

Gnu Make Documentation

Here is a complete package for programmers who are new to UNIX or who would like to make better use of the system. The book provides an introduction to all the tools needed for a C programmer. The CD contains sources and binaries for the most popular GNU tools, including their C/C++ compiler. Managing Projects with GNU MakeThe Power of GNU Make for Building Anything©O'Reilly Media, Inc."

Includes Gtks, MonoDevelop, Web services, and IKVM.

GNU Emacs is much more than a word processor; over the years it has expanded into and entire workflow environment. Programmers are impressed by its integrated debugging and project management features. Emacs is also a multi-lingual word processor, can handle all your email and Usenet news needs, display web pages, and even has a diary and a calendar for your appointments. When you tire of all the work you can accomplish with it, Emacs contains games to play.Features include:* Special editing modes for 25 programming languages including Java, Perl, C, C++, Objective C, Fortran, Lisp, Scheme, and Pascal.* Special scripting language modes for Bash, other common shells, and creating Makefiles for GNU/Linux, Unix, Windows/DOS and VMS systems* Support for typing and displaying in 21 non-English languages, including Chinese, Czech, Hindi, Hebrew, Russian, Vietnamese, and all Western European languages* Creates Postscript output from plain text files and has special editing modes for LaTeX and TeX* Compile and debug from inside Emacs* Maintain extensive ChangeLogs* Extensive file merge and diff functions* Directory navigation: flag, move, and delete files and sub-directories recursively* Run shell commands from inside Emacs, or even use Emacs as a shell itself (Eshell)* Version control management for release and beta versions, with CVS and RCS integration.* And much more!

An Introduction to GCC

Programming Embedded Systems

A Program for Directing Recompilation : GNU Make Version 3.79.1

GNU Make

Linux Cookbook

Bash Reference Manual

This book provides an introduction to Bluetooth programming, with a specific focus on developing real code. The authors discuss the major concepts and techniques involved in Bluetooth programming, with special emphasis on how they relate to other networking technologies. They provide specific descriptions and examples for creating applications in a number of programming languages and environments including Python, C, Java, GNU/Linux, Windows XP, Symbian Series 60, and Mac OS X. No previous experience with Bluetooth is assumed, and the material is suitable for anyone with some programming background. The authors place special emphasis on the essential concepts and techniques of Bluetooth programming, starting simply and allowing the reader to quickly master the basic concepts before addressing advanced features.

Master the Linux Tools That Will Make You a More Productive, Effective Programmer The Linux Programmer's Toolbox helps you tap into the vast collection of open source tools available for GNU/Linux. Author John Fusco systematically describes the most useful tools available on most GNU/Linux distributions using concise examples that you can easily modify to meet your needs. You'll start by learning the basics of downloading, building, and installing open source projects. You'll then learn how open source tools are distributed, and what to look for to avoid wasting time on projects that aren't ready for you. Next, you'll learn the ins and outs of building your own projects. Fusco also demonstrates what to look for in a text editor, and may even show you a few new tricks in your favorite text editor. You'll enhance your knowledge of the Linux kernel by learning how it interacts with your software. Fusco walks you through the fundamentals of the Linux kernel with simple, thought-provoking examples that illustrate the principles behind the operating system. Then he shows you how to put this knowledge to use with more advanced tools. He focuses on how to interpret output from tools like sar, vmstat, valgrind, strace, and apply it to your application; how to take advantage of various programming APIs to develop your own tools; and how to write code that monitors itself. Next, Fusco covers tools that help you enhance the performance of your software. He explains the principles behind today's multicore CPUs and demonstrates how to squeeze the most performance from these systems. Finally, you'll learn tools and techniques to debug your code under any circumstances. Coverage includes Maximizing productivity with editors, revision control tools, source code browsers, and "beautifiers" Interpreting the kernel: what your tools are telling you Understanding processes--and the tools available for managing them Tracing and resolving application bottlenecks with gprof and valgrind Streamlining and automating the documentation process Rapidly finding help, solutions, and workarounds when you need them Optimizing program code with sar, vmstat, iostat, and other tools Debugging IPC with shell commands: signals, pipes, sockets, files, and IPC objects Using printf, gdb, and other essential debugging tools Foreword Preface Acknowledgments About the Author Chapter 1 Downloading and Installing Open Source Tools Chapter 2 Building from Source Chapter 3 Finding Help Chapter 4 Editing and Maintaining Source Files Chapter 5 What Every Developer Should Know about the Kernel Chapter 6 Understanding Processes Chapter 7 Communication between Processes Chapter 8 Debugging IPC with Shell Commands Chapter 9 Performance Tuning Chapter 10 Debugging Index

" This book represents a thorough and extensive treatment of the software build process including the choices, benefits, and challenges of a well designed build process. I recommend it not only to all software build engineers but to all software developers since a well designed build process is key to an effective software development process. " —Kevin Bodie, Director Software Development, Pitney Bowes Inc. " An excellent and detailed explanation of build systems, an important but often overlooked part of software development projects. The discussion of productivity as related to build systems is, alone, well worth the time spent reading this book. " —John M. Pantone, Objectech Corporation, VP, IT Educator and Course Developer " Peter Smith provides an interesting and accessible look into the world of software build systems, distilling years of experience and covering virtually every type of tool in the build engineer ' s toolbox. Well organized, well written, and very thorough; I would recommend this book to anyone with a build system under their responsibility. " —Jeff Overbey, Project Co-Lead, Pthoran " Software Build Systems teaches how to think about building software. It surveys the tools and techniques for building software products and the ways things go wrong. This book will appeal to those new to build systems as well as experienced build system engineers. " —Monte Davidoff, Software Development Consultant, Alluvial Software, Inc. Inadequate build systems can dramatically impact developer productivity. Bad dependencies, false compile errors, failed software images, slow compilation, and time-wasting manual processes are just some of the byproducts of a subpar build system. In Software Build Systems, software productivity expert Peter Smith shows you how to implement build systems that overcome all these problems, so you can deliver reliable software more rapidly, at lower cost. Smith explains the core principles underlying highly efficient build systems, surveying both system features and usage scenarios. Next, he encapsulates years of experience in creating and maintaining diverse build systems—helping you make well-informed choices about tools and practices, and avoid common traps and pitfalls. Throughout, he shares a wide range of practical examples and lessons from multiple environments, including Java, C++, C, and C#. Coverage includes • Mastering build system concepts, including source trees, build tools, and compilation tools • Comparing five leading build tools: GNU Make, Ant, SCons, CMake, and the Eclipse IDE ' s integrated build features • Ensuring accurate dependency checking and efficient incremental compilation • Using metadata to assist debugging, profiling, and source code documentation • Packaging software for installation on your target machine • Best practices for managing complex version-control systems, build machines, and compilation tools If you ' re a developer, this book will illuminate the issues involved in building and maintaining the build system that ' s best for your team. If you ' re a manager, you ' ll discover how to evaluate your team ' s build system and improve its effectiveness. And if you ' re a build " guru, " you ' ll learn how to optimize the performance and scalability of your build system, no matter how demanding your requirements are.

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 syncn 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 GNU Make Book

Using GCC

A Program for Directed Recompilation : GNU Make Version 3.81

Ubuntu Linux Bible

Ubuntu 8.10 Linux Bible

For the GNU Compilers Gcc and G++

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.

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 together on this book to teach developers 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 study guide to the interactions between the 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.

Programming from the Ground Up uses Linux assembly language to teach new programmers the most important concepts in programming. It takes you a step at a time through these concepts: * How the processor views memory * How the processor operates * How programs interact with the operating system * How computers represent data internally * How to do low-level and high-level optimization Most beginning-level programming books attempt to shield the reader from how their computer really works. Programming from the Ground Up starts by teaching how the computer works under the hood, so that the programmer will have a sufficient background to be successful in all areas of programming. This book is being used by Princeton University in their COS 217 "Introduction to Programming Systems" course.

Applying revision control system and source code control system.

The Art of UNIX Programming

Text Processing and Pattern Matching

Free Your Numbers

R Markdown

Managing Projects with Make

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"

Carries readers from the beginning through the proficient stages of learning the GNU Emacs editor, covering everything from simple text editing to moderately complicated customization and programming. Original. (Advanced).

This volume is the official reference manual for GNU Bash, the standard GNU command-line interpreter.

Effective awk Programming,3rd Edition, focuses entirely on awk, exploring it in the greatest depth of the three awk titles we carry. It's an excellent companion piece to the more broadly focused second edition. This book provides complete coverage of the gawk 3.1 language as well as the most up-to-date coverage of the POSIX standard for awk available anywhere. Author Arnold Robbins clearly distinguishes standard awk features from GNU awk (gawk)-specific features, shines light into many of the "dark corners" of the language (areas to watch out for when programming), and devotes two full chapters to example programs. A brand new chapter is devoted to TCP/IP networking with gawk. He includes a summary of how the awk language evolved. The book also covers: Internationalization of gawk Interfacing to i18n at the awk level Two-way pipes TCP/IP networking via the two-way pipe interface The new PROCINFO array, which provides information about running gawk Profiling and pretty-printing awk programs in addition to covering the awk language, this book serves as the official "User's Guide" for the GNU implementation of awk (gawk), describing in an integrated fashion the extensions available to the System V Release 4 version of awk that are also available in gawk. As the official gawk User's Guide, this book will also be available electronically, and can be freely copied and distributed under the terms of the Free Software Foundation's Free Documentation License (FDL). A portion of the proceeds from sales of this book will go to the Free Software Foundation to support further development of GNU software. This book is also available in electronic form; you have the freedom to modify this GNU Manual, like GNU software. Copies published by the Free Software Foundation raise funds for GNU development.

A Developer's Notebook

The Gnu Octave 4.0 Reference Manual 1/2

Learning GNU Emacs

Version Management with CVS

The Power of GNU Make for Building Anything

Software Build Systems

The definitive reference manual for the most widely used C compiler in the world, written by the program's original author and its current developers. Learn how GCC supports language standards and extends support beyond them: how to fine-tune programs for your specific platform; and all the Objective-C runtime features. Also contains the complete list of GCC command options, and shows many features of GCC's language support. For intermediate-level and above programmers who know either C, C++ or Objective C.

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 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 Meeckenburg, 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.

Software -- Operating Systems

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--

A Complete Introduction

GNU Autoconf, Automake, and Libtool

Principles and Experience

Debugging with GDB

Sorting, Extending, and Customizing

Mono

R Markdown: The Definitive Guide is the first official book authored by the core R Markdown developers that provides a comprehensive and accurate reference to the R Markdown ecosystem. With R Markdown, you can easily create reproducible data analysis reports, presentations, dashboards, interactive applications, books, dissertations, websites, and journal articles, while enjoying the simplicity of Markdown and the great power of R and other languages. In this book, you will learn Basics: Syntax of Markdown and R code chunks, how to generate figures and tables, and how to use other computing languages Built-in output formats of R Markdown: PDF/HTML/Word/RTF/Markdown documents and ioslides/Slidy/Beamer/PowerPoint presentations Extensions and applications: Dashboards, Tufté handouts, xaringan/reveal.js presentations, websites, books, journal articles, and interactive tutorials Advanced topics: Parameterized reports, HTML widgets, document templates, custom output formats, and Shiny documents. Yihui Xie is a software engineer at RStudio. He has authored and co-authored several R packages, including knitr, rmarkdown, bookdown, blogdown, shiny, xaringan, and animation. He has published three other books, Dynamic Documents with R and knitr, bookdown: Authoring Books and Technical Documents with R Markdown, and blogdown: Creating Websites with R Markdown. J.J. Allaire is the founder of RStudio and the creator of the RStudio IDE. He is an author of several packages in the R Markdown ecosystem including rmarkdown, hexdashboard, learnr, and radix. Garrett Grolmund is the co-author of R for Data Science and author of Hands-On Programming with R. He wrote the lubridate R package and works for RStudio as an advocate who trains engineers to do data science with R and the Tidyverse.

This manual is a printed edition of the official Org Mode 9.2 Reference Manual - release 9.2. A free PDF copy may be found at orgmode.org. Org is a mode for keeping notes, maintaining TODO lists, and project planning with a fast and effective plain-text system. It also is an authoring system with unique support for literate programming and reproducible research. Org is implemented on top of Outline mode, which makes it possible to keep the content of large files well structured. Visibility cycling and structure editing help to work with the tree. Tables are easily created with a built-in table editor. Plain text URI-like links connect to websites, emails, Usenet messages, BBDB entries, and any files related to the projects. Org develops organizational tasks around notes files that contain lists or information about projects as plain text. Project planning and task management makes use of metadata which is part of an outline note. Based on this data, specific entries can be extracted in queries and create dynamic agenda views that also integrate the Emacs calendar and diary. Org can be used to implement many different project planning schemes, such as David Allen's GTD system.

This is a Starter guide designed to enable the reader to start using MinGW to develop Microsoft Windows applications as quickly, and as efficiently, as possible. This book is for C and C++ developers who are looking for new and effective instruments to use in application development for Microsoft Windows. No experience of MinGW is needed: this book will guide you through the essentials to get you using the software like a pro in a matter of hours.

This manual is the definitive guide to GNU Octave, an interactive environment for numerical computation. GNU Octave provides a convenient command-line interface for solving linear and nonlinear problems using vectors and matrices. This updated edition of the manual covers version 4.0.0 of GNU Octave, and includes documentation for new features such as the new graphical userinterface, sparse matrices, linear programming and computational geometry. GNU Octave is free software, distributed under the GNU General Public License (GPL). As GNU Octave became such a big project over the years, we had to split this reference manual in two parts that are two separate physical books. To keep it consistent with our digital manual, the references and page numbers cover both physical books as it were one. Therefore please note that you probably want to have both parts.

PostgreSQL 8.4 Official Documentation - Volume II. Server Administration

GNU Parallel 2018

With C and GNU Development Tools

Bluetooth Essentials for Programmers

Effective awk Programming

From Source Control to Project Control

Welcome to the "PostgreSQL 8.4 Official Documentation - Volume II. Server Administration"! After many years of development, PostgreSQL has become feature-complete in many areas. This release shows a targeted approach to adding features (e.g., authentication, monitoring, space reuse), and adds capabilities defined in the later SQL standards.

Provides an introduction to the GNU C and C++ compilers, gcc and g++. This manual includes: compiling C and C++ programs using header files and libraries, warning options, use of the preprocessor, static and dynamic linking, optimization, platform-specific options, profiling and coverage testing, paths and environment variables, and more.

Describes how to use CVS, the concurrent version system for source-code management.

The GNU Scientific Library (GSL) is a free numerical library for C and C++ programmers. It provides over 1,000 routines for solving mathematical problems in science and engineering. Written by the developers of GSL this reference manual is the definitive guide to the library. All the money raised from the sale of this book supports the development of the GNU Scientific Library. This is the third edition of the manual, and corresponds to version 1.12 of the library (updated January 2009).

Instant MinGW Starter

The Definitive Guide

The Org Mode 9.2 Reference Manual

Reference Manual

For CVS 1.11

Effective AWK Programming

This book is part of the PostgreSQL 9.0 documentation collection (up-to-date & full), published by Fultus Corporation. PostgreSQL 9.0 includes built-in, binary replication, and over a dozen other major features which will appeal to everyone from web developers to database hackers.

Bring yourself up to date on everything you need to know about Ubuntu Linux The Ubuntu Linux Bible covers all of the latest developments in version 8.10 and 8.04, including tips for newcomers as well as expert guidance for seasoned system administrators. Learn about topics like the Gnome Desktop, the Bash shell, virtual machines, wireless networking, file sharing, and more. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

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.

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.

A User's Guide for GNU AWK

The GNU Compiler Collection Reference Manual

Reference Documentation for Bash Edition 2.5b, for Bash Version 2.05b

Beginner's Guide : Become a Proficient Octave User by Learning this High-level Scientific Numerical Tool from the Ground Up

Managing Projects with GNU Make

The Linux Programmer's Toolbox

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.

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

PostgreSQL 9.0 Official Documentation - Volume II. Server Administration

GNU Emacs Manual 26.1

GNU Scientific Library

The GNU Source-level Debugger

Applying RCS and SCCS

The GAWK Manual