

Modern Linux Administration

Encouraging hands-on practice, *Mastering Linux* provides a comprehensive, up-to-date guide to Linux concepts, usage, and programming. Through a set of carefully selected topics and practical examples, the book imparts a sound understanding of operating system concepts and shows how to use Linux effectively. Ready-to-Use Examples Offer Immediate Access to Practical Applications After a primer on the fundamentals, the text covers user interfaces, commands and filters, Bash Shell scripting, the file system, networking and Internet use, and kernel system calls. It presents many examples and complete programs ready to run on your Linux system. Each chapter includes a summary and exercises of varying degrees of difficulty. Web Resource The companion website at <http://ml.sofpower.com/> offers a host of ancillary materials. Along with links to numerous resources, it includes appendices on SSH and SFTP, VIM, text editing with Vi, and the emacs editor. The site also provides a complete example code package for download. Master the Linux Operating System Toolbox This book enables you to leverage the capabilities and power of the Linux system more effectively. Going beyond this, it can help you write programs at the shell and C levels—encouraging you to build new custom tools for applications and R&D.

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 Comprehensive, Up-to-Date Apache Hadoop Administration Handbook and Reference “Sam Alapati has worked with production Hadoop clusters for six years. His unique depth of experience has enabled him to write the go-to resource for all administrators looking to spec, size, expand, and secure production Hadoop clusters of any size.” —Paul Dix, Series Editor In Expert Hadoop® Administration, leading Hadoop administrator Sam R. Alapati brings together authoritative knowledge for creating, configuring, securing, managing, and optimizing production Hadoop clusters in any environment. Drawing on his experience with large-scale Hadoop administration, Alapati integrates action-oriented advice with carefully researched explanations of both problems and solutions. He covers an unmatched range of topics and offers an unparalleled collection of realistic examples. Alapati demystifies complex Hadoop environments, helping you understand exactly what happens behind the scenes when you administer your cluster. You’ll gain unprecedented insight as you walk through building clusters from scratch and configuring high availability, performance, security, encryption, and other key attributes. The high-value administration skills you

learn here will be indispensable no matter what Hadoop distribution you use or what Hadoop applications you run. Understand Hadoop's architecture from an administrator's standpoint Create simple and fully distributed clusters Run MapReduce and Spark applications in a Hadoop cluster Manage and protect Hadoop data and high availability Work with HDFS commands, file permissions, and storage management Move data, and use YARN to allocate resources and schedule jobs Manage job workflows with Oozie and Hue Secure, monitor, log, and optimize Hadoop Benchmark and troubleshoot Hadoop

With Early Release ebooks, you get books in their earliest form--the author's raw and unedited content as he or she writes--so you can take advantage of these technologies long before the official release of these titles. You'll also receive updates when significant changes are made, new chapters are available, and the final ebook bundle is released. If you want to excel in your work as a Linux administrator, or perhaps land a job as one, you need this book. The amount of knowledge and expertise required of Linux administrators has grown tremendously over the past 10 years. Today you need an amazing variety of skills, several of them very new. This book provides developers, enterprise architects, and site reliability engineers with a sound introduction to bleeding-edge Linux-based tools and

technologies for both development and production environments. If you already know Linux administration basics, author Sam Alapati will help you explore and evaluate tools for virtualization, cloud and big data, configuration management and continuous delivery, and operations monitoring. Topics include: Scalability, web applications, web services, and microservices Server virtualization, Linux containers, and Docker containers Automating server deployment and managing development environments Infrastructure as code, configuration management, and orchestration tools Version control and source code management Continuous integration, continuous delivery, and continuous deployment Centralized log management and analysis, and streaming data.

Learn the pros and the cons of the most frequently used distros in order to find the one that is right for you. You will explore each distro step by step, so that you don't have to endure hours of web surfing, countless downloads, becoming confused by new concepts and, in the worst cases, reading complex and marathon installation guides. You will benefit from the author's long-term experience working with each distro hands on, enabling you to choose the best distro for your long-term needs. The first barrier that a new Linux user has to face is the overwhelming number of "flavors" that this operating system has. These "flavors" are commonly known as

distros (from distribution), and to date there are more than three hundred active distros to choose from. So, how to choose one? You can choose the most popular at the moment, or take heed of what your friend says, but are you sure that this is the one that you need? Making the wrong decision on this matter is behind a good number of disappointments with this operating system. You need to choose the distro that is right for you and your needs. Linux offers us a wonderful open source alternative to proprietary software. With *Introducing Linux Distros* you can decide how to best make it work for you. Start exploring the open source world today. What You'll learn Review what a Linux distro is and which one to select Decide which criteria to follow to make a right decision Examine the most used Linux distros and their unique philosophies install and maintain different Linux distros Who This Book Is For Newcomers to the Linux world that have to deal with the myriad of distributions.

Essential System Administration Pocket Reference

Linux Network Administrator's Guide

A Practical Guide to Linux System Administration

Learn Linux Quickly

Mastering Linux System Administration

Mastering Linux

Discover how to leverage modern Unix even if you've never worked with Unix before. This book presents everything

in conceptual terms that you can understand, rather than tips to be committed raw to memory. You will learn everyday tasks ranging from basic system administration—partitioning and mounting filesystems, software installation, network configuration, working from the command line) – to Bourne shell scripting, using graphical applications, as well as fanciful things such as emulation layers for Windows and Linux and virtualization with VirtualBox. It's now 50 years since the creation of Unix but it is still growing. As Unix now moves to everyone's OS (open-source FreeBSD/Linux), it is the perfect time to start your journey with *Beginning Modern Unix as your guide*. What You'll Learn Live comfortably in a modern Unix environment, both on the command-line and in the graphical world. Choose the right hardware for Unix Work with Unix in real world settings Develop Unix applications Review advanced techniques in Shell scripting Who This Book Is For Everyone who uses a computer – those who intend to migrate to Unix as well as those who are worried about

migrating to Unix, perhaps fearing it is a pure command-line or 'difficult' world.

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

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 the basics of do-it-yourself ZFS storage on Linux. This book delivers explanations of key features and provides best practices for planning, creating and sharing your storage. ZFS as a file system simplifies many aspects of the storage administrator's day-to-day job and solves a lot of problems that administrators face, but it can be confusing. Introducing ZFS on Linux addresses some of these issues and shows you how to resolve them. This book explains the technical side of

ZFS, through planning the hardware list to planning the physical and logical layout of the storage. What You'll Learn Understand the gains ZFS gives system and storage administrators and utilize its features Install and configure ZFS software Create and maintain ZFS pool Administer ZFS storage, including sharing Who This Book is For This book is ideal for those who already have experience working with Linux systems but want to understand the bare basics of ZFS before moving further.

Learn to Build Systems for Your Business Using Free and Open Source Software

Linux Administration Cookbook

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

Introducing Linux Distros

Up and Running

A Complete Introduction

With 28 new chapters, the third edition of The Practice of System and Network

Administration innovates yet again!

Revised with thousands of updates and clarifications based on reader feedback,

this new edition also incorporates DevOps strategies even for non-DevOps environments. Whether you use Linux, Unix, or Windows, this new edition describes the essential practices previously handed down only from mentor to protégé. This wonderfully lucid, often funny cornucopia of information introduces beginners to advanced frameworks valuable for their entire career, yet is structured to help even experts through difficult projects. Other books tell you what commands to type. This book teaches you the cross-platform strategies that are timeless!

DevOps techniques: Apply DevOps principles to enterprise IT infrastructure, even in environments without developers

Game-changing strategies: New ways to deliver results faster with less stress

Fleet management: A comprehensive guide to managing your fleet of desktops, laptops, servers and mobile devices

Service management: How to design, launch, upgrade and migrate services

Measurable improvement: Assess your operational effectiveness; a forty-page, pain-free assessment system you can start using today to raise the quality of all services

Design guides: Best practices for networks, data centers, email, storage, monitoring, backups and more

Management

skills: Organization design, communication, negotiation, ethics, hiring and firing, and more Have you ever had any of these problems? Have you been surprised to discover your backup tapes are blank? Ever spent a year launching a new service only to be told the users hate it? Do you have more incoming support requests than you can handle? Do you spend more time fixing problems than building the next awesome thing? Have you suffered from a botched migration of thousands of users to a new service? Does your company rely on a computer that, if it died, can't be rebuilt? Is your network a fragile mess that breaks any time you try to improve it? Is there a periodic "hell month" that happens twice a year? Twelve times a year? Do you find out about problems when your users call you to complain? Does your corporate "Change Review Board" terrify you? Does each division of your company have their own broken way of doing things? Do you fear that automation will replace you, or break more than it fixes? Are you underpaid and overworked? No vague "management speak" or empty platitudes. This comprehensive guide provides real solutions that prevent these problems and more!

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.

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. 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" Linux Apache Web Server Administration Beginning Modern Unix

A Desktop Quick Reference - Covers GNU/Linux, Mac OS X, and Solaris

Puppet Types and Providers

Mastering Linux Administration

Mastering Modern Linux

Get hands-on recipes to make the most of Ubuntu Server, CentOS 7 Linux Server and RHEL 7 Server About This Book Get Linux servers up and running in seconds, In-depth guide to explore new features and solutions in server administration

Maintain performance and security of your server solution by deploying expert configuration advice Who This Book Is For This Learning Path is intended for system administrators with a basic understanding of Linux operating systems and written with the novice-to-intermediate Linux user in mind. To get the most of this Learning Path, you should have a working knowledge of basic system administration and management tools. What You Will Learn Set up high performance, scalable, and fault-tolerant back ends with web and database servers Facilitate team communication with a real-time chat service and collaboration tools Monitor, manage and develop your

server's file system to maintain a stable performance Gain best practice methods on sharing files and resources through a network Install and configure common standard services such as web, mail, FTP, database and domain name server technologies Create kickstart scripts to automatically deploy RHEL 7 systems Use Orchestration and configuration management tools to manage your environment In Detail Linux servers are frequently selected over other server operating systems for their stability, security and flexibility advantages. This Learning Path will teach you how to get up and running with three of the most popular Linux server distros: Ubuntu Server, CentOS 7 Server, and RHEL 7 Server. We will begin with the Ubuntu Server and show you how to make the most of Ubuntu's advanced functionalities. Moving on, we will provide you with all the knowledge that will give you access to the inner workings of the latest CentOS version 7. Finally, touching RHEL 7, we will provide you with solutions to common RHEL 7 Server challenges. This Learning Path combines some of the best that Packt has to offer in one complete, curated package. It includes content from the following Packt products: 1) Ubuntu Server Cookbook 2) CentOS 7 Linux Server

Cookbook, Second Edition 3) Red Hat Enterprise Linux Server Cookbook Style and approach This easy-to-follow practical guide contains hands on examples and solutions to real word administration problems and problems faced when building your RHEL 7 system from scratch using orchestration tools.

As an open operating system, Unix can be improved on by anyone and everyone: individuals, companies, universities, and more. As a result, the very nature of Unix has been altered over the years by numerous extensions formulated in an assortment of versions. Today, Unix encompasses everything from Sun's Solaris to Apple's Mac OS X and more varieties of Linux than you can easily name. The latest edition of this bestselling reference brings Unix into the 21st century. It's been reworked to keep current with the broader state of Unix in today's world and highlight the strengths of this operating system in all its various flavors.

Detailing all Unix commands and options, the informative guide provides generous descriptions and examples that put those commands in context. Here are some of the new features you'll find in Unix in a Nutshell, Fourth Edition: Solaris 10, the latest version of the SVR4-based operating

system, GNU/Linux, and Mac OS X Bash shell (along with the 1988 and 1993 versions of ksh) tsch shell (instead of the original Berkeley csh) Package management programs, used for program installation on popular GNU/Linux systems, Solaris and Mac OS X GNU Emacs Version 21 Introduction to source code management systems Concurrent versions system Subversion version control system GDB debugger As Unix has progressed, certain commands that were once critical have fallen into disuse. To that end, the book has also dropped material that is no longer relevant, keeping it taut and current. If you're a Unix user or programmer, you'll recognize the value of this complete, up-to-date Unix reference. With chapter overviews, specific examples, and detailed command. A guide to Ubuntu covers such topics as installation, configuration, the filesystem, the command line, system maintenance and security, networking, using OpenOffice.org, Web browsing, and playing games.

This essential guide covers all aspects of Linux system administration, from user maintenance, backups, filesystem housekeeping, storage management, and network setup to hardware and software troubleshooting and some application

management. It's both a practical daily reference manual for sysadmins and IT pros and a handy study guide for those taking Linux certification exams. You'll turn to it frequently, not only because of the sheer volume of valuable information it provides but because of the real-world examples within and the clear, useful way the information is presented. With this book at your side, you'll be able to:

- Install Linux and perform initial setup duties, such as connecting to a network
- Navigate the Linux filesystem via the command line
- Install software from repositories and source and satisfy dependencies
- Set permissions on files and directories
- Create, modify, and remove user accounts
- Set up networking
- Format and mount filesystems
- Perform basic troubleshooting on hardware and software
- Create and manage logical volumes
- Work with SELinux
- Manage a firewall and iptables
- Shut down, reboot, and recover a system
- Perform backups and restores.

The Ultimate Beginners Guide to Learn Linux Step by Step
Making Servers Work
Enterprise Mac Administrators Guide
Linux in Action
Ubuntu
UNIX and Linux System Administration

Handbook

“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.

Authoritative Answers to All Your Apache Questions--Now Updated to Cover Apache 2.0 Linux Apache Web Server Administration is the most complete, most advanced guide to the Apache Web server you'll find anywhere. Written by a leading Apache expert--and now updated to cover Apache 2.0--this book teaches you, step-by-step, all the standard and advanced techniques

you need to know to administer Apache on a Linux box. Hundreds of clear, consistent examples illustrate these techniques in detail--so you stay on track and accomplish all your goals. Coverage includes:

- * Compiling Apache from source code
- * Creating and hosting virtual web sites
- * Using Server-Side Includes to create Web pages with dynamic content
- * Using Apache directives to configure your site
- * Extending Apache using add-on modules
- * Using the Common Gateway Interface for web programming
- * Enhancing the performance of CGI programs with FastCGI and mod_perl
- * Installing Apache support for PHP
- * Extending Apache to run Java servlets or Java Server Pages
- * Attaching Apache to a database server
- * Using URL rewriting for increased request-handling flexibility
- * Implementing user authentication
- * Adding Secure Sockets Layer for enhanced system security
- * Customizing Apache's log formats

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, System Administration, DNS Server Administration, Network Servers, 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. Learn over 116 Linux commands to develop the skills you need to become a professional Linux system administrator

Key Features Explore essential Linux commands and understand how to use Linux help tools Discover the power of task automation with bash scripting and Cron jobs Get to grips with various network configuration tools and disk management techniques

Book Description Linux is one of the most sought-after skills in the IT industry, with jobs involving Linux being increasingly in demand. Linux is by far the most popular operating system deployed in both public and private clouds; it is the processing power behind the majority of IoT and embedded devices. Do you use a mobile device that runs on Android? Even Android is a Linux distribution. This Linux book is a practical guide that lets you explore the power of the Linux command-line interface. Starting with the history of Linux, you'll quickly progress to the Linux filesystem hierarchy and learn a variety of basic Linux commands. You'll then understand how to make use of the extensive Linux documentation and help

tools. The book shows you how to manage users and groups and takes you through the process of installing and managing software on Linux systems. As you advance, you'll discover how you can interact with Linux processes and troubleshoot network problems before learning the art of writing bash scripts and automating administrative tasks with Cron jobs. In addition to this, you'll get to create your own Linux commands and analyze various disk management techniques. By the end of this book, you'll have gained the Linux skills required to become an efficient Linux system administrator and be able to manage and work productively on Linux systems. What you will learn

Master essential Linux commands and analyze the Linux filesystem hierarchy

Find out how to manage users and groups in Linux

Analyze Linux file ownership and permissions

Automate monotonous administrative tasks with Cron jobs and bash scripts

Use aliases to create your own Linux commands

Understand how to interact with and manage Linux processes

Become well-versed with using a variety of Linux networking commands

Perform disk partitioning, mount filesystems, and create logical volumes

Who this book is for

This book doesn't assume any prior Linux

knowledge, which makes it perfect for beginners. Intermediate and advanced Linux users will also find this book very useful as it covers a wide range of topics necessary for Linux 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 Administrator Jason 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.

Pro Linux System Administration

*The Design and Implementation of the
FreeBSD Operating System*

Hands-On System Programming with Linux

*A Comprehensive Guide to Installing,
Configuring, and Maintaining Linux Systems
in the Modern Data Center*

Tiny Python Projects

*Explore Linux system programming
interfaces, theory, and practice*

Linux consistently turns up high in the list of popular Internet servers, whether it's for the Web, anonymous FTP, or general services like DNS and routing mail. But security is uppermost on the mind of anyone providing such a service. Any server experiences casual probe attempts dozens of time a day, and serious break-in attempts with some frequency as well. As the cost of broadband and other high-speed Internet connectivity has gone down, and its availability has increased, more Linux users are providing or considering providing Internet services such as HTTP, Anonymous FTP, etc., to the world at large. At the same time, some important, powerful, and popular Open Source tools have emerged and rapidly matured--some of which rival expensive commercial equivalents--making Linux a particularly appropriate platform for providing secure Internet services. Building Secure Servers with Linux will help you master

the principles of reliable system and network security by combining practical advice with a firm knowledge of the technical tools needed to ensure security. The book focuses on the most common use of Linux--as a hub offering services to an organization or the larger Internet--and shows readers how to harden their hosts against attacks. Author Mick Bauer, a security consultant, network architect, and lead author of the popular Paranoid Penguin column in Linux Journal, carefully outlines the security risks, defines precautions that can minimize those risks, and offers recipes for robust security. The book does not cover firewalls, but covers the more common situation where an organization protects its hub using other systems as firewalls, often proprietary firewalls. The book includes: Precise directions for securing common services, including the Web, mail, DNS, and file transfer. Ancillary tasks, such as hardening Linux, using SSH and certificates for tunneling, and using iptables for firewalling. Basic installation of intrusion detection tools. Writing for Linux users with little security expertise, the author explains security concepts and techniques in clear language, beginning with the fundamentals. Building Secure Servers with Linux provides a unique balance of "big picture" principles that transcend specific software

packages and version numbers, and very clear procedures on securing some of those software packages. An all-inclusive resource for Linux users who wish to harden their systems, the book covers general security as well as key services such as DNS, the Apache Web server, mail, file transfer, and secure shell. With this book in hand, you'll have everything you need to ensure robust security of your Linux system.

Modern Linux Administration
How to Become a Cutting-edge Linux Administrator

Linux Administration Cookbook
Insightful recipes to work with system administration tasks on

Linux
Packt Publishing Ltd

Have you ever wanted to become a Linux System Administrator? Or did you want to learn more about the operating system? If you answered yes to these questions, you have come to the right place. The motive of this book is to get you well versed with the Linux operating system and the profile known to the world as Linux System Administration. A Linux system admin is basically a superhero who owns the servers of an organization and makes sure that they never go down. Servers in an organization contain user data, which is the most important thing in the modern world. Loss of data can result in huge losses for an organization and even lawsuits. Over the course of the book, you will gather

information about the following: This book will prepare you with the knowledge that is essential to enter the field of Linux system administration. You will learn about the operating system called Red Hat Enterprise Linux 7 and how to install it. After installing you will learn about the tasks that are essential for a system in their day-to-day life. You will learn about the command line in Linux, which is used extensively by system admins to perform tasks using important commands. You will further get to know about the Linux File System hierarchy and how to navigate your way through files and directories in the Linux operating system. You will also understand how processes work in the Linux system and how you can use commands and signals to manage system processes as well as processes started manually. You will learn about SSH, which is one of the most used tools in Linux systems to create secure connections between two Linux systems on a private network or over the Internet. You will study how to analyze logs in the Linux system and how to read them to understand errors and how to fix those errors. And much more ! All in all, the book is aimed at preparing you to enter the world of Linux system administration such that you can pursue a career in an organization, which demand this role on a very large scale.

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.

How to Become a Cutting-edge Linux

Administrator

Introducing ZFS on Linux

The Linux Command Line

Building Secure Servers with Linux

Unix in a Nutshell

This book contains comprehensive, up-to-date, and authoritative technical information on the internal structure of the FreeBSD open-source operating system. Coverage includes the capabilities of the system; how to effectively and efficiently interface to the system; how to maintain, tune, and configure the operating system; and how to extend and enhance the system. The authors provide a concise overview of FreeBSD's design and implementation. Then, while explaining key design decisions, they detail the concepts, data structures, and algorithms used in implementing the systems facilities. As a result, this book can be used as an operating systems textbook, a practical reference, or an in-depth study of a contemporary, portable, open-source operating system. -- Provided by publisher.

If you're a Unix system administrator, then the information you need every day just to get your job done could fill a book--a very large book. But, practically speaking, you don't want to stop and thumb through a weighty volume each time a

problem arises. Your answer is the *Essential System Administration Pocket Reference*, the only system administration reference that fits in your pocket. Concise and easy-to-use, this little book is the portable companion to the classic *Essential System Administration* by Aileen Frisch. The *Essential System Administration Pocket Reference* is a quick reference to all the fundamental and essential tasks required to run such divergent Unix systems as Solaris, Linux, AIX, BSD, SuSe, Red Hat, and more. Beginners and experienced administrators alike will quickly be able to apply its principles and advice to solve everyday problems. The book is divided into three parts: *Commands, Syntax and Their Applications*, *Configuration Files and Formats*, and *Operating System Specific Information*. The information in this book is a must-have for any administrator or user of a Unix system. O'Reilly's *Pocket References* have become a favorite among technology professionals everywhere. By providing a wealth of important details in a concise, well-organized format, these handy books deliver just what you need to complete the task at hand. When you've reached a sticking point and need to get to a solution quickly, the new *Essential System*

Administration Pocket Reference is the book you'll want to have.

Praise for the First Edition: "This outstanding book ... gives the reader robust concepts and implementable knowledge of this environment. Graphical user interface (GUI)-based users and developers do not get short shrift, despite the command-line interface's (CLI) full-power treatment. ... Every programmer should read the introduction's Unix/Linux philosophy section. ... This authoritative and exceptionally well-constructed book has my highest recommendation. It will repay careful and recursive study."

--Computing Reviews, August 2011 Mastering Modern Linux, Second Edition retains much of the good material from the previous edition, with extensive updates and new topics added. The book provides a comprehensive and up-to-date guide to Linux concepts, usage, and programming. The text helps the reader master Linux with a well-selected set of topics, and encourages hands-on practice. The first part of the textbook covers interactive use of Linux via the Graphical User Interface (GUI) and the Command-Line Interface (CLI), including comprehensive treatment of the Gnome desktop and the Bash Shell. Using different apps, commands

and filters, building pipelines, and matching patterns with regular expressions are major focuses. Next comes Bash scripting, file system structure, organization, and usage. The following chapters present networking, the Internet and the Web, data encryption, basic system admin, as well as Web hosting. The Linux Apache MySQL/MariaDB PHP (LAMP) Web hosting combination is also presented in depth. In the last part of the book, attention is turned to C-level programming. Topics covered include the C compiler, preprocessor, debugger, I/O, file manipulation, process control, inter-process communication, and networking. The book includes many examples and complete programs ready to download and run. A summary and exercises of varying degrees of difficulty can be found at the end of each chapter. A companion website (<http://mml.sofpower.com>) provides appendices, information updates, an example code package, and other resources for instructors, as well as students. "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® Fedora™ 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.

Understand the Basics of Storage with ZFS

Linux Administration a Beginner's Guide

Linux Administration Handbook

Linux Administration

UNIX System Administration Handbook

Modern Linux System Administration

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.

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.

Get up and running with system programming concepts in Linux

Key Features

- Acquire insight on Linux system architecture and its programming interfaces
- Get to grips with core concepts such as process management, signalling and pthreads
- Packed with industry best practices and dozens of code examples

Book Description

The Linux OS and its embedded and server applications are critical components of today's software infrastructure in a decentralized, networked universe. The industry's demand for proficient Linux developers is only rising with time. *Hands-On System Programming with Linux* gives you a solid theoretical base and practical industry-relevant descriptions, and covers the Linux system programming domain. It delves into the art and science of Linux application programming—

system architecture, process memory and management, signaling, timers, pthreads, and file IO. This book goes beyond the use API X to do Y approach; it explains the concepts and theories required to understand programming interfaces and design decisions, the tradeoffs made by experienced developers when using them, and the rationale behind them. Troubleshooting tips and techniques are included in the concluding chapter. By the end of this book, you will have gained essential conceptual design knowledge and hands-on experience working with Linux system programming interfaces. What you will learn

Explore the theoretical underpinnings of Linux system architecture
Understand why modern OSes use virtual memory and dynamic memory APIs
Get to grips with dynamic memory issues and effectively debug them
Learn key concepts and powerful system APIs related to process management
Effectively perform file IO and use signaling and timers
Deeply understand multithreading concepts, pthreads APIs, synchronization and scheduling

Who this book is for
Hands-On System Programming with Linux is for Linux system engineers, programmers, or anyone who wants to go beyond using an API set to understanding the theoretical underpinnings and concepts behind powerful Linux system programming APIs. To get the most out of this book, you should be familiar with Linux at the user-level logging in, using shell via the command line interface, the ability to use tools such a

find, grep, and sort. Working knowledge of the C programming language is required. No prior experience with Linux systems programming is assumed.

Following the successful Mastering series approach, Mastering Linux System Administration demonstrates practical applications of the Linux operating system, helping entry-level and experienced system admins to manage and secure Linux servers. This practical book provides a learning-by-doing approach, taking you from a core understanding of Linux to mastery.

Organized by tasks, this book includes coverage of:

- Components of Linux desktop and server
- Storage of information on a Linux system
- Adding a computer in a Linux system
- Navigating the command line and using the command line to create, move, delete, and archiving files and searching and extracting data from files
- Turning commands into scripts
- Command line editor and text files
- Identifying user types
- Creating users and groups
- Setting permission and ownership
- Special directories and files

Mastering Linux System Administration provides instructor materials, including a sample syllabus, additional review questions, and PowerPoint slides.

The Practice of System and Network Administration

Expert Hadoop 2 Administration

Building and Maintaining Reliable Systems

Modern System Administration

Insightful recipes to work with system administration

tasks on Linux

Linux: Powerful Server Administration

Essential System Administration, 3rd Edition is the definitive guide for Unix system administration, covering all the fundamental and essential tasks required to run such divergent Unix systems as AIX, FreeBSD, HP-UX, Linux, Solaris, Tru64 and more. Essential System Administration provides a clear, concise, practical guide to the real-world issues that anyone responsible for a Unix system faces daily. The new edition of this indispensable reference has been fully updated for all the latest operating systems. Even more importantly, it has been extensively revised and expanded to consider the current system administrative topics that administrators need most. Essential System Administration, 3rd Edition covers: DHCP, USB devices, the latest automation tools, SNMP and network management, LDAP, PAM, and recent security tools and techniques. Essential System Administration is comprehensive. But what has made this book the guide system administrators turn to over and over again is not just the sheer volume of valuable information it provides, but the clear, useful way the information is presented. It discusses the underlying higher-level concepts, but it also provides the details of the procedures needed to carry them out. It is not organized around the features of the Unix operating system, but around the various facets of a system administrator's job. It describes all the usual administrative tools that Unix provides, but it also shows how to use them intelligently and efficiently. Whether you

use a standalone Unix system, routinely provide administrative support for a larger shared system, or just want an understanding of basic administrative functions, *Essential System Administration* is for you. This comprehensive and invaluable book combines the author's years of practical experience with technical expertise to help you manage Unix systems as productively and painlessly as possible.

Charles Edge, Zack Smith, and Beau Hunter provide detailed explanations of the technology required for large-scale Mac OS X deployments and show you how to integrate it with other operating systems and applications. *Enterprise Mac Administrator's Guide* addresses the growing size and spread of Mac OS X deployments in corporations and institutions worldwide. In some cases, this is due to the growth of traditional Mac environments, but for the most part it has to do with "switcher" campaigns, where Windows and/or Linux environments are migrating to Mac OS X. However, there is a steep culture shock with these types of migrations. The products that are used are different, the nomenclature is different, and most importantly the best practices for dealing with the operating system are different. Apple provides a number of tools to help automate and guide IT toward managing a large number of Mac OS X computers—it has since before Mac OS X was initially released. However, if you want to put together all of the pieces to tell a compelling story about how to run an IT department or a deployment of Macs, you need to compile information

from a number of different sources. This book will provide explanations of the technology required. Provides complete solutions for the large- and medium-scale integration of directory services, imaging, and security Complete guide for integrating Macs and Mac OS X into mixed environments with confidence and no down time One-stop volume for IT professionals who need the technical details to get their job done as efficiently and effectively as possible

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.

”Tiny Python Projects is a gentle and amusing introduction to Python that will firm up key programming concepts while also making you giggle.”—Amanda Debler,

Schaeffler Key Features Learn new programming concepts through 21-bitesize programs Build an insult generator, a Tic-Tac-Toe AI, a talk-like-a-pirate program, and more Discover testing techniques that will make you a better programmer Code-along with free accompanying videos on YouTube Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About The Book The 21 fun-but-powerful activities in Tiny Python Projects teach Python fundamentals through puzzles and games. You'll be engaged and entertained with every exercise, as you learn about text manipulation, basic algorithms, and lists and dictionaries, and other foundational programming skills. Gain confidence and experience while you create each satisfying project. Instead of going quickly through a wide range of concepts, this book concentrates on the most useful skills, like text manipulation, data structures, collections, and program logic with projects that include a password creator, a word rhymer, and a Shakespearean insult generator. Author Ken Youens-Clark also teaches you good programming practice, including writing tests for your code as you go. What You Will Learn Write command-line Python programs Manipulate Python data structures Use and control randomness Write and run tests for programs and functions Download testing suites for each project This Book Is Written For For readers familiar with the basics of Python programming. About The Author Ken Youens-Clark is a Senior Scientific Programmer at the University of Arizona. He has an MS in

Biosystems Engineering and has been programming for over 20 years. Table of Contents 1 How to write and test a Python program 2 The crow's nest: Working with strings 3 Going on a picnic: Working with lists 4 Jump the Five: Working with dictionaries 5 Howler: Working with files and STDOUT 6 Words count: Reading files and STDIN, iterating lists, formatting strings 7 Gashlycrumb: Looking items up in a dictionary 8 Apples and Bananas: Find and replace 9 Dial-a-Curse: Generating random insults from lists of words 10 Telephone: Randomly mutating strings 11 Bottles of Beer Song: Writing and testing functions 12 Ransom: Randomly capitalizing text 13 Twelve Days of Christmas: Algorithm design 14 Rhymer: Using regular expressions to create rhyming words 15 The Kentucky Friar: More regular expressions 16 The Scrambler: Randomly reordering the middles of words 17 Mad Libs: Using regular expressions 18 Gematria: Numeric encoding of text using ASCII values 19 Workout of the Day: Parsing CSV files, creating text table output 20 Password strength: Generating a secure and memorable password 21 Tic-Tac-Toe: Exploring state 22 Tic-Tac-Toe redux: An interactive version with type hints

Modern Linux Administration

Linux System Administration

The Linux Operating System and Command Line Guide for Linux Administrators

A beginner-friendly guide to getting up and running with the world's most powerful operating system

Tools and Techniques for Linux and Unix Administration

Essential System Administration

Summary Linux in Action is a task-based tutorial that will give you the skills and deep understanding you need to administer a Linux-based system. This hands-on book guides you through 12 real-world projects so you can practice as you learn. Each chapter ends with a review of best practices, new terms, and exercises. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology You can't learn anything without getting your hands dirty—â€ including Linux. Skills like securing files, folders, and servers, safely installing patches and applications, and managing a network are required for any serious user, including developers, administrators, and DevOps professionals. With this hands-on tutorial, you'll roll up your sleeves and learn Linux project by project. About the Book Linux in Action guides you through 12 real-world projects, including automating a backup-and-restore system, setting up a private Dropbox-style file cloud, and building your own MediaWiki server. You'll try out interesting examples as you lock in core practices like virtualization, disaster recovery, security, backup, DevOps, and system troubleshooting. Each chapter ends with a review of best practices, new terms, and exercises. What's inside

Setting up a safe Linux environment
Managing secure remote connectivity
Building a system recovery device
Patching and upgrading your system

About the Reader No prior Linux admin experience is required. About the Author David Clinton is a certified Linux Server Professional, seasoned instructor, and author of Manning's bestselling Learn Amazon Web Services in a Month of Lunches. Table of Contents

Welcome to Linux
Linux virtualization: Building a Linux working environment
Remote connectivity: Safely accessing networked machines
Archive management: Backing up or

copying entire file systems Automated administration:
Configuring automated offsite backups Emergency tools:
Building a system recovery device Web servers: Building a
MediaWiki server Networked file sharing: Building a
Nextcloud file-sharing server Securing your web server
Securing network connections: Creating a VPN or DMZ
System monitoring: Working with log files Sharing data over a
private network Troubleshooting system performance issues
Troubleshooting network issues Troubleshooting peripheral
devices DevOps tools: Deploying a scripted server
environment using Ansible
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.

Early system administration required in-depth knowledge of a variety of services on individual systems. Now, the job is increasingly complex and different from one company to the next with an ever-growing list of technologies and third-party services to integrate. How does any one individual stay relevant in systems and services? This practical guide helps anyone in operations--sysadmins, automation engineers, IT professionals, and site reliability engineers--understand the essential concepts of the role today. Collaboration, automation, and the evolution of systems change the fundamentals of operations work. No matter where you are in your journey, this book provides you the information to craft your path to advancing essential system administration skills. Author Jennifer Davis provides examples of modern practices and tools with recommended materials to advance your skills. Topics include: Development and testing: Version control, fundamentals of virtualization and containers, testing, and architecture reviewDeploying and configuring services: Infrastructure management, networks, security, storage, serverless, and release managementScaling administration: Monitoring and observability, capacity planning, log management and analysis, and security and compliance Puppet's true power exists in the simple resource model it uses to manage the state of complex operating systems. This concise guide shows you how to extend that model and implement custom functionality on top of Puppet by working with the type and provider APIs. Two experts from Puppet Labs explain the concepts behind these APIs, and provide instructions and examples to help you write your own fully functional types and providers. You'll also delve into

Puppet's source code to get a better understanding of how types and providers are implemented internally. If you're familiar with basic Puppet concepts, you're ready to get started. Learn the fundamental concepts behind resources, and become familiar with the structure of Puppet's Resource Model Discover how the type API is used to create new resource types that Puppet can manage Understand how providers interact with the system to achieve the desired state of a declared resource Explore advanced features to get a more complete understanding of how Puppet works Simplify the troubleshooting process when developing types and providers

Learn coding and testing with puzzles and games

Volume 1: DevOps and other Best Practices for Enterprise IT

Commands and File Formats

Learn to Live Comfortably in a Modern Unix Environment

Managing Spark, YARN, and MapReduce