Debian Linux Administration Guide

The Linux System Administrator's Guide describes the system administration aspects of using Linux. It is intended for people who know next to nothing about system administration (those saying ``what is it?''), but who have already mastered at least the basics of normal usage. This manual doesn't tell you how to install Linux; that is described in the Installation and Getting Started document. See below for more information about Linux manuals. System administration covers all the things that you have to do to keep a computer system in usable order. It includes things like backing up files (and restoring them if necessary), installing new programs, creating accounts for users (and deleting them when no longer needed), making certain that the file system is not corrupted, and so on. The structure of this manual is such that many of the chapters should be usable independently, so if you need information about backups, for example, you can read just that chapter.

The European Molecular Biology Open Software Suite (EMBOSS) is a high quality package of open source software tools for molecular biology. It includes over 200 applications integrated with a range of popular third party software packages under a consistent and powerful command line interface. The tools are available from a wide range of graphical interfaces, including easy to use web interfaces and powerful workflow software. The EMBOSS Administrator's Guide is the official, definitive and comprehensive guide to EMBOSS installation and maintenance: • Find all the information needed to configure, install and maintain EMBOSS, including recent additions for version 6.2 • Step-by-step instructions with real-world examples - saves readers time and helps them avoid the pitfalls on all the common platforms • In-depth reference to database configuration - learn how to set up and use databases under EMBOSS • Includes EMBOSS Frequently Asked Questions (FAQ) with answers - quickly find solutions to common problems

Provides instructions on using Webmin, covering such topics as installation, partitions, system logs, firewall configuration, cluster modules, and Webmin modules.

“As this book shows, Linux systems are just as functional, secure, and reliable as their proprietary counterparts. Thanks to the ongoing efforts of thousands of Linux developers, Linux is more ready than ever for deployment at the frontlines of the real world. The authors of this book know that terrain well, and I am happy to leave you in their most capable hands.” –Linus Torvalds “The most successful sysadmin book of all time–because it works!” –Rik Farrow, editor of ;login: “This book clearly explains current technology with the perspective of decades of experience in large-scale system administration. Unique and highly recommended.” –Jonathan Corbet, cofounder, LWN.net “Nemeth et al. is the overall winner for Linux administration: it’s intelligent, full of insights, and looks at the implementation of concepts.” –Peter Salus, editorial director, Matrix.net Since 2001, Linux Administration Handbook has been the definitive resource for every Linux® system administrator who must efficiently solve technical problems and maximize the reliability and performance of a production environment. Now, the authors have systematically updated this classic guide to address today’s most important Linux distributions and most powerful new administrative tools. The authors spell out detailed best practices for every facet of system administration, including storage management, network design and administration, web hosting, software configuration management, performance analysis, Windows interoperability, and much more. Sysadmins will especially appreciate the thorough and up-to-date discussions of such difficult topics such as DNS, LDAP, security, and the management of IT service organizations. Linux® Administration Handbook, Second Edition, reflects the current versions of these leading distributions: Red Hat® Enterprise Linux® FedoraTM Core SUSE® Linux Enterprise Debian® GNU/Linux Ubuntu® Linux Sharing their war stories and hard-won insights, the authors capture the behavior of Linux systems in the real world, not just in ideal environments. They explain complex tasks in detail and illustrate these tasks with examples drawn from their extensive hands-on experience.

More than 50 percent new and revised content for today's Linux environment gets you up and running in no time! Linux continues to be an excellent, low-cost alternative to expensive operating systems. Whether you're new to Linux or need a reliable update and reference, this is an excellent resource. Veteran bestselling author Christopher Negus provides a complete tutorial packed with major updates, revisions, and hands-on exercises so that you can confidently start using Linux today. Offers a complete restructure, complete with exercises, to make the book a better learning tool Places a strong focus on the Linux command line tools and can be used with all distributions and versions of Linux Features in-depth coverage of the tools that a power user and a Linux administrator need to get started This practical learning tool is ideal for anyone eager to set up a new Linux desktop system at home or curious to learn how to manage Linux server systems at work.

A concise Packt Beginner's Guide to get you started with administering a Linux Mint system. This book is for those users who want to become Linux Mint system administrators and need to start learning quickly. It's assumed that you have a basic knowledge of GNU/Linux operating systems, as well as being familiar with concepts, such as kernel, filesystems, users, accounts, groups, and disk partitions

O'Reilly's Pocket Guides have earned a reputation as inexpensive, comprehensive, and compact guides that have the stuff but not the fluff. Every page of Linux Pocket Guide lives up to this billing. It clearly explains how to get up to speed quickly on day-to-day Linux use. Once you're up and running, Linux Pocket Guide provides an easy-to-use reference that you can keep by your keyboard for those times when you want a fast, useful answer, not hours in the man pages.Linux Pocket Guide is organized the way you use Linux: by function, not just alphabetically. It's not the 'bible of Linux; it's a practical and concise guide to the options and commands you need most. It starts with general concepts like files and directories, the shell, and X windows, and then presents detailed overviews of the most essential commands, with clear examples. You'll learn each command's purpose, usage, options, location on disk, and even the RPM package that installed it.The Linux Pocket Guide is tailored to Fedora Linux--the latest spin-off of Red Hat Linux--but

most of the information applies to any Linux system.Throw in a host of valuable power user tips and a friendly and accessible style, and you'll quickly find this practical, to-the-point book a small but mighty resource for Linux users.

The Bash Guide for Beginners (Second Edition) discusses concepts useful in the daily life of the serious Bash user. While a basic knowledge of shell usage is required, it starts with a discussion of shell building blocks and common practices. Then it presents the grep, awk and sed tools that will later be used to create more interesting examples. The second half of the course is about shell constructs such as loops, conditional tests, functions and traps, and a number of ways to make interactive scripts. All chapters come with examples and exercises that will help you become familiar with the theory.

Your easy-to-follow step-by-step guide to configuring a Cisco router from the ground up The Accidental Administratortm: Cisco Router Step-by-Step Configuration Guide is packed with more than 30 easy-to-follow interactive exercises, loads of screen captures, and lots of step-by-step examples to help you build a working router from scratch. Easily the most straightforward approach to learning how to configure a Cisco router, this book is filled with practical tips and secrets learned from years of Don s teaching and consulting on Cisco network devices. As a bonus, you won t waste your time on boring theory. All the essentials are covered in chapters on installing, backups and restores, and TCP/IP. You ll learn the nitty-gritty on subnetting, remote administration, routing protocols, static routing, access-control lists, site-to-site VPNs, network address translation (NAT), DHCP, password recovery, and security. There s even an entire chapter on the new Internet Protocol version 6 (IPv6). Here's just some of what you'll find: How to configure and manage access lists How to set up a site-to-site VPN How to implement IPv6 All the information is presented in a straightforward style that you can understand and use right away. With The Accidental Administrator: Cisco Router Step-by-Step Configuration Guide you ll be able to sit down with your routers and build a working configuration in a matter of minutes. Of course, some of the more advanced configs may take a little longer, but even so, you'll be able to "get 'er done" in a minimal amount of time In addition, there are supporting videos and a supporting webpage to provide even more help and updated information.

Debian GNU/Linux is one of the major Linux distributions available today. It is known as the most open" of the Linux distributions -- for its commitment to the free software principals, and its community-centricism. It is also known for its tradition of high-quality packages and package management tools, as well as its focus on security issues. Debian GNU/Linux(r) Bible focuses on common apps, GUIs, networking, and system administration. The Debian Project's Internet-based development model has helped the distribution achieve unparalleled Internet functionality. One of the most popular features in Debian GNU/Linux is "apt-get," which automates free network downloads of all software package updates, making the Debian CD the last CD you will ever need to keep your system up-to-date with Linux."

Publisher's Note: Products purchased from Third Party sellers are not guaranteed by the publisher for quality, authenticity, or access to any online entitlements included with the product. Gain Essential Linux Administration Skills Easily Effectively set up and manage popular Linux distributions on individual servers and build entire network infrastructures using this practical resource. Fully updated to cover the latest tools and techniques, Linux Administration: A Beginner’s Guide, Eighth Edition features clear explanations, step-by-step instructions, and real-world examples. Find out how to configure hardware and software, work from the command line or GUI, maintain Internet and network services, and secure your data. Performance tuning, virtualization, containers, software management, security, and backup solutions are covered in detail. Install and configure Linux, including the latest distributions from Fedora, Ubuntu, CentOS, openSUSE, Debian, and RHEL. Set up and administer core system services, daemons, users, and groups. Manage software applications from source code or binary packages. Customize, build, or patch the Linux kernel. Understand and manage the Linux network stack and networking protocols, including TCP/IP, ARP, IPv4, and IPv6. Minimize security threats and build reliable firewalls and routers with Netfilter (iptables and nftables) and Linux. Create and maintain DNS, FTP, web, e-mail, print, LDAP, VoIP, and SSH servers and services. Share resources using GlusterFS, NFS, and Samba. Spin-up and manage Linux-based servers in popular cloud environments, such as OpenStack, AWS, Azure, Linode, and GCE. Explore virtualization and container technologies using KVM, Docker, Kubernetes, and Open Container Initiative (OCI) tooling. Download specially curated Virtual Machine image and containers that replicate various exercises, software, servers, commands, and concepts covered in the book. Wale Soyinka is a father, system administrator, a DevOps/SecOps aficionado, an open source evangelist, a hacker, and a well-respected world-renowned chef (in his mind). He is the author of Advanced Linux Administration as well as other Linux, Network, and Windows administration training materials.

This collection of tips, tools, and scripts provides clear, concise, hands-on solutions that can be applied to the challenges facing anyone running a network of Linux servers from small networks to large data centers.

Despite its reputation as an operating system exclusively for professionals and hardcore computer hobbyists, Debian's open development cycle and strict quality control have helped it to gain popularity. With an installed base that’s growing annually by an estimated 25 percent, Debian clearly has its fair share of fans (not to mention the newsmaking Debian-based Linux distributions such as Knoppix, Ubuntu, and Xandros). Unlike other popular Linux distributions, the Debian GNU/Linux operating system favors text-based configuration over graphical user interfaces (GUIs). In The Debian System, author Martin Krafft, an experienced Debian developer, introduces the concept of the Debian operating system, and explains how to use its various tools and techniques as well as the pitfalls and the thinking behind each. Debian may appear simplistic, but it is actually quite robust, scalable, and secure. After reading The Debian System, you’ll see that strict adherence to standards, highly experienced developers, a clear vision and goals, and a certain degree of academic perfection make Debian the exceptional system that it is today. This is a fascinating, must-have volume that UNIX and Linux administrators will find complements the standard Linux references and will quickly orient you to Debian's unique philosophy and structure. Co-published with Open Source Press, an independent publisher based in Munich that specializes in the field of free and open source software. Visit the book's companion site for a discussion forum, errata, frequently asked questions, and more.

An expert in UNIX/Linux systems integration presents a comprehensive and detailed guide to Linux system admistration, for any skill level, that covers such areas as installing a Linux system, Linux distribution differences and considerations, and understanding the principles of Linux security. Original. (Intermediate)

Your step-by-step guide to the latest in Linux Nine previous editions of this popular benchmark guide can’t be wrong! Whether you’re new to Linux and need a step-by-step guide or are a pro who wants to catch up with recent distributions, Linux For Dummies, 10th Edition has your back. Covering everything from installation to automation, this updated edition focuses on openSUSE and Ubuntu and includes new and refreshed material—as well as chapters on building a web server and creating simple shell scripts. In his friendly, no-jargon style, IT professional and tech higher education instructor Richard Blum draws on more than 10 years of teaching to show you just why Linux’s open source operating systems are relied on to run a huge proportion of the world’s online infrastructure, servers, supercomputers, and NAS devices—and how you can master them too. Study the thinking behind Linux Choose the right installation approach Pick up the basics—from prepping to desktops Get fancy with music, video, movies, and games Whatever your Linux needs—work, fun, or just a hobby—this bestselling, evergreen guide will get you up and coding in the open source revolution in no time at all.

Now covers Red Hat Linux! Written by Evi Nemeth, Garth Snyder, Scott Seebass, and Trent R. Hein with Adam Boggs, Rob Braun, Ned McClain, Dan Crawl, Lynda McGinley, and Todd Miller "This is not a nice, neat book for a nice, clean world. It's a nasty book for a nasty world. This is a book for the rest of us." –Eric Allman and Marshall Kirk McKusick "I am pleased to welcome Linux to the UNIX System Administration Handbook!" –Linus Torvalds, Transmeta "This book is most welcome!" –Dennis Ritchie, AT&T Bell Laboratories This new edition of the world's most comprehensive guide to UNIX system administration is an ideal tutorial for those new to administration and an invaluable reference for experienced professionals. The third edition has been expanded to include "direct from the frontlines" coverage of Red Hat Linux. UNIX System Administration Handbook describes every aspect of system administration–from basic topics to UNIX esoterica–and provides explicit coverage of four popular UNIX systems: This book stresses a practical approach to system administration. It's packed with war stories and pragmatic advice, not just theory and watered-down restatements of the manuals. Difficult subjects such as sendmail, kernel building, and DNS configuration are tackled head-on. Examples are provided for all four versions of UNIX and are drawn from real-life systems–warts and all. "This book is where I turn first when I have system administration questions. It is truly a wonderful resource and always within reach of my terminal." –W. Richard Stevens, author of numerous books on UNIX and TCP/IP "This is a comprehensive guide to the care and feeding of UNIX systems. The authors present the facts along with seasoned advice and numerous real-world examples. Their perspective on the variations among systems is valuable for anyone who runs a heterogeneous computing facility." –Pat Parseghian, Transmeta "We noticed your book on the staff recommendations shelf at our local bookstore: 'Very clear, a masterful interpretation of the subject.' We were most impressed, until we noticed that the same staff member had also recommended Aunt Bea's Mayberry Cookbook." –Shannon Bloomstran, history teacher

Learn to install and administer Linux on an individual workstation or an entire network with this comprehensive in depth reference. You'll find everything you need to get up and running with any Linux distribution, including the latest version of Red Hat. Updated to cover the new 2.4 kernel and complete with an expanded section on advanced networking, this book shows you how to install and configure Linux, set up Internet services, handle single-host administration, and much more. Plus, you'll get eight pages of blueprints illustrating the differences between Linux and Windows NT/2000. If you are a professional administrator wanting to bring Linux into your network topology, a home user with multiple machines wanting to build a simple home network, or are migrating from Windows, then you need this book.

Implement a SOHO or SMB Linux infrastructure to expand your business and associated IT capabilities. Backed by the expertise and experienced guidance of the authors, this book provides everything you need to move your business forward. Pro Linux System Administration makes it easy for small- to medium–sized businesses to enter the world of zero–cost software running on Linux and covers all the distros you might want to use, including Red Hat, Ubuntu, Debian, and CentOS. Pro Linux System Administration takes a layered, component–based approach to open source business systems, while training system administrators as the builders of business infrastructure. Completely updated for this second edition, Dennis Matotek takes you through an infrastructure-as-code approach, seamlessly taking you through steps along the journey of Linux administration with all you need to master complex systems. This edition now includes Jenkins, Ansible, Logstash and more. What You'll Learn: Understand Linux architecture Build, back up, and recover Linux servers Create basic networks and network services with Linux Build and implement Linux infrastructure and services including mail, web, databases, and file and print Implement Linux security Resolve Linux performance and capacity planning issues Who This Book Is For: Small to medium–sized business owners looking to run their own IT, system administrators considering migrating to Linux, and IT systems integrators looking for an extensible Linux infrastructure management approach.

Over 100 recipes to get up and running with the modern Linux administration ecosystem Key Features Understand and implement the core system administration tasks in Linux Discover tools and techniques to troubleshoot your Linux system Maintain a healthy system with good security and backup practices Book 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 learn Install and manage a Linux server, both locally and in the cloud Understand how to perform administration across all Linux distros Work through evolving concepts such as IaaS versus PaaS, containers, and automation Explore security and configuration best practices Troubleshoot your system if something goes wrong Discover and mitigate hardware issues, such as faulty memory and failing drives Who 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.

Shows the reader how to install, configure and manage the latest version of Debian Linux at the time of pubication. The book covers the most important topics to the Debian Linux intermediate/advanced user on installation and management of Debian systems. The book also provides wisdom and insights on how to control some of the more difficult to use aspects of Debian, like integrating Debian into Microsoft networks. Advanced topics show how to set up an Internet server, set up a firewall, and install Linux on notebook computers. The text also offers coverage of working with open-source databases, and covers programming in several languages and shells in detail.

Presents information on computing and programming with Raspberry Pi. Original.

“As an author, editor, and publisher, I never paid much attention to the competition—except in a few cases. This is one of those cases. The UNIX System Administration

Handbook is one of the few books we ever measured ourselves against." —Tim O'Reilly, founder of O'Reilly Media "This edition is for those whose systems live in the cloud or in virtualized data centers; those whose administrative work largely takes the form of automation and configuration source code; those who collaborate closely with developers, network engineers, compliance officers, and all the other worker bees who inhabit the modern hive." —Paul Vixie, Internet Hall of Fame-recognized innovator and founder of ISC and Farsight Security "This book is fun and functional as a desktop reference. If you use UNIX and Linux systems, you need this book in your short-reach library. It covers a bit of the systems' history but doesn't bloviate. It's just straight-forward information delivered in a colorful and memorable fashion." —Jason A. Nunnelley UNIX® and Linux® System Administration Handbook, Fifth Edition, is today's definitive guide to installing, configuring, and maintaining any UNIX or Linux system, including systems that supply core Internet and cloud infrastructure. Updated for new distributions and cloud environments, this comprehensive guide covers best practices for every facet of system administration, including storage management, network design and administration, security, web hosting, automation, configuration management, performance analysis, virtualization, DNS, security, and the management of IT service organizations. The authors—world-class, hands-on technologists—offer indispensable new coverage of cloud platforms, the DevOps philosophy, continuous deployment, containerization, monitoring, and many other essential topics. Whatever your role in running systems and networks built on UNIX or Linux, this conversational, well-written ¿guide will improve your efficiency and help solve your knottiest problems.

This introduction to networking on Linux now covers firewalls, including the use of ipchains and Netfilter, masquerading, and accounting. Other new topics in this second edition include Novell (NCP/IPX) support and INN (news administration).

You've experienced the shiny, point-and-click surface of your Linux computer--now dive below and explore its depths with the power of the command line. The Linux Command Line takes you from your very first terminal keystrokes to writing full programs in Bash, the most popular Linux shell (or command line). Along the way you'll learn the timeless skills handed down by generations of experienced, mouse-shunning gurus: file navigation, environment configuration, command chaining, pattern matching with regular expressions, and more. In addition to that practical knowledge, author William Shotts reveals the philosophy behind these tools and the rich heritage that your desktop Linux machine has inherited from Unix supercomputers of yore. As you make your way through the book's short, easily-digestible chapters, you'll learn how to: • Create and delete files, directories, and symlinks • Administer your system, including networking, package installation, and process management • Use standard input and output, redirection, and pipelines • Edit files with Vi, the world's most popular text editor • Write shell scripts to automate common or boring tasks • Slice and dice text files with cut, paste, grep, patch, and sed Once you overcome your initial "shell shock," you'll find that the command line is a natural and expressive way to communicate with your computer. Just don't be surprised if your mouse starts to gather dust.

A guide to Linux networking covers such topics as TCP/IP, Apache, Samba, connecting with a serial line, running inetd superservers, logging in remotely, and setting up a nameserver.

Surveys the best practices for all aspects of system administration, covering such topics as storage management, email, Web hosting, performance analysis, virtualization, DNS, security, and configuration management.

A guide to the Debian 2.1 distribution of Linux demonstrates the capabilities of the completely open-source operating system, covering installation, setup, and basic applications

"Most Indispensable Linux Book" --2001 Linux Journal Readers Choice Awards Authoritative Answers to All Your Linux Questions You can rely on the fully updated second edition of Linux System Administration for answers to all your questions about installing, configuring, and administering Linux. Written by two Linux experts, this book teaches you, step-by-step, all the standard and advanced techniques you need to know to set up and maintain a secure, effective Linux environment. Scores of clear, consistent examples illustrate these techniques in detail--so you stay on track and accomplish all your goals. Coverage includes: * Installing a Linux server * Setting up and maintaining user and group accounts * Setting up Linux system security * Sharing files using Samba and NFS * Implementing a backup strategy * Troubleshooting common Linux problems * Setting up the X Window System * Setting up TCP/IP and connecting to the Internet * Setting up a mail server * Maintaining filesystems and partitions * Configuring printers * Improving system performance * Writing shell scripts * Using Webmin for cross-distribution GUI administration The Craig Hunt Linux Library The Craig Hunt Linux Library provides in-depth, advanced coverage of the key topics for Linux administrators. Topics include Samba, Network Servers, DNS Server Administration, Apache, Security, and Sendmail. Each book in the series is either written by or meticulously reviewed by Craig Hunt to ensure the highest quality and most complete coverage for networking professionals working specifically in Linux environments.

Debian GNU/Linux, a very popular non-commercial Linux distribution, is known for its reliability and richness. Built and maintained by an impressive network of thousands of developers throughout the world, the Debian project is cemented by its social contract. This foundation text defines the project's objective: fulfilling the needs of users with a 100% free operating system. The success of Debian and of its ecosystem of derivative distributions (with Ubuntu at the forefront) means that an increasing number of administrators are exposed to Debian's technologies. This Debian Administrator's Handbook, which has been entirely updated for Debian 8 "Jessie", builds on the success of its 6 previous editions. Accessible to all, this book teaches the essentials to anyone who wants to become an effective and independent Debian GNU/Linux administrator. It covers all the topics that a competent Linux administrator should master, from installation to updating the system, creating packages and compiling the kernel, but also monitoring,

backup and migration, without forgetting advanced topics such as setting up SELinux or AppArmor to secure services, automated installations, or virtualization with Xen, KVM or LXC. This book is not only designed for professional system administrators. Anyone who uses Debian or Ubuntu on their own computer is de facto an administrator and will find tremendous value in knowing more about how their system works. Being able to understand and resolve problems will save you invaluable time. Learn more about the book on its official website: debian-handbook.info

A guide to the features of Samba-3 provides step-by-step installation instructions on integrating Samba into a Windows or UNIX environment.

This book highlights practical sysadmin skills, common architectures that you'll encounter, and best practices that apply to automating and running systems at any scale, from one laptop or server to 1,000 or more. It is intended to help orient you within the discipline, and hopefully encourages you to learn more about system administration.

Learn Linux Administration and Supercharge Your Career!If you're looking to make the jump from being a Linux user to being a Linux administrator, this book is for you! If you're in windows administration and want to learn the ins and outs of Linux administration, start here. This book is also great for Unix administrators switching to Linux administration.Here is what you will learn by reading this Linux System Administration book: How the the boot process works on Linux servers and what you can do to control it. The various types of messages generated by a Linux system, where they're stored, and how to automatically prevent them from filling up your disks. Disk management, partitioning, and file system creation. Managing Linux users and groups. Exactly how permissions work and how to decipher the most cryptic Linux permissions with ease. Networking concepts that apply to system administration and specifically how to configure Linux network interfaces. How to use the nano, vi, and emacs editors. How to schedule and automate jobs using cron. How to switch users and run processes as others. How to configure sudo. How to find and install software. Managing process and jobs. How to make the most out of the Linux command line Several Linux commands you'll need to know Linux shell scripting What you learn in book applies to any Linux system including Ubuntu Linux, Debian, Linux Mint, RedHat Linux, CentOS, Fedora, SUSE Linux, Arch Linux, Kali Linux and more.Real Advice from a Real, Professional Linux AdministratorJason Cannon is the author of Linux for Beginners, the founder of the Linux Training Academy, and an instructor to over 40,000 satisfied students. He started his IT career in the late 1990's as a Unix and Linux System Engineer and he'll be sharing his real-world Linux experience with you throughout this book.By the end of this book you will fully understand the most important and fundamental concepts of Linux server administration. More importantly, you will be able to put those concepts to use in practical real-world situations. You'll be able to configure, maintain, and support a variety of Linux systems. You can even use the skills you learned to become a Linux System Engineer or Linux System Administrator.

You've experienced the shiny, point-and-click surface of your Linux computer—now dive below and explore its depths with the power of the command line. The Linux Command Line takes you from your very first terminal keystrokes to writing full programs in Bash, the most popular Linux shell. Along the way you'll learn the timeless skills handed down by generations of gray-bearded, mouse-shunning gurus: file navigation, environment configuration, command chaining, pattern matching with regular expressions, and more. In addition to that practical knowledge, author William Shotts reveals the philosophy behind these tools and the rich heritage that your desktop Linux machine has inherited from Unix supercomputers of yore. As you make your way through the book's short, easily-digestible chapters, you'll learn how to: * Create and delete files, directories, and symlinks * Administer your system, including networking, package installation, and process management * Use standard input and output, redirection, and pipelines * Edit files with Vi, the world's most popular text editor * Write shell scripts to automate common or boring tasks * Slice and dice text files with cut, paste, grep, patch, and sed Once you overcome your initial "shell shock," you'll find that the command line is a natural and expressive way to communicate with your computer. Just don't be surprised if your mouse starts to gather dust. A featured resource in the Linux Foundation's "Evolution of a SysAdmin"

Develop advanced skills for working with Linux systems on-premises and in the cloud Key Features Become proficient in everyday Linux administration tasks by mastering the Linux command line and using automation Work with the Linux filesystem, packages, users, processes, and daemons Deploy Linux to the cloud with AWS, Azure, and Kubernetes Book 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 learn Understand how Linux works and learn basic to advanced Linux administration skills Explore the most widely used commands for managing the Linux filesystem, network, security, and more Get to grips with different networking and messaging protocols Find out how Linux security works and how to configure SELinux, AppArmor, and Linux iptables Work with virtual machines and containers and understand container orchestration with Kubernetes Work with containerized workflows using Docker and Kubernetes Automate your configuration management workloads with Ansible Who

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.

Now with a virtual machine showcasing the book's test system configuration, Linux Administration: A Beginner's Guide, Seventh Edition teaches system administrators how to set-up and configure Linux quickly and easily. Effectively set up and manage any version of Linux on individual servers or entire networks using this practical resource. Fully updated to cover the latest tools and techniques, Linux Administration: A Beginner's Guide, Seventh Edition features clear explanations, step-by-step instructions, and real-world examples. Find out how to configure hardware and software, work from the GUI or command line, maintain Internet and network services, and secure your data. Performance tuning, virtualization, containers, software management, and backup solutions are covered in detail. • Install and configure Linux, including the latest distributions from Fedora, Ubuntu, CentOS, openSUSE, Debian, and RHEL • Manage users, permissions, files, folders, and applications • Set up and administer system services and daemons • Manage software from source code or binary packages • Customize, build, or patch the Linux kernel • Work with physical and virtual file systems, such as proc, SysFS, and cgroup • Understand networking protocols, including TCP/IP, ARP, IPv4, and IPv6 • Build reliable firewalls and routers with Netfilter (iptables and nftables) and Linux • Monitor and test network activity and minimize security threats • Create and maintain DNS, FTP, web, e-mail, print, LDAP, and VoIP servers • Share resources using GlusterFS, NFS, and Samba • Implement popular cloud-based technologies using Linux virtualization and containers using KVM and Docker

JBoss Application server is the most popular open source Java application server, renamed from this release and on as WildFly. This book covers all details on administration and management aspect of this new version of the application server. Focusing exclusively on the management instruments of the application server, the book takes you through all of the latest architectural and performance changes. You'll progress from basic server configuration to more advanced techniques for clustering, JDBC connectivity, logging, and much more. What you will learn from this book: - How to install the application server on Windows and Unix/Linux systems including details for installing it as a service - Steps for packaging and deploying web applications - Configuring the services stack, including the new Undertow Web subsystem - Deploying Wildfly 8 with the Apache Web server and mod_cluster - Monitoring Wildfly 8 servers in realtime - Secure applications and encrypt their communication

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.