

## Kali Nethunter

Von der Installation über die Konfiguration bis hin zum Einsatz der wichtigsten Tools Detaillierter Ablauf von Security Assessments und Durchführung von Penetrationstests mit praktischer Checkliste Schwachstellenanalyse mit OpenVAS, Angriffe mit WebScarab und Metasploit, IT-Forensik mit Autopsy, Reporting mit Faraday und viele weitere Tools Die Distribution Kali Linux ist auf Sicherheits- und Penetrationstests spezialisiert. Sie enthält mehrere Hundert Pakete zur Informationssammlung und Schwachstellenanalyse und jede Menge Tools für Angriffe und Exploitation sowie Forensik und Reporting, sodass Penetration Tester aus einem beinahe endlosen Fundus kostenloser Tools schöpfen können. Dieses Buch ermöglicht IT-Sicherheitsexperten und allen, die es werden wollen, einen einfachen Einstieg in Kali Linux. Erfahrung im Umgang mit anderen Linux-Distributionen setzt der Autor dabei nicht voraus. Im ersten Teil des Buches erfahren Sie, wie Sie Kali Linux installieren und an Ihre Bedürfnisse anpassen. Darüber hinaus gibt Ihnen der Autor grundlegende Linux-Kenntnisse an die Hand, die Sie für das Penetration Testing mit Kali Linux brauchen. Der zweite Teil erläutert verschiedene Security Assessments sowie die grundlegende Vorgehensweise bei der Durchführung von Penetrationstests. So vorbereitet können Sie im nächsten Schritt gezielt die für Ihren Einsatzzweck passenden Tools für das Penetration Testing auswählen. Aus der Fülle der bei Kali Linux mitgelieferten Tools stellt der Autor im dritten Teil des Buches die wichtigsten vor und zeigt Schritt für Schritt, wie und wofür sie eingesetzt werden, darunter bekannte Tools wie Nmap, OpenVAS, Metasploit und John the Ripper. Nach der Lektüre sind Sie bereit, Kali Linux sowie die wichtigsten mitgelieferten Tools für Penetrationstests einzusetzen und IT-Systeme auf Schwachstellen zu prüfen.

Over 120 recipes to perform advanced penetration testing with Kali Linux  
 About This Book\* Practical recipes to conduct effective penetration testing using the powerful Kali Linux\* Leverage tools like Metasploit, Wireshark, Nmap, and many more to detect vulnerabilities with ease\* Confidently perform networking and application attacks using task-oriented recipes  
 Who This Book Is For  
 This book is aimed at IT security professionals, pentesters, and security analysts who have basic knowledge of Kali Linux and want to conduct advanced penetration testing techniques.  
 What You Will Learn\* Installing, setting up and customizing Kali for pentesting on multiple platforms\* Pentesting routers and embedded devices\* Bug hunting 2017\* Pwning and escalating through corporate network\* Buffer overflows 101\* Auditing wireless networks\* Fiddling around with software-defined radio\* Hacking on the run with NetHunter\* Writing good quality reports  
 In Detail  
 With the current rate of hacking, it is very important to pentest your environment in order to ensure advanced-level security. This book is packed with practical recipes that will quickly get you started with Kali Linux (version 2016.2) according to your needs, and move on to core functionalities. This book will start with the installation and configuration of Kali Linux so that you can perform your tests. You will learn how to plan attack strategies and perform web application exploitation using tools such as Burp, and Jexboss. You will also learn how to perform network exploitation using Metasploit, Sparta, and Wireshark. Next, you will perform wireless and password attacks using tools such as Patator, John the Ripper, and airoscript-ng. Lastly, you will learn how to create an optimum quality pentest report! By the end of this book, you will know how to conduct advanced penetration testing thanks to the book's crisp and task-oriented recipes.  
 Style and approach  
 This is a recipe-based book that allows you to venture into some of the most cutting-edge practices and techniques to perform penetration testing with Kali Linux.

This book gives you the skills you need to use Python for penetration testing, with the help of detailed code examples. This book has been updated for Python 3.6.3 and Kali Linux 2018.1.  
 Key Features  
 Detect and avoid various attack types that put the privacy of a system at risk  
 Leverage Python to build efficient code and eventually build a robust environment  
 Learn about securing wireless applications and information gathering on a web server  
 Book Description  
 This book gives you the skills you need to use Python for penetration testing (pentesting), with the help of detailed code examples. We start by exploring the basics of networking with Python and then proceed to network hacking. Then, you will delve into exploring Python libraries to perform various types of pentesting and ethical hacking techniques. Next, we delve into hacking the application layer, where we start by gathering information from a website. We then move on to concepts related to website hacking—such as parameter tampering, DDoS, XSS, and SQL injection. By reading this book, you will learn different techniques and methodologies that will familiarize you with Python pentesting techniques, how to protect yourself, and how to create automated programs to find the admin console, SQL injection, and XSS attacks. What you will learn  
 The basics of network pentesting including network scanning and sniffing  
 Wireless, wired attacks, and building traps for attack and torrent detection  
 Web server footprinting and web application attacks, including the XSS and SQL injection attack  
 Wireless frames and how to obtain information such as SSID, BSSID, and the channel number from a wireless frame using a Python script  
 The importance of web server signatures, email gathering, and why knowing the server signature is the first step in hacking  
 Who this book is for  
 If you are a Python programmer, a security researcher, or an ethical hacker and are interested in penetration testing with the help of Python, then this book is for you. Even if you are new to the field of ethical hacking, this book can help you find the vulnerabilities in your system so that you are ready to tackle any kind of attack or intrusion.

Over 70 recipes for system administrators or DevOps to master Kali Linux 2 and perform effective security assessments  
 About This Book  
 Set up a penetration testing lab to conduct a preliminary assessment of attack surfaces and run exploits  
 Improve your testing efficiency with the use of automated vulnerability scanners  
 Work through step-by-step recipes to detect a wide array of vulnerabilities, exploit them to analyze their consequences, and identify security anomalies  
 Who This Book Is For  
 This book is intended for those who want to know more about information security. In particular, it's ideal for system administrators and system architects who want to ensure that the infrastructure and systems they are creating and managing are secure. This book helps both beginners and intermediates by allowing them to use it as a reference book and to gain in-depth knowledge.

What You Will Learn Understand the importance of security assessments over merely setting up and managing systems/processes Familiarize yourself with tools such as OPENVAS to locate system and network vulnerabilities Discover multiple solutions to escalate privileges on a compromised machine Identify security anomalies in order to make your infrastructure secure and further strengthen it Acquire the skills to prevent infrastructure and application vulnerabilities Exploit vulnerabilities that require a complex setup with the help of Metasploit In Detail With the increasing threats of breaches and attacks on critical infrastructure, system administrators and architects can use Kali Linux 2.0 to ensure their infrastructure is secure by finding out known vulnerabilities and safeguarding their infrastructure against unknown vulnerabilities. This practical cookbook-style guide contains chapters carefully structured in three phases – information gathering, vulnerability assessment, and penetration testing for the web, and wired and wireless networks. It's an ideal reference guide if you're looking for a solution to a specific problem or learning how to use a tool. We provide hands-on examples of powerful tools/scripts designed for exploitation. In the final section, we cover various tools you can use during testing, and we help you create in-depth reports to impress management. We provide system engineers with steps to reproduce issues and fix them. Style and approach This practical book is full of easy-to-follow recipes with based on real-world problems faced by the authors. Each recipe is divided into three sections, clearly defining what the recipe does, what you need, and how to do it. The carefully structured recipes allow you to go directly to your topic of interest.

Discover the next level of network defense and penetration testing with the Metasploit 5.0 framework Key Features Make your network robust and resilient with this updated edition covering the latest pentesting techniques Explore a variety of entry points to compromise a system while remaining undetected Enhance your ethical hacking skills by performing penetration tests in highly secure environments Book Description Updated for the latest version of Metasploit, this book will prepare you to face everyday cyberattacks by simulating real-world scenarios. Complete with step-by-step explanations of essential concepts and practical examples, Mastering Metasploit will help you gain insights into programming Metasploit modules and carrying out exploitation, as well as building and porting various kinds of exploits in Metasploit. Giving you the ability to perform tests on different services, including databases, IoT, and mobile, this Metasploit book will help you get to grips with real-world, sophisticated scenarios where performing penetration tests is a challenge. You'll then learn a variety of methods and techniques to evade security controls deployed at a target's endpoint. As you advance, you'll script automated attacks using CORTANA and Armitage to aid penetration testing by developing virtual bots and discover how you can add custom functionalities in Armitage. Following real-world case studies, this book will take you on a journey through client-side attacks using Metasploit and various scripts built on the Metasploit 5.0 framework. By the end of the book, you'll have developed the skills you need to work confidently with efficient exploitation techniques What you will learn Develop advanced and sophisticated auxiliary, exploitation, and post-exploitation modules Learn to script automated attacks using CORTANA Test services such as databases, SCADA, VoIP, and mobile devices Attack the client side with highly advanced pentesting techniques Bypass modern protection mechanisms, such as antivirus, IDS, and firewalls Import public exploits to the Metasploit Framework Leverage C and Python programming to effectively evade endpoint protection Who this book is for If you are a professional penetration tester, security engineer, or law enforcement analyst with basic knowledge of Metasploit, this book will help you to master the Metasploit framework and guide you in developing your exploit and module development skills. Researchers looking to add their custom functionalities to Metasploit will find this book useful. As Mastering Metasploit covers Ruby programming and attack scripting using Cortana, practical knowledge of Ruby and Cortana is required.

Insights into the true history of cyber warfare, and the strategies, tactics, and cybersecurity tools that can be used to better defend yourself and your organization against cyber threat. Key Features Define and determine a cyber-defence strategy based on current and past real-life examples Understand how future technologies will impact cyber warfare campaigns and society Future-ready yourself and your business against any cyber threat Book Description The era of cyber warfare is now upon us. What we do now and how we determine what we will do in the future is the difference between whether our businesses live or die and whether our digital self survives the digital battlefield. Cyber Warfare – Truth, Tactics, and Strategies takes you on a journey through the myriad of cyber attacks and threats that are present in a world powered by AI, big data, autonomous vehicles, drones video, and social media. Dr. Chase Cunningham uses his military background to provide you with a unique perspective on cyber security and warfare. Moving away from a reactive stance to one that is forward-looking, he aims to prepare people and organizations to better defend themselves in a world where there are no borders or perimeters. He demonstrates how the cyber landscape is growing infinitely more complex and is continuously evolving at the speed of light. The book not only covers cyber warfare, but it also looks at the political, cultural, and geographical influences that pertain to these attack methods and helps you understand the motivation and impacts that are likely in each scenario. Cyber Warfare – Truth, Tactics, and Strategies is as real-life and up-to-date as cyber can possibly be, with examples of actual attacks and defense techniques, tools, and strategies presented for you to learn how to think about defending your own systems and data. What you will learn Hacking at scale – how machine learning (ML) and artificial intelligence (AI) skew the battlefield Defending a boundaryless enterprise Using video and audio as weapons of influence Uncovering DeepFakes and their associated attack vectors Using voice augmentation for exploitation Defending when there is no perimeter Responding tactically to counter-campaign-based attacks Who this book is for This book is for any engineer, leader, or professional with either a responsibility for cyber security within their organizations, or an interest in working in this ever-growing field.

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





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

Discover end-to-end penetration testing solutions to enhance your ethical hacking skills  
**Key Features** Practical recipes to conduct effective penetration testing using the latest version of Kali Linux Leverage tools like Metasploit, Wireshark, Nmap, and more to detect vulnerabilities with ease  
**Confidently** perform networking and application attacks using task-oriented recipes  
**Book Description** Many organizations have been affected by recent cyber events. At the current rate of hacking, it has become more important than ever to pentest your environment in order to ensure advanced-level security. This book is packed with practical recipes that will quickly get you started with Kali Linux (version 2018.4 / 2019), in addition to covering the core functionalities. The book will get you off to a strong start by introducing you to the installation and configuration of Kali Linux, which will help you to perform your tests. You will also learn how to plan attack strategies and perform web application exploitation using tools such as Burp and JexBoss. As you progress, you will get to grips with performing network exploitation using Metasploit, Sparta, and Wireshark. The book will also help you delve into the technique of carrying out wireless and password attacks using tools such as Patator, John the Ripper, and airoscript-ng. Later chapters will draw focus to the wide range of tools that help in forensics investigations and incident response mechanisms. As you wrap up the concluding chapters, you will learn to create an optimum quality pentest report. By the end of this book, you will be equipped with the knowledge you need to conduct advanced penetration testing, thanks to the book's crisp and task-oriented recipes. What you will learn  
 Learn how to install, set up and customize Kali for pentesting on multiple platforms  
 Pentest routers and embedded devices  
 Get insights into fiddling around with software-defined radio  
 Pwn and escalate through a corporate network  
 Write good quality security reports  
 Explore digital forensics and memory analysis with Kali Linux  
 Who this book is for  
 If you are an IT security professional, pentester, or security analyst who wants to conduct advanced penetration testing techniques, then this book is for you. Basic knowledge of Kali Linux is assumed.

Over 120 recipes to perform advanced penetration testing with Kali Linux  
**About This Book** Practical recipes to conduct effective penetration testing using the powerful Kali Linux Leverage tools like Metasploit, Wireshark, Nmap, and many more to detect vulnerabilities with ease  
**Confidently** perform networking and application attacks using task-oriented recipes  
**Who This Book Is For** This book is aimed at IT security professionals, pentesters, and security analysts who have basic knowledge of Kali Linux and want to conduct advanced penetration testing techniques. What You Will Learn  
 Installing, setting up and customizing Kali for pentesting on multiple platforms  
 Pentesting routers and embedded devices  
 Bug hunting 2017  
 Pwning and escalating through corporate network  
 Buffer overflows 101  
 Auditing wireless networks  
 Fiddling around with software-defned radio  
 Hacking on the run with NetHunter  
 Writing good quality reports  
**In Detail** With the current rate of hacking, it is very important to pentest your environment in order to ensure advanced-level security. This book is packed with practical recipes that will quickly get you started with Kali Linux (version 2016.2) according to your needs, and move on to core functionalities. This book will start with the installation and configuration of Kali Linux so that you can perform your tests. You will learn how to plan attack strategies and perform web application exploitation using tools such as Burp, and Jexboss. You will also learn how to perform network exploitation using Metasploit, Sparta, and Wireshark. Next, you will perform wireless and password attacks using tools such as Patator, John the Ripper, and airoscript-ng. Lastly, you will learn how to create an optimum quality pentest report! By the end of this book, you will know how to conduct advanced penetration testing thanks to the book's crisp and task-oriented recipes. Style and approach This is a recipe-based book that allows you to venture into some of the most cutting-edge practices and techniques to perform penetration testing with Kali Linux.

Your pen testing career begins here, with a solid foundation in essential skills and concepts  
**Penetration Testing Essentials** provides a starting place for professionals and beginners looking to learn more about penetration testing for cybersecurity. Certification eligibility requires work experience—but before you get that experience, you need a basic understanding of the technical and behavioral ways attackers compromise security, and the tools and techniques you'll use to discover the weak spots before others do. You'll learn information gathering techniques, scanning and enumeration, how to target wireless networks, and much more as you build your pen tester skill set. You'll learn how to break in, look around, get out, and cover your tracks, all without ever being noticed. Pen testers are tremendously important to data security, so they need to be sharp and well-versed in technique, but they also need to work smarter than the average hacker. This book set you on the right path, with expert instruction from a veteran IT security expert with multiple security certifications. IT Security certifications have stringent requirements and demand a complex body of knowledge. This book lays the groundwork for any IT professional hoping to move into a cybersecurity career by developing a robust pen tester skill set. Learn the fundamentals of security and cryptography  
 Master breaking, entering, and maintaining access to a system  
 Escape and evade detection while covering your tracks  
 Build your pen testing lab and the essential toolbox  
 Start developing the tools and mindset you need to become experienced in pen testing today.

Your ultimate guide to pentesting with Kali Linux  
 Kali is a popular and powerful Linux distribution used by cybersecurity professionals around the world. Penetration testers must master Kali's varied library of tools to be effective at their work. The Kali Linux Penetration Testing Bible is the hands-on and methodology guide for pentesting with Kali. You'll discover everything you need to know about the tools and techniques hackers use to gain access to systems like yours so you can erect reliable defenses for your virtual assets. Whether you're new to the field or an established pentester, you'll find what you need in this comprehensive guide. Build a modern dockerized environment  
 Discover the fundamentals of the bash language in Linux  
 Use a variety of effective techniques to find vulnerabilities (OSINT, Network Scan, and more)  
 Analyze your findings and identify false positives and uncover advanced subjects, like buffer overflow, lateral movement, and privilege escalation  
 Apply practical and efficient pentesting workflows  
 Learn about Modern Web Application Security  
 Secure SDLC  
 Automate your penetration testing with Python

An immersive learning experience enhanced with technical, hands-on labs to understand the concepts, methods, tools, platforms, and systems required to master the art of cybersecurity  
**Key Features** Get hold of the best defensive security strategies and tools  
 Develop a defensive security strategy at an enterprise level  
 Get hands-on with advanced cybersecurity threat detection, including XSS, SQL injections, brute forcing web applications, and more  
**Book Description** Every organization has its own data and digital assets that need to be protected against an ever-growing threat landscape that compromises the availability, integrity, and confidentiality of crucial data. Therefore, it is important to train professionals in the latest defensive security skills and tools to secure them. Mastering Defensive Security provides you with in-depth knowledge of the latest cybersecurity threats along with the best tools and techniques needed to keep your

infrastructure secure. The book begins by establishing a strong foundation of cybersecurity concepts and advances to explore the latest security technologies such as Wireshark, Damn Vulnerable Web App (DVWA), Burp Suite, OpenVAS, and Nmap, hardware threats such as a weaponized Raspberry Pi, and hardening techniques for Unix, Windows, web applications, and cloud infrastructures. As you make progress through the chapters, you'll get to grips with several advanced techniques such as malware analysis, security automation, computer forensics, and vulnerability assessment, which will help you to leverage pentesting for security. By the end of this book, you'll have become familiar with creating your own defensive security tools using IoT devices and developed advanced defensive security skills. What you will learn

- Become well versed with concepts related to defensive security
- Discover strategies and tools to secure the most vulnerable factor – the user
- Get hands-on experience using and configuring the best security tools
- Understand how to apply hardening techniques in Windows and Unix environments
- Leverage malware analysis and forensics to enhance your security strategy
- Secure Internet of Things (IoT) implementations
- Enhance the security of web applications and cloud deployments

Who this book is for This book is for IT professionals, including systems administrators, programmers, IT architects, solution engineers, system analysts, data scientists, DBAs, and any IT expert looking to explore the fascinating world of cybersecurity. Cybersecurity professionals who want to broaden their knowledge of security topics to effectively create and design a defensive security strategy for a large organization will find this book useful. A basic understanding of concepts such as networking, IT, servers, virtualization, and cloud is required.

Drahtlose Netzwerke sind heute allgegenwärtig und werden im Zuge von Entwicklungen wie dem "Smart Home" und dem "Internet of Things" in Zukunft eine noch wichtigere Schlüsselrolle bei der Informationsvermittlung spielen. Folglich steht und fällt die Zuverlässigkeit unserer Infrastruktur nicht zuletzt mit der Sicherheit von WLAN-Technologien. Das Buch vermittelt seinen Leserinnen und Lesern das nötige Wissen, um WLAN-Umgebungen wirksam gegen Angriffe abzusichern. Zahlreiche praxisnahe Beispiele helfen sowohl Anfängern als auch Fortgeschrittenen dabei, verschiedene Angriffsszenarien nachzuvollziehen, um sich effektiv vor Hackern schützen zu können. Vom Auskundschaften einer WLAN-Umgebung bis zur Umgehung von Authentifizierungsverfahren geben die Autoren einen umfassenden Einblick in alle gängigen Angriffswege auf drahtlose Datenübertragungstechnologien. Rechtliche und gesellschaftliche Aspekte wie Störerhaftung und Freifunk runden das Buch ab und machen es zu einem unverzichtbaren Lern- und Nachschlagewerk für alle, denen die Sicherheit ihrer Funknetze am Herzen liegt.

The world of wireless and mobile devices is evolving day-to-day, with many individuals relying solely on their wireless devices in the workplace and in the home. The growing use of mobile devices demands that organizations become more educated in securing this growing technology and determining how to best protect their assets. Written by an industry expert, Wireless and Mobile Device Security explores the evolution of wired networks to wireless networking and its impact on the corporate world. Using case studies and real-world events, it goes on to discuss risk assessments, threats, and vulnerabilities of wireless networks, as well as the security measures that should be put in place to mitigate breaches. The text closes with a look at the policies and procedures in place and a glimpse ahead at the future of wireless and mobile device security.

Fully-updated for Python 3, the second edition of this worldwide bestseller (over 100,000 copies sold) explores the stealthier side of programming and brings you all new strategies for your hacking projects. When it comes to creating powerful and effective hacking tools, Python is the language of choice for most security analysts. In this second edition of the bestselling Black Hat Python, you'll explore the darker side of Python's capabilities: everything from writing network sniffers, stealing email credentials, and bruteforcing directories to crafting mutation fuzzers, investigating virtual machines, and creating stealthy trojans. All of the code in this edition has been updated to Python 3.x. You'll also find new coverage of bit shifting, code hygiene, and offensive forensics with the Volatility Framework as well as expanded explanations of the Python libraries ctypes, struct, lxml, and BeautifulSoup, and offensive hacking strategies like splitting bytes, leveraging computer vision libraries, and scraping websites. You'll even learn how to:

- Create a trojan command-and-control server using GitHub
- Detect sandboxing and automate common malware tasks like keylogging and screenshotting
- Extend the Burp Suite web-hacking tool
- Escalate Windows privileges with creative process control
- Use offensive memory forensics tricks to retrieve password hashes and find vulnerabilities on a virtual machine
- Abuse Windows COM automation
- Exfiltrate data from a network undetected

When it comes to offensive security, you need to be able to create powerful tools on the fly. Learn how with Black Hat Python.

This practical, tutorial-style book uses the Kali Linux distribution to teach Linux basics with a focus on how hackers would use them. Topics include Linux command line basics, filesystems, networking, BASH basics, package management, logging, and the Linux kernel and drivers. If you're getting started along the exciting path of hacking, cybersecurity, and pentesting, Linux Basics for Hackers is an excellent first step. Using Kali Linux, an advanced penetration testing distribution of Linux, you'll learn the basics of using the Linux operating system and acquire the tools and techniques you'll need to take control of a Linux environment. First, you'll learn how to install Kali on a virtual machine and get an introduction to basic Linux concepts. Next, you'll tackle broader Linux topics like manipulating text, controlling file and directory permissions, and managing user environment variables. You'll then focus in on foundational hacking concepts like security and anonymity and learn scripting skills with bash and Python. Practical tutorials and exercises throughout will reinforce and test your skills as you learn how to:

- Cover your tracks by changing your network information and manipulating the rsyslog logging utility
- Write a tool to scan for network connections, and connect and listen to wireless networks
- Keep your internet activity stealthy using Tor, proxy servers, VPNs, and encrypted email
- Write a bash script to scan open ports for potential targets
- Use and abuse services like MySQL, Apache web server, and OpenSSH
- Build your own hacking tools, such as a remote video spy camera and a password cracker

Hacking is complex, and there is no single way in. Why not start at the beginning with Linux Basics for Hackers?

This book will equip you with a holistic understanding of 'social engineering'. It will help you to avoid and combat social engineering attacks by giving you a detailed insight into how a social engineer operates. The book covers topics from baiting, phishing, and spear phishing, to pretexting and scareware.

This SpringerBrief explores features of digital protocol wireless communications systems, and features of the emerging electrical smart grid. Both low power and high power wireless systems are described. The work also examines the cybersecurity vulnerabilities, threats and current levels of risks to critical infrastructures that rely on digital wireless technologies. Specific topics include areas of application for high criticality wireless networks (HCWN), modeling risks and vulnerabilities, governance and management frameworks, systemic mitigation, reliable operation, assessing effectiveness and efficiency, resilience testing, and accountability of HCWN. Designed for researchers and professionals, this SpringerBrief provides essential information for avoiding malevolent uses of wireless networks. The content is also valuable for advanced-level students interested in security studies or wireless networks.

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.

Unleash the power of Python scripting to execute effective and efficient penetration tests

- About This Book Sharpen your pentesting skills with Python
- Develop your fluency with Python to write sharper scripts for rigorous security testing
- Get stuck into some of the most powerful tools in the security world
- Who This Book Is For If you are a Python programmer or a security researcher who has basic knowledge of Python programming and wants to learn about penetration testing with the help of Python, this course is ideal for you. Even if you are new to the field of ethical hacking, this course can help you find the vulnerabilities in your system so that you are ready to tackle any kind of attack or intrusion.
- What You Will Learn
- Familiarize yourself with the generation of Metasploit resource files and use the Metasploit Remote Procedure Call to automate exploit generation and execution
- Exploit the Remote File Inclusion to gain administrative access to systems with Python and other scripting languages
- Crack an organization's Internet perimeter and chain exploits to gain deeper access to an organization's resources
- Explore wireless traffic with the help of various programs and perform wireless attacks with Python programs
- Gather passive information from a website using automated scripts and perform XSS, SQL injection, and parameter tampering attacks
- Develop complicated header-based attacks through Python

In Detail Cybercriminals are always one step ahead, when it comes to tools and techniques. This means you need to use the same tools and adopt the same mindset to properly secure your software. This course shows you how to do just that, demonstrating how effective Python can be for powerful pentesting that keeps your software safe. Comprising of three key modules, follow each one to push your Python and security skills to the next level. In the first module, we'll show you how to get to grips with the fundamentals. This means you'll quickly find out how to tackle some of the common challenges facing pentesters using custom Python tools designed specifically for your needs. You'll also learn what tools to use and when, giving you complete confidence when deploying your pentester tools to combat any potential threat. In the next module you'll begin hacking into the application layer. Covering everything from parameter tampering, DDoS, XSS and SQL injection, it will build on the knowledge and skills you learned in the first module to make you an even more fluent security expert. Finally in the third module, you'll find more than 60 Python pentesting recipes. We think this will soon become your trusted resource for any pentesting situation. This Learning Path combines some of the best that Packt has to offer in one complete, curated package. It includes content from the following Packt products: Learning Penetration Testing with Python by Christopher Duffy Python Penetration Testing Essentials by Mohit Python Web Penetration Testing Cookbook by Cameron Buchanan, Terry Ip, Andrew Mabbitt, Benjamin May and Dave Mound

Style and approach This course provides a quick access to powerful, modern tools, and customizable scripts to kick-start the creation of your own Python web penetration testing toolbox.

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 classical SQL, 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.

Evade antiviruses and bypass firewalls with the most widely used penetration testing frameworks

- Key Features
- Gain insights into the latest antivirus evasion techniques
- Set up a complete pentesting environment using Metasploit and virtual machines
- Discover a variety of tools and techniques that can be used with Kali Linux

Book Description Penetration testing or ethical hacking is a legal and foolproof way to identify vulnerabilities in your system. With thorough penetration testing, you can secure your system against the majority of threats. This Learning Path starts with an in-depth explanation of what hacking and penetration testing is. You'll gain a deep understanding of classical SQL and command injection flaws, and discover ways to exploit these flaws to secure your system. You'll also learn how to create and customize payloads to evade antivirus software and bypass an organization's defenses. Whether it's exploiting server vulnerabilities and attacking client systems, or compromising mobile phones and installing backdoors, this Learning Path will guide you through all this and more to improve your defense against online attacks. By the end of this Learning Path, you'll have the knowledge and skills you need to invade a system and identify all its vulnerabilities. This Learning Path includes content from the following Packt products: Web Penetration Testing with Kali Linux - Third Edition by Juned Ahmed Ansari and Gilberto Najera-Gutierrez Metasploit Penetration Testing Cookbook - Third Edition by Abhinav Singh, Monika Agarwal, et al

- What you will learn
- Build and analyze Metasploit modules in Ruby
- Integrate Metasploit with other penetration testing tools
- Use server-side attacks to detect vulnerabilities in web servers and their applications
- Explore automated attacks such as fuzzing web applications

Identify the difference between hacking a web application and network hacking Deploy Metasploit with the Penetration Testing Execution Standard (PTES) Use MSFvenom to generate payloads and backdoor files, and create shellcode Who this book is for This Learning Path is designed for security professionals, web programmers, and pentesters who want to learn vulnerability exploitation and make the most of the Metasploit framework. Some understanding of penetration testing and Metasploit is required, but basic system administration skills and the ability to read code are a must.

If you are a Python programmer or a security researcher who has basic knowledge of Python programming and want to learn about penetration testing with the help of Python, this book is ideal for you. Even if you are new to the field of ethical hacking, this book can help you find the vulnerabilities in your system so that you are ready to tackle any kind of attack or intrusion.

Security Testing with Kali NetHunter Kali Linux NetHunter is an Ethical Hacking platform that allows you to run a mobile version of Kali Linux on a supported Android device. In Security Testing with Kali NetHunter, you will see the basic usage of NetHunter as we walk through the entire NetHunter tool menu, and learn by doing with hands on step-by-step tutorials. Topics Include: Kali NetHunter Introduction and Overview Shodan App (the "Hacker's Google") Using cSploit & DriveDroid Exploiting Windows and Linux Systems Human Interface Device Attacks Man-in-the-Middle Attacks Wi-Fi Attacks Metasploit Payload Generator Using NetHunter with a WiFi Pineapple Nano NetHunter not only brings the power of Kali Linux to a portable device, it also brings an inherent level of stealth to Ethical Hackers and Pentesters by the very fact that smartphones are in use everywhere.

A hands-on guide to hacking computer systems from the ground up, from capturing traffic to crafting sneaky, successful trojans. A crash course in modern hacking techniques, Ethical Hacking is already being used to prepare the next generation of offensive security experts. In its many hands-on labs, you'll explore crucial skills for any aspiring penetration tester, security researcher, or malware analyst. You'll begin with the basics: capturing a victim's network traffic with an ARP spoofing attack and then viewing it in Wireshark. From there, you'll deploy reverse shells that let you remotely run commands on a victim's computer, encrypt files by writing your own ransomware in Python, and fake emails like the ones used in phishing attacks. In advanced chapters, you'll learn how to fuzz for new vulnerabilities, craft trojans and rootkits, exploit websites with SQL injection, and escalate your privileges to extract credentials, which you'll use to traverse a private network. You'll work with a wide range of professional penetration testing tools—and learn to write your own tools in Python—as you practice tasks like:

- Deploying the Metasploit framework's reverse shells and embedding them in innocent-seeming files
- Capturing passwords in a corporate Windows network using Mimikatz
- Scanning (almost) every device on the internet to find potential victims
- Installing Linux rootkits that modify a victim's operating system
- Performing advanced Cross-Site Scripting (XSS) attacks that execute sophisticated JavaScript payloads

Along the way, you'll gain a foundation in the relevant computing technologies. Discover how advanced fuzzers work behind the scenes, learn how internet traffic gets encrypted, explore the inner mechanisms of nation-state malware like Drovorub, and much more. Developed with feedback from cybersecurity students, Ethical Hacking addresses contemporary issues in the field not often covered in other books and will prepare you for a career in penetration testing. Most importantly, you'll be able to think like an ethical hacker?: someone who can carefully analyze systems and creatively gain access to them.

Over 60 powerful recipes to scan, exploit, and crack wireless networks for ethical purposes About This Book Expose wireless security threats through the eyes of an attacker, Recipes to help you proactively identify vulnerabilities and apply intelligent remediation, Acquire and apply key wireless pentesting skills used by industry experts Who This Book Is For If you are a security professional, administrator, and a network professional who wants to enhance their wireless penetration testing skills and knowledge then this book is for you. Some prior experience with networking security and concepts is expected. What You Will Learn Deploy and configure a wireless cyber lab that resembles an enterprise production environment Install Kali Linux 2017.3 on your laptop and configure the wireless adapter Learn the fundamentals of commonly used wireless penetration testing techniques Scan and enumerate Wireless LANs and access points Use vulnerability scanning techniques to reveal flaws and weaknesses Attack Access Points to gain access to critical networks In Detail More and more organizations are moving towards wireless networks, and Wi-Fi is a popular choice. The security of wireless networks is more important than ever before due to the widespread usage of Wi-Fi networks. This book contains recipes that will enable you to maximize the success of your wireless network testing using the advanced ethical hacking features of Kali Linux. This book will go through techniques associated with a wide range of wireless penetration tasks, including WLAN discovery scanning, WEP cracking, WPA/WPA2 cracking, attacking access point systems, operating system identification, vulnerability mapping, and validation of results. You will learn how to utilize the arsenal of tools available in Kali Linux to penetrate any wireless networking environment. You will also be shown how to identify remote services, how to assess security risks, and how various attacks are performed. By finishing the recipes, you will feel confident conducting wireless penetration tests and will be able to protect yourself or your organization from wireless security threats. Style and approach The book will provide the foundation principles, techniques, and in-depth analysis to effectively master wireless penetration testing. It will aid you in understanding and mastering many of the most powerful and useful wireless testing techniques in the industry.

Penetrationstests mit Metasploit als effektiver Teil der IT-Sicherheitsstrategie Der komplette Workflow: Portscanning mit Nmap, Hacking mit Metasploit, Schwachstellen scannen mit Nessus Die Techniken der Angreifer verstehen und geeignete Gegenmaßnahmen ergreifen Metasploit ist ein mächtiges Werkzeug, mit dem auch unerfahrene Administratoren gängige Angriffsmethoden verstehen und nachstellen können. Der Autor erklärt das Framework dabei nicht in seiner Gesamtheit, sondern greift gezielt alle Themengebiete heraus, die relevant für Verteidiger (sogenannte Blue Teams) sind. Diese erläutert Sebastian Brabetz ausführlich und zeigt, wie sie im Alltag der IT-Security wirkungsvoll eingesetzt werden können. Der Autor vermittelt Ihnen das Basiswissen zu Exploits und Penetration Testing. Sie setzen eine Kali-Linux-Umgebung auf und lernen, sich dort zurechtzufinden. Mit dem kostenlos verfügbaren Portscanner Nmap scannen Sie Systeme auf angreifbare Dienste ab. Sebastian Brabetz führt Sie dann Schritt für Schritt durch einen typischen Hack mit Metasploit und demonstriert, wie Sie mit einfachen Techniken in kürzester Zeit höchste Berechtigungsstufen in den Zielumgebungen erlangen. Schließlich zeigt er Ihnen, wie Sie Metasploit von der Meldung einer Sicherheitsbedrohung über das Patchen bis hin zur Validierung in der Verteidigung von IT-Systemen und Netzwerken einsetzen und gibt konkrete Tipps zur Erhöhung Ihres IT-Sicherheitslevels. Zusätzlich lernen Sie, Schwachstellen mit dem Schwachstellenscanner Nessus zu finden, auszuwerten und auszugeben. So wird Metasploit ein effizienter Bestandteil Ihrer IT-Sicherheitsstrategie. Sie können Schwachstellen und Angriffstechniken unter sicheren Rahmenbedingungen selbst anwenden und somit fundierte Entscheidungen treffen sowie nachvollziehen, ob Ihre Gegenmaßnahmen erfolgreich sind.

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.

[Copyright: 80e55f72629e7187cebc8724e85c120c](#)