Security Information Event Monitoring

Information Security Analytics gives you insights into the practice of analytics and, more importantly, how you can utilize analytic techniques to identify trends and outliers that may not be possible to identify using traditional security analysis techniques. Information Security Analytics dispels the myth that analytics within the information security domain is limited to just security incident and event management systems and basic network analysis. Analytic techniques can help you mine data and identify patterns and relationships in any form of security data. Using the techniques covered in this book, you will be able to gain security insights into unstructured big data of any type. The authors of Information Security Analytics bring a wealth of analytics experience to demonstrate practical, hands-on techniques through case studies and using freely-available tools that will allow you to find anomalies and outliers by combining disparate data sets. They also teach you everything you need to know about threat simulation techniques and how to use analytics as a powerful decision-making tool to assess security control and process requirements within your organization. Ultimately, you will learn how to use these simulation techniques to help predict and profile potential risks to your organization. Written by security practitioners,

for security practitioners Real-world case studies and scenarios are provided for each analytics technique Learn about open-source analytics and statistical packages, tools, and applications Step-by-step guidance on how to use analytics tools and how they map to the techniques and scenarios provided Learn how to design and utilize simulations for "what-if" scenarios to simulate security events and processes Learn how to utilize big data techniques to assist in incident response and intrusion analysis

Any good attacker will tell you that expensive security monitoring and prevention tools aren't enough to keep you secure. This practical book demonstrates a data-centric approach to distilling complex security monitoring, incident response, and threat analysis ideas into their most basic elements. You'll learn how to develop your own threat intelligence and incident detection strategy, rather than depend on security tools alone. Written by members of Cisco's Computer Security Incident Response Team, this book shows IT and information security professionals how to create an InfoSec playbook by developing strategy, technique, and architecture. Learn incident response fundamentals—and the importance of getting back to basics Understand threats you face and what you should be protecting Collect, mine, organize, and analyze as many relevant data sources as possible Build your own playbook of repeatable methods for security

monitoring and response Learn how to put your plan into action and keep it running smoothly Select the right monitoring and detection tools for your environment Develop queries to help you sort through data and create valuable reports Know what actions to take during the incident response phase
Security Controls Evaluation, Testing, and Assessment Handbook, Second Edition, provides a current and well-developed approach to evaluate and test IT security controls to prove they are functioning correctly. This handbook discusses the world of threats and potential breach actions surrounding all industries and systems. Sections cover how to take FISMA, NIST Guidance, and DOD actions, while also providing a detailed, hands-on guide to performing assessment events for information security professionals in US federal agencies. This handbook uses the DOD Knowledge Service and the NIST Families assessment guides as the basis for needs assessment, requirements and evaluation efforts. Provides direction on how to use SP800-53A, SP800-115, DOD Knowledge Service, and the NIST Families assessment guides to implement thorough evaluation efforts Shows readers how to implement proper evaluation, testing, assessment procedures and methodologies, with step-by-step walkthroughs of all key concepts Presents assessment techniques for each type of control, provides evidence of assessment, and includes proper reporting techniques

Provides information on how to prevent, detect, and mitigate a security attack that comes from within a company.

As the sophistication of cyber-attacks increases, understanding how to defend critical infrastructure systems—energy production, water, gas, and other vital systems—becomes more important, and heavily mandated. Industrial Network Security, Second Edition arms you with the knowledge you need to understand the vulnerabilities of these distributed supervisory and control systems. The book examines the unique protocols and applications that are the foundation of industrial control systems, and provides clear guidelines for their protection. This how-to guide gives you thorough understanding of the unique challenges facing critical infrastructures, new guidelines and security measures for critical infrastructure protection, knowledge of new and evolving security tools, and pointers on SCADA protocols and security implementation. All-new real-world examples of attacks against control systems, and more diagrams of systems Expanded coverage of protocols such as 61850, Ethernet/IP, CIP, ISA-99, and the evolution to IEC62443 Expanded coverage of Smart Grid security New coverage of signature-based detection, exploit-based vs. vulnerability-based detection, and signature reverse engineering

Create appropriate, security-focused business propositions that consider the

balance between cost, risk, and usability, while starting your journey to become an information security manager. Covering a wealth of information that explains exactly how the industry works today, this book focuses on how you can set up an effective information security practice, hire the right people, and strike the best balance between security controls, costs, and risks. Practical Information Security Management provides a wealth of practical advice for anyone responsible for information security management in the workplace, focusing on the 'how' rather than the 'what'. Together we'll cut through the policies, regulations, and standards to expose the real inner workings of what makes a security management program effective, covering the full gamut of subject matter pertaining to security management: organizational structures, security architectures, technical controls, governance frameworks, and operational security. This book was not written to help you pass your CISSP, CISM, or CISMP or become a PCI-DSS auditor. It won't help you build an ISO 27001 or COBIT-compliant security management system, and it won't help you become an ethical hacker or digital forensics investigator – there are many excellent books on the market that cover these subjects in detail. Instead, this is a practical book that offers years of real-world experience in helping you focus on the getting the job done. What You Will Learn Learn the practical aspects of being an

effective information security manager Strike the right balance between cost and risk Take security policies and standards and make them work in reality Leverage complex security functions, such as Digital Forensics, Incident Response and Security Architecture Who This Book Is For“/div>divAnyone who wants to make a difference in offering effective security management for their business. You might already be a security manager seeking insight into areas of the job that you’ve not looked at before, or you might be a techie or risk guy wanting to switch into this challenging new career. Whatever your career goals are, Practical Security Management has something to offer you.

Logging and Log Management: The Authoritative Guide to Understanding the Concepts Surrounding Logging and Log Management introduces information technology professionals to the basic concepts of logging and log management. It provides tools and techniques to analyze log data and detect malicious activity. The book consists of 22 chapters that cover the basics of log data; log data sources; log storage technologies; a case study on how syslog-ng is deployed in a real environment for log collection; covert logging; planning and preparing for the analysis log data; simple analysis techniques; and tools and techniques for reviewing logs for potential problems. The book also discusses statistical analysis; log data mining; visualizing log data; logging laws and logging mistakes;

open source and commercial toolsets for log data collection and analysis; log management procedures; and attacks against logging systems. In addition, the book addresses logging for programmers; logging and compliance with regulations and policies; planning for log analysis system deployment; cloud logging; and the future of log standards, logging, and log analysis. This book was written for anyone interested in learning more about logging and log management. These include systems administrators, junior security engineers, application developers, and managers. Comprehensive coverage of log management including analysis, visualization, reporting and more Includes information on different uses for logs -- from system operations to regulatory compliance Features case Studies on syslog-ng and actual real-world situations where logs came in handy in incident response Provides practical guidance in the areas of report, log analysis system selection, planning a log analysis system and log data normalization and correlation

The first comprehensive guide to the design and implementation of security in 5G wireless networks and devices Security models for 3G and 4G networks based on Universal SIM cards worked very well. But they are not fully applicable to the unique security requirements of 5G networks. 5G will face additional challenges due to increased user privacy concerns, new trust and service models and

requirements to support IoT and mission-critical applications. While multiple books already exist on 5G, this is the first to focus exclusively on security for the emerging 5G ecosystem. 5G networks are not only expected to be faster, but provide a backbone for many new services, such as IoT and the Industrial Internet. Those services will provide connectivity for everything from autonomous cars and UAVs to remote health monitoring through body-attached sensors, smart logistics through item tracking to remote diagnostics and preventive maintenance of equipment. Most services will be integrated with Cloud computing and novel concepts, such as mobile edge computing, which will require smooth and transparent communications between user devices, data centers and operator networks. Featuring contributions from an international team of experts at the forefront of 5G system design and security, this book: Provides priceless insights into the current and future threats to mobile networks and mechanisms to protect it Covers critical lifecycle functions and stages of 5G security and how to build an effective security architecture for 5G based mobile networks Addresses mobile network security based on network-centricity, device-centricity, information-centricity and people-centricity views Explores security considerations for all relative stakeholders of mobile networks, including mobile network operators, mobile network virtual operators, mobile users, wireless

users, Internet-of things, and cybersecurity experts Providing a comprehensive guide to state-of-the-art in 5G security theory and practice, A Comprehensive Guide to 5G Security is an important working resource for researchers, engineers and business professionals working on 5G development and deployment.

Dig deep into the Windows auditing subsystem to monitor for malicious activities and enhance Windows system security Written by a former Microsoft security program manager, DEFCON "Forensics CTF" village author and organizer, and CISSP, this book digs deep into the Windows security auditing subsystem to help you understand the operating system?s event logging patterns for operations and changes performed within the system. Expert guidance brings you up to speed on Windows auditing, logging, and event systems to help you exploit the full capabilities of these powerful components. Scenario–based instruction provides clear illustration of how these events unfold in the real world. From security monitoring and event patterns to deep technical details about the Windows auditing subsystem and components, this book provides detailed information on security events generated by the operating system for many common operations such as user account authentication, Active Directory object modifications, local security policy changes, and other activities. This book is based on the author?s experience and the results of his research into Microsoft Windows security

monitoring and anomaly detection. It presents the most common scenarios people should be aware of to check for any potentially suspicious activity. Learn to: Implement the Security Logging and Monitoring policy Dig into the Windows security auditing subsystem Understand the most common monitoring event patterns related to operations and changes in the Microsoft Windows operating system About the Author Andrei Miroshnikov is a former security program manager with Microsoft. He is an organizer and author for the DEFCON security conference "Forensics CTF" village and has been a speaker at Microsoft?s Bluehat security conference. In addition, Andrei is an author of the "Windows 10 and Windows Server 2016 Security Auditing and Monitoring Reference" and multiple internal Microsoft security training documents. Among his many professional qualifications, he has earned the (ISC)2 CISSP and Microsoft MCSE: Security certifications.

The only SSCP study guide officially approved by (ISC)2 The (ISC)2 Systems Security Certified Practitioner (SSCP) certification is a well-known vendor-neutral global IT security certification. The SSCP is designed to show that holders have the technical skills to implement, monitor, and administer IT infrastructure using information security policies and procedures. This comprehensive Official Study Guide—the only study guide officially approved by (ISC)2—covers all objectives of

the seven SSCP domains. Access Controls Security Operations and Administration Risk Identification, Monitoring, and Analysis Incident Response and Recovery Cryptography Network and Communications Security Systems and Application Security If you're an information security professional or student of cybersecurity looking to tackle one or more of the seven domains of the SSCP, this guide gets you prepared to pass the exam and enter the information security workforce with confidence.

Foundations of Information Security provides readers with fundamental knowledge of information security in both theoretical and practical aspects. Each chapter explores one main security concept, lists scenarios in which the concept is applicable, and discusses the implementation of that concept in detail, often by going over rival models or strategies. Readers will come away with a sense of what types of assets need protecting, what kinds of risks exist, and what kinds of defensive measures can be taken.

Cisco® Security Monitoring, Analysis, and Response System (MARS) is a next-generation Security Threat Mitigation system (STM). Cisco Security MARS receives raw network and security data and performs correlation and investigation of host and network information to provide you with actionable intelligence. This easy-to-use family of threat mitigation appliances enables you

to centralize, detect, mitigate, and report on priority threats by leveraging the network and security devices already deployed in a network, even if the devices are from multiple vendors. Security Monitoring with Cisco Security MARS helps you plan a MARS deployment and learn the installation and administration tasks you can expect to face. Additionally, this book teaches you how to use the advanced features of the product, such as the custom parser, Network Admission Control (NAC), and global controller operations. Through the use of real-world deployment examples, this book leads you through all the steps necessary for proper design and sizing, installation and troubleshooting, forensic analysis of security events, report creation and archiving, and integration of the appliance with Cisco and third-party vulnerability assessment tools. Learn the differences between various log aggregation and correlation systems Examine regulatory and industry requirements Evaluate various deployment scenarios Properly size your deployment Protect the Cisco Security MARS appliance from attack Generate reports, archive data, and implement disaster recovery plans Investigate incidents when Cisco Security MARS detects an attack Troubleshoot Cisco Security MARS operation Integrate Cisco Security MARS with Cisco Security Manager, NAC, and third-party devices Manage groups of MARS controllers with global controller operations This security book is part of the Cisco

Press® Networking Technology Series. Security titles from Cisco Press help networking professionals secure critical data and resources, prevent and mitigate network attacks, and build end-to-end self-defending networks.

The internet has greatly enhanced access to, dissemination, and sale of child pornography, which is a profitable industry estimated to generate billions of dollars worldwide. While efforts to address the issue of sexual exploitation of children may be slow, the capabilities of offenders to organize, communicate over the internet, and harness technology are unequivocally fast. Protection of children against cyber exploitation has become imperative, and measures should be taken that are specific and targeted to provide specialized victim identification capabilities; adequate protection for children using the internet; genuine participation of children; a full and responsible private sector; and finally, coordinated, effective, and structured international cooperation to protect all children. Combating the Exploitation of Children in Cyberspace: Emerging Research and Opportunities provides innovative research for understanding all elements of combating cyber exploitation of children including the roles of law enforcement, international organizations, and the judicial system and educating children and their families to the dangers of the independent internet usage through cyberspace awareness programs. The content within this publication

examines child grooming, cyberbullying, and cybercrime. It is designed for law enforcement, lawmakers, teachers, government officials, policymakers, IT specialists, cybercriminal researchers, psychologists, victim advocates, professionals, academicians, researchers, and students.

Simple Network Management Protocol (SNMP) provides a "simple" set of operations that allows you to more easily monitor and manage network devices like routers, switches, servers, printers, and more. The information you can monitor with SNMP is wide-ranging--from standard items, like the amount of traffic flowing into an interface, to far more esoteric items, like the air temperature inside a router. In spite of its name, though, SNMP is not especially simple to learn. O'Reilly has answered the call for help with a practical introduction that shows how to install, configure, and manage SNMP. Written for network and system administrators, the book introduces the basics of SNMP and then offers a technical background on how to use it effectively. Essential SNMP explores both commercial and open source packages, and elements like OIDs, MIBs, community strings, and traps are covered in depth. The book contains five new chapters and various updates throughout. Other new topics include: Expanded coverage of SNMPv1, SNMPv2, and SNMPv3 Expanded coverage of SNMPc The concepts behind network management and change management RRDTool

and Cricket The use of scripts for a variety of tasks How Java can be used to create SNMP applications Net-SNMP's Perl module The bulk of the book is devoted to discussing, with real examples, how to use SNMP for system and network administration tasks. Administrators will come away with ideas for writing scripts to help them manage their networks, create managed objects, and extend the operation of SNMP agents. Once demystified, SNMP is much more accessible. If you're looking for a way to more easily manage your network, look no further than Essential SNMP, 2nd Edition.

Every organization has a core set of mission-critical data that must be protected. Security lapses and failures are not simply disruptions—they can be catastrophic events, and the consequences can be felt across the entire organization. As a result, security administrators face serious challenges in protecting the company's sensitive data. IT staff are challenged to provide detailed audit and controls documentation at a time when they are already facing increasing demands on their time, due to events such as mergers, reorganizations, and other changes. Many organizations do not have enough experienced mainframe security administrators to meet these objectives, and expanding employee skillsets with low-level mainframe security technologies can be time-consuming. The IBM® Security zSecure suite consists of multiple components designed to

help you administer your mainframe security server, monitor for threats, audit usage and configurations, and enforce policy compliance. Administration, provisioning, and management components can significantly reduce administration, contributing to improved productivity, faster response time, and reduced training time needed for new administrators. This IBM Redbooks® publication is a valuable resource for security officers, administrators, and architects who wish to better understand their mainframe security solutions. Network security is not simply about building impenetrable walls—determined attackers will eventually overcome traditional defenses. The most effective computer security strategies integrate network security monitoring (NSM): the collection and analysis of data to help you detect and respond to intrusions. In The Practice of Network Security Monitoring, Mandiant CSO Richard Bejtlich shows you how to use NSM to add a robust layer of protection around your networks—no prior experience required. To help you avoid costly and inflexible solutions, he teaches you how to deploy, build, and run an NSM operation using open source software and vendor-neutral tools. You'll learn how to: –Determine where to deploy NSM platforms, and size them for the monitored networks –Deploy stand-alone or distributed NSM installations –Use command line and graphical packet analysis tools, and NSM consoles –Interpret network evidence

from server-side and client-side intrusions –Integrate threat intelligence into NSM software to identify sophisticated adversaries There's no foolproof way to keep attackers out of your network. But when they get in, you'll be prepared. The Practice of Network Security Monitoring will show you how to build a security net to detect, contain, and control them. Attacks are inevitable, but losing sensitive data shouldn't be.

Security Information and Event Management (SIEM) ImplementationMcGraw Hill Professional

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 constitutes the thoroughly refereed post-conference proceedings of the 15th Nordic Conference in Secure IT Systems, NordSec 2010, held at Aalto University in Espoo, Finland in October 2010. The 13 full papers and 3 short papers presented were carefully reviewed and selected from 37 submissions. The volume also contains 1 full-paper length invited talk and 3 revised selected papers initially presented at the OWASP AppSec Research 2010 conference. The contributions cover the following topics: network security; monitoring and reputation; privacy; policy enforcement; cryptography and protocols.

Uncertainty and risk, meet planning and action. Reinforce your organization’s security posture using the expert information contained in this tactical guide. The Computer Incident Response Planning Handbook: Executable Plans for Protecting Information at Risk shows you how to build and manage successful response plans for the cyber incidents that have become inevitable for organizations of any size. Find out why these plans work. Learn the step-by-step process for developing and managing plans built to address the wide range of issues organizations face in times of crisis. Contains the essentials for developing both data breach and malware outbreak response plans—and best practices for maintaining those plans Features ready-to-implement CIRPs—derived from living incident response plans that have survived the rigors of repeated execution and numerous audits Clearly explains how to minimize the risk of

post-event litigation, brand impact, fines and penalties—and how to protect shareholder value Supports corporate compliance with industry standards and requirements, including PCI, HIPAA, SOX, and CA SB-24

Today's networks are required to support an increasing array of real-time communication methods. Video chat and live resources put demands on networks that were previously unimagined. Written to be accessible to all, Fundamentals of Communications and Networking, Third Edition helps readers better understand today's networks and the way they support the evolving requirements of different types of organizations. While displaying technical depth, this new edition presents an evolutionary perspective of data networking from the early years to the local area networking boom, to advanced IP data networks that support multimedia and real-time applications. The Third Edition is loaded with real-world examples, network designs, and network scenarios that provide the reader with a wealth of data networking information and practical implementation tips. Key Features of the third Edition: - Introduces network basics by describing how networks work - Discusses how networks support the increasing demands of advanced communications - Illustrates how to map the right technology to an organization's needs and business goals - Outlines how businesses use networks to solve business problems, both technically and operationally.

This book introduces the Process for Attack Simulation &Threat Analysis (PASTA) threat modeling methodology. It provides anintroduction to various types of application threat modeling andintroduces a risk-centric methodology aimed at applying securitycountermeasures that are commensurate to the possible impact thatcould be sustained from defined threat models, vulnerabilities,weaknesses, and attack patterns. This book

describes how to apply application threat modeling asan advanced preventive form of security. The authors discuss themethodologies, tools, and case studies of successful applicationthreat modeling techniques. Chapter 1 provides an overview ofthreat modeling, while Chapter 2 describes the objectives andbenefits of threat modeling. Chapter 3 focuses on existing threatmodeling approaches, and Chapter 4 discusses integrating threatmodeling within the different types of Software DevelopmentLifecycles (SDLCs). Threat modeling and risk management is thefocus of Chapter 5. Chapter 6 and Chapter 7 examine Processfor Attack Simulation and Threat Analysis (PASTA). Finally, Chapter8 shows how to use the PASTA risk-centric threat modeling processto analyze the risks of specific threat agents targeting webapplications. This chapter focuses specifically on the webapplication assets that include customer's confidential dataand business critical functionality that the web applicationprovides. • Provides a detailed walkthrough of the PASTAmethodology alongside software development activities,normally conducted via a standard SDLC process • Offers precise steps to take when combating threats tobusinesses • Examines real-life data breach incidents and lessons forrisk management Risk Centric Threat Modeling: Process for Attack Simulationand Threat Analysis is a resource for software developers,architects, technical risk managers, and seasoned securityprofessionals.

An Ultimate Guide to Building a Successful Career in Information Security KEY FEATURES •Understand the basics and essence of Information Security. •Understand why Information Security is important. •Get tips on how to make a career in Information Security. •Explore various domains within Information Security. •Understand different ways to find a job in this field. DESCRIPTION The book starts by introducing the fundamentals of Information Security.

You will deep dive into the concepts and domains within Information Security and will explore the different roles in Cybersecurity industry. The book includes a roadmap for a technical and non-technical student who want to make a career in Information Security. You will also understand the requirement, skill and competency required for each role. The book will help you sharpen your soft skills required in the Information Security domain. The book will help you with ways and means to apply for jobs and will share tips and tricks to crack the interview. This is a practical guide will help you build a successful career in Information Security. WHAT YOU WILL LEARN •Understand how to build and expand your brand in this field. •Explore several domains in Information Security. •Review the list of top Information Security certifications. •Understand different job roles in Information Security. •Get tips and tricks that will help you ace your job interview. WHO THIS BOOK IS FOR The book is for anyone who wants to make a career in Information Security. Students, aspirants and freshers can benefit a lot from this book. TABLE OF CONTENTS 1. Introduction to Information Security 2. Domains in Information Security 3. Information Security for non-technical professionals 4. Information Security for technical professionals 5. Skills required for a cybersecurity professional 6. How to find a job 7. Personal Branding

The essential guide to effective IG strategy and practice Information Governance is a highly practical and deeply informative handbook for the implementation of effective Information Governance (IG) procedures and strategies. A critical facet of any mid- to large-sized company, this “super-discipline” has expanded to cover the management and output of information across the entire organization; from email, social media, and cloud computing to electronic records and documents, the IG umbrella now covers nearly every aspect of your

business. As more and more everyday business is conducted electronically, the need for robust internal management and compliance grows accordingly. This book offers big-picture guidance on effective IG, with particular emphasis on document and records management best practices. Step-by-step strategy development guidance is backed by expert insight and crucial advice from a leading authority in the field. This new second edition has been updated to align with the latest practices and regulations, providing an up-to-date understanding of critical IG concepts and practices. Explore the many controls and strategies under the IG umbrella Understand why a dedicated IG function is needed in today's organizations Adopt accepted best practices that manage risk in the use of electronic documents and data Learn how IG and IT technologies are used to control, monitor, and enforce information access and security policy IG strategy must cover legal demands and external regulatory requirements as well as internal governance objectives; integrating such a broad spectrum of demands into workable policy requires a deep understanding of key concepts and technologies, as well as a clear familiarity with the most current iterations of various requirements. Information Governance distills the best of IG into a primer for effective action.

- This is the latest practice test to pass the CISM Isaca Certified Information Security Manager Exam. - It contains 1519 Questions and Answers. - All the questions are 100% valid and stable. - You can reply on this practice test to pass the exam with a good mark and in the first attempt.

The only official CCSP practice test product endorsed by (ISC)² With over 1,000 practice questions, this book gives you the opportunity to test your level of

understanding and gauge your readiness for the Certified Cloud Security Professional (CCSP) exam long before the big day. These questions cover 100% of the CCSP exam domains, and include answers with full explanations to help you understand the reasoning and approach for each. Logical organization by domain allows you to practice only the areas you need to bring you up to par, without wasting precious time on topics you've already mastered. As the only official practice test product for the CCSP exam endorsed by (ISC)², this essential resource is your best bet for gaining a thorough understanding of the topic. It also illustrates the relative importance of each domain, helping you plan your remaining study time so you can go into the exam fully confident in your knowledge. When you're ready, two practice exams allow you to simulate the exam day experience and apply your own test-taking strategies with domains given in proportion to the real thing. The online learning environment and practice exams are the perfect way to prepare, and make your progress easy to track.
To comply with government and industry regulations, such as Sarbanes-Oxley, Gramm Leach Bliley (GLBA), and COBIT (which can be considered a best-practices framework), organizations must constantly detect, validate, and report unauthorized changes and out-of-compliance actions within the Information Technology (IT) infrastructure. Using the IBM® Tivoli Security Information and

Event Manager solution organizations can improve the security of their information systems by capturing comprehensive log data, correlating this data through sophisticated log interpretation and normalization, and communicating results through a dashboard and full set of audit and compliance reporting. In this IBM Redbooks® publication, we discuss the business context of security audit and compliance software for organizations and describe the logical and physical components of IBM Tivoli Security Information and Event Manager. We also present a typical deployment within a business scenario. This book is a valuable resource for security officers, administrators, and architects who want to understand and implement a centralized security audit and compliance solution. Applied Network Security Monitoring is the essential guide to becoming an NSM analyst from the ground up. This book takes a fundamental approach to NSM, complete with dozens of real-world examples that teach you the key concepts of NSM. Network security monitoring is based on the principle that prevention eventually fails. In the current threat landscape, no matter how much you try, motivated attackers will eventually find their way into your network. At that point, it is your ability to detect and respond to that intrusion that can be the difference between a small incident and a major disaster. The book follows the three stages of the NSM cycle: collection, detection, and analysis. As you progress through

each section, you will have access to insights from seasoned NSM professionals while being introduced to relevant, practical scenarios complete with sample data. If you've never performed NSM analysis, Applied Network Security Monitoring will give you an adequate grasp on the core concepts needed to become an effective analyst. If you are already a practicing analyst, this book will allow you to grow your analytic technique to make you more effective at your job. Discusses the proper methods for data collection, and teaches you how to become a skilled NSM analyst Provides thorough hands-on coverage of Snort, Suricata, Bro-IDS, SiLK, and Argus Loaded with practical examples containing real PCAP files you can replay, and uses Security Onion for all its lab examples Companion website includes up-to-date blogs from the authors about the latest developments in NSM

Technology provides numerous opportunities for positive developments in modern society; however, these venues inevitably increase vulnerability to threats in online environments. Addressing issues of security in the cyber realm is increasingly relevant and critical to society. Threat Mitigation and Detection of Cyber Warfare and Terrorism Activities is a comprehensive reference source for the latest scholarly perspectives on countermeasures and related methods to enhance security and protection against criminal activities online. Highlighting a

range of topics relevant to secure computing, such as parameter tampering, surveillance and control, and digital protests, this book is ideally designed for academics, researchers, graduate students, professionals, and practitioners actively involved in the expanding field of cyber security.

See how privileges, insecure passwords, administrative rights, and remote access can be combined as an attack vector to breach any organization. Cyber attacks continue to increase in volume and sophistication. It is not a matter of if, but when, your organization will be breached. Threat actors target the path of least resistance: users and their privileges. In decades past, an entire enterprise might be sufficiently managed through just a handful of credentials. Today's environmental complexity has seen an explosion of privileged credentials for many different account types such as domain and local administrators, operating systems (Windows, Unix, Linux, macOS, etc.), directory services, databases, applications, cloud instances, networking hardware, Internet of Things (IoT), social media, and so many more. When unmanaged, these privileged credentials pose a significant threat from external hackers and insider threats. We are experiencing an expanding universe of privileged accounts almost everywhere. There is no one solution or strategy to provide the protection you need against all vectors and stages of an attack. And while some new and innovative products

will help protect against or detect against a privilege attack, they are not guaranteed to stop 100% of malicious activity. The volume and frequency of privilege-based attacks continues to increase and test the limits of existing security controls and solution implementations. Privileged Attack Vectors details the risks associated with poor privilege management, the techniques that threat actors leverage, and the defensive measures that organizations should adopt to protect against an incident, protect against lateral movement, and improve the ability to detect malicious activity due to the inappropriate usage of privileged credentials. This revised and expanded second edition covers new attack vectors, has updated definitions for privileged access management (PAM), new strategies for defense, tested empirical steps for a successful implementation, and includes new disciplines for least privilege endpoint management and privileged remote access. What You Will Learn Know how identities, accounts, credentials, passwords, and exploits can be leveraged to escalate privileges during an attack Implement defensive and monitoring strategies to mitigate privilege threats and risk Understand a 10-step universal privilege management implementation plan to guide you through a successful privilege access management journey Develop a comprehensive model for documenting risk, compliance, and reporting based on privilege session activity Who This Book Is

For Security management professionals, new security professionals, and auditors looking to understand and solve privilege access management problems
As part of the Syngress Basics series, The Basics of Information Security provides you with fundamental knowledge of information security in both theoretical and practical aspects. Author Jason Andress gives you the basic knowledge needed to understand the key concepts of confidentiality, integrity, and availability, and then dives into practical applications of these ideas in the areas of operational, physical, network, application, and operating system security. The Basics of Information Security gives you clear-non-technical explanations of how infosec works and how to apply these principles whether you're in the IT field or want to understand how it affects your career and business. The new Second Edition has been updated for the latest trends and threats, including new material on many infosec subjects. Learn about information security without wading through a huge textbook Covers both theoretical and practical aspects of information security Provides a broad view of the information security field in a concise manner All-new Second Edition updated for the latest information security trends and threats, including material on incident response, social engineering, security awareness, risk management, and legal/regulatory issues

The information infrastructure--comprising computers, embedded devices, networks and software systems--is vital to operations in every sector. Global business and industry, governments, and society itself, cannot function effectively if major components of the critical information infrastructure are degraded, disabled or destroyed. This book contains a selection of 27 edited papers from the First Annual IFIP WG 11.10 International Conference on Critical Infrastructure Protection.

Implement a robust SIEM system Effectively manage the security information and events produced by your network with help from this authoritative guide. Written by IT security experts, Security Information and Event Management (SIEM) Implementation shows you how to deploy SIEM technologies to monitor, identify, document, and respond to security threats and reduce false-positive alerts. The book explains how to implement SIEM products from different vendors, and discusses the strengths, weaknesses, and advanced tuning of these systems. You'll also learn how to use SIEM capabilities for business intelligence. Real-world case studies are included in this comprehensive resource. Assess your organization's business models, threat models, and regulatory compliance requirements Determine the necessary SIEM components for small- and medium-size businesses Understand SIEM anatomy—source device, log collection,

parsing/normalization of logs, rule engine, log storage, and event monitoring Develop an effective incident response program Use the inherent capabilities of your SIEM system for business intelligence Develop filters and correlated event rules to reduce false-positive alerts Implement AlienVault's Open Source Security Information Management (OSSIM) Deploy the Cisco Monitoring Analysis and Response System (MARS) Configure and use the Q1 Labs QRadar SIEM system Implement ArcSight Enterprise Security Management (ESM) v4.5 Develop your SIEM security analyst skills

Clinical Engineering Handbook, Second Edition, covers modern clinical engineering topics, giving experienced professionals the necessary skills and knowledge for this fast-evolving field. Featuring insights from leading international experts, this book presents traditional practices, such as healthcare technology management, medical device service, and technology application. In addition, readers will find valuable information on the newest research and groundbreaking developments in clinical engineering, such as health technology assessment, disaster preparedness, decision support systems, mobile medicine, and prospects and guidelines on the future of clinical engineering. As the biomedical engineering field expands throughout the world, clinical engineers play an increasingly important role as translators between the medical, engineering and

business professions. In addition, they influence procedures and policies at research facilities, universities, and in private and government agencies. This book explores their current and continuing reach and its importance. Presents a definitive, comprehensive, and up-to-date resource on clinical engineering Written by worldwide experts with ties to IFMBE, IUPESM, Global CE Advisory Board, IEEE, ACCE, and more Includes coverage of new topics, such as Health Technology Assessment (HTA), Decision Support Systems (DSS), Mobile Apps, Success Stories in Clinical Engineering, and Human Factors Engineering
This IBM Redbooks publication reviews the overall Tivoli Enterprise Security Architecture. It focuses on the integration of audit and compliance, access control, identity management, and federation throughout extensive e-business enterprise implementations. The available security product diversity in the marketplace challenges everyone in charge of designing single secure solutions or an overall enterprise security architecture. With Access Manager, Identity Manager, Federated Identity Manager, Security Compliance Manager, Security Operations Manager, Directory Server, and Directory Integrator, Tivoli offers a complete set of products designed to address these challenges. This book describes the major logical and physical components of each of the Tivoli products. It also depicts several e-business scenarios with different security

challenges and requirements. By matching the desired Tivoli security product criteria, this publication describes the appropriate security implementations that meet the targeted requirements. This book is a valuable resource for security officers, administrators, and architects who want to understand and implement enterprise security following architectural guidelines.

Cyber security has become a topic of concern over the past decade as private industry, public administration, commerce, and communication have gained a greater online presence. As many individual and organizational activities continue to evolve in the digital sphere, new vulnerabilities arise. Cyber Security and Threats: Concepts, Methodologies, Tools, and Applications contains a compendium of the latest academic material on new methodologies and applications in the areas of digital security and threats. Including innovative studies on cloud security, online threat protection, and cryptography, this multi-volume book is an ideal source for IT specialists, administrators, researchers, and students interested in uncovering new ways to thwart cyber breaches and protect sensitive digital information.

Implementing Information Security in Healthcare: Building a Security Program offers a critical and comprehensive look at healthcare security concerns in an era of powerful computer technology, increased mobility, and complex regulations

designed to protect personal information. Featuring perspectives from more than two dozen security experts, the book explores the tools and policies healthcare organizations need to build an effective and compliant security program. Topics include information security frameworks, risk analysis, senior management oversight and involvement, regulations, security policy development, access control, network security, encryption, mobile device management, disaster recovery, and more. Information security is a concept that has never been more important to healthcare as it is today. Special features include appendices outlining potential impacts of security objectives, technical security features by regulatory bodies (FISMA, HIPAA, PCI DSS and ISO 27000), common technical security features, and a sample risk rating chart.

How well does your enterprise stand up against today's sophisticated security threats? In this book, security experts from Cisco Systems demonstrate how to detect damaging security incidents on your global network--first by teaching you which assets you need to monitor closely, and then by helping you develop targeted strategies and pragmatic techniques to protect them. Security Monitoring is based on the authors' years of experience conducting incident response to keep Cisco's global network secure. It offers six steps to improve network monitoring. These steps will help you: Develop Policies: define rules,

regulations, and monitoring criteria Know Your Network: build knowledge of your infrastructure with network telemetry Select Your Targets: define the subset of infrastructure to be monitored Choose Event Sources: identify event types needed to discover policy violations Feed and Tune: collect data, generate alerts, and tune systems using contextual information Maintain Dependable Event Sources: prevent critical gaps in collecting and monitoring events Security Monitoring illustrates these steps with detailed examples that will help you learn to select and deploy the best techniques for monitoring your own enterprise network.

A log is a record of the events occurring within an org¿s. systems & networks. Many logs within an org. contain records related to computer security (CS). These CS logs are generated by many sources, incl. CS software, such as antivirus software, firewalls, & intrusion detection & prevention systems; operating systems on servers, workstations, & networking equip.; & applications. The no., vol., & variety of CS logs have increased greatly, which has created the need for CS log mgmt. -- the process for generating, transmitting, storing, analyzing, & disposing of CS data. This report assists org¿s. in understanding the need for sound CS log mgmt. It provides practical, real-world guidance on developing, implementing, & maintaining effective log mgmt. practices. Illus.