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**PeopleSoft for the Oracle DBA**-David Kurtz  
2012-03-02 PeopleSoft for the Oracle DBA, Second Edition stands on the boundary between the PeopleSoft application and the Oracle database. This new edition of David Kurtz's book is freshly revised, showing how to tame the beast and manage Oracle successfully in a PeopleSoft

environment. You'll learn about PeopleSoft's Internet architecture and its use of Oracle's Tuxedo Application Server. You'll find full coverage of key database issues such as indexing, connectivity, and tablespace usage as they apply to PeopleSoft. Kurtz also provides some of the best advice and information to be found anywhere on managing and troubleshooting performance issues in a PeopleSoft environment. The solid coverage of

performance troubleshooting is enough by itself to make PeopleSoft for the Oracle DBA a must-have book for any Oracle Database administrator working in support of a PeopleSoft environment. Explains PeopleSoft's technical architecture as it relates to Oracle Database Demonstrates how to instrument and measure the performance of PeopleSoft Provides techniques to troubleshoot and resolve performance problems

**Process Support and Knowledge Representation in Health Care**-Richard Lenz 2013-02-01 This book constitutes thoroughly refereed revised selected papers from the BPM 2012 Joint Workshop on Process-Oriented Information Systems and Knowledge Representation in Health Care, ProHealth 2012/KR4HC 2012, held in Tallinn, Estonia, in September 2012. The 9 papers presented were carefully reviewed and selected from 19 submissions. In addition the book contains 1 keynote paper and 2 invited contributions. The papers are organized in topical sections named:

guidelines and summarization; archetypes and cooperation; and process mining and temporal analysis.

**Troubleshooting Cisco IP Telephony**-Paul Giralt 2002 In The Implosion of Capitalism world-renowned political economist Samir Amin connects the key events of our times - financial crisis, Eurozone implosion, the emerging BRIC nations and the rise of political Islam - identifying them as symptoms of a profound systemic crisis. In light of these major crises and tensions, Amin updates and modifies the classical definitions of social classes, political parties, social movements and ideology. In doing so he exposes the reality of monopoly capitalism in its contemporary global form. In a bravura conclusion, Amin argues that the current capitalist system is not viable and that implosion is unavoidable. The Implosion of Capitalism makes clear the stark choices facing humanity - and the urgent need for a more humane global order.

## **DB2 for z/OS and WebSphere Integration for Enterprise Java Applications**

Paolo Bruni

2013-08-07 IBM DB2® for z/OS® is a high-performance database management system (DBMS) with a strong reputation in traditional high-volume transaction workloads that are based on relational technology. IBM WebSphere® Application Server is web application server software that runs on most platforms with a web server and is used to deploy, integrate, execute, and manage Java Platform, Enterprise Edition applications. In this IBM® Redbooks® publication, we describe the application architecture evolution focusing on the value of having DB2 for z/OS as the data server and IBM z/OS® as the platform for traditional and for modern applications. This book provides background technical information about DB2 and WebSphere features and demonstrates their applicability presenting a scenario about configuring WebSphere Version 8.5 on z/OS and type 2 and type 4 connectivity

(including the XA transaction support) for accessing a DB2 for z/OS database server taking into account high-availability requirements. We also provide considerations about developing applications, monitoring performance, and documenting issues. DB2 database administrators, WebSphere specialists, and Java application developers will appreciate the holistic approach of this document.

## **Developing Applications with IBM FileNet P8 APIs**

Wei-Dong Zhu 2009-12-30 This IBM®

Redbooks® publication can help you develop content and process management applications with IBM FileNet® APIs. The IBM FileNet P8 suite of products contains a set of robust APIs that range from core platform APIs to supporting application APIs. This book focuses specifically on Content Engine and Process Engine APIs. Content Engine API topics that we discuss include creating, retrieving, updating, and deleting objects; querying and viewing documents; and batching and batch execution.

We also explore more complex topics, including permissions and authorization, versioning, relationships, annotations, workflow subscriptions and event actions, metadata discovery, and dynamic security inheritance. Process Engine API topics that we discuss include launching a workflow, searching for and processing work items, and working with process status. The more complex topics we cover include, Component Integrator application space, role, workbasket, resource navigation in Process Engine REST API, ECM Widgets, and building a custom Get Next In-basket widget. To help you better understand programming with IBM FileNet APIs, we provide a sample application implemented for a fictional company. We include the data model, security model, workflows, and various applications developed for the sample. You can download them for your reference. This book is intended for IBM FileNet P8 application developers. We recommend using this book in conjunction with the online ECM help.

**Building Your Next Big Thing with Google Cloud Platform**-Jose Ugia Gonzalez 2015-06-15 Building Your Next Big Thing with Google Cloud Platform shows you how to take advantage of the Google Cloud Platform technologies to build all kinds of cloud-hosted software and services for both public and private consumption. Whether you need a simple virtual server to run your legacy application or you need to architect a sophisticated high-traffic web application, Cloud Platform provides all the tools and products required to create innovative applications and a robust infrastructure to manage them. Google is known for the scalability, reliability, and efficiency of its various online products, from Google Search to Gmail. And, the results are impressive. Google Search, for example, returns results literally within fractions of second. How is this possible? Google custom-builds both hardware and software, including servers, switches, networks, data centers, the operating system's stack, application frameworks, applications, and APIs. Have you ever imagined what you could build if you were able to tap the

same infrastructure that Google uses to create and manage its products? Now you can! Building Your Next Big Thing with Google Cloud Platform shows you how to take advantage of the Google Cloud Platform technologies to build all kinds of cloud-hosted software and services for both public and private consumption. Whether you need a simple virtual server to run your legacy application or you need to architect a sophisticated high-traffic web application, Cloud Platform provides all the tools and products required to create innovative applications and a robust infrastructure to manage them. Using this book as your compass, you can navigate your way through the Google Cloud Platform and turn your ideas into reality. The authors, both Google Developer Experts in Google Cloud Platform, systematically introduce various Cloud Platform products one at a time and discuss their strengths and scenarios where they are a suitable fit. But rather than a manual-like "tell all" approach, the emphasis is on how to Get Things Done so that you get up to speed with Google Cloud Platform as quickly as possible.

You will learn how to use the following technologies, among others: Google Compute Engine Google App Engine Google Container Engine Google App Engine Managed VMs Google Cloud SQL Google Cloud Storage Google Cloud Datastore Google BigQuery Google Cloud Dataflow Google Cloud DNS Google Cloud Pub/Sub Google Cloud Endpoints Google Cloud Deployment Manager Author on Google Cloud Platform Google APIs and Translate API Using real-world examples, the authors first walk you through the basics of cloud computing, cloud terminologies and public cloud services. Then they dive right into Google Cloud Platform and how you can use it to tackle your challenges, build new products, analyze big data, and much more. Whether you're an independent developer, startup, or Fortune 500 company, you have never had easier to access to world-class production, product development, and infrastructure tools. Google Cloud Platform is your ticket to leveraging your skills and knowledge into making reliable, scalable, and efficient products—just like how Google builds its own products.

## **Supercharge Your Applications with**

**GraalVM-A B Vijay Kumar 2021-08-10**

Understand the internals and architecture of GraalVM with the help of hands-on experiments and gain deep knowledge that you can apply to improve your application's performance, interoperability, and throughput. Key Features  
Generate faster and leaner code with minimum computing resources for high performance  
Compile Java applications faster than ever to a standalone executable called native images  
Create high-performance polyglot applications that are compatible across various JVM and non-JVM languages  
Book Description GraalVM is a universal virtual machine that allows programmers to compile and run applications written in both JVM and non-JVM languages. It improves the performance and efficiency of applications, making it an ideal companion for cloud-native or microservices-based applications. This book is a hands-on guide, with step-by-step instructions on how to work with GraalVM.

Starting with a quick introduction to the GraalVM architecture and how things work under the hood, you'll discover the performance benefits of running your Java applications on GraalVM. You'll then learn how to create native images and understand how AOT (ahead-of-time) can improve application performance significantly. The book covers examples of building polyglot applications that will help you explore the interoperability between languages running on the same VM. You'll also see how you can use the Truffle framework to implement any language of your choice to run optimally on GraalVM. By the end of this book, you'll not only have learned how GraalVM is beneficial in cloud-native and microservices development but also how to leverage its capabilities to create high-performing polyglot applications. What you will learn  
Gain a solid understanding of GraalVM and how it works under the hood  
Work with GraalVM's high performance optimizing compiler and see how it can be used in both JIT (just-in-time) and AOT (ahead-of-time) modes  
Get to grips with the various optimizations that

GraalVM performs at runtime Use advanced tools to analyze and diagnose performance issues in the code Compile, embed, run, and interoperate between languages using Truffle on GraalVM Build optimum microservices using popular frameworks such as Micronaut and Quarkus to create cloud-native applications Who this book is for This book is for JVM developers looking to optimize their application's performance. You'll also find this book useful if you're a JVM developer looking to explore options to develop polyglot applications using tools from the Python, R, Ruby, or Node.js ecosystem. A solid understanding of software development concepts and prior experience working with programming languages is necessary to get started.

**Understanding Augmented Reality**-Alan B. Craig 2013-04-26 Understanding Augmented Reality addresses the elements that are required to create augmented reality experiences. The technology that supports augmented reality will come and go, evolve and change. The underlying

principles for creating exciting, useful augmented reality experiences are timeless. Augmented reality designed from a purely technological perspective will lead to an AR experience that is novel and fun for one-time consumption - but is no more than a toy. Imagine a filmmaking book that discussed cameras and special effects software, but ignored cinematography and storytelling! In order to create compelling augmented reality experiences that stand the test of time and cause the participant in the AR experience to focus on the content of the experience - rather than the technology - one must consider how to maximally exploit the affordances of the medium. Understanding Augmented Reality addresses core conceptual issues regarding the medium of augmented reality as well as the technology required to support compelling augmented reality. By addressing AR as a medium at the conceptual level in addition to the technological level, the reader will learn to conceive of AR applications that are not limited by today's technology. At the same time, ample examples

are provided that show what is possible with current technology. Explore the different techniques, technologies and approaches used in developing AR applications Learn from the author's deep experience in virtual reality and augmented reality applications to succeed right off the bat, and avoid many of the traps that catch new developers and users of augmented reality experiences Some AR examples can be experienced from within the book using downloadable software

**Mobility Aware Technologies and Applications**-Thomas Magedanz 2005-11-16 The beginning of the twenty-first century is characterized by global markets, and the mobility of people is becoming an important fact of life. Consequently, the mobile user is demanding appropriate technical solutions to make use of customized information and communication services. In this context the notion of next-generation networks (NGNs), which are driven by the convergence of the entertainment sector,

the mobile Internet, and fixed/mobile telecommunications, is emerging. Such NGNs are aggregating a variety of different access networks and supporting the seamless connection of an open set of end-user devices, and due to the adoption of an all-IP network paradigm they enable a much better integration of voice and data services. Coincidentally the buzzword 'fixed mobile convergence' (FMC) describes the current trend towards providing common services across fixed and mobile networks resulting in the medium term in the full integration of fixed and mobile telecommunication networks. The adoption of appropriate middleware technologies and the provision of - called service delivery platforms driven by the ongoing innovation in the field of information technologies provides today the technical foundation for supporting terminal, personal and service mobility and thus the implementation of real seamless information and communication services. Furthermore, users are nowadays looking, in light of an omnipresent service environment, for a much higher degree of



customization and context awareness in the services they use. The papers in this volume look at these enabling mobility-aware technologies and their use for implementing mobility-aware and context-aware applications.

### **MasteringÂ ASP.NET with Visual C#-A.**

Russell Jones 2006-10-11 In recent years, creating dynamic, server-side web applications has become the most vital part of web development. Now, thanks to ASP.NET and Visual C#, you can build cleaner, more powerful web applications, and you can do it more quickly than ever before. Mastering ASP.NET with C# is an essential guide to harnessing the power of the .NET Framework to develop and consume Web Services of all kinds. This book is packed with the skills you need to get started creating ASP.NET applications, including using Web Forms, connecting to databases with ADO.NET, and working with XML. Coverage Includes: \* Using the ASP.NET intrinsic objects \* Employing the ASP.NET Server controls \* Using HTML controls

\* Saving state data with cookies \* Uploading files \* Sending email \* Retrieving and displaying data from databases \* Building User and Composite controls \* Building custom controls \* Managing multiple ASP.NET configuration files \* Building a custom configuration section handler \* Creating Web Services \* Consuming Web Services from Web Forms, Windows Forms, and COM applications

### **Applied Parallel and Scientific Computing-**

Kristján Jónasson 2012-02-04 The two volume set LNCS 7133 and LNCS 7134 constitutes the thoroughly refereed post-conference proceedings of the 10th International Conference on Applied Parallel and Scientific Computing, PARA 2010, held in Reykjavík, Iceland, in June 2010. These volumes contain three keynote lectures, 29 revised papers and 45 minisymposia presentations arranged on the following topics: cloud computing, HPC algorithms, HPC programming tools, HPC in meteorology, parallel numerical algorithms, parallel computing in

physics, scientific computing tools, HPC software engineering, simulations of atomic scale systems, tools and environments for accelerator based computational biomedicine, GPU computing, high performance computing interval methods, real-time access and processing of large data sets, linear algebra algorithms and software for multicore and hybrid architectures in honor of Fred Gustavson on his 75th birthday, memory and multicore issues in scientific computing - theory and praxis, multicore algorithms and implementations for application problems, fast PDE solvers and a posteriori error estimates, and scalable tools for high performance computing.

### **Ubiquitous Computing and Multimedia**

**Applications**-Tai-hoon Kim 2011-05-04 This two-volume set (CCIS 150 and CCIS 151) constitutes the refereed proceedings of the Second International Conference on Ubiquitous Computing and Multimedia Applications, UCMA 2011, held in Daejeon, Korea, in April 2011. The 86 revised full papers presented were carefully

reviewed and selected from 570 submissions. Focusing on various aspects of advances in multimedia applications and ubiquitous computing with computational sciences, mathematics and information technology the papers present current research in the area of multimedia and ubiquitous environment including models and systems, new directions, novel applications associated with the utilization, and acceptance of ubiquitous computing devices and systems.

### **Developing Web Applications with ASP.NET**

**and C#**-Hank Meyne 2002-10-02 Learn how to create the basic, dynamic, and advanced ASP.NET pages in C# Packed with tips, tricks, and workarounds, this book covers every aspect of developing a Web application for the enterprise using ASP.NET and C#. Written by Microsoft insiders, it shows readers how to create the basic, dynamic, and advanced ASP.NET pages in Microsoft's new C# programming language, and explains how to

interact with the database using ADO.NET. The authors review how to transport and display data on the Internet or an Intranet using XML, objects, and Web services. They also explain how to implement security with authentication, integrate important e-commerce issues, and optimize the ASP.NET Web application for optimal performance. Companion Web site features complete source code samples for the applications developed and explained in the book. Microsoft Technologies .NET Platform: The next big overhaul to Microsoft's technologies that will bring enterprise distributed computing to the next level by fully integrating the Internet into the development platform. This will allow interaction between any machine, on any platform, and on any device. Visual Basic.NET: The update to this popular visual programming language will offer greater Web functionality, more sophisticated object-oriented language features, links to Microsoft's new common runtime, and a new interface. ASP.NET: A programming framework (formerly known as Active Server Pages) for building powerful Web-

based enterprise applications; can be programmed using VB.NET or C#. C#: Microsoft's new truly object-oriented programming language that builds on the strengths of C++ and the ease of Visual Basic; promises to give Sun's Java a run for its money.

### **Model-Implementation Fidelity in Cyber Physical System Design**-Anca Molnos

2016-12-08 This book puts in focus various techniques for checking modeling fidelity of Cyber Physical Systems (CPS), with respect to the physical world they represent. The authors' present modeling and analysis techniques representing different communities, from very different angles, discuss their possible interactions, and discuss the commonalities and differences between their practices. Coverage includes model driven development, resource-driven development, statistical analysis, proofs of simulator implementation, compiler construction, power/temperature modeling of digital devices, high-level performance analysis, and code/device

certification. Several industrial contexts are covered, including modeling of computing and communication, proof architectures models and statistical based validation techniques.

### **The History of North American Small Gas Turbine Aircraft Engines**

Richard A. Leyes  
1999 This landmark joint publication between the National Air and Space Museum and the American Institute of Aeronautics and Astronautics chronicles the evolution of the small gas turbine engine through its comprehensive study of a major aerospace industry. Drawing on in-depth interviews with pioneers, current project engineers, and company managers, engineering papers published by the manufacturers, and the tremendous document and artifact collections at the National Air and Space Museum, the book captures and memorializes small engine development from its earliest stage. Leyes and Fleming leap back nearly 50 years for a first look at small gas turbine engine development and the seven major

corporations that dared to produce, market, and distribute the products that contributed to major improvements and uses of a wide spectrum of aircraft. In non-technical language, the book illustrates the broad-reaching influence of small turbines from commercial and executive aircraft to helicopters and missiles deployed in recent military engagements. Detailed corporate histories and photographs paint a clear historical picture of turbine development up to the present. See for yourself why *The History of North American Small Gas Turbine Aircraft Engines* is the most definitive reference book in its field. The publication of *The History of North American Small Gas Turbine Aircraft Engines* represents an important milestone for the National Air and Space Museum (NASM) and the American Institute of Aeronautics and Astronautics (AIAA). For the first time, there is an authoritative study of small gas turbine engines, arguably one of the most significant spheres of aeronautical technology in the second half o

**A Treatise on the Steam-engine in Its Various Applications to Mines, Mills, Steam Navigation, Railways, and Agriculture**-John Bourne 1861

**A Treatise on the Steam-engine in Its Various Applications to Mines, Mills, Steam Navigation, Railways, and Agriculture, with Theoretical Investigations Respecting the Motive Power of Heat and the Proper Proportions of Steam-engines**-John Bourne 1866

**Troubleshooting Oracle Performance**-Christian Antognini 2008-08-20 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.

**Design and Application of Heavy-duty Clutches**-G. R. Harting 1963 Online version: Technical papers portion of the SAE Digital Library references thousands of SAE Technical Papers covering the latest advances and research in all areas of mobility engineering including ground vehicle, aerospace, off-highway, and manufacturing technology. Sample coverage includes fuels and lubricants, emissions, electronics, brakes, restraint systems, noise, engines, materials, lighting, and more. Your SAE service includes detailed summaries, complete documents in PDF, plus document storage and maintenance

**Ray Tracing: A Tool for All**-Jon Peddie

2019-08-08 This is the first book to offer a comprehensive overview for anyone wanting to understand the benefits and opportunities of ray tracing, as well as some of the challenges, without having to learn how to program or be an optics scientist. It demystifies ray tracing and brings forward the need and benefit of using ray tracing throughout the development of a film, product, or building — from pitch to prototype to marketing. Ray Tracing and Rendering clarifies the difference between conventional faked rendering and physically correct, photo-realistic ray traced rendering, and explains how programmer's time, and backend compositing time are saved while producing more accurate representations with 3D models that move. Often considered an esoteric subject the author takes ray tracing out of the confines of the programmer's lair and shows how all levels of users from concept to construction and sales can benefit without being forced to be a practitioner. It treats both theoretical and practical aspects of the subject as well as giving insights into all the major ray tracing programs and how many of

them came about. It will enrich the readers' understanding of what a difference an accurate high-fidelity image can make to the viewer — our eyes are incredibly sensitive to flaws and distortions and we quickly disregard things that look phony or unreal. Such dismissal by a potential user or customer can spell disaster for a supplier, producer, or developer. If it looks real it will sell, even if it is a fantasy animation. Ray tracing is now within reach of every producer and marketer, and at prices one can afford, and with production times that meet the demands of today's fast world.

**Reliable and Autonomous Computational Science**-Sung Y. Shin 2011-02-02 Increasing size and complexity of software and hardware systems makes it harder to ensure their reliability. At the same time, the issues of autonomous computing become more critical as we more and more rely on software systems in our daily life. Such complexity is getting even more critical with the ubiquitous computing of

embedded devices and other pervasive systems. These trends ask for techniques and tools for developing reliable and autonomous software which can support software engineers in their efforts. This book summarizes the state of the art of research in the diverse fields concerned, including novel designs, case studies and experimental as well as theoretical results.

**Motor Age- 1911**

### **Performance Tuning of Scientific**

**Applications-**David H. Bailey 2010-11-23 With contributions from some of the most notable experts in the field, Performance Tuning of Scientific Applications presents current research in performance analysis. The book focuses on the following areas. Performance monitoring: Describes the state of the art in hardware and software tools that are commonly used for monitoring and measuring performance and managing large quantities of data Performance

analysis: Discusses modern approaches to computer performance benchmarking and presents results that offer valuable insight into these studies Performance modeling: Explains how researchers deduce accurate performance models from raw performance data or from other high-level characteristics of a scientific computation Automatic performance tuning: Explores ongoing research into automatic and semi-automatic techniques for optimizing computer programs to achieve superior performance on any computer platform Application tuning: Provides examples that show how the appropriate analysis of performance and some deft changes have resulted in extremely high performance Performance analysis has grown into a full-fledged, sophisticated field of empirical science. Describing useful research in modern performance science and engineering, this book helps real-world users of parallel computer systems to better understand both the performance vagaries arising in scientific applications and the practical means for improving performance. Read about the book on

HPCwire and insideHPC

**Installing, Upgrading and Maintaining Oracle Applications 11i (Or, When Old Dogs Herd Cats - Release 11i Care and Feeding)-**

Barbara Matthews 2004-11-01 The experts at OnCallDBA and Solution Beacon collaborated to provide in depth coverage about Oracle Applications Release 11i. Topics include 11i Concepts and Architecture, 11i New Administration Features, 11i Installation, Upgrading or Migrating to 11i, Maintaining 11i, Administering 11i, Setting Up the Concurrent Manager, Using the Concurrent Manager, Workflow Setup, Using Workflow Builder, Workflow Care and Feeding, and Tuning & Troubleshooting. Co-authored by Barb Matthews, John Stouffer, Karen Brownfield and Randy Giefer, this book is intended for E-Business Suite releases 11.5.8 and earlier. Users of 11.5.9 and higher may find the concepts useful, but the actual procedures and forms have changed significantly and do not match those depicted in

the book. List price \$69.99, Lulu Price \$62.99

**Distributed Tracing in Practice**-Austin Parker

2020-04-13 Most applications today are distributed in some fashion. Monitoring the health and performance of these distributed architectures requires a new approach. Enter distributed tracing, a method of profiling and monitoring applications—especially those that use microservice architectures. There’s just one problem: distributed tracing can be hard. But it doesn’t have to be. With this practical guide, you’ll learn what distributed tracing is and how to use it to understand the performance and operation of your software. Key players at Lightstep walk you through instrumenting your code for tracing, collecting the data that your instrumentation produces, and turning it into useful, operational insights. If you want to start implementing distributed tracing, this book tells you what you need to know. You’ll learn: The pieces of a distributed tracing deployment: Instrumentation, data collection, and delivering



value Best practices for instrumentation (the methods for generating trace data from your service) How to deal with or avoid overhead, costs, and sampling How to work with spans (the building blocks of request-based distributed traces) and choose span characteristics that lead to valuable traces Where distributed tracing is headed in the future

### **Google Cloud Certified Professional Cloud Architect All-in-One Exam Guide**

**Iman Ghanizada** 2021-03-19 Everything you need to succeed on the Google Cloud Certified Professional Cloud Architect exam in one accessible study guide Take the challenging Google Cloud Certified Professional Cloud Architect exam with confidence using the comprehensive information contained in this invaluable self-study guide. The book provides a thorough overview of cloud architecture and Google Cloud Platform (GCP) and shows you how to pass the test. Beyond exam preparation, the guide also serves as a valuable on-the-job

reference. Written by a recognized expert in the field, Google Cloud Certified Professional Cloud Architect All-In-One Exam Guide is based on proven pedagogy and features special elements that teach and reinforce practical skills. The book contains accurate practice questions and in-depth explanations. You will discover how to design, develop, and manage robust, secure, scalable, and highly available solutions to drive business objectives. Offers 100% coverage of every objective for the Google Cloud Certified Professional Cloud Architect exam Online content includes 100 additional practice questions in the TotalTester customizable exam engine Written by a Google Cloud Certified Professional Cloud Architect

### **Multi-Cloud Architecture and Governance**

**Jeroen Mulder** 2020-12-11 A comprehensive guide to architecting, managing, implementing, and controlling multi-cloud environments Key Features Deliver robust multi-cloud environments and improve your business

productivity Stay in control of the cost, governance, development, security, and continuous improvement of your multi-cloud solution Integrate different solutions, principles, and practices into one multi-cloud foundation Book Description Multi-cloud has emerged as one of the top cloud computing trends, with businesses wanting to reduce their reliance on only one vendor. But when organizations shift to multiple cloud services without a clear strategy, they may face certain difficulties, in terms of how to stay in control, how to keep all the different components secure, and how to execute the cross-cloud development of applications. This book combines best practices from different cloud adoption frameworks to help you find solutions to these problems. With step-by-step explanations of essential concepts and practical examples, you'll begin by planning the foundation, creating the architecture, designing the governance model, and implementing tools, processes, and technologies to manage multi-cloud environments. You'll then discover how to design workload environments using different

cloud propositions, understand how to optimize the use of these cloud technologies, and automate and monitor the environments. As you advance, you'll delve into multi-cloud governance, defining clear demarcation models and management processes. Finally, you'll learn about managing identities in multi-cloud: who's doing what, why, when, and where By the end of this book, you'll be able to create, implement, and manage multi-cloud architectures with confidence What you will learn Get to grips with the core functions of multiple cloud platforms Deploy, automate, and secure different cloud solutions Design network strategy and get to grips with identity and access management for multi-cloud Design a landing zone spanning multiple cloud platforms Use automation, monitoring, and management tools for multi-cloud Understand multi-cloud management with the principles of BaseOps, FinOps, SecOps, and DevOps Define multi-cloud security policies and use cloud security tools Test, integrate, deploy, and release using multi-cloud CI/CD pipelines Who this book is for This book is for architects

and lead engineers involved in architecting multi-cloud environments, with a focus on getting governance right to stay in control of developments in multi-cloud. Basic knowledge of different cloud platforms (Azure, AWS, GCP, VMWare, and OpenStack) and understanding of IT governance is necessary.

**Oracle PL/SQL Programming**-Steven Feuerstein 2014-01-23 Considered the best Oracle PL/SQL programming guide by the Oracle community, this definitive guide is precisely what you need to make the most of Oracle's powerful procedural language. The sixth edition describes the features and capabilities of PL/SQL up through Oracle Database 12c Release 1. Hundreds of thousands of PL/SQL developers have benefited from this book over the last twenty years; this edition continues that tradition. With extensive code examples and a lively sense of humor, this book explains language fundamentals, explores advanced coding techniques, and offers best practices to

help you solve real-world problems. Get PL/SQL programs up and running quickly, with clear instructions for executing, tracing, testing, debugging, and managing code Understand new 12.1 features, including the ACCESSIBLE\_BY clause, WITH FUNCTION and UDF pragma, BEQUEATH CURRENT\_USER for views, and new conditional compilation directives Take advantage of extensive code samples, from easy-to-follow examples to reusable packaged utilities Optimize PL/SQL performance with features like the function result cache and Oracle utilities such as PL/Scope and the PL/SQL hierarchical profiler Build modular, easy-to-maintain PL/SQL applications using packages, procedures, functions, and triggers

**Applications, Tools and Techniques on the Road to Exascale Computing**-Koen de Bosschere 2012-01-01 Single processing units have now reached a point where further major improvements in their performance are restricted by their physical limitations. This is

causing a slowing down in advances at the same time as new scientific challenges are demanding exascale speed. This has meant that parallel processing has become key to High Performance Computing (HPC). This book contains the proceedings of the 14th biennial ParCo conference, ParCo2011, held in Ghent, Belgium. The ParCo conferences have traditionally concentrated on three main themes: Algorithms, Architectures and Applications. Nowadays though, the focus has shifted from traditional multiprocessor topologies to heterogeneous and manycores, incorporating standard CPUs, GPUs (Graphics Processing Units) and FPGAs (Field Programmable Gate Arrays). These platforms are, at a higher abstraction level, integrated in clusters, grids and clouds. The papers presented here reflect this change of focus. New architectures, programming tools and techniques are also explored, and the need for exascale hardware and software was also discussed in the industrial session of the conference. This book will be of interest to all those interested in parallel computing today, and progress towards

the exascale computing of tomorrow.

**Multi-Agent Systems**-Adeline M. Uhrmacher  
2018-10-08 Methodological Guidelines for Modeling and Developing MAS-Based Simulations  
The intersection of agents, modeling, simulation, and application domains has been the subject of active research for over two decades. Although agents and simulation have been used effectively in a variety of application domains, much of the supporting research remains scattered in the literature, too often leaving scientists to develop multi-agent system (MAS) models and simulations from scratch. **Multi-Agent Systems: Simulation and Applications** provides an overdue review of the wide ranging facets of MAS simulation, including methodological and application-oriented guidelines. This comprehensive resource reviews two decades of research in the intersection of MAS, simulation, and different application domains. It provides scientists and developers with disciplined engineering approaches to

modeling and developing MAS-based simulations. After providing an overview of the field's history and its basic principles, as well as cataloging the various simulation engines for MAS, the book devotes three sections to current and emerging approaches and applications. Simulation for MAS — explains simulation support for agent decision making, the use of simulation for the design of self-organizing systems, the role of software architecture in simulating MAS, and the use of simulation for studying learning and stigmergic interaction. MAS for Simulation — discusses an agent-based framework for symbiotic simulation, the use of country databases and expert systems for agent-based modeling of social systems, crowd-behavior modeling, agent-based modeling and simulation of adult stem cells, and agents for traffic simulation. Tools — presents a number of representative platforms and tools for MAS and simulation, including Jason, James II, SeSAM, and RoboCup Rescue. Complete with over 200 figures and formulas, this reference book provides the necessary overview of experiences with MAS simulation and the tools needed to exploit

simulation in MAS for future research in a vast array of applications including home security, computational systems biology, and traffic management.

**BPF Performance Tools**-Brendan Gregg  
2019-11-27 BPF and related observability tools give software professionals unprecedented visibility into software, helping them analyze operating system and application performance, troubleshoot code, and strengthen security. BPF Performance Tools: Linux System and Application Observability is the industry's most comprehensive guide to using these tools for observability. Brendan Gregg, author of the industry's definitive guide to system performance, introduces powerful new methods and tools for doing analysis that leads to more robust, reliable, and safer code. This authoritative guide: Explores a wide spectrum of software and hardware targets Thoroughly covers open source BPF tools from the Linux Foundation iovisor project's bcc and bpfftrace

repositories Summarizes performance engineering and kernel internals you need to understand Provides and discusses 150+ bpftrace tools, including 80 written specifically for this book: tools you can run as-is, without programming — or customize and develop further, using diverse interfaces and the bpftrace front-end You'll learn how to use BPF (eBPF) tracing tools to analyze CPUs, memory, disks, file systems, networking, languages, applications, containers, hypervisors, security, and the Linux kernel. You'll move from basic to advanced tools and techniques, producing new metrics, stack traces, custom latency histograms, and more. It's like having a superpower: with Gregg's guidance and tools, you can analyze virtually everything that impacts system performance, so you can improve virtually any Linux operating system or application.

### **Developing Embedded Software Using DaVinci & OMAP Technology**-Basavaraj

Pawate 2009 This book discusses how to develop

embedded products using DaVinci & OMAP Technology from Texas Instruments Incorporated. It presents a single software platform for diverse hardware platforms. DaVinci & OMAP Technology refers to the family of processors, development tools, software products, and support. While DaVinci Technology is driven by the needs of consumer video products such as IP network cameras, networked projectors, digital signage and portable media players, OMAP Technology is driven by the needs of wireless products such as smart phones. Texas Instruments offers a wide variety of processing devices to meet our users' price and performance needs. These vary from single digital signal processing devices to complex, system-on-chip (SoC) devices with multiple processors and peripherals. As a software developer you question: Do I need to become an expert in signal processing and learn the details of these complex devices before I can use them in my application? As a senior executive you wonder: How can I reduce my engineering development cost? How can I move from one processor to another from

Texas Instruments without incurring a significant development cost? This book addresses these questions with sample code and gives an insight into the software architecture and associated component software products that make up this software platform. As an example, we show how we develop an IP network camera. Using this software platform, you can choose to focus on the application and quickly create a product without having to learn the details of the underlying hardware or signal processing algorithms. Alternatively, you can choose to differentiate at both the application as well as the signal processing layer by developing and adding your algorithms using the xDAIS for Digital Media, xDM, guidelines for component software. Finally, you may use one code base across different hardware platforms. Table of Contents: Software Platform / More about xDM, VISA, & CE / Building a Product Based on DaVinci Technology / Reducing Development Cost / eXpressDSP Digital Media (xDM) / Sample Application Using xDM / Embedded Peripheral Software Interface (EPSI) / Sample Application Using EPSI / Sample

Application Using EPSI and xDM / IP Network Camera on DM355 Using TI Software / Adding your secret sauce to the Signal Processing Layer (SPL) / Further Reading

**Proceedings-** 2002

**Graphics Hardware-** 2002

**SEC Docket-**United States. Securities and Exchange Commission 2003

**Autonomous and Autonomic Systems: With Applications to NASA Intelligent Spacecraft Operations and Exploration Systems-**Walt Truskowski 2009-11-12 In the early 1990s, NASA Goddard Space Flight Center started researching and developing autonomous and autonomic ground and spacecraft control systems for future NASA missions. This research

started by experimenting with and developing expert systems to automate ground station software and reduce the number of people needed to control a spacecraft. This was followed by research into agent-based technology to develop autonomous ground control and spacecraft. Research into this area has now evolved into using the concepts of autonomic systems to make future space missions self-managing and giving them a high degree of survivability in the harsh environments in which they operate. This book describes much of the results of this research. In addition, it aims to discuss the needed software to make future NASA space missions more completely autonomous and autonomic. The core of the software for these new missions has been written for other applications or is being applied gradually in current missions, or is in current development. It is intended that this book should document how NASA missions are becoming more autonomous and autonomic and should point to the way of making future missions highly autonomous and autonomic. What is not covered

is the supporting hardware of these missions or the intricate software that implements orbit and attitude determination, on-board resource allocation, or planning and scheduling (though we refer to these technologies and give references for the interested reader).

### **High-Performance Computing**-R.J. Allan

1999-03-31 Over the past decade high performance computing has demonstrated the ability to model and predict accurately a wide range of physical properties and phenomena. Many of these have had an important impact in contributing to wealth creation and improving the quality of life through the development of new products and processes with greater efficacy, efficiency or reduced harmful side effects, and in contributing to our ability to understand and describe the world around us. Following a survey of the U.K.'s urgent need for a supercomputing facility for academic research (see next chapter), a 256-processor T3D system from Cray Research Inc. went into operation at



the University of Edinburgh in the summer of 1994. The High Performance Computing Initiative, HPCI, was established in November 1994 to support and ensure the efficient and effective exploitation of the T3D (and future generations of HPC systems) by a number of consortia working in the "frontier" areas of computational research. The Cray T3D, now comprising 512 processors and total of 32 GB memory, represented a very significant increase in computing power, allowing simulations to move forward on a number of fronts. The three-fold aims of the HPCI may be summarised as follows; (1) to seek and maintain a world class position in computational science and engineering, (2) to support and promote exploitation of HPC in industry, commerce and business, and (3) to support education and training in HPC and its application.

**Professional Microsoft SQL Server 2014 Administration**-Adam Jorgensen 2014-09-08  
Learn to take advantage of the opportunities

offered by SQL Server 2014 Microsoft's SQL Server 2014 update means big changes for database administrators, and you need to get up to speed quickly because your methods, workflow, and favorite techniques will be different from here on out. The update's enhanced support of large-scale enterprise databases and significant price advantage mean that SQL Server 2014 will become even more widely adopted across the industry. The update includes new backup and recovery tools, new AlwaysOn features, and enhanced cloud capabilities. In-memory OLTP, Buffer Pool Extensions for SSDs, and a new Cardinality Estimator can improve functionality and smooth out the workflow, but only if you understand their full capabilities. Professional Microsoft SQL Server 2014 is your comprehensive guide to working with the new environment. Authors Adam Jorgensen, Bradley Ball, Ross LoForte, Steven Wort, and Brian Knight are the dream team of the SQL Server community, and they put their expertise to work guiding you through the changes. Improve oversight with better

management and monitoring Protect your work with enhanced security features Upgrade performance tuning, scaling, replication, and clustering Learn new options for backup and recovery Professional Microsoft SQL Server 2014 includes a companion website with sample code and efficient automation utilities, plus a host of tips, tricks, and workarounds that will make your job as a DBA or database architect much easier. Stop getting frustrated with administrative issues and start taking control. Professional Microsoft SQL Server 2014 is your roadmap to mastering the update and creating solutions that work.

**Nonlinear Model Predictive Control of Combustion Engines**-Thivaharan Albin Rajasingham 2021 This book provides an overview of the nonlinear model predictive control (NMPC) concept for application to innovative combustion engines. Readers can use this book to become more expert in advanced combustion engine control and to develop and implement their own NMPC algorithms to solve

challenging control tasks in the field. The significance of the advantages and relevancy for practice is demonstrated by real-world engine and vehicle application examples. The author provides an overview of fundamental engine control systems, and addresses emerging control problems, showing how they can be solved with NMPC. The implementation of NMPC involves various development steps, including: reduced-order modeling of the process; analysis of system dynamics; formulation of the optimization problem; and real-time feasible numerical solution of the optimization problem. Readers will see the entire process of these steps, from the fundamentals to several innovative applications. The application examples highlight the actual difficulties and advantages when implementing NMPC for engine control applications. Nonlinear Model Predictive Control of Combustion Engines targets engineers and researchers in academia and industry working in the field of engine control. The book is laid out in a structured and easy-to-read manner, supported by code examples in MATLAB®/Simulink®, thus

expanding its readership to students and academics who would like to understand the fundamental concepts of NMPC. Advances in Industrial Control reports and encourages the transfer of technology in control engineering. The rapid development of control technology has an impact on all areas of the control discipline. The series offers an opportunity for researchers to present an extended exposition of new work in all aspects of industrial control.

### **Recent Advances in the Message Passing**

**Interface**-Rainer Keller 2010-09-02 Parallel Computing is at the verge of a new era. Multi-core processors make parallel computing a fundamental skill required by all computer scientists. At the same time, high-end systems have surpassed the PetaFlop barrier, and significant efforts are devoted to the development of hardware and software technologies for the next-generation Exascale systems. To reach this next stage, processor architectures, high-speed interconnects and programming models will go

through dramatic changes. The Message Passing Interface (MPI) has been the most widespread programming model for parallel systems of today. A key question of upcoming Exascale systems is whether and how MPI has to evolve in order to meet the performance and productivity demands of Exascale systems. EuroMPI is the successor of the EuroPVM/MPI series, a flagship conference for this community, established as the premier international forum for researchers, users and vendors to present their latest advances in MPI and message passing systems in general. The 17th European MPI users group meeting was held in Stuttgart during September 12-15, 2010. The conference was organized by the High Performance Computing Center Stuttgart at the University of Stuttgart. The previous conferences were held in Espoo (2009), Dublin (2008), Paris (2007), Bonn (2006), Sorrento (2005), Budapest (2004), Venice (2003), Linz (2002), St. Moritz (2001), Balatonfüred (2000), Barcelona (1999), Liverpool (1998), Krakow (1997), Munich (1996), Lyon

(1995) and Rome (1994). The main topics of the conference were message-passing systems - especially MPI, performance, scalability and reliability issues on very large scale systems.