Security Operations Center Guidebook A Practical G

Practitioners in Cybersecurity community understand that they are an unending war with opponents who have varying interests, but are mostly motivated by financial gains. New vulnerabilities are continuously discovered, new technologies are continuously being developed, and attackers are innovative in exploiting flaws to gain access to information assets for financial gains. It is profitable for attackers to succeed only few times. Security Operations Center (SOC) plays a key role in this perpetual arm wrestling to ensure you win most of the times. And if you fail once in a while, you can get back very quickly without much damage. People, who are part of SOC planning, architecture, design, implementation, operations, and incidents response will find this book useful.Many public and private sector organizations have built Security Operations Centers in-house whereas others have outsourced SOC operations to managed security services providers. Some also choose a hybrid approach by keeping parts of SOC operations in-house and outsourcing the rest of it. However, many of these efforts don't bring the intended results or realize desired business outcomes.This book is an effort to learn from experiences of many SOC practitioners and researchers to find practices that have been proven to be useful while avoiding common pitfalls in building SOC. I have also explored different ideas to find a "balanced" approach towards building a SOC and making informed choices between functions that can/should be kept in-house and the ones that can be outsourced. Even if you are an experienced SOC professional, you will still find few interesting ideas as I have done significant research

and interviewed many SOC professionals to include tips to help avoid pitfalls.

Security analytics can be defined as the process of continuously monitoring and analyzing all the activities in your enterprise network to ensure the minimal number of occurrences of security breaches. Security Analyst is the individual that is qualified to perform the functions necessary to accomplish the security monitoring goals of the organization. This book is intended to improve the ability of a security analyst to perform their day to day work functions in a more professional manner. Deeper knowledge of tools, processes and technology is needed for this. A firm understanding of all the domains of this book is going to be vital in achieving the desired skill set to become a professional security analyst. The attempt of this book is to address the problems associated with the content development (use cases and correlation rules) of SIEM deployments. The term "Cyber Threat Intelligence" has gained considerable interest in the Information Security community over the past few years. The main purpose of implementing a Cyber threat intelligence(CTI) program is to prepare businesses to gain awareness of cyber threats and implement adequate defenses before disaster strikes. Threat Intelligence is the knowledge that helps Enterprises make informed decisions about defending against current and future security threats. This book is a complete practical guide to understanding, planning and building an effective Cyber Threat Intelligence program within an organization. This book is a must read for any Security or IT professional with mid to advanced level of skills. The book provides insights that can be leveraged on in conversations with your management and decision makers to get your organization on the path to building an effective CTI program.

This is the definitive, vendor-neutral guide to building, maintaining, and operating a modern Security Operations Center (SOC). Written by three leading security and networking experts, it brings together all the technical knowledge professionals need to deliver the right mix of security services to their organizations. The authors introduce the SOC as a service provider, and show how to use your SOC to integrate and transform existing security practices, making them far more effective. Writing for security and network professionals, managers, and other stakeholders, the authors cover: How SOCs have evolved, and today's key considerations in deploying them Key services SOCs can deliver, including organizational risk management, threat modeling, vulnerability assessment, incident response, investigation, forensics, and compliance People and process issues, including training, career development, job rotation, and hiring Centralizing and managing security data more effectively Threat intelligence and threat hunting Incident response, recovery, and vulnerability management Using data orchestration and playbooks to automate and control the response to any situation Advanced tools, including SIEM 2.0 The future of SOCs, including AI-Assisted SOCs, machine learning, and training models Note: This book's lead author, Joseph Muñiz, was also lead author of Security Operations Center: Building, Operating, and Maintaining your SOC (Cisco Press). The Modern Security Operations Center is an entirely new and fully vendor-neutral book.

Ten Strategies of a World-Class Cyber Security Operations Center conveys MITRE's accumulated expertise on enterprise-grade computer network defense. It covers ten key qualities of leading Cyber Security Operations Centers (CSOCs), ranging from their structure and organization, to processes that best enable smooth operations, to

approaches that extract maximum value from key CSOC technology investments. This book offers perspective and context for key decision points in structuring a CSOC, such as what capabilities to offer, how to architect large-scale data collection and analysis, and how to prepare the CSOC team for agile, threat-based response. If you manage, work in, or are standing up a CSOC, this book is for you. It is also available on MITRE's website, www.mitre.org.

A NATO Cooperative Cyber Defence Centre of Excellence Initiative

Ethics and Policies for Cyber Operations

Protecting National Infrastructure, STUDENT EDITION

Mainstreaming Human Security in Peace Operations and Crisis Management

SIEM Technology, Use Cases and Practices

Security Operations Center - Analyst Guide

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

In recent years, there has been a sharp rise in acts of violence in the courts. These acts range from minor disturbances and physical assaults to murder and mass destruction. The potential exists for violence to occur in any court system regardless of location. Unfortunately, many courts at all levels of the judicial system have been slow or even reluctant to implement adequate security measures. This book is designed to prove the folly in such denial. It provides hard statistics and observations that highlight this unique visceral security environment. The text is specifically designed to help those charged with developing and implementing security measures to reevaluate current methods for safeguarding the judicial process. Presented in four sections, the first discusses perpetrators planning an attack and reviews types of perpetrators, target selection, tactics, operations styles, the mechanics of violent attacks, and thwarting attacks. Section two discusses in much detail a

multitude of integrated security systems now available for court facilities. The third section presents effective response mechanics for courthouse violence, and the final section reviews tactical considerations for training, containment, and responding to explosive devices. The text serves as a substantial resource in providing the most current state-of-the-art information on security operations and technologies in a very clear but in-depth format. The ultimate goal of this book is to emphasize that court security in today's world must be constantly reexamined, revamped, and upgraded to protect human and physical assets. This unique and comprehensive text will be invaluable to courthouse adminstrators, security professionals, law enforcement personnel, judges, lawyers, and college-level students of security.

Hospital and Healthcare Security, Fifth Edition, examines the issues inherent to healthcare and hospital security, including licensing, regulatory requirements, litigation, and accreditation standards. Building on the solid foundation laid down in the first four editions, the book looks at the changes that have occurred in healthcare security since the last edition was published in 2001. It consists of 25 chapters and presents examples from Canada, the UK, and the United States. It first provides an overview of the healthcare environment, including categories of healthcare, types of hospitals, the nonhospital side of healthcare, and the different stakeholders. It then

describes basic healthcare security risks/vulnerabilities and offers tips on security management planning. The book also discusses security department organization and staffing, management and supervision of the security force, training of security personnel, security force deployment and patrol activities, employee involvement and awareness of security issues, implementation of physical security safeguards, parking control and security, and emergency preparedness. Healthcare security practitioners and hospital administrators will find this book invaluable. FEATURES AND BENEFITS: * Practical support for healthcare security professionals, including operationally proven policies, and procedures * Specific assistance in preparing plans and materials tailored to healthcare security programs * Summary tables and sample forms bring together key data, facilitating ROI discussions with administrators and other departments * General principles clearly laid out so readers can apply the industry standards most appropriate to their own environment NEW TO THIS EDITION: * Quick-start section for hospital administrators who need an overview of security issues and best practices

Your one stop solution to implement a Cyber Defense Intelligence program in to your organisation. Key Features Intelligence processes and procedures for response mechanisms Master F3EAD to drive

processes based on intelligence Threat modeling and intelligent frameworks Case studies and how to go about building intelligent teams Book Description Cyber intelligence is the missing link between your cyber defense operation teams, threat intelligence, and IT operations to provide your organization with a full spectrum of defensive capabilities. This book kicks off with the need for cyber intelligence and why it is required in terms of a defensive framework. Moving forward, the book provides a practical explanation of the F3EAD protocol with the help of examples. Furthermore, we learn how to go about threat models and intelligence products/frameworks and apply them to real-life scenarios. Based on the discussion with the prospective author I would also love to explore the induction of a tool to enhance the marketing feature and functionality of the book. By the end of this book, you will be able to boot up an intelligence program in your organization based on the operation and tactical/strategic spheres of Cyber defense intelligence. What you will learn Learn about the Observe-Orient-Decide-Act (OODA) loop and it's applicability to security Understand tactical view of Active defense concepts and their application in today's threat landscape Get acquainted with an operational view of the F3EAD process to drive decision making within an organization Create a Framework and Capability Maturity Model that integrates inputs and outputs from key functions in an

information security organization Understand the idea of communicating with the Potential for Exploitability based on cyber intelligence Who this book is for This book targets incident managers, malware analysts, reverse engineers, digital forensics specialists, and intelligence analysts; experience in, or knowledge of, security operations, incident responses or investigations is desirable so you can make the most of the subjects presented.

Methodologies, Tools, and Techniques for Incident Analysis and Response

IBM Intelligent Operations Center 1.6 Programming Guide

Blue Team Handbook: SOC, SIEM, and Threat Hunting (V1. 02)

A Practical Guide for a Successful SOC

The Modern Security Operations Center

Siem Technology, Use Cases and Practices

This book presents 12 essays that focus on the analysis of the problems prompted by cyber operations (COs). It clarifies and discusses the ethical and regulatory problems raised by the deployment of cyber capabilities by a state's army to inflict disruption or damage to an adversary's targets in or through cyberspace. Written by world-leading philosophers, ethicists, policy-makers, and law and military experts, the essays cover such topics as the conceptual novelty of COs and the ethical problems that this engenders; the applicability of existing conceptual and regulatory frameworks to COs deployed in case of conflicts; the definition of deterrence strategies involving COs; and the analysis of models to foster cooperation in managing cyber crises. Each essay is an invited contribution or a revised version of a paper originally

presented at the workshop on Ethics and Policies for Cyber Warfare, organized by the NATO Cooperative Cyber Defence Centre of Excellence in collaboration with the University of Oxford. The volume endorses a multi-disciplinary approach, as such it offers a comprehensive overview of the ethical, legal, and policy problems posed by COs and of the different approaches and methods that can be used to solve them. It will appeal to a wide readership, including ethicists, philosophers, military experts, strategy planners, and law- and policy-makers.

IBM® Intelligent Operations Center is an integrated solution. It provides a rich set of capabilities and line of business tools that business users with domain expertise and no technical background can use without customization. IBM Intelligent Operations Center also provides services and extension points that developers can use to extend the IBM Intelligent Operations Center standard functions and develop capabilities specific to the domain and client requirements. IBM Intelligent Operations Center includes an application-based programming model that supports all the interactions with the solution components. The programming model is based on industry standard Representational State Transfer (REST) and Java technologies. IBM Intelligent Operations Center includes a full set of REST and Java application programming interfaces (APIs) that provide a simplified development environment and make the platform easy to extend and customize for a large community of developers. This IBM Redbooks® publication gives a broad understanding of the IBM Intelligent Operations Center 1.6.0.1 programming model and available extension points. Many of the chapters describe working examples and usage scenarios that demonstrate how to extend the IBM Intelligent Operations Center base platform. This book includes sample code that can be downloaded from the IBM Redbooks website. The target audience for this book consists of solution architects, developers, technical consultants, and solution administrators who will learn the following information: The

options available to extend the IBM Intelligent Operations Center solution programmatically How to configure customizations tailored to specific customer requirements How to use the available configuration tools to configure the solution without requiring programming Readers of this book will benefit from the IBM Redbooks publication IBM® Intelligent Operations Center 1.5 to 1.6 Migration Guide , SG24-8202.

This Festschrift is in honor of Sushil Jajodia, Professor in the George Mason University, USA, on the occasion of his 70th birthday. This book contains papers written in honor of Sushil Jajodia, of his vision and his achievements. Sushil has sustained a highly active research agenda spanning several important areas in computer security and privacy, and established himself as a leader in the security research community through unique scholarship and service. He has extraordinarily impacted the scientific and academic community, opening and pioneering new directions of research, and significantly influencing the research and development of security solutions worldwide. Also, his excellent record of research funding shows his commitment to sponsored research and the practical impact of his work. The research areas presented in this Festschrift include membrane computing, spiking neural networks, phylogenetic networks, ant colonies optimization, work bench for bio-computing, reaction systems, entropy of computation, rewriting systems, and insertion-deletion systems.

IBM® defines a smarter city as one that makes optimal use of all available information to better understand and control its operations and optimize the use of resources. There is much information available from different sources. However, city officials often lack the holistic view of the city's operations that is required to respond to the citizens' needs in a timely manner and use the city resources wisely. IBM Intelligent Operations Center delivers a unified view of city agencies, providing three primary elements for successful management of cities: use information, anticipate problems, and coordinate actions and resources. Chapter 1 of this

IBM Redbooks® publication introduces the IBM Intelligent Operations Center solution. The chapter provides a high-level overview of its features, benefits, and architecture. This information is intended for city officials and IT architects that must understand the business value of IBM Intelligent Operations Center and its architecture. The remaining chapters of this book focus on information that help IBM Intelligent Operations Center administrators perform daily administration tasks. This book describes commands and tools that IBM Intelligent Operations Center administrators must use to keep the solution running, troubleshoot and diagnose problems, and perform preventive maintenance. This book includes preferred practices, tips and techniques, and general suggestions for administrators of IBM Intelligent Operations Center on-premises deployments. For related information about this topic, refer to the following IBM Redbooks publications: IBM Intelligent Operations Center for Smarter Cities Redpaper, REDP-4939 IBM Intelligent Operations Center for Smarter Cities Solution Guide

An Introduction to Planning and Conducting Private Security Details for High-Risk Areas

Designing and Building Security Operations Center

Cybersecurity Operations Handbook

Practical Cyber Intelligence

Ten Strategies of a World-Class Cybersecurity Operations Center

Microsoft Azure Security Center

IT-SEC protects the information. SEC-OT protects physical, industrial operations from information, more specifically from attacks embedded in information. When the consequences of compromise are unacceptable ? unscheduled downtime, impaired product quality and damaged equipment ? software-based IT-SEC defences

are not enough. Secure Operations Technology (SEC-OT) is a perspective, a methodology, and a set of best practices used at secure industrial sites. SEC-OT demands cyber-physical protections - because all software can be compromised. SEC-OT strictly controls the flow of information ? because all information can encode attacks. SEC-OT uses a wide range of attack capabilities to determine the strength of security postures - because nothing is secure. This book documents the Secure Operations Technology approach, including physical offline and online protections against cyber attacks and a set of twenty standard cyber-attack patterns to use in risk assessments. Discover high-value Azure security insights, tips, and operational optimizations This book presents comprehensive Azure Security Center techniques for safeguarding cloud and hybrid environments. Leading Microsoft security and cloud experts Yuri Diogenes and Dr. Thomas Shinder show how to apply Azure Security Center's full spectrum of features and capabilities to address protection, detection, and response in key operational scenarios. You'll learn how to secure any Azure workload, and optimize virtually all facets of modern security,

from policies and identity to incident response and risk management. Whatever your role in Azure security, you'll learn how to save hours, days, or even weeks by solving problems in most efficient, reliable ways possible. Two of Microsoft's leading cloud security experts show how to: • Assess the impact of cloud and hybrid environments on security, compliance, operations, data protection, and risk management • Master a new security paradigm for a world without traditional perimeters • Gain visibility and control to secure compute, network, storage, and application workloads • Incorporate Azure Security Center into your security operations center • Integrate Azure Security Center with Azure AD Identity Protection Center and third-party solutions • Adapt Azure Security Center's built-in policies and definitions for your organization • Perform security assessments and implement Azure Security Center recommendations • Use incident response features to detect, investigate, and address threats • Create high-fidelity fusion alerts to focus attention on your most urgent security issues • Implement application whitelisting and just-in-time VM access • Monitor user behavior and access, and investigate compromised or

misused credentials • Customize and perform operating system security baseline assessments • Leverage integrated threat intelligence to identify known bad actors The sophisticated methods used in recent high-profile cyber incidents have driven many to need to understand how such security issues work. Demystifying the complexity often associated with information assurance, Cyber Security Essentials provides a clear understanding of the concepts behind prevalent threats, tactics, and procedures.To accomplish 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

Information Security Operations Center A Complete Guide - 2020 Edition

The African Union-United Nations Partnership in Darfur

Modern Theories and Practices for Cyber Ethics and Security Compliance

Legitimacy, Peace Operations and Global-regional Security

The Practice of Network Security Monitoring

Hospital and Healthcare Security

Blue Team Handbook: SOC, SIEM, and Threat

Hunting Use Cases provides the security practitioner with numerous field notes on building a security operations team and mining data sources to get the maximum amount of information out of them with a threat hunting approach. The author shares his fifteen years of experience with SIEMs and security operations after implementing five major platforms, integrating over one hundred data sources into various platforms, and running a MSSP practice.This book covers the topics below using a "zero fluff" approach as if you hired him as a security consultant and were sitting across the table with him (or her). Topics covered include:* The book begins with a discussion for professionals to help them build a successful business case and a project plan, and deciding on SOC tier models. There is also a list of tough questions you need to consider when proposing a SOC, as well as a discussion of layered operating models. * It then goes through numerous data sources that feed a SOC and SIEM and provides specific guidance on how to use those data sources. Most of the examples presented were implemented in one organization or another. These uses cases explain how to use a SIEM and how to use the data coming into the platform, a question that is

poorly answered by many vendors.* An inventory of Security Operations Center (SOC) Services.* Several business concepts are also introduced, because they are often overlooked by IT: value chain, PESTL, and SWOT. * Metrics.* SOC staff onboarding, training topics, and desirable skills. Along these lines, there is a chapter on a day in the life of a SOC analyst. * Maturity analysis for the SOC and the log management program. * Applying a Threat Hunt mindset to the SOC. * A full use case template that was used within two major Fortune 500 companies, and is in active use by one major SIEM vendor, along with a complete example of how to build a SOC and SIEM focused use case. You can see the corresponding discussion on YouTube - search for the 2017 Security Onion conference. * Critical topics in deploying SIEM based on experience deploying five different technical platforms for nineteen different organizations in education, nonprofit, and commercial enterprises from 160 to 30,000 personnel. * Understanding why SIEM deployments fail with actionable compensators. * Real life experiences getting data into SIEM platforms and the considerations for the many different ways to provide data. * Issues relating to time, time management, and time zones. *

Critical factors in log management, network security monitoring, continuous monitoring, and security architecture related directly to SOC and SIEM.* A table of useful TCP and UDP port numbers.This is the second book in the Blue Team Handbook Series. Volume One, focused on incident response, has over 32,000 copies in print and has a 4.5/5.0 review rating!
Security Operations Center Guidebook: A Practical Guide for a Successful SOC provides everything security professionals need to create and operate a world-class Security Operations Center. It starts by helping professionals build a successful business case using financial, operational, and regulatory requirements to support the creation and operation of an SOC. It then delves into the policies and procedures necessary to run an effective SOC and explains how to gather the necessary metrics to persuade upper management that a company's SOC is providing value. This comprehensive text also covers more advanced topics, such as the most common Underwriter Laboratory (UL) listings that can be acquired, how and why they can help a company, and what additional activities and services an SOC can provide to maximize value to a company. Helps security professionals

build a successful business case for a Security Operations Center, including information on the necessary financial, operational, and regulatory requirements Includes the required procedures, policies, and metrics to consider Addresses the often opposing objectives between the security department and the rest of the business with regard to security investments Features objectives, case studies, checklists, and samples where applicable

Security Operations Center Building, Operating, and Maintaining Your SOC The complete, practical guide to planning, building, and operating an effective Security Operations Center (SOC) Security Operations Center is the complete guide to building, operating, and managing Security Operations Centers in any environment. Drawing on experience with hundreds of customers ranging from Fortune 500 enterprises to large military organizations, three leading experts thoroughly review each SOC model, including virtual SOCs. You'll learn how to select the right strategic option for your organization, and then plan and execute the strategy you've chosen. Security Operations Center walks you through every phase required to establish

and run an effective SOC, including all significant people, process, and technology capabilities. The authors assess SOC technologies, strategy, infrastructure, governance, planning, implementation, and more. They take a holistic approach considering various commercial and open-source tools found in modern SOCs. This best-practice guide is written for anybody interested in learning how to develop, manage, or improve a SOC. A background in network security, management, and operations will be helpful but is not required. It is also an indispensable resource for anyone preparing for the Cisco SCYBER exam. · Review high-level issues, such as vulnerability and risk management, threat intelligence, digital investigation, and data collection/analysis · Understand the technical components of a modern SOC · Assess the current state of your SOC and identify areas of improvement · Plan SOC strategy, mission, functions, and services · Design and build out SOC infrastructure, from facilities and networks to systems, storage, and physical security · Collect and successfully analyze security data · Establish an effective vulnerability management practice · Organize incident response teams and measure their

performance · Define an optimal governance and staffing model · Develop a practical SOC handbook that people can actually use · Prepare SOC to go live, with comprehensive transition plans · React quickly and collaboratively to security incidents · Implement best practice security operations, including continuous enhancement and improvement

"This book focuses on the collaboration that takes place in the field of conflict management between the global centre and the African regional level. It moves beyond the dominant framework on regional-global security partnerships, which mainly considers one-sided legal and political factors. Instead, new perspectives on the relationships are presented through the lens of international legitimacy. The book argues that the AU and the UN Security Council fight for legitimacy to ensure their positions of authority and to improve the chances of success of their activities. It demonstrates in regard to the case of Darfur why and how legitimacy matters for states, international organisations, and also for global actors and local populations." -- Page [iii] of paperback version.

Policies, Problems, Potential

Winning the Perpetual Fight Against Crime

by Building a Modern Security Operations Center (SOC)
How action-based intelligence can be an effective response to incidents
International and Law Enforcement Perspectives
From Database to Cyber Security
Cyber Security Essentials

In today?s globalized world, businesses and governments rely heavily on technology for storing and protecting essential information and data. Despite the benefits that computing systems offer, there remains an assortment of issues and challenges in maintaining the integrity and confidentiality of these databases. As professionals become more dependent cyberspace, there is a need for research on modern strategies and concepts for improving the security and safety of these technologies. Modern Theories and Practices for Cyber Ethics and Security Compliance is a collection of innovative research on the concepts, models, issues, challenges, innovations, and mitigation strategies needed to improve cyber protection. While highlighting topics including database governance, cryptography, and intrusion detection, this book provides guidelines for the protection, safety, and security of business data and national infrastructure from cyber-attacks. It is ideally designed for security analysts, law enforcement, researchers, legal

practitioners, policymakers, business professionals, governments, strategists, educators, and students seeking current research on combative solutions for cyber threats and attacks.

Do you know what weapons are used to protect against cyber warfare and what tools to use to minimize their impact? How can you gather intelligence that will allow you to configure your system to ward off attacks? Online security and privacy issues are becoming more and more significant every day, with many instances of companies and governments mishandling (or deliberately misusing) personal and financial data. Organizations need to be committed to defending their own assets and their customers' information. Designing and Building a Security Operations Center will show you how to develop the organization, infrastructure, and capabilities to protect your company and your customers effectively, efficiently, and discreetly. Written by a subject expert who has consulted on SOC implementation in both the public and private sector, Designing and Building a Security Operations Center is the go-to blueprint for cyber-defense. Explains how to develop and build a Security Operations Center Shows how to gather invaluable intelligence to protect your organization Helps you evaluate the pros and cons behind each decision during the SOC-building process

Cybersecurity Operations Handbook is the

first book for daily operations teams who install, operate and maintain a range of security technologies to protect corporate infrastructure. Written by experts in security operations, this book provides extensive guidance on almost all aspects of daily operational security, asset protection, integrity management, availability methodology, incident response and other issues that operational teams need to know to properly run security products and services in a live environment. Provides a master document on Mandatory FCC Best Practices and complete coverage of all critical operational procedures for meeting Homeland Security requirements. · First book written for daily operations teams · Guidance on almost all aspects of daily operational security, asset protection, integrity management · Critical information for compliance with Homeland Security

Cyber Attacks, Student Edition, offers a technical, architectural, and management approach to solving the problems of protecting national infrastructure. This approach includes controversial themes such as the deliberate use of deception to trap intruders. This volume thus serves as an attractive framework for a new national strategy for cyber security. A specific set of criteria requirements allows any organization, such as a government agency, to integrate the principles into their local environment. In this edition, each principle

is presented as a separate security strategy and illustrated with compelling examples. The book adds 50-75 pages of new material aimed specifically at enhancing the student experience and making it more attractive for instructors teaching courses such as cyber security, information security, digital security, national security, intelligence studies, technology and infrastructure protection. It now also features case studies illustrating actual implementation scenarios of the principles and requirements discussed in the text, along with a host of new pedagogical elements, including chapter outlines, chapter summaries, learning checklists, and a 2-color interior. Furthermore, a new and complete ancillary package includes test bank, lesson plans, PowerPoint slides, case study questions, and more. This text is intended for security practitioners and military personnel as well as for students wishing to become security engineers, network operators, software designers, technology managers, application developers, etc. Provides case studies focusing on cyber security challenges and solutions to display how theory, research, and methods, apply to real-life challenges Utilizes, end-of-chapter case problems that take chapter content and relate it to real security situations and issues Includes instructor slides for each chapter as well as an instructor’s manual with sample syllabi and test bank

Security Operations Management
A Condensed Guide for the Security Operations Team and Threat Hunter
Cybersecurity Arm Wrestling
Understanding Incident Detection and Response
Security Information and Event Management (SIEM) Implementation
Network Security Metrics

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.
Direct from Microsoft, this Exam Ref is the official study guide for the new Microsoft SC-200 Microsoft Security Operations Analyst certification exam. Exam Ref SC-200 Microsoft Security Operations Analyst offers professional-level preparation that helps candidates maximize their exam performance and sharpen their skills on the job. It focuses on the specific areas of expertise modern IT professionals need to demonstrate real-world mastery of threat mitigation with Microsoft 365 and Azure tools. Coverage includes mitigating threats using: Microsoft 365 Defender: Detect, investigate, respond, and remediate threats to the productivity environment, endpoints, and identity; manage cross-domain investigations Azure Defender: Design and configure Azure Defender implementations; plan and implement the use of data connectors to ingest data sources; manage alert rules; configure automation and remediation; investigate alerts and incidents Azure Sentinel: Design and configure a workspace; ingest data sources; manage analytics rules; configure SOAR; manage incidents; use workbooks to analyze and interpret data; hunt for threats Microsoft Exam Ref publications stand apart from third-party study guides because they: Provide guidance from Microsoft, the creator of Microsoft

certification exams Target professional-level exam candidates with content focused on their needs, not "one-size-fits-all" content Streamline study by organizing material according to the exam objective domain (OD), covering one functional group and its objectives in each chapter Feature Thought Experiments to guide candidates through a set of "what if?" scenarios, and prepare them more effectively for Pro-level style exam questions Include "Need more review?" aids pointing you to more study materials if you need them Explore big picture thinking around the professional's job role For more information on Exam SC-200 and the Microsoft Certified: Security Operations Analyst Associate credential, visit https: //docs.microsoft.com/en-us/learn/certifications/security-operations-analyst/.

Security Operations: An Introduction to Planning and Conducting Private Security Details for High-Risk Areas, Second Edition was written for one primary purpose: to keep people alive by introducing them to private security detail tactics and techniques. The book provides an understanding of the basic concepts and rules that need to be followed in protective services, including what comprises good security practice. This second edition is fully updated to include new case scenarios, threat vectors, and new ambush ploys and attack tactics used by opportunistic predators and seasoned threat

actors with ever-advanced, sophisticated schemes. Security has always been a necessity for conducting business operations in both low- and high-risk situations, regardless of the threat level in the operating environment. Overseas, those with new ideas or businesses can frequently be targets for both political and criminal threat agents intent on doing harm. Even in the United States, people become targets because of positions held, publicity, politics, economics, or other issues that cause unwanted attention to a person, their family, or business operations. Security Operations, Second Edition provides an introduction to what duties a security detail should perform and how to effectively carry out those duties. The book can be used by a person traveling with a single bodyguard or someone being moved by a full security detail. FEATURES • Identifies what can pose a threat, how to recognize threats, and where threats are most likely to be encountered • Presents individuals and companies with the security and preparedness tools to protect themselves when operating in various environments, especially in high-risk regions • Provides an understanding of operational security when in transit: to vary route selection and keep destinations and movement plans out of the public view • Outlines the tools and techniques needed for people to become security conscious and situationally aware for their own safety and the safety of those close to

them An equal help to those just entering the protection business or people and companies that are considering hiring a security detail, Security Operations is a thorough, detailed, and responsible approach to this serious and often high-risk field. Robert H. Deatherage Jr. is a veteran Special Forces Soldier and private security consultant with thirty years' experience in military and private security operations. His various writings on security topics cover security operations, threat assessment, risk management, client relations, surveillance detection, counter surveillance operations, foot and vehicle movements, and building security—blending solid operational theory with practical field experience. The second edition of Security Operations Management continues as the seminal reference on corporate security management operations. Revised and updated, topics covered in depth include: access control, selling the security budget upgrades to senior management, the evolution of security standards since 9/11, designing buildings to be safer from terrorism, improving relations between the public and private sectors, enhancing security measures during acute emergencies, and, finally, the increased security issues surrounding the threats of terrorism and cybercrime. An ideal reference for the professional, as well as a valuable teaching tool for the security student, the book includes discussion questions and a glossary of

*common security terms. Additionally, a brand new appendix contains contact information for academic, trade, and professional security organizations. * Fresh coverage of both the business and technical sides of security for the current corporate environment * Strategies for outsourcing security services and systems * Brand new appendix with contact information for trade, professional, and academic security organizations*

Network Intrusion Analysis

CCNA Cybersecurity Operations Companion Guide

A Guide for Post 9-11 Environments

Principles of Emergency Management and Emergency Operations Centers (EOC)

Security Operations Center

Understanding the Fundamentals of InfoSec in Theory and Practice

Emergency operations centers (EOCs) are a key component of coordination efforts during incident planning as well as reaction to natural and human-made events. Managers and their staff coordinate incoming information from the field, and the public, to support pre-planned events and field operations as they occur. This book looks at the function and role of EOCs and their organizations. The highly anticipated second edition of Principles of Emergency Management and Emergency Operations Centers (EOC) provides an updated understanding of the coordination, operation of EOCs at local, regional, state, and federal

operations. Contributions from leading experts provide contemporary knowledge and best practice learned through lived experience. The chapters collectively act as a vital training guide, at both a theoretical and practical level, providing detailed guidance on handling each phase and type of emergency. Readers will emerge with a blueprint of how to create effective training and exercise programs, and thereby develop the skills required for successful emergency management. Along with thoroughly updated and expanded chapters from the first edition, this second edition contains new chapters on: The past and future of emergency management, detailing the evolution of emergency management at the federal level, and potential future paths. Communicating with the public and media, including establishing relations with, and navigating, the media, and the benefits this can provide if successfully managed. In-crisis communications. Leadership and decision-making during disaster events. Facilitating and managing interagency collaboration, including analysis of joint communications, and effective resource management and deployment when working with multiple agencies. Developing and deploying key skills of management, communication, mental resilience. Planning for terrorism and responding to complex coordinated terrorist attacks. Developing exercises and after-action reports (AARs) for emergency management.

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.

Are problem definition and motivation clearly presented? Operational - will it work? Will the team be available to assist members in planning investigations? How do you verify your resources? What is your competitive advantage? This astounding Information Security Operations Center self-assessment will make you the dependable Information Security Operations Center domain auditor by revealing just what you need to know to be fluent and ready for any Information Security Operations Center challenge. How do I reduce the effort in the Information Security Operations Center work to be done to get problems solved? How can I ensure that plans of action include every Information Security Operations Center task and that every Information Security Operations Center

outcome is in place? How will I save time investigating strategic and tactical options and ensuring Information Security Operations Center costs are low? How can I deliver tailored Information Security Operations Center advice instantly with structured going-forward plans? There's no better guide through these mind-expanding questions than acclaimed best-selling author Gerard Blokdyk. Blokdyk ensures all Information Security Operations Center essentials are covered, from every angle: the Information Security Operations Center self-assessment shows succinctly and clearly that what needs to be clarified to organize the required activities and processes so that Information Security Operations Center outcomes are achieved. Contains extensive criteria grounded in past and current successful projects and activities by experienced Information Security Operations Center practitioners. Their mastery, combined with the easy elegance of the self-assessment, provides its superior value to you in knowing how to ensure the outcome of any efforts in Information Security Operations Center are maximized with professional results. Your purchase includes access details to the Information Security Operations Center self-assessment dashboard download which gives you your dynamically prioritized projects-ready tool and shows you exactly what to do next. Your exclusive instant access details can be found in your book. You will receive the following contents with New and

Updated specific criteria: - The latest quick edition of the book in PDF - The latest complete edition of the book in PDF, which criteria correspond to the criteria in... - The Self-Assessment Excel Dashboard - Example pre-filled Self-Assessment Excel Dashboard to get familiar with results generation - In-depth and specific Information Security Operations Center Checklists - Project management checklists and templates to assist with implementation INCLUDES LIFETIME SELF ASSESSMENT UPDATES Every self assessment comes with Lifetime Updates and Lifetime Free Updated Books. Lifetime Updates is an industry-first feature which allows you to receive verified self assessment updates, ensuring you always have the most accurate information at your fingertips. Security analytics can be defined as the process of continuously monitoring and analyzing all the activities in your enterprise network to ensure the minimal number of occurrences of security breaches. Security Analyst is the individual that is qualified to perform the functions necessary to accomplish the security monitoring goals of the organization. This book is intended to improve the ability of a security analyst to perform their day to day work functions in a more professional manner. Deeper knowledge of tools, processes and technology is needed for this. A firm understanding of all the domains of this book is going to be vital in achieving the desired skill set to become a professional security analyst. The attempt of this

book is to address the problems associated with the content development (use cases and correlation rules) of SIEM deployments

Blue Team Handbook

Cyber Attacks

Practical Threat Intelligence and Data-Driven Threat Hunting

Security Operations Center Guidebook

The Basics of Information Security

IBM Intelligent Operations Center for Smarter Cities Administration Guide

In this age of terrorism, world and national security as well as policing the streets of our country have become an increasingly important objective. This book brings together international experts on stress, resiliency and performance. These experts draw on latest research with military and police personnel to provide an integrated perspective on the psychological pressures involved in this type of work, as well as practical recommendations on how to optimize human performance in security operations. This book examines research and practical applications to the field of security operations that provide new insights into the common stressors and challenges encountered by personnel and organizations involved in security. The book is divided into three sections. Section I provides

basic theoretical perspectives on both social and psychological factors that significantly impact human responses to high stress demands of security operations. A theoretical model of resilience is presented, with special reference to the police officer's job. The model includes many factors that are addressed throughout the book, and provides a useful framework for considering both the selection and the training issues. Section II emphasizes scientifically grounded, yet practical, approaches for selecting, training, and preparing personnel to function effectively in security operations. Section III presents a collection of both case studies and special life-threatening scenarios that workers and leaders in security operations may face. The training of new police officers in Kosovo and of local demining teams in Sudan and Iraq are addressed, including contagion in the use of deadly force by police and security workers. The preparation of security personnel to cope with the threat of chemical, biological, radiological, or nuclear materials is a special problem, and this book provides positive direction concerning human performance and effectiveness. It will serve as an

outstanding resource for defense organizations, local, state and federal police forces, contract security firms, security operations personnel, policymakers, and educators in the military--Publisher's description.

The concept of human security is a new approach to security that focuses on the individual human being and provides policy alternatives to the traditional state-centred view, which considers the state to be the only and ultimate referent of security. Formally introduced into the United Nations system in 1994 the concept's intellectual roots draw from international humanitarian law, human rights and human development, and since its introduction human security has been progressively integrated into the international security discourse. Mainstreaming Human Security: Policies, Problems, Potential paints a comprehensive picture of the relevance of the concept of human security in practice in a time of changing security paradigms and a challenging international environment. This volume looks at the practical implications of mainstreaming human security. It focuses on the potential, problems and policies of human security in peace operations and crisis management

operations of the United Nations and of the European Union. Topics addressed by the contributors include mainstreaming human rights and human security in peace and crisis management in general and the role of human security in the EU's Common Security and Defence Policy, security sector reform, restorative responses to human rights violations by peacemakers, human security in Serbia and in African peace operations as well as proposals for human security training. The contributions to the book focus equally on mainstreaming human security in the UN and in the EU context. The global issues discussed and conclusions drawn are of relevance for the future of security addressed by peace and crisis management operations all over the world.

A must have for those working as and Those who intend to work as SOC analyst. Security analytics can be defined as the process of continuously monitoring and analyzing all the activities in your enterprise network to ensure the minimal number of occurrences of security breaches. Security Analyst is the individual that is qualified to perform the functions necessary to accomplish the security monitoring goals of the organization. This book is intended to

improve the ability of a security analyst to perform their day to day work functions in a more professional manner. Deeper knowledge of tools, processes and technology is needed for this. A firm understanding of all the domains of this book is going to be vital in achieving the desired skill set to become a professional security analyst. The attempt of this book is to address the problems associated with the content development (use cases and correlation rules) of SIEM deployments. 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.

Soc, Siem, and Threat Hunting Use Cases: A Condensed Field Guide for the Security Operations Team

Building, Operating, and Maintaining your SOC

Enhancing Human Performance in Security Operations

Court Security

A hands-on guide to threat hunting with the ATT&CK™ Framework and open source tools

Exam Ref Sc-200 Microsoft Security Operations Analyst

Nearly every business depends on its network to provide information services to carry out essential activities, and network intrusion attacks have been growing increasingly

frequent and severe. When network intrusions do occur, it's imperative that a thorough and systematic analysis and investigation of the attack is conducted to determine the nature of the threat and the extent of information lost, stolen, or damaged during the attack. A thorough and timely investigation and response can serve to minimize network downtime and ensure that critical business systems are maintained in full operation. Network Intrusion Analysis teaches the reader about the various tools and techniques to use during a network intrusion investigation. The book focuses on the methodology of an attack as well as the investigative methodology, challenges, and concerns. This is the first book that provides such a thorough analysis of network intrusion investigation and response. Network Intrusion Analysis addresses the entire process of investigating a network intrusion by: *Providing a step-by-step guide to the tools and techniques used in the analysis and investigation of a network intrusion. *Providing real-world examples of network intrusions, along with associated workarounds. *Walking you through the methodology and practical steps needed to conduct a thorough intrusion investigation and incident response, including a wealth of practical, hands-on tools for incident assessment and mitigation. Network Intrusion Analysis addresses the entire process of investigating a network intrusion Provides a step-by-step guide to the tools and techniques used in the analysis and investigation of a network intrusion Provides real-world examples of network intrusions, along with

associated workarounds Walks readers through the methodology and practical steps needed to conduct a thorough intrusion investigation and incident response, including a wealth of practical, hands-on tools for incident assessment and mitigation

Blue Team Handbook: SOC, SIEM, and Threat Hunting Use Cases is having an amazing impact on Security Operations worldwide. BTHb:SOCTH is the go to guiding book for new staff at a top 10 MSSP, integrated into University curriculum, and cited in top ten courses from a major information security training company. This listing is for V1.02.BTHb:SOCTH provides the security practitioner with numerous field notes on building a security operations team, managing SIEM, and mining data sources to get the maximum amount of information out of them with a threat hunting approach. The author shares his fifteen years of experience with SIEMs and security operations is a no frills, just information format. Don Murdoch has implemented five major platforms, integrated over one hundred data sources into various platforms, and ran an MSSP practice for two years.This book covers the topics below using a "zero fluff" approach as if you hired him as a security consultant and were sitting across the table with him (or her).The book begins with a discussion for professionals to help them build a successful business case and a project plan, decide on SOC tier models, anticipate and answer tough questions you need to consider when proposing a SOC, and considerations in building a logging infrastructure.

The book goes through numerous data sources that feed a SOC and SIEM and provides specific real world guidance on how to use those data sources to best possible effect. Most of the examples presented were implemented in one organization or another. These uses cases explain on what to monitor, how to use a SIEM and how to use the data coming into the platform, both questions that Don found is often answered poorly by many vendors. Several business concepts are also introduced, because they are often overlooked by IT: value chain, PESTL, and SWOT. Major sections include:An inventory of Security Operations Center (SOC) Services.Metrics, with a focus on objective measurements for the SOC, for analysts, and for SIEM's.SOC staff onboarding, training topics, and desirable skills. Along these lines, there is a chapter on a day in the life of a SOC analyst.Maturity analysis for the SOC and the log management program. Applying a Threat Hunt mindset to the SOC. A full use case template that was used within two major Fortune 500 companies, and is in active use by one major SIEM vendor, along with a complete example of how to build a SOC and SIEM focused use case. You can see the corresponding discussion of this chapter on YouTube. Just search for the 2017 Security Onion conference for the presentation.Critical topics in deploying SIEM based on experience deploying five different technical platforms for nineteen different organizations in education, nonprofit, and commercial enterprises from 160 to 30,000 personnel.Understanding why SIEM deployments fail

with actionable compensators. Real life experiences getting data into SIEM platforms and the considerations for the many different ways to provide data. Issues relating to time, time management, and time zones.

Get to grips with cyber threat intelligence and data-driven threat hunting while exploring expert tips and techniques Key Features Set up an environment to centralize all data in an Elasticsearch, Logstash, and Kibana (ELK) server that enables threat hunting Carry out atomic hunts to start the threat hunting process and understand the environment Perform advanced hunting using MITRE ATT&CK Evals emulations and Mordor datasets Book Description Threat hunting (TH) provides cybersecurity analysts and enterprises with the opportunity to proactively defend themselves by getting ahead of threats before they can cause major damage to their business. This book is not only an introduction for those who don't know much about the cyber threat intelligence (CTI) and TH world, but also a guide for those with more advanced knowledge of other cybersecurity fields who are looking to implement a TH program from scratch. You will start by exploring what threat intelligence is and how it can be used to detect and prevent cyber threats. As you progress, you'll learn how to collect data, along with understanding it by developing data models. The book will also show you how to set up an environment for TH using open source tools. Later, you will focus on how to plan a hunt with practical examples, before going on to explore the MITRE ATT&CK framework. By the end of this book, you'll have

the skills you need to be able to carry out effective hunts in your own environment. What you will learn Understand what CTI is, its key concepts, and how it is useful for preventing threats and protecting your organization Explore the different stages of the TH process Model the data collected and understand how to document the findings Simulate threat actor activity in a lab environment Use the information collected to detect breaches and validate the results of your queries Use documentation and strategies to communicate processes to senior management and the wider business Who this book is for If you are looking to start out in the cyber intelligence and threat hunting domains and want to know more about how to implement a threat hunting division with open-source tools, then this cyber threat intelligence book is for you.

CCNA Cybersecurity Operations Companion Guide is the official supplemental textbook for the Cisco Networking Academy CCNA Cybersecurity Operations course. The course emphasizes real-world practical application, while providing opportunities for you to gain the skills needed to successfully handle the tasks, duties, and responsibilities of an associate-level security analyst working in a security operations center (SOC). The Companion Guide is designed as a portable desk reference to use anytime, anywhere to reinforce the material from the course and organize your time. The book's features help you focus on important concepts to succeed in this course: · Chapter Objectives—Review core concepts by

answering the focus questions listed at the beginning of each chapter. · Key Terms—Refer to the lists of networking vocabulary introduced and highlighted in context in each chapter. · Glossary—Consult the comprehensive Glossary with more than 360 terms. · Summary of Activities and Labs—Maximize your study time with this complete list of all associated practice exercises at the end of each chapter. · Check Your Understanding—Evaluate your readiness with the end-of-chapter questions that match the style of questions you see in the online course quizzes. The answer key explains each answer. How To—Look for this icon to study the steps you need to learn to perform certain tasks. Interactive Activities—Reinforce your understanding of topics with dozens of exercises from the online course identified throughout the book with this icon. Packet Tracer Activities—Explore and visualize networking concepts using Packet Tracer. There are exercises interspersed throughout the chapters and provided in the accompanying Lab Manual book. Videos—Watch the videos embedded within the online course. Hands-on Labs—Develop critical thinking and complex problem-solving skills by completing the labs and activities included in the course and published in the separate Lab Manual.

Essays Dedicated to Sushil Jajodia on the Occasion of His 70th Birthday

Secure Operations Technology

Security Operations

Security Operations Center - SIEM Use Cases and Cyber

Threat Intelligence
(ISC)2 CCSP Certified Cloud Security Professional Official Practice Tests