

Learning Penetration Testing With Python

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.

Wireless has become ubiquitous in today's world. The mobility and flexibility provided by it makes our lives more comfortable and productive. But this comes at a cost – Wireless technologies are inherently insecure and can be easily broken. BackTrack is a penetration testing and security auditing distribution that comes with a myriad of wireless networking tools used to simulate network attacks and detect security loopholes. Backtrack 5 Wireless Penetration Testing Beginner's Guide will take you through the journey of becoming a Wireless hacker. You will learn various wireless testing methodologies taught using live examples, which you will implement throughout this book. The engaging practical sessions very gradually grow in complexity giving you enough time to ramp up before you get to advanced wireless attacks. This book will take you through the basic concepts in Wireless and creating a lab environment for your experiments to the business of different lab sessions in wireless security basics, slowly turn on the heat and move to more complicated scenarios, and finally end your journey by conducting bleeding edge wireless attacks in your lab. There are many interesting and new things that you will learn in this book – War Driving, WLAN packet sniffing, Network Scanning, Circumventing hidden SSIDs and MAC filters, bypassing Shared Authentication, Cracking WEP and WPA/WPA2 encryption, Access Point MAC spoofing, Rogue Devices, Evil Twins, Denial of Service attacks, Viral SSIDs, Honeypot and Hotspot attacks, Caffe Latte WEP Attack, Man-in-the-Middle attacks, Evading Wireless Intrusion Prevention systems and a bunch of other cutting edge wireless attacks. If you were ever curious about what wireless security and hacking was all about, then this book will get you started by providing you with the knowledge and practical know-how to become a wireless hacker. Hands-on practical guide with a step-by-step approach to help you get started immediately with Wireless Penetration Testing

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.

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.

Learn how to hack systems like black hat hackers and secure them like security experts Key Features Understand how computer systems work and their vulnerabilities Exploit weaknesses and hack into machines to test their security Learn how to secure systems from hackers Book Description This book starts with the basics of ethical hacking, how to practice hacking safely and legally, and how to install and interact with Kali Linux and the Linux terminal. You will explore network hacking, where you will see how to test the security of wired and wireless networks. You'll also learn how to crack the password for any Wi-Fi network (whether it uses WEP, WPA, or WPA2) and spy on the connected devices. Moving on, you will discover how to gain access to remote computer systems using client-side and server-side attacks. You will also get the hang of post-exploitation techniques, including remotely controlling and interacting with the systems that you compromised. Towards the end of the book, you will be able to pick up web application hacking techniques. You'll see how to discover, exploit, and prevent a number of website vulnerabilities, such as XSS and SQL injections. The attacks covered are practical techniques that work against real systems and are purely for educational purposes. At the end of each section, you will learn how to detect, prevent, and secure systems from these attacks. What you will learn Understand ethical hacking and the different fields and types of hackers Set up a penetration testing lab to practice safe and legal hacking Explore Linux basics, commands, and how to interact with the

terminal Access password-protected networks and spy on connected clients Use server and client-side attacks to hack and control remote computers Control a hacked system remotely and use it to hack other systems Discover, exploit, and prevent a number of web application vulnerabilities such as XSS and SQL injections Who this book is for Learning Ethical Hacking from Scratch is for anyone interested in learning how to hack and test the security of systems like professional hackers and security experts.

If you are a security professional, pentester, or anyone interested in getting to grips with wireless penetration testing, this is the book for you. Some familiarity with Kali Linux and wireless concepts is beneficial.

Over 50+ hands-on recipes to help you pen test networks using Python, discover vulnerabilities, and find a recovery path About This Book Learn to detect and avoid various types of attack that put system privacy at risk Enhance your knowledge of wireless application concepts and information gathering through practical recipes Learn a pragmatic way to penetration-test using Python, build efficient code, and save time Who This Book Is For If you are a developer with prior knowledge of using Python for penetration testing and if you want an overview of scripting tasks to consider while penetration testing, this book will give you a lot of useful code for your toolkit. What You Will Learn Learn to configure Python in different environment setups. Find an IP address from a web page using BeautifulSoup and Scrapy Discover different types of packet sniffing script to sniff network packets Master layer-2 and TCP/ IP attacks Master techniques for exploit development for Windows and Linux Incorporate various network- and packet-sniffing techniques using Raw sockets and Scrapy In Detail Penetration testing is the use of tools and code to attack a system in order to assess its vulnerabilities to external threats. Python allows pen testers to create their own tools. Since Python is a highly valued pen-testing language, there are many native libraries and Python bindings available specifically for pen-testing tasks. Python Penetration Testing Cookbook begins by teaching you how to extract information from web pages. You will learn how to build an intrusion detection system using network sniffing techniques. Next, you will find out how to scan your networks to ensure performance and quality, and how to carry out wireless pen testing on your network to avoid cyber attacks. After that, we'll discuss the different kinds of network attack. Next, you'll get to grips with designing your own torrent detection program. We'll take you through common vulnerability scenarios and then cover buffer overflow exploitation so you can detect insecure coding. Finally, you'll master PE code injection methods to safeguard your network. Style and approach This book takes a recipe-based approach to solving real-world problems in pen testing. It is structured in stages from the initial assessment of a system through exploitation to post-exploitation tests, and provides scripts that can be used or modified for in-depth penetration testing.

Coding for Penetration Testers discusses the use of various scripting languages in penetration testing. The book presents step-by-step instructions on how to build customized penetration testing tools using Perl, Ruby, Python, and other languages. It also provides a primer on scripting including, but not limited to, Web scripting, scanner scripting, and exploitation scripting. It guides the student through specific examples of custom tool development that can be incorporated into a tester's toolkit as well as real-world scenarios where such tools might be used. This book is divided into 10 chapters that explores topics such as command shell scripting; Python, Perl, and Ruby; Web scripting with PHP; manipulating Windows with PowerShell; scanner scripting; information gathering; exploitation scripting; and post-exploitation scripting. This book will appeal to penetration testers, information security practitioners, and network and system administrators. Discusses the use of various scripting languages in penetration testing Presents step-by-step instructions on how to build customized penetration testing tools using Perl, Ruby, Python, and other languages Provides a primer on scripting including, but not limited to, Web scripting, scanner scripting, and exploitation scripting

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. Violent Python shows you how to move from a theoretical understanding of offensive computing concepts to a practical implementation. Instead of relying on another attacker's tools, this book will teach you to forge your own weapons using the Python programming language. This book demonstrates how to write Python scripts to automate large-scale network attacks, extract metadata, and investigate forensic artifacts. It also shows how to write code to intercept and analyze network traffic using Python, craft and spoof wireless frames to attack wireless and Bluetooth devices, and how to data-mine popular social media websites and evade modern anti-virus. Demonstrates how to write Python scripts to automate large-scale network attacks, extract metadata, and investigate forensic artifacts Write code to intercept and analyze network traffic using Python. Craft and spoof wireless frames to attack wireless and Bluetooth devices Data-mine popular social media websites and evade modern anti-virus

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.

When it comes to creating powerful and effective hacking tools, Python is the language of choice for most security analysts. But just how does the magic happen? In Black Hat Python, the latest from Justin Seitz (author of the best-selling Gray Hat Python), you'll explore the darker side of Python's capabilities—writing network sniffers, manipulating packets, infecting virtual machines, creating stealthy trojans, and more. You'll learn how to: –Create a trojan command-and-control using GitHub –Detect sandboxing and automate common malware tasks, like keylogging and screenshotting –Escalate Windows privileges with creative process control –Use offensive memory forensics tricks to retrieve password hashes and inject shellcode into a virtual machine –Extend the popular Burp Suite web-hacking tool –Abuse Windows COM automation to perform a man-in-the-browser attack –Exfiltrate data from a network most sneakily Insider techniques and creative challenges throughout show you how to extend the hacks and how to write your own exploits. When it comes to offensive security, your ability to create powerful tools on the fly is indispensable. Learn how in Black Hat Python. Uses Python 2

Become a master at penetration testing using machine learning with Python Key Features Identify ambiguities and breach intelligent security systems Perform unique cyber attacks to breach robust systems Learn to leverage machine learning algorithms Book Description Cyber security is crucial for both businesses and individuals. As systems are getting smarter, we now see machine learning interrupting computer security. With the adoption of machine learning in upcoming security products, it's important for pentesters and security researchers to understand how these systems work, and to breach them for testing purposes. This book begins with the basics of machine learning and the algorithms used to build robust systems. Once you've gained a fair understanding of how security products leverage machine learning, you'll dive into the core concepts of breaching such systems. Through practical use cases, you'll see how to find loopholes and surpass a self-learning security system. As you make your way through the chapters, you'll focus on topics such as network intrusion detection and AV and IDS evasion. We'll also cover the best practices when identifying ambiguities, and extensive techniques to breach an intelligent system. By the end of this book, you will be well-versed with identifying loopholes in a self-learning security system and will be able to efficiently breach a machine learning system. What you will learn Take an in-depth look at machine learning Get to know natural language processing (NLP) Understand malware feature engineering Build generative adversarial networks using Python libraries Work on threat hunting with machine learning and the ELK stack Explore the best practices for machine learning Who this book is for This book is for pen testers and security professionals who are interested in learning techniques to break an intelligent security system. Basic knowledge of Python is needed, but no prior knowledge of machine learning is necessary.

Do you feel that informatics is indispensable in today's increasingly digital world? Do you want to introduce yourself to the world of programming or cyber security but don't know where to get started? If the answer to these questions is yes, then keep reading... This book includes: PYTHON MACHINE LEARNING: A Beginner's Guide to Python Programming for Machine Learning and Deep Learning, Data Analysis, Algorithms and Data Science with Scikit Learn, TensorFlow, PyTorch and Keras Here's a sneak peek of what you'll learn with this book: - The Fundamentals of Python - Python for Machine Learning - Data Analysis in Python - Comparing Deep Learning and Machine Learning - The Role of Machine Learning in the Internet of Things (IoT) And much more... SQL FOR BEGINNERS: A Step by Step Guide to Learn SQL Programming for Query Performance Tuning on SQL Database Throughout these pages, you will learn: - How to build databases and tables with the data you create. - How to sort through the data efficiently to find what you need. - The exact steps to clean your data and make it easier to analyze. - How to modify and delete tables and databases. And much more... LINUX FOR BEGINNERS: An Introduction to the Linux Operating System for Installation, Configuration and Command Line We will cover the following topics: - How to Install Linux - The Linux Console - Command line interface - Network administration And much more... HACKING WITH KALI LINUX: A Beginner's Guide to Learn Penetration Testing to Protect Your Family and Business from Cyber Attacks Building a Home Security System for Wireless Network Security You will learn: - The importance of cybersecurity - How malware and cyber-attacks operate - How to install Kali Linux on a virtual box - VPNs & Firewalls And much more... ETHICAL HACKING: A Beginner's Guide to Computer and Wireless Networks Defense Strategies, Penetration Testing and Information Security Risk Assessment Here's a sneak peek of what you'll learn with this book: - What is Ethical Hacking (roles and responsibilities of an Ethical Hacker) - Most common security tools - The three ways to scan your system - The seven proven penetration testing strategies ...and much more. This book won't make you an expert programmer, but it will give you an exciting first look at programming and a foundation of basic concepts with which you can start your journey learning computer programming, machine learning and cybersecurity Scroll up and click the BUY NOW BUTTON!

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.

Cyber-crime increasingly impacts both the online and offline world, and targeted attacks play a significant role in disrupting services in both. Targeted attacks are those that are aimed at a particular individual, group, or type of site or service. Unlike worms and viruses that usually attack indiscriminately, targeted attacks involve intelligence-gathering and planning to a degree that drastically changes its profile. Individuals, corporations, and even governments are facing new threats from targeted attacks. Targeted Cyber Attacks examines real-world examples of directed attacks and provides insight into what

techniques and resources are used to stage these attacks so that you can counter them more effectively. A well-structured introduction into the world of targeted cyber-attacks Includes analysis of real-world attacks Written by cyber-security researchers and experts

Over 60 hands-on recipes to pen test networks using Python to discover vulnerabilities and find a recovery path About This Book* Learn to detect and avoid various types of attacks that put the privacy of a system at risk* Enhance your knowledge on the concepts of wireless applications and information gathering through practical recipes.* See a pragmatic way to penetration test using Python to build efficient code and save time Who This Book Is For This book is for developers who have prior knowledge of using Python for pen testing. If you want an overview of scripting tasks to consider while pen testing, this book will give you a lot of useful code or your tool kit. What You Will Learn* Find an IP address from a web page using BeautifulSoup and urllib* Discover different types of sniffers to build an intrusion detection system* Create an efficient and high-performance ping sweep and port scanner* Get to grips with making an SSID and BSSID scanner* Perform network pen-testing by attacking DDoS, DHCP and packet injecting* Fingerprint OS and network applications, and correlate common vulnerabilities* Master techniques to detect vulnerabilities in your environment and secure them* Incorporate various networks and packet sniffing techniques using Raw sockets and Scapy In Detail Penetration testing is the use of tools and code to attack a system in order to assess its vulnerabilities to external threats. Python allows pen testers to create their own tools. Since Python is a highly valued pen-testing language, there are many native libraries and Python bindings available specifically for pen-testing tasks. Python Penetration Testing Cookbook begins by teaching you how to extract information from web pages. You will learn how to build an intrusion detection system using network sniffing techniques. Next, you will find out how to scan your networks to ensure performance and quality, and how to carry out wireless pen testing on your network to avoid cyber attacks. After that, we'll discuss the different kinds of attacks on the network. Next, you'll get to grips with designing your own torrent detection program. We'll take you through common vulnerability scenarios and then cover buffer overflow exploitation so you can detect insecure coding. Finally, you'll discover PE code injection methods to safeguard your network.

Like the best-selling Black Hat Python, Black Hat Go explores the darker side of the popular Go programming language. This collection of short scripts will help you test your systems, build and automate tools to fit your needs, and improve your offensive security skillset. Black Hat Go explores the darker side of Go, the popular programming language revered by hackers for its simplicity, efficiency, and reliability. It provides an arsenal of practical tactics from the perspective of security practitioners and hackers to help you test your systems, build and automate tools to fit your needs, and improve your offensive security skillset, all using the power of Go. You'll begin your journey with a basic overview of Go's syntax and philosophy and then start to explore examples that you can leverage for tool development, including common network protocols like HTTP, DNS, and SMB. You'll then dig into various tactics and problems that penetration testers encounter, addressing things like data pilfering, packet sniffing, and exploit development. You'll create dynamic, pluggable tools before diving into cryptography, attacking Microsoft Windows, and implementing steganography. You'll learn how to:

- Make performant tools that can be used for your own security projects
- Create usable tools that interact with remote APIs
- Scrape arbitrary HTML data
- Use Go's standard package, net/http, for building HTTP servers
- Write your own DNS server and proxy
- Use DNS tunneling to establish a C2 channel out of a restrictive network
- Create a vulnerability fuzzer to discover an application's security weaknesses
- Use plug-ins and extensions to future-proof products

Build an RC2 symmetric-key brute-forcer • Implant data within a Portable Network Graphics (PNG) image. Are you ready to add to your arsenal of security tools? Then let's Go!

This book is a practical guide to discovering and exploiting security flaws in web applications. The authors explain each category of vulnerability using real-world examples, screen shots and code extracts. The book is extremely practical in focus, and describes in detail the steps involved in detecting and exploiting each kind of security weakness found within a variety of applications such as online banking, e-commerce and other web applications. The topics covered include bypassing login mechanisms, injecting code, exploiting logic flaws and compromising other users. Because every web application is different, attacking them entails bringing to bear various general principles, techniques and experience in an imaginative way. The most successful hackers go beyond this, and find ways to automate their bespoke attacks. This handbook describes a proven methodology that combines the virtues of human intelligence and computerized brute force, often with devastating results. The authors are professional penetration testers who have been involved in web application security for nearly a decade. They have presented training courses at the Black Hat security conferences throughout the world. Under the alias "PortSwigger", Dafydd developed the popular Burp Suite of web application hack tools.

Utilize Python scripting to execute effective and efficient penetration tests About This Book Understand how and where Python scripts meet the need for penetration testing Familiarise yourself with the process of highlighting a specific methodology to exploit an environment to fetch critical data Develop your Python and penetration testing skills with real-world examples Who This Book Is For If you are a security professional or researcher, with knowledge of different operating systems and a conceptual idea of penetration testing, and you would like to grow your knowledge in Python, then this book is ideal for you. What You Will Learn Familiarise yourself with the generation of Metasploit resource files Use the Metasploit Remote Procedure Call (MSFRPC) to automate exploit generation and execution Use Python's Scapy, network, socket, office, Nmap libraries, and custom modules Parse Microsoft Office spreadsheets and eXtensible Markup Language (XML) data files Write buffer overflows and reverse Metasploit modules to expand capabilities Exploit Remote File Inclusion (RFI) to gain administrative access to systems with Python and other scripting languages Crack an organization's Internet perimeter Chain exploits to gain deeper access to an organization's resources Interact with web services with Python In Detail Python is a powerful new-age scripting platform that allows you to build exploits, evaluate services, automate, and link solutions with ease. Python is a multi-paradigm programming language well suited to both object-oriented application development as well as functional design patterns. Because of the power and flexibility offered by it, Python has become one of the most popular languages used for penetration testing. This book highlights how you can evaluate an organization methodically and realistically. Specific tradecraft and techniques are covered that show you exactly when and where industry tools can and should be used and when Python fits a need that proprietary and open source solutions do not. Initial methodology, and Python fundamentals are established and then built on. Specific examples are created with vulnerable system images, which are available to the community to test scripts, techniques, and exploits. This book walks you through real-world penetration testing challenges and how Python can help. From start to finish, the book takes you through how to create Python scripts that meet relative needs that can be adapted to particular situations. As chapters progress, the script examples explain new concepts to enhance your foundational knowledge, culminating with you being able to build multi-threaded security tools, link security tools together, automate reports, create custom exploits, and expand Metasploit modules. Style and approach This book is a practical guide that will help you become better penetration testers and/or Python security tool developers. Each chapter builds on concepts and tradecraft using detailed examples in test environments that you can simulate.

Implement defensive techniques in your ecosystem successfully with Python Key Features Identify and expose vulnerabilities in your infrastructure with Python Learn custom exploit development . Make robust and powerful cybersecurity tools with Python Book Description With the current technological and infrastructural shift, penetration testing is no longer a process-oriented activity. Modern-day penetration testing demands lots of automation and innovation; the only language that dominates all its peers is Python. Given the huge number of tools written in Python, and its popularity in the penetration testing space, this language has always been the first choice for penetration testers. Hands-On Penetration Testing with Python walks you through advanced Python programming constructs. Once you are familiar with the core concepts, you'll explore the advanced uses of Python in the domain of penetration testing and optimization. You'll then move on to understanding how Python, data science, and the

cybersecurity ecosystem communicate with one another. In the concluding chapters, you'll study exploit development, reverse engineering, and cybersecurity use cases that can be automated with Python. By the end of this book, you'll have acquired adequate skills to leverage Python as a helpful tool to pentest and secure infrastructure, while also creating your own custom exploits. What you will learn Get to grips with Custom vulnerability scanner development Familiarize yourself with web application scanning automation and exploit development Walk through day-to-day cybersecurity scenarios that can be automated with Python Discover enterprise-or organization-specific use cases and threat-hunting automation Understand reverse engineering, fuzzing, buffer overflows , key-logger development, and exploit development for buffer overflows. Understand web scraping in Python and use it for processing web responses Explore Security Operations Centre (SOC) use cases Get to understand Data Science, Python, and cybersecurity all under one hood Who this book is for If you are a security consultant , developer or a cyber security enthusiast with little or no knowledge of Python and want in-depth insight into how the pen-testing ecosystem and python combine to create offensive tools , exploits , automate cyber security use-cases and much more then this book is for you. Hands-On Penetration Testing with Python guides you through the advanced uses of Python for cybersecurity and pen-testing, helping you to better understand security loopholes within your infrastructure .

Master the art of identifying vulnerabilities within the Windows OS and develop the desired solutions for it using Kali Linux. Key Features Identify the vulnerabilities in your system using Kali Linux 2018.02 Discover the art of exploiting Windows kernel drivers Get to know several bypassing techniques to gain control of your Windows environment Book Description Windows has always been the go-to platform for users around the globe to perform administration and ad hoc tasks, in settings that range from small offices to global enterprises, and this massive footprint makes securing Windows a unique challenge. This book will enable you to distinguish yourself to your clients. In this book, you'll learn advanced techniques to attack Windows environments from the indispensable toolkit that is Kali Linux. We'll work through core network hacking concepts and advanced Windows exploitation techniques, such as stack and heap overflows, precision heap spraying, and kernel exploitation, using coding principles that allow you to leverage powerful Python scripts and shellcode. We'll wrap up with post-exploitation strategies that enable you to go deeper and keep your access. Finally, we'll introduce kernel hacking fundamentals and fuzzing testing, so you can discover vulnerabilities and write custom exploits. By the end of this book, you'll be well-versed in identifying vulnerabilities within the Windows OS and developing the desired solutions for them. What you will learn Get to know advanced pen testing techniques with Kali Linux Gain an understanding of Kali Linux tools and methods from behind the scenes See how to use Kali Linux at an advanced level Understand the exploitation of Windows kernel drivers Understand advanced Windows concepts and protections, and how to bypass them using Kali Linux Discover Windows exploitation techniques, such as stack and heap overflows and kernel exploitation, through coding principles Who this book is for This book is for penetration testers, ethical hackers, and individuals breaking into the pentesting role after demonstrating an advanced skill in boot camps. Prior experience with Windows exploitation, Kali Linux, and some Windows debugging tools is necessary

The Basics of Hacking and Penetration Testing, Second Edition, serves as an introduction to the steps required to complete a penetration test or perform an ethical hack from beginning to end. The book teaches students how to properly utilize and interpret the results of the modern-day hacking tools required to complete a penetration test. It provides a simple and clean explanation of how to effectively utilize these tools, along with a four-step methodology for conducting a penetration test or hack, thus equipping students with the know-how required to jump start their careers and gain a better understanding of offensive security. Each chapter contains hands-on examples and exercises that are designed to teach learners how to interpret results and utilize those results in later phases. Tool coverage includes: Backtrack Linux, Google reconnaissance, MetaGooFil, dig, Nmap, Nessus, Metasploit, Fast Track Autopwn, Netcat, and Hacker Defender rootkit. This is complemented by PowerPoint slides for use in class. This book is an ideal resource for security consultants, beginning InfoSec professionals, and students. Each chapter contains hands-on examples and exercises that are designed to teach you how to interpret the results and utilize those results in later phases. Written by an author who works in the field as a Penetration Tester and who teaches Offensive Security, Penetration Testing, and Ethical Hacking, and Exploitation classes at Dakota State University. Utilizes the Kali Linux distribution and focuses on the seminal tools required to complete a penetration test.

Hacking and Python Made Easy The world of hacking is an interesting study. It allows you the opportunity to learn more about your computer system, work with different programs, and even protects your computer and your network against black hat hackers. There are many different attacks that a hacker can use against your network, but you can use the countermeasures and even some of the same kinds of hacks to find the vulnerabilities in your system and keep things safe. The basics of hacking Some of the things that you need to know how to do before hacking Picking out the best hacking tools How to get through passwords on a computer How to do spoofing and man in the middle attacks How to hack through a network or wireless connection How to protect your system and keep it safe Working in hacking can be a great way to expand your knowledge of programming and computers and can even be used as a way to keep others who don't belong out of your system. When you are ready to learn how to do an attack with the help of Python, make sure to check out this guidebook and learn how to do some of your own hacking today! Click the Buy button on this page today!

The Art of Network Penetration Testing is a guide to simulating an internal security breach. You'll take on the role of the attacker and work through every stage of a professional pentest, from information gathering to seizing control of a system and owning the network. Summary Penetration testing is about more than just getting through a perimeter firewall. The biggest security threats are inside the network, where attackers can rampage through sensitive data by exploiting weak access controls and poorly patched software. Designed for up-and-coming security professionals, The Art of Network Penetration Testing teaches you how to take over an enterprise network from the inside. It lays out every stage of an internal security assessment step-by-step, showing you how to identify weaknesses before a malicious invader can do real damage. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Penetration testers uncover security gaps by attacking networks exactly like malicious intruders do. To become a world-class pentester, you need to master offensive security concepts, leverage a proven methodology, and practice, practice, practice. Th is book delivers insights from security expert Royce Davis, along with a virtual testing environment you can use to hone your skills. About the book The Art of Network Penetration Testing is a guide to simulating an internal security breach. You'll take on the role of the attacker and work through every stage of a professional pentest, from information gathering to seizing control of a system and owning the network. As you brute force passwords, exploit unpatched services, and elevate network level privileges, you'll learn where the weaknesses are—and how to take advantage of them. What's inside Set up a virtual pentest lab Exploit Windows and Linux network vulnerabilities Establish persistent re-entry to compromised targets Detail your findings in an engagement report About the reader For tech professionals. No security experience required. About the author Royce Davis has orchestrated hundreds of penetration tests, helping to secure many of the largest companies in the world. Table of Contents 1 Network Penetration Testing PHASE 1 - INFORMATION GATHERING 2 Discovering network hosts 3 Discovering network services 4 Discovering network vulnerabilities PHASE 2 - FOCUSED PENETRATION 5 Attacking vulnerable web services 6 Attacking vulnerable database services 7 Attacking unpatched services PHASE 3 - POST-EXPLOITATION AND PRIVILEGE ESCALATION 8 Windows post-exploitation 9 Linux or UNIX post-exploitation 10 Controlling the entire network PHASE 4 - DOCUMENTATION 11 Post-engagement cleanup 12 Writing a solid pentest deliverable

Leverage the simplicity of Python and available libraries to build web security testing tools for your application Key Features Understand the web application penetration testing methodology and toolkit using Python Write a web crawler/spider with the Scrapy library Detect and exploit SQL injection vulnerabilities by creating a script all by yourself Book Description Web penetration testing is the use of tools and code to attack a website or web app in order to assess its vulnerability to external threats. While there are an increasing number of sophisticated, ready-made tools to scan systems for vulnerabilities, the use

of Python allows you to write system-specific scripts, or alter and extend existing testing tools to find, exploit, and record as many security weaknesses as possible. Learning Python Web Penetration Testing will walk you through the web application penetration testing methodology, showing you how to write your own tools with Python for each activity throughout the process. The book begins by emphasizing the importance of knowing how to write your own tools with Python for web application penetration testing. You will then learn to interact with a web application using Python, understand the anatomy of an HTTP request, URL, headers and message body, and later create a script to perform a request, and interpret the response and its headers. As you make your way through the book, you will write a web crawler using Python and the Scrappy library. The book will also help you to develop a tool to perform brute force attacks in different parts of the web application. You will then discover more on detecting and exploiting SQL injection vulnerabilities. By the end of this book, you will have successfully created an HTTP proxy based on the mitmproxy tool. What you will learn Interact with a web application using the Python and Requests libraries Create a basic web application crawler and make it recursive Develop a brute force tool to discover and enumerate resources such as files and directories Explore different authentication methods commonly used in web applications Enumerate table names from a database using SQL injection Understand the web application penetration testing methodology and toolkit Who this book is for Learning Python Web Penetration Testing is for web developers who want to step into the world of web application security testing. Basic knowledge of Python is necessary.

Explore the world of practical ethical hacking by developing custom network scanning and remote access tools that will help you test the system security of your organization Key Features Get hands-on with ethical hacking and learn to think like a real-life hacker Build practical ethical hacking tools from scratch with the help of real-world examples Leverage Python 3 to develop malware and modify its complexities Book Description Penetration testing enables you to evaluate the security or strength of a computer system, network, or web application that an attacker can exploit. With this book, you'll understand why Python is one of the fastest-growing programming languages for penetration testing. You'll find out how to harness the power of Python and pentesting to enhance your system security. Developers working with Python will be able to put their knowledge and experience to work with this practical guide. Complete with step-by-step explanations of essential concepts and practical examples, this book takes a hands-on approach to help you build your own pentesting tools for testing the security level of systems and networks. You'll learn how to develop your own ethical hacking tools using Python and explore hacking techniques to exploit vulnerabilities in networks and systems. Finally, you'll be able to get remote access to target systems and networks using the tools you develop and modify as per your own requirements. By the end of this ethical hacking book, you'll have developed the skills needed for building cybersecurity tools and learned how to secure your systems by thinking like a hacker. What you will learn Understand the core concepts of ethical hacking Develop custom hacking tools from scratch to be used for ethical hacking purposes Discover ways to test the cybersecurity of an organization by bypassing protection schemes Develop attack vectors used in real cybersecurity tests Test the system security of an organization or subject by identifying and exploiting its weaknesses Gain and maintain remote access to target systems Find ways to stay undetected on target systems and local networks Who this book is for If you want to learn ethical hacking by developing your own tools instead of just using the prebuilt tools, this book is for you. A solid understanding of fundamental Python concepts is expected. Some complex Python concepts are explained in the book, but the goal is to teach ethical hacking, not Python.

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.

If you want to learn the art of hacking, then keep reading... This book explains Hacking using an operating system that is created for this sole purpose. We start with an introduction to the world of hacking along with a lot of examples and processes that hackers use in their real life testing methods. As a hacker, one needs to understand basic Linux commands along with bash and python scripting. This book has provided a lot of bash and python examples that will make you start with the hacking scripting. In the next chapters, we have discussed about Network management, process management and several other parts of Linux architecture in detail. In the subsequent chapter, a whole section is dedicated about VPN and Tor network. We have explained everything in Layman's concept along with a lot of examples. Apart from this in the last chapter, we have made a whole new strategy to attack web using Burp suite an important kali Linux tool. Below we will explain about the exciting parts of the book without any delay. Find out what are the gems you can find in this book below. Hacking process along with clear instructions. This is more like a starting tip for the beginner hackers Installation of virtual machine VM ware and Installation of kali Linux in detail. Bash scripting with a lot of examples. We will explain variables, conditionals and looping in Bash scripting. Python scripting with a lot of examples. We will explain variables, classes, objects in python scripting. Network management and a lot of methods to spoof addresses Process management along with examples. We give so many methodologies to kill a process and prioritizing processes. Description about the Logging system and its uses Automating tasks About TOR bundle, Vpn and Proxy chains Web hacking using the Burp suite Even if you've never used Linux, you can learn it quickly. Why are you waiting still? Go grab this hell of a hacking book

now. Scroll up and click BUY NOW button!

Learn the basics of ethical hacking and gain insights into the logic, algorithms, and syntax of Python. This book will set you up with a foundation that will help you understand the advanced concepts of hacking in the future. Learn Ethical Hacking with Python 3 touches the core issues of cyber security: in the modern world of interconnected computers and the Internet, security is increasingly becoming one of the most important features of programming. Ethical hacking is closely related to Python. For this reason this book is organized in three parts. The first part deals with the basics of ethical hacking; the second part deals with Python 3; and the third part deals with more advanced features of ethical hacking. What You Will Learn Discover the legal constraints of ethical hacking Work with virtual machines and virtualization Develop skills in Python 3 See the importance of networking in ethical hacking Gain knowledge of the dark web, hidden Wikipedia, proxy chains, virtual private networks, MAC addresses, and more Who This Book Is For Beginners wanting to learn ethical hacking alongside a modular object oriented programming language.

Learning Penetration Testing with Python Packt Publishing Ltd

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

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.

This book is a blend of penetration testing and best practices industrial automation in cybersecurity space with Python. This book will enable pentesters to take their skills to the next level by leveraging the power of Python and explaining the core concepts that will come in handy when making robust cybersecurity tools and custom exploits.

Shell scripts are an efficient way to interact with your machine and manage your files and system operations. With just a few lines of code, your computer will do exactly what you want it to do. But you can also use shell scripts for many other essential (and not-so-essential) tasks. This second edition of Wicked Cool Shell Scripts offers a collection of useful, customizable, and fun shell scripts for solving common problems and personalizing your computing environment. Each chapter contains ready-to-use scripts and explanations of how they work, why you'd want to use them, and suggestions for changing and expanding them. You'll find a mix of classic favorites, like a disk backup utility that keeps your files safe when your system crashes, a password manager, a weather tracker, and several games, as well as 23 brand-new scripts, including: – ZIP code lookup tool that reports the city and state – Bitcoin address information retriever – suite of tools for working with cloud services like Dropbox and iCloud – for renaming and applying commands to files in bulk – processing and editing tools Whether you want to save time managing your system or just find new ways to goof off, these scripts are wicked cool!

Identify vulnerabilities across applications, network and systems using simplified cybersecurity scripting KEY FEATURES ? Exciting coverage on red teaming methodologies and penetration testing techniques. ? Explore the exploitation development environment and process of creating exploit scripts. ? Includes powerful Python libraries to analyze the web and helps identifying critical vulnerabilities. ? Conduct wireless attacks and identify potential threats using Python. DESCRIPTION This book starts with an understanding of penetration testing and red teaming methodologies and teaches Python 3.x from scratch for those who are not familiar with programming. The book gives the skills of how to create scripts for cracking, and brute force attacks. The second part of this book focuses on the network and wireless level. The book teaches you the skills of how to create an offensive tool using Python 3.x to identify different services and ports using different Python network modules and conducting network attacks. In the network monitoring section, you will be able to monitor layers 3 and 4. And finally, you will be able to conduct different attacks on wireless. The last part of this book focuses on web applications and exploitation developments. It focuses on how to create scripts to extract web information such as links, images, documents, etc. It also focuses on how to create scripts to identify

and exploit web vulnerabilities and how to bypass WAF. The last chapter of this book focuses on exploitation development starting with how to play with the stack and then moving on to how to use Python in fuzzing and creating exploitation scripts. WHAT YOU WILL LEARN ? Learn to code Python scripts from scratch to identify web vulnerabilities. ? Conduct network attacks, create offensive tools, and identify vulnerable services and ports. ? Perform deep monitoring of network up to layers 3 and 4. ? Execute web scraping scripts to extract images, documents, and links. WHO THIS BOOK IS FOR This book is for Penetration Testers, Security Researchers, Red Teams, Security Auditors and IT Administrators who want to start with an action plan in protecting their IT systems. All you need is some basic understanding of programming concepts and working of IT systems. Hands-on experience with python will be more beneficial but not required. TABLE OF CONTENTS 1. Start with Penetration Testing and Basic Python 2. Cracking with Python 3. Service and Applications Brute Forcing with Python 4. Python Services Identifications - Ports and Banner 5. Python Network Modules and Nmap 6. Network Monitoring with Python 7. Attacking Wireless with Python 8. Analyze Web Applications with Python 9. Attack Web Application with Python 10. Exploitation Development with Python 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.

Pen test your system like a pro and overcome vulnerabilities by leveraging Python scripts, libraries, and tools About This Book Learn to utilize your Python scripting skills to pentest a computer system, network, and web-application Get proficient at the art of assessing vulnerabilities by conducting effective penetration testing This is the ultimate guide that teaches you how to use Python to protect your systems against sophisticated cyber attacks Who This Book Is For This book is ideal for those who are comfortable with Python or a similar language and need no help with basic programming concepts, but want to understand the basics of penetration testing and the problems pentesters face. What You Will Learn Write Scapy scripts to investigate network traffic Get to know application fingerprinting techniques with Python Understand the attack scripting techniques Write fuzzing tools with pentesting requirements Learn basic attack scripting methods Utilize cryptographic toolkits in Python Automate pentesting with Python tools and libraries In Detail Penetration testing is a practice of testing a computer system, network, or web application to find weaknesses in security that an attacker can exploit. Effective Python Penetration Testing will help you utilize your Python scripting skills to safeguard your networks from cyberattacks. We will begin by providing you with an overview of Python scripting and penetration testing. You will learn to analyze network traffic by writing Scapy scripts and will see how to fingerprint web applications with Python libraries such as ProxMon and Spynner. Moving on, you will find out how to write basic attack scripts, and will develop debugging and reverse engineering skills with Python libraries. Toward the end of the book, you will discover how to utilize cryptography toolkits in Python and how to automate Python tools and libraries. Style and approach This is an expert's guide to Python with a practical based approach, where each chapter will help you improve your penetration testing skills using Python to become a master pen tester.

This book gives you an arsenal of Python scripts perfect to use or to customize your needs for each stage of the testing process. Each chapter takes you step by step through the methods of designing and modifying scripts to attack web apps. You will learn how to collect both open and hidden information from websites to further your attacks, identify vulnerabilities, perform SQL Injections, exploit cookies, and enumerate poorly configured systems. You will also discover how to crack encryption, create payloads to mimic malware, and create tools to output your findings into presentable formats for reporting to your employers.

Your one-stop guide to using Python, creating your own hacking tools, and making the most out of resources available for this programming language Key Features Comprehensive information on building a web application penetration testing framework using Python Master web application penetration testing using the multi-paradigm programming language Python Detect vulnerabilities in a system or application by writing your own Python scripts Book Description Python is an easy-to-learn and cross-platform programming language that has unlimited third-party libraries. Plenty of open source hacking tools are written in Python, which can be easily integrated within your script. This book is packed with step-by-step instructions and working examples to make you a skilled penetration tester. It is divided into clear bite-sized chunks, so you can learn at your own pace and focus on the areas of most interest to you. This book will teach you how to code a reverse shell and build an anonymous shell. You will also learn how to hack passwords and perform a privilege escalation on Windows with practical examples. You will set up your own virtual hacking environment in VirtualBox, which will help you run multiple operating systems for your testing environment. By the end of this book, you will have learned how to code your own scripts and mastered ethical hacking from scratch. What you will learn Code your own reverse shell (TCP and HTTP) Create your own anonymous shell by interacting with Twitter, Google Forms, and SourceForge Replicate Metasploit features and build an advanced shell Hack passwords using multiple techniques (API hooking, keyloggers, and clipboard hijacking) Exfiltrate data from your target Add encryption (AES, RSA, and XOR) to your shell to learn how cryptography is being abused by malware Discover privilege escalation on Windows with practical examples Countermeasures against most attacks Who this book is for This book is for ethical hackers; penetration testers; students preparing for OSCP, OSCE, GPEN, GXPN, and CEH; information security professionals; cybersecurity consultants; system and network security administrators; and programmers who are keen on learning all about penetration testing.

Secure your iOS applications and uncover hidden vulnerabilities by conducting penetration tests About This Book Achieve your goal to secure iOS devices and applications with the help of this fast paced manual Find vulnerabilities in your iOS applications and fix them with the help of this example-driven guide Acquire the key skills that will easily help you to perform iOS exploitation and forensics with greater confidence and a stronger understanding Who This Book Is For This book is for IT security professionals who want to conduct security testing of applications. This book will give you exposure to diverse tools to perform penetration testing. This book will also appeal to iOS developers who would like to secure their applications, as well as security professionals. It is easy to follow for anyone without experience of iOS pentesting. What You Will Learn Understand the basics of iOS app development, deployment, security architecture, application signing, application sandboxing, and OWASP TOP 10 for mobile Set up your lab for iOS app pentesting and identify sensitive information stored locally Perform traffic analysis of iOS devices and catch sensitive data being leaked by side channels Modify an application's behavior using runtime analysis Analyze an application's binary for security protection Acquire the knowledge required for exploiting iOS devices Learn the basics of iOS forensics In Detail iOS has become one of the most popular mobile operating systems with more than 1.4 million apps available in the iOS App Store. Some security weaknesses in any of these applications or on the system could mean that an attacker can get access to the device and retrieve sensitive information. This book will show you how to conduct a wide range of penetration tests on iOS devices to uncover vulnerabilities and strengthen the system from attacks. Learning iOS Penetration Testing discusses the common vulnerabilities and security-related shortcomings in an iOS application and operating system, and will teach you to conduct static and dynamic analysis of iOS applications. This practical guide will help you uncover vulnerabilities in iOS phones and applications. We begin with basics of iOS security and dig deep to learn about traffic analysis, code analysis, and various other techniques. Later, we discuss the various utilities, and the process of reversing and auditing. Style and approach This fast-paced and practical guide takes a step-by-step approach to penetration testing with the goal of helping you secure your iOS devices and apps quickly.

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