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XAT5AE - KARSYN SIENA

The 4th FTRA International Conference on Computer Science and its Applications (CSA-12) will be held in Jeju, Korea on November 22~25, 2012. CSA-12 will be the most comprehensive conference focused on the various aspects of advances in computer science and its applications. CSA-12 will provide an opportunity for academic and industry professionals to discuss the latest issues and progress in the area of CSA. In addition, the conference will publish high quality papers which are closely related to the various theories and practical applications in CSA. Furthermore, we expect that the conference and its publications will be a trigger for further related research and technology improvements in this important subject. CSA-12 is the next event in a series of highly successful International Conference on Computer Science and its Applications, previously held as CSA-11 (3rd Edition: Jeju, December, 2011), CSA-09 (2nd Edition: Jeju, December, 2009), and CSA-08 (1st Edition: Australia, October, 2008).

"This book addresses various aspects of building secure E-Government architectures and services; it presents views of experts from academia, policy and the industry to conclude that secure E-Government web services can be deployed in an application-centric, interoperable way. It addresses the narrow yet promising area of web services and sheds new light on this innovative area of applications"--Provided by publisher.

Over 80 recipes to master IoT security techniques. About This Book Identify vulnerabilities in IoT device architectures and firmware using software and hardware pentesting techniques Understand radio communication analysis with concepts such as sniffing the air and capturing radio signals A recipe based guide that will teach you to pentest new and unique set of IoT devices. Who This Book Is For This book targets IoT developers, IoT enthusiasts, pentesters, and security professionals who are interested in learning about IoT security. Prior knowledge of basic pentesting would be beneficial. What You Will Learn Set up an IoT pentesting lab Explore various threat modeling concepts Exhibit the ability to analyze and exploit firmware vulnerabilities Demonstrate the automation of application binary analysis for iOS and Android using MobSF Set up a Burp Suite and use it for web app testing Identify UART and JTAG pinouts, solder headers, and hardware debugging Get solutions to common wireless protocols Explore the mobile security and firmware best practices Master various advanced IoT exploitation techniques and security automation In Detail IoT is an upcoming trend in the IT industry today; there are a lot of IoT devices on the market, but there is a minimal understanding of how to safeguard them. If you are a security enthusiast or pentester, this book will help you understand how to exploit and secure IoT devices. This book follows a recipe-based approach, giving you practical experience in securing upcoming smart devices. It starts with practical recipes on how to analyze IoT device architectures and identify vulnerabilities. Then, it focuses on enhancing your pentesting skill set, teaching you how to exploit a vulnerable IoT device, along with identifying vulnerabilities in IoT device firmware. Next, this book teaches you how to secure embedded devices and exploit smart devices with hardware techniques. Moving forward, this book reveals advanced hardware pentesting techniques, along with software-defined, radio-based IoT pentesting with Zigbee and Z-Wave. Finally, this book also covers how to use new and unique pentesting techniques for different IoT devices, along with smart devices connected to the cloud. By the end of this book, you will have a fair understanding of how to use different pentesting techniques to exploit and secure various IoT devices. Style and approach This recipe-based book will teach you how to use advanced IoT exploitation and security automation.

This textbook provides a comprehensive, thorough and up-to-date treatment of topics in cyber security, cyber-attacks, ethical hacking, and cyber crimes prevention. It discusses the different third-party attacks and hacking processes which a poses a big issue in terms of data damage or theft. The book then highlights the cyber security protection techniques and overall risk assessments to detect and resolve these issues at the beginning stage to minimize data loss or damage. This book is written in a way that it presents the topics in a simplified holistic and pedagogical manner with end-of chapter exercises and examples to cater to undergraduate students, engineers and scientists who will benefit from this approach.

Continuing a tradition of excellent training on open source tools, Penetration Tester’s Open Source Toolkit, Fourth Edition is a great reference to the open source tools available today and teaches you how to use them by demonstrating them in real-world examples. This book expands upon existing documentation so that a professional can get the most accurate and in-depth test results possible. Real-life scenarios are a major focus so that the reader knows which tool to use and how to use it for a variety of situations. This updated edition covers the latest technologies and attack vectors, including industry specific case studies and complete laboratory setup. Great commercial penetration testing tools can be very expensive and sometimes hard to use or of questionable accuracy. This book helps solve both of these problems. The open source, no-cost penetration testing tools presented work as well or better than commercial tools and can be modified by the user for each situation if

needed. Many tools, even ones that cost thousands of dollars, do not come with any type of instruction on how and in which situations the penetration tester can best use them. Penetration Tester's Open Source Toolkil, Fourth Edition bridges this gap providing the critical information that you need. Details current open source penetration tools Presents core technologies for each type of testing and the best tools for the job New to this edition: expanded wireless pen testing coverage to include Bluetooth, coverage of cloud computing and virtualization, new tools, and the latest updates to tools, operating systems, and techniques Includes detailed laboratory environment setup, new real--world examples, and industry-specific case studies

Rigorously test and improve the security of all your Web software! It’s as certain as death and taxes: hackers will mercilessly attack your Web sites, applications, and services. If you’re vulnerable, you’d better discover these attacks yourself, before the black hats do. Now, there’s a definitive, hands-on guide to security-testing any Web-based software: How to Break Web Software. In this book, two renowned experts address every category of Web software exploit: attacks on clients, servers, state, user inputs, and more. You’ll master powerful attack tools and techniques as you uncover dozens of crucial, widely exploited flaws in Web architecture and coding. The authors reveal where to look for potential threats and attack vectors, how to rigorously test for each of them, and how to mitigate the problems you find. Coverage includes · Client vulnerabilities, including attacks on client-side validation · State-based attacks: hidden fields, CGI parameters, cookie poisoning, URL jumping, and session hijacking · Attacks on user-supplied inputs: cross-site scripting, SQL injection, and directory traversal · Language- and technology-based attacks: buffer overflows, canonicalization, and NULL string attacks · Server attacks: SQL Injection with stored procedures, command injection, and server fingerprinting · Cryptography, privacy, and attacks on Web services Your Web software is mission--critical–it can’t be compromised. Whether you’re a developer, tester, QA specialist, or IT manager, this book will help you protect that software–systematically.

The demand for large-scale dependable, systems, such as Air Traffic Management, industrial plants and space systems, is attracting efforts of many word-leading European companies and SMEs in the area, and is expected to increase in the near future. The adoption of Off-The-Shelf (OTS) items plays a key role in such a scenario. OTS items allow mastering complexity and reducing costs and time-to--market; however, achieving these goals by ensuring dependability requirements at the same time is challenging. CRITICAL STEP project establishes a strategic collaboration between academic and industrial partners, and proposes a framework to support the development of dependable, OTS-based, critical systems. The book introduces methods and tools adopted by the critical systems industry, and surveys key achievements of the CRITICAL STEP project along four directions: fault injection tools, V&V of critical systems, runtime monitoring and evaluation techniques, and security assessment.

This book constitutes the proceedings of the First International Workshop on future Internet Testing, FITTEST 2013, held in Turkey, Istanbul, in November 2013, in conjunction with the International Conference on Testing Software and Systems (ICTSS). The volume presents a total of 7 contributions; 5 full papers which were selected from 8 submissions, as well as a paper on the Java Unit Test Competition and a summary of the achievements of the FITTEST project.

Discover the most common web vulnerabilities and prevent them from becoming a threat to your site's security Key Features Familiarize yourself with the most common web vulnerabilities Conduct a preliminary assessment of attack surfaces and run exploits in your lab Explore new tools in the Kali Linux ecosystem for web penetration testing Book Description Web applications are a huge point of attack for malicious hackers and a critical area for security professionals and penetration testers to lock down and secure. Kali Linux is a Linux-based penetration testing platform that provides a broad array of testing tools, many of which can be used to execute web penetration testing. Kali Linux Web Penetration Testing Cookbook gives you the skills you need to cover every stage of a penetration test – from gathering information about the system and application, to identifying vulnerabilities through manual testing. You will also cover the use of vulnerability scanners and look at basic and advanced exploitation techniques that may lead to a full system compromise. You will start by setting up a testing laboratory, exploring the latest features of tools included in Kali Linux and performing a wide range of tasks with OWASP ZAP, Burp Suite and other web proxies and security testing tools. As you make your way through the book, you will learn how to use automated scanners to find security flaws in web applications and understand how to bypass basic security controls. In the concluding chapters, you will look at what you have learned in the context of the Open Web Application Security Project (OWASP) and the top 10 web application vulnerabilities you are most likely to encounter, equipping you with the ability to combat them effectively. By the end of this book, you will have acquired the skills you need to identify, exploit, and prevent web application vulnerabilities. What you will learn Set up a secure penetration testing laboratory Use proxies, crawlers, and spiders to investigate an entire website Identify cross-site scripting and client-side vulnerabilities Exploit vulnerabilities that allow the insertion of code into web applications Exploit vulnerabilities that require complex setups Improve testing efficiency using automated vulnerability scanners Learn how to circumvent security controls put in place to prevent attacks Who this book is for Kali Linux Web Penetration Testing Cookbook is for IT professionals, web developers, security enthusiasts, and security professionals who want an accessible reference on how to find, exploit, and prevent security vulnerabilities in web applications. The basics of operating a Linux environment and prior exposure to security technologies and tools are necessary.

Proceedings of the 2012 International Conference on Information Technology and Software Engineering presents selected articles from this major event, which was held in Beijing, December 8-10, 2012. This book presents the latest research trends, methods and experimental results in the fields of information technology and software engineering, covering various state-of-the-art research theories and approaches. The subjects range from intelligent computing to information processing, software engineering, Web, unified modeling language (UML), multimedia, communication technologies, system identification, graphics and visualizing, etc. The proceedings provide a major interdisciplinary forum for researchers and engineers to present the most innovative studies and advances, which can serve as an excellent reference work for researchers and graduate students working on information technology and software engineering. Prof. Wei Lu, Dr. Guoqiang Cai, Prof. Weibin Liu and Dr. Weiwei Xing all work at Beijing Jiaotong University.

It is often assumed that software testing is based on clearly defined requirements and software development standards. However, testing is typically performed against changing, and sometimes inaccurate, requirements. The third edition of a bestseller, Software Testing and Continuous Quality Im-

provement, Third Edition provides a continuous quality framework for the software testing process within traditionally structured and unstructured environments. This framework aids in creating meaningful test cases for systems with evolving requirements. This completely revised reference provides a comprehensive look at software testing as part of the project management process, emphasizing testing and quality goals early on in development. Building on the success of previous editions, the text explains testing in a Service Orientated Architecture (SOA) environment, the building blocks of a Testing Center of Excellence (COE), and how to test in an agile development. Fully updated, the sections on test effort estimation provide greater emphasis on testing metrics. The book also examines all aspects of functional testing and looks at the relation between changing business strategies and changes to applications in development. Includes New Chapters on Process, Application, and Organizational Metrics All IT organizations face software testing issues, but most are unprepared to manage them. Software Testing and Continuous Quality Improvement, Third Edition is enhanced with an up-to-date listing of free software tools and a question-and-answer checklist for choosing the best tools for your organization. It equips you with everything you need to effectively address testing issues in the most beneficial way for your business.

Build your defense against web attacks with Kali Linux, including command injection flaws, crypto implementation layers, and web application security holes Key Features Know how to set up your lab with Kali Linux Discover the core concepts of web penetration testing Get the tools and techniques you need with Kali Linux Book Description Web Penetration Testing with Kali Linux - Third Edition shows you how to set up a lab, helps you understand the nature and mechanics of attacking websites, and explains classical attacks in great depth. This edition is heavily updated for the latest Kali Linux changes and the most recent attacks. Kali Linux shines when it comes to client-side attacks and fuzzing in particular. From the start of the book, you'll be given a thorough grounding in the concepts of hacking and penetration testing, and you'll see the tools used in Kali Linux that relate to web application hacking. You'll gain a deep understanding of classicalSQL, command-injection flaws, and the many ways to exploit these flaws. Web penetration testing also needs a general overview of client-side attacks, which is rounded out by a long discussion of scripting and input validation flaws. There is also an important chapter on cryptographic implementation flaws, where we discuss the most recent problems with cryptographic layers in the networking stack. The importance of these attacks cannot be overstated, and defending against them is relevant to most internet users and, of course, penetration testers. At the end of the book, you'll use an automated technique called fuzzing to identify flaws in a web application. Finally, you'll gain an understanding of web application vulnerabilities and the ways they can be exploited using the tools in Kali Linux. What you will learn Learn how to set up your lab with Kali Linux Understand the core concepts of web penetration testing Get to know the tools and techniques you need to use with Kali Linux Identify the difference between hacking a web application and network hacking Expose vulnerabilities present in web servers and their applications using server-side attacks Understand the different techniques used to identify the flavor of web applications See standard attacks such as exploiting cross-site request forgery and cross-site scripting flaws Get an overview of the art of client-side attacks Explore automated attacks such as fuzzing web applications Who this book is for Since this book sets out to cover a large number of tools and security fields, it can work as an introduction to practical security skills for beginners in security. In addition, web programmers and also system administrators would benefit from this rigorous introduction to web penetration testing. Basic system administration skills are necessary, and the ability to read code is a must.

Web Services are an integral part of next generation Web applications. The development and use of these services is growing at an incredible rate, and so too are the security issues surrounding them. Hacking Web Services is a practical guide for understanding Web services security and assessment methodologies. Written for intermediate-to-advanced security professionals and developers, the book provides an in-depth look at new concepts and tools used for Web services security. Beginning with a brief introduction to Web services technologies, the book discusses Web services assessment methodology, WSDL -- an XML format describing Web services as a set of endpoints operating on SOAP messages containing information -- and the need for secure coding. Various development issues and open source technologies used to secure and harden applications offering Web services are also covered. Throughout the book, detailed case studies, real-life demonstrations, and a variety of tips and techniques are used to teach developers how to write tools for Web services. If you are responsible for securing your company's Web services, this is a must read resource!

How secure is your network? The best way to find out is to attack it. Network Security Assessment provides you with the tricks and tools professional security consultants use to identify and assess risks in Internet-based networks-the same penetration testing model they use to secure government, military, and commercial networks. With this book, you can adopt, refine, and reuse this testing model to design and deploy networks that are hardened and immune from attack.Network Security Assessment demonstrates how a determined attacker scours Internet-based networks in search of vulnerable components, from the network to the application level. This new edition is up-to-date on the latest hacking techniques, but rather than focus on individual issues, it looks at the bigger picture by grouping and analyzing threats at a high-level. By grouping threats in this way, you learn to create defensive strategies against entire attack categories, providing protection now and into the future.Network Security Assessment helps you assess: Web services, including Microsoft IIS, Apache, Tomcat, and subsystems such as OpenSSL, Microsoft FrontPage, and Outlook Web Access (OWA)Web application technologies, including ASP, JSP, PHP, middleware, and backend databases such as MySQL, Oracle, and Microsoft SQL ServerMicrosoft Windows networking components, including RPC, NetBIOS, and CIFS servicesSMTP, POP3, and IMAP email servicesIP services that provide secure inbound network access, including IPsec, Microsoft PPTP, and SSL VPNsUnix RPC services on Linux, Solaris, IRIX, and other platformsVarious types of application-level vulnerabilities that hacker tools and scripts exploitAssessment is the first step any organization should take to start managing information risks correctly. With techniques to identify and assess risks in line with CESG CHECK and NSA IAM government standards, Network Security Assessment gives you a precise method to do just that.

The Laboratory Manual is a valuable tool designed to enhance your lab experience. Lab activities, objectives, materials lists, step-by-step procedures, illustrations, and review questions are commonly found in a Lab Manual. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Discover security posture, vulnerabilities, and blind spots ahead of the threat actor KEY FEATURES ●

Includes illustrations and real-world examples of pentesting web applications, REST APIs, thick clients, mobile applications, and wireless networks. ● Covers numerous techniques such as Fuzzing (FFuF), Dynamic Scanning, Secure Code Review, and bypass testing. ● Practical application of Nmap, Metasploit, SQLmap, OWASP ZAP, Wireshark, and Kali Linux. DESCRIPTION The 'Ethical Hacker's Penetration Testing Guide' is a hands-on guide that will take you from the fundamentals of pen testing to advanced security testing techniques. This book extensively uses popular pen testing tools such as Nmap, Burp Suite, Metasploit, SQLmap, OWASP ZAP, and Kali Linux. A detailed analysis of pentesting strategies for discovering OWASP top 10 vulnerabilities, such as cross-site scripting (XSS), SQL Injection, XXE, file upload vulnerabilities, etc., are explained. It provides a hands-on demonstration of pentest approaches for thick client applications, mobile applications (Android), network services, and wireless networks. Other techniques such as Fuzzing, Dynamic Scanning (DAST), and so on are also demonstrated. Security logging, harmful activity monitoring, and pentesting for sensitive data are also included in the book. The book also covers web security automation with the help of writing effective python scripts. Through a series of live demonstrations and real-world use cases, you will learn how to break applications to expose security flaws, detect the vulnerability, and exploit it appropriately. Throughout the book, you will learn how to identify security risks, as well as a few modern cybersecurity approaches and popular pentesting tools. WHAT YOU WILL LEARN ● Expose the OWASP top ten vulnerabilities, fuzzing, and dynamic scanning. ● Get well versed with various pentesting tools for web, mobile, and wireless pentesting. ● Investigate hidden vulnerabilities to safeguard critical data and application components. ● Implement security logging, application monitoring, and secure coding. ● Learn about various protocols, pentesting tools, and ethical hacking methods. WHO THIS BOOK IS FOR This book is intended for pen testers, ethical hackers, security analysts, cyber professionals, security consultants, and anybody interested in learning about penetration testing, tools, and methodologies. Knowing concepts of penetration testing is preferable but not required. TABLE OF CONTENTS 1. Overview of Web and Related Technologies and Understanding the Application 2. Web Penetration Testing- Through Code Review 3. Web Penetration Testing-Injection Attacks 4. Fuzzing, Dynamic scanning of REST API and Web Application 5. Web Penetration Testing-Unvalidated Redirects/Forwards, SSRF 6. Pentesting for Authentication, Authorization Bypass, and Business Logic Flaws 7. Pentesting for Sensitive Data, Vulnerable Components, Security Monitoring 8. Exploiting File Upload Functionality and XXE Attack 9. Web Penetration Testing: Thick Client 10. Introduction to Network Pentesting 11. Introduction to Wireless Pentesting 12. Penetration Testing-Mobile App 13. Security Automation for Web Pentest 14. Setting up Pentest Lab

This book presents the proceedings of the Thirteenth International Conference on Dependability and Complex Systems (DepCoS-RELCOMEX), which took place in the Brunów Palace in Poland from 2nd to 6th July 2018. The conference has been organized at the Faculty of Electronics, Wrocław University of Science and Technology since 2006, and it continues the tradition of two other events: RELCOMEX (1977–89) and Microcomputer School (1985–95). The selection of papers in these proceedings illustrates the broad variety of topics that are investigated in dependability analyses of today’s complex systems. Dependability came naturally as a contemporary answer to new challenges in the reliability evaluation of these systems. Such systems cannot be considered only as structures (however complex and distributed) built on the basis of technical resources (hardware): their analysis must take into account a unique blend of interacting people (their needs and behaviours), networks (together with mobile properties, cloud-based systems) and a large number of users dispersed geographically and producing an unimaginable number of applications (working online). A growing number of research methods apply the latest advances in artificial intelligence (AI) and computational intelligence (CI). Today’s complex systems are really complex and are applied in numerous different fields of contemporary life.

Master the art of conducting modern pen testing attacks and techniques on your web application before the hacker does! About This Book This book covers the latest technologies such as Advance XSS, XSRF, SQL Injection, Web API testing, XML attack vectors, OAuth 2.0 Security, and more involved in today's web applications Penetrate and secure your web application using various techniques Get this comprehensive reference guide that provides advanced tricks and tools of the trade for seasoned penetration testers Who This Book Is For This book is for security professionals and penetration testers who want to speed up their modern web application penetrating testing. It will also benefit those at an intermediate level and web developers who need to be aware of the latest application hacking techniques. What You Will Learn Get to know the new and less-publicized techniques such PHP Object Injection and XML-based vectors Work with different security tools to automate most of the redundant tasks See different kinds of newly-designed security headers and how they help to provide security Exploit and detect different kinds of XSS vulnerabilities Protect your web application using filtering mechanisms Understand old school and classic web hacking in depth using SQL Injection, XSS, and CSRF Grasp XML-related vulnerabilities and attack vectors such as XXE and DoS techniques Get to know how to test REST APIs to discover security issues in them In Detail Web penetration testing is a growing, fast-moving, and absolutely critical field in information security. This book executes modern web application attacks and utilises cutting-edge hacking techniques with an enhanced knowledge of web application security. We will cover web hacking techniques so you can explore the attack vectors during penetration tests. The book encompasses the latest technologies such as OAuth 2.0, Web API testing methodologies and XML vectors used by hackers. Some lesser discussed attack vectors such as RPO (relative path overwrite), DOM clobbering, PHP Object Injection and etc. has been covered in this book. We'll explain various old school techniques in depth such as XSS, CSRF, SQL Injection through the ever-dependable SQLMap and reconnaissance. Websites nowadays provide APIs to allow integration with third party applications, thereby exposing a lot of attack surface, we cover testing of these APIs using real-life examples. This pragmatic guide will be a great benefit and will help you prepare fully secure applications. Style and approach This master-level guide covers various techniques serially. It is power-packed with real-world examples that focus more on the practical aspects of implementing the techniques rather going into detailed theory.

The authors have here put together the first reference on all aspects of testing and validating service-oriented architectures. With contributions by leading academic and industrial research groups it offers detailed guidelines for the actual validation process. Readers will find a comprehensive survey of state-of-the-art approaches as well as techniques and tools to improve the quality of service-oriented applications. It also includes references and scenarios for future research and development.

This book constitutes the proceedings of the 4th International Conference on Network Security and

Applications held in Chennai, India, in July 2011. The 63 revised full papers presented were carefully reviewed and selected from numerous submissions. The papers address all technical and practical aspects of security and its applications for wired and wireless networks and are organized in topical sections on network security and applications, ad hoc, sensor and ubiquitous computing, as well as peer-to-peer networks and trust management.

The latest Web app attacks and countermeasures from world-renowned practitioners Protect your Web applications from malicious attacks by mastering the weapons and thought processes of today's hacker. Written by recognized security practitioners and thought leaders, Hacking Exposed Web Applications, Third Edition is fully updated to cover new infiltration methods and countermeasures. Find out how to reinforce authentication and authorization, plug holes in Firefox and IE, reinforce against injection attacks, and secure Web 2.0 features. Integrating security into the Web development lifecycle (SDL) and into the broader enterprise information security program is also covered in this comprehensive resource. Get full details on the hacker's footprinting, scanning, and profiling tools, including SHODAN, Maltego, and OWASP DirBuster See new exploits of popular platforms like Sun Java System Web Server and Oracle WebLogic in operation Understand how attackers defeat commonly used Web authentication technologies See how real-world session attacks leak sensitive data and how to fortify your applications Learn the most devastating methods used in today's hacks, including SQL injection, XSS, XSRF, phishing, and XML injection techniques Find and fix vulnerabilities in ASP.NET, PHP, and J2EE execution environments Safety deploy XML, social networking, cloud computing, and Web 2.0 services Defend against RIA, Ajax, UGC, and browser-based, client-side exploits Implement scalable threat modeling, code review, application scanning, fuzzing, and security testing procedures

Computer and Information Security Handbook, Third Edition, provides the most current and complete reference on computer security available in one volume. The book offers deep coverage of an extremely wide range of issues in computer and cybersecurity theory, applications, and best practices, offering the latest insights into established and emerging technologies and advancements. With new parts devoted to such current topics as Cloud Security, Cyber-Physical Security, and Critical Infrastructure Security, the book now has 100 chapters written by leading experts in their fields, as well as 12 updated appendices and an expanded glossary. It continues its successful format of offering problem-solving techniques that use real-life case studies, checklists, hands-on exercises, question and answers, and summaries. Chapters new to this edition include such timely topics as Cyber Warfare, Endpoint Security, Ethical Hacking, Internet of Things Security, Nanoscale Networking and Communications Security, Social Engineering, System Forensics, Wireless Sensor Network Security, Verifying User and Host Identity, Detecting System Intrusions, Insider Threats, Security Certification and Standards Implementation, Metadata Forensics, Hard Drive Imaging, Context-Aware Multi--Factor Authentication, Cloud Security, Protecting Virtual Infrastructure, Penetration Testing, and much more. Written by leaders in the field Comprehensive and up-to-date coverage of the latest security technologies, issues, and best practices Presents methods for analysis, along with problem--solving techniques for implementing practical solutions

Learn how to execute web application penetration testing end-to-end Key Features Build an end--to-end threat model landscape for web application security Learn both web application vulnerabilities and web intrusion testing Associate network vulnerabilities with a web application infrastructure Book Description Companies all over the world want to hire professionals dedicated to application security. Practical Web Penetration Testing focuses on this very trend, teaching you how to conduct application security testing using real-life scenarios. To start with, you'll set up an environment to perform web application penetration testing. You will then explore different penetration testing concepts such as threat modeling, intrusion test, infrastructure security threat, and more, in combination with advanced concepts such as Python scripting for automation. Once you are done learning the basics, you will discover end-to-end implementation of tools such as Metasploit, Burp Suite, and Kali Linux. Many companies deliver projects into production by using either Agile or Waterfall methodology. This book shows you how to assist any company with their SDLC approach and helps you on your journey to becoming an application security specialist. By the end of this book, you will have hands-on knowledge of using different tools for penetration testing. What you will learn Learn how to use Burp Suite effectively Use Nmap, Metasploit, and more tools for network infrastructure tests Practice using all web application hacking tools for intrusion tests using Kali Linux Learn how to analyze a web application using application threat modeling Know how to conduct web intrusion tests Understand how to execute network infrastructure tests Master automation of penetration testing functions for maximum efficiency using Python Who this book is for Practical Web Penetration Testing is for you if you are a security professional, penetration tester, or stakeholder who wants to execute penetration testing using the latest and most popular tools. Basic knowledge of ethical hacking would be an added advantage.

Build your defense against web attacks with Kali Linux 2.0 About This Book Gain a deep understanding of the flaws in web applications and exploit them in a practical manner Get hands-on web application hacking experience with a range of tools in Kali Linux 2.0 Develop the practical skills required to master multiple tools in the Kali Linux 2.0 toolkit Who This Book Is For If you are already working as a network penetration tester and want to expand your knowledge of web application hacking, then this book tailored for you. Those who are interested in learning more about the Kali Sana tools that are used to test web applications will find this book a thoroughly useful and interesting guide. What You Will Learn Set up your lab with Kali Linux 2.0 Identify the difference between hacking a web application and network hacking Understand the different techniques used to identify the flavor of web applications Expose vulnerabilities present in web servers and their applications using server--side attacks Use SQL and cross-site scripting (XSS) attacks Check for XSS flaws using the burp suite proxy Find out about the mitigation techniques used to negate the effects of the Injection and Blind SQL attacks In Detail Kali Linux 2.0 is the new generation of the industry-leading BackTrack Linux penetration testing and security auditing Linux distribution. It contains several hundred tools aimed at various information security tasks such as penetration testing, forensics, and reverse engineering. At the beginning of the book, you will be introduced to the concepts of hacking and penetration testing and will get to know about the tools used in Kali Linux 2.0 that relate to web application hacking. Then, you will gain a deep understanding of SQL and command injection flaws and ways to exploit the flaws. Moving on, you will get to know more about scripting and input validation flaws, AJAX, and the security issues related to AJAX. At the end of the book, you will use an automated technique called fuzzing to be able to identify flaws in a web application. Finally, you will understand the web

application vulnerabilities and the ways in which they can be exploited using the tools in Kali Linux 2.0. Style and approach This step-by-step guide covers each topic with detailed practical examples. Every concept is explained with the help of illustrations using the tools available in Kali Linux 2.0.

Hacking APIs is a crash course in web API security testing that will prepare you to penetration-test APIs, reap high rewards on bug bounty programs, and make your own APIs more secure. Hacking APIs is a crash course on web API security testing that will prepare you to penetration-test APIs, reap high rewards on bug bounty programs, and make your own APIs more secure. You'll learn how REST and GraphQL APIs work in the wild and set up a streamlined API testing lab with Burp Suite and Postman. Then you'll master tools useful for reconnaissance, endpoint analysis, and fuzzing, such as Kiterunner and OWASP Amass. Next, you'll learn to perform common attacks, like those targeting an API's authentication mechanisms and the injection vulnerabilities commonly found in web applications. You'll also learn techniques for bypassing protections against these attacks. In the book's nine guided labs, which target intentionally vulnerable APIs, you'll practice: Enumerating APIs users and endpoints using fuzzing techniques Using Postman to discover an excessive data exposure vulnerability Performing a JSON Web Token attack against an API authentication process Combining multiple API attack techniques to perform a NoSQL injection Attacking a GraphQL API to uncover a broken object level authorization vulnerability By the end of the book, you'll be prepared to uncover those high-payout API bugs other hackers aren't finding and improve the security of applications on the web.

The resilience of computing systems includes their dependability as well as their fault tolerance and security. It defines the ability of a computing system to perform properly in the presence of various kinds of disturbances and to recover from any service degradation. These properties are immensely important in a world where many aspects of our daily life depend on the correct, reliable and secure operation of often large-scale distributed computing systems. Wolter and her co-editors grouped the 20 chapters from leading researchers into seven parts: an introduction and motivating examples, modeling techniques, model-driven prediction, measurement and metrics, testing techniques, case studies, and conclusions. The core is formed by 12 technical papers, which are framed by motivating real-world examples and case studies, thus illustrating the necessity and the application of the presented methods. While the technical chapters are independent of each other and can be read in any order, the reader will benefit more from the case studies if he or she reads them together with the related techniques. The papers combine topics like modeling, benchmarking, testing, performance evaluation, and dependability, and aim at academic and industrial researchers in these areas as well as graduate students and lecturers in related fields. In this volume, they will find a comprehensive overview of the state of the art in a field of continuously growing practical importance.

Master key approaches used by real attackers to perform advanced pentesting in tightly secured infrastructure, cloud and virtualized environments, and devices, and learn the latest phishing and hacking techniques Key FeaturesExplore red teaming and play the hackers game to proactively defend your infrastructureUse OSINT, Google dorks, Nmap, recon-nag, and other tools for passive and active reconnaissanceLearn about the latest email, Wi-Fi, and mobile-based phishing techniques-Book Description Remote working has given hackers plenty of opportunities as more confidential information is shared over the internet than ever before. In this new edition of Mastering Kali Linux for Advanced Penetration Testing, you'll learn an offensive approach to enhance your penetration testing skills by testing the sophisticated tactics employed by real hackers. You'll go through laboratory integration to cloud services so that you learn another dimension of exploitation that is typically forgotten during a penetration test. You'll explore different ways of installing and running Kali Linux in a VM and containerized environment and deploying vulnerable cloud services on AWS using containers, exploiting misconfigured S3 buckets to gain access to EC2 instances. This book delves into passive and active reconnaissance, from obtaining user information to large-scale port scanning. Building on this, different vulnerability assessments are explored, including threat modeling. See how hackers use lateral movement, privilege escalation, and command and control (C2) on compromised systems. By the end of this book, you'll have explored many advanced pentesting approaches and hacking techniques employed on networks, IoT, embedded peripheral devices, and radio frequencies. What you will learnExploit networks using wired/wireless networks, cloud infrastructure, and web servicesLearn embedded peripheral device, Bluetooth, RFID, and IoT hacking techniquesMaster the art of bypassing traditional antivirus and endpoint detection and response (EDR) toolsTest for data system exploits using Metasploit, PowerShell Empire, and CrackMapExecPerform cloud security vulnerability assessment and exploitation of security misconfigurationsUse bettercap and Wireshark for network sniffingImplement complex attacks with Metasploit, Burp Suite, and OWASP ZAPWho this book is for This fourth edition is for security analysts, pentesters, ethical hackers, red team operators, and security consultants wanting to learn and optimize infrastructure/application/cloud security using advanced Kali Linux features. Prior penetration testing experience and basic knowledge of ethical hacking will help you make the most of this book.

With the increasing reliance on digital means to transact goods that are retail and communication based, e-services continue to develop as key applications for business, finance, industry and innovation.Electronic Services: Concepts, Methodologies, Tools and Applications is an all-inclusive research collection covering the latest studies on the consumption, delivery and availability of e-services. This multi-volume book contains over 100 articles, making it an essential reference for the evolving e-services discipline.

This innovative new resource provides both professionals and aspiring professionals with clear guidance on how to identify and exploit common web application vulnerabilities. The book focuses on offensive security and how to attack web applications. It describes each of the Open Web Application Security Project (OWASP) top ten vulnerabilities, including broken authentication, cross-site scripting and insecure deserialization, and details how to identify and exploit each weakness. Readers learn to bridge the gap between high-risk vulnerabilities and exploiting flaws to get shell access. The book demonstrates how to work in a professional services space to produce quality and thorough testing results by detailing the requirements of providing a best-of-class penetration testing service. It offers insight into the problem of not knowing how to approach a web app pen test and the challenge of integrating a mature pen testing program into an organization. Based on the author's many years of first-hand experience, this book provides examples of how to break into user accounts, how to breach systems, and how to configure and wield penetration testing tools.

This volume contains 68 papers presented at SCI 2016: First International Conference on Smart Computing and Informatics. The conference was held during 3-4 March 2017, Visakhapatnam, India and

organized communally by ANITS, Visakhapatnam and supported technically by CSI Division V – Education and Research and PRF, Vizag. This volume contains papers mainly focused on smart computing for cloud storage, data mining and software analysis, and image processing.

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

Web Penetration Testing with Kali Linux contains various penetration testing methods using BackTrack that will be used by the reader. It contains clear step-by-step instructions with lot of screenshots. It is written in an easy to understand language which will further simplify the understanding for the user."Web Penetration Testing with Kali Linux" is ideal for anyone who is interested in learning how to become a penetration tester. It will also help the users who are new to Kali Linux and want to learn the features and differences in Kali versus Backtrack, and seasoned penetration testers who may need a refresher or reference on new tools and techniques. Basic familiarity with web-based programming languages such as PHP, JavaScript and MySQL will also prove helpful.

IBWAS 2009, the Iberic Conference on Web Applications Security, was the first international conference organized by both the OWASP Portuguese and Spanish ch- ters in order to join the international Web application security academic and industry communities to present and discuss the major aspects of Web applications security. There is currently a change in the information systems development paradigm. The emergence of Web 2. 0 technologies led to the extensive deployment and use of W- based applications and Web services as a way to develop new and flexible information systems. Such systems are easy to develop, deploy and maintain and they demonstrate impressive features for users, resulting in their current wide use. The "social" features of these technologies create the necessary "massification" effects that make millions of users share their own personal information and content over large web-based int- active platforms. Corporations, businesses and governments all over the world are also developing and deploying more and more applications to interact with their bu- nesses, customers, suppliers and citizens to enable stronger and tighter relations with all of them. Moreover, legacy non-Web systems are being ported to this new intrin- cally connected environment. IBWAS 2009 brought together application security experts, researchers, educators and practitioners from industry, academia and international communities such as OWASP, in order to discuss open problems and new solutions in application security. In the context of this track, academic researchers were able to combine interesting results with the experience of practitioners and software engineers.

You want to know how to quote a Penetration Test or Red Team project. In order to do that, you need the answer to does deep security as a service conduct vulnerability and penetration testing? The problem is will you receive third party penetration and application security test results, which makes you feel asking are security penetration test reports available for review? We believe there is an answer to problems like do you want vulnerability testing, penetration testing, a security plan, etc. We understand you need to take a forward-looking perspective in identifying Penetration Tester skills research related to market response and models which is why an answer to 'how often do you conduct third party penetration and security testing?' is important. Here's how you do it with this book: 1. Acquire the skills needed to become a penetration tester for your organization 2. Properly scope a web services penetration test 3. Become a penetration tester So, do you need a security assessment or a penetration test? This Penetration Tester Critical Questions Skills Assessment book puts you in control by letting you ask what's important, and in the meantime, ask yourself; which is the main security risk of penetration testing? So you can stop wondering 'how secure is a remote network security attack and penetration test?' and instead define security related test cases and based on what. This Penetration Tester Guide is unlike books you're used to. If you're looking for a textbook, this might not be for you. This book and its included digital components is for you who understands the importance of asking great questions. This gives you the questions to uncover the Penetration Tester challenges you're facing and generate better solutions to solve those problems. INCLUDES all the tools you need to an in-depth Penetration Tester Skills Assessment. Featuring new and updated case-based questions, organized into seven core levels of Penetration Tester maturity, this Skills Assessment will help you identify areas in which Penetration Tester improvements can be made. In using the questions you will be better able to: Diagnose Penetration Tester projects, initiatives, organizations, businesses and processes using accepted diagnostic standards and practices. Implement evidence-based best practice strategies aligned with overall goals. Integrate recent advances in Penetration Tester and process design strategies into practice according to best practice guidelines. Using the Skills Assessment tool gives you the Penetration Tester Scorecard, enabling you to develop a clear picture of which Penetration Tester areas need attention. Your purchase includes access to the Penetration Tester skills assessment digital components which gives you your dynamically prioritized projects-ready tool that enables you to define, show and lead your organization exactly with what's important.

Cyber-Security Threats, Actors, and Dynamic Mitigation provides both a technical and state-of-the-art perspective as well as a systematic overview of the recent advances in different facets of cyber-security. It covers the methodologies for modeling attack strategies used by threat actors targeting devices, systems, and networks such as smart homes, critical infrastructures, and industrial IoT. With a comprehensive review of the threat landscape, the book explores both common and sophisticated threats to systems and networks. Tools and methodologies are presented for precise modeling of attack strategies, which can be used both proactively in risk management and reactively in intru-

sion prevention and response systems. Several contemporary techniques are offered ranging from reconnaissance and penetration testing to malware detection, analysis, and mitigation. Advanced machine learning-based approaches are also included in the area of anomaly-based detection, that are capable of detecting attacks relying on zero-day vulnerabilities and exploits. Academics, researchers, and professionals in cyber-security who want an in-depth look at the contemporary aspects of the field will find this book of interest. Those wanting a unique reference for various cyber-security threats and how they are detected, analyzed, and mitigated will reach for this book often.

A complete pentesting guide facilitating smooth backtracking for working hackers About This Book Conduct network testing, surveillance, pen testing and forensics on MS Windows using Kali Linux Gain a deep understanding of the flaws in web applications and exploit them in a practical manner Pentest Android apps and perform various attacks in the real world using real case studies Who This Book Is For This course is for anyone who wants to learn about security. Basic knowledge of Android programming would be a plus. What You Will Learn Exploit several common Windows network vulnerabilities Recover lost files, investigate successful hacks, and discover hidden data in innocent-looking files Expose vulnerabilities present in web servers and their applications using server-side attacks Use SQL and cross-site scripting (XSS) attacks Check for XSS flaws using the burp suite proxy Acquaint yourself with the fundamental building blocks of Android Apps in the right way Take a look at how your personal data can be stolen by malicious attackers See how developers make mistakes that allow attackers to steal data from phones In Detail The need for penetration testers has grown well over what the IT industry ever anticipated. Running just a vulnerability scanner is no longer an effective method to determine whether a business is truly secure. This learning path will help you develop the most effective penetration testing skills to protect your Windows, web applications, and Android devices. The first module focuses on the Windows platform, which is one of the most common OSes, and managing its security spawned the discipline of IT security. Kali Linux is the premier platform for testing and maintaining Windows security. Employs the most advanced tools and techniques to reproduce the methods used by sophisticated hackers. In this module first,you'll be introduced to Kali's top ten tools and other useful reporting tools. Then, you will find your way around your target network and determine known vulnerabilities so you can exploit a system remotely. You'll not only learn to penetrate in the machine, but will also learn to work with Windows privilege escalations. The second module will help you get to grips with the tools used in Kali Linux 2.0 that relate to web application hacking. You will get to know about scripting and input validation flaws, AJAX, and security issues related to AJAX. You will also use an automated technique called fuzzing so you can identify flaws in a web application. Finally, you'll understand the web application vulnerabilities and the ways they can be exploited. In the last module, you'll get started with Android security. Android, being the platform with the largest consumer base, is the obvious primary target for attackers. You'll begin this journey with the absolute basics and will then slowly gear up to the concepts of Android rooting, application security assessments, malware, infecting APK files, and fuzzing. You'll gain the skills necessary to perform Android application vulnerability assessments and to create an Android pentesting lab. This Learning Path is a blend of content from the following Packt products: Kali Linux 2: Windows Penetration Testing by Wolf Halton and Bo Weaver Web Penetration Testing with Kali Linux, Second Edition by Juned Ahmed Ansari Hacking Android by Srinivasa Rao Kotipalli and Mohammed A. Imran Style and approach This course uses easy-to-understand yet professional language for explaining concepts to test your network's security.

"This book's main objective is to present some of the key approaches, research lines, and challenges that exist in the field of security in SOA systems"--Provided by publisher.

InfoWorld is targeted to Senior IT professionals. Content is segmented into Channels and Topic Centers. InfoWorld also celebrates people, companies, and projects.

The Complete Reference to Professional SOA with Visual Studio 2005 (C# & VB 2005) focuses on architecting and constructing enterprise-level systems. Taking advantage of the newly released Visual Studio 2005 development environment, the book assesses the current service-oriented platform and examines new ways to develop for scalability, availability, and security (which have become available with .NET 2.0). You'll get to look closely at application infrastructure in terms of flexibility, interoperability, and integration, as well as the decisions that have to be made to achieve optimum balance within your architecture.

Test, fuzz, and break web applications and services using Burp Suite’s powerful capabilities Key FeaturesMaster the skills to perform various types of security tests on your web applicationsGet hands-on experience working with components like scanner, proxy, intruder and much moreDiscover the best-way to penetrate and test web applicationsBook Description Burp suite is a set of graphic tools focused towards penetration testing of web applications. Burp suite is widely used for web penetration testing by many security professionals for performing different web-level security tasks. The book starts by setting up the environment to begin an application penetration test. You will be able to configure the client and apply target whitelisting. You will also learn to setup and configure Android and IOS devices to work with Burp Suite. The book will explain how various features of Burp Suite can be used to detect various vulnerabilities as part of an application penetration test. Once detection is completed and the vulnerability is confirmed, you will be able to exploit a detected vulnerability using Burp Suite. The book will also covers advanced concepts like writing extensions and macros for Burp suite. Finally, you will discover various steps that are taken to identify the target, discover weaknesses in the authentication mechanism, and finally break the authentication implementation to gain access to the administrative console of the application. By the end of this book, you will be able to effectively perform end-to-end penetration testing with Burp Suite. What you will learnSet up Burp Suite and its configurations for an application penetration testProxy application traffic from browsers and mobile devices to the serverDiscover and identify application security issues in various scenariosExploit discovered vulnerabilities to execute commandsExploit discovered vulnerabilities to gain access to data in various datastoresWrite your own Burp Suite plugin and explore the Infiltrator moduleWrite macros to automate tasks in Burp SuiteWho this book is for If you are interested in learning how to test web applications and the web part of mobile applications using Burp, then this is the book for you. It is specifically designed to meet your needs if you have basic experience in using Burp and are now aiming to become a professional Burp user.