It Security Metrics A Practical Framework For Measuring Security Protecting Data

This book constitutes the refereed proceedings of the First International Workshop on Security, IWSEC 2006, held in Kyoto, Japan in October 2006. The 30 revised full papers presented were carefully reviewed and selected from 147 submissions.

Security Smarts for the Self-Guided IT Professional “An extraordinarily thorough and sophisticated explanation of why you need to measure the effectiveness of your security program and how to do it. A must-have for any quality security program!” —Dave Cullinane, CISSP, CISO & VP, Global Fraud, Risk & Security, eBay Learn how to communicate the value of an information security program, enable investment planning and decision making, and drive necessary change to improve the security of your organization. Security Metrics: A Beginner's Guide explains, step by step, how to develop and implement a successful security metrics program. This practical resource covers project management, communication, analytics tools, identifying targets, defining objectives, obtaining stakeholder buy-in, metrics automation, data quality, and resourcing. You'll also get details on cloud-based security metrics and process improvement. Templates, checklists, and examples give you the hands-on help you need to get started right away. Security Metrics: A Beginner's Guide features: Lingo--Common security terms defined so that you're in

the know on the job IMHO--Frank and relevant opinions based on the author's years of industry experience Budget Note--Tips for getting security technologies and processes into your organization's budget In Actual Practice--Exceptions to the rules of security explained in real-world contexts Your Plan--Customizable checklists you can use on the job now Into Action--Tips on how, why, and when to apply new skills and techniques at work Caroline Wong, CISSP, was formerly the Chief of Staff for the Global Information Security Team at eBay, where she built the security metrics program from the ground up. She has been a featured speaker at RSA, ITWeb Summit, Metricon, the Executive Women's Forum, ISC2, and the Information Security Forum.

IT Security Metrics: A Practical Framework for Measuring Security & Protecting DataMcgraw-hill

This book addresses the challenges in the software engineering of variability-intensive systems. Variability-intensive systems can support different usage scenarios by accommodating different and unforeseen features and qualities. The book features academic and industrial contributions that discuss the challenges in developing, maintaining and evolving systems, cloud and mobile services for variability-intensive software systems and the scalability requirements they imply. The book explores software engineering approaches that can efficiently deal with variability-intensive systems as well as applications and use cases benefiting from variability-intensive systems.

This book is written for the first security hire in an organization, either an individual moving into this role

from within the organization or hired into the role. More and more, organizations are realizing that information security requires a dedicated team with leadership distinct from information technology, and often the people who are placed into those positions have no idea where to start or how to prioritize. There are many issues competing for their attention, standards that say do this or do that, laws, regulations, customer demands, and no guidance on what is actually effective. This book offers guidance on approaches that work for how you prioritize and build a comprehensive information security program that protects your organization. While most books targeted at information security professionals explore specific subjects with deep expertise, this book explores the depth and breadth of the field. Instead of exploring a technology such as cloud security or a technique such as risk analysis, this book places those into the larger context of how to meet an organization's needs, how to prioritize, and what success looks like. Guides to the maturation of practice are offered, along with pointers for each topic on where to go for an in-depth exploration of each topic. Unlike more typical books on information security that advocate a single perspective, this book explores competing perspectives with an eye to providing the pros and cons of the different approaches and the implications of choices on implementation and on maturity, as often a choice on an approach needs to change as an organization grows and matures. Building a Practical Information Security Program provides users with a strategic view on how to build an information security program that aligns with business

objectives. The information provided enables both executive management and IT managers not only to validate existing security programs, but also to build new business-driven security programs. In addition, the subject matter supports aspiring security engineers to forge a career path to successfully manage a security program, thereby adding value and reducing risk to the business. Readers learn how to translate technical challenges into business requirements, understand when to "go big or go home," explore in-depth defense strategies, and review tactics on when to absorb risks. This book explains how to properly plan and implement an infosec program based on business strategy and results. Provides a roadmap on how to build a security program that will protect companies from intrusion Shows how to focus the security program on its essential mission and move past FUD (fear, uncertainty, and doubt) to provide business value Teaches how to build consensus with an effective business-focused program With their rapidly changing architecture and API-driven automation, cloud platforms come with unique security challenges and opportunities. This hands-on book guides you through security best practices for multivendor cloud environments, whether your company plans to move legacy on-premises projects to the cloud or build a new infrastructure from the ground up. Developers, IT architects, and security professionals will learn cloud-specific techniques for securing popular cloud platforms such as Amazon Web Services, Microsoft Azure, and IBM Cloud. Chris Dotson—an IBM senior technical staff member—shows you how to establish data asset

management, identity and access management, vulnerability management, network security, and incident response in your cloud environment.

This 60-minute recorded webinar features information security expert Dr. Lance Hayden, author of "IT Security Metrics: A Practical Framework for Measuring Security and Protecting Data " (McGraw-Hill, 2010), which is used by organizations around the world as a foundation for measuring security programs and educating industry professionals.

Provides predictive security metrics with R—security, analytics, and programming Massive data breaches and discussions surrounding improving technology security have been topics of intense interest over the past several years. Security failures by organizations such as Equifax, Uber, the U.S Securities and Exchange Commission, and the Republican National Committee, amongst many others, impacted millions of Americans. There is no disputing the importance of effective cybersecurity technologies and practices, yet measuring security effectiveness within corporations and other entities has proved to be a challenge. The Metrics Manifesto examines security metrics with R, the popular open-source programming language and software development environment for statistical computing. This timely, fully up-to-date guide focuses on applied measurement that proves or disproves information security effectiveness. Comprehensive, detailed

chapters discuss security, predictive analytics, and programming with R. Author Richard Seiersen presents an innovative approach to security metrics, looking to fields such as the sciences and professional sports to improve measurement. A valuable tool for discovering how to improve IT security procedures, this important book: Uncovers the truths about an organization's security programs Explains how processing data with R can measure security improvements Helps technology security teams identify and rectify security weaknesses Offer practical insights from a leading security expert with two decade's experience in information security, risk management, and product development Includes a downloadable applied tutorial new R users The Metrics Manifesto: Confronting Security with Data is an essential resource for IT security managers, risk managers, statisticians, and other security professionals.

This book constitutes the thoroughly refereed post-conference proceedings of the 9th International Symposium on Foundations and Practice of Security, FPS 2016, held in Québec City, QC, Canada, in October 2016. The 18 revised regular papers presented together with 5 short papers and 3 invited talks were carefully reviewed and selected from 34 submissions. The accepted papers cover diverse research themes, ranging from classic topics, such as malware, anomaly detection, and

privacy, to emerging issues, such as security and privacy in mobile computing and cloud.
The second edition of this comprehensive handbook of computer and information security provides the most complete view of computer security and privacy available. It offers in-depth coverage of security theory, technology, and practice as they relate to established technologies as well as recent advances. It explores practical solutions to many security issues. Individual chapters are authored by leading experts in the field and address the immediate and long-term challenges in the authors' respective areas of expertise. The book is organized into 10 parts comprised of 70 contributed chapters by leading experts in the areas of networking and systems security, information management, cyber warfare and security, encryption technology, privacy, data storage, physical security, and a host of advanced security topics. New to this edition are chapters on intrusion detection, securing the cloud, securing web apps, ethical hacking, cyber forensics, physical security, disaster recovery, cyber attack deterrence, and more. Chapters by leaders in the field on theory and practice of computer and information security technology, allowing the reader to develop a new level of technical expertise Comprehensive and up-to-date coverage of security issues allows the reader to remain current and fully informed from multiple viewpoints Presents methods

of analysis and problem-solving techniques, enhancing the reader's grasp of the material and ability to implement practical solutions

This book constitutes the refereed proceedings of the Third International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2006, held in federation with the Second International Conference on Natural Computation ICNC 2006. The book presents 115 revised full papers and 50 revised short papers. Coverage includes neural computation, quantum computation, evolutionary computation, DNA computation, fuzzy computation, granular computation, artificial life, innovative applications to knowledge discovery, finance, operations research, and more.

Spectacular security failures continue to dominate the headlines despite huge increases in security budgets and ever-more draconian regulations. The 20/20 hindsight of audits is no longer an effective solution to security weaknesses, and the necessity for real-time strategic metrics has never been more critical. Information Security Management Metrics: A Definitive Guide to Effective Security Monitoring and Measurement offers a radical new approach for developing and implementing security metrics essential for supporting business activities and managing information risk. This work provides anyone with security and risk management responsibilities insight into these critical security

questions: How secure is my organization? How much security is enough? What are the most cost-effective security solutions? How secure is my organization? You can't manage what you can't measure This volume shows readers how to develop metrics that can be used across an organization to assure its information systems are functioning, secure, and supportive of the organization's business objectives. It provides a comprehensive overview of security metrics, discusses the current state of metrics in use today, and looks at promising new developments. Later chapters explore ways to develop effective strategic and management metrics for information security governance, risk management, program implementation and management, and incident management and response. The book ensures that every facet of security required by an organization is linked to business objectives, and provides metrics to measure it. Case studies effectively demonstrate specific ways that metrics can be implemented across an enterprise to maximize business benefit. With three decades of enterprise information security experience, author Krag Brotby presents a workable approach to developing and managing cost-effective enterprise information security.

There is extensive government research on cyber security science, technology, and applications. Much of this research will be transferred to the private

sector to aid in product development and the improvement of protective measures against cyber warfare attacks. This research is not widely publicized. There are initiatives to coordinate these research efforts but there has never been a published comprehensive analysis of the content and direction of the numerous research programs. This book provides private sector developers, investors, and security planners with insight into the direction of the U.S. Government research efforts on cybersecurity.

Organizations, worldwide, have adopted practical and applied approaches for mitigating risks and managing information security program. Considering complexities of a large-scale, distributed IT environments, security should be proactively planned for and prepared ahead, rather than as used as reactions to changes in the landscape. Strategic and Practical Approaches for Information Security Governance: Technologies and Applied Solutions presents high-quality research papers and practice articles on management and governance issues in the field of information security. The main focus of the book is to provide an organization with insights into practical and applied solutions, frameworks, technologies and practices on technological and organizational factors. The book aims to be a collection of knowledge for professionals, scholars, researchers and academicians working in this field

that is fast evolving and growing as an area of information assurance.

The Growing Imperative Need for Effective Information Security Governance With monotonous regularity, headlines announce ever more spectacular failures of information security and mounting losses. The succession of corporate debacles and dramatic control failures in recent years underscores the necessity for information security to be tightly integrated into the fabric of every organization. The protection of an organization's most valuable asset information can no longer be relegated to low-level technical personnel, but must be considered an essential element of corporate governance that is critical to organizational success and survival. Written by an industry expert, Information Security Governance is the first book-length treatment of this important topic, providing readers with a step-by-step approach to developing and managing an effective information security program. Beginning with a general overview of governance, the book covers: The business case for information security Defining roles and responsibilities Developing strategic metrics Determining information security outcomes Setting security governance objectives Establishing risk management objectives Developing a cost-effective security strategy A sample strategy development The steps for implementing an effective strategy

Developing meaningful security program development metrics Designing relevant information security management metrics Defining incident management and response metrics Complemented with action plans and sample policies that demonstrate to readers how to put these ideas into practice, Information Security Governance is indispensable reading for any professional who is involved in information security and assurance.

This book focuses on software architecture and the value of architecture in the development of long-lived, mission-critical, trustworthy software-systems. The author introduces and demonstrates the powerful strategy of “Managed Evolution,” along with the engineering best practice known as “Principle-based Architecting.” The book examines in detail architecture principles for e.g., Business Value, Changeability, Resilience, and Dependability. The author argues that the software development community has a strong responsibility to produce and operate useful, dependable, and trustworthy software. Software should at the same time provide business value and guarantee many quality-of-service properties, including security, safety, performance, and integrity. As Dr. Furrer states, “Producing dependable software is a balancing act between investing in the implementation of business functionality and investing in the quality-of-service properties of the software-systems.” The book presents extensive coverage of such concepts as: Principle-Based Architecting Managed Evolution Strategy The Future

Principles for Business Value Legacy Software Modernization/Migration Architecture Principles for Changeability Architecture Principles for Resilience Architecture Principles for Dependability The text is supplemented with numerous figures, tables, examples and illustrative quotations. Future-Proof Software-Systems provides a set of good engineering practices, devised for integration into most software development processes dedicated to the creation of software-systems that incorporate Managed Evolution.

Other books on information security metrics discuss number theory and statistics in academic terms. Light on mathematics and heavy on utility, PRAGMATIC Security Metrics: Applying Metametrics to Information Security breaks the mold. This is the ultimate how-to-do-it guide for security metrics. Packed with time-saving tips, the book offers easy-to-follow guidance for those struggling with security metrics. Step by step, it clearly explains how to specify, develop, use, and maintain an information security measurement system (a comprehensive suite of metrics) to help: Security professionals systematically improve information security, demonstrate the value they are adding, and gain management support for the things that need to be done Management address previously unsolvable problems rationally, making critical decisions such as resource allocation and prioritization of security relative to other business activities Stakeholders, both within and outside the organization, be assured that information security is being competently managed The PRAGMATIC approach lets you hone in on your problem

areas and identify the few metrics that will generate real business value. The book: Helps you figure out exactly what needs to be measured, how to measure it, and most importantly, why it needs to be measured Scores and ranks more than 150 candidate security metrics to demonstrate the value of the PRAGMATIC method Highlights security metrics that are widely used and recommended, yet turn out to be rather poor in practice Describes innovative and flexible measurement approaches such as capability maturity metrics with continuous scales Explains how to minimize both measurement and security risks using complementary metrics for greater assurance in critical areas such as governance and compliance In addition to its obvious utility in the information security realm, the PRAGMATIC approach, introduced for the first time in this book, has broader application across diverse fields of management including finance, human resources, engineering, and production—in fact any area that suffers a surplus of data but a deficit of useful information. Visit Security Metametrics. Security Metametrics supports the global community of professionals adopting the innovative techniques laid out in PRAGMATIC Security Metrics. If you, too, are struggling to make much sense of security metrics, or searching for better metrics to manage and improve information security, Security Metametrics is the place./font/td http://securitymetametrics.com/

The censorship and surveillance of individuals, societies, and countries have been a long-debated ethical and moral issue. In consequence, it is vital to explore this controversial topic from all angles. Censorship,

Surveillance, and Privacy: Concepts, Methodologies, Tools, and Applications is a vital reference source on the social, moral, religious, and political aspects of censorship and surveillance. It also explores the techniques of technologically supported censorship and surveillance. Highlighting a range of topics such as political censorship, propaganda, and information privacy, this multi-volume book is geared towards government officials, leaders, professionals, policymakers, media specialists, academicians, and researchers interested in the various facets of censorship and surveillance.

The Definitive Guide to Quantifying, Classifying, and Measuring Enterprise IT Security Operations Security Metrics is the first comprehensive best-practice guide to defining, creating, and utilizing security metrics in the enterprise. Using sample charts, graphics, case studies, and war stories, Yankee Group Security Expert Andrew Jaquith demonstrates exactly how to establish effective metrics based on your organization's unique requirements. You'll discover how to quantify hard-to-measure security activities, compile and analyze all relevant data, identify strengths and weaknesses, set cost-effective priorities for improvement, and craft compelling messages for senior management. Security Metrics successfully bridges management's quantitative viewpoint with the nuts-and-bolts approach typically taken by security professionals. It brings together expert solutions drawn from Jaquith's extensive consulting work in the software, aerospace, and financial services industries, including new metrics presented nowhere

else. You'll learn how to: • Replace nonstop crisis response with a systematic approach to security improvement • Understand the differences between "good" and "bad" metrics • Measure coverage and control, vulnerability management, password quality, patch latency, benchmark scoring, and business-adjusted risk • Quantify the effectiveness of security acquisition, implementation, and other program activities • Organize, aggregate, and analyze your data to bring out key insights • Use visualization to understand and communicate security issues more clearly • Capture valuable data from firewalls and antivirus logs, third-party auditor reports, and other resources • Implement balanced scorecards that present compact, holistic views of organizational security effectiveness

This book presents findings from the papers accepted at the Cyber Security Education Stream and Cyber Security Technology Stream of The National Cyber Summits Research Track, reporting on the latest advances on topics ranging from software security to cyber attack detection and modelling to the use of machine learning in cyber security to legislation and policy to surveying of small businesses to cyber competition, and so on. Understanding the latest capabilities in cyber security ensures that users and organizations are best prepared for potential negative events. This book is of interest to cyber security researchers, educators, and practitioners, as well as students seeking to learn about cyber security.

The Official (ISC)2® Guide to the CISSP®-ISSEP® CBK® provides an inclusive analysis of all of the topics covered on the newly created CISSP-ISSEP Common

Body of Knowledge. The first fully comprehensive guide to the CISSP-ISSEP CBK, this book promotes understanding of the four ISSEP domains: Information Systems Security Engineering (ISSE); Certification and Accreditation; Technical Management; and an Introduction to United States Government Information Assurance Regulations. This volume explains ISSE by comparing it to a traditional Systems Engineering model, enabling you to see the correlation of how security fits into the design and development process for information systems. It also details key points of more than 50 U.S. government policies and procedures that need to be understood in order to understand the CBK and protect U.S. government information. About the Author Susan Hansche, CISSP-ISSEP is the training director for information assurance at Nortel PEC Solutions in Fairfax, Virginia. She has more than 15 years of experience in the field and since 1998 has served as the contractor program manager of the information assurance training program for the U.S. Department of State.

According to the Brookings Institute, an organization's information and other intangible assets account for over 80 percent of its market value. As the primary sponsors and implementers of information security programs, it is essential for those in key leadership positions to possess a solid understanding of the constantly evolving fundamental conc

The adoption of Information and Communication Technologies (ICT) in healthcare is driven by the need to contain costs while maximizing quality and efficiency. However, ICT adoption for healthcare information

management has brought far-reaching effects and implications on the spirit of the Hippocratic Oath, patient privacy and confidentiality. A wave of security breaches have led to pressing calls for opt-in and opt-out provisions where patients are free to choose to or not have their healthcare information collected and recorded within healthcare information systems. Such provisions have negative impact on cost, efficiency and quality of patient care. Thus determined efforts to gain patient trust is increasingly under consideration for enforcement through legislation, standards, national policy frameworks and implementation systems geared towards closing gaps in ICT security frameworks. The ever-increasing healthcare expenditure and pressing demand for improved quality and efficiency in patient care services are driving innovation in healthcare information management. Key among the main innovations is the introduction of new healthcare practice concepts such as shared care, evidence-based medicine, clinical practice guidelines and protocols, the cradle-to-grave health record and clinical workflow or careflow. Central to these organizational re-engineering innovations is the widespread adoption of Information and Communication Technologies (ICT) at national and regional levels, which has ushered in computer-based healthcare information management that is centred on the electronic healthcare record (EHR).

This book constitutes the thoroughly refereed post-conference proceedings of the 8th International Symposium on Foundations and Practice of Security, FPS 2015, held in Clermont-Ferrand, France, in October 2015. The 12 revised

full papers presented together with 8 short papers and 2 keynote talks were carefully reviewed and selected from 58 submissions. The papers are organized in topical sections on RFID, sensors and secure computation; security policies and biometrics; evaluation of protocols and obfuscation security; spam emails, botnets and malware.

Implement an Effective Security Metrics Project or Program IT Security Metrics provides a comprehensive approach to measuring risks, threats, operational activities, and the effectiveness of data protection in your organization. The book explains how to choose and design effective measurement strategies and addresses the data requirements of those strategies. The Security Process Management Framework is introduced and analytical strategies for security metrics data are discussed. You'll learn how to take a security metrics program and adapt it to a variety of organizational contexts to achieve continuous security improvement over time. Real-world examples of security measurement projects are included in this definitive guide. Define security metrics as a manageable amount of usable data Design effective security metrics Understand quantitative and qualitative data, data sources, and collection and normalization methods Implement a programmable approach to security using the Security Process Management Framework Analyze security metrics data using quantitative and qualitative methods Design a security measurement project for operational analysis of security metrics Measure security operations, compliance, cost and value, and people, organizations, and culture Manage groups of security measurement projects using the Security Improvement Program Apply organizational learning methods to security metrics

This book presents a framework to model the main activities of information security management and governance. The

same model can be used for any security sub-domain such as cybersecurity, data protection, access rights management, business continuity, etc.

This book constitutes the proceedings of the 13th International Conference on Information Security and Practice and Experience, ISPEC 2017, held in Melbourne, Australia, in December 2017. The 34 full and 14 short papers presented together with 9 papers from the SocialSec Track in this volume were carefully reviewed and selected from 105 submissions. The papers cover topics such as blockchain, asymmetric encryption, symmetric encryption, lattice-based cryptography, searchable encryption, signature, authentication, cloud security, network security, cyber-physical security, social network and QR code security, software security and trusted computing, and SocialSec track.

An Executive Guide to Data Management

"Drawing upon a wealth of experience from academia, industry, and government service, this book details and dissects current organizational cybersecurity policy issues on a global scale. Using simple language, it includes a thorough description of each issue, lists pros and cons, documents policy alternatives for the sake of clarity with respect to policy alone, and dives into organizational implementation issues. It also equips the reader with descriptions of the impact of specific policy choices, both positive and negative. This book gives students, scholars, and technical decision-makers the necessary knowledge of cybersecurity policy in order to make more informed decisions"--Provided by publisher.

ISACA’s Certified Information Security Manager (CISM) certification indicates expertise in information security governance, program development and management, incident management and risk management. It is for those with technical expertise and experience in IS/IT security and control and wants to make the move from team player to

manager. CISM can add credibility and confidence to your interactions with internal and external stakeholders, peers and regulators. ISACA's CISM brings credibility to your team and ensures alignment between the organization's information security program and its broader goals and objectives. CISM can validate your team’s commitment to compliance, security and integrity and increase customer retention.

Moving Target Defense: Creating Asymmetric Uncertainty for Cyber Threats was developed by a group of leading researchers. It describes the fundamental challenges facing the research community and identifies new promising solution paths. Moving Target Defense which is motivated by the asymmetric costs borne by cyber defenders takes an advantage afforded to attackers and reverses it to advantage defenders. Moving Target Defense is enabled by technical trends in recent years, including virtualization and workload migration on commodity systems, widespread and redundant network connectivity, instruction set and address space layout randomization, just-in-time compilers, among other techniques. However, many challenging research problems remain to be solved, such as the security of virtualization infrastructures, secure and resilient techniques to move systems within a virtualized environment, automatic diversification techniques, automated ways to dynamically change and manage the configurations of systems and networks, quantification of security improvement, potential degradation and more. Moving Target Defense: Creating Asymmetric Uncertainty for Cyber Threats is designed for advanced -level students and researchers focused on computer science, and as a secondary text book or reference. Professionals working in this field will also find this book valuable.

This book provides profound insights into industrial control system resilience, exploring fundamental and advanced topics and including practical examples and scenarios to support the theoretical approaches. It examines issues related to the safe operation of control systems, risk analysis and assessment, use of attack graphs to evaluate the resiliency of control systems, preventive maintenance, and malware detection and analysis. The book also discusses sensor networks and Internet of Things devices. Moreover, it covers timely responses to malicious attacks and hazardous situations, helping readers select the best approaches to handle such unwanted situations. The book is essential reading for engineers, researchers, and specialists addressing security and safety issues related to the implementation of modern industrial control systems. It is also a valuable resource for students interested in this area.

The ability to organise and measure performance is a key part of the implementation of IT Service Management processes. This publication contains practical information on the provision of useful and meaningful metrics, as well as how best to use them within an organisation, including generic principles (such as SMART and KISS), specific examples and templates for the use of each metricAll metrics discussed are directly related to process objectives, in order to help create a service-focused management system. This publication complements the ITIL, CobiT and ISO20000 service management principles. “If you need to develop metrics for an IT environment, buy this book or hire a consultant who has read it” G. Kieliszek, Healthcare CIO

(Amazon) "This is more than a book, it's a practical, useable "A to Z" of IT Service Management Metrics! Peter Brooks (Author) has given us all a crystal clear view of a neglected, blurred piece of the IT Service Management puzzle. As a Principal ITSM Consultant working for Foster-Melliar in South Africa I am continuously disappointed by the many ITSM books produced that generally regurgitate what is already known by many in the industry. Metrics for IT Service Organisations provides a vast array of possible audiences something that many ITSM volumes do not, and this is a Practical, useable view of "How" to plan for, design, manage and improve the critical measures IT Service organisations require from both a strategic, tactical and operational perspective. I don't carry many books around with me, this one, I most certainly will!!" Ian Clark Principal ITSM Consultant Foster-Melliar "With all the focus on IT Governance and IT Business process management. It is easy to see why metric are becoming hugely important for the management of organisations. In reality however, getting the right set of metrics in place is by no means a simple exercise. Metrics for IT service organisations can be a great help. Using ITIL as the basis the book lists many useful examples of metrics. But what is more important, is that it gives us insight into to creation of "good" metrics and the dangers of "bad" metrics. " Emma Speakman IT BPM consultant SA/NL/UK "Looking for a comprehensive, in-depth exploration and explanation of what metrics to use in your ITSM journey? Then 'Metrics for IT Service Organizations' by Peter Brooks may be exactly what

you're looking for. This (new) book not only covers what metrics need to be seriously considered, but explains the 'why' and 'how' behind selecting and defining them, pointing out along the way many of the dangers and pitfalls of selecting the wrong ones; or too many. If you tend to agree that 'what gets measured gets done', then applying the ideas in Peter's book will assist you in getting the right things done." Ken Wendle (FISM) previous President of the itSMF USA, works as a Senior Solution Architect for Hewlett Packard's OpenView Software division Given that itSMF is the source, readers of this book will naturally expect a 'best practices' view on metrics, and a highly practical reference text. More particularly, though, the special merit of the text is its carefulness in stressing that metrics must be both useful and meaningful, and that the meaning comes from the business perspective on IT management processes - a perspective always represented by a stated business objective. By encouraging readers to seriously commit to defining clear business objectives, the text aims the reader at measurement that avoids excess or irrelevance. Malcolm Ryder (CA Architect)

CISSP Study Guide - fully updated for the 2021 CISSP Body of Knowledge (ISC)2 Certified Information Systems Security Professional (CISSP) Official Study Guide, 9th Edition has been completely updated based on the latest 2021 CISSP Exam Outline. This bestselling Sybex Study Guide covers 100% of the exam objectives. You'll prepare for the exam smarter and faster with Sybex thanks to expert content, knowledge from our real-world experience, advice on mastering this adaptive exam,

access to the Sybex online interactive learning environment, and much more. Reinforce what you've learned with key topic exam essentials and chapter review questions. The three co-authors of this book bring decades of experience as cybersecurity practitioners and educators, integrating real-world expertise with the practical knowledge you'll need to successfully pass the CISSP exam. Combined, they've taught cybersecurity concepts to millions of students through their books, video courses, and live training programs. Along with the book, you also get access to Sybex's superior online interactive learning environment that includes: Over 900 new and improved practice test questions with complete answer explanations. This includes all of the questions from the book plus four additional online-only practice exams, each with 125 unique questions. You can use the online-only practice exams as full exam simulations. Our questions will help you identify where you need to study more. Get more than 90 percent of the answers correct, and you're ready to take the certification exam. More than 700 Electronic Flashcards to reinforce your learning and give you last-minute test prep before the exam A searchable glossary in PDF to give you instant access to the key terms you need to know for the exam New for the 9th edition: Audio Review. Author Mike Chapple reads the Exam Essentials for each chapter providing you with 2 hours and 50 minutes of new audio review for yet another way to reinforce your knowledge as you prepare. Coverage of all of the exam topics in the book means you'll be ready for: Security and Risk Management Asset Security Security Architecture and

Engineering Communication and Network Security Identity and Access Management (IAM) Security Assessment and Testing Security Operations Software Development Security

This book constitutes the refereed proceedings of the 6th International Conference on Security Standardisation Research, SSR 2020, held in London, UK, in November 2020.* The papers cover a range of topics in the field of security standardisation research, including cryptographic evaluation, standards development, analysis with formal methods, potential future areas of standardisation, and improving existing standards. * The conference was held virtually due to the COVID-19 pandemic.

Other books on information security metrics discuss number theory and statistics in academic terms. Light on mathematics and heavy on utility, PRAGMATIC Security Metrics: Applying Metametrics to Information Security breaks the mold. This is the ultimate how-to-do-it guide for security metrics. Packed with time-saving tips, the book offers easy-to-follow guidance for those struggling with security metrics. Step by step, it clearly explains how to specify, develop, use, and maintain an information security measurement system (a comprehensive suite of metrics) to help: Security professionals systematically improve information security, demonstrate the value they are adding, and gain management support for the things that need to be done Management address previously unsolvable problems rationally, making critical decisions such as resource allocation and prioritization of security relative

to other business activities Stakeholders, both within and outside the organization, be assured that information security is being competently managed The PRAGMATIC approach lets you hone in on your problem areas and identify the few metrics that will generate real business value. The book: Helps you figure out exactly what needs to be measured, how to measure it, and most importantly, why it needs to be measured Scores and ranks more than 150 candidate security metrics to demonstrate the value of the PRAGMATIC method Highlights security metrics that are widely used and recommended, yet turn out to be rather poor in practice Describes innovative and flexible measurement approaches such as capability maturity metrics with continuous scales Explains how to minimize both measurement and security risks using complementary metrics for greater assurance in critical areas such as governance and compliance In addition to its obvious utility in the information security realm, the PRAGMATIC approach, introduced for the first time in this book, has broader application across diverse fields of management including finance, human resources, engineering, and production—in fact any area that suffers a surplus of data but a deficit of useful information. Visit Security Metametrics. Security Metametrics supports the global community of professionals adopting the innovative techniques laid out in PRAGMATIC Security Metrics. If you, too, are struggling to make much sense of security metrics, or searching for better metrics to manage and improve information security, Security Metametrics is the place. http://securitymetametrics.com/

This book examines different aspects of network security metrics and their application to enterprise networks. One of the most pertinent issues in securing mission-critical computing networks is the lack of effective security metrics which this book discusses in detail. Since “you cannot improve what you cannot measure”, a network security metric is essential to evaluating the relative effectiveness of potential network security solutions. The authors start by examining the limitations of existing solutions and standards on security metrics, such as CVSS and attack surface, which typically focus on known vulnerabilities in individual software products or systems. The first few chapters of this book describe different approaches to fusing individual metric values obtained from CVSS scores into an overall measure of network security using attack graphs. Since CVSS scores are only available for previously known vulnerabilities, such approaches do not consider the threat of unknown attacks exploiting the so-called zero day vulnerabilities. Therefore, several chapters of this book are dedicated to develop network security metrics especially designed for dealing with zero day attacks where the challenge is that little or no prior knowledge is available about the exploited vulnerabilities, and thus most existing methodologies for designing security metrics are no longer effective. Finally, the authors examine several issues on the application of network security metrics at the enterprise level. Specifically, a chapter presents a suite of security metrics organized along several dimensions for measuring and visualizing different aspects of the enterprise cyber security risk,

and the last chapter presents a novel metric for measuring the operational effectiveness of the cyber security operations center (CSOC). Security researchers who work on network security or security analytics related areas seeking new research topics, as well as security practitioners including network administrators and security architects who are looking for state of the art approaches to hardening their networks, will find this book helpful as a reference. Advanced-level students studying computer science and engineering will find this book useful as a secondary text.

Today's advancements in technology have brought about a new era of speed and simplicity for consumers and businesses. Due to these new benefits, the possibilities of universal connectivity, storage and computation are made tangible, thus leading the way to new Internet-of Things solutions. Resource Management and Efficiency in Cloud Computing Environments is an authoritative reference source for the latest scholarly research on the emerging trends of cloud computing and reveals the benefits cloud paths provide to consumers. Featuring coverage across a range of relevant perspectives and topics, such as big data, cloud security, and utility computing, this publication is an essential source for researchers, students and professionals seeking current research on the organization and productivity of cloud computing environments.