

## Metasploit Community User Guide

***This book constitutes the refereed proceedings of the First Conference on Cybersecurity of Industrial Control Systems, CyberICS 2015, and the First Workshop on the Security of Cyber Physical Systems, WOS-CPS 2015, held in Vienna, Austria, in September 2015 in conjunction with ESORICS 2015, the 20th annual European Symposium on Research in Computer Security. The 6 revised full papers and 2 short papers of CyberICS 2015 presented together with 3 revised full papers of WOS-CPS 2015 were carefully reviewed and selected from 28 initial submissions. CyberICS 2015 focuses on topics covering ICSs, including cyber protection and cyber defense of SCADA systems, plant control systems, engineering workstations, substation equipment, programmable logic controllers, PLCs, and other industrial control system. WOS-CPS 2015 deals with the Security of Cyber Physical Systems, that exist everywhere around us, and range in size, complexity and criticality, from embedded systems used in smart vehicles, to SCADA systems in smart grids to control systems in water distribution systems, to smart transportation systems etc. This book follows a Cookbook style with recipes explaining the steps for penetration testing with WLAN, VOIP, and even cloud computing. There is plenty of code and commands used to make your learning curve easy and quick. This book targets both professional penetration testers as well as new users of Metasploit, who wish to gain expertise over the framework and learn an additional skill of penetration testing, not limited to a particular OS. The book requires basic knowledge of scanning, exploitation, and the Ruby language.***

***This book gathers high-quality papers presented at the International Conference on Smart Trends for Information Technology and Computer Communications (SmartCom 2019), organized by the Global Knowledge Research Foundation (GR Foundation) from 24 to 25 January 2019. It covers the state-of-the-art and emerging topics pertaining to information, computer communications, and effective strategies for their use in engineering and managerial applications. It also explores and discusses the latest technological advances in, and future directions for, information and knowledge computing and its applications.***

***This book constitutes the proceedings of the Sixth Conference on Information and Communication Technologies “TIC.EC”, held in Cuenca, Ecuador, from November 27 to 29, 2019. Considered one of the most important conferences on ICT in Ecuador, it brings together scholars and practitioners from the country and abroad to discuss the development, issues and projections of the use of information and communication technologies in multiples fields of application. The 2019 “TIC.EC” conference was organized by Universidad del Azuay (UDA) and its Engineering School, as well as the Ecuadorian Corporation for the Development of Research and Academia (CEDIA). The book covers the following topics:*** · Software engineering · Security · Data · Networks · Architecture · Applied ICTs · Technological entrepreneurship · Links between research and industry · High-impact innovation · Knowledge management and intellectual property

***The Ultimate Security Guide***

***A Hands-On Introduction to Hacking***

***Advanced Penetration Testing for Highly-Secured Environments***

***Kali Linux 2 - Assuring Security by Penetration Testing***

***Secure web applications using Burp Suite, Nmap, Metasploit, and more***

***Ten Strategies of a World-Class Cybersecurity Operations Center***

Master Wireshark to solve real-world security problems If you don’t already use Wireshark for a wide range of information security tasks, you will after this book. Mature and powerful, Wireshark is commonly used to find root cause of challenging network issues. This book extends that power to information security professionals, complete with a downloadable, virtual lab environment. Wireshark for Security Professionals covers both offensive and defensive concepts that can be applied to essentially any InfoSec role. Whether into network security, malware analysis, intrusion detection, or penetration testing, this book demonstrates Wireshark through relevant and useful examples. Master Wireshark through both lab scenarios and exercises. Early in the book, a virtual lab environment is provided for the purpose of getting hands-on experience with Wireshark. Wireshark is combined with two popular platforms: Kali, the security-focused Linux distribution, and the Metasploit Framework, the open-source framework for security testing. Lab-based virtual systems generate network traffic for analysis, investigation and demonstration. In addition to following along with the labs you will be challenged with end-of-chapter exercises to expand on covered material. Lastly, this book explores Wireshark with Lua, the light-weight programming language. Lua allows you to extend and customize Wireshark’s features for your needs as a security professional. Lua source code is available both in the book and online. Lua code and lab source code are available online through GitHub, which the book also introduces. The book’s final two chapters greatly draw on Lua and TShark, the command-line interface of Wireshark. By the end of the book you will gain the following: Master the basics of Wireshark Explore the virtual w4sp-lab environment that mimics a real-world network Gain experience using the Debian-based Kali OS among other systems Understand the technical details behind network attacks Execute exploitation and grasp offensive and defensive activities, exploring them through Wireshark Employ Lua to extend Wireshark features and create useful scripts To sum up, the book content, labs and online material, coupled with many referenced sources of PCAP traces, together present a dynamic and robust manual for information security professionals seeking to leverage Wireshark.

A comprehensive and detailed, step by step tutorial guide that takes you through important aspects of the Metasploit framework. If you are a penetration tester, security engineer, or someone who is looking to extend their penetration testing skills with Metasploit, then this book is ideal for you. The readers of this book must have a basic knowledge of using Metasploit. They are also expected to have knowledge of exploitation and an indepth understanding of object-oriented programming languages.

This is the eBook version of the print title. Note that the eBook does not provide access to the practice test software that accompanies the print book. Learn, prepare, and practice for CompTIA Pentest+ PT0-001 exam success with this CompTIA Cert Guide from Pearson IT Certification, a leader in IT Certification. Master CompTIA Pentest+ PT0-001 exam topics Assess your knowledge with chapter-ending quizzes Review key concepts with exam preparation tasks Practice with realistic exam questions Get practical guidance for next steps and more advanced certifications CompTIA Pentest+ Cert Guide is a best-of-breed exam study guide. Leading IT security experts Omar Santos and Ron Taylor share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The book presents you with an organized test preparation routine through the use of proven series elements and techniques. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. Review questions help you assess your knowledge, and a final preparation chapter guides you through tools and resources to help you craft your final study plan. Well regarded for its level of detail, assessment features, and challenging review questions and exercises, this study guide helps you master the concepts and techniques that will allow you to succeed on the exam the first time. The CompTIA study guide helps you master all the topics on the Pentest+ exam, including: Planning and scoping: Explain the importance of proper planning and scoping, understand key legal concepts, explore key aspects of compliance-based assessments Information gathering and vulnerability identification: Understand passive and active reconnaissance, conduct appropriate information gathering and use open source intelligence (OSINT); perform vulnerability scans; analyze results; explain how to leverage gathered information in exploitation; understand weaknesses of specialized systems Attacks and exploits: Compare and contrast social engineering attacks; exploit network-based, wireless, RF-based, application-based, and local host vulnerabilities; summarize physical security attacks; perform post-exploitation techniques Penetration testing tools: Use numerous tools to perform reconnaissance, exploit vulnerabilities and perform post-exploitation activities; leverage the Bash shell, Python, Ruby, and PowerShell for basic scripting Reporting and communication: Write reports containing effective findings and recommendations for mitigation; master best practices for reporting and communication; perform post-engagement activities such as cleanup of tools or shells

Get started with NMAP, OpenVAS, and Metasploit in this short book and understand how NMAP, OpenVAS, and Metasploit can be integrated with each other for greater flexibility and efficiency. You will begin by working with NMAP and ZENMAP and learning the basic scanning and enumeration process. After getting to know the differences between TCP and UDP scans, you will learn to fine tune your scans and efficiently use NMAP scripts. This will be followed by an introduction to OpenVAS vulnerability management system. You will then learn to configure OpenVAS and scan for and report vulnerabilities. The next chapter takes you on a detailed tour of Metasploit and its basic commands and configuration. You will then invoke NMAP and OpenVAS scans from Metasploit. Lastly, you will take a look at scanning services with Metasploit and get to know more about Meterpreter, an advanced, dynamically extensible payload that is extended over the network at runtime. The final part of the book concludes by pentesting a system in a real-world scenario, where you will apply the skills you have learnt. What You Will Learn Carry out basic scanning with NMAP Invoke NMAP from Python Use vulnerability scanning and reporting with OpenVAS Master common commands in Metasploit Who This Book Is For Readers new to penetration testing who would like to get a quick start on it.

Proceedings of SmartCom 2019

Penetration Testing: A Survival Guide

Exam

First Workshop, CyberICS 2015 and First Workshop, WOS-CPS 2015 Vienna, Austria, September 21–22, 2015 Revised Selected Papers

Mastering Metasploit,

Metasploit Revealed: Secrets of the Expert Pentester

Master the Metasploit Framework and become an expert in penetration testing. Key Features Gain a thorough understanding of the Metasploit Framework Develop the skills to perform penetration testing in complex and highly secure environments Learn techniques to integrate Metasploit with the industry’s leading tools Book Description Most businesses today are driven by their IT infrastructure, and the tiniest crack in this IT network can bring down the entire business. Metasploit is a pentesting network that can validate your system by performing elaborate penetration tests using the Metasploit Framework to secure your infrastructure. This Learning Path introduces you to the basic functionalities and applications of Metasploit. Throughout this book, you’ll learn different techniques for programming Metasploit modules to validate services such as databases, fingerprinting, and scanning. You’ll get to grips with post exploitation and write quick scripts to gather information from exploited systems. As you progress, you’ll delve into real-world scenarios where performing penetration tests are a challenge. With the help of these case studies, you’ll explore client-side attacks using Metasploit and a variety of scripts built on the Metasploit Framework. By the end of this Learning Path, you’ll have the skills required to identify system vulnerabilities by using thorough testing. This Learning Path includes content from the following Packt products: Metasploit for Beginners by Sagar Rahalkar Mastering Metasploit - Third Edition by Nipun Jaswal What you will learn Develop advanced and sophisticated auxiliary modules Port exploits from Perl, Python, and many other programming languages Bypass modern protections such as antivirus and IDS with Metasploit Script attacks in Armitage using the Cortana scripting language Customize Metasploit modules to modify existing exploits Explore the steps involved in post-exploitation on Android and mobile platforms Who this book is for This Learning Path is ideal for security professionals, web programmers, and pentesters who want to master vulnerability exploitation and get the most of the Metasploit Framework. Basic knowledge of Ruby programming and Cortana scripting language is required.

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.

World-class preparation for the new PenTest+ exam The CompTIA PenTest+ Study Guide: Exam PT0-001 offers comprehensive preparation for the newest intermediate cybersecurity certification exam. With expert coverage of Exam PT0-001 objectives, this book is your ideal companion throughout all stages of study; whether you’re just embarking on your certification journey or finalizing preparations for the big day, this invaluable resource helps you solidify your understanding of essential skills and concepts. Access to the Sybex online learning environment allows you to study anytime, anywhere with electronic flashcards, a searchable glossary, and more, while hundreds of practice exam questions help you step up your preparations and avoid surprises on exam day. The CompTIA PenTest+ certification validates your skills and knowledge surrounding second-generation penetration testing, vulnerability assessment, and vulnerability management on a variety of systems and devices, making it the latest go-to qualification in an increasingly mobile world. This book contains everything you need to prepare; identify what you already know, learn what you don’t know, and face the exam with full confidence! Perform security assessments on desktops and mobile devices, as well as cloud, IoT, industrial and embedded systems Identify security weaknesses and manage system vulnerabilities Ensure that existing cybersecurity practices, configurations, and policies conform with current best practices Simulate cyberattacks to pinpoint security weaknesses in operating systems, networks, and applications As our information technology advances, so do the threats against it. It’s an arms race for complexity and sophistication, and the expansion of networked devices and the Internet of Things has integrated cybersecurity into nearly every aspect of our lives. The PenTest+ certification equips you with the skills you need to identify potential problems—and fix them—and the CompTIA PenTest+ Study Guide: Exam PT0-001 is the central component of a complete preparation plan.

As protecting information becomes a rapidly growing concern for today’s businesses, certifications in IT security have become highly desirable, even as the number of certifications has grown. Now you can set yourself apart with the Certified Ethical Hacker (CEH v10) certification. The CEH v10 Certified Ethical Hacker Study Guide offers a comprehensive overview of the CEH certification requirements using concise and easy-to-follow instruction. Chapters are organized by exam objective, with a handy section that maps each objective to its corresponding chapter, so you can keep track of your progress. The text provides thorough coverage of all topics, along with challenging chapter review questions and Exam Essentials, a key feature that identifies critical study areas. Subjects include intrusion detection, DDoS attacks, buffer overflows, virus creation, and more. This study guide goes beyond test prep, providing practical hands-on exercises to reinforce vital skills and real-world scenarios that put what you’ve learned into the context of actual job roles. Gain a unique certification that allows you to understand the mind of a hacker Expand your career opportunities with an IT certificate that satisfies the Department of Defense’s 8570 Directive for Information Assurance positions Fully updated for the 2018 CEH v10 exam, including the latest developments in IT security Access the Sybex online learning center, with chapter review questions, full-length practice exams, hundreds of electronic flashcards, and a glossary of key terms Thanks to its clear organization, all-inclusive coverage, and practical instruction, the CEH v10 Certified Ethical Hacker Study Guide is an excellent resource for anyone who needs to understand the hacking process or anyone who wants to demonstrate their skills as a Certified Ethical Hacker.

Wireshark for Security Professionals

Evade antiviruses, bypass firewalls, and exploit complex environments with the most widely used penetration testing framework, 3rd Edition

Quick Start Guide to Penetration Testing

With NMAP, OpenVAS and Metasploit

Security of Industrial Control Systems and Cyber Physical Systems

Information and Communication Technologies of Ecuador (TIC.EC)

*Master the art of penetration testing with Metasploit Framework in 7 days About This Book A fast-paced guide that will quickly enhance your penetration testing skills in just 7 days Carry out penetration testing in complex and highly-secured environments. Learn techniques to Integrate Metasploit with industry’s leading tools Who This Book Is For If you are a penetration tester, ethical hacker, or security consultant who quickly wants to master the Metasploit framework and carry out advanced penetration testing in highly secured environments then, this book is for you. What You Will Learn Get hands-on knowledge of Metasploit Perform penetration testing on services like Databases, VOIP and much more Understand how to Customize Metasploit modules and modify existing exploits Write simple yet powerful Metasploit automation scripts Explore steps involved in post-exploitation on Android and mobile platforms. In Detail The book starts with a hands-on Day 1 chapter, covering the basics of the Metasploit framework and preparing the readers for a self-completion exercise at the end of every chapter. The Day 2 chapter dives deep into the use of scanning and fingerprinting services with Metasploit while helping the readers to modify existing modules according to their needs. Following on from the previous chapter, Day 3 will focus on exploiting various types of service and client-side exploitation while Day 4 will focus on post-exploitation, and writing quick scripts that helps with gathering the required information from the exploited systems. The Day 5 chapter presents the reader with the techniques involved in scanning and exploiting various services, such as databases, mobile devices, and VOIP. The Day 6 chapter prepares the reader to speed up and integrate Metasploit with leading industry tools for penetration testing. Finally, Day 7 brings in sophisticated attack vectors and challenges based on the user’s preparation over the past six days and ends with a Metasploit challenge to solve. Style and approach This book is all about fast and intensive learning. That means we don’t waste time in helping readers get started. The new content is basically about filling in with highly-effective examples to build new things, show solving problems in newer and unseen ways, and solve real-world examples.*

*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 to 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. Inrnan *Style and approach* This course uses easy-to-understand yet professional language for explaining concepts to test your network's security.

*Get to grips with security assessment, vulnerability exploitation, workload security, and encryption with this guide to ethical hacking and learn to secure your AWS environment* *Key Features* Perform cybersecurity events such as red or blue team activities and functional testing *Gain an overview and understanding of AWS penetration testing and security* *Make the most of your AWS cloud infrastructure by learning about AWS fundamentals and exploring pentesting best practices* *Book Description* Cloud security has always been treated as the highest priority by AWS while designing a robust cloud infrastructure. AWS has now extended its support to allow users and security experts to perform penetration tests on its environment. This has not only revealed a number of loopholes and brought vulnerable points in their existing system to the fore, but has also opened up opportunities for organizations to build a secure cloud environment. This book teaches you how to perform penetration tests in a controlled AWS environment. You'll begin by performing security assessments of major AWS resources such as Amazon EC2 instances, Amazon S3, Amazon API Gateway, and AWS Lambda. Throughout the course of this book, you'll also learn about specific tests such as exploiting applications, testing permissions flaws, and discovering weak policies. Moving on, you'll discover how to establish private-cloud access through backdoor Lambda functions. As you advance, you'll explore the no-go areas where users can't make changes due to vendor restrictions and find out how you can avoid being flagged to AWS in these cases. Finally, this book will take you through tips and tricks for securing your cloud environment in a professional way. By the end of this penetration testing book, you'll have become well-versed in a variety of ethical hacking techniques for securing your AWS environment against modern cyber threats. What you will learn *Set up your AWS account and get well-versed in various pentesting services* *Delve into a variety of cloud pentesting tools and methodologies* *Discover how to exploit vulnerabilities in both AWS and applications* *Understand the legality of pentesting and learn how to stay in scope* *Explore cloud pentesting best practices, tips, and tricks* *Become competent at using tools such as Kali Linux, Metasploit, and Nmap* *Get to grips with post-exploitation procedures and find out how to write pentesting reports* *Who this book is for* If you are a network engineer, system administrator, or system operator looking to secure your AWS environment against external cyberattacks, then this book is for you. *Ethical hackers, penetration testers, and security consultants who want to enhance their cloud security skills will also find this book useful.* *No prior experience in penetration testing is required; however, some understanding of cloud computing or AWS cloud is recommended.*

*Learn how to break systems, networks, and software in order to determine where the bad guys might get in. Once the holes have been determined, this short book discusses how they can be fixed. Until they have been located, they are exposures to your organization. By reading Penetration Testing Basics, you'll gain the foundations of a simple methodology used to perform penetration testing on systems and networks for which you are responsible. What You Will Learn* *Identify security vulnerabilities* *Use some of the top security tools to identify holes* *Read reports from testing tools* *Spot and negate common attacks* *Identify common Web-based attacks and exposures as well as recommendations for closing those holes* *Who This Book Is For* *Anyone who has some familiarity with computers and an interest in information security and penetration testing.*

*The Penetration Tester's Guide*

*CEH v10 Certified Ethical Hacker Study Guide*

*Set up a virtual lab and pentest major AWS services, including EC2, S3, Lambda, and CloudFormation*

*Hands-On AWS Penetration Testing with Kali Linux*

*Cybersecurity Blue Team Toolkit*

*CompTIA CYSA+ Guide to Cyber Security Analyst*

**This effective study guide provides 100% coverage of every topic on the GPEN GIAC Penetration Tester exam** **This effective self-study guide fully prepares you for the Global Information Assurance Certification's challenging Penetration Tester exam, which validates advanced IT security skills. The book features exam-focused coverage of penetration testing methodologies, legal issues, and best practices. GPEN GIAC Certified Penetration Tester All-in-One Exam Guide contains useful tips and tricks, real-world examples, and case studies drawn from authors' extensive experience. Beyond exam preparation, the book also serves as a valuable on-the-job reference. Covers every topic on the exam, including: Pre-engagement and planning activities Reconnaissance and open source intelligence gathering Scanning, enumerating targets, and identifying vulnerabilities Exploiting targets and privilege escalation Password attacks Post-exploitation activities, including data exfiltration and pivoting PowerShell for penetration testing Web application injection attacks Tools of the trade: Metasploit, proxies, and more** **Online content includes: 230 accurate practice exam questions Test engine containing full-length practice exams and customizable quizzes**

**Metasploit is a popular penetration testing framework that has one of the largest exploit databases around. This book will show you exactly how to prepare yourself for the attacks you will face every day by simulating real-world possibilities.**

**This book constitutes the thoroughly refereed post-conference proceedings of the 15th International Conference on Information Security and Cryptology, ICISC 2012, held in Seoul, Korea, in November 2012. The 32 revised full papers presented together with 3 invited talks were carefully selected from 120 submissions during two rounds of reviewing. The papers provide the latest results in research, development, and applications in the field of information security and cryptology. They are organized in topical sections on attack and defense, software and Web security, cryptanalysis, cryptographic protocol, identity-based encryption, efficient implementation, cloud computing security, side channel analysis, digital signature, and privacy enhancement.**

**A practical handbook to cybersecurity for both tech and non-tech professionals** **As reports of major data breaches fill the headlines, it has become impossible for any business, large or small, to ignore the importance of cybersecurity. Most books on the subject, however, are either too specialized for the non-technical professional or too general for positions in the IT trenches. Thanks to author Nadean Tanner's wide array of experience from teaching at a University to working for the Department of Defense, the Cybersecurity Blue Team Toolkit strikes the perfect balance of substantive and accessible, making it equally useful to those in IT or management positions across a variety of industries. This handy guide takes a simple and strategic look at best practices and tools available to both cybersecurity management and hands-on professionals, whether they be new to the field or looking to expand their expertise. Tanner gives comprehensive coverage to such crucial topics as security assessment and configuration, strategies for protection and defense, offensive measures, and remediation while aligning the concept with the right tool using the CIS Controls version 7 as a guide. Readers will learn why and how to use fundamental open source and free tools such as ping, tracer, PuTTY, pathping, sysinternals, NMAP, OpenVAS, Nexpose Community, OSSEC, Hamachi, InSSIDer, Nexpose Community, Wireshark, Solarwinds Kiwi Syslog Server, Metasploit, Burp, Clonezilla and many more. Up-to-date and practical cybersecurity instruction, applicable to both management and technical positions**

- Straightforward explanations of the theory behind cybersecurity best practices
- Designed to be an easily navigated tool for daily use
- Includes training appendix on Linux, how to build a virtual lab and glossary of key terms

**The Cybersecurity Blue Team Toolkit is an excellent resource for anyone working in digital policy as well as IT security professionals, technical analysts, program managers, and Chief Information and Technology Officers. This is one handbook that won't gather dust on the shelf, but remain a valuable reference at any career level, from student to executive.**

**Penetration Testing**

**CompTIA PenTest+ Study Guide**

**Metasploit Penetration Testing Cookbook**

**GPEN GIAC Certified Penetration Tester All-in-One Exam Guide**

**Metasploit**

**Mastering Metasploit**

**Identify tools and techniques to secure and perform a penetration test on an AWS infrastructure using Kali Linux** **Key Features** Efficiently perform penetration testing techniques on your public cloud instances **Learn not only to cover loopholes but also to automate security monitoring and alerting within your cloud-based deployment pipelines** **A step-by-step guide that will help you leverage the most widely used security platform to secure your AWS Cloud environment** **Book Description** The cloud is taking over the IT industry. Any organization housing a large amount of data or a large infrastructure has started moving cloud-ward — and AWS rules the roost when it comes to cloud service providers, with its closest competitor having less than half of its market share. This highlights the importance of security on the cloud, especially on AWS. While a lot has been said (and written) about how cloud environments can be secured, performing external security assessments in the form of pentests on AWS is still seen as a dark art. This book aims to help pentesters as well as seasoned system administrators with a hands-on approach to pentesting the various cloud services provided by Amazon through AWS using Kali Linux. To make things easier for novice pentesters, the book focuses on building a practice lab and refining penetration testing with Kali Linux on the cloud. This is helpful not only for beginners but also for pentesters who want to set up a pentesting environment in their private cloud, using Kali Linux to perform a white-box assessment of their own cloud resources. Besides this, there is a lot of in-depth coverage of the large variety of AWS services that are often overlooked during a pentest — from serverless infrastructure to automated deployment pipelines. By the end of this book, you will be able to identify possible vulnerable areas efficiently and secure your AWS cloud environment. What you will learn **Familiarize yourself with and pentest the most common external-facing AWS services** **Audit your own infrastructure and identify flaws, weaknesses, and loopholes** **Demonstrate the process of lateral and vertical movement through a partially compromised AWS account** **Maintain stealth and persistence within a compromised AWS account** **Master a hands-on approach to pentesting** **Discover a number of automated tools to ease the process of continuously assessing and improving the security stance of an AWS infrastructure** **Who this book is for** If you are a security analyst or a penetration tester and are interested in exploiting Cloud environments to reveal vulnerable areas and secure them, then this book is for you. **A basic understanding of penetration testing, cloud computing, and its security concepts is mandatory.**

**Exploit the secrets of Metasploit to master the art of penetration testing. About This Book** **Discover techniques to integrate Metasploit with the industry's leading tools** **Carry out penetration testing in highly-secured environments with Metasploit and acquire skills to build your defense against organized and complex attacks** **Using the Metasploit framework, develop exploits and generate modules for a variety of real-world scenarios** **Who This Book Is For** **This course is for penetration testers, ethical hackers, and security professionals who'd like to master the Metasploit framework and explore approaches to carrying out advanced penetration testing to build highly secure networks. Some familiarity with networking and security concepts is expected, although no familiarity of Metasploit is required. What You Will Learn** **Get to know the absolute basics of the Metasploit framework so you have a strong foundation for advanced attacks** **Integrate and use various supporting tools to make Metasploit even more powerful and precise** **Test services such as databases, SCADA, and many more** **Attack the client side with highly advanced techniques** **Test mobile and tablet devices with Metasploit** **Understand how to Customize Metasploit modules and modify existing exploits** **Write simple yet powerful Metasploit automation scripts** **Explore steps involved in post-exploitation on Android and mobile platforms** **In Detail** **Metasploit is a popular penetration testing framework that has one of the largest exploit databases around. This book will show you exactly how to prepare yourself against the attacks you will face every day by simulating real-world possibilities. This learning path will begin by introducing you to Metasploit and its functionalities. You will learn how to set up and configure Metasploit on various platforms to create a virtual test environment. You will also get your hands on various tools and components and get hands-on experience with carrying out client-side attacks. In the next part of this learning path, you'll develop the ability to perform testing on various services such as SCADA, databases, IoT, mobile, tablets, and many more services. After this training, we jump into real-world sophisticated scenarios where performing penetration tests are a challenge. With real-life case studies, we take you on a journey through client-side attacks using Metasploit and various scripts built on the Metasploit framework. The final instalment of your learning journey will be covered through a bootcamp approach. You will be able to bring together the learning together and speed up and integrate Metasploit with leading industry tools for penetration testing. You'll finish by working on challenges based on user's preparation and work towards solving the challenge. The course provides you with highly practical content explaining Metasploit from the following Packt books: Metasploit for Beginners Mastering Metasploit, Second Edition Metasploit Bootcamp Style and approach** **This pragmatic learning path is packed with start-to-end instructions from getting started with Metasploit to effectively building new things and solving real-world examples. All the key concepts are explained with the help of examples and demonstrations that will help you understand everything to use this essential IT power tool.**

**The first comprehensive guide to discovering and preventing attacks on the Android OS** **As the Android operating system continues to increase its share of the smartphone market, smartphone hacking remains a growing threat. Written by experts who rank among the world's foremost Android security researchers, this book presents vulnerability discovery, analysis, and exploitation tools for the good guys.** **Following a detailed explanation of how the Android OS works and its overall security architecture, the authors examine how vulnerabilities can be discovered and exploits developed for various system components, preparing you to defend against them. If you are a mobile device administrator, security researcher, Android app developer, or consultant responsible for evaluating Android security, you will find this guide is essential to your toolbox. A crack team of leading Android security researchers explain Android security risks, security design and architecture, rooting, fuzz testing, and vulnerability analysis** **Covers Android application building blocks and security as well as debugging and auditing Android apps** **Prepares mobile device administrators, security researchers, Android app developers, and security consultants to defend Android systems against attack** **Android Hacker's Handbook is the first comprehensive resource for IT professionals charged with smartphone security.**

**An easy-to-digest practical guide to Metasploit covering all aspects of the framework from installation, configuration, and vulnerability hunting to advanced client-side attacks and anti-forensics. About This Book** **Carry out penetration testing in highly-secured environments with Metasploit** **Learn to bypass different defenses to gain access into different systems. A step-by-step guide that will quickly enhance your penetration testing skills. Who This Book Is For** **If you are a penetration tester, ethical hacker, or security consultant who wants to quickly learn the Metasploit framework to carry out elementary penetration testing in highly secured environments then, this book is for you. What You Will Learn** **Get to know the absolute basics of the Metasploit framework so you have a strong foundation for advanced attacks** **Integrate and use various supporting tools to make Metasploit even more powerful and precise** **Set up the Metasploit environment along with your own virtual testing lab** **Use Metasploit for information gathering and enumeration before planning the blueprint for the attack on the target system** **Get your hands dirty by firing up Metasploit in your own virtual lab and hunt down real vulnerabilities** **Discover the clever features of the Metasploit framework for launching sophisticated and deceptive client-side attacks that bypass the perimeter security** **Leverage Metasploit capabilities to perform Web application security scanning** **In Detail** **This book will begin by introducing you to Metasploit and its functionality. Next, you will learn how to set up and configure Metasploit on various platforms to create a virtual test environment. You will also get your hands on various tools and components used by Metasploit. Further on in the book, you will learn how to find weaknesses in the target system and hunt for vulnerabilities using Metasploit and its supporting tools. Next, you'll get hands-on experience carrying out client-side attacks. Moving on, you'll learn about web application security scanning and bypassing anti-virus and clearing traces on the target system post compromise. This book will also keep you updated with the latest security techniques and methods that can be directly applied to scan, test, hack, and secure networks and systems with Metasploit. By the end of this book, you'll get the hang of bypassing different defenses, after which you'll learn how hackers use the network to gain access into different systems. Style and approach** **This tutorial is packed with step-by-step instructions that are useful for those getting started with Metasploit. This is an easy-to-read guide to learning Metasploit from scratch that explains simply and clearly all you need to know to use this essential IT power tool.**

**Using Wireshark and the Metasploit Framework**

**CompTIA PenTest+ PT0-001 Cert Guide**

**Build your defense against complex attacks**

**Beginner's guide to hacking AWS with tools such as Kali Linux, Metasploit, and Nmap**

**The subtle art of using Metasploit 5.0 for web application exploitation**

**A Quick-Start Guide to Breaking into Systems**

**Penetration testers simulate cyber attacks to find security weaknesses in networks, operating systems, and applications. Information security experts worldwide use penetration techniques to evaluate enterprise defenses. In Penetration Testing, security expert, researcher, and trainer Georgia Weidman introduces you to the core skills and techniques that every pentester needs. Using a virtual machine-based lab that includes Kali Linux and vulnerable operating systems, you'll run through a series of practical lessons with tools like Wireshark, Nmap, and Burp Suite. As you follow along with the labs and launch attacks, you'll experience the key stages of an actual assessment—including information gathering, finding exploitable vulnerabilities, gaining access to systems, post exploitation, and more. Learn how to:**

- Crack passwords and wireless network keys with brute-forcing and wordlists
- Test web applications for vulnerabilities
- Use the Metasploit Framework to launch exploits and write your own Metasploit modules
- Automate social-engineering attacks
- Bypass antivirus software
- Turn access to one machine into total control of the enterprise in the post exploitation phase

**You'll even explore writing your own exploits. Then it's on to mobile hacking—Weidman's particular area of research—with her tool, the Smartphone Pentest Framework. With its collection of hands-on lessons that cover key tools and strategies, Penetration Testing is the introduction that every aspiring hacker needs.**

**Know how to set up, defend, and attack computer networks with this revised and expanded second edition. You will learn to configure your network from the ground up, beginning with developing your own private virtual test environment, then setting up your own DNS server and AD infrastructure. You will continue with more advanced network services, web servers, and database servers and you will end by building your own web applications servers, including WordPress and Joomla!. Systems from 2011 through 2017 are covered, including Windows 7, Windows 8, Windows 10, Windows Server 2012, and Windows Server 2016 as well as a range of Linux distributions, including Ubuntu, CentOS, Mint, and OpenSUSE. Key defensive techniques are integrated throughout and you will develop situational awareness of your network and build a complete defensive infrastructure, including log servers, network firewalls, web application firewalls, and intrusion detection systems. Of course, you cannot truly understand how to defend a network if you do not know how to attack it, so you will attack your test systems in a variety of ways. You will learn about Metasploit, browser attacks, privilege escalation, pass-the-hash attacks, malware, man-in-the-middle attacks, database attacks, and web application attacks. What You'll Learn** **Construct a testing laboratory to experiment with software and attack techniques** **Build realistic networks that include active directory, file servers, databases, web servers, and web applications such as WordPress and Joomla!** **Manage networks remotely with tools, including PowerShell, WMI, and WinRM** **Use offensive tools such as Metasploit, Mimikatz, Veil, Burp Suite, and John the Ripper** **Exploit networks starting from malware and initial intrusion to privilege escalation through password cracking and persistence mechanisms** **Defend networks by developing operational awareness using auditd and Sysmon to analyze logs, and deploying defensive tools such as the Snort intrusion detection system, IPFire firewalls, and ModSecurity web application firewalls** **Who This Book Is For** **This study guide is intended for everyone involved in or interested in cybersecurity operations (e.g., cybersecurity professionals, IT professionals, business professionals, and students)**

**Publisher's Note:** Products purchased from Third Party sellers are not guaranteed by the publisher for quality, authenticity, or access to any online entitlements included with the product. **Up-to-date coverage of every topic on the CEH v10 exam** **Thoroughly updated for CEH v10 exam objectives, this integrated self-study system offers complete coverage of the EC-Council's Certified Ethical Hacker exam. In this new edition, IT security expert Matt Walker discusses the latest tools, techniques, and exploits relevant to the exam. You'll find learning objectives at the beginning of each chapter, exam tips, practice exam questions, and in-depth explanations. Designed to help you pass the exam with ease, this comprehensive resource also serves as**

an essential on-the-job reference. Covers all exam topics, including: •Ethical hacking fundamentals•Reconnaissance and footprinting•Scanning and enumeration•Sniffing and evasion•Attacking a system•Hacking web servers and applications•Wireless network hacking•Security in cloud computing•Trojans and other attacks•Cryptography•Social engineering and physical security•Penetration testing Digital content includes: •300 practice exam questions•Test engine that provides full-length practice exams and customized quizzes by chapter

Ten Strategies of a World-Class Cyber Security Operations Center conveys MITRE’s accumulated expertise on enterprise-grade computer network defense. It covers ten key qualities of leading Cyber Security Operations Centers (CSOCs), ranging from their structure and organization, to processes that best enable smooth operations, to approaches that extract maximum value from key CSOC technology investments. This book offers perspective and context for key decision points in structuring a CSOC, such as what capabilities to offer, how to architect large-scale data collection and analysis, and how to prepare the CSOC team for agile, threat-based response. If you manage, work in, or are standing up a CSOC, this book is for you. It is also available on MITRE’s website, www.mitre.org.

Metasploit Bootcamp

CompTIA Security+ Guide to Network Security Fundamentals

Android Hacker’s Handbook

Second Edition

The Complete Metasploit Guide

Cyber Operations

Up-to-date coverage of every topic on the CEH v11 exam Thoroughly updated for CEH v11 exam objectives, this integrated self-study system offers complete coverage of the EC-Council ’s Certified Ethical Hacker exam. In this new edition, IT security expert Matt Walker discusses the latest tools, techniques, and exploits relevant to the exam. You ’ll find learning objectives at the beginning of each chapter, exam tips, practice exam questions, and in-depth explanations. Designed to help you pass the exam with ease, this comprehensive resource also serves as an essential on-the-job reference. Covers all exam topics, including: Ethical hacking fundamentals Reconnaissance and footprinting Scanning and enumeration Sniffing and evasion Attacking a system Hacking web servers and applications Wireless network hacking Mobile, IoT, and OT Security in cloud computing Trojans and other attacks, including malware analysis Cryptography Social engineering and physical security Penetration testing Online content includes: 300 practice exam questions Test engine that provides full-length practice exams and customized quizzes by chapter or exam domain

This best-selling guide provides a complete, practical, up-to-date introduction to network and computer security. SECURITY+ GUIDE TO NETWORK SECURITY FUNDAMENTALS, Fifth Edition, maps to the new CompTIA Security+ SY0-401 Certification Exam, providing thorough coverage of all domain objectives to help readers prepare for professional certification and career success. The text covers the essentials of network security, including compliance and operational security; threats and vulnerabilities; application, data, and host security; access control and identity management; and cryptography. The extensively updated Fifth Edition features a new structure based on major domains, a new chapter dedicated to mobile device security, expanded coverage of attacks and defenses, and new and updated information reflecting recent developments and emerging trends in information security, such as virtualization. New hands-on and case activities help readers review and apply what they have learned, and end-of-chapter exercises direct readers to the Information Security Community Site for additional activities and a wealth of learning resources, including blogs, videos , and current news and information relevant to the information security field. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Over 80 recipes to master the most widely used penetration testing framework.

The Metasploit Framework makes discovering, exploiting, and sharing vulnerabilities quick and relatively painless. But while Metasploit is used by security professionals everywhere, the tool can be hard to grasp for first-time users. Metasploit: The Penetration Tester’s Guide fills this gap by teaching you how to harness the Framework and interact with the vibrant community of Metasploit contributors. Once you’ve built your foundation for penetration testing, you ’ll learn the Framework’s conventions, interfaces, and module system as you launch simulated attacks. You ’ll move on to advanced penetration testing techniques, including network reconnaissance and enumeration, client-side attacks, wireless attacks, and targeted social-engineering attacks. Learn how to: – Find and exploit unmaintained, misconfigured, and unpatched systems – Perform reconnaissance and find valuable information about your target – Bypass anti-virus technologies and circumvent security controls – Integrate Nmap, NeXpose, and Nessus with Metasploit to automate discovery – Use the Meterpreter shell to launch further attacks from inside the network – Harness standalone Metasploit utilities, third-party tools, and plug-ins – Learn how to write your own Meterpreter post exploitation modules and scripts You’ll even touch on exploit discovery for zero-day research, write a fuzzer, port existing exploits into the Framework, and learn how to cover your tracks. Whether your goal is to secure your own networks or to put someone else’s to the test, Metasploit: The Penetration Tester’s Guide will take you there and beyond.

CEH Certified Ethical Hacker All-in-One Exam Guide, Fourth Edition

Hands-On Web Penetration Testing with Metasploit

Information Security and Cryptology -- ICISC 2012

Practical Web Penetration Testing

Take your penetration testing and IT security skills to a whole new level with the secrets of Metasploit, 3rd Edition

Penetration Testing Basics

An intensive hands-on guide to perform professional penetration testing for highly-secured environments from start to finish. You will learn to provide penetration testing services to clients with mature security infrastructure. Understand how to perform each stage of the penetration test by gaining hands-on experience in performing attacks that mimic those seen in the wild. In the end, take the challenge and perform a virtual penetration test against a fictional corporation. If you are looking for guidance and detailed instructions on how to perform a penetration test from start to finish, are looking to build out your own penetration testing lab, or are looking to improve on your existing penetration testing skills, this book is for you. Although the books attempts to accommodate those that are still new to the penetration testing field, experienced testers should be able to gain knowledge and hands-on experience as well. The book does assume that you have some experience in web application testing and as such the chapter regarding this subject may require you to understand the basic concepts of web security. The reader should also be familiar with basic IT concepts, and commonly used protocols such as TCP/IP.

Achieve the gold standard in penetration testing with Kali using this masterpiece, now in its third edition! About This Book Get a rock-solid insight into penetration testing techniques and test your corporate network against threats like never before Formulate your pentesting strategies by relying on the most up-to-date and feature-rich Kali version in town—Kali Linux 2 (aka Sana). Experience this journey with new cutting-edge wireless penetration tools and a variety of new features to make your pentesting experience smoother Who This Book Is For If you are an IT security professional or a student with basic knowledge of Unix/Linux operating systems, including an awareness of information security factors, and you want to use Kali Linux for penetration testing, this book is for you. What You Will Learn Find out to download and install your own copy of Kali Linux Properly scope and conduct the initial stages of a penetration test Conduct reconnaissance and enumeration of target networks Exploit and gain a foothold on a target system or network Obtain and crack passwords Use the Kali Linux NetHunter install to conduct wireless penetration testing Create proper penetration testing reports In Detail Kali Linux is a comprehensive penetration testing platform with advanced tools to identify, detect, and exploit the vulnerabilities uncovered in the target network environment. With Kali Linux, you can apply appropriate testing methodology with defined business objectives and a scheduled test plan, resulting in a successful penetration testing project engagement. Kali Linux – Assuring Security by Penetration Testing is a fully focused, structured book providing guidance on developing practical penetration testing skills by demonstrating cutting-edge hacker tools and techniques with a coherent, step-by-step approach. This book offers you all of the essential lab preparation and testing procedures that reflect real-world attack scenarios from a business perspective, in today’s digital age. Style and approach This practical guide will showcase penetration testing through cutting-edge tools and techniques using a coherent, step-by-step approach.

Identify, exploit, and test web application security with ease Key Features Get up to speed with Metasploit and discover how to use it for pentesting Understand how to exploit and protect your web environment effectively Learn how an exploit works and what causes vulnerabilities Book Description Metasploit has been a crucial security tool for many years. However, there are only a few modules that Metasploit has made available to the public for pentesting web applications. In this book, you’ll explore another aspect of the framework – web applications – which is not commonly used. You’ll also discover how Metasploit, when used with its inbuilt GUI, simplifies web application penetration testing. The book starts by focusing on the Metasploit setup, along with covering the life cycle of the penetration testing process. Then, you will explore Metasploit terminology and the web GUI, which is available in the Metasploit Community Edition. Next, the book will take you through pentesting popular content management systems such as Drupal, WordPress, and Joomla, which will also include studying the latest CVEs and understanding the root cause of vulnerability in detail. Later, you’ll gain insights into the vulnerability assessment and exploitation of technological platforms such as JBoss, Jenkins, and Tomcat. Finally, you’ll learn how to fuzz web applications to find logical security vulnerabilities using third-party tools. By the end of this book, you’ll have a solid understanding of how to exploit and validate vulnerabilities by working with various tools and techniques. What you will learn Get up to speed with setting up and installing the Metasploit framework Gain first-hand experience of the Metasploit web interface Use Metasploit for web-application reconnaissance Understand how to pentest various content management systems Pentest platforms such as JBoss, Tomcat, and Jenkins Become well-versed with fuzzing web applications Write and automate penetration testing reports Who this book is for This book is for web security analysts, bug bounty hunters, security professionals, or any stakeholder in the security sector who wants to delve into web application security testing. Professionals who are not experts with command line tools or Kali Linux and prefer Metasploit’s graphical user interface (GUI) will also find this book useful. No experience with Metasploit is required, but basic knowledge of Linux and web application pentesting will be helpful.

Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

AWS Penetration Testing

CEH Certified Ethical Hacker All-in-One Exam Guide, Fifth Edition

Smart Trends in Computing and Communications

Metasploit for Beginners

Building, Defending, and Attacking Modern Computer Networks

15th International Conference, Seoul, Korea, November 28-30, 2012, Revised Selected Papers

Over 100 recipes for penetration testing using Metasploit and virtual machines Key Features Special focus on the latest operating systems, exploits, and penetration testing techniques Learn new anti-virus evasion techniques and use Metasploit to evade countermeasures Automate post exploitation with AutoRunScript Exploit Android devices, record audio and video, send and read SMS, read call logs, and much more Build and analyze Metasploit modules in Ruby Integrate Metasploit with other penetration testing tools Book Description Metasploit is the world’s leading penetration testing tool and helps security and IT professionals find, exploit, and validate vulnerabilities. Metasploit allows penetration testing automation, password auditing, web application scanning, social engineering, post exploitation, evidence collection, and reporting. Metasploit’s integration with InsightVM (or Nexpose), Nessus, OpenVas, and other vulnerability scanners provides a validation solution that simplifies vulnerability prioritization and remediation reporting. Teams can collaborate in Metasploit and present their findings in consolidated reports. In this book, you will go through great recipes that will allow you to start using Metasploit effectively. With an ever increasing level of complexity, and covering everything from the fundamentals to more advanced features in Metasploit, this book is not just for beginners but also for professionals keen to master this awesome tool. You will begin by building your lab environment, setting up Metasploit, and learning how to perform intelligence gathering, threat modeling, vulnerability analysis, exploitation, and post exploitation—all inside Metasploit. You will learn how to create and customize payloads to evade anti-virus software and bypass an organization’s defenses, exploit server vulnerabilities, attack client systems, compromise mobile phones, automate post exploitation, install backdoors, run keyloggers, highjack webcams, port public exploits to the framework, create your own modules, and much more. What you will learn Set up a complete penetration testing environment using Metasploit and virtual machines Master the world’s leading penetration testing tool and use it in professional penetration testing Make the most of Metasploit with PostgreSQL, importing scan results, using workspaces, hosts, loot, notes, services, vulnerabilities, and exploit results Use Metasploit with the Penetration Testing Execution Standard methodology Use MSFvenom efficiently to generate payloads and backdoor files, and create shellcode Leverage Metasploit’s advanced options, upgrade sessions, use proxies, use Meterpreter sleep control, and change timeouts to be stealthy Who this book is for If you are a Security professional or pentester and want to get into vulnerability exploitation and make the most of the Metasploit framework, then this book is for you. Some prior understanding of penetration testing and Metasploit is required.

Explore effective penetration testing techniques with Metasploit