Understanding Ibm Soa Foundation Suite Learning Visually With Examples Jane Fung

Safe 5.0 Distilled: Achieving Business Agility with the Scaled Agile FrameworkCIO.Enterprise Master Data ManagementOracle SOA Suite 12c HandbookWS-BPEL 2.0 for SOA Composite Applications with Oracle SOA Suite 11gManaging Data in MotionSmart SOA Connectivity Patterns: Unleash the Power of IBM WebSphere Connectivity PortfolioPractical Software ArchitectureEssentials of Cloud ComputingWebSphere Application Server V8.5 Concepts, Planning, and Design GuideEnterprise Integration PatternsUnderstanding SOA Security Design and ImplementationUnderstanding SOA with Web ServicesSOA Policy, Service Gateway, and SLA ManagementIBM SmartCloud: Building a Cloud Enabled Data CenterUnderstanding IBM SOA Foundation SuiteReduce Risk and Improve Security on IBM Mainframes: Volume 3 Mainframe Subsystem and Application SecuritySoftware DevelopmentApplication Development for IBM WebSphere Process Server 7 and Enterprise Service Bus 7Sicherheitsservices Für Service Oriented Architecture Am Fallbeispiel Enterprise SoOracle SOA Suite 11g HandbookOracle EssentialsIBM WebSphere Application Server 8.0 Administration GuideCombining Business Process Management and Enterprise Architecture for Better Business OutcomesSOA Design PatternsDo More with Soa IntegrationAnalytics Across the EnterpriseServices ComputingBusiness Process Management Design Guide: Using IBM Business Process ManagerHandbook of Research on Demand-Driven Web Services: Theory, Technologies, and ApplicationsPatterns of Information Management100 SOA QuestionsEnd-to-end Integration with IBM Sterling B2B Integration and Managed File Transfer solutionsWebSphere MQ V7.0 Features and EnhancementsBuilding SOA Solutions Using the Rational SDPSOA Principles of Service Design (paperback)IT Architecture For DummiesSoa Made SimpleBusiness and Scientific WorkflowsAn Architectural and Practical Guide to IBM Hybrid Integration Platform

Safe 5.0 Distilled: Achieving Business Agility with the Scaled Agile Framework

Organizations are looking for ways to get more out of their already strained IT infrastructure as they face new technological and economic pressures. They are also trying to satisfy a broad set of users (internal and external to the enterprise) who demand improvements in their quality of service (QoS), regardless of increases in the number of users and applications. Cloud computing offers attractive opportunities to reduce costs, accelerate development, and increase the flexibility of the IT infrastructure, applications, and services. Infrastructure as a service (IaaS) is the typical starting point for most organizations when moving to a cloud computing environment. IaaS can be used for the delivery of resources such as compute, storage, and network services through a self-service portal. With IaaS, IT services are delivered as a subscription service, eliminating up-front costs and driving down ongoing support costs. IBM® has defined the Cloud Computing Reference Architecture (CCRA) based on years of experience of working with customers who have implemented cloud-computing solutions. The IBM CCRA is a blueprint or guide for architecting cloud-computing implementations. This IBM

RedguideTM publication highlights the Cloud Enabled Data Center adoption pattern and describes how you can use it to define an IaaS solution. This guide is intended for chief technology officers, data center architects, IT architects, and application architects who want to understand the cloud-computing infrastructure necessary to support their applications and services by using an IaaS solution. It explains the technical and business benefits of a Cloud Enabled Data Center solution. It introduces a Cloud Enabled Data Center maturity model where each maturity level corresponds to an increase in the degree of automation and the cloud-computing capabilities that are available. In addition, this guide describes the architectural framework provided by the IBM CCRA and explains details about the Cloud Enabled Data Center adoption pattern.

CIO.

A solid introduction to the practices, plans, and skills required for developing a smart system architecture Information architecture combines IT skills with business skills in order to align the IT structure of an organization with the mission, goals, and objectives of its business. This friendly introduction to IT architecture walks you through the myriad issues and complex decisions that many organizations face when setting up IT systems to work in sync with business procedures. Veteran IT professional and author Kirk Hausman explains the business value behind IT architecture and provides you with an action plan for implementing IT architecture procedures in an organization. You'll explore the many challenges that organizations face as they attempt to use technology to enhance their business's productivity so that you can gain a solid understanding of the elements that are required to plan and create an architecture that meets specific business goals. Defines IT architecture as a blend of IT skills and business skills that focuses on business optimization, business architecture, performance management, and organizational structure Uncovers and examines every topic within IT architecture including network, system, data, services, application, and more Addresses the challenges that organizations face when attempting to use information technology to enable profitability and business continuity While companies look to technology more than ever to enhance productivity, you should look to IT Architecture For Dummies for guidance in this field.

Enterprise Master Data Management

Oracle SOA Suite 12c Handbook

WS-BPEL 2.0 for SOA Composite Applications with Oracle SOA Suite 11g

Where most SOA books focus on integration and architecture basics, Lomow and Newcomer fearlessly dive into these more advanced, yet critical, topics, and provide a depth of treatment unavailable anywhere else."--Jason Bloomberg, Senior Analyst, ZapThink LLC"This book provides a wealth of content on Web Services and SOA not found elsewhere. Although the book is technical in nature, it is surprisingly

easy to read and digest. Managers who would like to keep up with the most effective technical strategies will find this book required reading."--Hari Mailvaganam, University of British Columbia, Vancouver"I have been teaching companies and lecturing on SOA and XML Web Services for years and sort of felt at home with these technologies. I didn t think anyone else could teach me anything more significant about either of them. This book surprised me. If a person teaching SOA and Web Services can learn something from this book, you can too. This book is a must-read for all architects, senior developers, and concerned CTOs."--Sayed Y.

Managing Data in Motion

Smart SOA Connectivity Patterns: Unleash the Power of IBM WebSphere Connectivity Portfolio

How to Transform Your Organization with Analytics: Insider Lessons from IBM's Pioneering Experience Analytics is not just a technology: It is a better way to do business. Using analytics, you can systematically inform human judgment with data-driven insight. This doesn't just improve decision-making: It also enables greater innovation and creativity in support of strategy. Your transformation won't happen overnight; however, it is absolutely achievable, and the rewards are immense. This book demystifies your analytics journey by showing you how IBM has successfully leveraged analytics across the enterprise, worldwide. Three of IBM's pioneering analytics practitioners share invaluable real-world perspectives on what does and doesn't work and how you can start or accelerate your own transformation. This book provides an essential framework for becoming a smarter enterprise and shows through 31 case studies how IBM has derived value from analytics throughout its business. Coverage Includes Creating a smarter workforce through big data and analytics More effectively optimizing supply chain processes Systematically improving financial forecasting Managing financial risk, increasing operational efficiency, and creating business value Reaching more B2B or B2C customers and deepening their engagement Optimizing manufacturing and product management processes Deploying your sales organization to increase revenue and effectiveness Achieving new levels of excellence in services delivery and reducing risk Transforming IT to enable wider use of analytics "Measuring the immeasurable" and filling gaps in imperfect data Whatever your industry or role, whether a current or future leader, analytics can make you smarter and more competitive. Analytics Across the Enterprise shows how IBM did it--and how you can, too. Learn more about IBM Analytics

Practical Software Architecture

Master Oracle SOA Suite 12c Design, implement, manage, and maintain a highly flexible service-oriented computing infrastructure across your enterprise using the detailed information in this Oracle Press guide. Written by an Oracle ACE director, Oracle SOA Suite 12c Handbook uses a start-to-finish case study to illustrate each concept and technique. Learn expert techniques for designing and implementing components, assembling composite applications, integrating Java, handling

complex business logic, and maximizing code reuse. Runtime administration, governance, and security are covered in this practical resource. Get started with the Oracle SOA Suite 12c development and run time environment Deploy and manage SOA composite applications Expose SOAP/XML REST/JSON through Oracle Service Bus Establish interactions through adapters for Database, JMS, File/FTP, UMS, LDAP, and Coherence Embed custom logic using Java and the Spring component Perform fast data analysis in real time with Oracle Event Processor Implement Event Drive Architecture based on the Event Delivery Network (EDN) Use Oracle Business Rules to encapsulate logic and automate decisions Model complex processes using BPEL, BPMN, and human task components Establish KPIs and evaluate performance using Oracle Business Activity Monitoring Control traffic, audit system activity, and encrypt sensitive data

Essentials of Cloud Computing

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

WebSphere Application Server V8.5 Concepts, Planning, and Design Guide

This IBM® Redbooks® publication explains how to combine business process management (BPM) and Enterprise Architecture (EA) for better business outcomes. This book provides a unique synergistic approach to BPM and EA, based on a firm understanding of the life cycles of the enterprise and the establishment of appropriate collaboration and governance processes. When carried out together, BPM provides the business context, understanding, and metrics, and EA provides the discipline to translate business vision sod strategy into architectural change. Both are needed for sustainable continuous improvement. This book provides thought leadership and direction on the topic of BPM and EA synergies. Although technical in nature, it is not a typical IBM Redbooks publication. The book provides guidance and direction on how to collaborate effectively across tribal boundaries rather than technical details about IBM software products. The primary audience

for this book is leaders and architects who need to understand how to effectively combine BPM and EA to drive, as a key differentiator, continuous improvement and transformational change with enterprise scope.

Enterprise Integration Patterns

This IBM® Redbooks® publication documents the strength and value of the IBM security strategy with IBM zTM Systems hardware and software. In an age of increasing security consciousness and more and more dangerous advanced persistent threats, IBM z SystemsTM provides the capabilities to address the needs of today's business security challenges. This publication explores how z Systems hardware is designed to provide integrity, process isolation, and cryptographic capability to help address security requirements. We highlight the features of IBM z/OS® and other operating systems, which offer a variety of customizable security elements. We discuss z/OS and other operating systems and additional software that use the building blocks of z Systems hardware to provide solutions to business security needs. We also explore the perspective from the view of an enterprise security architect and how a modern mainframe has to fit into an overarching enterprise security architecture. This book is part of a three-volume series that focuses on guiding principles for optimized mainframe security configuration within a holistic enterprise security architecture. The series' intended audience includes enterprise security architects, planners, and managers who are interested in exploring how the security design and features of z Systems, the z/OS operating system, and associated software address current issues such as data encryption, authentication, authorization, network security, auditing, ease of security administration, and monitoring.

Understanding SOA Security Design and Implementation

Build SOA-based flexible, economical, and efficient applications for IBM WebSphere Process Server 7 and Enterprise Service Bus 7 with this book and eBook.

Understanding SOA with Web Services

Across numerous vertical industries, enterprises are challenged to improve processing efficiency as transactions flow from their business communities to their internal systems and vice versa, simplify management and expansion of the external communities, accommodate customer and supplier preferences, govern the flow of information, enforce policy and standards, and protect sensitive information. Throughout this process, external partners must be on-boarded and off-boarded, information must flow across multiple communications infrastructures, and data must be mapped and transformed for consumption across multiple applications. Some transactions require synchronous or real-time processing while others are of a more periodic nature. For some classes of customer or supplier, the enterprise might prefer a locally-managed, on-premise solution. For some types of communities (often small businesses), an as-a-Service solution might be the best option. Many large enterprises combine the on-premise and as-a-Service approach to serve different categories of business partners (customers or suppliers). This IBM® Redbooks® publication focuses on solutions for end-to-end integration in

complex value chains and presents several end-to-end common integration scenarios with IBM Sterling and IBM WebSphere® portfolios. We believe that this publication will be a reference for IT Specialists and IT Architects implementing an integration solution architecture involving IBM Sterling and IBM WebSphere portfolios.

SOA Policy, Service Gateway, and SLA Management

Define, model, implement, and monitor real-world BPEL business processes with SOA powered BPM for Oracle SOA Suite with this book and eBook.

IBM SmartCloud: Building a Cloud Enabled Data Center

Would you like to use a consistent visual notation for drawing integration solutions? "Look inside the front cover." Do you want to harness the power of asynchronous systems without getting caught in the pitfalls? "See "Thinking Asynchronously" in the Introduction." Do you want to know which style of application integration is best for your purposes? "See Chapter 2, Integration Styles." Do you want to learn techniques for processing messages concurrently? "See Chapter 10, Competing Consumers and Message Dispatcher." Do you want to learn how you can track asynchronous messages as they flow across distributed systems? "See Chapter 11, Message History and Message Store." Do you want to understand how a system designed using integration patterns can be implemented using Java Web services, .NET message queuing, and a TIBCO-based publish-subscribe architecture? "See Chapter 9, Interlude: Composed Messaging." Utilizing years of practical experience, seasoned experts Gregor Hohpe and Bobby Woolf show how asynchronous messaging has proven to be the best strategy for enterprise integration success. However, building and deploying messaging solutions presents a number of problems for developers. " Enterprise Integration Patterns " provides an invaluable catalog of sixty-five patterns, with real-world solutions that demonstrate the formidable of messaging and help you to design effective messaging solutions for your enterprise. The authors also include examples covering a variety of different integration technologies, such as JMS, MSMQ, TIBCO ActiveEnterprise, Microsoft BizTalk, SOAP, and XSL. A case study describing a bond trading system illustrates the patterns in practice, and the book offers a look at emerging standards, as well as insights into what the future of enterprise integration might hold. This book provides a consistent vocabulary and visual notation framework to describe large-scale integration solutions across many technologies. It also explores in detail the advantages and limitations of asynchronous messaging architectures. The authors present practical advice on designing code that connects an application to a messaging system, and provide extensive information to help you determine when to send a message, how to route it to the proper destination, and how to monitor the health of a messaging system. If you want to know how to manage, monitor, and maintain a messaging system once it is in use, get this book. 0321200683B09122003

Understanding IBM SOA Foundation Suite

In the era of "Big Data," effective information management has become crucial to

the success of virtually all organizations. Unfortunately, few IT practitioners know today's best practices for successfully managing enterprise information resources. "Patterns for Information Management" offers the solution: a multi-disciplinary patterns-based approach that reflects where information comes from, how it is distributed, protected, governed, monitored -- and, ultimately, utilized. Leading IBM information management experts Mandy Chessell and Harald Smith show how to design, integrate, and optimize "information supply chains" that: * Effectively characterize the information issues associated with today's complex distributed systems* Fully reflect today's service-oriented, message-based environments* Establish an information landscape that is effective, manageable, ordered, and efficient.* Create orderly flows of information which can be reused and synchronized wherever necessary* Support reasoned decision-making about the applicability and consequences of each alternative approach Chessell and Smith complement their plain-English information pattern language with a complete case study demonstrating its real-world applications. Their pioneering guidebook will serve as both an indispensable guide to architects at all levels of experience "and" an outstanding long-term information management reference.

Reduce Risk and Improve Security on IBM Mainframes: Volume 3 Mainframe Subsystem and Application Security

This IBM® Red paper books® publication is divided into three parts: Part 1, "Introduction" on page1, provides an introduction to message-oriented middleware and the WebSphere® MQ product. We discuss the concept of messaging, explaining what is new in WebSphere MQ V7.0 and how it is implemented. An overview is provided on how it fits within the service-oriented architecture (SOA) framework. Part 2, "WebSphere MQ V7.0 enhancements and changes" on page 41, explains the new WebSphere MQ V7.0 features and enhancements in detail and includes compatibility and the migration considerations from the previous supported versions. Part 3, "Scenario" on page253, contains a scenario that demonstrates how the new features and enhancements work and how to use them. The sample programs and scripts used for this scenario are available for download by following the instructions in Appendix B, "Additional material" on page379.

Software Development

Understanding IBM SOA Foundation Suite Learning Visually with Examples Master the IBM SOA Foundation Through 26 Hands-On, Start-to-Finish Tutorials The IBM SOA Foundation Suite is an integrated, open-standards-based set of software, best practices, and patterns that help you systematically maximize the business value of SOA. Understanding IBM SOA Foundation Suite brings together 26 hands-on tutorials that will help you master IBM SOA Foundation and apply it successfully in your organization. Four of IBM's SOA practitioners identify core IBM SOA Foundation components and usage scenarios, and walk you step-by-step through implementing them in real-world environments. This book's self-contained tutorials are presented both in print and through video on the accompanying CD-ROM, showing you the results of every action immediately, whether you're running the software or not. Using these tutorials, technical professionals can quickly move up

the learning curve, discovering how each product works, and how they fit together. You'll gain the big picture overview you need to make intelligent up-front decisions, and all the hands-on practice you need to prototype working solutions. Coverage includes Designing services with UML, sharing designs via HTML files, and transforming designs to and from Java with IBM Rational Software Architect Creating services with IBM Rational Application Developer, and deploying them with IBM WebSphere Application Server Implementing effective service governance with IBM WebSphere Service Registry and Repository Integrating existing services into new business processes with IBM WebSphere Integration Developer and IBM WebSphere Process Server Connecting services with IBM WebSphere Message Broker Developing, testing, deploying, and managing portlets with IBM WebSphere Portlet Factory and IBM WebSphere Portal Systematically securing services with IBM Tivoli Federated Identity Manager

Application Development for IBM WebSphere Process Server 7 and Enterprise Service Bus 7

Securing access to information is important to any business. Security becomes even more critical for implementations structured according to Service-Oriented Architecture (SOA) principles, due to loose coupling of services and applications, and their possible operations across trust boundaries. To enable a business so that its processes and applications are flexible, you must start by expecting changes – both to process and application logic, as well as to the policies associated with them. Merely securing the perimeter is not sufficient for a flexible on demand business. In this IBM Redbooks publication, security is factored into the SOA life cycle reflecting the fact that security is a business requirement, and not just a technology attribute. We discuss an SOA security model that captures the essence of security services and securing services. These approaches to SOA security are discussed in the context of some scenarios, and observed patterns. We also discuss a reference model to address the requirements, patterns of deployment, and usage, and an approach to an integrated security management for SOA. This book is a valuable resource to senior security officers, architects, and security administrators.

Sicherheitsservices Für Service Oriented Architecture Am Fallbeispiel Enterprise So

Master Oracle SOA Suite 11g Design and implement an agile service-oriented enterprise computing infrastructure using the detailed information in this Oracle Press guide. Written by an Oracle ACE director, Oracle SOA Suite 11g Handbook uses a hands-on case study to illustrate each programming, management, and governance concept. Get expert techniques for modeling and implementing complex business processes and deploying and securing Web services, while maximizing decoupling and code reuse. Install Oracle SOA Suite 11g or migrate from a previous version Design and develop composite applications using SCA and SDO Model processes using BPEL, BPMN, and human task components Connect components through mapping and filtering with Oracle Mediator Apply the principles of event-driven architecture through complex event processing, the event delivery network, and Oracle Business Activity Monitoring server Benefit

from the power of Java through the Spring component and the interaction with Oracle Validate, enrich, transform, route, and operate on data using the Oracle Service Bus Deploy, test, and manage composite applications from the Oracle Enterprise Manager control console

Oracle SOA Suite 11g Handbook

Focuses on how to use web service computing and service-basedworkflow technologies to develop timely, effective workflows forboth business and scientific fields Utilizing web computing and Service-Oriented Architecture (SOA),Business and Scientific Workflows: A Web Service–OrientedApproach focuses on how to design, analyze, and deploy webservice–based workflows for both business and scientificapplications in many areas of healthcare and biomedicine. It alsodiscusses and presents the recent research and developmentresults. This informative reference features application scenarios thatinclude healthcare and biomedical applications, such aspersonalized healthcare processing, DNA sequence data processing,and electrocardiogram wave analysis, and presents: Updated research and development results on the compositiontechnologies of web services for ever-sophisticated servicerequirements from various users and communities Fundamental methods such as Petri nets and social networkanalysis to advance the theory and applications of workflow designand web service composition Practical and real applications of the developed theory andmethods for such platforms as personalized healthcare andBiomedical Informatics Grids The authors' efforts on advancing service composition methodsfor both business and scientific software systems, with theoreticaland empirical contributions With workflow-driven service composition and reuse being a hottopic in both academia and industry, this book is ideal forresearchers, engineers, scientists, professionals, and students whowork on service computing, software engineering, business andscientific workflow management, the internet, and managementinformation systems (MIS).

Oracle Essentials

"SOA Made Simple" is a concise and indispensable handbook for finally understanding exactly what Service Oriented Architecture is. Split into three clear sections, in this book you'll learn from both theory as well as step-by-step implementation examples to aid in your understanding of this often poorly-articulated industry term.If you are an architect who wants to be completely clear in your understanding of what SOA is, then this book is essential. In fact, anyone (designer, developer, administrator or team lead) who is implementing or about to implement an architecture in an IT environment should not miss out on "SOA Made Simple." Some previous experience with general software architecture is required, but this guide will tell you everything you need to know about SOA in a clear and easy fashion.

IBM WebSphere Application Server 8.0 Administration Guide

Cloud computing-accessing computing resources over the Internet-is rapidly changing the landscape of information technology. Its primary benefits compared to on-premise computing models are reduced costs and increased agility and

scalability. Hence, cloud computing is receiving considerable interest among several stakeholders-businesses, the IT ind

Combining Business Process Management and Enterprise Architecture for Better Business Outcomes

A resource for information executives, the online version of CIO offers executive programs, research centers, general discussion forums, online information technology links, and reports on information technology issues.

SOA Design Patterns

This book bridges the gap between Business and IT services and proposes an original life-cycle view of the modern service industry. Major solution architectures, technologies and research methods are discussed in the lifecycle of services innovation research. The book provides readers with new research and solution methods to enable IT services and computing technology to better create and manage business services, which is the goal of Services Computing.

Do More with Soa Integration

The Only Complete Technical Primer for MDM Planners, Architects, and Implementers Companies moving toward flexible SOA architectures often face difficult information management and integration challenges. The master data they rely on is often stored and managed in ways that are redundant, inconsistent, inaccessible, non-standardized, and poorly governed. Using Master Data Management (MDM), organizations can regain control of their master data, improve corresponding business processes, and maximize its value in SOA environments. Enterprise Master Data Management provides an authoritative, vendor-independent MDM technical reference for practitioners: architects, technical analysts, consultants, solution designers, and senior IT decisionmakers. Written by the IBM® data management innovators who are pioneering MDM, this book systematically introduces MDM's key concepts and technical themes, explains its business case, and illuminates how it interrelates with and enables SOA. Drawing on their experience with cutting-edge projects, the authors introduce MDM patterns, blueprints, solutions, and best practices published nowhere else—everything you need to establish a consistent, manageable set of master data, and use it for competitive advantage. Coverage includes How MDM and SOA complement each other Using the MDM Reference Architecture to position and design MDM solutions within an enterprise Assessing the value and risks to master data and applying the right security controls Using PIM-MDM and CDI-MDM Solution Blueprints to address industry-specific information management challenges Explaining MDM patterns as enablers to accelerate consistent MDM deployments Incorporating MDM solutions into existing IT landscapes via MDM Integration Blueprints Leveraging master data as an enterprise asset—bringing people, processes, and technology together with MDM and data governance Best practices in MDM deployment, including data warehouse and SAP integration

Analytics Across the Enterprise

Integrate, automate, and regulate your business processes with the best of Packt's SOA books and ebooks.

Services Computing

IBM® Business Process Manager (IBM BPM) is a comprehensive business process management (BPM) suite that provides visibility and management of your business processes. IBM BPM supports the whole BPM lifecycle approach: Discover and document Plan Implement Deploy Manage Optimize Process owners and business owners can use this solution to engage directly in the improvement of their business processes. IBM BPM excels in integrating role-based process design, and provides a social BPM experience. It enables asset sharing and creating versions through its Process Center. The Process Center acts as a unified repository, making it possible to manage changes to the business processes with confidence. IBM BPM supports a wide range of standards for process modeling and exchange. Built-in analytics and search capabilities help to further improve and optimize the business processes. This IBM Redbooks® publication provides valuable information for project teams and business people that are involved in projects using IBM BPM. It describes the important design decisions that you face as a team. These decisions invariably have an effect on the success of your project. These decisions range from the more business-centric decisions, such as which should be your first process, to the more technical decisions, such as solution analysis and architectural considerations.

Business Process Management Design Guide: Using IBM Business Process Manager

"This book could be described as an encyclopedia of service design-Erl leaves nothing to chance. Indispensable." -Steve Birkel, Chief IT Technical Architect, Intel Corp. "An absolute pleasure to readthe best SOA book I've read. A book I would recommend to all of my colleagues; it provides much insight to the topics often overlooked by most books in this genrethe visuals were fantastic." -Brandon Bohling, SOA Architecture and Strategy, Intel Corporation "This book is a milestone in SOA literature. For the first time we are provided with a practical guide on defining service characteristics and service design principles for SOA from a vendor-agnostic viewpoint. It's a great reference for SOA discovery, adoptions, and implementation projects." -Canyang Kevin Liu, Principal Enterprise Architect, SAP Americas, Inc. "I liked this book. It contains extremely important material for those who need to design services." -Farzin Yashar, IBM SOA Advanced Technologies "This book does a great job laying out benefits, key ideas and design principles behind successfully adopting service-oriented computing. At the same time, the book openly addresses challenges, risks and trade-offs that are in the way of adopting SOA in the real-world today. It moves away from ivory-tower views of service orientation, but still lays out a strong vision for SOA and outlines the changes necessary to realize the full potential." -Christoph Schittko, Senior Architect, Microsoft "I recommend this book to any SOA practitioner who wishes to empower themselves in making service design realgives readers the 360° view into service design [and] gives SOA practitioners the depth and understanding needed into the principles of SOA to assist in the design of a mature and successful

SOA program." -Stephen G. Bennett, Americas SOA Practice Lead, BEA Systems "SOA projects are most successful when they are based on a solid technical foundation. Well accepted and established design principles are part of this foundation. This book takes a very structured approach at defining the core design principles for SOA, thus allowing the reader to immediately applying them to a project. Each principle is formally introduced and explained, and examples are given for how to apply it to a real design problem. A 'must read' for any architect, designer or developer of service oriented solutions." -Andre Tost, Senior Technical Staff Member, IBM Software Group "There are few references for SOA that give you the nuts and bolts and this one is at the top of the list. Well written and valuable as a reference book to any SOA practitioner." -Dr. Mohamad Afshar, Director of Product Management, Oracle Fusion Middleware, Oracle Corporation "A thorough examination of the considerations of service design. Both seasoned SOA practitioners and those endeavoring to realize services can benefit from reading this book." -Bill Draven, Enterprise Architect, Intel Corporation "There are very few who understand SOA like Thomas Erl does! The principle centric description of service orientation from Thomas canonizes the underpinnings of this important paradigm shift in creating agile and reusable software capabilities. The principles, so eloquently explained, leave little room for any ambiguity attached to the greater purpose of SOA. Most organizations today are creating services in a bottoms-up approach, realizing composition and reuse organically. The time is ripe for a book like this that prepares architects for a principle centric approach to SOA." -Hanu Kommalapati, Architect, Microsoft Corporation "Outstanding SOA literature uniquely focused on the fundamental services design with thorough and in-depth study on all practical aspects from design principles to methodologies. This book provides a systematic approach for SOA adoption essential for both IT management and professionals." -Robin Chen, PhD, Google, Inc. "Thomas Erl's books are always densely filled with information that's well structured. This book is especially insightful for Enterprise Architects because it provide s great context and practical examples. Part 1 of the book alone is worth getting the book for." -Markus Zirn, Senior Director, Product Management, Oracle Fusion Middleware, Oracle Corporation "A very clear discussion of the subject matter. Provides a good structure that facilitates understanding and readily highlights key points." -Kareem Yusuf, Director of SOA Strategy and Planning, IBM Software Group "I am very impressed. Comprehensive. Educative. This book helped me to step back and look at the SOA principles from broader perspective. I'd say this is a must-read book for SOA stakeholders." -Radovan Janecek, Director R&D, SOA Center, Hewlett-Packard "Very valuable guidance for understanding and applying SOA service design principles with concrete examples. A must read for the practitioner of SOA service design." -Umit Yalcinalp, PhD, Standards Architect, SAP "This book really does an excellent job of explaining the principles underpinning the value of SOAErl goes to great length to explain and give examples of each of the 8 principles that will significantly increase the readers ability to drive an SOA service design that benefits both business and IT." -Robert Laird, IT Architect, IBM EAI/SOA Advanced Technologies Group "This book strikes a healthy balance between theory and practice. It is a perfect complement to the SOA series by the author." -Prakash Narayan, Sun Microsystems "If you are going to be designing, developing, or implementing SOA, this is a must have book." -Jason "AJ" Comfort Sr., Booz Allen Hamilton "An excellent book for anyone who wants to understand service-orientation and the principles involved in designing servicesa clear, concise and

articulate exploration of the eight design principles involved in analyzing, designing, implementing, and maintaining services" -Anish Karmarkar, Oracle Corporation "Very well written, succinct, and easy to understand." -Raj Balasubramanian, IBM Software Group "Acomprehensive exploration of the issues of service design which has the potential to become the definitive work in this area." -James Pasley, Chief Technology Officer, Cape Clear Software "An excellent addition to any SOA library; it covers a wide range of issues in enough detail to be a valuable asset to anyone considering designing or using SOA based technologies." -Mark Little, Director of Standards, Red Hat "This book communicates complex concepts in a clear and concise manner. Examples and illustrations are used very effectively." -Darryl Hogan, Senior Architect, Microsoft "A work of geniusOffers the most comprehensive and thorough explanation on the principles of service design and what it means to be 'service oriented.' "Erl's treatment of the complex world of service oriented architecture is pragmatic, inclusive of real world situations and offers readers ways to communicate these ideas through illustrations and well formulated processes." -David Michalowicz, MITRE Corporation "This is the book for the large organization trying to rationalize its IT assets and establish an agile platform for the future. By highlighting risk and rewards, Thomas Erl brings clarity to how Service Orientation can be applied to ensure a responsive IT organization. This book finally brings software engineering principles to address the real world development challenges being faced. To effectively serve the business, let alone embrace SOA, everyone involved should be familiar with the concepts investigated here. Thomas Erl thoroughly clarifies the nuances and defines the practice of service design. We expect that this will become a classic text in software engineering, corporate training and colleges." -Cory Isaacson, President, Rogue Wave Software and Ravi Palepu, SOA Author and Speaker "Thomas Erl does a great joban easy read." -Michael H. Sor, Booz Allen Hamilton ..".a must read for SOA Architects to develop a firm foundation and understanding of the principles (and trade-offs) that make up a good SOA service. After reading this book, it finally 'clicked' as to why a properly designed SOA system is different (and better) than a system based on previous enterprise architectures." -Fred Ingham, Platinum Solutions Inc. "Lays a tremendous foundation for business and technical workers to come to common terms and expectationsincredibly enlightening to see the details associated with achieving the SOA vision." -Wayne P. Ariola, Vice President of Strategy, Parasoft "[Erl does] and excellent job of addressing the breadth of [his] audience to present to those new to SOA and weaved in enough detail to assist those who are already actively involved in SOA development." -R. Perry Smith, Application Program Manager, EDS/OnStar "It is easy to miss the big picture of what SOA means for the design of larger scale systems amidst the details of WS technologies. Erl helps provide a broader perspective, surveying the landscape from a design standpoint." -Jim Clune, Chief Architect, Parasoft "Lays a firm foundation for the underlying principles of good service design. Cuts through the hype and provides a cogent resource for improving architectural judgment on SOA projects." -Jim Murphy, Vice President of Product Management, Mindreef, Inc. "The first book to concisely, gradually and comprehensively explain how to apply SOA principles into enterprise-level software design. It is an excellent book." -Robin G. Qiu, Ph.D., Division of Engineering and Information Science, Pennsylvania State University "I really think that this is a very useful book that a lot of people really need out there in the industry." -Dr. Arnaud Simon, Principal Software Engineer, Red Hat

..".indispensable companion to designing and implementing a service-oriented architecture. It condenses all information necessary to design services and is the most relevant source I know if in the field." "[This book is] not only helpful, but fundamental to successfully designing an SOA." -Phillipp Offermann, Research Analyst, University of Berlin "Service-Oriented Architecture is an important topic in IT today. Its vast scope could span an organization's enterprise. Designing it properly is a major undertaking. This book provides timely, expert and comprehensive discussions on the principles of service design. Thomas has a keen sense in identifying the subtle points of various subjects and explains them in an easy-to-understand way. The book is a valuable resource for IT professionals working in SOA." -Peter H. Chang, PhD, Associate Professor of Information Systems, Lawrence Technological University The Definitive Guide to Service Engineering The key to succeeding with service-oriented architecture (SOA) is in comprehending the meaning and significance of its most fundamental building block: the service. It is through an understanding of service design that truly "service-oriented" solution logic can be created in support of achieving the strategic goals associated with SOA and service-oriented computing. Bestselling SOA author Thomas Erl guides you through a comprehensive, insightful, and visually rich exploration of the service-orientation design paradigm, revealing exactly how services should and should not be designed for real-world SOA. This book's in-depth coverage includes Over 240 full-color illustrations. A concise introduction to SOA and service-oriented computing concepts and benefits. A thorough exploration of the service-orientation design paradigm as represented by eight specific design principles. A comparison of service-oriented and object-oriented concepts and principles and a clear definition of what qualifies as "service-oriented" logic. Detailed coverage of four different forms of service-related design granularity. An exhaustive examination of service contracts, with an emphasis on standardization, abstraction, and the utilization of WS-Policy, XML Schema, and WSDL definitions. A comprehensive study of positive and negative service-related coupling types with an emphasis on the requirements to attaining a suitable level of loose coupling. An inside look into how commercial design approaches are incorporated to achieve truly agnostic and reusable service logic. Techniques for maximizing service reliability, scalability, and performance by instilling high levels of autonomy and emphasizing stateless design. Approaches for positioning services as highly discoverable and interpretable enterprise resources. Unprecedented coverage of how to design services for participation in complex compositions. The definition of concrete links between each design principle and the strategic goals and benefits of SOA and service-oriented computing. Numerous cross-references to key design patterns documented separately in SOA: Design Patterns. www.prenhallprofessional.com www.soabooks.com www.soasystems.com Preface xxv Chapter 1: Introduction 1 Chapter 2: Case Study Background 19 Part I: Fundamentals Chapter 3: Service-Oriented Computing and SOA 25 Chapter 4: Service-Orientation 67 Chapter 5: Understanding Design Principles 103 Part II: Design Principles Chapter 6: Service Contracts (Standardization and Design) 125 Chapter 7: Service Coupling (Intra-Service and Consumer Dependencies) 163 Chapter 8: Service Abstraction (Information Hiding and Meta Abstraction Types) 211 Chapter 9: Service Reusability (Commercial and Agnostic Design) 253 Chapter 10: Service Autonomy (Processing Boundaries and Control) 293 Chapter 11: Service Statelessness (State Management Deferral and Stateless Design) 325 Chapter 12: Service Discoverability (Interpretability and Communication) 361 Chapter 13: Service

Handbook of Research on Demand-Driven Web Services: Theory, Technologies, and Applications

In order to remain competitive in today's world, companies need to be able to integrate internally and externally by connecting sensors, customers and partners with the information in their systems of record. In short, they need to integrate with everything. This IBM® Redbooks® publication describes how IBM Application Integration Suite and IBM Messaging portfolio can be used to satisfy the needs of core hybrid integration use cases, accelerating companies in their digital transformation journey. All concepts are explained within the context of these use cases: Joining the API economy Improving productivity Refactoring for innovation The target audience for this book is cloud and integration architects and specialists who are implementing hybrid integration solutions.

Patterns of Information Management

This IBM® Redbooks® publication provides you with a path to demystify the complexity of adopting a service-oriented architecture (SOA) approach to integrating applications and services. With an iterative evolution of a fictitious company, which is called ITSO Enterprise, we demonstrate several scenarios about how we can implement an IBM Smart SOA approach that helps ITSO Enterprise to achieve its business goals to be a global interconnected enterprise, one step at a time. It is not our intention to dive into the extremely technical details of every product or to tell you specific solutions for specific problems, but rather, to advise you about how to look at these problems from a business context perspective and then to provide you with a concise deployment using the IBM WebSphere® Connectivity portfolio of products to easily address them. This book will be a reference for IT Specialists and IT Architects working on implementing Smart SOA solutions using the IBM WebSphere Connectivity portfolio of products at client sites, as well as for decision makers, IBM employees, IBM Business Partners, and IT Managers.

100 SOA Questions

Managing Data in Motion describes techniques that have been developed for significantly reducing the complexity of managing system interfaces and enabling scalable architectures. Author April Reeve brings over two decades of experience to present a vendor-neutral approach to moving data between computing environments and systems. Readers will learn the techniques, technologies, and best practices for managing the passage of data between computer systems and integrating disparate data together in an enterprise environment. The average

enterprise's computing environment is comprised of hundreds to thousands computer systems that have been built, purchased, and acquired over time. The data from these various systems needs to be integrated for reporting and analysis, shared for business transaction processing, and converted from one format to another when old systems are replaced and new systems are acquired. The management of the "data in motion" in organizations is rapidly becoming one of the biggest concerns for business and IT management. Data warehousing and conversion, real-time data integration, and cloud and "big data" applications are just a few of the challenges facing organizations and businesses today. Managing Data in Motion tackles these and other topics in a style easily understood by business and IT managers as well as programmers and architects. Presents a vendor-neutral overview of the different technologies and techniques for moving data between computer systems including the emerging solutions for unstructured as well as structured data types Explains, in non-technical terms, the architecture and components required to perform data integration Describes how to reduce the complexity of managing system interfaces and enable a scalable data architecture that can handle the dimensions of "Big Data"

End-to-end Integration with IBM Sterling B2B Integration and Managed File Transfer solutions

Getting Architecture Just Right: Detailed Practical Guidance for Architecting Any Real-World IT Project To build effective architectures, software architects must tread a fine line between precision and ambiguity (a.k.abig animal pictures). This is difficult but crucial: Failure to achieve this balance often leads directly to poor systems design and implementation. Now, pioneering IBM Distinguished Engineer and Chief Technology Officer Tilak Mitra offers the first complete guide to developing end-to-end solution architectures that are "just enough"--identifying and capturing the most important artifacts, without over-engineering or excessive documentation, and providing a practical approach to consistent and repeated success in defining software architectures. Practical Software Architecture provides detailed prescriptive and pragmatic guidance for architecting any real-world IT project, regardless of system, methodology, or environment. Mitra specifically identifies the artifacts that require emphasis and shows how to communicate evolving solutions with stakeholders, bridging the gap between architecture and implementation.

WebSphere MQ V7.0 Features and Enhancements

This IBM® Redbooks® publication teaches you how to automate your runtime policy by using a centralized policy management system. The SOA Policy Solution provides a centralized policy administration, enforcement, and monitoring for runtime policies that enable traffic management for service level agreement enforcement, service mediation, and other customized policies. Policies can be defined once and reused among multiple services, thus enabling a standardized, consistent approach to a runtime policy that saves time and money for implementation and maintenance of non-functional requirements for the enterprise and assists with faster time to market. Business users can use the SOA Policy Solution to help create the service level agreements for their business services to

deliver on promises for business performance. IT Architects can use the SOA Policy Solution to architect the policy solution patterns that standardize the runtime policy usage at their organization. Developers select specific policy patterns to implement the non-functional requirements that are associated with their projects. Operations groups provide information about operation needs and create standardized monitoring policy for operational action at run time.

Building SOA Solutions Using the Rational SDP

Diplomarbeit aus dem Jahr 2007 im Fachbereich Informatik - Technische Informatik, Note: 1,0, Duale Hochschule Baden-Wurttemberg Mannheim, fruher: Berufsakademie Mannheim, Veranstaltung: Informationstechnik, Sprache: Deutsch, Abstract: Service Oriented Architecture - Durch sie ist es moglich, Geschaftsprozesse zu automatisieren und dabei vollig flexibel auf unternehmensspezifische Veranderungen einzugehen. Hierfur mussen Unternehmen jedoch ihre bisher im Einsatz befindlichen Sicherheitsmechanismen anpassen und fur Geschaftspartner offnen. So wird es moglich, durchgangige und automatisierte Geschaftsprozesse abzubilden und damit die Vorteile der globalen Markte mit Hilfe des neuen Architekturgedankens zu nutzen. Dies birgt neben den Chancen aber auch Risiken. Unternehmen mussen sich dieser Gefahren bewusst werden und sie bewerten, nur so konnen entsprechende Massnahmen zur Reduzierung des Risikos ermittelt werden. Hierfur ist ein strukturiertes und prozessorientiertes Vorgehen notwendig. Im von der Autorin beschriebenen Verfahren wird zu diesem Zweck zunachst der Schutzbedarf fur den zu analysierenden Geschaftsprozess ermittelt. Anschliessend werden Risiken identifiziert und deren Risikohohe mit Hilfe der Eintrittswahrscheinlichkeit und des Schadensausmasses bestimmt. Mittels dieser Werte kann eine Aussage uber die Notwendigkeit der Risikominimierung gemacht werden, um effektive Kontrollmassnahmen zu ermitteln, beginnend beim kritischsten Risiko. Grundlegender Gedanke und Nutzen einer SOA ist die Wiederverwendbarkeit. Dies trifft auch auf die Sicherheitsaspekte zu. Mithin demonstrierte die Autorin das zuvor beschriebene Verfahren an zwei Geschaftsprozessen, so dass auf Basis der erhaltenen Kontrollen Sicherheitsservices bestimmt werden konnten. Diese enthalten sinnvolle Kombinationen von technischen und nicht-technischen Massnahmen zur ganzheitlichen Absicherung von Geschaftsprozessen und konnen immer wiederverwendet werden. Schliesslich wurden die Sicherheitsservices

SOA Principles of Service Design (paperback)

This IBM® Redbooks® publication provides information about the concepts, planning, and design of IBM WebSphere® Application Server V8.5 environments. The target audience of this book is IT architects and consultants who want more information about the planning and design of application-serving environments, from small to large, and complex implementations. This book addresses the packaging and features in WebSphere Application Server, and highlights the most common implementation topologies. It provides information about planning for specific tasks and components that conform to the WebSphere Application Server environment. Also in this book are planning guidelines for Websphere Application Server and Websphere Application Server Network Deployment on distributed platforms. It also includes guidelines for WebSphere Application Server for IBM

z/OS®. This book contains information about migration considerations when moving from previous releases. This book has been updated with the new features introduced with WebSphere Application Server V8.5.5.

IT Architecture For Dummies

100 SOA Questions brings together authoritative answers to the most crucial questions business, technical, and architectural decision-makers ask about SOA. It draws on the immense experience of two SOA experts who've participated in more than 100 SOA projects in the roles of architect, designer, consultant, technical manager, and strategist. Organized to reflect the Open Group's Open Services Integration Maturity Model (OSIMM), this book provides fast, convenient access to information about all facets of SOA planning, implementation, management, and utilization. This book will be an invaluable resource for all executives, architects, and practitioners who have just started their SOA journey or are well underway. In-depth answers to questions about SOA topics such as • SOA Concepts and Planning • Business Strategy • Organization and Support • Governance • Methods and Techniques • Applications • Architecture • Information Management • Infrastructure • The Future of SOA 100 SOA Questions answers the most critical questions executives and practitioners have about SOA. Kerrie Holley and Dr. Ali Arsanjani draw on their unsurpassed experience from hundreds of SOA projects conducted worldwide. • Why should business stakeholders care about SOA? • What is the return on investment (ROI) of SOA adoption? • What is flexibility and how does SOA deliver on this promise? • Should service development be centralized in service centers? • How should services be identified or specified to maximize reuse? • How do SOA methods reduce the lifetime costs for applications? • How can organizational barriers to SOA success be removed? • What changes with application development when SOA is introduced? • How does architecture change as a result of SOA adoption? • What is a canonical message model? • How does the SOA infrastructure support events? • What are context-aware services?

Soa Made Simple

IBM WebSphere Application Server 8.0 Administration Guide is a highly practical, example-driven tutorial. You will be introduced to WebSphere Application Server 8.0, and guided through configuration, deployment, and tuning for optimum performance. If you are an administrator who wants to get up and running with IBM WebSphere Application Server 8.0, then this book is not to be missed. Experience with WebSphere and Java would be an advantage, but is not essential.

Business and Scientific Workflows

In cooperation with experts and practitioners throughout the SOA community, best-selling author Thomas Erl brings together the de facto catalog of design patterns for SOA and service-orientation. More than three years in development and subjected to numerous industry reviews, the 85 patterns in this full-color book provide the most successful and proven design techniques to overcoming the most common and critical problems to achieving modern-day SOA. Through numerous examples, individually documented pattern profiles, and over 400 color

illustrations, this book provides in-depth coverage of: • Patterns for the design, implementation, and governance of service inventories–collections of services representing individual service portfolios that can be independently modeled, designed, and evolved. • Patterns specific to service-level architecture which pertain to a wide range of design areas, including contract design, security, legacy encapsulation, reliability, scalability, and a variety of implementation and governance issues. • Service composition patterns that address the many aspects associated with combining services into aggregate distributed solutions, including topics such as runtime messaging and message design, inter-service security controls, and transformation. • Compound patterns (such as Enterprise Service Bus and Orchestration) and recommended pattern application sequences that establish foundational processes. The book begins by establishing SOA types that are referenced throughout the patterns and then form the basis of a final chapter that discusses the architectural impact of service-oriented computing in general. These chapters bookend the pattern catalog to provide a clear link between SOA design patterns, the strategic goals of service-oriented computing, different SOA types, and the service-orientation design paradigm. This book series is further supported by a series of resources sites, including soabooks.com, soaspecs.com, soapatterns.org, soamag.com, and soaposters.com.

An Architectural and Practical Guide to IBM Hybrid Integration Platform

In the current technological world, Web services play an integral role in service computing and social networking services. This is also the case in the traditional FREG (foods, resources, energy, and goods) services because almost all traditional services are replaced fully or partially by Web services. Handbook of Research on Demand-Driven Web Services: Theory, Technologies, and Applications presents comprehensive and in-depth studies that reveal the cutting-edge theories, technologies, methodologies, and applications of demand-driven Web, mobile, and e-business services. This book provides critical perspectives for researchers and practitioners, lecturers and undergraduate/graduate students, and professionals in the fields of computing, business, service, management, and government, as well as a variety of readers from all the social strata.

ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION

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