Mastering Linux Security And Hardening Secure Your Linux Server And Protect It From Intruders Malware Attacks And Other External Threats

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. The Exam Ref is the official study guide for Microsoft certification exams. Featuring concise coverage of the skills measured by the exam, challenging Thought Experiments, and pointers to more in-depth material for the candidate needing additional study, exam candidates get professional-level preparation for the exam. The Exam Ref helps candidates determine their readiness for the exam, and provides Exam Tips to help maximize their performance on the exam. The organization of the material mirrors the skills measured by the exam as presented on the certification exam webpage.

Explore the latest ethical hacking tools and techniques in Kali Linux 2019 to perform penetration testing from scratch Key FeaturesGet up and running with Kali Linux 2019.2Gain comprehensive insights into security concepts such as social engineering, wireless network exploitation, and web application attacksLearn to use Linux commands in the way ethical hackers do to gain control of your environmentBook Description The current rise in hacking and security breaches makes it more important than ever to effectively pentest your environment, ensuring endpoint protection. This book will take you through the latest version of Kali Linux and help you use various tools and techniques to efficiently deal with crucial security aspects. Through real-world examples, you'll understand how to set up a lab and later explore core penetration testing concepts. Throughout the course of this book, you'll get up to speed with gathering sensitive information and even discover different vulnerability assessment tools bundled in Kali Linux 2019. In later chapters, you'll gain insights into concepts such as social engineering, attacking wireless networks, exploitation of web applications and remote access connections to further build on your pentesting skills. You'll also focus on techniques such as bypassing controls, attacking the end user and maintaining persistence access through social media. Finally, this pentesting book covers best practices for performing complex penetration testing techniques in a highly secured environment. By the end of this book, you'll be able to use Kali Linux to detect vulnerabilities and secure your system by applying penetration testing techniques of varying complexity. What you will learnExplore the fundamentals of ethical hackingLearn how to install and configure Kali LinuxGet up to speed with performing wireless network pentestingGain insights into passive and active information gatheringUnderstand web application pentesting Decode WEP, WPA, and WPA2 encryptions using a variety of methods, such as the fake authentication attack, the ARP request replay attack, and the dictionary attackWho this book is for If you are an IT security professional or a security consultant who wants to get started with penetration testing using Kali Linux 2019.2, then this book is for you. The book will also help if you're simply looking to learn more about ethical hacking and various security breaches. Although prior knowledge of Kali Linux is not necessary, some understanding of cybersecurity will be useful.

A comprehensive guide for teaching system administrators, developers, and security professionals how to create their own systemd units and maintain system security Key FeaturesMaintain and troubleshoot systemd services with easeLearn to create, modify, and reload service files and use systemd utilitiesUse cgroups to control resource usage and enhance securityBook Description Linux Service Management Made Easy with systemd will provide you with an in-depth understanding of systemd, so that you can set up your servers securely and efficiently. This is a comprehensive guide for Linux administrators that will help you get the best of systemd, starting with an explanation of the fundamentals of systemd management. You'll also learn how to edit and create your own systemd units, which will be particularly helpful if you need to create custom services or timers and add features or security to an existing service. Next, you'll find out how to analyze and fix boot-up challenges and set system parameters. An overview of cgroups that'll help you control system resource usage for both processes and users will also be covered, alongside a practical demonstration on how cgroups are structured, spotting the differences between cgroups Version 1 and 2, and how to set resource limits on both. Finally, you'll learn about the systemd way of performing time-keeping, networking, logging, and login management. You'll discover how to configure servers accurately and gather system information to analyze system security and performance. By the end of this Linux book, you'll be able to efficiently manage all aspects of a server running the systemd init system. What you will learnUse basic systemd utilities to manage a systemCreate and edit your own systemd unitsCreate services for Podman-Docker containersEnhance system security by adding security-related parametersFind important information with journaldAnalyze boot-up problemsConfigure system settings with systemd utilitiesWho this book is for This book is best suited for Linux administrators who want to learn more about maintaining and troubleshooting Linux servers. It will also be useful for aspiring administrators studying for a Linux certification exam, developers looking to learn how to create systemd unit files, and security administrators who want to understand the security settings that can be used in systemd units and how to control resource usage with cgroups. Before you dive into this book, you'll need a solid working knowledge of basic Linux commands.

*Imparts good security doctrine, methodology, and strategies *Each application-focused chapter will be able to be used as a stand-alone HOW-TO for that particular application. *Offers users a selection of resources (websites, mailing lists, and books) to further their knowledge.

Mastering Linux Shell Scripting,

Effective techniques to secure your Windows, Linux, IoT, and cloud infrastructure

Implement Mandatory Access Control to Secure Applications, Users, and Information Flows on Linux

Mastering Linux Security and Hardening

Hardening Linux

Linux System Programming Techniques

A comprehensive guide to mastering the art of preventing your Linux system from getting compromised. Key Features Leverage this guide to confidently deliver a system that reduces the risk of being hacked Perform a number of advanced Linux security techniques such as network service detection, user authentication, controlling special permissions, encrypting file systems, and much more Master the art of securing a Linux environment with this end-to-end practical guide Book Description This book has extensive coverage of techniques that will help prevent attackers from breaching your system, by building a much more secure Linux environment. You will learn various security techniques such as SSH hardening, network service detection, setting up firewalls, encrypting file systems, protecting user accounts, authentication processes, and so on. Moving forward, you will also develop hands-on skills with advanced Linux permissions, access control, special modes, and more. Lastly, this book will also cover best practices and troubleshooting techniques to get your work done efficiently. By the end of this book, you will be confident in delivering a system that will be much harder to compromise. What you will learn Use various techniques to prevent intruders from accessing sensitive data Prevent intruders from planting malware, and detect whether malware has been planted Prevent insiders from accessing data that they aren't authorized to access Do quick checks to see whether a computer is running network services that it doesn't need to run Learn security techniques that are common to all Linux distros, and some that are distro-specific Who this book is for If you are a systems administrator or a network engineer interested in making your Linux environment more secure, then this book is for you. Security consultants wanting to enhance their Linux security skills will also benefit from this book. Prior knowledge of Linux is mandatory.

Develop advanced skills for working with Linux systems on-premises and in the cloud Key FeaturesBecome proficient in everyday Linux administration tasks by mastering the Linux command line and using automationWork with the Linux filesystem, packages, users, processes, and daemonsDeploy Linux to the cloud with AWS, Azure, and KubernetesBook Description Linux plays a significant role in modern data center management and provides great versatility in deploying and managing your workloads on-premises and in the cloud. This book covers the important topics you need to know about for your everyday Linux administration tasks. The book starts by helping you understand the Linux command line and how to work with files, packages, and filesystems. You'll then begin administering network services and hardening security, and learn about cloud computing, containers, and orchestration. Once you've learned how to work with the command line, you'll explore the essential Linux commands for managing users, processes, and daemons and discover how to secure your Linux environment using application security frameworks and firewall managers. As you advance through the chapters, you'll work with containers, hypervisors, virtual machines, Ansible, and Kubernetes. You'll also learn how to deploy Linux to the cloud using AWS and Azure. By the end of this Linux book, you'll be well-versed with Linux and have mastered everyday administrative tasks using workflows spanning from on-premises to the cloud. If you also find yourself adopting DevOps practices in the process, we'll consider our mission accomplished. What you will learnUnderstand how Linux works and learn basic to advanced Linux administration skillsExplore the most widely used commands for managing the Linux filesystem, network, security, and moreGet to grips with different networking and messaging protocolsFind out how Linux security works and how to configure SELinux, AppArmor, and Linux iptablesWork with virtual machines and containers and understand container orchestration with KubernetesWork with containerized workflows using Docker and KubernetesAutomate your configuration management workloads with AnsibleWho this book is for If you are a Linux administrator who wants to understand the fundamentals and as well as modern concepts of Linux system administration, this book is for you. Windows System Administrators looking to extend their knowledge to the Linux OS will also benefit from this book.

This text introduces the spirit and theory of hacking as well as the science behind it all; it also provides some core techniques and tricks of hacking so you can think like a hacker, write your own hacks or thwart potential system attacks.

Enhance Windows security and protect your systems and servers from various cyber attacks Key Features Protect your device using a zero-trust approach and advanced security techniques Implement efficient security measures using Microsoft Intune, Configuration Manager, and Azure solutions Understand how to create cyber-threat defense solutions effectively Book Description Are you looking for effective ways to protect Windows-based systems from being compromised by unauthorized users? Mastering Windows Security and Hardening is a detailed guide that helps you gain expertise when implementing efficient security measures and creating robust defense solutions. We will begin with an introduction to Windows security fundamentals, baselining, and the importance of building a baseline for an organization. As you advance, you will learn how to effectively secure and harden your Windows-based system, protect identities, and even manage access. In the concluding chapters, the book will take you through testing, monitoring, and security operations. In addition to this, you'll be equipped with the tools you need to ensure compliance and continuous monitoring through security operations. By the end of this book, you'll have developed a full understanding of the processes and tools involved in securing and hardening your Windows environment. What you will learn Understand baselining and learn the best practices for building a baseline Get to grips with identity management and access management on Windows-based systems Delve into the device administration and remote management of Windows-based systems Explore security tips to harden your Windows server and keep clients secure Audit, assess, and test to ensure controls are successfully applied and enforced Monitor and report activities to stay on top of vulnerabilities Who this book is for This book is for system administrators, cybersecurity and technology professionals, solutions architects, or anyone interested in learning how to secure their Windows-based systems. A basic understanding of Windows security concepts, Intune, Configuration Manager, Windows PowerShell, and Microsoft Azure will help you get the best out of this book.

Mastering Windows Security and Hardening

Mastering Linux System Administration

Secure and protect your Windows environment from intruders, malware attacks, and other cyber threats

Linux Security Fundamentals

Advanced Linux Programming

Mastering FreeBSD and OpenBSD Security

API Security in Action teaches you how to create secure APIs for any situation. By following this hands-on guide you'll build a social network API while mastering techniques for flexible multi-user security, cloud key management, and lightweight cryptography. Summary A web API is an efficient way to communicate with an application or service. However, this convenience opens your systems to new security risks. API Security in Action gives you the skills to build strong, safe APIs you can confidently expose to the world. Inside, you'll learn to construct secure and scalable REST APIs, deliver machine-to-machine interaction in a microservices architecture, and provide protection in resource-constrained IoT (Internet of Things) environments. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology APIs control data sharing in every service, server, data store, and web client. Modern data-centric designs—including microservices and cloud-native applications—demand a comprehensive, multi-layered approach to security for both private and public-facing APIs. About the book API Security in Action teaches you how to create secure APIs for any situation. By following this hands-on guide you'll build a social network API while mastering techniques for flexible multi-user security, cloud key management, and lightweight cryptography. When you're done, you'll be able to create APIs that stand up to complex threat models and hostile environments. What's inside Authentication Authorization Audit logging Rate limiting Encryption About the reader For developers with experience building RESTful APIs. Examples are in Java. About the author Neil Madden has in-depth knowledge of applied cryptography, application security, and current API security technologies. He holds a Ph.D. in Computer Science. Table of Contents PART 1 - FOUNDATIONS 1 What is API security? 2 Secure API development 3 Securing the Natter API PART 2 - TOKEN-BASED AUTHENTICATION 4 Session cookie authentication 5 Modern token-based authentication 6 Self-contained tokens and JWTs PART 3 - AUTHORIZATION 7 OAuth2 and OpenID Connect 8 Identity-based access control 9 Capability-based security and macaroons PART 4 - MICROSERVICE APIs IN KUBERNETES 10 Microservice APIs in Kubernetes 11 Securing service-to-service APIs PART 5 - APIs FOR THE INTERNET OF THINGS 12 Securing IoT communications 13 Securing IoT APIs

An informative handbook for network administrators and professionals who use Linux offers practical guidelines on how to test, hack, and find security holes and secure them, explaining how to assess one's system, shut down unnecessary services and access, install filters and firewalls, eliminate unnecessary software, enhance authentication and user identity protocols, monitor network systems, and other important topics. Original. (Intermediate)

Achieve enterprise automation in your Linux environment with this comprehensive guide Key FeaturesAutomate your Linux infrastructure with the help of practical use cases and real-world scenariosLearn to plan, build, manage, and customize OS releases in your environmentEnhance the scalability and efficiency of your infrastructure with advanced Linux system administration conceptsBook Description Automation is paramount if you want to run Linux in your enterprise effectively. It helps you minimize costs by reducing manual operations, ensuring compliance across data centers, and accelerating deployments for your cloud infrastructures. Complete with detailed explanations, practical examples, and self-assessment questions, this book will teach you how to manage your Linux estate and leverage Ansible to achieve effective levels of automation. You'll learn important concepts on standard operating environments that lend themselves to automation, and then build on this knowledge by applying Ansible to achieve standardization throughout your Linux environments. By the end of this Linux automation book, you'll be able to build, deploy, and manage an entire estate of Linux servers with higher reliability and lower overheads than ever before. What you will learnPerform large-scale automation of Linux environments in an enterpriseOvercome the common challenges and pitfalls of extensive automationDefine the business processes needed to support a large-scale Linux environmentGet well-versed with the most effective and reliable patch management strategiesAutomate a range of tasks from simple user account changes to complex security policy enforcementLearn best practices and procedures to make your Linux environment automatableWho this book is for This book is for anyone who has a Linux environment to design, implement, and maintain. Open source professionals including infrastructure architects and system administrators will find this book useful. You're expected to have experience in implementing and maintaining Linux servers along with knowledge of building, patching, and maintaining server infrastructure. Although not necessary, knowledge of Ansible or other automation technologies will be beneficial.

Implement Industrial-Strength Security on Any Linux Server In an age of mass surveillance, when advanced cyberwarfare weapons rapidly migrate into every hacker's toolkit, you can't rely on outdated security methods–especially if you're responsible for Internet-facing services. In Linux® Hardening in Hostile Networks, Kyle Rankin helps you to implement modern safeguards that provide maximum impact with minimum effort and to strip away old techniques that are no longer worth your time. Rankin provides clear, concise guidance on modern workstation, server, and network hardening, and explains how to harden specific services, such as web servers, email, DNS, and databases. Along the way, he demystifies technologies once viewed as too complex or mysterious but now essential to mainstream Linux security. He also includes a full chapter on effective incident response that both DevOps and SecOps can use to write their own incident response plan. Each chapter begins with techniques any sysadmin can use quickly to protect against entry-level hackers and presents intermediate and advanced techniques to safeguard against sophisticated and knowledgeable attackers, perhaps even state actors. Throughout, you learn what each technique does, how it works, what it does and doesn't protect against, and whether it would be useful in your environment. Apply core security techniques including 2FA and strong passwords Protect admin workstations via lock screens, disk encryption, BIOS passwords, and other methods Use the security-focused Tails distribution as a quick path to a hardened workstation Compartmentalize workstation tasks into VMs with varying levels of trust Harden servers with SSH, use apparmor and sudo to limit the damage attackers can do, and set up remote syslog servers to track their actions Establish secure VPNs with OpenVPN, and leverage SSH to tunnel traffic when VPNs can't be used Configure a software load balancer to terminate SSL/TLS connections and initiate new ones downstream Set up standalone Tor services and hidden Tor services and relays Secure Apache and Nginx web servers, and take full advantage of HTTPS Perform advanced web server hardening with HTTPS forward secrecy and ModSecurity web application firewalls Strengthen email security with SMTP relay authentication, SMTPS, SPF records, DKIM, and DMARC Harden DNS servers, deter their use in DDoS attacks, and fully implement DNSSEC Systematically protect databases via network access control, TLS traffic encryption, and encrypted data storage Respond to a compromised server, collect evidence, and prevent future attacks Register your product at informit.com/register for convenient access to downloads, updates, and corrections as they become available.

API Security in Action

Mastering Linux Security and Hardening - Second Edition

Linux System Administration

Hands-On Enterprise Automation on Linux

A practical guide to Linux command-line, Bash scripting, and Shell programming, 2nd Edition

A comprehensive guide to automating administrative tasks with the Bash shell

Achieve Linux system administration mastery with time-tested and proven techniques In Mastering Linux System Administration, Linux experts and system administrators Christine Bresnahan and Richard Blum deliver a comprehensive roadmap to go from Linux beginner to expert Linux system administrator with a learning-by-doing approach. Organized by do-it-yourself tasks, the book includes instructor materials like a sample syllabus, additional review questions, and slide decks. Amongst the practical applications of the Linux operating system included within, you'll find detailed and easy-to-follow instruction on: Installing Linux servers, understanding the boot and initialization processes, managing hardware, and working with networks Accessing the Linux command line, working with the virtual directory structure, and creating shell scripts to automate administrative tasks Managing Linux user accounts, system security, web and database servers, and virtualization environments Perfect for entry-level Linux system administrators, as well as system administrators familiar with Windows, Mac, NetWare, or other UNIX systems, Mastering Linux System Administration is a must-read guide to manage and secure Linux servers.

The first comprehensive guide to discovering and preventingattacks on the Android OS As the Android operating system continues to increase its shareof the smartphone market, smartphone hacking remains a growingthreat. Written by experts who rank among the world's foremostAndroid security researchers, this book presents vulnerabilitydiscovery, analysis, and exploitation tools for the good guys.Following a detailed explanation of how the Android OS works andits overall security architecture, the authors examine howvulnerabilities can be discovered and exploits developed forvarious system components, preparing you to defend againstthem. If you are a mobile device administrator, security researcher,Android app developer, or consultant responsible for evaluatingAndroid security, you will find this guide is essential to yourtoolbox. A crack team of leading Android security researchers explainAndroid security risks, security design and architecture, rooting,fuzz testing, and vulnerability analysis Covers Android application building blocks and security as wellas debugging and auditing Android apps Prepares mobile device administrators, security researchers,Android app developers, and security consultants to defend Androidsystems against attack Android Hacker's Handbook is the first comprehensiveresource for IT professionals charged with smartphonesecurity.

Hackers exploit browser vulnerabilities to attack deep withinnetworks The Browser Hacker's Handbook gives a practicalunderstanding of hacking the everyday web browser and using it as abeachhead to launch further attacks deep into corporate networks.Written by a team of highly experienced computer security experts,the handbook provides hands-on tutorials exploring a range ofcurrent attack methods. The web browser has become the most popular and widely usedcomputer "program" in the world. As the gateway to the Internet, itis part of the storefront to any business that operates online, butit is also one of the most vulnerable entry points of any system.With attacks on the rise, companies are increasingly employingbrowser-hardening techniques to protect the unique vulnerabilitiesinherent in all currently used browsers. The Browser Hacker'sHandbook thoroughly covers complex security issues and exploresrelevant topics such as: Bypassing the Same Origin Policy ARP spoofing, social engineering, and phishing to accessbrowsers DNS tunneling, attacking web applications, andproxying—all from the browser Exploiting the browser and its ecosystem (plugins andextensions) Cross-origin attacks, including Inter-protocol Communicationand Exploitation The Browser Hacker's Handbook is written with aprofessional security engagement in mind. Leveraging browsers aspivot points into a target's network should form an integralcomponent into any social engineering or red-team securityassessment. This handbook provides a complete methodology tounderstand and structure your next browser penetration test.

Your one stop guide to making the most out of Bash programming About This Book From roots to leaves, learn how to program in Bash and automate daily tasks, pouring some spice in your scripts Daemonize a script and make a real service of it, ensuring it's available at any time to process user-fed data or commands This book provides functional examples that show you practical applications of commands Who This Book Is For If you're a power user or system administrator involved in writing Bash scripts to automate tasks, then this book is for you. This book is also ideal for advanced users who are engaged in complex daily tasks. What You Will Learn Understand Bash right from the basics and progress to an advanced level Customise your environment and automate system routine tasks Write structured scripts and create a command-line interface for your scripts Understand arrays, menus, and functions Securely execute remote commands using ssh Write Nagios plugins to automate your infrastructure checks Interact with web services, and a Slack notification script Find out how to execute subshells and take advantage of parallelism Explore inter-process communication and write your own daemon In Detail System administration is an everyday effort that involves a lot of tedious tasks, and devious pits. Knowing your environment is the key to unleashing the most powerful solution that will make your life easy as an administrator, and show you the path to new heights. Bash is your Swiss army knife to set up your working or home environment as you want, when you want. This book will enable you to customize your system step by step, making your own real, virtual, home out of it. The journey will take you swiftly through the basis of the shell programming in Bash to more interesting and challenging tasks. You will be introduced to one of the most famous open source monitoring systems—Nagios, and write complex programs with it in any languages. You'll see how to perform checks on your sites and applications. Moving on, you'll discover how to write your own daemons so you can create your services and take advantage of inter-process communication to let your scripts talk to each other. So, despite these being everyday tasks, you'll have a lot of fun on the way. By the end of the book, you will have gained advanced knowledge of Bash that will help you automate routine tasks and manage your systems. Style and approach This book presents step-by-step instructions and expert advice on working with Bash and writing scripts. Starting from the basics, this book serves as a reference manual where you can find handy solutions and advice to make your scripts flexible and powerful.

Advanced techniques to effectively manage, control, and monitor Linux systems and services

Gain expertise in the art of deploying, configuring, managing, and troubleshooting Ubuntu Server, 3rd Edition

Mastering Kali Linux for Advanced Penetration Testing

Protect your Linux systems from intruders, malware attacks, and other cyber threats, 2nd Edition

Linux Administration Cookbook

Windows Security Monitoring

With more than 600 security tools in its arsenal, the Kali Linux distribution can be overwhelming. Experienced and aspiring security professionals alike may find it challenging to select the most appropriate tool for conducting a given test. This practical book covers Kali's expansive security capabilities and helps you identify the tools you need to conduct a wide range of security tests and penetration tests. You'll also explore the vulnerabilities that make those tests necessary. Author Ric Messier takes you through the foundations of Kali Linux and explains methods for conducting tests on networks, web applications, wireless security, password vulnerability, and more. You'll discover different techniques for extending Kali tools and creating your own toolset. Learn tools for stress testing network stacks and applications Perform network reconnaissance to determine what's available to attackers Execute penetration tests using automated exploit tools such as Metasploit Use cracking tools to see if passwords meet complexity requirements Test wireless capabilities by injecting frames and cracking passwords Assess web application vulnerabilities with automated or proxy-based tools Create advanced attack techniques by extending Kali tools or developing your own Use Kali Linux to generate reports once testing is complete

Dig deep into the Windows auditing subsystem to monitor for malicious activities and enhance Windows system security Written by a former Microsoft security program manager, DEFCON "Forensics CTF" village author and organizer, and CISSP, this book digs deep into the Windows security auditing subsystem to help you understand the operating system's event logging patterns for operations and changes performed within the system. Expert guidance brings you up to speed on Windows auditing, logging, and event systems to help you exploit the full capabilities of these powerful components. Scenario-based instruction provides clear illustration of how these events unfold in the real world. From security monitoring and event patterns to deep technical details about the Windows auditing subsystem and components, this book provides detailed information on security events generated by the operating system for many common operations such as user account authentication, Active Directory object modifications, local security policy changes, and other activities. This book is based on the author's experience and the results of his research into Microsoft Windows security monitoring and anomaly detection. It presents the most common scenarios people should be aware of to check for any potentially suspicious activity. Learn to: Implement the Security Logging and Monitoring policy Dig into the Windows security auditing subsystem Understand the most common monitoring event patterns related to operations and changes in the Microsoft Windows operating system About the Author Andrei Miroshnikov is a former security program manager with Microsoft. He is an organizer and author for the DEFCON security conference "Forensics CTF" village and has been a speaker at Microsoft's Bluehat security conference. In addition, Andrei is an author of the "Windows 10 and Windows Server 2016 Security Auditing and Monitoring Reference" and multiple internal Microsoft security training documents. Among his many professional qualifications, he has earned the (ISC)2 CISSP and Microsoft MCSE: Security certifications.

Even small applications have dozens of components. Large applications may have thousands, which makes them challenging to install, maintain, and remove. Docker bundles all application components into a package called a container that keeps things tidy and helps manage any dependencies on other applications or infrastructure. Docker in Action, Second Edition teaches you the skills and knowledge you need to create, deploy, and manage applications hosted in Docker containers. This bestseller has been fully updated with new examples, best practices, and entirely new chapters. You'll start with a clear explanation of the Docker model and learn how to package applications in containers, including techniques for testing and distributing applications. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

A comprehensive guide to mastering the art of preventing your Linux system from getting compromised. Key Features Leverage this guide to confidently deliver a system that reduces the risk of being hacked Perform a number of advanced Linux security techniques such as network service detection, user authentication, controlling special permissions, encrypting file systems, and much more Master the art of securing a Linux environment with this end-to-end practical guide Book Description This book has extensive coverage of techniques that will help prevent attackers from breaching your system, by building a much more secure Linux environment. You will learn various security techniques such as SSH hardening, network service detection, setting up firewalls, encrypting file systems, protecting user accounts, authentication processes, and so on. Moving forward, you will also develop hands-on skills with advanced Linux permissions, access control, special modes, and more. Lastly, this book will also cover best practices and troubleshooting techniques to get your work done efficiently. By the end of this book, you will be confident in delivering a system that will be much harder to compromise. What you will learn Use various techniques to prevent intruders from accessing sensitive data Prevent intruders from planting malware, and detect whether malware has been planted Prevent insiders from accessing data that they aren't authorized to access Do quick checks to see whether a computer is running network services that it doesn't need to run Learn security techniques that are common to all Linux distros, and some that are distro-specific Who this book is for If you are a systems administrator or a network engineer interested in making your Linux environment more secure, then this book is for you. Security consultants wanting to enhance their Linux security skills will also benefit from this book. Prior knowledge of Linux is mandatory.

The Browser Hacker's Handbook

Linux Hardening in Hostile Networks

Learn Linux Shell Scripting – Fundamentals of Bash 4.4

Secure your Linux environment from modern-day attacks with practical recipes, 2nd Edition

Server Security from TLS to Tor

Linux Firewalls

"This course has extensive coverage of techniques that will help prevent attackers from breaching your system, by building a much more secure Linux environment. You will learn various security techniques such as SSH hardening, network service detection, setting up firewalls, encrypting file systems, protecting user accounts, authentication processes, and so on. Moving forward, you will also develop hands-on skills with advanced Linux permissions, access control, special modes, and more. Lastly, this course will also cover best practices and troubleshooting techniques to get your work done efficiently. By the end of this course, you will be confident in delivering a system that will be much harder to compromise."--Resource description page.

Master the complexities of Bash shell scripting and unlock the power of shell for your enterprise Key Features Identify high-level steps such as verifying user input Using the command line and conditional statements in creating/executing simple shell scripts Create and edit dynamic shell scripts to manage complex and repetitive tasks Leverage the command-line to bypass GUI and automate common tasks Book Description In this book, you'll discover everything you need to know to master shell scripting and make informed choices about the elements you employ. Grab your favorite editor and start writing your best Bash scripts step by step. Get to grips with the fundamentals of creating and running a script in normal mode, and in debug mode. Learn about various conditional statements' code snippets, and realize the power of repetition and loops in your shell script. You will also learn to write complex shell scripts. This book will also deep dive into file system administration, directories, and system administration like networking, process management, user authentications, and package installation and regular expressions. Towards the end of the book, you will learn how to use Python as a BASH Scripting alternative. By the end of this book, you will know shell scripts at the snap of your fingers and will be able to automate and communicate with your system with keyboard expressions. What you will learn Make, execute, and debug your first Bash script Create interactive scripts that prompt for user input Foster menu structures for operators with little command-line experience Develop scripts that dynamically edit web configuration files to produce a new virtual host Write scripts that use AWK to search and reports on log files Draft effective scripts using functions as building blocks, reducing maintenance and build time Make informed choices by comparing different script languages such as Python with BASH Who this book is for If you are a Linux administrator or a system administrator and are interested in automating tasks in your daily lives, saving time and effort, this book is for you. Basic shell scripting and command-line experience will be required. Familiarity with the tasks you need to automate will be helpful.

This book provides an overview of the kill chain approach to penetration testing, and then focuses on using Kali Linux to provide examples of how this methodology is applied in the real world. After describing the underlying concepts, step-by-step examples are provided that use selected tools to demonstrate the techniques.If you are an IT professional or a security consultant who wants to maximize the success of your network testing using some of the advanced features of Kali Linux, then this book is for you. This book will teach you how to become an expert in the pre-engagement, management, and documentation of penetration testing by building on your understanding of Kali Linux and wireless concepts.

This is the third edition of the bestselling one-stop resource for sysadmins and DevOps professionals to learn, configure and use Ubuntu 20.04 for their day-to-day operations and deployments. Key FeaturesA hands-on book that will teach you how to deploy, maintain and troubleshoot Ubuntu ServerLearn to leverage the improved performance and security-related aspects of Ubuntu Server 20.04 LTSNew chapters dedicated to exploring Ubuntu for cloudBook Description Ubuntu Server has taken data centers around the world by storm. Whether you're deploying Ubuntu for a large-scale project or for a small office, it is a stable, customizable, and powerful Linux distribution with innovative and cutting-edge features. For both simple and complex server deployments, Ubuntu's flexible nature can be easily adapted to meet to the needs of your organization. This third edition is updated to cover the advancements of Ubuntu 20.04 LTS and further train you to understand how to use Ubuntu Server, from initial deployment to creating production-ready resources for your network. The book begins with the concepts of user management, group management, and file system permissions. Continuing into managing storage volumes, you will learn how to format storage devices, utilize logical volume management, and monitor disk usage. Later, you will learn how to virtualize hosts and applications, which will include setting up QEMU & KVM, as well as containerization with both Docker and LXD. As the book continues, you will learn how to automate configuration with Ansible, as well as take a look at writing scripts. Lastly, you will explore best practices and troubleshooting techniques when working with Ubuntu Server that are applicable to real-world scenarios. By the end of this Ubuntu Server book, you will be well-versed in Ubuntu server's advanced concepts and attain the required proficiency needed for Ubuntu Server administration. What you will learnManage users, groups, and permissionsOptimize the performance of system resourcesPerform disk encryption and decryption with Linux Unified Key Setup (LUKS)Set up Secure Shell (SSH) for remote access, and connect it to other nodesShare directories using Samba and Network File System (NFS)Get familiar with scripting to improve command-line efficiencyConfigure VMs, containers, and orchestrate with MicroK8s and KubernetesAutomate server deployments with Ansible and cloud server deployments with TerraformWho this book is for The book is written to cater to sysadmins and DevOps professionals whose teams are planning to employ an Ubuntu/Linux environment for their development needs. Prior knowledge of Ubuntu is not required. However, it is assumed that you possess some IT admin, Linux, and shell scripting experience.

Docker in Action

Linux Service Management Made Easy with systemd

Exam Ref 70-744 Securing Windows Server 2016

Mastering Bash

SQL Injection Strategies

Getting Started with Networking, Scripting, and Security in Kali

FreeBSD and OpenBSD are increasingly gaining traction in educational institutions, non-profits, and corporations worldwide because they provide significant security advantages over Linux. Although a lot can be said for the robustness, clean organization, and stability of the BSD operating systems, security is one of the main reasons system administrators use these two platforms. There are plenty of books to help you get a FreeBSD or OpenBSD system off the ground, and all of them touch on security to some extent, usually dedicating a chapter to the subject. But, as security is commonly named as the key concern for today's system administrators, a single chapter on the subject can't provide the depth of information you need to keep your systems secure. FreeBSD and OpenBSD are rife with security "building blocks" that you can put to use, and Mastering FreeBSD and OpenBSD Security shows you how. Both operating systems have kernel options and filesystem features that go well beyond traditional Unix permissions and controls. This power and flexibility is valuable, but the colossal range of possibilities need to be tackled one step at a time. This book walks you through the installation of a hardened operating system, the installation and configuration of critical services, and ongoing maintenance of your FreeBSD and OpenBSD systems. Using an application-specific approach that builds on your existing knowledge, the book provides sound technical information on FreeBSD and Open-BSD security with plenty of real-world examples to help you configure and deploy a secure system. By imparting a solid technical foundation as well as practical know-how, it enables administrators to push their server's security to the next level. Even administrators in other environments--like Linux and Solaris--can find useful paradigms to emulate. Written by security professionals with two decades of operating system experience, Mastering FreeBSD and OpenBSD Security features broad and deep explanations of how how to secure your most critical systems. Where other books on BSD systems help you achieve functionality, this book will help you more thoroughly secure your deployments.

A guide geared toward seasoned Linux and Unix administrators offers practical knowledge for managing a range of Linux systems and servers, covering such topics as installing servers, setting up e-mail systems, and creating shell scripts.

Learn to exploit vulnerable database applications using SQL injection tools and techniques, while understanding how to effectively prevent attacks Key FeaturesUnderstand SQL injection and its effects on websites and other systemsGet hands-on with SQL injection using both manual and automated toolsExplore practical tips for various attack and defense strategies relating to SQL injectionBook Description SQL injection (SQLi) is probably the most infamous attack that can be unleashed against applications on the internet. SQL Injection Strategies is an end-to-end guide for beginners looking to learn how to perform SQL injection and test the security of web applications, websites, or databases, using both manual and automated techniques. The book serves as both a theoretical and practical guide to take you through the important aspects of SQL injection, both from an attack and a defense perspective. You'll start with a thorough introduction to SQL injection and its impact on websites and systems. Later, the book features steps to configure a virtual environment, so you can try SQL injection techniques safely on your own computer. These tests can be performed not only on web applications but also on web services and mobile applications that can be used for managing IoT environments. Tools such as sqlmap and others are then covered, helping you understand how to use them effectively to perform SQL injection attacks. By the end of this book, you will be well-versed with SQL injection, from both the attack and defense perspective. What you will learnFocus on how to defend against SQL injection attacksUnderstand web application securityGet up and running with a variety of SQL injection conceptsBecome well-versed with different SQL injection scenariosDiscover SQL injection manual attack techniquesDelve into SQL injection automated techniquesWho this book is for This book is ideal for penetration testers, ethical hackers, or anyone who wants to learn about SQL injection and the various attack and defense strategies against this web security vulnerability. No prior knowledge of SQL injection is needed to get started with this book.

Over 100 recipes to get up and running with the modern Linux administration ecosystem Key FeaturesUnderstand and implement the core system administration tasks in LinuxDiscover tools and techniques to troubleshoot your Linux systemMaintain a healthy system with good security and backup practicesBook Description Linux is one of the most widely used operating systems among system administrators,and even modern application and server development is heavily reliant on the Linux platform. The Linux Administration Cookbook is your go-to guide to get started on your Linux journey. It will help you understand what that strange little server is doing in the corner of your office, what the mysterious virtual machine languishing in Azure is crunching through, what that circuit-board-like thing is doing under your office TV, and why the LEDs on it are blinking rapidly. This book will get you started with administering Linux, giving you the knowledge and tools you need to troubleshoot day-to-day problems, ranging from a Raspberry Pi to a server in Azure, while giving you a good understanding of the fundamentals of how GNU/Linux works. Through the course of the book, you'll install and configure a system, while the author regales you with errors and anecdotes from his vast experience as a data center hardware engineer, systems administrator, and DevOps consultant. By the end of the book, you will have gained practical knowledge of Linux, which will serve as a bedrock for learning Linux administration and aid you in your Linux journey. What you will learnInstall and manage a Linux server, both locally and in the cloudUnderstand how to perform administration across all Linux distrosWork through evolving concepts such as IaaS versus PaaS, containers, and automationExplore security and configuration best practicesTroubleshoot your system if something goes wrongDiscover and mitigate hardware issues, such as faulty memory and failing drivesWho this book is for If you are a system engineer or system administrator with basic experience of working with Linux, this book is for you.

A comprehensive guide to installing, configuring, and maintaining Linux systems in the modern data center

SELinux System Administration - Third Edition

Practical techniques to secure old vulnerabilities against modern attacks

Efficiently perform large-scale Linux infrastructure automation with Ansible

Secure your Linux server and protect it from intruders, malware attacks, and other external threats

Perform powerful penetration testing using Kali Linux, Metasploit, Nessus, Nmap, and Wireshark

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 FeaturesGet hold of the best defensive security strategies and toolsDevelop a defensive security strategy at an enterprise levelGet hands-on with advanced cybersecurity threat detection, including XSS, SQL injections, brute forcing web applications, and moreBook 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 learnBecome well versed with concepts related to defensive securityDiscover strategies and tools to secure the most vulnerable factor – the userGet hands-on experience using and configuring the best security toolsUnderstand how to apply hardening techniques in Windows and Unix environmentsLeverage malware analysis and forensics to enhance your security strategySecure Internet of Things (IoT) implementationsEnhance the security of web applications and cloud deploymentsWho this book is for This book is for all IT professionals who want to take their first steps into the world of defensive security; from system admins and programmers to data analysts and data scientists with an interest in security. Experienced cybersecurity professionals working on broadening their knowledge and keeping up to date with the latest defensive developments will also find plenty of useful information in this book. You'll need a basic understanding of networking, IT, servers, virtualization, and cloud platforms before you get started with this book.

Find solutions to all your problems related to Linux system programming using practical recipes for developing your own system programs Key FeaturesDevelop a deeper understanding of how Linux system programming worksGain hands-on experience of working with different Linux projects with the help of practical examplesLearn how to develop your own programs for LinuxBook Description Linux is the world's most popular open source operating system (OS). Linux System Programming Techniques will enable you to extend the Linux OS with your own system programs and communicate with other programs on the system. The book begins by exploring the Linux filesystem, its basic commands, built-in manual pages, the GNU compiler collection (GCC), and Linux system calls. You'll then discover how to handle errors in your programs and will learn to catch errors and print relevant information about them. The book takes you through multiple recipes on how to read and write files on the system, using both streams and file descriptors. As you advance, you'll delve into forking, creating zombie processes, and daemons, along with recipes on how to handle daemons using systemd. After this, you'll find out how to create shared libraries and start exploring different types of interprocess communication (IPC). In the later chapters, recipes on how to write programs using POSIX threads and how to debug your programs using the GNU debugger (GDB) and Valgrind will also be covered. By the end of this Linux book, you will be able to develop your own system programs for Linux, including daemons, tools, clients, and filters. What you will learnDiscover how to write programs for the Linux system using a wide variety of system callsDelve into the working of POSIX functionsUnderstand and use key concepts such as signals, pipes, IPC, and process managementFind out how to integrate programs with a Linux systemExplore advanced topics such as filesystem operations, creating shared libraries, and debugging your programsGain an

overall understanding of how to debug your programs using ValgrindWho this book is for This book is for anyone who wants to develop system programs for Linux and gain a deeper understanding of the Linux system. The book is beneficial for anyone who is facing issues related to a particular part of Linux system programming and is looking for specific recipes or solutions.

Includes one year of FREE access after activation to the online test bank and study tools: Custom practice exam 100 electronic flashcards Searchable key term glossary The Sybex™ method for teaching Linux® security concepts Understanding Linux Security is essential for administration professionals. Linux Security Fundamentals covers all the IT security basics to help active and aspiring admins respond successfully to the modern threat landscape. You'll improve your ability to combat major security threats against computer systems, networks, and services. You'll discover how to prevent and mitigate attacks against personal devices and how to encrypt secure data transfers through networks, storage devices, or the cloud. Linux Security Fundamentals teaches: Using Digital Resources Responsibly What Vulnerabilities and Threats Are Controlling Access to Your Assets Controlling Network Connections Encrypting Data, Whether at Rest or Moving Risk Assessment Configuring System Backups and Monitoring Resource Isolation Design Patterns Interactive learning environment Take your skills to the next level with Sybex's superior interactive online study tools. To access our learning environment, simply visit www.wiley.com/go/sybextestprep, register your book to receive your unique PIN, and instantly gain one year of FREE access to: Interactive test bank with a practice exam to help you identify areas where you need to expand your knowledge 100 electronic flashcards to reinforce what you've learned Comprehensive glossary in PDF format gives you instant access to key terms you use in your job

System administrators need to stay ahead of new security vulnerabilities that leave their networks exposed every day. A firewall and an intrusion detection systems (IDS) are two important weapons in that fight, enabling you to proactively deny access and monitor network traffic for signs of an attack. Linux Firewalls discusses the technical details of the iptables firewall and the Netfilter framework that are built into the Linux kernel, and it explains how they provide strong filtering, Network Address Translation (NAT), state tracking, and application layer inspection capabilities that rival many commercial tools. You'll learn how to deploy iptables as an IDS with psad and fwsnort and how to build a strong, passive authentication layer around iptables with fwknop. Concrete examples illustrate concepts such as firewall log analysis and policies, passive network authentication and authorization, exploit packet traces, Snort ruleset emulation, and more with coverage of these topics: –Passive network authentication and OS fingerprinting –iptables log analysis and policies –Application layer attack detection with the iptables string match extension –Building an iptables ruleset that emulates a Snort ruleset –Port knocking vs. Single Packet Authorization (SPA) –Tools for visualizing iptables logs Perl and C code snippets offer practical examples that will help you to maximize your deployment of Linux firewalls. If you're responsible for keeping a network secure, you'll find Linux Firewalls invaluable in your attempt to understand attacks and use iptables—along with psad and fwsnort—to detect and even prevent compromises.

Mastering Defensive Security

Attack Detection and Response

Mastering Linux Administration

SELinux System Administration

Android Hacker's Handbook

Insightful recipes to work with system administration tasks on Linux

A comprehensive guide to securing your Linux system against cyberattacks and intruders Key FeaturesDeliver a system that reduces the risk of being hackedExplore a variety of advanced Linux security techniques with the help of hands-on labsMaster the art of securing a Linux environment with this end-to-end practical guideBook Description From creating networks and servers to automating the entire working environment, Linux has been extremely popular with system administrators for the last couple of decades. However, security has always been a major concern. With limited resources available in the Linux security domain, this book will be an invaluable guide in helping you get your Linux systems properly secured. Complete with in-depth explanations of essential concepts, practical examples, and self-assessment questions, this book begins by helping you set up a practice lab environment and takes you through the core functionalities of securing Linux. You'll practice various Linux hardening techniques and advance to setting up a locked-down Linux server. As you progress, you will also learn how to create user accounts with appropriate privilege levels, protect sensitive data by setting permissions and encryption, and configure a firewall. The book will help you set up mandatory access control, system auditing, security profiles, and kernel hardening, and finally cover best practices and troubleshooting techniques to secure your Linux environment efficiently. By the end of this Linux security book, you will be able to confidently set up a Linux server that will be much harder for malicious actors to compromise. What you will learnCreate locked-down user accounts with strong passwordsConfigure firewalls with iptables, UFW, nftables, and firewalldProtect your data with different encryption technologiesHarden the secure shell service to prevent security break-insUse mandatory access control to protect against system exploitsHarden kernel parameters and set up a kernel-level auditing systemApply OpenSCAP security profiles and set up intrusion detectionConfigure securely the GRUB 2 bootloader and BIOS/UEFIWho this book is for This book is for Linux administrators, system administrators, and network engineers interested in securing moderate to complex Linux environments. Security consultants looking to enhance their Linux security skills will also find this book useful. Working experience with the Linux command line and package management is necessary to understand the concepts covered in this book.

Create and maintain powerful Bash scripts for automation and administration. Key FeaturesGet up and running with Linux shell scripting using real-world examplesLeverage command-line techniques and methodologies to automate common yet complex administration tasksA practical guide with exposure to scripting constructs and common scripting patternsBook Description Shell scripts allow us to program commands in chains and have the system execute them as a scripted event, just like batch files. This book will start with an overview of Linux and Bash shell scripting, and then quickly deep dive into helping you set up your local environment, before introducing you to tools that are used to write shell scripts. The next set of chapters will focus on helping you understand Linux under the hood and what Bash provides the user. Soon, you will have embarked on your journey along the command line. You will now begin writing actual scripts instead of commands, and will be introduced to practical applications for scripts. The final set of chapters will deep dive into the more advanced topics in shell scripting. These advanced topics will take you from simple scripts to reusable, valuable programs that exist in the real world. The final chapter will leave you with some handy tips and tricks and, as regards the most frequently used commands, a cheat sheet containing the most interesting flags and options will also be provided. After completing this book, you should feel confident about starting your own shell scripting projects, no matter how simple or complex the task previously seemed. We aim to teach you how to script and what to consider, to complement the clear-cut patterns that you can use in your daily scripting challenges. What you will learnUnderstand Linux and Bash basics as well as shell scripting fundamentalsLearn to write simple shell scripts that interact with Linux operating systemBuild, maintain, and deploy scripts in a Linux environmentLearn best practices for writing shell scriptsAvoid common pitfalls associated with Bash scriptingGain experience and the right toolset to write your own complex shell scriptsWho this book is for This book targets new and existing Linux system administrators, Windows system administrators or developers who are interested in automating administrative tasks. No prior shell scripting experience is needed but in case you do this book will make a pro quickly. Readers should have a basic understanding of the command line.

Enhance file system security and learn about network attack, security tools and different versions of Linux build. Key Features Hands-on recipes to create and administer a secure Linux system Enhance file system security and local and remote user authentication Use various security tools and different versions of Linux for different tasks Book Description Over the last few years, system security has gained a lot of momentum and software professionals are focusing heavily on it. Linux is often treated as a highly secure operating system. However, the reality is that Linux has its share of security flaws, and these security flaws allow attackers to get into your system and modify or even destroy your important data. But there's no need to panic, since there are various mechanisms by which these flaws can be removed, and this book will help you learn about different types of Linux security to create a more secure Linux system. With a step-by-step recipe approach, the book starts by introducing you to various threats to Linux systems. Then, this book will walk you through customizing the Linux kernel and securing local files. Next, you will move on to managing user authentication both locally and remotely and mitigating network attacks. Later, you will learn about application security and kernel vulnerabilities. You will also learn about patching Bash vulnerability, packet filtering, handling incidents, and monitoring system logs. Finally, you will learn about auditing using system services and performing vulnerability scanning on Linux. By the end of this book, you will be able to secure your Linux systems and create a robust environment. What you will learn Learn about vulnerabilities and exploits in relation to Linux systems Configure and build a secure kernel and test it Learn about file permissions and how to securely modify files Authenticate users remotely and securely copy files on remote systems Review different network security methods and tools Perform vulnerability scanning on Linux machines using tools Learn about malware scanning and read through logs Who this book is for This book is intended for all those Linux users who already have knowledge of Linux file systems and administration. You should be familiar with basic Linux commands. Understanding information security and its risks to a Linux system is also helpful in understanding the recipes more easily.

This is the eBook version of the printed book. If the print book includes a CD-ROM, this content is not included within the eBook version. Advanced Linux Programming is divided into two parts. The first covers generic UNIX system services, but with a particular eye towards Linux specific information. This portion of the book will be of use even to advanced programmers who have worked with other Linux systems since it will cover Linux specific details and differences. For programmers without UNIX experience, it will be even more valuable. The second section covers material that is entirely Linux specific. These are truly advanced topics, and are the techniques that the gurus use to build great applications. While this book will focus mostly on the Application Programming Interface (API) provided by the Linux kernel and the C library, a preliminary introduction to the development tools available will allow all who purchase the book to make immediate use of Linux.

Practical Linux Security Cookbook

Learn Kali Linux 2019

Learning Kali Linux

Linux Basics for Hackers

Scenarios and Patterns

Security Testing, Penetration Testing, and Ethical Hacking

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?

A step-by-step guide to learn how to set up security on Linux servers by taking SELinux policies into your own hands.Linux administrators will enjoy the various SELinux features that this book covers and the approach used to guide the admin into understanding how SELinux works. The book assumes that you have basic knowledge in Linux administration, especially Linux permission and user management.

A comprehensive guide to securing your Linux system against cyberattacks and intruders Key Features Deliver a system that reduces the risk of being hacked Explore a variety of advanced Linux security techniques with the help of hands-on labs Master the art of securing a Linux environment with this end-to-end practical guide Book Description From creating networks and servers to automating the entire working environment, Linux has been extremely popular with system administrators for the last couple of decades. However, security has always been a major concern. With limited resources available in the Linux security domain, this book will be an invaluable guide in helping you get your Linux systems properly secured. Complete with in-depth explanations of essential concepts, practical examples, and self-assessment questions, this book begins by helping you set up a practice lab environment and takes you through the core functionalities of securing Linux. You'll practice various Linux hardening techniques and advance to setting up a locked-down Linux server. As you progress, you will also learn how to create user accounts with appropriate privilege levels, protect sensitive data by setting permissions and encryption, and configure a firewall. The book will help you set up mandatory access control, system auditing, security profiles, and kernel hardening, and finally cover best practices and troubleshooting techniques to secure your Linux environment efficiently. By the end of this Linux security book, you will be able to confidently set up a Linux server that will be much harder for malicious actors to compromise. What you will learn Create locked-down user accounts with strong passwords Configure firewalls with iptables, UFW, nftables, and firewalld Protect your data with different encryption technologies Harden the secure shell service to prevent security break-ins Use mandatory access control to protect against system exploits Harden kernel parameters and set up a kernel-level auditing system Apply OpenSCAP security profiles and set up intrusion detection Configure securely the GRUB 2 bootloader and BIOS/UEFI Who this book is for This book is for Linux administrators, system administrators, and network engineers interested in securing moderate to complex Linux environments. Security consultants looking to enhance their Linux security skills will also find this book useful. Working experience with the Linux command line and package management is...

Enhance Linux security, application platforms, and virtualization solutions with SELinux to work within your boundaries, your rules, and your policiesKey Features* Learn what SELinux is, and how it acts as a mandatory access control system on Linux* Apply and tune SELinux enforcement to users, applications, platforms, and virtualization solutions* Use real-life examples and custom policies to strengthen the security posture of your systemsBook DescriptionLinux is a dominant player in many organizations and in the cloud. Securing the Linux environment is extremely important for any organization, and Security-Enhanced Linux (SELinux) acts as an additional layer to Linux system security.SELinux System Administration covers basic SELinux concepts and shows you how to enhance Linux system protection measures. You will get to grips with SELinux and understand how it is integrated. As you progress, you'll get hands-on experience of tuning and configuring SELinux and integrating it into day-to-day administration tasks such as user management, network management, and application maintenance. Platforms such as Kubernetes, system services like systemd, and virtualization solutions like libvirt and Xen, all of which offer SELinux-specific controls, will be explained effectively so that you understand how to apply and configure SELinux within these applications. If applications do not exert the expected behavior, you'll learn how to fine-tune policies to securely host these applications. In case no policies exist, the book will guide you through developing custom policies on your own.By the end of this Linux book, you'll be able to harden any Linux system using SELinux to suit your needs and fine-tune existing policies and develop custom ones to protect any app and service running on your Linux systems.What you will learn* Understand what SELinux is and how it is integrated into Linux* Tune Linux security using policies and their configurable settings* Manage Linux users with least-privilege roles and access controls* Use SELinux controls in system services and virtualization solutions* Analyze SELinux behavior through log events and policy analysis tools* Protect systems against unexpected and malicious behavior* Enhance existing policies or develop custom onesWho this book is forThis Linux sysadmin book is for Linux administrators who want to control the secure state of their systems using SELinux, and for security professionals who have experience in maintaining a Linux system and want to know about SELinux. Experience in maintaining Linux systems, covering user management, software installation and maintenance, Linux security controls, and network configuration is required to get the most out of this book.

Hacking- The art Of Exploitation

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Mastering Ubuntu Server

Become a proficient Linux system programmer using expert recipes and techniques