Managing Data In Motion Data Integration Best Practice Techniques And Technologies The Morgan Kaufmann Series On Business Intelligence

The Data Book: Collection and Management of Research Data is the first practical book written for researchers and research team members covering how to collect and manage data for research. The book covers basic types of data and fundamentals of how data grow, move and change over time. Focusing on pre-publication data collection and handling, the text illustrates use of these key concepts to match data collection and management methods to a particular study, in essence, making good decisions about data. The first section of the book defines data, introduces fundamental types of data that bear on methodology to collect and manage them, and covers data management planning and research reproducibility. The second section covers basic principles of and options for data collection and processing emphasizing error resistance and traceability. The third section focuses on managing the data collection and processing stages of research such that quality is consistent and ultimately capable of supporting conclusions drawn

from data. The final section of the book covers principles of data security, sharing, and archival. This book will help graduate students and researchers systematically identify and implement appropriate data collection and handling methods.
This book constitutes the refereed proceedings of the scientific track of the 7th Software Quality Days Conference, SWQD 2015, held in Vienna, Austria, in January 2015. The SWQD conference offers a range of comprehensive and valuable information by presenting new ideas from the latest research papers, keynote speeches by renowned academics and industry leaders, professional lectures, exhibits, and tutorials. The four scientific full papers accepted for SWQD were each peer reviewed by three or more reviewers and selected out of 13 high-quality submissions. Further, four short papers were also presented and are included in this book. The papers are organized into topical sections on risk management and inspection, change impact analysis and systems testing, and software and systems architectures.
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How do we enable our organizations to enjoy the often significant benefits of BI and analytics, while at the same time minimizing the cost and risk of failure? In this book, I am not going to try to be prescriptive; I won't tell you exactly how to build

your BI environment. Instead, I am going to focus on a few core principles that will enable you to navigate the rocky shoals of BI architecture and arrive at a destination best suited for your particular organization. Some of these core principles include: · Have an overarching strategy, plan, and roadmap · Recognize and leverage your existing technology investments · Support both data discovery and data reuse · Keep data in motion, not at rest · Separate information delivery from data storage · Emphasize data transparency over data quality · Take an agile approach to BI development. This book will show you how to successfully navigate both the jungle of BI technology and the minefield of human nature. It will show you how to create a BI architecture and strategy that addresses the needs of all organizational stakeholders. It will show you how to maximize the value of your BI investments. It will show you how to manage the risk of disruptive technology. And it will show you how to use agile methodologies to deliver on the promise of BI and analytics quickly, succinctly, and iteratively. This book is about many things. But principally, it's about success. The goal of any enterprise initiative is to succeed and to derive benefit—benefit that all stakeholders can share in. I want you to be successful. I want your organization to be successful. This book will show you how. This book is for anyone who is currently or will someday be

working on a BI, analytics, or Big Data project, and for organizations that want to get the maximum amount of value from both their data and their BI technology investment. This includes all stakeholders in the BI effort—not just the data people or the IT people, but also the business stakeholders who have the responsibility for the definition and use of data. There are six sections to this book: In Section I, What Kind of Garden Do You Want?, we will examine the benefits and risks of Business Intelligence, making the central point that BI is a business (not IT) process designed to manage data assets in pursuit of enterprise goals. We will show how data, when properly managed and used, can be a key enabler of several types of core business processes. The purpose of this section is to help you define the particular benefit(s) you want from BI. In Section II, Building the Bones, we will talk about how to design and build out the “hardscape” (infrastructure) of your BI environment. This stage of the process involves leveraging existing technology investments and iteratively moving toward your desired target state BI architecture. In Section III, From the Ground Up, we explore the more detailed aspects of implementing your BI operational environment. In Section IV, Weeds, Pests and Critters, we talk about the myriad of things that can go wrong on a BI project, and discuss ways of mitigating these risks. In Section V, The Sustainable

Garden, we talk about how to create a BI infrastructure that is easy and inexpensive to maintain. Finally, Section VI presents a case study illustrating the principles of this book, as applied to a fictional manufacturing company (the Blue Moon Guitar Company).

A Primer in Financial Data Management describes concepts and methods, considering financial data management, not as a technological challenge, but as a key asset that underpins effective business management. This broad survey of data management in financial services discusses the data and process needs from the business user, client and regulatory perspectives. Its non-technical descriptions and insights can be used by readers with diverse interests across the financial services industry. The need has never been greater for skills, systems, and methodologies to manage information in financial markets. The volume of data, the diversity of sources, and the power of the tools to process it massively increased. Demands from business, customers, and regulators on transparency, safety, and above all, timely availability of high quality information for decision-making and reporting have grown in tandem, making this book a must read for those working in, or interested in, financial management. Focuses on ways information management can fuel financial institutions' processes, including regulatory

reporting, trade lifecycle management, and customer interaction Covers recent regulatory and technological developments and their implications for optimal financial information management Views data management from a supply chain perspective and discusses challenges and opportunities, including big data technologies and regulatory scrutiny

Apache Ignite is one of the most widely used open source memory-centric distributed, caching, and processing platform. This allows the users to use the platform as an in-memory computing framework or a full functional persistence data stores with SQL and ACID transaction support. On the other hand, Apache Ignite can be used for accelerating existing Relational and NoSQL databases, processing events & streaming data or developing Microservices in fault-tolerant fashion. This book addressed anyone interested in learning in-memory computing and distributed database. This book intends to provide someone with little to no experience of Apache Ignite with an opportunity to learn how to use this platform effectively from scratch taking a practical hands-on approach to learning. Please see the table of contents for more details.

As data management and integration continue to evolve rapidly, storing all your data in one place, such as a data warehouse, is no longer scalable. In the very near future, data will need to be distributed

and available for several technological solutions. With this practical book, you'll learnhow to migrate your enterprise from a complex and tightly coupled data landscape to a more flexible architecture ready for the modern world of data consumption. Executives, data architects, analytics teams, and compliance and governance staff will learn how to build a modern scalable data landscape using the Scaled Architecture, which you can introduce incrementally without a large upfront investment. Author Piethein Strengholt provides blueprints, principles, observations, best practices, and patterns to get you up to speed. Examine data management trends, including technological developments, regulatory requirements, and privacy concerns Go deep into the Scaled Architecture and learn how the pieces fit together Explore data governance and data security, master data management, self-service data marketplaces, and the importance of metadata While many companies ponder implementation details such as distributed processing engines and algorithms for data analysis, this practical book takes a much wider view of big data development, starting with initial planning and moving diligently toward execution. Authors Ted Malaska and Jonathan Seidman guide you through the major components necessary to start, architect, and develop successful big data projects. Everyone from CIOs and COOs to lead architects and developers will explore a variety

of big data architectures and applications, from massive data pipelines to web-scale applications. Each chapter addresses a piece of the software development life cycle and identifies patterns to maximize long-term success throughout the life of your project. Start the planning process by considering the key data project types Use guidelines to evaluate and select data management solutions Reduce risk related to technology, your team, and vague requirements Explore system interface design using APIs, REST, and pub/sub systems Choose the right distributed storage system for your big data system Plan and implement metadata collections for your data architecture Use data pipelines to ensure data integrity from source to final storage Evaluate the attributes of various engines for processing the data you collect

This book constitutes the refereed proceedings of six workshops of the 14th International Conference on Web-Age Information Management, WAIM 2013, held in Beidaihe, China, June 2013. The 37 revised full papers are organized in topical sections on the six following workshops: The International Workshop on Big Data Management on Emerging Hardware (HardBD 2013), the Second International Workshop on Massive Data Storage and Processing (MDSP 2013), the First International Workshop on Emergency Management in Big Data Age (BigEM 2013), the International Workshop on Trajectory Mining in Social Networks (TMSN 2013), the First International Workshop on Location-based

Query Processing in Mobile Environments (LQPM 2013), and the First International Workshop on Big Data Management and Service (BDMS 2013).

XML in Data Management is for IT managers and technical staff involved in the creation, administration, or maintenance of a data management infrastructure that includes XML. For most IT staff, XML is either just a buzzword that is ignored or a silver bullet to be used in every nook and cranny of their organization. The truth is in between the two. This book provides the guidance necessary for data managers to make measured decisions about XML within their organizations. Readers will understand the uses of XML, its component architecture, its strategic implications, and how these apply to data management. Takes a data-centric view of XML Explains how, when, and why to apply XML to data management systems Covers XML component architecture, data engineering, frameworks, metadata, legacy systems, and more Discusses the various strengths and weaknesses of XML technologies in the context of organizational data management and integration

Clouds are being positioned as the next-generation consolidated, centralized, yet federated IT infrastructure for hosting all kinds of IT platforms and for deploying, maintaining, and managing a wider variety of personal, as well as professional applications and services. Handbook of Research on Cloud Infrastructures for Big Data Analytics focuses exclusively on the topic of cloud-sponsored big data analytics for creating flexible and futuristic organizations. This book helps researchers and

practitioners, as well as business entrepreneurs, to make informed decisions and consider appropriate action to simplify and streamline the arduous journey towards smarter enterprises.

These conference proceedings focus on the topics of data-driven decision-making, stochastic decision-making, fuzzy decision-making and their applications in real-life problems. Beijing University of Chemical Technology organized IFDS2016, the 4th International Forum on Decision Sciences, with the theme “Data-Driven Decision-Making.” The proceedings collect 84 selected papers presenting cutting-edge modeling and solution methods and include numerous practical case studies, making it a valuable resource for students, researchers and practitioners working in the fields of decision science, operations research, management science and engineering.

Information Modeling and Relational Databases provides an introduction to ORM (Object Role Modeling)-and much more. In fact, it's the only book to go beyond introductory coverage and provide all of the in-depth instruction you need to transform knowledge from domain experts into a sound database design. Inside, ORM authority Terry Halpin blends conceptual information with practical instruction that will let you begin using ORM effectively as soon as possible. Supported by examples, exercises, and useful background information, his step-by-step approach teaches you to develop a natural-language-based ORM model and then, where needed, abstract ER and UML models from it. This book will quickly make you proficient

in the modeling technique that is proving vital to the development of accurate and efficient databases that best meet real business objectives. The most in-depth coverage of Object Role Modeling available anywhere-written by a pioneer in the development of ORM. Provides additional coverage of Entity Relationship (ER) modeling and the Unified Modeling Language-all from an ORM perspective. Intended for anyone with a stake in the accuracy and efficacy of databases: systems analysts, information modelers, database designers and administrators, instructors, managers, and programmers. Explains and illustrates required concepts from mathematics and set theory.

The digital age has presented an exponential growth in the amount of data available to individuals looking to draw conclusions based on given or collected information across industries. Challenges associated with the analysis, security, sharing, storage, and visualization of large and complex data sets continue to plague data scientists and analysts alike as traditional data processing applications struggle to adequately manage big data. Big Data: Concepts, Methodologies, Tools, and Applications is a multi-volume compendium of research-based perspectives and solutions within the realm of large-scale and complex data sets. Taking a multidisciplinary approach, this publication presents exhaustive coverage of crucial topics in the field of big data including diverse applications, storage solutions, analysis techniques, and methods for searching and transferring large data sets, in addition to security issues. Emphasizing essential research in the field of data

science, this publication is an ideal reference source for data analysts, IT professionals, researchers, and academics.

How do you approach answering queries when your data is stored in multiple databases that were designed independently by different people? This is first comprehensive book on data integration and is written by three of the most respected experts in the field. This book provides an extensive introduction to the theory and concepts underlying today's data integration techniques, with detailed, instruction for their application using concrete examples throughout to explain the concepts. Data integration is the problem of answering queries that span multiple data sources (e.g., databases, web pages). Data integration problems surface in multiple contexts, including enterprise information integration, query processing on the Web, coordination between government agencies and collaboration between scientists. In some cases, data integration is the key bottleneck to making progress in a field. The authors provide a working knowledge of data integration concepts and techniques, giving you the tools you need to develop a complete and concise package of algorithms and applications. Offers a range of data integration solutions enabling you to focus on what is most relevant to the problem at hand Enables you to build your own algorithms and implement your own data integration applications

Promise, Application and Pitfalls

The overall objective of this book is to show that data management is an exciting and valuable capability that is

worth time and effort. More specifically it aims to achieve the following goals: 1. To give a “gentle” introduction to the field of DM by explaining and illustrating its core concepts, based on a mix of theory, practical frameworks such as TOGAF, ArchiMate, and DMBOK, as well as results from real-world assignments. 2. To offer guidance on how to build an effective DM capability in an organization.This is illustrated by various use cases, linked to the previously mentioned theoretical exploration as well as the stories of practitioners in the field. The primary target groups are: busy professionals who “are actively involved with managing data”. The book is also aimed at (Bachelor’s/ Master’s) students with an interest in data management. The book is industry-agnostic and should be applicable in different industries such as government, finance, telecommunications etc. Typical roles for which this book is intended: data governance office/ council, data owners, data stewards, people involved with data governance (data governance board), enterprise architects, data architects, process managers, business analysts and IT analysts. The book is divided into three main parts: theory, practice, and closing remarks. Furthermore, the chapters are as short and to the point as possible and also make a clear distinction between the main text and the examples. If the reader is already familiar with the topic of a chapter, he/she can easily skip it and move on to the next.

A comprehensive resource for understanding the issues involved in collecting, measuring and managing data in the financial services industry.

Revised and updated with the latest data from this fast

paced field, Access Control, Authentication, and Public Key Infrastructure defines the components of access control, provides a business framework for implementation, and discusses legal requirements that impact access control programs.

Cloud computing is becoming the next revolution in the IT industry; providing central storage for internet data and services that have the potential to bring data transmission performance, security and privacy, data deluge, and inefficient architecture to the next level. Enabling the New Era of Cloud Computing: Data Security, Transfer, and Management discusses cloud computing as an emerging technology and its critical role in the IT industry upgrade and economic development in the future. This book is an essential resource for business decision makers, technology investors, architects and engineers, and cloud consumers interested in the cloud computing future.

"This book examines the current scope of theoretical and practical applications on the security of mobile and wireless communications, covering fundamental concepts of current issues, challenges, and solutions in wireless and mobile networks"--Provided by publisher.

This IBM® Redbooks® publication documents how IBM Platform Computing, with its IBM Platform Symphony® MapReduce framework, IBM Spectrum Scale (based Upon IBM GPFSTM), IBM Platform LSF®, the Advanced Service Controller for Platform Symphony are work together as an infrastructure to manage not just Hadoop-related offerings, but many popular industry offeringsm such as Apach Spark, Storm, MongoDB, Cassandra, and

so on. It describes the different ways to run Hadoop in a big data environment, and demonstrates how IBM Platform Computing solutions, such as Platform Symphony and Platform LSF with its MapReduce Accelerator, can help performance and agility to run Hadoop on distributed workload managers offered by IBM. This information is for technical professionals (consultants, technical support staff, IT architects, and IT specialists) who are responsible for delivering cost-effective cloud services and big data solutions on IBM Power SystemsTM to help uncover insights among client's data so they can optimize product development and business results.

This book discusses the concepts, theory, and core technologies of intelligent theory and human animation, including video based human animation and intelligent technology of motion data management and reusing. It introduces systems developed to demonstrate the technologies of video based animation. Lively pictures and demos throughout the text help make the theory and technologies more accessible to readers.

With the ever-increasing volume of data, proper management of data is a challenging proposition to scientists and researchers, and given the vast storage space required, multimedia data is no exception in this regard. Scientists and researchers are investing great effort to discover new space-efficient methods for storage and archiving of this data. Intelligent Innovations in Multimedia Data Engineering and Management provides emerging research exploring the theoretical and practical aspects of storage systems and computing

methods for large forms of data. Featuring coverage on a broad range of topics such as binary image, fuzzy logic, and metaheuristic algorithms, this book is ideally designed for computer engineers, IT professionals, technology developers, academicians, and researchers seeking current research on advancing strategies and computing techniques for various types of data.

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"

Executing Data Quality Projects, Second Edition presents a structured yet flexible approach for creating, improving, sustaining and managing the quality of data and information within any organization. Studies show that data quality problems are costing businesses billions of dollars each year, with poor data linked to waste and inefficiency, damaged credibility among customers and suppliers, and an organizational inability to make sound decisions. Help is here! This book describes a proven Ten Step approach that combines a conceptual framework for understanding information quality with techniques, tools, and instructions for practically putting the approach to work – with the end result of high-quality trusted data and information, so critical to today's data-dependent organizations. The Ten Steps approach applies to all types of data and all types of organizations – for-profit in any industry, non-profit, government, education, healthcare, science, research, and medicine. This book includes numerous templates, detailed examples, and practical advice for executing every step. At the same time, readers are advised on how to select relevant steps and apply them in different ways to best address the many situations they will face. The layout allows for quick reference with an easy-to-use format highlighting key concepts and definitions, important checkpoints, communication activities, best practices, and warnings. The experience of actual clients and users of the Ten Steps provide real examples of outputs for the steps plus

highlighted, sidebar case studies called Ten Steps in Action. This book uses projects as the vehicle for data quality work and the word broadly to include: 1) focused data quality improvement projects, such as improving data used in supply chain management, 2) data quality activities in other projects such as building new applications and migrating data from legacy systems, integrating data because of mergers and acquisitions, or untangling data due to organizational breakups, and 3) ad hoc use of data quality steps, techniques, or activities in the course of daily work. The Ten Steps approach can also be used to enrich an organization's standard SDLC (whether sequential or Agile) and it complements general improvement methodologies such as six sigma or lean. No two data quality projects are the same but the flexible nature of the Ten Steps means the methodology can be applied to all. The new Second Edition highlights topics such as artificial intelligence and machine learning, Internet of Things, security and privacy, analytics, legal and regulatory requirements, data science, big data, data lakes, and cloud computing, among others, to show their dependence on data and information and why data quality is more relevant and critical now than ever before. Includes concrete instructions, numerous templates, and practical advice for executing every step of The Ten Steps approach Contains real examples from around the world, gleaned from the author's consulting practice and from those who implemented based on her training courses and the earlier edition of the book Allows for quick reference with an easy-to-use format highlighting key concepts and definitions, important checkpoints, communication activities, and best practices A companion Web site includes links to numerous data quality resources, including many of the templates featured in the text, quick summaries of key ideas from the Ten Steps methodology, and other tools and information that

are available online

An Executive Guide to Data Management

In SOA and Web Services Interface Design, data architecture guru James Bean teaches you how to design web service interfaces that are capable of being extended to accommodate ever changing business needs and promote incorporation simplicity. The book first provides an overview of critical SOA principles, thereby offering a basic conceptual summary. It then provides explicit, tactical, and real-world techniques for ensuring compliance with these principles. Using a focused, tutorial-based approach the book provides working syntactical examples - described by Web services standards such as XML, XML Schemas, WSDL and SOAP - that can be used to directly implement interface design procedures, thus allowing you immediately generate value from your efforts. In summary, SOA and Web Services Interface Design provides the basic theory, but also design techniques and very specific implementable encoded interface examples that can be immediately employed in your work, making it an invaluable practical guide to any practitioner in today's exploding Web-based service market. Provides chapters on topics of introductory WSDL syntax and XML Schema syntax, taking take the reader through fundamental concepts and into deeper techniques and allowing them to quickly climb the learning curve. Provides working syntactical examples - described by Web services standards such as XML, XML Schemas, WSDL and SOAP - that can be used to directly implement interface design procedures. Real-world examples generated using the Altova XML Spy tooling reinforce applicability, allowing you to immediately generate value from their efforts.

This open access book presents the foundations of the Big Data research and innovation ecosystem and the associated enablers that facilitate delivering value from data for business

and society. It provides insights into the key elements for research and innovation, technical architectures, business models, skills, and best practices to support the creation of data-driven solutions and organizations. The book is a compilation of selected high-quality chapters covering best practices, technologies, experiences, and practical recommendations on research and innovation for big data. The contributions are grouped into four parts: · Part I: Ecosystem Elements of Big Data Value focuses on establishing the big data value ecosystem using a holistic approach to make it attractive and valuable to all stakeholders. · Part II: Research and Innovation Elements of Big Data Value details the key technical and capability challenges to be addressed for delivering big data value. · Part III: Business, Policy, and Societal Elements of Big Data Value investigates the need to make more efficient use of big data and understanding that data is an asset that has significant potential for the economy and society. · Part IV: Emerging Elements of Big Data Value explores the critical elements to maximizing the future potential of big data value. Overall, readers are provided with insights which can support them in creating data-driven solutions, organizations, and productive data ecosystems. The material represents the results of a collective effort undertaken by the European data community as part of the Big Data Value Public-Private Partnership (PPP) between the European Commission and the Big Data Value Association (BDVA) to boost data-driven digital transformation.

A concise reference to the state of the art in systems interoperability, Enterprise Interoperability VII will be of great value to engineers and computer scientists working in manufacturing and other process industries and to software engineers and electronic and manufacturing engineers working in the academic environment. Furthermore, it shows

how knowledge of the meaning within information and the use to which it will be put have to be held in common between enterprises for consistent and efficient inter-enterprise networks. Over 30 papers, ranging from academic research through case studies to industrial and administrative experience of interoperability show how, in a scenario of globalised markets, where the capacity to cooperate with other organizations efficiently is essential in order to remain economically, socially and environmentally cost-effective, the most innovative digitized and networked enterprises ensure that their systems and applications are able to interoperate across heterogeneous collaborative networks of independent organizations. This goal of interoperability is essential, not only from the perspective of the individual enterprise but also in the business structures that are now emerging, such as complex collaborating networks of suppliers and customers, virtual enterprises, interconnected organisations or extended enterprises, as well as in mergers and acquisitions. Establishing efficient and relevant collaborative situations requires the management of interoperability from a dynamic point of view: a relevant and efficient collaboration of organizations may require adaptation to remain in line with changing objectives, evolving resources, unexpected events, etc. Many of the papers contained in this, the eighth volume of Proceedings of the I-ESA Conferences have examples and illustrations calculated to deepen understanding and generate new ideas. The I-ESA'16 Conference from which this book is drawn was organized by the Escola de Engenharia da Universidade do Minho, on behalf of the European Virtual Laboratory for Enterprise Interoperability (INTEROP-VLab) and Interop VLab Portuguese Pole.

As technology weaves itself more tightly into everyday life, socio-economic development has become intricately tied to these ever-evolving innovations. Technology management is

now an integral element of sound business practices, and this revolution has opened up many opportunities for global communication. However, such swift change warrants greater research that can foresee and possibly prevent future complications within and between organizations. The Handbook of Research on Engineering Innovations and Technology Management in Organizations is a collection of innovative research that explores global concerns in the applications of technology to business and the explosive growth that resulted. Highlighting a wide range of topics such as cyber security, legal practice, and artificial intelligence, this book is ideally designed for engineers, manufacturers, technology managers, technology developers, IT specialists, productivity consultants, executives, lawyers, programmers, managers, policymakers, academicians, researchers, and students.

Proceedings of the International Conference on Interdisciplinary Research in Electronics and Instrumentation Engineering 2015 (ICIREIE)

Healthcare Data Analytics and Management help readers disseminate cutting-edge research that delivers insights into the analytic tools, opportunities, novel strategies, techniques and challenges for handling big data, data analytics and management in healthcare. As the rapidly expanding and heterogeneous nature of healthcare data poses challenges for big data analytics, this book targets researchers and bioengineers from areas of machine learning, data mining, data management, and healthcare providers, along with clinical researchers and physicians who are interested in the management and analysis of healthcare data. Covers data analysis, management and security concepts and tools in the healthcare domain Highlights electronic medical health records and patient information records Discusses the different techniques to integrate Big data and Internet-of-

Things in healthcare, including machine learning and data mining Includes multidisciplinary contributions in relation to healthcare applications and challenges

Everyone wants privacy and security online, something that most computer users have more or less given up on as far as their personal data is concerned. There is no shortage of good encryption software, and no shortage of books, articles and essays that purport to be about how to use it. Yet there is precious little for ordinary users who want just enough information about encryption to use it safely and securely and appropriately--WITHOUT having to become experts in cryptography. Data encryption is a powerful tool, if used properly. Encryption turns ordinary, readable data into what looks like gibberish, but gibberish that only the end user can turn back into readable data again. The difficulty of encryption has much to do with deciding what kinds of threats one needs to protect against and then using the proper tool in the correct way. It's kind of like a manual transmission in a car: learning to drive with one is easy; learning to build one is hard. The goal of this title is to present just enough for an average reader to begin protecting his or her data, immediately. Books and articles currently available about encryption start out with statistics and reports on the costs of data loss, and quickly get bogged down in cryptographic theory and jargon followed by attempts to comprehensively list all the latest and greatest tools and techniques. After step-by-step walkthroughs of the download and install process, there's precious little room left for what most readers really want: how to encrypt a thumb drive or email message, or digitally sign a data file. There are terabytes of content that explain how cryptography works, why it's important, and all the different pieces of software that can be used to do it; there is precious little content available that couples concrete threats to data with explicit responses to those threats. This title fills that niche. By reading this title

readers will be provided with a step by step hands-on guide that includes: Simple descriptions of actual threat scenarios Simple, step-by-step instructions for securing data How to use open source, time-proven and peer-reviewed cryptographic software Easy to follow tips for safer computing Unbiased and platform-independent coverage of encryption tools and techniques Simple descriptions of actual threat scenarios Simple, step-by-step instructions for securing data How to use open source, time-proven and peer-reviewed cryptographic software Easy-to-follow tips for safer computing Unbiased and platform-independent coverage of encryption tools and techniques

Mobile computing skills are becoming standard in the IT industry Mobile Computing Deployment and Management: Real World Skills for CompTIA Mobility+ Certification and Beyond is the ultimate reference for mobile computing. Certified Wireless Network Expert Robert J. Bartz guides IT and networking professionals through the fundamental and advanced concepts of mobile computing, providing the information and instruction necessary to get up to speed on current technology and best practices. The book maps to the CompTIA Mobility+ (MB0-001) exam, making it an ideal resource for those seeking this rewarding certification. The mobile device has already overshadowed the PC as a primary means for Internet access for a large portion of the world's population, and by 2020, there will be an estimated 10 billion mobile devices worldwide. Mobile connectivity has become the new standard for business professionals, and when combined with cloud computing, it creates a world where instant access is the norm. To remain relevant, IT professionals must hone their mobile skills. The ability to manage, develop, and secure a mobile infrastructure is quickly becoming a key component to entering the IT industry, and professionals lacking those skills will be left

behind. This book covers all aspects of mobile computing, including: Radio frequency, antenna, and cellular technology Physical and logical infrastructure technologies Common mobile device policies and application management Standards and certifications, and more Each chapter includes hands-on exercises, real-world examples, and in-depth guidance from the perspective of a mobile computing expert. IT professionals looking to expand their capabilities need look no further than Mobile Computing Deployment and Management: Real World Skills for CompTIA Mobility+ Certification and Beyond for the most comprehensive approach to mobile computing on the market today.

As customers and service providers begin to consolidate more and more applications and workloads onto shared storage infrastructures, it becomes increasingly difficult to coordinate outages for planned downtime for things, such as hardware refreshes. This difficulty is because many users, groups, or customers might be using the shared storage infrastructure at the same time. Users expect these infrastructures to be available 24/7, so it is imperative that service outages that are required for storage life-cycle management, cost/service-level optimization, and any other planned downtime do not disturb the availability of the always-on infrastructure. In this IBM® Redbooks® publication, we introduce you to the business value of Data Motion and its features. Storage and system administrators, data center managers, and IT as a service (ITaaS) providers will benefit from reading this book. In this publication, we assume that you have a basic knowledge of N series storage systems and Data ONTAP®, SnapMirror®, MultiStore®, and Provisioning Manager. A complete understanding of all Provisioning Manager features is not necessary. Also, basic knowledge of host and vFiler management from Provisioning Manager is sufficient. Data Motion significantly improves the availability of

shared storage infrastructure by avoiding the service outages that are associated with planned activities, such as storage life-cycle management and cost/service-level optimization, thus helping you to enable an always-on IT environment. The business values of Data Motion are: - No planned downtime for: - Storage capacity expansion - Scheduled maintenance outages - Technology refresh - Improved SLA flexibility: - On-demand load balancing - Adjustable storage tiers - Application transparency: - No performance impact - Transaction integrity

In this IBM® Redbooks® publication, we discuss and describe the positioning, functions, capabilities, and advanced programming techniques for IBM InfoSphereTM Streams (V1). See: http://www.redbooks.ibm.com/abstracts/sg247970.html for the newer InfoSphere Streams (V2) release. Stream computing is a new paradigm. In traditional processing, queries are typically run against relatively static sources of data to provide a query result set for analysis. With stream computing, a process that can be thought of as a continuous query, that is, the results are continuously updated as the data sources are refreshed. So, traditional queries seek and access static data, but with stream computing, a continuous stream of data flows to the application and is continuously evaluated by static queries. However, with IBM InfoSphere Streams, those queries can be modified over time as requirements change. IBM InfoSphere Streams takes a fundamentally different approach to continuous processing and differentiates itself with its distributed runtime platform, programming model, and tools for developing continuous processing applications. The data streams consumable by IBM InfoSphere Streams can originate from sensors, cameras, news feeds, stock tickers, and a variety of other sources, including traditional databases. It provides an execution platform and services for

applications that ingest, filter, analyze, and correlate potentially massive volumes of continuous data streams.
New security risks, continuously evolving regulation and increasing security standards have created new and growing needs for secure internal information transfers, which SSH provides. This book addresses these new trends in depth, offering the most up-to-date information on the integration of SSH into a security environment. It covers the newest features and applications of SSH-2 (which received Proposed Standard status from the IETF in 2006). SSH2 is more secure than previous versions and has many expanded uses on a wider variety of computing platforms. Another particular note driving new SSH2 adoption are the requirements of recent legislation (PCI/HIPAA/SOX/FISMA). SSH 2 has become an even more valuable tool, as it provides communications security compliance with the latest standards. This book offers the most up-to-date information on SSH2 in a practical, hands-on, tutorial-style reference that goes well beyond UNIX implementation. It concentrates on the latest version of SSH 2 with all new information. * Discover why SSH2 offers more robust security than SSH1 and how to incorporate it into your network administration software toolbox.
Every year, in response to advancements in technology and new laws in different countries and regions, there are many changes and updates to the body of knowledge required of IT security professionals. Updated annually to keep up with the increasingly fast pace of change in the field, the Information Security Management Handbook is the single most