Reference Architecture

Joseph Ingeno

The Architecture Reference & Specification Book Updated & Revised Julia McMorrough,2018-01-09 Most architectural standards references contain thousands of pages of details, overwhelmingly more than architects need to know to know on any given day. The updated and revised edition of Architecture Reference & Specification contains vital information that's essential to planning and executing architectural projects of all shapes and sizes, all in a format that is small enough to carry anywhere. It distills the data provided in standard architectural volumes and is an easy-to-use reference for the most indispensable--and most requested--types of architectural information.

Software Architect's Handbook Joseph Ingeno,2018-08-30 A comprehensive guide to exploring software architecture concepts and implementing best practices Key Features Enhance your skills to grow your career as a software architect Design efficient software architectures using patterns and best practices Learn how software architecture relates to an organization as well as software development methodology Book Description The Software Architect's Handbook is a comprehensive guide to help developers, architects, and senior programmers advance their career in the software architecture domain. This book takes you through all the important concepts, right from design principles to different considerations at various stages of your career in software architecture. The book begins by covering the fundamentals, benefits, and purpose of software architecture. You will discover how software architecture relates to an organization, followed by identifying its significant quality attributes. Once you have covered the basics, you will explore design patterns, best practices, and paradigms for efficient software development. The book discusses which factors you need to consider for performance and security enhancements. You will learn to write documentation for your architectures and make appropriate decisions when considering DevOps. In addition to this, you will explore how to design legacy applications before understanding how to create software architectures that evolve as the market, business requirements, frameworks, tools, and best practices change over time. By the end of this book, you will not only have studied software architecture concepts but also built the soft skills necessary to grow in this field. What you will learn Design software architectures using patterns and best practices Explore the different considerations for designing software architecture Discover what it takes to continuously improve as a software architect Create loosely coupled systems that can support change Understand DevOps and how it affects software architecture Integrate, refactor, and re-architect legacy applications Who this book is for The Software Architect's Handbook is for you if you are a software architect, chief technical officer (CTO), or senior developer looking to gain a firm grasp of software architecture.

Architectural Detailing Edward Allen,Patrick Rand,2016-03-14 The industry-standard guide to designing well-performing buildings Architectural Detailing systematically describes the principles by which good architectural details are designed. Principles are explained in brief, and backed by extensive illustrations that show you how to design details that will not leak water or air, will control the flow of heat and water vapor, will adjust to all kinds of movement, and will be easy to construct. This new third edition has been updated to conform to International Building Code 2012, and incorporates current knowledge about new material and construction technology. Sustainable design issues are integrated where relevant, and the discussion includes reviews of recent built works that extract underlying principles that can be the basis for new patterns or the alteration and addition to existing patterns. Regulatory topics are primarily focused on the US, but touch on other jurisdictions and geographic settings to give you a well-rounded perspective of the art and science of architectural detailing. In guiding a design from idea to reality, architects design a set of details that show how a structure will be put together. Good details are correct, complete, and provide accurate information to a wide variety of users. By demonstrating the use of detail patterns, this book teaches you how to design a building that will perform as well as you intend. Integrate appropriate detailing into your designs Learn the latest in materials, assemblies, and construction methods Incorporate sustainable design principles and current building codes Design buildings that perform well, age gracefully, and look great Architects understand that aesthetics are only a small fraction of good design, and that stability and functionality require a deep understanding of how things come together. Architectural Detailing helps you bring it all together with a well fleshed-out design that communicates accurately at all levels of the construction process.

SOA Source Book The Open Group,2009-04-04 Software services are established as a programming concept, but their impact on the overall architecture of enterprise IT and business operations is not well-understood. This has led to problems in deploying SOA, and some disillusionment. The SOA Source Book adds to this a collection of reference material for SOA. It is an invaluable resource for enterprise architects working with SOA.The SOA Source Book will help enterprise architects to use SOA effectively. It explains: What SOA is How to evaluate SOA features in business terms How to model SOA How to use The Open Group Architecture Framework (TOGAF™) for SOA SOA governance This book explains how TOGAF can help to make an Enterprise Architecture. Enterprise Architecture is an approach that can help management to understand this growing complexity.

Reference Architecture Standard Requirements Gerardus Blokdyk,2018-06-04 What tools and technologies are needed for a custom Reference architecture project? What are the basics of Reference architecture fraud? What is Reference architecture's impact on utilizing the best solution(s)? Who will provide the final approval of Reference architecture deliverables? How do your measurements capture actionable Reference architecture information for use in exceeding your customers expectations and securing your customers engagement? This instant Reference architecture self-assessment will make you the trusted Reference architecture domain specialist by revealing just what you need to know to be fluent and ready for any Reference architecture challenge. How do I reduce the effort in the Reference architecture work to be done to get problems solved? How can I ensure that plans of action include every Reference architecture task and that every Reference architecture outcome is in place? How will I save time investigating strategic and tactical options and ensuring Reference architecture costs are low? How can I deliver tailored Reference architecture advice instantly with structured going-forward plans? There's no better guide through these mind-expanding questions than acclaimed best-selling author Gerard Blokdyk. Blokdyk ensures all Reference architecture essentials are covered, from every angle: the Reference architecture self-assessment shows succinctly and clearly that what needs to be clarified to organize the required activities and processes so that Reference architecture outcomes are achieved. Contains extensive criteria grounded in past and current successful projects and activities by experienced Reference architecture practitioners. Their mastery, combined with the easy elegance of the self-assessment, provides its superior value to you in knowing how to ensure the outcome of any efforts in Reference architecture are maximized with professional results. Your purchase includes access details to the Reference architecture self-assessment dashboard download which gives you your dynamically prioritized projects-ready tool and shows you exactly what to do next. Your exclusive instant access details can be found in your book.

Reference Architecture for the Telecommunications Industry Christian Czarnecki,Christian Dietze,2017-01-26 This book reflects the tremendous changes in the telecommunications industry in the course of the past few decades – shorter innovation cycles, stiffer competition and new communication products. It analyzes the transformation of processes, applications and network technologies that are now expected to take place under enormous time pressure. The International Telecommunication Union (ITU) and the TM Forum have provided reference solutions that are broadly recognized and used throughout the value chain of the telecommunications industry, and which can be considered the de facto standard. The book describes how these reference solutions can be used in a practical context: it presents the latest insights into their development, highlights lessons learned from numerous international projects and combines them with well-founded research results in enterprise architecture management and reference modeling. The complete architectural transformation is explained, from the planning and set-up stage to the implementation. Featuring a wealth of examples

and illustrations, the book offers a valuable resource for telecommunication professionals, enterprise architects and project managers alike.

The IT4ITTM Reference Architecture, Version 2.1 The Open Group,2017-04-24 The Open Group IT4ITTM Reference Architecture, Version 2.1, an Open Group Standard, provides a vendor-neutral, technology-agnostic, and industry-agnostic reference architecture for managing the business of IT.The Open Group IT4IT Reference Architecture standard comprises a reference architecture and a value chain-based operating model.The IT Value Chain has four value streams supported by a reference architecture to drive efficiency and agility. The four value streams are: • Strategy to Portfolio • Request to Fulfill• Requirement to Deploy• Detect to CorrectEach IT Value Stream is centered on a key aspect of the service model, the essential data objects (information model), and functional components (functional model) that support it. Together, the four value streams play a vital role in helping IT control the service model as it advances through its lifecycle. The IT4IT Reference Architecture:• Provides prescriptive guidance on the specification of and interaction with a consistent service model backbone (common data model/context)• Supports real-world use-cases driven by the Digital Economy (e.g., Cloud-sourcing, Agile, DevOps, and service brokering)• Embraces and complements existing process frameworks and methodologies (e.g., ITIL®, CoBIT®, SAFe, and TOGAF®) by taking a data-focused implementation model perspective, essentially specifying an information model across the entire value chainThe audience for this standard is:• IT Professionals who are responsible for delivering services in a way that isflexible, traceable, and cost-effective• IT Professionals / Practitioners who are focused on instrumenting the ITmanagement landscape• IT Leaders who are concerned about their operating model• Enterprise Architects who are responsible for IT business transformationTopics covered include:• An introduction to the standard and the purpose of the IT4IT work• Key terminology of the standard• An introduction for executives and others introducing the IT Value Chain and IT4IT Reference Architecture concepts• IT4IT Core, which defines the structure of the IT4IT standard as well as the process and document structure used by the IT4IT standard• The Strategy to Portfolio (S2P) Value Stream• The Requirement to Deploy (R2D) Value Stream• The Request to Fulfill (R2F) Value Stream• The Detect to Correct (D2C) Value Stream• Background information on the standard.

The IT4ITTM reference architecture, Version 2.0 The Open Group,1970-01-01 The Open Group IT4IT Reference Architecture, Version 2.0, an Open Group Standard, provides a vendor-neutral, technology-agnostic, and industry-agnostic reference architecture for managing the business of IT.The Open Group IT4IT Reference Architecture standard comprises a reference architecture and a value chain-based operating model.The IT Value Chain has four value streams supported by a reference architecture to drive efficiency and agility. The four value streams are: Strategy to Portfolio Request to Fulfill Requirement to Deploy Detect to CorrectEach IT Value Stream is centered on a key aspect of the service model, the essential data objects (information model), and functional components (functional model) that support it. Together, the four value streams play a vital role in helping IT control the service model as it advances through its lifecycle. The IT4IT Reference Architecture: Provides prescriptive guidance on the specification of and interaction with a consistent service model backbone (common data model/context) Supports real-world use-cases driven by the Digital Economy (e.g., Cloud-sourcing, Agile, DevOps, and service brokering) Embraces and complements existing process frameworks and methodologies (e.g., ITIL®, CoBIT®, SAFe, and TOGAF®) by taking a data-focused implementation model perspective, essentially specifying an information model across the entire value chainThe audience for this standard is: IT Professionals who are responsible for delivering services in a way that isflexible, traceable, and cost-effective IT Professionals / Practitioners who are focused on instrumenting the ITmanagement landscape IT Leaders who are concerned about their operating model Enterprise Architects who are responsible for IT business transformationTopics covered include: An introduction to the standard and the purpose of the IT4IT work Key terminology of the standard An introduction for executives and others introducing the IT Value Chain and IT4IT Reference Architecture concepts IT4IT Core, which defines the structure of the IT4IT standard as well as the process and document structure used by the IT4IT standard The Strategy to Portfolio (S2P) Value Stream The Requirement to Deploy (R2D) Value Stream The Request to Fulfill (R2F) Value Stream The Detect to Correct (D2C) Value Stream Background information on the standard.

The IT4ITTM Reference Architecture, Version 2.1 – A Pocket Guide Andrew Josey,2017-04-24 This Pocket Guide provides a concise introduction to the IT4ITTM ReferenceArchitecture, Version 2.1, an Open Group Standard. The IT4IT standard provides avendor-neutral, technology-agnostic, and industry-agnostic reference architecture formanaging the business of IT, enabling insight for continuous improvement.This Pocket Guide is based on the IT4IT Reference Architecture Version 2.1. What'smore, it's authoritative with material derived from the official IT4IT documentationand contributions from members of the IT4IT Forum.The audience for this Pocket Guide is:• Individuals who require a basic understanding of the IT Value Chain and IT4ITReference Architecture• IT Professionals who are responsible for delivering services in a way that isflexible, traceable, and cost-effective• IT Professionals / Practitioners who are focused on instrumenting the ITmanagement landscape• IT leaders who are concerned about their operating model• Enterprise Architects who are responsible for IT business transformationTopics covered include:• An introduction to the IT4IT Reference Architecture, the structure of the IT4ITstandard, and the positioning of the IT4IT standard in the standards landscape• The IT Value Chain and IT4IT Reference Architecture concepts, including ValueStreams• The Strategy to Portfolio (S2P) Value Stream• The Requirement to Deploy (R2D) Value Stream• The Request to Fulfill (R2F) Value Stream• The Detect to Correct (D2C) Value Stream• A summary of the differences between the IT4IT Reference Architecture andITIL

Hospital Reference Architecture Guide: The Complete and Expanded English translation of the Dutch ZiRA The Open Group,2023-12-12 Dive into a groundbreaking resource that equips healthcare professionals, Enterprise Architects, and IT decision-makers with the essential tools to enhance patient care and streamline operations within hospitals of all sizes and locales. In an era of Digital Transformation, this guide is your compass. Introducing the ZiRA Hospital Reference Architecture in English, a pioneering open-source solution developed by healthcare experts, for healthcare experts. Building upon the foundation of the renowned Dutch ZiRA and our collaboration with Nictiz, the Center of Excellence for Health IT in The Netherlands, this guide offers an accessible translation, clear insights, and essential updates. Discover why the ZiRA in English Guide by The Open Group fills a critical void, providing a trusted, internationally relevant reference architecture tailored to the unique needs of hospitals worldwide. Hospitals are the backbone of healthcare, accounting for a substantial portion of spending in the US and EU, yet they grapple with the challenges of a digital era. This guide empowers hospitals to thrive in today's evolving healthcare landscape.

A Reference Architecture for Real-Time Performance Measurement Sachin Karadgi,2014-06-02 This book describes how manufacturing enterprises, by reinforcing their existing monitoring and control of manufacturing processes, can successfully face the ever-increasing pressure from internal and external environments to maintain their competitive advantage. Numerous performance measurement systems have been elaborated to satisfy these requirements, stressing the importance of financial and operational metrics. It also highlights the fact that research on generating and linking financial and operational metrics, especially in real-time, has not garnered sufficient attention to date. The book follows an approach that integrates enterprises across different levels and departments. By computing and linking the financial and operational metrics in real-time, the book demonstrates how to provide a comprehensive view of an entire enterprise.

IBM Reference Architecture for Genomics, Power Systems Edition Dino Quintero,Luis Bolinches,Marcelo Correia Lima,Katarzyna Pasierb,William dos Santos,IBM Redbooks,2016-04-05 This IBM® Redbooks® publication introduces the IBM Reference Architecture for Genomics, IBM Power SystemsTM edition on IBM POWER8®. It addresses topics such as why you would implement Life Sciences workloads on IBM POWER8, and shows how to use such solution to run Life Sciences workloads using IBM PlatformTM

Computing software to help set up the workloads. It also provides technical content to introduce the IBM POWER8 clustered solution for Life Sciences workloads. This book customizes and tests Life Sciences workloads with a combination of an IBM Platform Computing software solution stack, Open Stack, and third party applications. All of these applications use IBM POWER8, and IBM Spectrum ScaleTM for a high performance file system. This book helps strengthen IBM Life Sciences solutions on IBM POWER8 with a well-defined and documented deployment model within an IBM Platform Computing and an IBM POWER8 clustered environment. This system provides clients in need of a modular, cost-effective, and robust solution with a planned foundation for future growth. This book highlights IBM POWER8 as a flexible infrastructure for clients looking to deploy life sciences workloads, and at the same time reduce capital expenditures, operational expenditures, and optimization of resources. This book helps answer clients' workload challenges in particular with Life Sciences applications, and provides expert-level documentation and how-to-skills to worldwide teams that provide Life Sciences solutions and support to give a broad understanding of a new architecture.

IBM System Storage N series Reference Architecture for Virtualized Environments Roland Tretau,Jacky Ben-Bassat,Craig Thompson,IBM Redbooks,2014-06-13 This IBM® Redbooks® publication provides deployment guidelines, workload estimates, and preferred practices for clients who want a proven IBM technology stack for virtualized VMware and Microsoft environments. The result is a Reference Architecture for Virtualized Environments (RAVE) that uses VMware vSphere or Microsoft Hypervisor, IBM System x® or IBM BladeCenter® server, IBM System Networking, and IBM System Storage® N series with Clustered Data ONTAP as a storage foundation. The reference architecture can be used as a foundation to create dynamic cloud solutions and make full use of underlying storage features and functions. This book provides a blueprint that illustrates how clients can create a virtualized infrastructure and storage cloud to help address current and future data storage business requirements. It explores the solutions that IBM offers to create a storage cloud solution addressing client needs. This book also shows how the Reference Architecture for Virtualized Environments and the extensive experience of IBM in cloud computing, services, proven technologies, and products support a Smart Storage Cloud solution that is designed for your storage optimization efforts. This book is for anyone who wants to learn how to successfully deploy a virtualized environment. It is also written for anyone who wants to understand how IBM addresses data storage and compute challenges with IBM System Storage N series solutions with IBM servers and networking solutions. This book is suitable for IT architects, business partners, IBM clients, storage solution integrators, and IBM sales representatives.

Reference Architectures for Critical Domains Elisa Yumi Nakagawa,Pablo Oliveira Antonino,2023-03-14 This book presents reference architecture as a key blueprint to develop and evolve critical software-intensive systems, emphasizing both the state of the art in research and successful industrial cases. After outlining the theoretical foundations of reference architecture and presenting an overview of a number of reference architectures proposed over the recent years, this book dives into a set of critical application domains, including defense, health, automotive, avionics, and Industry 4.0, highlighting the respective most relevant reference architectures that have impacted these domains, the experience and lessons learned, insights gained, benefits and drawbacks, and factors that make these architectures sustainable. The book finishes with the most relevant directions for future advances in reference architectures. The content of this book is useful for researchers and advanced professionals in industry in the areas of computing and engineering, as well as in critical application domains that increasingly require interconnected, large, and complex software-intensive systems.

The Architects Guide to Writing Bill Schmalz,The Images Publishing Group,2014 There are a lot of good books available to help people write better. They include dictionaries, usage guides, and various types of writers' manuals – and professional writers ought to have many of those books on their bookshelves. But most architects and other design and construction professionals are not professional writers. Instead, they are people who spend a large part of their professional lives writing. That's a big difference, and that's where this book will help. The Architect's Guide to Writing has been written not by an English major, but by Bill Schmalz, an architect who knows the kinds of documents his fellow professionals routinely have to write, and understands the kinds of technical mistakes they often make in their writing. This book is designed to meet the specific needs of design and construction professionals. It's not going to waste their time with the things that most educated professionals know, but it will help them with the things they don't know or are unsure of. It's not a Chicago Manual-sized encyclopaedic reference that includes everything any writer would ever need to know, because architects don't need to know everything. But what they do need to know – and what they use every day in their professional lives – has been assembled in this book.

The Visual Dictionary of American Domestic Architecture Rachel Carley,1997-03-15 Visual presentation of the many types of houses built in America from the earliest Indian dwellings to designs for futuristic homes.

Architectures for Enterprise Integration Peter Bernus,Laszlo Nemes,Theodore J. Williams,2013-04-17 Architectures for Enterprise Integration describes the latest methods to guide enterprises and consultants, managers and technical personnel through a complete life-cycle of enterprise development. This book is based on the findings of the IFIP/IFAC Task Force and presents the state-of-the-art in enterprise architecture. This book is essential reading for all practising engineers and researchers in manufacturing and engineering management with special interest for those involved in CIM and Enterprise Modelling and Integration.

The Architecture Reference & Specification Book Julia McMorrough,2013-08 Most architectural standards references contain thousands of pages of details—overwhelmingly more than architects need to know to know on any given day. The Architecture Reference & Specification Book contains vital information that's essential to planning and executing architectural projects of all shapes and sizes, in a format that is small enough to carry anywhere. It distills the data provided in standard architectural volumes and is an easy-to-use reference for the most indispensable—and most requested—types of architectural information.

Materials Julia McMorrough,2006 Publisher description

Non-referential Architecture Valerio Olgiati,Markus Breitschmid,2019 Non-Referential Architecture is a manifesto on a new kind of architecture. Non-Referential Architecture presents a new framework for architecture in a world that is increasingly free of ideologies. We have left behind the values of multicultural postmodernity! Non-Referential Architecture offers unlimited possibilities for the liberated mind.

Unveiling the Power of Verbal Art: An Emotional Sojourn through **Reference Architecture**

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Reference Architecture Introduction

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