Learning Centos A Beginners Guide To Using Linux

Combine advanced analytics including Machine Learning, Deep Learning Neural Networks and Natural Language Processing with modern scalable technologies including Apache Spark to derive actionable insights from Big Data in real-time Key Features Make a hands-on start in the fields of Big Data, Distributed Technologies and Machine Learning Learn how to design, develop and interpret the results of common Machine Learning algorithms Uncover hidden patterns in your data in order to derive real actionable insights and business value Book Description Every person and every organization in the world manages data, whether they realize it or not. Data is used to describe the world around us and can be used for almost any purpose, from analyzing consumer habits to fighting disease and serious organized crime. Ultimately, we manage data in order to derive value from it, and many organizations around the world have traditionally invested in technology to help process their data faster and more efficiently. But we now live in an interconnected world driven by mass data creation and consumption where data is no longer rows and columns restricted to a spreadsheet, but an organic and evolving asset in its own right. With this realization comes major challenges for organizations: how do we manage the sheer size of data being created every second (think not only spreadsheets and databases, but also social media posts, images, videos, music, blogs and so on)? And once we can manage all of this data, how do we derive real value from it? The focus of Machine Learning with Apache Spark is to help us answer these questions in a hands-on manner. We introduce the latest scalable technologies to help us manage and process big data. We then introduce advanced analytical algorithms applied to real-world use cases in order to uncover patterns, derive actionable insights, and learn from this big data. What you will learn Understand how Spark fits in the context of the big data ecosystem Understand how to deploy and configure a local development environment using Apache Spark Understand how to design supervised and unsupervised learning models Build models to perform NLP, deep learning, and cognitive services using Spark ML libraries Design real-time machine learning pipelines in Apache Spark Become familiar with advanced techniques for processing a large volume of data by applying machine learning algorithms Who this book is for This book is aimed at Business Analysts, Data Analysts and Data Scientists who wish to make a hands-on start in order to take advantage of modern Big Data technologies combined with Advanced Analytics.

Create high availability clusters to enhance system performance using CentOS 7 About This Book Master the concepts of high performance and high availability to eliminate performance bottlenecks Maximize the uptime of services running in a CentOS 7 cluster A step-by-step guide that will provide knowledge of methods and approaches to optimize the performance of CentOS clusters Who This Book Is For This book is targeted at system administrators: those who want a detailed, step-by-step guide to learn how to set up a high-availability CentOS 7 cluster, and those who are looking for a reference book to help them learn or refresh the necessary skills to ensure their systems and respective resources are utilized optimally. No previous knowledge of high-availability systems is needed, though the reader is expected to have at least some degree of familiarity with any spin-off of the Fedora family of Linux distributions, preferably CentOS. What You Will Learn Install a CentOS 7 cluster and network infrastructure Configure firewall, networking, and clustering services and settings Set up and test a HAC (high-availability cluster) to host an Apache web server and a MariaDB database server Monitor performance and availability Identify bottlenecks and troubleshoot issues Improve performance and ensure high availability In Detail CentOS is the enterprise level Linux OS, which is 100% binary compatible to Red Hat Enterprise Linux (RHEL). It acts as a free alternative to RedHat's commercial Linux offering, with only a change in the branding. A high performance cluster consists in a group of computers that work together as one set parallel, hence minimizing or eliminating the downtime of critical services and enhancing the performance of the application. Starting with the basic principles of clustering, you will learn the necessary steps to install a cluster with two CentOS 7 servers. We will then set up and configure the basic required network infrastructure and clustering services. Further, you will learn how to take a proactive approach to the split-brain issue by configuring the failover and fencing of the cluster as a whole and the quorum of each node individually. Further, we will be setting up HAC and HPC clusters as a web server and a database server. You will also master the art of monitoring performance and availability, identifying bottlenecks, and exploring troubleshooting techniques. At the end of the book, you'll review performance-tuning techniques for the recently installed cluster, test performance using a payload simulation, and learn the necessary skills to ensure that the systems, and the corresponding resources and services, are being utilized to their best capacity. Style and approach An easy-to-follow and step-by-step guide with hands-on instructions to set up real-world simple cluster scenarios that will start you on the path to building more complex applications on your own.

Mastering Ubuntu Server, Third Edition not only strengthens your server fundamentals but also equips you with the advanced concepts of Ubuntu 20.04 LTS. It polishes and expands your skill set to prepare you for better business opportunities.

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.

A concise walk-through of CentOS 7, starting from installation to securing it’s environment. Key Features No previous Linux environment experience needed for reading this book Get comfortable with a popular and stable Red Hat Enterprise Linux distribution Most of the command line based concepts are explained with graphics Book Description Linux kernel development has been the worlds largest collaborative project to date. With this practical guide, you will learn Linux through one of its most popular and stable distributions. This book will introduce you to essential Linux skills using CentOS 7. It describes how a Linux system is organized, and will introduce you to key command-line concepts you can practice on your own. It will guide you in performing basic system administration tasks and day-to-day operations in a Linux environment. You will learn core system administration skills for managing a system running CentOS 7 or a similar operating system, such as RHEL 7, Scientific Linux, and Oracle Linux. You will be able to perform installation, establish network connectivity and user and process management, modify file permissions, manage text files using the command line, and implement basic security administration after covering this book. By the end of this book, you will have a solid understanding of working with Linux using the command line. What you will learn Understand file system hierarchy and essential command-line skills Use Vi editor, I/O redirections and how to work with common text manipulating tools

Create, delete, modify user accounts and manage passwords and their aging policy Manage file ownership, permissions, and ACL Execute process management and monitoring on the command line Validate and manage network configuration using nmcli Manage remote logins using SSH and file transfer using SCP and Rsync Understand system logging, how to control system services with systemd and systemctl, and manage firewalld Who this book is for Any individual who wants to learn how to use Linux as server or desktop in his environment. Whether you are a developer, budding system administrator, or tech lover with no previous Linux administration background, you will be able to start your journey in Linux using CentOS 7 with this book.

As a PC user, are you in search of a beginner's guide that will teach you everything there is to know about the Linux operating system, or are you simply looking to try out the Linux system for your PC? Then you should opt for this guide. Indisputably, Linux is by far one of the most powerful and well performing operating system you can find anywhere in the world. Although macOS and Windows are the major leaders in the world because they are very popular in the technology market, but it still doesn't take the fact away that Linux is a powerful OS. First, Linux is an open source OS, that manages and control's a system's resources and hardware, such as memory, CPU and others. If you are not sure about what Linux is and what it represents, you have no worry since you stumbled upon this guide. Luckily, in this guide, Linux for beginners, readers will learn everything about Linux, Operating System, UNIX, difference between Linux and UNIX, how to install Linux OS and so much more. In addition, users will discover how to choose the best Linux distributions among all other kinds of distribution depending on your preference and requirements. Furthermore, this book, Linux for beginners, will also broaden your horizon to learning the basic Linux commands, how to shut down, restart, reboot, compress, archive files and so many other things. At the end of this guide, users will have the confidence to obtain a Linux operating system, install it, and begin using it. Here are some of the things you stand to learn in this guide: Meaning of Linux How is Linux working OS utilized? What is an Operating system? Definition of UNIX Difference between Linux and UNIX Benefits of Linux How to choose Linux distribution Ubuntu and Linux Mint SuSE Linux Red Hat/CentOS/Fedora Slackware and Arch Linux Basic Linux Commands Installing Linux What type of PC is needed? Video Card How to install a Linux distribution How to copy an ISO image to CD or DVD About Sort Command How to sort files Open and edit files How to create a collection of files How to create a file using touch command How to create a file using the redirection operator How to create a large file How to compress files to save space Alternatives to Microsoft Office Alternatives to Internet Explorer Alternatives to Photoshop Alternatives to Adobe Acrobat Reader What is shell scripting? Types/Kinds of Shell How to write a shell script Shell Variables Why you should use Linux How to partition disk Features of Ubuntu 20.04 LTS Linux security tips Linux network administration How to know a file's type How to know the file type of several files How to delete, copy, move, and rename files Environmental variables Common Environment Variables Files and Directory Permissions File and Directory - Real Ownership Adding a User Group Requirements to add a User Group Adding a User to Several Groups Simultaneously Adding a User and Add to Group How to Delete a Created Group List of Well-Known Groups in Linux System Shutdown, Restart, and Logout Commands Archives and Compressed File Commands And many more.... This is just a few of what is contained in this book and you can Download FREE with Kindle UnlimitedSo what are you waiting for? Scroll up and Click the Orange - BUY NOW WITH 1-CLICK BUTTON- on the top right corner and Download Now!!! You won't regret you did See you inside!!!

A complete guide and reference to five major Linux distributions Linux continues to grow in popularity worldwide as a low-cost, reliable operating system for enterprise use. Nine minibooks in this guide cover everything administrators need to know about the five leading versions: Ubuntu, Fedora Core, OpenSUSE, Mint, and Mandriva. The companion DVD includes full Ubuntu installations and ISO images for the other four, saving hours of downloading time. The open source Linux operating system is gaining market share around the world for both desktop and server use; this soup-to-nuts guide covers installation and everything else administrators need to know about Ubuntu, Fedora Core, OpenSUSE, Mint, and Mandriva Nine self-contained minibooks cover Linux basics, desktops, networking, Internet, administration, security, Linux servers, programming, and scripting Updated to cover the newest versions of the five top distributions, with complete installation instructions and a DVD including the full Ubuntu installations and ISO images for the others Linux users and administrators will be able to install and sample five popular Linux flavors with the information in Linux All-in-One For Dummies. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

Arguably one of the most highly regarded and widely used enterprise level operating systems available today is the CentOS 8 distribution. Not only is it considered to be among the most stable and reliable operating systems, it is also backed by the considerable resources and technical skills of Red Hat, Inc. CentOS 8 Essentials is designed to provide detailed information on the installation, use and administration of the CentOS 8 distribution. For beginners, the book covers topics such as operating system installation, the basics of the GNOME desktop environment, configuring email and web servers and installing packages and system updates using App Streams. Additional installation topics such as dual booting with Microsoft Windows are also covered, together with all important security topics such as configuring a firewall and user and group administration. For the experienced user, topics such as remote desktop access, the Cockpit web interface, logical volume management (LVM), disk partitioning, swap management, KVM virtualization, Secure Shell (SSH), Linux Containers and file sharing using both Samba and NFS are covered in detail to provide a thorough overview of this enterprise class operating system.

You need to maintain clients, servers and networks, while acquiring new skills. Foundations of Cent OS Linux: Enterprise Linux On the Cheap covers a free, unencumbered Linux operating system within the Red Hat lineage, but it does not assume you have a Red Hat Enterprise Linux license. Now you can learn CentOS Linux, the most powerful and popular of all Red Hat clones, keep maintaining your network at work, and become an Red Hat Certified Engineer, all just for the cost of this book. Introduces CentOS Linux and Fedora clients as equals to Red Hat Enterprise Linux Sets up CentOS as a secure, high–performance web services back end Prepares you for the RHCE examination, but does not assume an RHEL installation

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.

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 book is targeted at system engineers and system administrators who want to upgrade their knowledge and skills in high availability and want to learn practically how to achieve high availability with CentOS Linux. You are expected to have good CentOS Linux knowledge and basic networking experience.

If you want to learn how to use Linux, but don't know where to start read on. Knowing where to start when learning a new skill can be a challenge, especially when the topic seems so vast. There can be so much information available that you can't even decide where to start. Or worse, you start down the path of learning and quickly discover too many concepts, commands, and nuances that aren't explained. This kind of experience is frustrating and leaves you with more questions than answers. Linux for Beginners doesn't make any assumptions about your background or knowledge of Linux. You need no prior knowledge to benefit from this book. You will be guided step by step using a logical and systematic approach. As new concepts, commands, or jargon are encountered they are explained in plain language, making it easy for anyone to understand. Here is what you will learn by reading Linux for Beginners: How to get access to a Linux server if you don't already. What a Linux distribution is and which one to choose. What software is needed to connect to Linux from Mac and Windows computers. Screenshots included. What SSH is and how to use it, including creating and using SSH keys. The file system layout of Linux systems and where to find programs, configurations, and documentation. The basic Linux commands you'll use most often. Creating, renaming, moving, and deleting directories. Listing, reading, creating, editing, copying, and deleting files. Exactly how permissions work and how to decipher the most cryptic Linux permissions with ease. How to use the nano, vi, and emacs editors. Two methods to search for files and directories. How to compare the contents of files. What pipes are, why they are useful, and how to use them. How to compress files to save space and make transferring data easy. How and why to redirect input and output from applications. How to customize your shell prompt. How to be efficient at the command line by using aliases, tab completion, and your shell history. How to schedule and automate jobs using cron. How to switch users and run processes as others. Where to go for even more in-depth coverage on each topic. What you learn in "Linux for Beginners" applies to any Linux environment including Ubuntu, Debian, Linux Mint, RedHat, Fedora, OpenSUSE, Slackware, and more. Scroll up, click the Buy Now With 1 Click button and get started learning Linux today!

If you are a Linux administrator who is looking to gain knowledge that differentiates yourself from the crowd, then this is the book for you. Beginners who have a keen interest to learn more about Linux administration will also progress quickly with this resourceful learning guide. Teaches you to start up Nginx and quickly take your expertise to a level where you can comfortably work with various aspects of the web server and make informed design decisions for your web farm. Nginx powers more than 40% of the top 1000 websites and is among the handful of web servers that can handle more than 10K simultaneous connections. It has some features which are simply unparalleled. Nginx: From Beginner to Pro teaches the Nginx server in a practical way. Frequently, it is found that web administrators struggle to fix the skill set gaps that happen due to a platform change. Migration from IIS & Apache becomes tedious at best. The book is targeted toward real-world administrators who would want to get up to speed as soon as possible and make good, informed design decisions. First you will set up Nginx and understand the architectural nuances. Then you will learn how to scale out, secure, monitor and troubleshoot the web server. Once you are fully comfortable with Nginx, you will start learning about migrating applications (or its part) from IIS or Apache web servers. Finally, you will learn to troubleshoot and maintain your Nginx professionally. Written by an author who has gone through the rough phase while moving from IIS/Apache to Nginx, this book is practical and filled with step-by-step instructions to make your time with Nginx as straightforward as possible. What You Will Learn Install and set up Nginx on CentOS, Ubuntu & Mac. Understand Nginx modules and compiling Nginx with appropriate modules. Learn about basic configuration and architecture along with hosting nuances. Load balance Nginx and use it as a highly available web platform. Monitor traffic and automate common administrative tasks. Use scripts to perform routine checks for health issues. Implement security and authentication in Nginx. Learn how and what to migrate from IIS & Apache web servers. Who This Book Is For Provides a crisp background of Nginx and then gears towards technical and practical topics. You need to know HTTP protocol, and have basic knowledge of Linux and networking concepts. The target audience is web administrators who would like to learn the finer nuances of Nginx, or map their existing skillset from IIS or Apache.

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.

Learn to set up the latest CentOS Linux network services including DNS, DHCP, SSH and VNC, Web, FTP, Mail, Firewall, and LDAP, enabling you to provide these services on your own network. CentOS continues to be a popular Linux distribution choice, and setting up your own services is a key skill for anyone maintaining a CentOS network. You will learn how to install CentOS, and manage basic administration. You'll then move onto understanding networking, and how to set up your required services. Each chapter is written in an easy-to-digest format and teaches you how set up, manage, and troubleshoot each service. You'll be running your own network in no time at all. What You Will Learn Install and set up the latest version of CentOS Configure and manage a wide range of network services Solve problems remotely and manage your network efficiently Who This Book Is For Anyone who wants to learn how to set up and manage CentOS Linux network services. Some previous Linux experience is beneficial, but this book is designed to be used by beginners.

BPF and related observability tools give software professionals unprecedented visibility into software, helping them analyze operating system and application performance, troubleshoot code, and strengthen security. BPF Performance Tools: Linux System and Application Observability is the industry's most comprehensive guide to using these tools for observability. Brendan Gregg, author of the industry's definitive guide to system performance, introduces powerful new methods and tools for doing analysis that leads to more robust, reliable, and safer code. This authoritative guide: Explores a wide spectrum of software and hardware

targets Thoroughly covers open source BPF tools from the Linux Foundation iovisor project's bcc and bpftrace repositories Summarizes performance engineering and kernel internals you need to understand Provides and discusses 150+ bpftrace tools, including 80 written specifically for this book: tools you can run as-is, without programming — or customize and develop further, using diverse interfaces and the bpftrace front-end You'll learn how to use BPF (eBPF) tracing tools to analyze CPUs, memory, disks, file systems, networking, languages, applications, containers, hypervisors, security, and the Linux kernel. You'll move from basic to advanced tools and techniques, producing new metrics, stack traces, custom latency histograms, and more. It's like having a superpower: with Gregg's guidance and tools, you can analyze virtually everything that impacts system performance, so you can improve virtually any Linux operating system or application.

This book is a beginner's guide for fast learning Linux commands which are frequently used by Linux administrators or beginners. The book covers all essential Linux commands as well as their operations, examples and explanations. It also includes Linux Helping commands, symbols, shortcut keys, run levels and Vi commands. From this book, you can easily learn: How to run all essential Linux commands. How to copy, move, and delete files and directories. How to create, remove, and manage users and groups. How to access Linux server, and use SSH commands. How to operate the run levels and change the run levels. How to navigate at the command line by helping commands. How to compare files, find out a file, manipulate file contents. How to start a job, stop a job and schedule a job. How to manage permissions, ownership of files, directories. How to connect across network, communicate with network. How to transfer files over network, send network messages And much more skill..... There is a long chart containing all common Linux commands in this book, which can give you a great help in your job or study. You can learn all essential Linux commands quickly.

Want to learn a new skill? Expand the technology that you work with? This book covers the basics of understanding how to use Linux. We will use Ubuntu 14.04 LTS to learn multiple fundamentals in using Linux and later will go through the process of creating a web server. 80% of websites are driven by Linux servers. Understanding the basics and expanding upon this will provide great career opportunities and a great skill as well. We start simple and the reader does not need any prior knowledge. We will make baby steps and slowly work ourselves up to configuring the Ubuntu Server to be a functional web server. There will still be much to learn, but within a few hours you can have your own Linux server setup, understand the basics, and also have WordPress loaded into it. We cover installing packages, creating files in nano, LAMP stack, and try to do so in a practical way so that you can finish this guide with something to show off.

A handy book for someone just starting with Unix or Linux, and an ideal primer for Mac and PC users of the Internet who need to know a little about Unix on the systems they visit. The most effective introduction to Unix in print, covering Internet usage for email, file transfers, web browsing, and many major and minor updates to help the reader navigate the ever-expanding capabilities of the operating system.

If you want to learn how to use Linux and level up your career but are pressed for time, read on.As the founder of the Linux Training Academy and an instructor of several courses, I've had the good fortune of helping thousands of people hone their Linux skills. Interacting with so many people who are just getting started with the Linux operating system has given me invaluable insight into the particular struggles and challenges people face at this stage.One of the biggest challenges for people interested in learning the ins and outs of Linux is simply a lack of time. When you are working with a limited and extremely valuable resource you want to make sure you make the most of it.The next biggest challenge for Linux newcomers is knowing where to start. There is so much information available that deciding what to focus your attention on first is a big enough hurdle to keep many people from even starting. What's worse is starting down the path of learning only to discover too many concepts, commands, and nuances that aren't explained. This kind of experience is frustrating and leaves you with more questions than answers.That's why I've written this book.Not only have I condensed the most important material into five sections, each designed to be consumed in a day, I've also structured the content in a logical and systematic manner. This way you'll be sure to make the most out of your time by learning the foundational aspects of Linux first and then building upon that foundation each day.In Learn Linux in 5 Days you will learn the most important concepts and commands, and be guided step-by-step through several practical and real-world examples. As new concepts, commands, or jargon are encountered they are explained in plain language, making it easy to understand.Here is what you will learn by reading Learn Linux in 5 Days: How to get access to a Linux server if you don't already. What a Linux distribution is and which one to choose. What software is needed to connect to Linux from Mac and Windows computers. Screenshots included. What SSH is and how to use it, including creating and using SSH keys. The file system layout of Linux systems and where to find programs, configurations, and documentation. The basic Linux commands you'll use most often. Creating, renaming, moving, and deleting directories. Listing, reading, creating, editing, copying, and deleting files. Exactly how permissions work and how to decipher the most cryptic Linux permissions with ease. How to use the nano, vi, and emacs editors. Two methods to search for files and directories. How to compare the contents of files. What pipes are, why they are useful, and how to use them. How to compress files to save space and make transferring data easy. How and why to redirect input and output from applications. How to customize your shell prompt. How to be efficient at the command line by using aliases, tab completion, and your shell history. How to schedule and automate jobs using cron. How to switch users and run processes as others. Where to go for even more in-depth coverage on each topic. What you learn in Learn Linux in 5 Days applies to any Linux environment including Ubuntu, Debian, Linux Mint, RedHat, Fedora, OpenSUSE, Slackware, and more.Scroll up, click the Buy Now With 1 Click button and get started learning Linux today!

Today, scientific computing and data analysis play an integral part in most scientific disciplines ranging from mathematics and biology to imaging processing and finance. With GNU Octave you have a highly flexible tool that can solve a vast number of such different problems as complex statistical analysis and dynamical system studies. The GNU Octave Beginner's Guide gives you an introduction that enables you to solve and analyze complicated numerical problems. The book is based on numerous concrete examples and at the end of each chapter you will find exercises to test your knowledge. It's easy to learn GNU Octave, with the GNU Octave Beginner's Guide to hand. Using real-world examples the GNU Octave Beginner's Guide will take you through the most important aspects of GNU Octave. This practical guide takes you from the basics where you are introduced to the interpreter to a more advanced level where you will learn how to build your own specialized and highly optimized GNU Octave toolbox package. The book starts by introducing you to work variables like vectors and matrices, demonstrating how to perform simple arithmetic operations on these objects before explaining how to use some of the simple functionality that comes with GNU Octave, including plotting. It then goes on to show you how to write new functionality into GNU Octave and how to make a toolbox package

to solve your specific problem. Finally, it demonstrates how to optimize your code and link GNU Octave with C and C++ code enabling you to solve even the most computationally demanding tasks. After reading GNU Octave Beginner's Guide you will be able to use and tailor GNU Octave to solve most numerical problems and perform complicated data analysis with ease.
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 dirtyÃ¢â‚¬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
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"
Puppet 5 Beginner's Guide, Third Edition is a practical guide that gets you up and running with the very latest features of Puppet 5. About This Book Develop skills to run Puppet 5 on single or multiple servers without hiccups Use Puppet to create and manage cloud resources such as Amazon EC2 instances Take full advantage of powerful new features of Puppet including loops, data types, Hiera integration, and container management Who This Book Is For Puppet 5 Beginner's Guide, Third Edition is designed for those who are new to Puppet, including system administrators and developers who are looking to manage computer server systems for configuration management. No prior programming or system administration experience is assumed. What You Will Learn Understand the latest Puppet 5 features Install and set up Puppet and discover the latest and most advanced features Configure, build, and run containers in production using Puppet's industry-leading Docker support Deploy configuration files and templates at super-fast speeds and manage user accounts and access control Automate your IT infrastructure Use the latest features in Puppet 5 onward and its official modules Manage clouds, containers, and orchestration Get to know the best practices to make Puppet more reliable and increase its performance In Detail Puppet 5 Beginner's Guide, Third Edition gets you up and running with the very latest features of Puppet 5, including Docker containers, Hiera data, and Amazon AWS cloud orchestration. Go from beginner to confident Puppet user with a series of clear, practical examples to help you manage every aspect of your server setup. Whether you're a developer, a system administrator, or you are simply curious about Puppet, you'll learn Puppet skills that you can put into practice right away. With practical steps giving you the key concepts you need, this book teaches you how to install packages and config files, create users, set up scheduled jobs, provision cloud instances, build containers, and so much more. Every example in this book deals with something real and practical that you're likely to need in your work, and you'll see the complete Puppet code that makes it happen, along with step-by-step instructions for what to type and what output you'll see. All the examples are available in a GitHub repo for you to download and adapt for your own server setup. Style and approach This tutorial is packed with quick step-by-step instructions that are immediately applicable for beginners. This is an easy-to-read guide, to learn Puppet from scratch, that explains simply and clearly all you need to know to use this essential IT power tool, while applying these solutions to real-world scenarios.
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.
Learn the fundamentals of PowerShell to build reusable scripts and functions to automate administrative tasks with Windows

About This Book Harness the capabilities of the PowerShell system to get started quickly with server automation Learn to package commands into a reusable script and add control structures and parameters to make them flexible Get to grips with cmdlets that allow you to perform administration tasks efficiently Who This Book Is For This book is intended for Windows administrators or DevOps users who need to use PowerShell to automate tasks. Whether you know nothing about PowerShell or know just enough to get by, this guide will give you what you need to go to take your scripting to the next level. What You Will Learn Learn to verify your installed version of PowerShell, upgrade it, and start a PowerShell session using the ISE Discover PowerShell commands and cmdlets and understand PowerShell formatting Use the PowerShell help system to understand what particular cmdlets do Utilise the pipeline to perform typical data manipulation Package your code in scripts, functions, and modules Solve common problems using basic file input/output functions Find system information with WMI and CIM Automate IIS functionality and manage it using the WebAdministration module In Detail Windows PowerShell is a task-based command-line shell and scripting language designed specifically for system administration. Built on the .NET Framework, Windows PowerShell helps IT professionals and power users control and automate the administration of the Windows operating system and applications that run on Windows. PowerShell is great for batch importing or deleting large sets of user accounts and will let you collect a massive amount of detailed system information in bulk via WMI (Windows Management Instrumentation). Getting Started with PowerShell is designed to help you get up and running with PowerShell, taking you from the basics of installation, to writing scripts and web server automation. This book, as an introduction to the central topics of PowerShell, covers finding and understanding PowerShell commands and packaging code for reusability, right through to a practical example of automating IIS. It also includes topics such as installation and setup, creating scripts, automating tasks, and using Powershell to access data stores, registry, and file systems. You will explore the PowerShell environment and discover how to use cmdlets, functions, and scripts to automate Windows systems. Along the way, you will learn to perform data manipulation and solve common problems using basic file input/output functions. By the end of this book, you will be familiar with PowerShell and be able to utilize the lessons learned from the book to automate your servers. Style and approach A practical learning guide, complete with plenty of activities, examples and screenshots.

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).

This book perfect guide for learning Centos. This book is for system administrators who wants to learn or deploy Centos in production but don't have enough time to read tons of books.. Main emphasis is on what a user would need to know to perform particular task. The focus here is on day to day challenges faced by administrators and users. The book covers general topics of Linux administration like shell commands, network, user management, software management, repositories, services, system monitoring, shell configuration, network connections, SELinux, firewalls and configuration of different servers like HTTP, FTP, NTP etc. This is book is excellent choice for preparing interview.This book is good reference kit for Linux administrator.

Most websites on the internet are powered by a CentOS server. CentOS is a very popular and lightweight version of Linux with a ten year support cycle. Due to the strong response from my first book on the topic, Learning Ubuntu, I decided to release another title. Learning CentOS, starts at the basics and provides three options to get started with the operating system. The reader will learn how to use SSH, setup a server on a VPS or Virtual Machine, install the popular LAMP stack for web servers, and will also learn how to install the most popular content management platform, WordPress, towards the end of the book. We start by learning how to install packages, manage users, and navigating our CentOS server by the CLI or Command Line Interface. If you are looking for a new skill or want to expand upon your current knowledge, this book serves as a great tool to get started and reference down the road. Topics Include: What is Linux and CentOS 7? Methods to Install CentOS 7 and Get Started. Setting Up CentOS on a Virtual Private Server (DigitalOcean or Linode) Setting Up CentOS on a Virtual Machine Using (Oracle VirtualBox) Installing CentOS on a Virtual Machine Getting Familiar with the Command Line Interface or CLI Logging into CentOS and Learning General System Navigation Creating New Users Checking System Resource Status Making Directories and Files Editing, Moving, Copying, and Deleting Files Installing LAMP (Apache, MySQL/MariaSQL, PHP) Installing Sendmail Managing the Server from the Browser Permission Settings, Groups, and Types Adding a Database Installing Packages Setting Up and Configuring WordPress Understanding wget and rsync Changing File and Directory Ownership and Permission Settings

UNIX, UNIX LINUX & UNIX TCL/TK. Write software that makes the most effective use of the Linux system, including the kernel and core system libraries. The majority of both Unix and Linux code is still written at the system level, and this book helps you focus on everything above the kernel, where applications such as Apache, bash, cp, vim, Emacs, gcc, gdb, glibc, ls, mv, and X exist. Written primarily for engineers looking to program at the low level, this updated edition of Linux System Programming gives you an understanding of core internals that makes for better code, no matter where it appears in the stack. -- Provided by publisher.

Python is an ideal language for solving problems, especially in Linux and Unix networks. With this pragmatic book, administrators can review various tasks that often occur in the management of these systems, and learn how Python can provide a more efficient and less painful way to handle them. Each chapter in Python for Unix and Linux System Administration presents a particular administrative issue, such as concurrency or data backup, and presents Python solutions through hands-on examples. Once you finish this book, you'll be able to develop your own set of command-line utilities with Python to tackle a wide range of problems. Discover how this language can help you: Read text files and extract information Run tasks concurrently using the threading and forking options Get information from one process to another using network facilities Create clickable GUIs to handle large and complex utilities Monitor large clusters of machines by interacting with SNMP programmatically Master the IPython Interactive Python shell to replace or augment Bash, Korn, or Z-Shell Integrate Cloud Computing into your infrastructure, and learn to write a Google App Engine Application Solve unique data backup challenges with customized scripts Interact with MySQL, SQLite, Oracle, Postgres, Django ORM, and SQLAlchemy With this book, you'll learn how to package and deploy your Python applications and libraries, and write code that runs equally well on multiple Unix platforms. You'll also learn about several Python-related technologies that will make your life much easier.

Learning CentOSA Beginners Guide to Learning LinuxCreatespace Independent Publishing Platform

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.

Whether you're just starting out with Linux or looking to hone your existing skills, this book will provide you with the knowledge you need.

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

This book is written in cookbook style and it offers learning through recipes with examples and illustrations. Each recipe contains step-by-step instructions about everything necessary to execute a particular task. The book is designed so that you can read it from start to end for beginner's or just open up any chapter and start following the recipes as a reference for advanced users,"CentOS 6 Linux Server Cookbook" is for Linux professionals and system administrators using CentOS for their business’s server

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.

If you are a security professional whose workload is increasing, or a Puppet professional looking to increase your knowledge of security, or even an experienced systems administrator, then this book is for you. This book will take you to the next level of security automation using Puppet. The book requires no prior knowledge of Puppet to get started.