Linux Makefile Manual

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

Master x86 language from the Linux point of view with this one-concept-at-a-time guide. Neveln gives an "under the hood" perspective of how Linux works and shows how to create device drivers. The CD-ROM includes all source code from the book plus edlinas, an x86 simulator that's perfect for hands-on, interactive assembler development.

The official "Ubuntu 10.10 Packaging Guide" is primarily addressed to those who would like to make and maintain Ubuntu packages. Although many of the concepts in this guide could be used to make binary packages for personal use, it is designed for those people wanting to distribute their packages to and for others.

"Covers GNU Make basics through advanced topics, including: user-defined functions, macros, and path handling; creating makefile assertions and debugging makefiles; parallelization; automatic dependency generation, rebuilding targets, and non-recursive Make; and using the GNU Make Standard Library"--

Ubuntu 10.10 Packaging Guide

Into the Core

The Linux Kernel Module Programming Guide

Linux Dictionary

The GAWK Manual

Programming Embedded Systems

CD-ROM contains: Electronic version of text in HTML format

The Most Useful Tutorial and Reference, with Hundreds of High-Quality Examples for Every Popular Linux Distribution "First Sobell taught people how to use Linux . . . now he teaches you the power of Linux. A must-have book for anyone who wants to take Linux to the next level." –Jon "maddog" Hall, Executive Director, Linux International Discover the Power of Linux—Covers macOS, too! Learn from hundreds of realistic, high-quality examples, and become a true command-line guru Covers MariaDB, DNF, and Python 3 3OO+ page reference section covers 102 utilities, including macOS commands For use with all popular versions of Linux, including Ubuntu,™ Fedora,™ openSUSE,™ Red Hat,® Debian, Mageia, Mint, Arch, CentOS, and macOS Linux is today's dominant Internet server platform. System administrators and Web developers need deep Linux fluency, including expert knowledge of shells and the command line. This is the only guide with everything you need to achieve that level of Linux mastery. Renowned Linux expert Mark Sobell has brought together comprehensive, insightful guidance on the tools sysadmins, developers, and power users need most, and has created an outstanding day-to-day reference, updated with assistance from new coauthor Matthew Helmke. This title is 1OO percent distribution and release agnostic. Packed with hundreds of high-quality, realistic examples, it presents Linux from the ground up: the clearest explanations and most useful information about everything from filesystems to shells, editors to utilities, and programming tools to regular expressions. Use a Mac? You'll find coverage of the macOS command line, including macOS-only tools and utilities that other Linux/UNIX titles ignore. A Practical Guide to Linux® Commands, Editors, and Shell Programming, Fourth Edition, is the only guide to deliver A MariaDB chapter to get you started with this ubiquitous relational database management system (RDBMS) A masterful introduction to Python for system administrators and power users In-depth coverage of the bash and tcsh shells, including a complete discussion of environment, inheritance, and process locality, plus coverage of basic and advanced shell programming Practical explanations of core utilities, from aspell to xargs, including printf and sshfs/curlftpfs, PLUS macOS–specific utilities from ditto to SetFile Expert guidance on automating remote backups using rsync Dozens of system security tips, including step-by-step walkthroughs of implementing secure communications using ssh and scp Tips and tricks for customizing the shell, including step values, sequence expressions, the eval builtin, and implicit command-line continuation High-productivity editing techniques using vim and emacs A comprehensive, 3OO-plus-page command reference section covering 102 utilities, including find, grep, sort, and tar Instructions for updating systems using apt-get and dnf And much more, including coverage of BitTorrent, gawk, sed, find, sort, bzip2, and regular expressions

A guide to Linux covers such topics as logging in, compressing files, using the command line, scripting, and security.

Describes the concepts of programming with Linux, covering such topics as shell programming, file structure, managing memory, using MySQL, debugging, processes and signals, and GNOME.

Linux System Security

Linux System Programming Techniques

Yocto Project Development Manual

Ubuntu Linux Bible

With C and GNU Development Tools

Documentation from the Source

This is Linux for those of us who don't mind typing. All Linux users and administrators tend to like the flexibility and speed of Linux administration from the command line in byte-sized chunks, instead of fairly standard graphical user interfaces. Beginning the Linux Command Line is verified against all of the most important Linux distributions, and follows a task-oriented approach which is distribution agnostic. Now this Second Edition of Beginning the Linux Command Line updates to the very latest versions of the Linux Operating System, including the new Btrfs file system and its management, and systemd boot procedure and firewall management with firewalld! Updated to the latest versions of Linux Work with files and directories, including Btrfs! Administer users and security, and deploy firewalld Understand how Linux is organized, to think Linux!

This document is designed to be a resource for those Linux users wishing to seek clarification on Linux/UNIX/POSIX related terms and jargon. At approximately 24000 definitions and two thousand pages it is one of the largest Linux related dictionaries currently available. Due to the rapid rate at which new terms are being created it has been decided that this will be an active project. We welcome input into the content of this document. At this moment in time half yearly updates are being envisaged. Please note that if you wish to find a 'Computer Dictionary Project' at http://computerdictionary.tsf.org.za/ Searchable databases exist at locations such as: http://www.swpearl.com/eng/scripts/dictionary/ (SWP) Sun Wah-PearL Linux Training and Development Centre is a centre of the Hong Kong Polytechnic University, established in 2000. Presently SWP is delivering professional grade Linux and related Open Source Software (OSS) technology training and consultant service in Hong Kong. SWP has an ambitious aim to promote the use of Linux and related Open Source Software (OSS) and Standards. The vendor independent positioning of SWP has been very well perceived by the market. Throughout the last couple of years, SWP becomes the Top Leading OSS training and service provider in Hong Kong. http://www.geona.com/dictionary?b= Geona, operated by Gold Vision Communications, is a new powerful search engine and internet directory, delivering quick and relevant results on almost any topic or subject you can imagine. The term "Geona" is an Italian and Hebrew name, meaning wisdom, exaltation, pride or majesty. We use our own database of spidered web sites and the Open Directory database, the same database which powers the core directory services for the Web's largest and most popular search engines and portals. Geona is spidering all domains listed in the non-adult part of the Open Directory and millions of additional sites of general interest to maintain a fulltext index of highly relevant web sites. http://www.linuxdig.com/documents/dictionary.php LINUXDIG.COM, "Yours News and Resource Site", LinuxDig.com was started in May 2001 as a hobby site with the original intention of getting the RFC's online and becoming an Open Source software link/download site. But since that time the site has evolved to become a RFC distribution site, linux news site and a locally written technology news site (with bad grammer :)) with focus on Linux while also containing articles about anything and everything we find interesting in the computer world. LinuxDig.Com contains about 20,000 documents and this number is growing everyday! http://linux.about.com/library/glossary/blglossary.htm Each month more than 20 million people visit About.com. Whether it be home repair and decorating ideas, recipes, movie trailers, or car buying tips, our Guides offer practical advice and solutions for every day life. Wherever you land on the new About.com, you'll find other content that is relevant to your interests. If you're looking for "How To" advice on planning to re-finish your deck, we'll also show you the tools you need to get the job done. If you've been to About before, we'll show you the latest updates, so you don't see the same thing twice. No matter where you are on About.com, or how you got here, you'll always find content that is relevant to your needs. Should you wish to possess your own localised searcheable version please make use of the available "dict", http://www.dict.org/ version at the Linux Documentation Project home page, http://www.tldp.org/ The author has decided to leave it up to readers to determine how to install and run it on their specific systems. An alternative form of the dictionary is available at: http://elibrary.fultus.com/covers/technical/linux/guides/Linux-Dictionary/cover.html Fultus Corporation helps writers and companies to publish, promote, market, and sell books and eBooks. Fultus combines traditional self-publishing practices with modern technology to produce paperback and hardcover print-on-demand (POD) books and electronic books (eBooks). Fultus publishes works (fiction, non-fiction, science fiction, mystery, ...) by both published and unpublished authors. We enable you to self-publish easily and cost-effectively, creating your book as a print-ready paperback or hardcover POD book or as an electronic book (eBook) in multiple eBook's formats. You retain all rights to your work. We provide distribution to bookstores worldwide. And all at a fraction of the cost of traditional publishing. We also offer corporate publishing solutions that enable businesses to produce and deliver manuals and documentation more efficiently and economically. Our use of electronic delivery and print-on-demand technologies reduces printed inventory and saves time. Please inform the author as to whether you would like to create a database or an alternative form of the dictionary so that he can include you in this list. Also note that the author considers breaches of copyright to be extremely serious. He will pursue all claims to the fullest extent of the law.

Everything you need to know—and then some! It's the fastest-growing, coolest Linux distribution out there, and now you can join the excitement with this information-packed guide. Want to edit graphics? Create a spreadsheet? Manage groups? Set up an NFS server? You'll learn it all and more with the expert guidance, tips, and techniques in this first-ever soup-to-nuts book on Ubuntu. From the basics for newcomers to enterprise management for system administrators, it's what you need to succeed with Ubuntu. Master the fundamentals for desktop and networks Send e-mail, share files, edit text, and print Download music, watch DVDs, and play games Use Ubuntu on laptops, go wireless, or synch it with your PDA Set up Web, mail, print, DNS, DHCP, and other servers Manage groups and secure your network What's on the CD-ROM? Test-drive Ubuntu on your computer without changing a thing using the bootable Ubuntu Desktop Live CD included with this book. If you decide to install it permanently, a simple, easy-to-use installer is provided. Also on the CD, you'll find: Popular open-source software for Microsoft(r) Windows(r), such as AbiWord, Firefox(r), GIMP, and more An easy-to-use application that simplifies installing these programs on your Microsoft Windows system System Requirements: Please see the "About the CD-ROM Appendix" for details and complete system requirements. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file. The utility simply known as make is one of the most enduring features of both Unix and other operating systems. First invented in the 1970s, make still turns up to this day as the central engine in most programming projects; it even builds the Linux kernel. In the third edition of the classic Managing Projects with GNU make, readers will learn why this utility continues to hold its top position in project build software, despite many younger competitors.The premise behind make is simple: after you change source files and want to rebuild your program or other output files, make checks timestamps to see what has changed and rebuilds just what you need, without wasting time rebuilding other files. But on top of this simple principle, make layers a rich collection of options that lets you manipulate multiple directories, build different versions of programs for different platforms, and customize your builds in other ways.This edition focuses on the GNU version of make, which has deservedly become the industry standard. GNU make contains powerful extensions that are explored in this book. It is also popular because it is free software and provides a version for almost every platform, including a version for Microsoft Windows as part of the free Cygwin project. Managing Projects with GNU make, 3rd Edition provides guidelines on meeting the needs of large, modern projects. Also added are a number of interesting advanced topics such as portability, parallelism, and use with Java.Robert Mecklenburg, author of the third edition, has used make for decades with a variety of platforms and languages. In this book he zealously lays forth how to get your builds to be as efficient as possible, reduce maintenance, avoid errors, and thoroughly understand what make is doing. Chapters on C++ and Java provide makefile entries optimized for projects in those languages. The author even includes a discussion of the makefile used to build the book.

C++ Cookbook

The Linux Command Line

Linux

Effective AWK Programming

GNU Emacs Manual

A Complete Introduction

The Mono Project is the much talked-about open source initiative to create a Unix implementation of Microsoft's .NET Development Framework. Its purpose is to allow Unix developers to build and deploy cross-platform .NET applications. The project has also sparked interest in developing components, libraries and frameworks with C#, the programming language of .NET.The controversy? Some say Mono will become the preferred platform for Linux development, empowering Linux/Unix developers. Others say it will allow Microsoft to embrace, extend, and extinguish Linux. The controversy rages on, but--like many developers--maybe you've had enough talk and want to see what Mono is really all about.There's one way to find out: roll up your sleeves, get to work, and see what you Mono can do. How do you start? You can research Mono at length. You can play around with it, hoping to figure things out for yourself. Or, you can get straight to work with Mono: A Developer's Notebook--a hands-on guide and your trusty lab partner as you explore Mono 1.0.Light on theory and long on practical application, Mono: A Developer's Notebook bypasses the talk and theory, and jumps right into Mono 1.0. Diving quickly into a rapid tour of Mono, you'll work through nearly fifty mini-projects that will introduce you to the most important and compelling aspects of the 1.0 release. Using the task-oriented format of this new series, you'll learn how to acquire, install, and run Mono on Linux, Windows, or Mac OS X. You'll work with the various Mono components: Gtk#, the Common Language Runtime, the class libraries (both .NET and Mono-provided class libraries), IKVM and the Mono C# compiler. No other resource will take you so deeply into Mono so quickly or show you as effectively what Mono is capable of.The new Developer's Notebooks series from O'Reilly covers important new tools for software developers. Emphasizing example over explanation and practice over theory, they focus on learning by doing--you'll get the goods straight from the masters, in an informal and code-intensive style that suits developers. If you've been curious about Mono, but haven't known where to start, this no-fluff, lab-style guide is the solution.

This title looks at the pros and cons of open source security tools and demonstrates how to implement them. It also provides coverage of Bastille. The text includes detailed instructions, as well as essential background information.

Authored by two of the leading authorities in the field, this guide offers readers the knowledge and skills needed to achieve proficiency with embedded software.

Step by Step instructions on how to put a bootloader on to the ATMega168 using the ISP STK500 programer. The how and why of the bootloader revealed, build your own bootloader. The complete source code is included. Using avr-gcc 'C' programing language. Detailed instructions for hooking the STK500 to your computer and breadboard. Diagrams and instructions on building your breadboard included. Book is aimed at the Debian-Linux user. This book starts with the assumption that you want to know how to write a bootloader in the 'C' programming language. That you want to learn how to use an ISP STK500 programer. You want to understand the microchip's fuses and lock bit settings and change them as you desire. That you want to load your own bootloader on to the microchip. You will cover the 'Makefile', for compiling your program and uploading it on to your microchip. Learn how to build your own library for programs and headers that you want to include in your programs. This includes a uart.c program and a uart.h file. The steps needed to accomplish the loading of your bootloader are walked through giving the reader good direction. The book includes the complete source code for all programs and header files. The complete Makefiles are also provided. The source code and instructions for loading a test programs are also included. Even the eeprom memory is lightly covered. While this is a technical subject the author provides a great deal of insight and documentation on the process. The book goes into good depth without getting hopelessly lost in computer science lingo.

Become a proficient Linux system programmer using expert recipes and techniques

Bash Reference Manual

A User's Guide for GNU AWK

Practical Uses for Open Source Software

MySQL Reference Manual

Including Makefile and Test Program

Step by Step instructions on how to put a bootloader on to the ATMega328P using the ISP STK500 programer. The how and why of the bootloader revealed, build your own bootloader. The complete source code is included. Using avr-gcc 'C' programing language. Detailed instructions for hooking the STK500 to your computer and breadboard. Diagrams

and instructions on building your breadboard included. Book is aimed at the Debian-Linux user. This book starts with the assumption that you want to know how to write a bootloader in the 'C' programming language. That you want to learn how to use an ISP STK500 programer. You want to understand the microchip's fuses and lock bit settings and change them as you desire. That you want to load your own bootloader on to the microchip. You will cover the 'Makefile', for compiling your program and uploading on to your microchip. Learn how to build your own library for programs and headers that you want to include in your programs. This includes a uart.c program and a uart.h file. The steps needed to accomplish the loading of your bootloader are walked through giving the reader good direction. The exhibits that are included greatly enhance the visualization of the process. The book includes the complete source code for all programs and header files. The complete Makefiles are also provided. The source code and instructions for loading a test programs are also included. Even the eeprom memory is lightly covered. While this is a technical subject the author provides a great deal of insight and documentation on the process. The book goes into good depth without getting hopelessly lost in computer science lingo.

This book introduces the concepts and features of Linux and explains how to install and configure the system. It describes the features and services of the Internet which have been instrumental in the rapid development and wide distribution of Linux and focuses on its graphical interface, network capability, and its extended tools. This updated second edition also gives a helpful overview of the wide range of shareware applications available for this powerful system. Highlights include: - new chapter on Emacs configuration and use - new reference section which describes the most common Linux commands - completely updated and expanded chapter on networking/tcpip - explanation of Linux as a server for MS-Windows.

Provides advice for system administrators on time management, covering such topics as keeping an effective calendar, eliminating time wasters, setting priorities, automating processes, and managing interruptions.

Linux Kernel Module Programming Guide is for people who want to write kernel modules. It takes a hands-on approach starting with writing a small "hello, world" program, and quickly moves from there. Far from a boring text on programming, Linux Kernel Module Programming Guide has a lively style that entertains while it educates. An excellent guide for anyone wishing to get started on kernel module programming. *** Money raised from the sale of this book supports the development of free software and documentation.

Mono: A Developer's Notebook
Building Embedded Systems
GNU Make
An Administrator's Guide to Open Source Security Tools
z/VM and Linux on IBM System z: The Virtualization Cookbook for SLES9
Linux Device Drivers
Designed for the way many developers work, this practical problem-solving guide balances the need for rapid development with a trusted source of information.
This volume is the official reference manual for GNU Bash, the standard GNU command-line interpreter.
This volume details the wider use of Linux. It provides a table at the front of each chapter to enumerate the software discussed in that chapter, which of the seven major Linux distributions include each package and and the URLs of the software's home page and download page.
Harness the power of Linux to create versatile and robust embedded solutions Key FeaturesLearn how to develop and configure robust embedded Linux devicesExplore the new features of Linux 5.4 and the Yocto Project 3.1 (Dunfell)Discover different ways to debug and profile your code in both user space and the Linux kernelBook Description If you're looking for a book that will demystify embedded Linux, then you've come to the right place. Mastering Embedded Linux Programming is a fully comprehensive guide that can serve both as means to learn new things or as a handy reference. The first few chapters of this book will break down the fundamental elements that underpin all embedded Linux projects: the toolchain, the bootloader, the kernel, and the root filesystem. After that, you will learn how to create each of these elements from scratch and automate the process using Buildroot and the Yocto Project. As you progress, the book will show you how to implement an effective storage strategy for flash memory chips and install updates to a device remotely once it's deployed. You'll also learn about the key aspects of writing code for embedded Linux, such as how to access hardware from apps, the implications of writing multi-threaded code, and techniques to manage memory in an efficient way. The final chapters demonstrate how to debug your code, whether it resides in apps or in the Linux kernel itself. You'll also cover the different tracers and profilers that are available for Linux so that you can quickly pinpoint any performance bottlenecks in your system. By the end of this Linux book, you'll be able to create efficient and secure embedded devices using Linux. What you will learnUse Buildroot and the Yocto Project to create embedded Linux systemsTroubleshoot BitBake build failures and streamline your Yocto development workflowUpdate IoT devices securely in the field using Mender or balenaPrototype peripheral additions by reading schematics, modifying device trees, soldering breakout boards, and probing pins with a logic analyzerInteract with hardware without having to write kernel device driversDivide your system up into services supervised by BusyBox runitDebug devices remotely using GDB and measure the performance of systems using tools such as perf, ftrace, eBPF, and CallgrindWho this book is for If you're a systems software engineer or system administrator who wants to learn how to implement Linux on embedded devices, then this book is for you. It's also aimed at embedded systems engineers accustomed to programming for low-power microcontrollers, who can use this book to help make the leap to high-speed systems on chips that can run Linux. Anyone who develops hardware that needs to run Linux will find something useful in this book – but before you get started, you'll need a solid grasp on POSIX standard, C programming, and shell scripting.
Linux Unleashing the Workstation in Your PC

Bootloader Source Code for Atmega168 Using Stk500 for Debian Linux
A Practical Guide to Linux Commands, Editors, and Shell Programming
The UNIX-haters Handbook
Rute User's Tutorial and Exposition
Provides information on writing a driver in Linux, covering such topics as character devices, network interfaces, driver debugging, concurrency, and interrupts.
Develop the software and hardware you never think about. We're talking about the nitty-gritty behind the buttons on your microwave, inside your thermostat, inside the keyboard used to type this description, and even running the monitor on which you are reading it now. Such stuff is termed embedded systems, and this book shows how to design and develop embedded systems at a pro...
Building embedded systems can be both fun and intimidating. Putting together an embedded system requires skill sets from multiple engineering disciplines, from software and hardware in particular. Building Embedded Systems is a book about helping you do things in the right way from the beginning of your first project: Programmers who know software will learn what they need to know about th...
software side. Whatever your background is; Building Embedded Systems is the perfect book to fill in any knowledge gaps and get you started in a career programming for everyday devices. Author Changyi Gu brings more than fifteen years of experience in working his way up the ladder in the field of embedded systems. He brings knowledge of numerous approaches to embedded systems, and brings it currently growing to dominate the field. His knowledge and experience make Building Embedded Systems an excellent book for anyone wanting to enter the field, or even just to do some embedded programming as a side project. What You Will Learn Program embedded systems at the hardware level Learn current industry practices in firmware development Develop practical knowledge of e... hardware Practice a work flow leading to successful outcomes Build from transistor level to the system level Make sound choices between performance and cost Who This Book Is For Embedded-system engineers and intermediate electronics enthusiasts who are seeking tighter integration between software and hardware. Those who favor the System on a Programmable Chip (SOPC) app... and Computer Science can also benefit from this book and the real-life industry practice it provides.
This IBM IBM Redbooks publication describes how to setup your own 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 gene... Server 9 (SLES9) for zSeries and we address both 31-bit and 64-bit distributions. In addition, there are a few associated REXX EXECs and Linux scripts to help speed up the process. These tools are not IBM products nor formally supported. However, they are informally supported. They are available on the Web. In this book, we assume that you have a general familiarity with zSeries techno... Linux. This book is written for those who want to get a quick start with z/VM and Linux on the mainframe.
This comprehensive reference guide offers useful pointers for advanced use of SQL and describes the bugs and workarounds involved in compiling MySQL for every system.
Beginning the Linux Command Line
LINUX Assembly Language Programming
A Program for Directing Recompilation : GNU Make Version 3.79.1
Mastering Embedded Linux Programming
Bootloader Source Code for Atmega328P Using Stk500 for Debian Linux
Reference Documentation for Bash Edition 2.5b, for Bash Version 2.05b
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 gene... 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 w... 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 * 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"
If you are a developer and are looking to participate in the Open Source development growth area you will need to learn new Open Source tools. GNU autoconf, GNU automake and GNU libtool are key tools for Open Source application development. These tools are not easy to learn, so some of the leading authorities on these tools have agreed to work togethe... how to boost their productivity and the portability of their application. This book place New Riders/MTP at the center of the Open Source development community. Autoconf, Automake and Libtool is an efficient discourse on the use of autoconf, automake and libtool aimed at reducing the steep learning curve normally associated with these tools. This is a stu... tools, and how best to get them to cooperate. If you are a developer and have no GNU build environment expertise, this book will help you develop these tools completely and confidently.
Software -- Operating Systems.
Managing Projects with GNU MakeThe Power of GNU Make for Building Anything"O'Reilly Media, Inc."
The GNU Make Book
Managing Projects with GNU Make
A Practical Guide to Red Hat Linux 8
The Power of GNU Make for Building Anything
Beginning Linux?Programming
Programmable Hardware
The following list describes what you can get from this book: Information that lets you get set up to develop using the Yocto Project. Information to help developers who are new to the open source environment and to the distributed revision control system Git, which the Yocto Project uses. An understanding of common end-to-end development models and tasks. Information about common development tasks generally used during image development for embedded devices. Information on using the Yocto Project integration of the QuickEMUlator (QEMU), which lets you simulate running on hardware an image you have built using the OpenEmbedded build system. Many references to other sources of related information.
Find solutions to all your problems related to Linux system programming using practical recipes for developing your own system programs Key FeaturesDevelop a deeper understanding of how Linux system programming worksGain hands-on experience of working with different Linux projects with the help of practical examplesLearn how to develop your own programs for LinuxBook Description Linux is the world's most popular open source operating system (OS). Linux System Programming Techniques will enable you to extend the Linux OS with your own system programs and communicate with other programs on the system. The book begins by exploring the Linux filesystem, its basic commands, built-in manual pages, the GNU compiler collection (GCC), and Linux system calls. You'll then discover how to handle errors in your programs and will learn to catch errors and print relevant information about them. The book takes you through multiple recipes on how to read and write files on the system, using both streams and file descriptors. As you advance, you'll delve into forking, creating zombie processes, and daemons, along with recipes on how to handle daemons using systemd. After this, you'll find out how to create shared libraries and start exploring different types of interprocess communication (IPC). In the later chapters, recipes on how to write programs using POSIX threads and how to debug your programs using the GNU debugger (GDB) and Valgrind will also be covered. By the end of this Linux book, you will be able to develop your own system programs for Linux, including daemons, tools, clients, and filters. What you will learnDiscover how to write programs for the Linux system using a wide variety of system callsDelve into the working of POSIX functionsUnderstand and use key concepts such as signals, pipes, IPC, and process managementFind out how to integrate programs with a Linux systemExplore advanced topics such as filesystem operations, creating shared libraries, and debugging your programsGain an overall understanding of how to debug your programs using ValgrindWho this book is for This book is for anyone who wants to develop system programs for Linux and gain a deeper understanding of the Linux system. The book is beneficial for anyone who is facing issues related to a particular part of Linux system programming and is looking for specific recipes or solutions.
The Art of UNIX Programming poses the belief that understanding the unwritten UNIX engineering tradition and mastering its design patterns will help programmers of all stripes to become better programmers. This book attempts to capture the engineering wisdom and design philosophy of the UNIX, Linux, and Open Source software development community as it has evolved over the past three decades, and as it is applied today by the most experienced programmers. Eric Raymond offers the next generation of "hackers" the unique opportunity to learn the connection between UNIX philosophy and practice through careful case studies of the very best UNIX/Linux programs.
Create fast and reliable embedded solutions with Linux 5.4 and the Yocto Project 3.1 (Dunfell)
The Art of UNIX Programming
Time Management for System Administrators
Multitool Linux
GNU Autoconf, Automake, and Libtool
Managing Projects with Make