MySQL Developer Guide; and Advanced and Specialized MySQL Topics.

Comprehensive coverage: This Bible covers both beginning-level and advanced topics. Topics covered include: introduction to relational database management; installing and configuring MySQL on the Linux, Windows 2000, and Mac OS X operating systems; MySQL security; debugging and repairing MySQL databases and servers; MySQL performance tuning; and developing MySQL applications with Perl and PHP. Coverage of NuSphere MySQL: Due to the growing popularity of the NuSphere MySQL package, this book covers its enhancements and how to install and develop with NuSphere MySQL. Running database application: This book builds an e-commerce sample database application throughout to demonstrate concepts and topics.

ABOUT THE CD-ROM: What's on the CD-ROM: The CD-ROM includes the latest version of MySQL (either Version 4.0 or 4.1); sample database application and code in the book; and PHP and Perl.

Dr. Greg Zacharias, former Chief Scientist of the United States Air Force (2015-18), explores next steps in autonomous systems (AS) development, fielding, and training. Rapid advances in AS development and artificial intelligence (AI) research will change how we think about machines, whether they are individual vehicle platforms or networked enterprises. The payoff will be considerable, affording the US military significant protection for aviators, greater effectiveness in employment, and unlimited opportunities for novel and disruptive concepts of operations. Autonomous Horizons: The Way Forward identifies issues and makes recommendations for the Air Force to take full advantage of this transformational technology.

A guide for users and designers of database systems. Outlines the inherent problems in the study, design, and implementation, and examines the background issues of priorities, administrative prerequisites, design concepts, database management systems, protocols, security, communication processes, and interactivity. Gives advice on developing corporate databases and management sytems. Non- technical, user-oriented text. No bibliography. Date provides a comprehensive treatment of standard SQL, with many worked examples while discussing some of the implications of the standard. Annotation copyrighted by Book News, Inc., Portland, OR

This pocket guide presents the most crucial information about SQL in a compact and easily accessible format, covering the four commonly used SQL variants--Oracle, IBM DB2, Microsoft SQL Server, and MySQL. Topics include: Data manipulation statements (SELECT, DELETE, INSERT, UPDATE, MERGE) and transaction control statements (START TRANSACTION, SAVEPOINT, COMMIT, ROLLBACK). Common SQL functions (date, numeric, math, trigonometric, string, conversion, aggregate) Such topics as literals, NULLs, CASE expressions, datatype conversion, regular expressions, grouping and summarizing data, joining tables, and writing queries (hierarchical, recursive, union, flashback) and subqueries. Instead of presenting complex and confusing syntax diagrams, the book teaches by example,

showing the SQL statements and options that readers are most like to use. All example data is available on the O'Reilly web site. "If you need fast, accurate SQL information, with examples for multiple database engines, be sure to check out this book."--Chris Kempster, Senior DBA and author of SQL Server 2000 for the Oracle DBA, www.chriskempster.com

The free book "Fundamentals of Computer Programming with C#" is a comprehensive computer programming tutorial that teaches programming, logical thinking, data structures and algorithms, problem solving and high quality code with lots of examples in C#. It starts with the first steps in programming and software development like variables, data types, conditional statements, loops and arrays and continues with other basic topics like methods, numeral systems, strings and string processing, exceptions, classes and objects. After the basics this fundamental programming book enters into more advanced programming topics like recursion, data structures (lists, trees, hash-tables and graphs), high-quality code, unit testing and refactoring, object-oriented principles (inheritance, abstraction, encapsulation and polymorphism) and their implementation the C# language. It also covers fundamental topics that each good developer should know like algorithm design, complexity of algorithms and problem solving. The book uses C# language and Visual Studio to illustrate the programming concepts and explains some C# / .NET specific technologies like lambda expressions, extension methods and LINQ. The book is written by a team of developers lead by Svetlin Nakov who has 20+ years practical software development experience. It teaches the major programming concepts and way of thinking needed to become a good software engineer and the C# language in the meantime. It is a great start for anyone who wants to become a skillful software engineer. The books does not teach technologies like databases, mobile and web development, but shows the true way to master the basics of programming regardless of the languages, technologies and tools. It is good for beginners and intermediate developers who want to put a solid base for a successful career in the software engineering industry. The book is accompanied by free video lessons, presentation slides and mind maps, as well as hundreds of exercises and live examples. Download the free C# programming book, videos, presentations and other resources from <http://introprogramming.info>. Title: Fundamentals of Computer Programming with C# (The Bulgarian C# Programming Book) ISBN: 9789544007737 ISBN-13: 978-954-400-773-7 (9789544007737) ISBN-10: 954-400-773-3 (9544007733) Author: Svetlin Nakov & Co. Pages: 1132 Language: English Published: Sofia, 2013 Publisher: Faber Publishing, Bulgaria Web site: <http://www.introprogramming.info> License: CC-Attribution-Share-Alike Tags: free, programming, book, computer programming, programming fundamentals, ebook, book programming, C#, CSharp, C# book, tutorial, C# tutorial; programming concepts, programming fundamentals, compiler, Visual Studio, .NET, .NET Framework, data types, variables, expressions, statements, console, conditional statements, control-flow logic, loops, arrays, numeral systems, methods, strings, text processing, StringBuilder, exceptions, exception handling, stack trace, streams, files, text files, linear data structures, list, linked list, stack, queue, tree, balanced tree, graph, depth-first search, DFS, breadth-first search, BFS, dictionaries, hash tables, associative arrays, sets, algorithms, sorting algorithm, searching algorithms, recursion, combinatorial algorithms, algorithm complexity, OOP, object-oriented programming, classes, objects, constructors, fields, properties, static members, abstraction, interfaces, encapsulation, inheritance, virtual methods, polymorphism, cohesion, coupling, enumerations, generics, namespaces, UML, design patterns, extension methods, anonymous types, lambda expressions, LINQ, code quality, high-quality code, high-quality classes, high-quality methods, code formatting, self-documenting code, code refactoring, problem solving, problem solving methodology, 9789544007737, 9544007733

How can you bring out MySQL's full power? With High Performance MySQL, you'll learn advanced techniques for everything from designing schemas, indexes, and queries to tuning your MySQL server, operating system, and hardware to their fullest potential. This guide also teaches you safe and practical ways to scale applications through replication, load balancing, high availability, and failover. Updated to reflect recent advances in MySQL and InnoDB performance, features, and tools, this third edition not only offers specific examples of how MySQL works, it also teaches you why this system works a.

This is the first volume of a book series covering PostgreSQL from the database administration point of view. The book covers PostgreSQL 11 on Linux analysing the install procedure either from source and with packages on Debian and RPM based systems. A good part of the book explains the logical organisation and the physical structure in order to give the reader a good starting point to understand the PostgreSQL internals. Logical backup and restore with pg_dump are also analysed and performance tips for speeding up a disaster recovery are given. The book also explain how PostgreSQL executes a query, the maintenance and the internal statistics in order to give the database administrators the know how for keeping PostgreSQL running efficiently at all time.

PostgreSQL 10 Vol1 The SQL Language

Do you need to extend your knowledge of querying in SQL Server? Then this book helps you take your existing skills to the next level as you discover how to write complex and robust SQL queries that enable you to deliver powerful analyses and meaningful insights. This book takes you further on your journey to mastering SQL querying with SQL Server. Step by step, you learn how to build on your existing knowledge and understand the subtleties of T-SQL, the Microsoft flavor of the standard database query language. No matter what your current level of SQL knowledge, this book helps you improve your existing proficiency and gives you the confidence to handle any SQL querying challenge. If you are coming to SQL Server from another database, then this book helps you transition smoothly to T-SQL, as well as deepening your knowledge of many of the more advanced SQL Server query techniques. In an age in which data is key, you need to ensure that you have the right skills to analyze your data and produce the insight that gives you the competitive edge. So get ahead with SQL using the dozens of practical and enjoyable examples and the methodical and comprehensive approach that this book provides. To smooth the learning curve, all the sample data used in the book, as well as all the essential query snippets, are available online at www.tetraspublishing.com.

Master PostgreSQL 12 features such as advanced indexing, high availability, monitoring, and much more to efficiently manage and maintain your database Key Features Grasp advanced PostgreSQL 12 concepts with real-world examples and sample datasets Explore query parallelism, data replication, database administration, and more Extend PostgreSQL functionalities to suit your organization's needs with minimal effort Book Description Thanks to its reliability, robustness, and high performance, PostgreSQL has become the most advanced open source database on the market. This third edition of Mastering PostgreSQL helps you build dynamic database solutions for enterprise applications using the latest release of PostgreSQL, which enables database analysts to design both physical and technical aspects of system architecture with ease. Starting with an introduction to the newly released features in PostgreSQL 12, this book will help you build efficient and fault-tolerant PostgreSQL applications. You'll thoroughly examine the advanced features of PostgreSQL, including logical replication, database clusters, performance tuning, monitoring, and user management. You'll also work with the PostgreSQL optimizer, configure PostgreSQL for high speed, and understand how to move from Oracle to PostgreSQL. As you progress through the chapters, you'll cover transactions, locking, indexes, and how to optimize queries for improved performance. Additionally, you'll learn how to manage network security and explore backups and replications while understanding useful PostgreSQL extensions to help you in optimizing the performance of large databases. By the end of this PostgreSQL book, you'll be able to get the most out of your database by implementing advanced administrative tasks effortlessly. What you will learn Understand the advanced SQL functions in PostgreSQL 12 Use indexing features in PostgreSQL to fine-tune the performance of queries Work with stored procedures and manage backup and recovery Master replication and failover techniques to reduce data loss Replicate PostgreSQL database systems to create backups and to scale your database Manage and improve the security of your server to protect your data Troubleshoot your PostgreSQL instance for solutions to common and not-so-common problems Who this book is for This book is for PostgreSQL developers and administrators and database professionals who want to implement advanced functionalities and master complex administrative tasks with PostgreSQL 12. Prior exposure to PostgreSQL as well as familiarity with the basics of database administration is expected.

The infrastructure-as-code revolution in IT is also affecting database administration. With this practical book, developers, system administrators, and junior to mid-level DBAs will learn how the modern practice of site reliability engineering applies to the craft of database architecture and operations. Authors Laine Campbell and Charity Majors provide a framework for professionals looking to join the ranks of today's database reliability engineers (DBRE). You'll begin by exploring core operational concepts that DBREs need to master. Then you'll examine a wide range of database persistence options, including how to implement key technologies to provide resilient, scalable, and performant data storage and retrieval. With a firm foundation in database reliability engineering, you'll be ready to dive into the architecture and operations of any modern database. This book covers: Service-level requirements and risk management Building and evolving an architecture for operational visibility Infrastructure engineering and infrastructure management How to facilitate the release management process Data storage, indexing, and replication Identifying datastore characteristics and best use cases Datastore architectural components and data-driven architectures

This book starts from where PostgreSQL for DBA volume 1 left by adding more topics to the previous book and covering what were left untold.Organised in parts the book covers how to manage and install PostgreSQL, the physical and logical layer along with the performance tuning, the maintenance and the HA/DR. Last but not least there is a part dedicated to upgrading the clusters for the minor and the major versions.The book covers PostgreSQL version 12 compiled from source and running on Slackware GNU Linux 14.2.The install procedure for the packages covers either DEB and RPM based distributions.The DEB the operating system is Devuan GNU Linux 2.0 and for the RPM the operating system is CentOS 7.

This book constitutes the refereed proceedings of the 11th International Conference entitled Beyond Databases, Architectures and Structures, BDAS 2015, held in Ustro?, Poland, in May 2015. This book consists of 53 carefully revised selected papers that are assigned to 8 thematic groups: database architectures and performance; data integration, storage and data warehousing; ontologies and semantic web; artificial intelligence, data mining and knowledge discovery; image analysis and multimedia mining; spatial data analysis; database systems development; application of database systems.

This book constitutes the refereed proceedings of the Software Engineering and Algorithms section of the 10th Computer Science On-line Conference 2021 (CSOC 2021), held on-line in April 2021. Software engineering research and its applications to intelligent algorithms take an essential role in computer science research. In this book, modern research methods, application of machine and statistical learning in the software engineering research are presented. .

This IBM® Redbooks® publication describes IBM DB2® SQL compatibility features. The latest version of DB2 includes extensive native support for the PL/SQL procedural language, new data types, scalar functions, improved concurrency, built-in packages, OCI, SQLPlus, and more. These features can help with developing applications that run on both DB2 and Oracle and can help simplify the process of moving from Oracle to DB2. In addition, IBM now provides tools to simplify the enablement process, such as the highly scalable IBM Data Movement Tool for moving schema and data into DB2, and an Editor and Profiler for PL/SQL provided by the IBM Data Studio tool suite. This Oracle to DB2 migration guide describes new technology, preferred practices for moving to DB2, and common scenarios that can help you as you move from Oracle to DB2. This book is intended for IT architects and developers who are converting from Oracle to DB2. DB2 compatibility with Oracle is provided through native support. The new capabilities in DB2 that provide compatibility are implemented at the lowest and most intimate levels of the database kernel, as though they were originally engineered for DB2. means that the DB2 implementation is done without the aid of an emulation layer. This intimacy leads to the scalable implementation that DB2 offers, providing identical performance between DB2 compatibility features and DB2 other language elements. For example, DB2 runs SQL PL at the same performance as PL/SQL implementations of the same function.

This latest edition of the best-selling implementation guide to the Structured Query Language teaches SQL fundamentals while providing practical solutions for critical business applications. The Practical SQL Handbook, Fourth Edition now includes expanded platform SQL coverage and extensive real-world examples based on feedback from actual SQL users. The Practical SQL

Handbook begins with a step-by-step introduction to SQL basics and examines the issues involved in designing SQL-based database applications. It fully explores SQL's most popular implementations from industry leaders, Oracle, Microsoft, Sybase, and Informix. Highlights include: Detailed coverage of SQL commands for creating databases, tables, and indexes, and for adding, changing, and deleting data Using the SELECT command to retrieve specific data Handling NULL values (missing information) in a relational database Joining tables, including self joins and outer joins (ANSI and WHERE-clause syntax) Working with nested queries (subqueries) to get data from multiple tables Creating views (virtual tables) to provide customized access to data Using SQL functions A bonus CD-ROM contains a time-limited, full-feature version of the Sybase® Adaptive Server Anywhere™ software as well as the sample database, scripts, and examples included in the book. The Practical SQL Handbook is the most complete reference available for day-to-day SQL implementations. 0201703092B05222001

The only book you'll ever need on SQL. The authors detail the changes in the new standard and provide a thorough guide to programming with SQL 2 for both newcomers and experienced programmers. The book is one that novice programmers should read cover to cover and experienced DBMS professionals should have as a definitive reference book for the new SQL 2 standard. "PostgreSQL Developer's Handbook" provides a complete overview of the PostgreSQL database server and extensive coverage of its core features, including object orientation, PL/SQL, and the most important programming interfaces. The authors introduce the reader to the language and syntax of PostgreSQL and then move quickly into sophisticated programming topics.

PostgreSQL is an object-relational database management system (ORDBMS) developed at the University of California at Berkeley Computer Science Department. This comprehensive reference manual consists of 7 books. This is Volume 1 with the main part "The SQL Language." To keep it consistent with the digital PostgreSQL manual, the references and page numbers cover all volumes as it were one. Therefore please note that you probably want to have all volumes. This book is based on PostgreSQL 10 Updated to include the new features introduced in PostgreSQL 13, this book shows you how to build better PostgreSQL applications and administer your PostgreSQL database efficiently. You'll master the advanced features of PostgreSQL and develop the skills you need to build secure and highly available database solutions.

Over 100 recipes to design and implement a highly available server with the advanced features of PostgreSQL 9.4,9.5 and 9.6 About This Book* Create a PostgreSQL cluster that stays online even when disaster strikes* Avoid costly downtime and data loss that can ruin your business* Updated to include the newest features introduced in PostgreSQL 9.6 with hands-on industry-driven recipes Who This Book Is For If you are a PostgreSQL DBA working on Linux systems who want a database that never gives up, this book is for you. If you've ever experienced a database outage, restored from a backup, spent hours trying to repair a malfunctioning cluster, or simply want to guarantee system stability, this book is definitely for you. What you will learn* Protect your data with PostgreSQL replication and management tools such as Slony, Bucardo, pglogical, and WAL-E* Hardware planning to help your database run efficiently* Prepare for catastrophes and prevent them before they happen* Reduce database resource contention with connection pooling using pgpool and PgBouncer* Automate monitoring and alerts to visualize cluster activity using Nagios and collected* Construct a robust software stack that can detect and fix outages* Learn simple PostgreSQL High Availability with Patroni, or dive into the full power of Pacemaker. In Detail Databases are nothing without the data they store. In the event of a failure - catastrophic or otherwise - immediate recovery is essential. By carefully combining multiple servers, it's even possible to hide the fact a failure occurred at all. From hardware selection to software stacks and horizontal scalability, this book will help you build a versatile PostgreSQL cluster that will survive crashes, resist data corruption, and grow smoothly with customer demand. It all begins with hardware selection for the skeleton of an efficient PostgreSQL database cluster. Then it's on to preventing downtime as well as troubleshooting some real life problems that administrators commonly face. Next, we add database monitoring to the stack, using collectd, Nagios, and Graphite. And no stack is complete without replication using multiple internal and external tools, including the newly released pglogical extension. Pacemaker or Raft consensus tools are the final piece to grant the cluster the ability to heal itself. We even round off by tackling the complex problem of data scalability. This book exploits many new features introduced in PostgreSQL 9.6 to make the database more efficient and adaptive, and most importantly, keep it running.

Summary PostGIS in Action, Second Edition teaches readers of all levels to write spatial queries that solve real-world problems. It first gives you a background in vector-, raster-, and topology-based GIS and then quickly moves into analyzing, viewing, and mapping data. This second edition covers PostGIS 2.0 and 2.1 series, PostgreSQL 9.1, 9.2, and 9.3 features, and shows you how to integrate with other GIS tools. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Book Processing data tied to location and topology requires specialized know-how. PostGIS is a free spatial database extender for PostgreSQL, every bit as good as proprietary software. With it, you can easily create location-aware queries in just a few lines of SQL code and build the back end for a mapping, raster analysis, or routing application with minimal effort. PostGIS in Action, Second Edition teaches you to solve real-world geodata problems. It first gives you a background in vector-, raster-, and topology-based GIS and then quickly moves into analyzing, viewing, and mapping data. You'll learn how to optimize queries for maximum speed, simplify geometries for greater efficiency, and create custom functions for your own applications. You'll also learn how to apply your existing GIS knowledge to PostGIS and integrate with other GIS tools. Familiarity with relational database and GIS concepts is helpful but not required. What's Inside An introduction to spatial databases Geometry, geography, raster, and topology spatial types, functions, and queries Applying PostGIS to real-world problems Extending PostGIS to web and desktop applications Updated for PostGIS 2.x and PostgreSQL 9.x About the Authors Regina Obe and Leo Hsu are database consultants and authors. Regina is a member of the PostGIS core development team and the Project Steering Committee. Table of Contents PART 1 INTRODUCTION TO POSTGIS What is a spatial database? Spatial data types Spatial reference system considerations Working with real data Using PostGIS on the desktop Geometry and geography functions Raster functions PostGIS TIGER geocoder Geometry relationships PART 2 PUTTING POSTGIS TO WORK Proximity analysis Geometry and geography processing Raster processing Building and using topologies Organizing spatial data Query performance tuning PART 3 USING POSTGIS WITH OTHER TOOLS Extending PostGIS with pgRouting and procedural languages Using PostGIS in web applications

This book is a practical guide to discovering and exploiting security flaws in web applications. The authors explain each category of vulnerability using real-world examples, screen shots and code extracts. The book is extremely practical in focus, and describes in detail the steps involved in detecting and exploiting each kind of security weakness found within a variety of applications such as online banking, e-commerce and other web applications. The topics covered include bypassing login mechanisms, injecting code,

exploiting logic flaws and compromising other users. Because every web application is different, attacking them entails bringing to bear various general principles, techniques and experience in an imaginative way. The most successful hackers go beyond this, and find ways to automate their bespoke attacks. This handbook describes a proven methodology that combines the virtues of human intelligence and computerized brute force, often with devastating results. The authors are professional penetration testers who have been involved in web application security for nearly a decade. They have presented training courses at the Black Hat security conferences throughout the world. Under the alias "PortSwigger", Dafydd developed the popular Burp Suite of web application hack tools.

This book is composed of a selection of articles from The 2021 World Conference on Information Systems and Technologies (WorldCIST'21), held online between 30 and 31 of March and 1 and 2 of April 2021 at Hanga de Heroismo, Terceira Island, Azores, Portugal. WorldCIST is a global forum for researchers and practitioners to present and discuss recent results and innovations, current trends, professional experiences and challenges of modern information systems and technologies research, together with their technological development and applications. The main topics covered are: A) Information and Knowledge Management; B) Organizational Models and Information Systems; C) Software and Systems Modeling; D) Software Systems, Architectures, Applications and Tools; E) Multimedia Systems and Applications; F) Computer Networks, Mobility and Pervasive Systems; G) Intelligent and Decision Support Systems; H) Big Data Analytics and Applications; I) Human-computer Interaction; J) Ethics, Computers & Security; K) Health Informatics; L) Information Technologies in Education; M) Information Technologies in Radiocommunications; N) Technologies for Biomedical Applications.

Database Administration, Second Edition, is the definitive, technology-independent guide to the modern discipline of database administration. Packed with best practices and proven solutions for any database platform or environment, this text fully reflects the field's latest realities and challenges. Drawing on more than thirty years of database experience, Mullins focuses on problems that today's DBAs actually face, and skills and knowledge they simply must have. Mullins presents realistic, thorough, and up-to-date coverage of every DBA task, including creating database environments, data modeling, normalization, design, performance, data integrity, compliance, governance, security, backup/recovery, disaster planning, data and storage management, data movement/distribution, data warehousing, connectivity, metadata, tools, and more. This edition adds new coverage of "Big Data," database appliances, cloud computing, and NoSQL. Mullins includes an entirely new chapter on the DBA's role in regulatory compliance, with substantial new material on data breaches, auditing, encryption, retention, and metadata management. You'll also find an all-new glossary, plus up-to-the-minute DBA rules of thumb.

Sams Teach Yourself SQL in 10 Minutes, Fourth Edition New full-color code examples help you see how SQL statements are structured Whether you're an application developer, database administrator, web application designer, mobile app developer, or Microsoft Office users, a good working knowledge of SQL is an important part of interacting with databases. And Sams Teach Yourself SQL in 10 Minutes offers the straightforward, practical answers you need to help you do your job. Expert trainer and popular author Ben Forta teaches you just the parts of SQL you need to know—starting with simple data retrieval and quickly going on to more complex topics including the use of joins, subqueries, stored procedures, cursors, triggers, and table constraints. You'll learn methodically, systematically, and simply—in 22 short, quick lessons that will each take only 10 minutes or less to complete. With the Fourth Edition of this worldwide bestseller, the book has been thoroughly updated, expanded, and improved. Lessons now cover the latest versions of IBM DB2, Microsoft Access, Microsoft SQL Server, MySQL, Oracle, PostgreSQL, SQLite, MariaDB, and Apache Open Office Base. And new full-color SQL code listings help the beginner clearly see the elements and structure of the language. 10 minutes is all you need to learn how to... Use the major SQL statements Construct complex SQL statements using multiple clauses and operators Retrieve, sort, and format database contents Pinpoint the data you need using a variety of filtering techniques Use aggregate functions to summarize data Join two or more related tables Insert, update, and delete data Create and alter database tables Work with views, stored procedures, and more Table of Contents 1 Understanding SQL 2 Retrieving Data 3 Sorting Retrieved Data 4 Filtering Data 5 Advanced Data Filtering 6 Using Wildcard Filtering 7 Creating Calculated Fields 8 Using Data Manipulation Functions 9 Summarizing Data 10 Grouping Data 11 Working with Subqueries 12 Joining Tables 13 Creating Advanced Joins 14 Combining Queries 15 Inserting Data 16 Updating and Deleting Data 17 Creating and Manipulating Tables 18 Using Views 19 Working with Stored Procedures 20 Managing Transaction Processing 21 Using Cursors 22 Understanding Advanced SQL Features Appendix A: Sample Table Scripts Appendix B: Working in Popular Applications Appendix C : SQL Statement Syntax Appendix D: Using SQL Datatypes Appendix E: SQL Reserved Words

[Copyright: 3e220d770830eda9a29771c78cf41fa1](https://www.pdfdrive.com/postgresql-10-vol1-the-sql-language-volume-1-p220d770830eda9a29771c78cf41fa1.html)