Practical Unix And Internet Security

Demonstrates two fundamental components of distributed computing in a UNIX environment--the Network File System and the Network Information System--explaining how to plan, set up, protect, and debug UNIX networks.

This book is for all people who are forced to use UNIX. It is a humorous book--pure entertainment--that maintains that UNIX is a computer virus with a user interface. It features letters from the thousands posted on the Internet's "UNIX-Haters" mailing list. It is not a computer handbook, tutorial, or reference. It is a self-help book that will let readers know they are not alone.

PGP is a freely available encryption program that protects the privacy of files and electronic mail. It uses powerful public key cryptography and works on virtually every platform. This book is both a readable technical user's guide and a fascinating behind-the-scenes look at cryptography and privacy. It describes how to use PGP and provides background on cryptography, PGP's history, battles over public key cryptography patents and U.S. government export restrictions, and public debates about privacy and free speech.

The definitive book on UNIX security, this volume covers every aspect of computer security on UNIX machines and the Internet.

Practical UNIX and Internet SecuritySecuring Solaris, Mac OS X, Linux & Free BSD"O'Reilly Media, Inc."

"UNIX Unleashed, 2nd Ed". takes an in-depth look at UNIX and its features, commands, and utilities. Written by UNIX experts in the UNIX and open systems fields, this book is the all-purpose, one-stop UNIX guide that takes the reader from start to finish. The companion CD contains GNU Emacs, Perl BASH, UUCP, TeX utilities, GNU C++ Compiler, and shell scripts from the book, as well as other programs and utilities.

This book provides a concise yet comprehensive overview of computer and Internet security, suitable for a one-term introductory course for junior/senior undergrad or first-year graduate students. It is also suitable for self-study by anyone seeking a solid footing in security – including software developers and computing professionals, technical managers and government staff. An overriding focus is on brevity, without sacrificing breadth of core topics or technical detail within them. The aim is to enable a broad understanding in roughly 350 pages. Further prioritization is supported by designating as optional selected content within this. Fundamental academic concepts are reinforced by specifics and examples, and related to applied problems and real-world incidents. The first chapter provides a gentle overview and 20 design principles for security. The ten chapters that follow provide a framework for understanding computer and Internet security. They regularly refer back to the principles, with supporting examples. These principles are the conceptual counterparts of security-related error patterns that have been recurring in software and system designs for over 50 years. The book is “elementary” in that it assumes no background in security, but unlike “soft” high-level texts it does not avoid low-level details, instead it selectively dives into fine points for exemplary topics to concretely illustrate concepts and principles. The book is rigorous in the sense of being technically sound, but avoids both mathematical proofs and lengthy source-code examples that typically make books inaccessible to general audiences. Knowledge of elementary operating system and networking concepts is helpful, but review sections summarize the essential background. For graduate students, inline exercises and supplemental references provided in per-chapter endnotes provide a bridge to further topics and a springboard to the research literature; for those in industry and government, pointers are provided to helpful surveys and relevant standards, e.g., documents from the Internet Engineering Task Force (IETF), and the U.S. National Institute of Standards and Technology.

Network and System Security provides focused coverage of network and system security technologies. It explores practical solutions to a wide range of network and systems security issues. Chapters are authored by leading experts in the field and address the immediate and long-term challenges in the authors’ respective areas of expertise. Coverage includes building a secure organization, cryptography, system intrusion, UNIX and Linux security, Internet security, intranet security, LAN security; wireless network security, cellular network security, RFID security, and more. Chapters contributed by leaders in the field covering foundational and practical aspects of system and network security, providing a new level of technical expertise not found elsewhere Comprehensive and updated coverage of the subject area allows the reader to put current technologies to work Presents methods of analysis and problem solving techniques, enhancing the reader’s grasp of the material and ability to implement practical solutions

Here is the CORBA book that every C++ software engineer has been waiting for. Advanced CORBA® Programming with C++ provides designers and developers with the tools required to understand CORBA technology at the architectural, design, and source code levels. This book offers hands-on explanations for building efficient applications, as well as lucid examples that provide practical advice on avoiding costly mistakes. With this book as a guide, programmers will find the support they need to successfully undertake industrial-strength CORBA development projects. The content is systematically arranged and presented so the book may be used as both a tutorial and a reference. The rich example programs in this definitive text show CORBA developers how to write clearer code that is more maintainable, portable, and efficient. The authors' detailed coverage of the IDL-to-C++ mapping moves beyond the mechanics of the APIs to discuss topics such as potential pitfalls and efficiency. An in-depth presentation of the new Portable Object Adapter (POA) explains how to take advantage of its numerous features to create scalable and high-performance servers. In addition, detailed discussion of advanced topics, such as garbage collection and multithreading, provides developers with the knowledge they need to write commercial applications. Other highlights In-depth coverage of IDL, including common idioms and design trade-offs Complete and detailed explanations of the Life Cycle, Naming, Trading, and Event Services Discussion of IIOP and implementation repositories Insight into the dynamic aspects of CORBA, such as dynamic typing and the new DynAny interfaces Advice on selecting appropriate application architectures and designs Detailed, portable, and vendor-independent source code

Internet Lockdown: Internet Security Administrator's Handbook covers hot security technology including firewalls, intrusion detection and prevention, honeypots, network security on all operating systems. It explains confusing core concepts like certificates, cryptography, firewalls and encryption in a fashion anyone can understand. This book takes the

theory behind security and provides real-world implementation examples and techniques.
Ten Strategies of a World-Class Cyber Security Operations Center conveys MITRE's accumulated expertise on enterprise-grade computer network defense. It covers ten key qualities of leading Cyber Security Operations Centers (CSOCs), ranging from their structure and organization, to processes that best enable smooth operations, to approaches that extract maximum value from key CSOC technology investments. This book offers perspective and context for key decision points in structuring a CSOC, such as what capabilities to offer, how to architect large-scale data collection and analysis, and how to prepare the CSOC team for agile, threat-based response. If you manage, work in, or are standing up a CSOC, this book is for you. It is also available on MITRE's website, www.mitre.org.
Computers at Risk presents a comprehensive agenda for developing nationwide policies and practices for computer security. Specific recommendations are provided for industry and for government agencies engaged in computer security activities. The volume also outlines problems and opportunities in computer security research, recommends ways to improve the research infrastructure, and suggests topics for investigators. The book explores the diversity of the field, the need to engineer countermeasures based on speculation of what experts think computer attackers may do next, why the technology community has failed to respond to the need for enhanced security systems, how innovators could be encouraged to bring more options to the marketplace, and balancing the importance of security against the right of privacy.
Based on interviews with the key software engineers who invented and built the powerful UNIX operating system, this book provides unique insight into the operating system that dominates the modern computing environment. Originating from a small project in a backroom at AT &T Bell Labs, UNIX has grown to be a dominant operating system in the commercial computing world -the operating system responsible for the development of the C programming language and the modern networked environment. Peter Salus is a longtime and well-recognized promoter and spokesman for UNIX and the UNIX community.
Introduces the authors' philosophy of Internet security, explores possible attacks on hosts and networks, discusses firewalls and virtual private networks, and analyzes the state of communication security.
In the five years since the first edition of this classic book was published, Internet use has exploded. The commercial world has rushed headlong into doing business on the Web, often without integrating sound security technologies and policies into their products and methods. The security risks--and the need to protect both business and personal data--have never been greater. We've updated Building Internet Firewalls to address these newer risks. What kinds of security threats does the Internet pose? Some, like password attacks and the exploiting of known security holes, have been around since the early days of networking. And others, like the distributed denial of service attacks that crippled Yahoo, E-Bay, and other major e-commerce sites in early 2000, are in current headlines. Firewalls, critical components of today's computer networks, effectively protect a system from most Internet security threats. They keep damage on one part of the network--such as eavesdropping, a worm program, or file damage--from spreading to the rest of the network. Without firewalls, network security problems can rage out of control, dragging more and more systems down. Like the bestselling and highly respected first edition, Building Internet Firewalls, 2nd Edition, is a practical and detailed step-by-step guide to designing and installing firewalls and configuring Internet services to work with a firewall. Much expanded to include Linux and Windows coverage, the second edition describes: Firewall technologies: packet filtering, proxying, network address translation, virtual private networks Architectures such as screening routers, dual-homed hosts, screened hosts, screened subnets, perimeter networks, internal firewalls Issues involved in a variety of new Internet services and protocols through a firewall Email and News Web services and scripting languages (e.g., HTTP, Java, JavaScript, ActiveX, RealAudio, RealVideo) File transfer and sharing services such as NFS, Samba Remote access services such as Telnet, the BSD "r" commands, SSH, BackOrifice 2000 Real-time conferencing services such as ICQ and talk Naming and directory services (e.g., DNS, NetBT, the Windows Browser) Authentication and auditing services (e.g., PAM, Kerberos, RADIUS); Administrative services (e.g., syslog, SNMP, SMS, RIP and other routing protocols, and ping and other network diagnostics) Intermediary protocols (e.g., RPC, SMB, CORBA, IIOP) Database protocols (e.g., ODBC, JDBC, and protocols for Oracle, Sybase, and Microsoft SQL Server) The book's complete list of resources includes the location of many publicly available firewall construction tools.
"This book will be riveting reading for security professionals and students, as well as technophiles interested in learning about how computer security fits into the big picture and high-level hackers seeking to broaden their understanding of their craft."--BOOK JACKET.
“The seminal book on white-hat hacking and countermeasures... Should be required reading for anyone with a server or a network to secure.” --Bill Machrone, PC Magazine "The definitive compendium of intruder practices and tools." --Steve Steinke, Network Magazine "For almost any computer book, you can find a clone. But not this one... A one-of-a-kind study of the art of breaking in." --UNIX Review Here is the latest edition of international best-seller, Hacking Exposed. Using real-world case studies, renowned security experts Stuart McClure, Joel Scambray, and George Kurtz show IT professionals how to protect computers and networks against the most recent security vulnerabilities. You'll find detailed examples of the latest devious break-ins and will learn how to think like a hacker in order to thwart attacks. Coverage includes: Code hacking methods and countermeasures New exploits for Windows 2003 Server, UNIX/Linux, Cisco, Apache, and Web and wireless applications Latest DDoS techniques--zombies, Blaster, MyDoom All new class of vulnerabilities--HTTP Response Splitting and much more
This complete guide to setting up and running a TCP/IP network is essential for network administrators, and invaluable for users of home systems that access the Internet. The book starts with the fundamentals -- what protocols do and how they work, how addresses and routing are used to move data through the network, how to set up your network connection -- and then covers, in detail, everything you need to know to exchange information via the Internet.Included are discussions on advanced routing protocols (RIPv2, OSPF, and BGP) and the gated software package that implements them, a tutorial

on configuring important network services -- including DNS, Apache, sendmail, Samba, PPP, and DHCP -- as well as expanded chapters on troubleshooting and security. TCP/IP Network Administration is also a command and syntax reference for important packages such as gated, pppd, named, dhcpd, and sendmail.With coverage that includes Linux, Solaris, BSD, and System V TCP/IP implementations, the third edition contains: Overview of TCP/IP Delivering the data Network services Getting startedM Basic configuration Configuring the interface Configuring routing Configuring DNS Configuring network servers Configuring sendmail Configuring Apache Network security Troubleshooting Appendices include dip, ppd, and chat reference, a gated reference, a dhcpd reference, and a sendmail reference This new edition includes ways of configuring Samba to provide file and print sharing on networks that integrate Unix and Windows, and a new chapter is dedicated to the important task of configuring the Apache web server. Coverage of network security now includes details on OpenSSH, stunnel, gpg, iptables, and the access control mechanism in xinetd. Plus, the book offers updated information about DNS, including details on BIND 8 and BIND 9, the role of classless IP addressing and network prefixes, and the changing role of registrars.Without a doubt, TCP/IP Network Administration, 3rd Edition is a must-have for all network administrators and anyone who deals with a network that transmits data over the Internet.

This book covers the fundamental principles in Computer Security. Via hands-on activities, the book aims to help readers understand the risks with software application and computer system, how various attacks work, what their fundamental causes are, how the countermeasures work, and how to defend against them in programs and systems.

On computer security

Covers topics such as the importance of secure systems, threat modeling, canonical representation issues, solving database input, denial-of-service attacks, and security code reviews and checklists.

When it comes to network security, many users and administrators are running scared, and justifiably so. The sophistication of attacks against computer systems increases with each new Internet worm.What's the worst an attacker can do to you? You'd better find out, right? That's what Security Warrior teaches you. Based on the principle that the only way to defend yourself is to understand your attacker in depth, Security Warrior reveals how your systems can be attacked. Covering everything from reverse engineering to SQL attacks, and including topics like social engineering, antiforensics, and common attacks against UNIX and Windows systems, this book teaches you to know your enemy and how to be prepared to do battle.Security Warrior places particular emphasis on reverse engineering. RE is a fundamental skill for the administrator, who must be aware of all kinds of malware that can be installed on his machines -- trojaned binaries, "spyware" that looks innocuous but that sends private data back to its creator, and more. This is the only book to discuss reverse engineering for Linux or Windows CE. It's also the only book that shows you how SQL injection works, enabling you to inspect your database and web applications for vulnerability.Security Warrior is the most comprehensive and up-to-date book covering the art of computer war: attacks against computer systems and their defenses. It's often scary, and never comforting. If you're on the front lines, defending your site against attackers, you need this book. On your shelf--and in your hands.

bull; Learn UNIX essentials with a concentration on communication, concurrency, and multithreading techniques bull; Full of ideas on how to design and implement good software along with unique projects throughout bull; Excellent companion to Stevens' Advanced UNIX System Programming

This concise, high-end guide shows experienced administrators how to customize and extend popular open source security tools such as Nikto, Ettercap, and Nessus. It also addresses port scanners, packet injectors, network sniffers, and web assessment tools.

A guide to the operating system's practical applications covers listing, finding, displaying, printing, security, editing, Emacs, and writing Bourne Shell Scripts and Perl programs

To configure and maintain an operating system is serious business. With UNIX and its wide variety of "flavors," it can be especially difficult and frustrating, and networking with UNIX adds still more challenges. UNIX Administration: A Comprehensive Sourcebook for Effective Systems & Network Management is a one-stop handbook for the administration and maintenance of UNIX systems and networks. With an outstanding balance of concepts and practical matters, it covers the entire range of administrative tasks, from the most basic to the advanced, from system startup and shutdown to network security and kernel reconfiguration. While focusing on the primary UNIX platforms, the author discusses all of the most common UNIX “flavors,” including Solaris, Linux, HP-UX, AIX and SGI IRIX. Three chapters of case studies offer a practical look at UNIX implementation issues: UNIX installation, disk space upgrade, and several emergency situations that every administrator must expect to face at some point. Diverse yet detailed, filled with examples and specific procedures, this is the one book that both the novice and the seasoned professional need to learn UNIX administration and effectively perform their daily system and network-related duties.

"Web Security, Privacy & Commerce" cuts through the hype and the front page stories. It tells readers what the real risks are and explains how to minimize them. Whether a casual (but concerned) Web surfer or a system administrator responsible for the security of a critical Web server, this book will tells users what they need to know.

Unlike some operating systems, Linux doesn’t try to hide the important bits from you—it gives you full control of your computer. But to truly master Linux, you need to understand its internals, like how the system boots, how networking works, and what the kernel actually does. In this completely revised second edition of the perennial best seller How Linux Works, author Brian Ward makes the concepts behind Linux internals accessible to anyone curious about the inner workings of the operating system. Inside, you’ll find the kind of knowledge that normally comes from years of experience doing things the hard way. You’ll learn: –How Linux boots, from boot loaders to init implementations (systemd, Upstart, and System V) –How the kernel manages devices, device drivers, and processes –How networking, interfaces, firewalls, and servers work –How development tools work and relate to shared libraries –How to write effective shell scripts You’ll also explore the kernel and examine key system tasks inside user space, including system calls, input and output, and filesystems. With its combination of background, theory, real-world examples, and patient explanations, How Linux Works will teach you what you need to know to solve pesky problems and take control of your operating system.

Presents information on how to analyze risks to your networks and the steps needed to select and deploy the appropriate countermeasures to reduce your exposure to physical and network threats. Also imparts the skills and knowledge needed to identify and counter some fundamental security risks and requirements, including Internet security threats and measures (audit trails IP sniffing/spoofing etc.) and how to implement security policies and procedures. In addition, this book covers security and network design with respect

to particular vulnerabilities and threats. It also covers risk assessment and mitigation and auditing and testing of security systems as well as application standards and technologies required to build secure VPNs, configure client software and server operating systems, IPsec-enabled routers, firewalls and SSL clients. This comprehensive book will provide essential knowledge and skills needed to select, design and deploy a public key infrastructure (PKI) to secure existing and future applications. * Chapters contributed by leaders in the field cover theory and practice of computer security technology, allowing the reader to develop a new level of technical expertise * Comprehensive and up-to-date coverage of security issues facilitates learning and allows the reader to remain current and fully informed from multiple viewpoints * Presents methods of analysis and problem-solving techniques, enhancing the reader's grasp of the material and ability to implement practical solutions

If you hope to outmaneuver threat actors, speed and efficiency need to be key components of your cybersecurity operations. Mastery of the standard command line interface (CLI) is an invaluable skill in times of crisis because no other software application can match the CLI’s availability, flexibility, and agility. This practical guide shows you how to use the CLI with the bash shell to perform tasks such as data collection and analysis, intrusion detection, reverse engineering, and administration. Authors Paul Troncone, founder of Digadel Corporation, and Carl Albing, coauthor of bash Cookbook (O’Reilly), provide insight into command line tools and techniques to help defensive operators collect data, analyze logs, and monitor networks. Penetration testers will learn how to leverage the enormous amount of functionality built into every version of Linux to enable offensive operations. With this book, security practitioners, administrators, and students will learn how to: Collect and analyze data, including system logs Search for and through files Detect network and host changes Develop a remote access toolkit Format output for reporting Develop scripts to automate tasks

Fifty years ago, in 1984, George Orwell imagined a future in which privacy was demolished by a totalitarian state that used spies, video surveillance, historical revisionism, and control over the media to maintain its power. Those who worry about personal privacy and identity--especially in this day of technologies that encroach upon these rights--still use Orwell's "Big Brother" language to discuss privacy issues. But the reality is that the age of a monolithic Big Brother is over. And yet the threats are perhaps even more likely to destroy the rights we've assumed were ours.Database Nation: The Death of Privacy in the 21st Century shows how, in these early years of the 21st century, advances in technology endanger our privacy in ways never before imagined. Direct marketers and retailers track our every purchase; surveillance cameras observe our movements; mobile phones will soon report our location to those who want to track us; government eavesdroppers listen in on private communications; misused medical records turn our bodies and our histories against us; and linked databases assemble detailed consumer profiles used to predict and influence our behavior. Privacy--the most basic of our civil rights--is in grave peril.Simson Garfinkel--journalist, entrepreneur, and international authority on computer security--has devoted his career to testing new technologies and warning about their implications. This newly revised update of the popular hardcover edition of Database Nation is his compelling account of how invasive technologies will affect our lives in the coming years. It's a timely, far-reaching, entertaining, and thought-provoking look at the serious threats to privacy facing us today. The book poses a disturbing question: how can we protect our basic rights to privacy, identity, and autonomy when technology is making invasion and control easier than ever before?Garfinkel's captivating blend of journalism, storytelling, and futurism is a call to arms. It will frighten, entertain, and ultimately convince us that we must take action now to protect our privacy and identity before it's too late.

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?

There has been roughly 15 years of research into approaches for aligning research in Human Computer Interaction with computer Security, more colloquially known as ``usable security.'' Although usability and security were once thought to be inherently antagonistic, today there is wide consensus that systems that are not usable will inevitably suffer security failures when they are deployed into the real world. Only by simultaneously addressing both usability and security concerns will we be able to build systems that are truly secure. This book presents the historical context of the work to date on usable security and privacy, creates a taxonomy for organizing that work, outlines current research objectives, presents lessons learned, and makes suggestions for future research.

Halting the Hacker: A Practical Guide to Computer Security, Second Edition combines unique insight into the mind of the hacker with practical, step-by-step countermeasures for protecting any HP-UX, Linux, or UNIX system. Fully updated for today's key threats, tools, and solutions, this book shows you how hackers work and the best ways to respond: not just what to do, but why. Through dozens of real-world examples, you'll master the skills and mindset to protect yourself against today's attacks -- and tomorrow's.

Offers real world examples of computer security breeches and discusses common attacks, security policies, configuration and hardware preparation, and system scanning and repair.
Introduces more than one hundred effective ways to ensure security in a Linux, UNIX, or Windows network, covering both TCP/IP-based services and host-based security techniques, with examples of applied encryption, intrusion detections, and logging.
A practical guide that describes system vulnerabilities and protective countermeasures, this book is the complete reference tool. Contents include UNIX and security basics, system administrator tasks, network security, and appendices containing checklists. The book also tells you how to detect intruders in your system, clean up after them, and even prosecute them.
This pioneering guide to Internet and intranet security is the first to cover all of the relevant technologies in one comprehensive reference, and enhances the ability to create and deploy secure architectures. It gives users the knowledge needed for improved productivity, whether setting up commerce on line, assembling a firewall, or selecting access controls and cryptographic protocols to secure TCP/IP-based networks.
Offers practical advice on how to get rid of electronic "spam," including junk messages, unsolicited ads, and inappropriate news articles, and explains how and why they are being sent
When Practical Unix Security was first published more than a decade ago, it became an instant classic. Crammed with information about host security, it saved many a Unix system administrator from disaster. The second edition added much-needed Internet security coverage and doubled the size of the original volume. The third edition is a comprehensive update of this very popular book - a companion for the Unix/Linux system administrator who needs to secure his or her organization's system, networks, and web presence in an increasingly hostile world.Focusing on the four most popular Unix variants today--Solaris, Mac OS X, Linux, and FreeBSD--this book contains new information on PAM (Pluggable Authentication Modules), LDAP, SMB/Samba, anti-theft technologies, embedded systems, wireless and laptop issues, forensics, intrusion detection, chroot jails, telephone scanners and firewalls, virtual and cryptographic filesystems, WebNFS, kernel security levels, outsourcing, legal issues, new Internet protocols and cryptographic algorithms, and much more.Practical Unix & Internet Security consists of six parts: Computer security basics: introduction to security problems and solutions, Unix history and lineage, and the importance of security policies as a basic element of system security. Security building blocks: fundamentals of Unix passwords, users, groups, the Unix filesystem, cryptography, physical security, and personnel security. Network security: a detailed look at modem and dialup security, TCP/IP, securing individual network services, Sun's RPC, various host and network authentication systems (e.g., NIS, NIS+, and Kerberos), NFS and other filesystems, and the importance of secure programming. Secure operations: keeping up to date in today's changing security world, backups, defending against attacks, performing integrity management, and auditing. Handling security incidents: discovering a break-in, dealing with programmed threats and denial of service attacks, and legal aspects of computer security. Appendixes: a comprehensive security checklist and a detailed bibliography of paper and electronic references for further reading and research. Packed with 1000 pages of helpful text, scripts, checklists, tips, and warnings, this third edition remains the definitive reference for Unix administrators and anyone who cares about protecting their systems and data from today's threats.