

Arch Linux Environment Setup How To

Teaches you exactly how program memory content and organization is vital for computer security, especially Unix-like operating systems. You will learn how it is manipulated to take control of a computer system, as well as the countermeasures that system designers set up to avoid this. Neither a guide for hackers nor an all-out theory book, this book is ideal for anyone studying computer security who wants to learn by doing. Using a practical approach, you will understand how stack frames relate to hardware and software theory and the various GNU/Linux distributions, before moving on to Base 2, 8 and 16 notations, executables and libraries. Lastly you will go in-depth to understand the intricacies of stack frames. A vital resource for all computer security students and enthusiasts, add Stack Frames: A Look Inside to your library today. What You Will Learn In-depth knowledge on activation records of functions, and how this information can be used. A better understanding on how conventions used by compilers work. Clarify some concepts on libraries and their relationship with executable programs. Get, or recall, technical skills using compilers, debuggers, and other tools. Who This Book Is For The book is suitable for college students with a good knowledge of the C language, who are interested in deepening their study of the content and organization of program memory, namely the activation records of functions, as regards possible implications in computer security. A basic knowledge of both the Assembly language and the UNIX operating system is certainly helpful, as well as some practice with compilers and debuggers; but they are not compulsory.

Two leading Linux developers show how to choose the best tools for your specific needs and integrate them into a complete development environment that maximizes your effectiveness in any project, no matter how large or complex. Includes research, requirements, coding, debugging, deployment, maintenance and beyond, choosing and implementing editors, compilers, assemblers, debuggers, version control systems, utilities, using Linux Standard Base to deliver applications that run reliably on a wide range of Linux systems, comparing Java development options for Linux platforms, using Linux in cross-platform and embedded development environments.

Haskell is an advanced general purpose programming language. This tutorial covers all aspects of Haskell development from foundations to compiler development.MonadsMonad TransformersLanguage ExtensionsType ClassesLazinessPreludeStringsApplicativesError HandlingAdvanced MonadsQuantificationGeneralized Algebraic DatatypesInterpretersTestingType FamiliesPromotionGenericsMathematicsData StructuresForeign Function

InterfaceConcurrency and ParallelismGraphicsParsersStream ProcessingCryptograpyDate and TimeData Formats and SerialisationNetwork and Web ProgrammingDatabasesGHC CompilerProfilingCompiler DevelopmentTemplate HaskellCategory Theory

Understand how to use service mesh architecture to efficiently manage and safeguard microservices-based applications with the help of examples Key FeaturesManage your cloud-native applications easily using service mesh architectureLearn about Istio, Linkerd, and Consul – the three primary open source service mesh providersExplore tips, techniques, and best practices for building secure, high-performance microservicesBook Description Although microservices-based applications support DevOps and continuous delivery, they can also add to the complexity of testing and observability. The implementation of a service mesh architecture, however, allows you to secure, manage, and scale your microservices more efficiently. With the help of practical examples, this book demonstrates how to install, configure, and deploy an efficient service mesh for microservices in a Kubernetes environment. You'll get started with a hands-on introduction to the concepts of cloud-native application management and service mesh architecture, before learning how to build your own Kubernetes environment. While exploring later chapters, you'll get to grips with the three major service mesh providers: Istio, Linkerd, and Consul. You'll be able to identify their specific functionalities, from traffic management, security, and certificate authority through to sidecar injections and observability. By the end of this book, you will have developed the skills you need to effectively manage modern microservices-based applications. What you will learnCompare the functionalities of Istio, Linkerd, and ConsulBecome well-versed with service mesh control and data plane conceptsUnderstand service mesh architecture with the help of hands-on examplesWork through hands-on exercises in traffic management, security, policy, and observabilitySet up secure communication for microservices using a service meshExplore service mesh features such as traffic management, service discovery, and resiliencyWho this book is for This book is for solution architects and network administrators, as well as DevOps and site reliability engineers who are new to the cloud-native framework. You will also find this book useful if you're looking to build a career in DevOps, particularly in operations. Working knowledge of Kubernetes and building microservices that are cloud-native is necessary to get the most out of this book.

R for Data Science

The Definitive Guide

Practical GIS

Advanced Linux Programming

A Beginner's Guide to Implement CI/CD Pipelines for Mobile, Hybrid, and Web Applications Using Jenkins (English Edition)

Security Strategies in Linux Platforms and Applications

Arch Linux Environment Setup How-ToPackt Publishing Ltd

Learn the basics of Geographic Information Systems by solving real-world problems with powerful open source tools About This Book This easy-to-follow guide allows you to manage and analyze geographic data with ease using open source tools Publish your geographical data online Learn the basics of geoinformatics in a practical way by solving problems Who This Book Is For The book is for IT professionals who have little or no knowledge of GIS. It's also useful for those who are new to the GIS field who don't want to spend a lot of money buying licenses of commercial tools and training. What You Will Learn Collect GIS data for your needs Store the data in a PostGIS database Exploit the data using the power of the GIS queries Analyze the data with basic and more advanced GIS tools Publish your data and share it with others Build a web map with your published data In Detail The most commonly used GIS tools automate tasks that were historically done manually/compiling new maps by overlaying one on top of the other or physically cutting maps into pieces representing specific study areas, changing their projection, and getting meaningful results from the various layers by applying mathematical functions and operations. This book is an easy-to-follow guide to use the most matured open source GIS tools for these tasks. We'll start by setting up the environment for the tools we use in the book. Then you will learn how to work with QGIS in order to generate useful spatial data. You will get to know the basics of queries, data management, and geoprocessing. After that, you will start to practice your knowledge on real-world examples. We will solve various types of geospatial analyses with various methods. We will start with basic GIS problems by imitating the work of an enthusiastic real estate agent, and continue with more advanced, but typical tasks by solving a decision problem. Finally, you will find out how to publish your data (and results) on the web. We will publish our data with QGIS Server and GeoServer, and create a basic web map with the API of the lightweight Leaflet web mapping library. Style and approach The book guides you step by step through each of the core concepts of the GIS toolkit, building an overall picture of its capabilities. This guide approaches the topic systematically, allowing you to build upon what you learned in previous chapters. By the end of this book, you'll have an understanding of the aspects of building a GIS system and will be able to take that knowledge with you to whatever project calls for it.

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 to those who intend to migrate to Unix, perhaps fearing it is a pure command-line or [difficult] world.

Eternal life. Eternal battle. Steve!Diomedes Tydides to his Trojan War buddies!Just had a bad day on his charter fishing boat in San Diego, but when the goddess Athena calls on her faithful warrior for another secret mission, he's ready. The bomb that exploded inside the Metropolitan Museum of Art isn't the crime American authorities think it is. Someone also stole the Cup of Jamshid, and Diomedes knows its fortune-telling abilities won't be used for anything benign. Though Diomedes recovers the Cup from a determined shaman holed up beneath Central Park, when he finds his allies slain and the Cup taken once more, he knows he's up against a truly powerful enemy. Over a millennium has passed since Diomedes last contended with Medea of Colchis, deranged wife of Jason the Argonaut, but neither her madness nor her devotion to Hecate, goddess of witchcraft, has waned, and she intends to use the Cup of Jamshid to release across the world a dark brand of chaos unseen in human history. Immortal since the Trojan War, Diomedes must once again fight for mortals he understands less and less, against a divine evil he may never truly defeat.

Linux in Action

Mastering Service Mesh

The Linux Development Platform

Arch Linux Environment Setup How-To

Desktop Linux

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 look 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

Gain a deeper understanding of how Raspberry Pi works to get the results you want right in the palm of your hand. This book helps you understand the right connections and software to drive your Raspberry Pi into opening the worlds of programming, electronic experiments, system control, digital imaging, and the Internet of Things to you. You'll discover how to expand your Pi's storage for bigger programs, use its onboard connections to interface with cameras and control devices, printers and scanners. You'll also see how to share information with Windows and Apple computers and mobile devices, and use it away from AC power. You'll be able to turn any HDTV into a media player; stream and share files from desktop and mobile devices; use your Pi for image capture via camera or scanner; and more! Expanding Your Raspberry Pi is your guide to doing almost anything a bigger computer can do – if you're ready for the challenge. What You'll Learn Connect, use, and manage mass storage devices for greater versatility Link with desktop, laptop, and mobile devices using the Pi's built-in Wi-Fi and Bluetooth features Share resources from your Pi with desktop and mobile devices Capture video and still photos with your Pi Who This Book Is For Network administrators: Connect Raspberry Pi devices to other devices on a wired or wireless network for media streaming, file serving, or print serving Teachers: Use Raspberry Pi to teach students how to connect different types of computers and operating systems with each other. IT workers: Use Raspberry Pi with your existing printers, scanners, webcams, and home network

The Book of Audacity is the definitive guide to Audacity, the powerful, free, cross-platform audio editor. Audacity allows anyone to transform their Windows, Mac, or Linux computer into a powerful recording studio. The Book of Audacity is the perfect book for bands on a budget, solo artists, audiophiles, and anyone who wants to learn more about digital audio. Musician and podcaster Carla Schroder will guide you through a range of fun and useful Audacity projects that will demystify that geeky audio jargon and show you how to get the most from Audacity. You'll learn how to: -Record podcasts, interviews, and live performances -Be your own backing band or chorus -Edit, splice, mix, and master multitrack recordings -Create super high-fidelity and surround-sound recordings -Digitize your vinyl or tape collection and clean up noise, hisses, and clicks -Create custom ringtones and sweet special effects In addition, you'll learn how to choose and use digital audio hardware like mics and preamps, and tune your computer for flawless audio performance. You'll also find out how to package your work for digital distribution, whether you want to share a podcast through iTunes or sell your own CDs. Become your own producer with The Book of Audacity. The fun starts now.

Embedded Android is for Developers wanting to create embedded systems based on Android and for those wanting to port Android to new hardware, or creating a custom development environment. Hackers and moders will also find this an indispensable guide to how Android works.

Storage, printing, peripherals, and network connections for your Raspberry Pi

Getting Started with UDOO

March 2017

Learn to Live Comfortably in a Modern Unix Environment

Linux Device Drivers

Building Embedded Linux Systems

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Build, deploy, and manage containers with the next-generation engine and tools Key FeaturesDiscover key differences between Docker and PodmanBuild brand new container images with Buildah, the Podman companionLearn how to manage and integrate containers securely in your existing infrastructureBook Description As containers have become the new de facto standard for packaging applications and their dependencies, understanding how to implement, build, and manage them is now an essential skill for developers, system administrators, and SRE/operations teams. Podman and its companion tools Buildah and Skopeo make a great toolset to boost the development, execution, and management of containerized applications. Starting with the basic concepts of containerization and its underlying technology, this book will help you get your first container up and running with Podman. You'll explore the complete toolkit and go over the development of new containers, their lifecycle management, troubleshooting, and security aspects. Together with Podman, the book illustrates Buildah and Skopeo to complete the tools ecosystem and cover the complete workflow for building, releasing, and managing optimized container images. Podman for DevOps provides a comprehensive view of the full-stack container technology and its relationship with the operating system foundations, along with crucial topics such as networking, monitoring, and integration with systemd, docker-compose, and Kubernetes. By the end of this DevOps book, you'll have developed the skills needed to build and package your applications inside containers as well as to deploy, manage, and integrate them with system services. What you will learnUnderstand Podman's daemonless approach as a container engineRun, manage, and secure containers with PodmanDiscover the strategies, concepts, and command-line options for using Buildah to build containers from scratchManage OCI images with SkopeoTroubleshoot runtime, build, and isolation issuesIntegrate Podman containers with existing networking and system servicesWho this book is for The book is for cloud developers looking to learn how to build and package applications inside containers and system administrators who want to deploy, manage, and integrate them with system services and orchestration solutions. This book provides a detailed comparison between Docker and Podman to aid you in learning Podman quickly.

This book constitutes the refereed proceedings of the 9th International Conference on Digital Forensics and Cyber Crime, ICDF2C 2017, held in Prague, Czech Republic, in October 2017. The 18 full papers were selected from 50 submissions and are grouped in topical sections on malware and botnet, deanonymization, digital forensics tools, cybercrime investigation and digital forensics triage, digital forensics tools testing and validation, hacking

Master the booting procedure of various operating systems with in-depth analysis of bootloaders and firmware. The primary focus is on the Linux booting procedure along with other popular operating systems such as Windows and Unix. Hands-on Booting begins by explaining what a bootloader is, starting with the Linux bootloader followed by bootloaders for Windows and Unix systems. Next, you'll address the BIOS and UEFI firmware by installing multiple operating systems on one machine and booting them through the Linux bootloader. Further, you'll see the kernel's role in the booting procedure of the operating system and the dependency between kernel, initramfs, and dracut. You'll also cover systemd, examining its structure and how it mounts the user root filesystem. In the final section, the book explains troubleshooting methodologies such as debugging shells followed by live images and rescue mode. On completing this book, you will understand the booting process of major operating systems such as Linux, Windows, and Unix. You will also know how to fix the Linux booting issues through various boot modes. What You Will Learn Examine the BIOS and UEFI firmware Understanding the Linux boot loader (GRUB)Work with initramfs, dracut, and systemdFix can't-boot issues on Linux Who This Book Is For Linux users, administrators, and developers.

Linux ve ađ temelleri: başucu kitabı

PHP & MySQL: Novice to Ninja

Hands-on Pipeline as YAML with Jenkins

Quick Guide for Beginners

R Markdown

Embedded Android

Linux® is being adopted by an increasing number of embedded systems developers, who have been won over by its sophisticated scheduling and networking, its cost-free license, its open development model, and the support offered by rich and powerful programming tools. While there is a great deal of hype surrounding the use of Linux in embedded systems, there is not a lot of practical information. Building Embedded Linux Systems is the first in-depth, hard-core guide to putting together an embedded system based on the Linux kernel. This indispensable book features arcane and previously undocumented procedures for: Building your own GNU development toolchain Using an efficient embedded development framework Selecting, configuring, building, and installing a target-specific kernel Creating a complete target root filesystem Setting up, manipulating, and using solid-state storage devices Installing and configuring a bootloader for the target Cross-compiling a slew of utilities and packages Debugging your embedded system using a plethora of tools and techniques Details are provided for various target architectures and hardware configurations, including a thorough review of Linux's support for embedded hardware. All explanations rely on the use of open source and free software packages. By presenting how to build the operating system components from pristine sources and how to find more documentation or help, this book greatly simplifies the task of keeping complete control over one's embedded operating system, whether it be for technical or sound financial reasons.Author Karim Yaghmour, a well-known designer and speaker who is responsible for the Linux Trace Toolkit, starts by discussing the strengths and weaknesses of Linux as an embedded operating system. Licensing issues are included, followed by a discussion of the basics of building embedded Linux systems. The configuration, setup, and use of over forty different open source and free software packages commonly used in embedded Linux systems are also covered. uClibc, BusyBox, U-Boot, OpenSSH, tftpd, tftp, strace, and gdb are among the packages discussed.

With Kernel Projects for Linux, Professor Gary Nutt provides a series of 12 lab exercises that illustrate how to implement core operating system concepts in the increasingly popular Linux environment. The makeup of the manual allows readers to learn concepts on a modern operating system—Linux—while at the same time viewing the source code. This hands-on manual complements any core OS book by demonstrating how theoretical concepts are realized in Linux.Part I presents an overview of the Linux design, offering some insight into such topics as runtime organization and process, file, and device management. Part II consists of a graduated set of exercises where readers move from inspecting various aspects of the operating systems's internals to developing their own functions and data structures for the Linux kernel.This book is designed for programmers who need to learn the fundamentals of operating systems on a modern OS. The progressively harder exercises allow them to learn concepts in a hands-on setting.

If you are an Android developer who wants to learn how to use UDOO to build Android applications that are capable of interacting with their surrounding environment, then this book is ideal for you. Learning UDOO is the next great step to start building your first real-world prototypes powered by the Android operating system.

Provides information on writing a driver in Linux, covering such topics as character devices, network interfaces, driver debugging, concurrency, and interrupts.

Havoc Rising

Record, Edit, Mix, and Master with the Free Audio Editor
Solutions and Examples for Building Distributed Applications
A Complete Introduction
Stack Frames
Understanding Linux Network Internals