The Security Development Lifecycle Sdl A Process For Developing Demonstrably More Secure Software Developer Best Practices | a20386c8e24f51724a5b2e5b1d6b9262

Cyber Secure Development LifecycleLSC (GLOBE UNIVERSITY) SD256: VS ePub for Mobile Application SecuritySoftware SecurityFundamentals of Secure System ModellingSecure Software DevelopmentWeb Application Security, A Beginner's GuideAgile Software RequirementsThe Security Development LifecycleInformation Security Education Across the CurriculumAgile Application SecurityApplied Software MeasurementComputer and Cyber Security19 Deadly Sins of Software SecurityExam Ref Az-500 Microsoft Azure Security TechnologiesAgile Processes in Software Engineering and Extreme ProgrammingWriting Secure CodeThreat ModelingWeb Application SecuritySecurity Requirements EngineeringThe Privacy Engineer's ManifestoPenetration Testing FundamentalsSecuring SystemsCritical CodeSecure and Resilient Software DevelopmentDeveloping Cybersecurity Programs and PoliciesSecure Coding in C and C++Threat ModelingThe Security Development LifecycleSecurity Strategy24 Deadly Sins of Software Security: Programming Flaws and How to Fix ThemAjax SecurityCore Software SecuritySecurity MetricsExploring Security in Software Architecture and DesignFederal Cloud ComputingSecrets of a Cyber Security ArchitectHash CrackSystems Analysis and DesignMicrosoft Azure SecurityThe Art of Software Security Testing

Cyber Secure Development Lifecycle

This book constitutes the refereed proceedings of the 9th IFIP WG 11.8 World Conference on Security Education, WISE 9, held in Hamburg, Germany, in May 2015. The 11 revised papers presented together with 2 invited papers were carefully reviewed and selected from 20 submissions. They are organized in topical sections on innovative methods, software security education, tools and applications for teaching, and syllabus design.

LSC (GLOBE UNIVERSITY) SD256: VS ePub for Mobile Application Security

Secure today's mobile devices and applications Implement a systematic approach to security in your mobile application development with help from this practical guide. Featuring case studies, code examples, and best practices, Mobile Application Security details how to protect against vulnerabilities in the latest

smartphone and PDA platforms. Maximize isolation, lockdown internal and removable storage, work with sandboxing and signing, and encrypt sensitive user information. Safeguards against viruses, worms, malware, and buffer overflow exploits are also covered in this comprehensive resource. Design highly isolated, secure, and authenticated mobile applications Use the Google Android emulator, debugger, and third-party security tools Configure Apple iPhone APIs to prevent overflow and SQL injection attacks Employ private and public key cryptography on Windows Mobile devices Enforce fine-grained security policies using the BlackBerry Enterprise Server Plug holes in Java Mobile Edition, SymbianOS, and WebOS applications Test for XSS, CSRF, HTTP redirects, and phishing attacks on WAP/Mobile HTML applications Identify and eliminate threats from Bluetooth, SMS, and GPS services Himanshu Dwivedi is a co-founder of iSEC Partners (www.isecpartners.com), an information security firm specializing in application security. Chris Clark is a principal security consultant with iSEC Partners. David Thiel is a principal security consultant with iSEC Partners.

Software Security

This book is open access under a CC BY license. The volume constitutes the proceedings of the 18th International Conference on Agile Software Development, XP 2017, held in Cologne, Germany, in May 2017. The 14 full and 6 short papers presented in this volume were carefully reviewed and selected from 46 submissions. They were organized in topical sections named: improving agile processes; agile in organization; and safety critical software. In addition, the volume contains 3 doctoral symposium papers (from 4 papers submitted).

Fundamentals of Secure System Modelling

Direct from Microsoft, this Exam Ref is the official study guide for the new Microsoft AZ-500 Microsoft Azure Security Technologies certification exam. Exam Ref AZ-500 Microsoft Azure Security Technologies offers professional-level preparation that helps candidates maximize their exam performance and sharpen their skills on the job. It focuses on specific areas of expertise modern IT professionals need to demonstrate real-world mastery of Azure security. Coverage includes: Managing identity and access Implementing platform protection Managing security operations Securing data and applications Microsoft Exam Ref publications stand apart from third-party study guides because they: Provide guidance from Microsoft, the creator of Microsoft certification exams Target IT 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's 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 Explore big picture thinking around the planning and design aspects of

the IT pro's job role For more information on Exam AZ-500 and the Microsoft Certified: Azure Security Engineer Associate credential, visit https: //docs.microsoft.com/en-us/learn/certifications/azure-security-engineer.

Secure Software Development

Security Smarts for the Self-Guided IT Professional "Get to know the hackers—or plan on getting hacked. Sullivan and Liu have created a savvy, essentials-based approach to web app security packed with immediately applicable tools for any information security practitioner sharpening his or her tools or just starting out." —Ryan McGeehan, Security Manager, Facebook, Inc. Secure web applications from today's most devious hackers. Web Application Security: A Beginner's Guide helps you stock your security toolkit, prevent common hacks, and defend quickly against malicious attacks. This practical resource includes chapters on authentication, authorization, and session management, along with browser, database, and file security--all supported by true stories from industry. You'll also get best practices for vulnerability detection and secure development, as well as a chapter that covers essential security fundamentals. This book's templates, checklists, and examples are designed to help you get started right away. Web Application Security: A Beginner's Guide features: Lingo--Common security terms defined so that you're in the know on the job IMHO--Frank and relevant opinions based on the authors' years of industry experience Budget Note--Tips for getting security technologies and processes into your organization's budget In Actual Practice--Exceptions to the rules of security explained in real-world contexts Your Plan--Customizable checklists you can use on the job now Into Action--Tips on how, why, and when to apply new skills and techniques at work

Web Application Security, A Beginner's Guide

State-of-the-Art Software Security Testing: Expert, Up to Date, and Comprehensive The Art of Software Security Testing delivers in-depth, up-to-date, battle-tested techniques for anticipating and identifying software security problems before the "bad guys" do. Drawing on decades of experience in application and penetration testing, this book's authors can help you transform your approach from mere "verification" to proactive "attack." The authors begin by systematically reviewing the design and coding vulnerabilities that can arise in software, and offering realistic guidance in avoiding them. Next, they show you ways to customize software debugging tools to test the unique aspects of any program and then analyze the results to identify exploitable vulnerabilities. Coverage includes Tips on how to think the way software attackers think to strengthen your defense strategy Cost-effectively integrating security testing into your development lifecycle Using threat modeling to prioritize testing based on your top areas of risk Building testing labs for performing white-, grey-, and black-box software testing Choosing and using the right tools for each testing project Executing today's leading

attacks, from fault injection to buffer overflows Determining which flaws are most likely to be exploited by real-world attackers

Agile Software Requirements

Cyber-attacks continue to rise as more individuals rely on storing personal information on networks. Even though these networks are continuously checked and secured, cybercriminals find new strategies to break through these protections. Thus, advanced security systems, rather than simple security patches, need to be designed and developed. Exploring Security in Software Architecture and Design is an essential reference source that discusses the development of security-aware software systems that are built into every phase of the software architecture. Featuring research on topics such as migration techniques, service-based software, and building security, this book is ideally designed for computer and software engineers, ICT specialists, researchers, academicians, and field experts.

The Security Development Lifecycle

Describes how to put software security into practice, covering such topics as risk analysis, coding policies, Agile Methods, cryptographic standards, and threat tree patterns.

Information Security Education Across the Curriculum

The perfect introduction to pen testing for all IT professionals and students · Clearly explains key concepts, terminology, challenges, tools, and skills · Covers the latest penetration testing standards from NSA, PCI, and NIST Welcome to today's most useful and practical introduction to penetration testing. Chuck Easttom brings together up-to-the-minute coverage of all the concepts, terminology, challenges, and skills you'll need to be effective. Drawing on decades of experience in cybersecurity and related IT fields, Easttom integrates theory and practice, covering the entire penetration testing life cycle from planning to reporting. You'll gain practical experience through a start-to-finish sample project relying on free open source tools. Throughout, quizzes, projects, and review sections deepen your understanding and help you apply what you've learned. Including essential pen testing standards from NSA, PCI, and NIST, Penetration Testing Fundamentals will help you protect your assets–and expand your career options. LEARN HOW TO · Understand what pen testing is and how it's used · Meet modern standards for comprehensive and effective testing · Review cryptography essentials every pen tester must know · Perform reconnaissance with Nmap, Google searches, and ShodanHq · Use malware as part of your pen testing toolkit · Test for vulnerabilities in Windows shares, scripts, WMI, and the Registry · Pen test websites and web communication · Recognize

SQL injection and cross-site scripting attacks · Scan for vulnerabilities with OWASP ZAP, Vega, Nessus, and MBSA · Identify Linux vulnerabilities and password cracks · Use Kali Linux for advanced pen testing · Apply general hacking technique ssuch as fake Wi-Fi hotspots and social engineering · Systematically test your environment with Metasploit · Write or customize sophisticated Metasploit exploits

Agile Application Security

All the Knowledge You Need to Build Cybersecurity Programs and Policies That Work Clearly presents best practices, governance frameworks, and key standards Includes focused coverage of healthcare, finance, and PCI DSS compliance An essential and invaluable guide for leaders, managers, and technical professionals Today, cyberattacks can place entire organizations at risk. Cybersecurity can no longer be delegated to specialists: success requires everyone to work together, from leaders on down. Developing Cybersecurity Programs and Policies offers start-to-finish guidance for establishing effective cybersecurity in any organization. Drawing on more than 20 years of real-world experience, Omar Santos presents realistic best practices for defining policy and governance, ensuring compliance, and collaborating to harden the entire organization. First, Santos shows how to develop workable cybersecurity policies and an effective framework for governing them. Next, he addresses risk management, asset management, and data loss prevention, showing how to align functions from HR to physical security. You'll discover best practices for securing communications, operations, and access; acquiring, developing, and maintaining technology; and responding to incidents. Santos concludes with detailed coverage of compliance in finance and healthcare, the crucial Payment Card Industry Data Security Standard (PCI DSS) standard, and the NIST Cybersecurity Framework. Whatever your current responsibilities, this guide will help you plan, manage, and lead cybersecurity–and safeguard all the assets that matter. Learn How To · Establish cybersecurity policies and governance that serve your organization's needs · Integrate cybersecurity program components into a coherent framework for action · Assess, prioritize, and manage security risk throughout the organization · Manage assets and prevent data loss · Work with HR to address human factors in cybersecurity · Harden your facilities and physical environment · Design effective policies for securing communications, operations, and access · Strengthen security throughout the information systems lifecycle · Plan for quick, effective incident response and ensure business continuity · Comply with rigorous regulations in finance and healthcare · Plan for PCI compliance to safely process payments · Explore and apply the guidance provided by the NIST Cybersecurity Framework

Applied Software Measurement

The Hash Crack: Password Cracking Manual v3 is an expanded reference guide

for password recovery (cracking) methods, tools, and analysis techniques. A compilation of basic and advanced techniques to assist penetration testers and network security professionals evaluate their organization's posture. The Hash Crack manual contains syntax and examples for the most popular cracking and analysis tools and will save you hours of research looking up tool usage. It also includes basic cracking knowledge and methodologies every security professional should know when dealing with password attack capabilities. Hash Crack contains all the tables, commands, online resources, and more to complete your cracking security kit. This version expands on techniques to extract hashes from a myriad of operating systems, devices, data, files, and images. Lastly, it contains updated tool usage and syntax for the most popular cracking tools.

Computer and Cyber Security

The only security book to be chosen as a Dr. Dobbs Jolt Award Finalist since Bruce Schneier's Secrets and Lies and Applied Cryptography! Adam Shostack is responsible for security development lifecycle threat modeling at Microsoft and is one of a handful of threat modeling experts in the world. Now, he is sharing his considerable expertise into this unique book. With pages of specific actionable advice, he details how to build better security into the design of systems, software, or services from the outset. You'll explore various threat modeling approaches, find out how to test your designs against threats, and learn effective ways to address threats that have been validated at Microsoft and other top companies. Systems security managers, you'll find tools and a framework for structured thinking about what can go wrong. Software developers, you'll appreciate the jargon-free and accessible introduction to this essential skill. Security professionals, you'll learn to discern changing threats and discover the easiest ways to adopt a structured approach to threat modeling. Provides a unique how-to for security and software developers who need to design secure products and systems and test their designs Explains how to threat model and explores various threat modeling approaches, such as asset-centric, attacker-centric and software-centric Provides effective approaches and techniques that have been proven at Microsoft and elsewhere Offers actionable how-to advice not tied to any specific software, operating system, or programming language Authored by a Microsoft professional who is one of the most prominent threat modeling experts in the world As more software is delivered on the Internet or operates on Internet-connected devices, the design of secure software is absolutely critical. Make sure you're ready with Threat Modeling: Designing for Security.

19 Deadly Sins of Software Security

Discover a practical, streamlined approach to information systems development that focuses on the latest developments with Tilley's SYSTEMS ANALYSIS AND DESIGN, 12E and MindTap digital resources. Real examples clearly demonstrate

both traditional and emerging approaches to systems analysis and design, including object-oriented and agile methods. You also study cloud computing and mobile applications as this edition presents an easy-to-follow approach to systems analysis and design. Meaningful projects, insightful assignments and both online and printed exercises emphasize the critical thinking and IT skills that are most important in today's dynamic, business-related environment. New MindTap ConceptClip videos and a new online continuing case further demonstrate concepts for success in today's competitive and rapidly changing business world.

Exam Ref Az-500 Microsoft Azure Security Technologies

Delve into the threat modeling methodology used by Microsoft's] security experts to identify security risks, verify an application's security architecture, and develop countermeasures in the design, coding, and testing phases. (Computer Books)

Agile Processes in Software Engineering and Extreme Programming

Writing Secure Code

Critical Code contemplates Department of Defense (DoD) needs and priorities for software research and suggests a research agenda and related actions. Building on two prior books-Summary of a Workshop on Software Intensive Systems and Uncertainty at Scale and Preliminary Observations on DoD Software Research Needs and Priorities-the present volume assesses the nature of the national investment in software research and, in particular, considers ways to revitalize the knowledge base needed to design, produce, and employ software-intensive systems for tomorrow's defense needs. Critical Code discusses four sets of questions: To what extent is software capability significant for the DoD? Is it becoming more or less significant and strategic in systems development? Will the advances in software producibility needed by the DoD emerge unaided from industry at a pace sufficient to meet evolving defense requirements? What are the opportunities for the DoD to make more effective use of emerging technology to improve software capability and software producibility? In which technology areas should the DoD invest in research to advance defense software capability and producibility?

Threat Modeling

This book provides a coherent overview of the most important modelling-related security techniques available today, and demonstrates how to combine them. Further, it describes an integrated set of systematic practices that can be used to achieve increased security for software from the outset, and combines practical

ways of working with practical ways of distilling, managing, and making security knowledge operational. The book addresses three main topics: (1) security requirements engineering, including security risk management, major activities, asset identification, security risk analysis and defining security requirements; (2) secure software system modelling, including modelling of context and protected assets, security risks, and decisions regarding security risk treatment using various modelling languages; and (3) secure system development, including effective approaches, pattern-driven development, and model-driven security. The primary target audience of this book is graduate students studying cyber security, software engineering and system security engineering. The book will also benefit practitioners interested in learning about the need to consider the decisions behind secure software systems. Overall it offers the ideal basis for educating future generations of security experts.

Web Application Security

"We need better approaches to understanding and managing software requirements, and Dean provides them in this book. He draws ideas from three very useful intellectual pools: classical management practices, Agile methods, and lean product development. By combining the strengths of these three approaches, he has produced something that works better than any one in isolation." –From the Foreword by Don Reinertsen, President of Reinertsen & Associates; author of Managing the Design Factory; and leading expert on rapid product development Effective requirements discovery and analysis is a critical best practice for serious application development. Until now, however, requirements and Agile methods have rarely coexisted peacefully. For many enterprises considering Agile approaches, the absence of effective and scalable Agile requirements processes has been a showstopper for Agile adoption. In Agile Software Requirements, Dean Leffingwell shows exactly how to create effective requirements in Agile environments. Part I presents the "big picture" of Agile requirements in the enterprise, and describes an overall process model for Agile requirements at the project team, program, and portfolio levels Part II describes a simple and lightweight, yet comprehensive model that Agile project teams can use to manage requirements Part III shows how to develop Agile requirements for complex systems that require the cooperation of multiple teams Part IV guides enterprises in developing Agile requirements for ever-larger "systems of systems," application suites, and product portfolios This book will help you leverage the benefits of Agile without sacrificing the value of effective requirements discovery and analysis. You'll find proven solutions you can apply right now–whether you're a software developer or tester, executive, project/program manager, architect, or team leader.

Security Requirements Engineering

A novel, model-driven approach to security requirements engineering that focuses

on socio-technical systems rather than merely technical systems.

The Privacy Engineer's Manifesto

While many resources for network and IT security are available, detailed knowledge regarding modern web application security has been lacking—until now. This practical guide provides both offensive and defensive security concepts that software engineers can easily learn and apply. Andrew Hoffman, a senior security engineer at Salesforce, introduces three pillars of web application security: recon, offense, and defense. You'll learn methods for effectively researching and analyzing modern web applications—including those you don't have direct access to. You'll also learn how to break into web applications using the latest hacking techniques. Finally, you'll learn how to develop mitigations for use in your own web applications to protect against hackers. Explore common vulnerabilities plaguing today's web applications Learn essential hacking techniques attackers use to exploit applications Map and document web applications for which you don't have direct access Develop and deploy customized exploits that can bypass common defenses Develop and deploy mitigations to protect your applications against hackers Integrate secure coding best practices into your development lifecycle Get practical tips to help you improve the overall security of your web applications

Penetration Testing Fundamentals

Agile continues to be the most adopted software development methodology among organizations worldwide, but it generally hasn't integrated well with traditional security management techniques. And most security professionals aren't up to speed in their understanding and experience of agile development. To help bridge the divide between these two worlds, this practical guide introduces several security tools and techniques adapted specifically to integrate with agile development. Written by security experts and agile veterans, this book begins by introducing security principles to agile practitioners, and agile principles to security practitioners. The authors also reveal problems they encountered in their own experiences with agile security, and how they worked to solve them. You'll learn how to: Add security practices to each stage of your existing development lifecycle Integrate security with planning, requirements, design, and at the code level Include security testing as part of your team's effort to deliver working software in each release Implement regulatory compliance in an agile or DevOps environment Build an effective security program through a culture of empathy, openness, transparency, and collaboration

Securing Systems

Covers topics such as the importance of secure systems, threat modeling,

canonical representation issues, solving database input, denial-of-service attacks, and security code reviews and checklists.

Critical Code

Internet attack on computer systems is pervasive. It can take from less than a minute to as much as eight hours for an unprotected machine connected to the Internet to be completely compromised. It is the information security architect's job to prevent attacks by securing computer systems. This book describes both the process and the practice of as

Secure and Resilient Software Development

Describes how to put software security into practice, covering such topics as risk management frameworks, architectural risk analysis, security testing, and penetration testing.

Developing Cybersecurity Programs and Policies

Effectively forecast, manage, and control software across the entire project lifecycle Accurately size, estimate, and administer software projects with real-world guidance from an industry expert. Fully updated to cover the latest tools and techniques, Applied Software Measurement, Third Edition details how to deploy a cost-effective and pragmatic analysis strategy. You will learn how to use function points and baselines, implement benchmarks and tracking systems, and perform efficiency tests. Full coverage of the latest regulations, metrics, and standards is included. Measure performance at the requirements, coding, testing, and installation phases Set function points for efficiency, cost, market share, and customer satisfaction Analyze quality and productivity using assessments, benchmarks, and baselines Design and manage project cost, defect, and quality tracking systems Use object-oriented, reusable component, Agile, CMM, and XP methods Assess defect removal efficiency using unit tests and multistage test suites

Secure Coding in C and C++

With Expert Insights, This Introduction To The Security Development Lifecycle (Sdl) Provides You With A History Of The Methodology And Guides You Through Each Stage Of The Proven Process From Design To Release That Helps Minimize Security Defects. The So

Threat Modeling

Any organization with valuable data has been or will be attacked, probably

successfully, at some point and with some damage. And, don't all digitally connected organizations have at least some data that can be considered "valuable"? Cyber security is a big, messy, multivariate, multidimensional arena. A reasonable "defense-in-depth" requires many technologies; smart, highly skilled people; and deep and broad analysis, all of which must come together into some sort of functioning whole, which is often termed a security architecture. Secrets of a Cyber Security Architect is about security architecture in practice. Expert security architects have dozens of tricks of their trade in their kips. In this book, author Brook S. E. Schoenfield shares his tips and tricks, as well as myriad tried and true bits of wisdom that his colleagues have shared with him. Creating and implementing a cyber security architecture can be hard, complex, and certainly frustrating work. This book is written to ease this pain and show how to express security requirements in ways that make the requirements more palatable and, thus, get them accomplished. It also explains how to surmount individual, team, and organizational resistance. The book covers: What security architecture is and the areas of expertise a security architect needs in practice The relationship between attack methods and the art of building cyber defenses Why to use attacks and how to derive a set of mitigations and defenses Approaches, tricks, and manipulations proven successful for practicing security architecture Starting, maturing, and running effective security architecture programs Secrets of the trade for the practicing security architecture Tricks to surmount typical problems Filled with practical insight, Secrets of a Cyber Security Architect is the desk reference every security architect needs to thwart the constant threats and dangers confronting every digitally connected organization.

The Security Development Lifecycle

This book is intended for Azure administrators who want to understand the application of security principles in distributed environments and how to use Azure to its full capability to reduce the risks of security breaches. Only basic knowledge of the security processes and services of Microsoft Azure is required.

Security Strategy

"The security of information systems has not improved at a rate consistent with the growth and sophistication of the attacks being made against them. To address this problem, we must improve the underlying strategies and techniques used to create our systems. Specifically, we must build security in from the start, rather than append it as an afterthought. That's the point of Secure Coding in C and C++. In careful detail, this book shows software developers how to build high-quality systems that are less vulnerable to costly and even catastrophic attack. It's a book that every developer should read before the start of any serious project." --Frank Abagnale, author, lecturer, and leading consultant on fraud prevention and secure documents Learn the Root Causes of Software Vulnerabilities and How to Avoid

Them Commonly exploited software vulnerabilities are usually caused by avoidable software defects. Having analyzed nearly 18,000 vulnerability reports over the past ten years, the CERT/Coordination Center (CERT/CC) has determined that a relatively small number of root causes account for most of them. This book identifies and explains these causes and shows the steps that can be taken to prevent exploitation. Moreover, this book encourages programmers to adopt security best practices and develop a security mindset that can help protect software from tomorrow's attacks, not just today's. Drawing on the CERT/CC's reports and conclusions, Robert Seacord systematically identifies the program errors most likely to lead to security breaches, shows how they can be exploited, reviews the potential consequences, and presents secure alternatives. Coverage includes technical detail on how to Improve the overall security of any C/C++ application Thwart buffer overflows and stack-smashing attacks that exploit insecure string manipulation logic Avoid vulnerabilities and security flaws resulting from the incorrect use of dynamic memory management functions Eliminate integer-related problems: integer overflows, sign errors, and truncation errors Correctly use formatted output functions without introducing format-string vulnerabilities Avoid I/O vulnerabilities, including race conditions Secure Coding in C and C++ presents hundreds of examples of secure code, insecure code, and exploits, implemented for Windows and Linux. If you're responsible for creating secure C or C++ software--or for keeping it safe--no other book offers you this much detailed, expert assistance.

24 Deadly Sins of Software Security: Programming Flaws and How to Fix Them

Addressing the diminished understanding of the value of security on the executive side and a lack of good business processes on the security side, Security Strategy: From Requirements to Reality explains how to select, develop, and deploy the security strategy best suited to your organization. It clarifies the purpose and place of strategy in an information security program and arms security managers and practitioners with a set of security tactics to support the implementation of strategic planning initiatives, goals, and objectives. The book focuses on security strategy planning and execution to provide a clear and comprehensive look at the structures and tools needed to build a security program that enables and enhances business processes. Divided into two parts, the first part considers business strategy and the second part details specific tactics. The information in both sections will help security practitioners and mangers develop a viable synergy that will allow security to take its place as a valued partner and contributor to the success and profitability of the enterprise. Confusing strategies and tactics all too often keep organizations from properly implementing an effective information protection strategy. This versatile reference presents information in a way that makes it accessible and applicable to organizations of all sizes. Complete with checklists of the physical security requirements that

organizations should consider when evaluating or designing facilities, it provides the tools and understanding to enable your company to achieve the operational efficiencies, cost reductions, and brand enhancements that are possible when an effective security strategy is put into action.

Ajax Security

The Hands-On, Practical Guide to Preventing Ajax-Related Security Vulnerabilities More and more Web sites are being rewritten as Ajax applications; even traditional desktop software is rapidly moving to the Web via Ajax. But, all too often, this transition is being made with reckless disregard for security. If Ajax applications aren't designed and coded properly, they can be susceptible to far more dangerous security vulnerabilities than conventional Web or desktop software. Ajax developers desperately need guidance on securing their applications: knowledge that's been virtually impossible to find, until now. Ajax Security systematically debunks today's most dangerous myths about Ajax security, illustrating key points with detailed case studies of actual exploited Ajax vulnerabilities, ranging from MySpace's Samy worm to MacWorld's conference code validator. Even more important, it delivers specific, up-to-the-minute recommendations for securing Ajax applications in each major Web programming language and environment, including .NET, Java, PHP, and even Ruby on Rails. You'll learn how to: · Mitigate unique risks associated with Ajax, including overly granular Web services, application control flow tampering, and manipulation of program logic · Write new Ajax code more safely—and identify and fix flaws in existing code · Prevent emerging Ajax-specific attacks, including JavaScript hijacking and persistent storage theft · Avoid attacks based on XSS and SQL Injection—including a dangerous SQL Injection variant that can extract an entire backend database with just two requests · Leverage security built into Ajax frameworks like Prototype, Dojo, and ASP.NET AJAX Extensions—and recognize what you still must implement on your own · Create more secure "mashup" applications Ajax Security will be an indispensable resource for developers coding or maintaining Ajax applications; architects and development managers planning or designing new Ajax software, and all software security professionals, from QA specialists to penetration testers.

Core Software Security

Leads readers through the tasks and activities that successful computer programmers navigate on a daily basis.

Security Metrics

Although many software books highlight open problems in secure software development, few provide easily actionable, ground-level solutions. Breaking the

mold, Secure and Resilient Software Development teaches you how to apply best practices and standards for consistent and secure software development. It details specific quality software developmen

Exploring Security in Software Architecture and Design

A guide to computer software security covers such topics as format string problems, command injection, cross-site scripting, SSL, information leakage, and key exchange.

Federal Cloud Computing

" an engaging book that will empower readers in both large and small software development and engineering organizations to build security into their products. Readers are armed with firm solutions for the fight against cyber threats." —Dr. Dena Haritos Tsamitis. Carnegie Mellon University " a must read for security specialists, software developers and software engineers. should be part of every security professional's library." —Dr. Larry Ponemon, Ponemon Institute " the definitive how-to guide for software security professionals. Dr. Ransome, Anmol Misra, and Brook Schoenfield deftly outline the procedures and policies needed to integrate real security into the software development process. A must-have for anyone on the front lines of the Cyber War " —Cedric Leighton, Colonel, USAF (Ret.), Cedric Leighton Associates "Dr. Ransome, Anmol Misra, and Brook Schoenfield give you a magic formula in this book - the methodology and process to build security into the entire software development life cycle so that the software is secured at the source! " —Eric S. Yuan, Zoom Video Communications There is much publicity regarding network security, but the real cyber Achilles' heel is insecure software. Millions of software vulnerabilities create a cyber house of cards, in which we conduct our digital lives. In response, security people build ever more elaborate cyber fortresses to protect this vulnerable software. Despite their efforts, cyber fortifications consistently fail to protect our digital treasures. Why? The security industry has failed to engage fully with the creative, innovative people who write software. Core Software Security expounds developer-centric software security, a holistic process to engage creativity for security. As long as software is developed by humans, it requires the human element to fix it. Developer-centric security is not only feasible but also cost effective and operationally relevant. The methodology builds security into software development, which lies at the heart of our cyber infrastructure. Whatever development method is employed, software must be secured at the source. Book Highlights: Supplies a practitioner's view of the SDL Considers Agile as a security enabler Covers the privacy elements in an SDL Outlines a holistic business-savvy SDL framework that includes people, process, and technology Highlights the key success factors, deliverables, and metrics for each phase of the SDL Examines cost efficiencies, optimized performance, and organizational structure of a developer-centric software security

program and PSIRT Includes a chapter by noted security architect Brook Schoenfield who shares his insights and experiences in applying the book's SDL framework View the authors' website at http://www.androidinsecurity.com/

Secrets of a Cyber Security Architect

This is a monumental reference for the theory and practice of computer security. Comprehensive in scope, this text covers applied and practical elements, theory, and the reasons for the design of applications and security techniques. It covers both the management and the engineering issues of computer security. It provides excellent examples of ideas and mechanisms that demonstrate how disparate techniques and principles are combined in widely-used systems. This book is acclaimed for its scope, clear and lucid writing, and its combination of formal and theoretical aspects with real systems, technologies, techniques, and policies.

Hash Crack

Federal Cloud Computing: The Definitive Guide for Cloud Service Providers offers an in-depth look at topics surrounding federal cloud computing within the federal government, including the Federal Cloud Computing Strategy, Cloud Computing Standards, Security and Privacy, and Security Automation. You will learn the basics of the NIST risk management framework (RMF) with a specific focus on cloud computing environments, all aspects of the Federal Risk and Authorization Management Program (FedRAMP) process, and steps for cost-effectively implementing the Assessment and Authorization (A&A) process, as well as strategies for implementing Continuous Monitoring, enabling the Cloud Service Provider to address the FedRAMP requirement on an ongoing basis. Provides a common understanding of the federal requirements as they apply to cloud computing Provides a targeted and cost-effective approach for applying the National Institute of Standards and Technology (NIST) Risk Management Framework (RMF) Provides both technical and non-technical perspectives of the Federal Assessment and Authorization (A&A) process that speaks across the organization

Systems Analysis and Design

"It's our thesis that privacy will be an integral part of the next wave in the technology revolution and that innovators who are emphasizing privacy as an integral part of the product life cycle are on the right track." --The authors of The Privacy Engineer's Manifesto The Privacy Engineer's Manifesto: Getting from Policy to Code to QA to Value is the first book of its kind, offering industry-proven solutions that go beyond mere theory and adding lucid perspectives on the challenges and opportunities raised with the emerging "personal" information economy. The authors, a uniquely skilled team of longtime industry experts, detail

how you can build privacy into products, processes, applications, and systems. The book offers insight on translating the guiding light of OECD Privacy Guidelines, the Fair Information Practice Principles (FIPPs), Generally Accepted Privacy Principles (GAPP) and Privacy by Design (PbD) into concrete concepts that organizations, software/hardware engineers, and system administrators/owners can understand and apply throughout the product or process life cycle—regardless of development methodology—from inception to retirement, including data deletion and destruction. In addition to providing practical methods to applying privacy engineering methodologies, the authors detail how to prepare and organize an enterprise or organization to support and manage products, process, systems, and applications that require personal information. The authors also address how to think about and assign value to the personal information assets being protected. Finally, the team of experts offers thoughts about the information revolution that has only just begun, and how we can live in a world of sensors and trillions of data points without losing our ethics or value(s)and even have a little fun. The Privacy Engineer's Manifesto is designed to serve multiple stakeholders: Anyone who is involved in designing, developing, deploying and reviewing products, processes, applications, and systems that process personal information, including software/hardware engineers, technical program and product managers, support and sales engineers, system integrators, IT professionals, lawyers, and information privacy and security professionals. This book is a must-read for all practitioners in the personal information economy. Privacy will be an integral part of the next wave in the technology revolution; innovators who emphasize privacy as an integral part of the product life cycle are on the right track. Foreword by Dr. Eric Bonabeau, PhD, Chairman, Icosystem, Inc. & Dean of Computational Sciences, Minerva Schools at KGI.

Microsoft Azure Security

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

Measure coverage and control, vulnerability management, password quality, patch latency, benchmark scoring, and business-adjusted risk • Quantify the effectiveness of security acquisition, implementation, and other program activities • Organize, aggregate, and analyze your data to bring out key insights • Use visualization to understand and communicate security issues more clearly • Capture valuable data from firewalls and antivirus logs, third-party auditor reports, and other resources • Implement balanced scorecards that present compact, holistic views of organizational security effectiveness

The Art of Software Security Testing

"What makes this book so important is that it reflects the experiences of two of the industry's most experienced hands at getting real-world engineers to understand just what they're being asked for when they're asked to write secure code. The book reflects Michael Howard's and David LeBlanc's experience in the trenches working with developers years after code was long since shipped, informing them of problems." --From the Foreword by Dan Kaminsky, Director of Penetration Testing, IOActive Eradicate the Most Notorious Insecure Designs and Coding Vulnerabilities Fully updated to cover the latest security issues, 24 Deadly Sins of Software Security reveals the most common design and coding errors and explains how to fix each one-or better yet, avoid them from the start. Michael Howard and David LeBlanc, who teach Microsoft employees and the world how to secure code, have partnered again with John Viega, who uncovered the original 19 deadly programming sins. They have completely revised the book to address the most recent vulnerabilities and have added five brand-new sins. This practical guide covers all platforms, languages, and types of applications. Eliminate these security flaws from your code: SQL injection Web server- and client-related vulnerabilities Use of magic URLs, predictable cookies, and hidden form fields Buffer overruns Format string problems Integer overflows C++ catastrophes Insecure exception handling Command injection Failure to handle errors Information leakage Race conditions Poor usability Not updating easily Executing code with too much privilege Failure to protect stored data Insecure mobile code Use of weak password-based systems Weak random numbers Using cryptography incorrectly Failing to protect network traffic Improper use of PKI Trusting network name resolution