

Classic Shell Scripting Hidden Commands That Unlock The Power Of Unix

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.

Salary surveys worldwide regularly place software architect in the top 10 best jobs, yet no real guide exists to help developers become architects. Until now. This book provides the first comprehensive overview of software architecture's many aspects. Aspiring and existing architects alike will examine architectural characteristics, architectural patterns, component determination, diagramming and presenting architecture, evolutionary architecture, and many other topics. Mark Richards and Neal Ford—hands-on practitioners who have taught software architecture classes professionally for years—focus on architecture principles that apply across all technology stacks. You'll explore software architecture in a modern light, taking into account all the innovations of the past decade. This book examines:

- Architecture patterns: The technical basis for many architectural decisions
- Components: Identification, coupling, cohesion, partitioning, and granularity
- Soft skills: Effective team management, meetings, negotiation, presentations, and more
- Modernity: Engineering practices and operational approaches that have changed radically in the past few years
- Architecture as an engineering discipline: Repeatable results, metrics, and concrete valuations that add rigor to software architecture

Master the complexities of Bash shell scripting and unlock the power of shell for your enterprise

Key Features

- Identify high-level steps such as verifying user input
- Using the command line and conditional statements in creating/executing simple shell scripts
- Create and edit dynamic shell scripts to manage complex and repetitive tasks
- Leverage the command-line to bypass GUI and automate common tasks

Book Description

In this book, you'll discover everything you need to know to master shell scripting and make informed choices about the elements you employ. Grab your favorite editor and start writing your best Bash scripts step by step. Get to grips with the fundamentals of creating and running a script in normal mode, and in debug mode. Learn about various conditional statements' code snippets, and realize the power of repetition and loops in your shell script. You will also learn to write complex shell scripts. This book will also deep dive into file system administration, directories, and system administration like networking, process management, user authentications, and package installation and regular expressions. Towards the end of the book, you will learn how to use Python as a BASH Scripting alternative. By the end of this book, you will know shell scripts at the snap of your fingers and will be able to automate and communicate with your system with keyboard expressions. What you will learn

- Make, execute, and debug your first Bash script
- Create interactive scripts that prompt for user input
- Foster menu structures for operators with little command-line experience
- Develop scripts that dynamically edit web configuration files to produce a new virtual host
- Write scripts that use AWK to search and reports on log files
- Draft effective scripts using functions as building blocks, reducing maintenance and build time
- Make informed choices by comparing different script languages such as Python with BASH

Who this book is for

If you are a Linux administrator or a system administrator and are interested in automating tasks in your daily lives, saving time and effort, this book is for you. Basic shell scripting and command-line experience will be required. Familiarity with the tasks you need to automate will be helpful.

The key to mastering any Unix system, especially Linux and Mac OS X, is a thorough knowledge of shell scripting. Scripting is a way to harness and customize the power of any Unix system, and it's an essential skill for any Unix users, including system administrators and professional OS X developers. But beneath this simple promise lies a treacherous ocean of variations in Unix commands and standards. bash Cookbook teaches shell scripting the way Unix masters practice the craft. It presents a variety of recipes and tricks for all levels of shell programmers so that anyone can become a proficient user of the most common Unix shell -- the bash shell -- and cygwin or other popular Unix emulation packages. Packed full of useful scripts, along with examples that explain how to create better scripts, this new cookbook gives professionals and power users everything they need to automate routine tasks and enable them to truly manage their systems -- rather than have their systems manage them.

Shell Programming in Unix, Linux and OS X

Unix Power Tools

Shell Scripting

Wicked Cool Shell Scripts, 2nd Edition

101 Scripts for Linux, OS X, and UNIX Systems

Windows NT Shell Scripting

Explains the progression in Unix from grep to sed and awk, describes how to write sed scripts, covers common programming constructs, and details awk's built-in functions

Unix Shell Programming is a tutorial aimed at helping Unix and Linux users get optimal performance out of their operating system. It shows them how to take control of their systems and work efficiently by harnessing the power of the shell to solve common problems. The reader learns everything he or she needs to know to customize the way a Unix system responds. The vast majority of Unix users utilize the Korn shell or some variant of the Bourne shell, such as bash. Three are covered in the third edition of Unix Shell Programming. It begins with a generalized tutorial of Unix and tools and then moves into detailed coverage of shell programming. Topics covered include: regular expressions, the kernel and the utilities, command files, parameters, manipulating text filters, understanding and debugging shell scripts, creating and utilizing variables, tools, processes, and customizing the shell.

For many users, working in the Unix environment means using vi, a full-screen text editor available on most Unix systems. Even those who know vi often make use of only a small number of its features.

Learning the vi Editor is a complete guide to text editing with vi. Topics new to the sixth edition include multiscreen editing and coverage of four vi clones: vim, elvis, nvi, and vile and their enhancements to vi, such as multi-window editing, GUI interfaces, extended regular expressions, and enhancements for programmers. A new appendix describes vi's place in the Unix and Internet cultures. Quickly learn the basics of editing, cursor movement, and global search and replacement. Then take advantage of the more subtle power of vi. Extend your editing skills by learning to use ex, a powerful line editor, from within vi. For easy reference, the sixth edition also includes a command summary at the end of each appropriate chapter. Topics covered include: Basic editing Moving around in a hurry Beyond the basics Greater power with ex Global search and replacement Customizing vi and ex Command shortcuts

Introduction to the vi clones' extensions The vi, elvis, vim, and vile editors Quick reference

to vi and ex commands vi and the Internet

Provides readers with end-to-end shell scripts that can be used to automate repetitive tasks and solve real-world system administration problems Targets the specific command structure for four popular UNIX systems: Solaris, Linux, AIX, and HP-UX Illustrates dozens of example tasks, presenting the proper command syntax and analyzing the performance gain or loss using various control structure techniques

Web site includes all the shell scripts used in the book

Effective awk Programming

Unix Shell Programming

The Linux Command Line, 2nd Edition

A Guide to the Most Frequently Used OpenSSL Features and Commands

Learning the Vi and Vim Editors

Using Csh & Tcsh

Introduces the UNIX environment in Mac OS X and explains concepts such as the Terminal application, compiling code, creating and installing packages, and building the Darwin kernel.

O'Reilly's bestselling book on Linux's bash shell is at it again. Now that Linux is an established player both as a server and on the desktop Learning the bash Shell has been updated and refreshed to account for all the latest changes. Indeed, this third edition serves as the most valuable guide yet to the bash shell. As any good programmer knows, the first thing users of the Linux operating system come face to face with is the shell the UNIX term for a user interface to the system. In other words, it's what lets you communicate with the computer via the keyboard and display. Mastering the bash shell might sound fairly simple but it isn't. In truth, there are many complexities that need careful explanation, which is just what Learning the bash Shell provides. If you are new to shell programming, the book provides an excellent introduction, covering everything from the most basic to the most advanced features. And if you've been writing shell scripts for years, it offers a great way to find out what the new shell offers. Learning the bash Shell is also full of practical examples of shell commands and programs that will make everyday use of Linux that much easier. With this book, programmers will learn: How to install bash as your login shell The basics of interactive shell use, including UNIX file and directory structures, standard I/O, and background jobs Command line editing, history substitution, and key bindings How to customize your shell environment without programming The nuts and bolts of basic shell programming, flow control structures, command-line options and typed variables Process handling, from job control to processes, coroutines and subshells Debugging techniques, such as trace and verbose modes Techniques for implementing system-wide shell customization and features related to system security

UNIX expert Randal K. Michael guides you through every detail of writing shell scripts to automate specific tasks. Each chapter begins with a typical, everyday UNIX challenge, then shows you how to take basic syntax and turn it into a shell scripting solution. Covering Bash, Bourne, and Korn shell scripting, this updated edition provides complete shell scripts plus detailed descriptions of each part. UNIX programmers and system administrators can tailor these to build tools that monitor for specific system events and situations, building solid UNIX shell scripting skills to solve real-world system administration problems.

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"

OpenSSL Cookbook

From Novice to Professional

Linux in a Nutshell

Bash, Bourne, and Korn Shell Scripting for Programmers, System Administrators, and UNIX Gurus

Sed & Awk

Unix in a Nutshell

Your hands-on guide to Windows PowerShell scripting fundamentals Expand your expertise--and teach yourself the fundamentals of Windows PowerShell scripting, including features available in Windows PowerShell 5. If you are an IT professional, power user, or consumer you'll get the guidance, exercises, and code you need to master core techniques for automating Windows setup, deployment, and management. Discover how to: Run cmdlets and command-line utilities Administer Windows-based servers and desktops with built-in cmdlets Use providers to access external information Write and run scripts from the Windows ISE Create functions that are easy to manage Build standardized environments with profiles Automate Windows systems with WMI, CIM cmdlets, and remoting Automate Active Directory Domain Services (AD DS) Debug scripts and handle errors Run commands that survive interruptions Use Desired State Configuration (DSC) to manage software services and their environments Get powerful new modules from PowerShell Gallery About You This book is for: IT professionals and power users who want to get productive with Windows PowerShell, including new features in Windows PowerShell 5 Windows system administrators who want to be more efficient and productive Anyone pursuing Windows PowerShell certifications No experience with Windows PowerShell or other scripting technologies necessary

A compendium of shell scripting recipes that can immediately be used, adjusted, and applied The shell is the primary way of communicating with the Unix and Linux systems, providing a direct way to program by automating simple-to-intermediate tasks. With this book, Linux & Steve Parker shares a collection of shell scripting recipes that can be used as is or easily modified for a variety of environments or situations. The book covers shell programming, with a focus on Linux and the Bash shell; it provides credible, real-world relevance, as well as providing the flexible tools to get started immediately. Shares a collection of helpful shell scripting recipes that can immediately be used for various real-world challenges Features recipes for system tools, shell features, and systems administration Provides a host of plug and play recipes for to immediately apply and easily modify so the wheel doesn't have to be reinvented with each challenge faced Come out of your shell and dive into this collection of tried and tested shell scripting recipes that you can start using right away!

It's simple: you need to know how to work with the bash shell if you want to get to the heart of Mac OS X, Linux, and other Unix systems. Updated for the most recent version of bash, this concise little book puts all of the essential information about bash at your fingertips so you can quickly find answers to annoying questions that always come up when you're writing shell scripts -- What characters do you need to do variable substitution? How do you get variable substitution to do exactly what you want? How do you use arrays? -- and much more. If you're a user or programmer of any Unix variant, or if you're using bash on Windows, you'll find this pocket reference indispensable. This book covers: Invoking the Shell Syntax Functions Variables Arithmetic Expressions Command History Programmable Completion Job Control Shell Options Command Execution Coprocesses Restricted Shells Built-in Commands

Covering all major platforms-Linux, Unix, Mac OS X, and Windows-this guide shows programmers and power users how to customize an operating system, automate commands, and simplify administration tasks using shell scripts Offers complete shell-scripting instructions, robust code examples, and full scripts for OS customization Covers shells as a user interface, basic scripting techniques, script editing, debugging, graphing data, and simplifying administrative tasks In addition to Unix and Linux scripting, the book covers the latest Windows scripting techniques and offers a complete tutorial on Mac OS X scripting, including detailed coverage of mobile file systems, legacy applications, Mac text editors, video captures, and the Mac OS X Open Scripting Architecture

Hidden Commands that Unlock the Power of Unix

Learning the Vi Editor

A practical guide to Linux command-line, Bash scripting, and Shell programming, 2nd Edition

Text Processing and Pattern Matching

Learning the Unix Operating System

An Engineering Approach

By its very nature, Unix is a "power tools" environment. Even beginning Unix users quickly grasp that immense power exists in shell programming, aliases and history mechanisms, and various editing tools. Nonetheless, few users ever really master the power available to them with Unix. There is just too much to learn! Unix Power Tools, Third Edition, literally contains thousands of tips, scripts, and techniques that make using Unix easier, more effective, and even more fun. This book is organized into hundreds of short articles with plenty of references to other sections that keep you flipping from new article to new article. You'll find the book hard to put down as you uncover one interesting tip after another. With the growing popularity of Linux and the advent of Mac OS X, Unix has metamorphosed into something new and exciting. With Unix no longer perceived as a difficult operating system, more and more users are discovering its

advantages for the first time. The latest edition of this best-selling favorite is loaded with advice about almost every aspect of Unix, covering all the new technologies that users need to know. In addition to vital information on Linux, Mac OS X, and BSD, Unix Power Tools, Third Edition, now offers more coverage of bcash, zsh, and new shells, along with discussions about modern utilities and applications. Several sections focus on security and Internet access, and there is a new chapter on access to Unix from Windows, addressing the heterogeneous nature of systems today. You'll also find expanded coverage of software installation and packaging, as well as basic information on Perl and Python. The book's accompanying web site provides some of the best software available to Unix users, which you can download and add to your own set of power tools. Whether you are a newcomer or a Unix power user, you'll find yourself thumbing through the gold mine of information in this new edition of Unix Power Tools to add to your store of knowledge. Want to try something new? Check this book first, and you're sure to find a tip or trick that will prevent you from learning things the hard way.

This Nutshell Handbook® is a thorough introduction to the Korn shell, both as a user interface and as a programming language. The Korn shell, like the C and Bourne shells, is a program that interprets UNIX commands. It has many features that aren't found in other shells, including command history (the ability to recall and edit previous commands). The Korn shell is also faster; several of its features allow you to write programs that execute more quickly than their Bourne or C shell equivalents. This book provides a clear and concise explanation of the Korn shell's features. It explains ksh string operations, co-processes, signals and signal handling, and one of the worst "dark corners" of shell programming: command-line interpretation. It does this by introducing simple real-life examples and then adding options and complexity in later chapters, illustrating the way real-world script development generally proceeds. An additional (and unique) programming aid, a Korn shell debugger (kshdb), is also included. Learning the Korn Shell is an ideal resource for many UNIX users and programmers, including software developers who want to "prototype" their designs, system administrators who want to write tools for their own use, and even novices who just want to use some of ksh's more advanced interactive features.

Describes how to create and customize shell scrips for UNIX.

A guide to the most frequently used OpenSSL features and commands, written by Ivan Ristic. Comprehensive coverage of OpenSSL installation, configuration, and key and certificate management Includes SSL/TLS Deployment Best Practices, a design and deployment guide Written by a well-known practitioner in the field and the author of SSL Labs and the SSL/TLS configuration assessment tool Available in a variety of digital formats (PDF, EPUB, Mobi/Kindle); no DRM Continuously updated OpenSSL Cookbook is built around one chapter from Bulletproof SSL/TLS and PKI, a larger work that provides complete coverage of SSL/TLS and PKI topics. To download your free copy in various formats, visit feistyduck.com/books/openssl-cookbook/

Fundamentals of Software Architecture

A Concise Guide for the New User

UNIX and Linux System Administration Handbook

Advanced Bash Scripting Guide

Beginning Shell Scripting

Advance your understanding of the Linux command line with this invaluable resource Linux Command Line and Shell Scripting Bible, 4th Edition is the newest installment in the indispensable series known to Linux developers all over the world. Packed with concrete strategies and practical tips, the latest edition includes brand-new content covering: Understanding the Shell Writing Simple Script Utilities Producing Database, Web & Email Scripts Creating Fun Little Shell Scripts Written by accomplished Linux professionals Christine Bresnahan and Richard Blum, Linux Command Line and Shell Scripting Bible, 4th Edition teaches readers the fundamentals and advanced topics necessary for a comprehensive understanding of shell scripting in Linux. The book is filled with real-world examples and usable scripts, helping readers navigate the challenging Linux environment with ease and convenience. The book is perfect for anyone who uses Linux at home or in the office and will quickly find a place on every Linux enthusiast's bookshelf.

"As an author, editor, and publisher, I never paid much attention to the competition—except in a few cases. This is one of those cases. The UNIX System Administration Handbook is one of the few books we ever measured ourselves against."

—Tim O'Reilly, founder of O'Reilly Media "This edition is for those whose systems live in the cloud or in virtualized data centers; those whose administrative work largely takes the form of automation and configuration source code; those who collaborate closely with developers, network engineers, compliance officers, and all the other worker bees who inhabit the modern hive." —Paul Vixie, Internet Hall of Fame-recognized innovator and founder of ISC and Farsight Security

"This book is fun and functional as a desktop reference. If you use UNIX and Linux systems, you need this book in your short-reach library. It covers a bit of the systems' history but doesn't blaviate. It's just straight-forward information

delivered in a colorful and memorable fashion.” —Jason A. Nunnelley UNIX® and Linux® System Administration Handbook, Fifth Edition, is today’s definitive guide to installing, configuring, and maintaining any UNIX or Linux system, including systems that supply core Internet and cloud infrastructure. Updated for new distributions and cloud environments, this comprehensive guide covers best practices for every facet of system administration, including storage management, network design and administration, security, web hosting, automation, configuration management, performance analysis, virtualization, DNS, security, and the management of IT service organizations. The authors—world-class, hands-on technologists—offer indispensable new coverage of cloud platforms, the DevOps philosophy, continuous deployment, containerization, monitoring, and many other essential topics. Whatever your role in running systems and networks built on UNIX or Linux, this conversational, well-written guide will improve your efficiency and help solve your knottiest problems.

The Tcl language and Tk graphical toolkit are simple and powerful building blocks for custom applications. The Tcl/Tk combination is increasingly popular because it lets you produce sophisticated graphical interfaces with a few easy commands, develop and change scripts quickly, and conveniently tie together existing utilities or programming libraries. One of the attractive features of Tcl/Tk is the wide variety of commands, many offering a wealth of options. Most of the things you'd like to do have been anticipated by the language's creator, John Ousterhout, or one of the developers of Tcl/Tk's many powerful extensions. Thus, you'll find that a command or option probably exists to provide just what you need. And that's why it's valuable to have a quick reference that briefly describes every command and option in the core Tcl/Tk distribution as well as the most popular extensions. Keep this book on your desk as you write scripts, and you'll be able to find almost instantly the particular option you need. Most chapters consist of alphabetical listings. Since Tk and mega-widget packages break down commands by widget, the chapters on these topics are organized by widget along with a section of core commands where appropriate. Contents include: Core Tcl and Tk commands and Tk widgets C interface (prototypes) Expect [incr Tcl] and [incr Tk] Tix TclX BLT Oratcl, SybTcl, and Tclodbc

One of the first books available on scripting the Windows NT shell, this title appeals to the many UNIX users migrating to Windows NT. It integrates hundreds of proven example scripts throughout the book and gives comprehensive reference of shell commands organized by functional group for ease of use.

Guide to UNIX Using Linux

The Linux Command Line

Expert Recipes for Linux, Bash, and more

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

The Power of GNU Make for Building Anything

Learning the Korn Shell

Using csh & tcsh describes from the beginning how to use csh--the standard shell on most UNIX systems--interactively. More importantly, it shows the reader how to get work done faster with less typing.

As an open operating system, Unix can be improved on by anyone and everyone: individuals, companies, universities, and more. As a result, the very nature of Unix has been altered over the years by numerous extensions formulated in an assortment of versions. Today, Unix encompasses everything from Sun's Solaris to Apple's Mac OS X and more varieties of Linux than you can easily name. The latest edition of this bestselling reference brings Unix into the 21st century. It's been reworked to keep current with the broader state of Unix in today's world and highlight the strengths of this operating system in all its various flavors. Detailing all Unix commands and options, the informative guide provides generous descriptions and examples that put those commands in context. Here are some of the new features you'll find in Unix in a Nutshell, Fourth Edition: Solaris 10, the latest version of the SVR4-based operating system, GNU/Linux, and Mac OS X Bash shell (along with the 1988 and 1993 versions of ksh) tsch shell (instead of the original Berkeley csh) Package management programs, used for program installation on popular GNU/Linux systems, Solaris and Mac OS X GNU Emacs Version 21 Introduction to source code management systems Concurrent versions system Subversion version control system GDB debugger As Unix has progressed, certain commands that were once critical have fallen into disuse. To that end, the book has also dropped material that is no longer relevant, keeping it taut and current. If you're a Unix user or programmer, you'll recognize the value of this complete, up-to-date Unix reference. With chapter overviews, specific examples, and detailed command.

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 free and open source software. The third edition of Effective awk Programming is a GNU Manual and is published by O'Reilly & Associates under the Free Software

Foundation's Free Documentation License (FDL). A portion of the proceeds from the sale of this book is donated to the Free Software Foundation to 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.

Portable shell scripting is the future of modern Linux, OS X, and Unix command-line access. *Beginning Portable Shell Scripting: From Novice to Professional* teaches shell scripting by using the common core of most shells and expands those principles to all of scripting. You will learn about portable scripting and how to use the same syntax and design principles for all shells. You will discover about the interaction between shells and other scripting languages like Ruby and Python, and everything you learn will be shown in context for Linux, OS X, bash, and AppleScript. What you will learn This book will prime you on not just shell scripting, but also the modern context of portable shell scripting. You will learn The core Linux/OS X shell constructs from a portability point of view How to write scripts that write other scripts, and how to write macros and debug them How to write and design shell script portably from the ground up How to use programmable utilities and their inherent portability to your advantage, while pinpointing potential traps Pulling everything together, how to engineer scripts that play well with Python and Ruby, and even run on embedded systems Who this book is for This book is for system administrators, programmers, and testers working across Linux, OS X, and the Unix command line. Table of Contents Introduction to Shell Scripting Patterns and Regular Expressions Basic Shell Scripting Core Shell Features Explained Shells Within Shells Invocation and Execution Shell Language Portability Utility Portability Bringing It All Together Shell Script Design Mixing and Matching

Pro Bash Programming

Managing Projects with GNU Make

Big Book of Apple Hacks

bash Pocket Reference

Beginning Linux?Programming

Windows PowerShell Step by Step

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.

Shell Programming in Unix, Linux and OS X is a thoroughly updated revision of Kochan and Wood's classic Unix Shell Programming tutorial. Following the methodology of the original text, the book focuses on the POSIX standard shell, and teaches you how to develop programs in this useful programming environment, taking full advantage of the underlying power of Unix and Unix-like operating systems. After a quick review of Unix utilities, the book's authors take you step-by-step through the process of building shell scripts, debugging them, and understanding how they work within the shell's environment. All major features of the shell are covered, and the large number of practical examples make it easy for you to build shell scripts for your particular applications. The book also describes the major features of the Korn and Bash shells. Learn how to... Take advantage of the many utilities provided in the Unix system Write powerful shell scripts Use the shell's built-in decision-making and looping constructs Use the shell's powerful quoting mechanisms Make the most of the shell's built-in history and command editing capabilities Use regular expressions with Unix commands Take advantage of the special features of the Korn and Bash shells Identify the major differences between versions of the shell language Customize the way your Unix system responds to you Set up your shell environment Make use of functions Debug scripts Contents at a Glance 1 A Quick Review of the Basics 2 What Is the Shell? 3 Tools of the Trade 4 And Away We Go 5 Can I Quote You on That? 6 Passing Arguments 7 Decisions, Decisions 8 'Round and 'Round She Goes 9 Reading and Printing Data 10 Your Environment 11 More on Parameters 12 Loose Ends 13 Rolo Revisited 14 Interactive and Nonstandard Shell Features A Shell Summary B For More Information

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 (or command line). Along the way you'll learn the timeless skills handed down by generations of experienced, 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.

Written with a clear, straightforward writing style and packed with step-by-step projects for direct, hands-on learning, Guide to UNIX Using Linux, 4E is the perfect resource for learning UNIX and Linux from the ground up. Through the use of practical examples, end-of-chapter reviews, and interactive exercises, novice users are transformed into confident UNIX/Linux users who can employ utilities, master files, manage and query data, create scripts, access a network or the Internet, and navigate popular user interfaces and software. The updated 4th edition incorporates coverage of the latest versions of UNIX and Linux, including new versions of Red Hat, Fedora, SUSE, and Ubuntu Linux. A new chapter has also been added to cover basic networking utilities, and several other chapters have been expanded to include additional information on the KDE and GNOME desktops, as well as coverage of the popular OpenOffice.org office suite. With a strong focus on universal UNIX and Linux commands that are transferable to all versions of Linux, this book is a must-

have for anyone seeking to develop their knowledge of these systems. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Mastering Unix Shell Scripting

Linux Command Line and Shell Scripting Bible

Tcl/Tk in a Nutshell

The Fourth Edition of Unix Shell Programming

Classic Shell Scripting

Beginning Portable Shell Scripting

For many users, working in the UNIX environment means using vi, a full-screen text editor available on most UNIX systems. Even those who know vi often make use of only a small number of its features. The vi Editor Pocket Reference is a companion volume to O'Reilly's updated sixth edition of Learning the vi Editor, a complete guide to text editing with vi. New topics in Learning the vi Editor include multi-screen editing and coverage of four vi clones: vim, elvis, nvi, and vile. This small book is a handy reference guide to the information in the larger volume, presenting movement and editing commands, the command-line options, and other elements of the vi editor in an easy-to-use tabular format.

Over the last few years, Linux has grown both as an operating system and a tool for personal and business use. Simultaneously becoming more user friendly and more powerful as a back-end system, Linux has achieved new plateaus: the newer filesystems have solidified, new commands and tools have appeared and become standard, and the desktop--including new desktop environments--have proved to be viable, stable, and readily accessible to even those who don't consider themselves computer gurus. Whether you're using Linux for personal software projects, for a small office or home office (often termed the SOHO environment), to provide services to a small group of colleagues, or to administer a site responsible for millions of email and web connections each day, you need quick access to information on a wide range of tools. This book covers all aspects of administering and making effective use of Linux systems. Among its topics are booting, package management, and revision control. But foremost in Linux in a Nutshell are the utilities and commands that make Linux one of the most powerful and flexible systems available. Now in its fifth edition, Linux in a Nutshell brings users up-to-date with the current state of Linux. Considered by many to be the most complete and authoritative command reference for Linux available, the book covers all substantial user, programming, administration, and networking commands for the most common Linux distributions.

Comprehensive but concise, the fifth edition has been updated to cover new features of major Linux distributions. Configuration information for the rapidly growing commercial network services and community update services is one of the subjects covered for the first time. But that's just the beginning. The book covers editors, shells, and LILO and GRUB boot options. There's also coverage of Apache, Samba, Postfix, sendmail, CVS, Subversion, Emacs, vi, sed, gawk, and much more. Everything that system administrators, developers, and power users need to know about Linux is referenced here, and they will turn to this book again and again.

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.

There's nothing that hard-core Unix and Linux users are more fanatical about than their text editor. Editors are the subject of adoration and worship, or of scorn and ridicule, depending upon whether the topic of discussion is your editor or someone else's. vi has been the standard editor for close to 30 years. Popular on Unix and Linux, it has a growing following on Windows systems, too. Most experienced system administrators cite vi as their tool of choice. And since 1986, this book has been the guide for vi. However, Unix systems are not what they were 30 years ago, and neither is this book. While retaining all the valuable features of previous editions, the 7th edition of Learning the vi and vim Editors has been expanded to include detailed information on vim, the leading vi clone. vim is the default version of vi on most Linux systems and on Mac OS X, and is available for many other operating systems too. With this guide, you learn text editing basics and advanced tools for both editors, such as multi-window editing, how to write both interactive macros and scripts to extend the editor, and power tools for programmers -- all in the easy-to-follow style that has made this book a classic. Learning the vi and vim Editors includes: A complete introduction to text editing with vi: How to move around vi in a hurry Beyond the basics, such as using buffers vi's global search and

replacement Advanced editing, including customizing vi and executing Unix commands How to make full use of vim: Extended text objects and more powerful regular expressions Multi-window editing and powerful vim scripts How to make full use of the GUI version of vim, called gvim vim's enhancements for programmers, such as syntax highlighting, folding and extended tags Coverage of three other popular vi clones -- nvi, elvis, and vile -- is also included. You'll find several valuable appendixes, including an alphabetical quick reference to both vi and ex mode commands for regular vi and for vim, plus an updated appendix on vi and the Internet. Learning either vi or vim is required knowledge if you use Linux or Unix, and in either case, reading this book is essential. After reading this book, the choice of editor will be obvious for you too.

Scripting the Linux Shell

vi Editor Pocket Reference

A Complete Introduction

Tips & Tools for unlocking the power of your Apple devices

Learning the bash Shell

Mac OS X for Unix Geeks

Classic Shell Scripting Hidden Commands that Unlock the Power of Unix "O'Reilly Media, Inc."

Shell scripts are an efficient way to interact with your machine and manage your files and system operations. With just a few lines of code, your computer will do exactly what you want it to do. But you can also use shell scripts for many other essential (and not-so-essential) tasks. This second edition of *Wicked Cool Shell Scripts* offers a collection of useful, customizable, and fun shell scripts for solving common problems and personalizing your computing environment. Each chapter contains ready-to-use scripts and explanations of how they work, why you'd want to use them, and suggestions for changing and expanding them. You'll find a mix of classic favorites, like a disk backup utility that keeps your files safe when your system crashes, a password manager, a weather tracker, and several games, as well as 23 brand-new scripts, including: – ZIP code lookup tool that reports the city and state – Bitcoin address information retriever – suite of tools for working with cloud services like Dropbox and iCloud – for renaming and applying commands to files in bulk – processing and editing tools Whether you want to save time managing your system or just find new ways to goof off, these scripts are wicked cool!

Bigger in size, longer in length, broader in scope, and even more useful than our original *Mac OS X Hacks*, the new *Big Book of Apple Hacks* offers a grab bag of tips, tricks and hacks to get the most out of Mac OS X Leopard, as well as the new line of iPods, iPhone, and Apple TV. With 125 entirely new hacks presented in step-by-step fashion, this practical book is for serious Apple computer and gadget users who really want to take control of these systems. Many of the hacks take you under the hood and show you how to tweak system preferences, alter or add keyboard shortcuts, mount drives and devices, and generally do things with your operating system and gadgets that Apple doesn't expect you to do. The *Big Book of Apple Hacks* gives you: Hacks for both Mac OS X Leopard and Tiger, their related applications, and the hardware they run on or connect to Expanded tutorials and lots of background material, including informative sidebars "Quick Hacks" for tweaking system and gadget settings in minutes Full-blown hacks for adjusting Mac OS X applications such as Mail, Safari, iCal, Front Row, or the iLife suite Plenty of hacks and tips for the Mac mini, the MacBook laptops, and new Intel desktops Tricks for running Windows on the Mac, under emulation in Parallels or as a standalone OS with Bootcamp The *Big Book of Apple Hacks* is not only perfect for Mac fans and power users, but also for recent -- and aspiring -- "switchers" new to the Apple experience. Hacks are arranged by topic for quick and easy lookup, and each one stands on its own so you can jump around and tweak whatever system or gadget strikes your fancy. Pick up this book and take control of Mac OS X and your favorite Apple gadget today!

The bash shell is a complete programming language, not merely a glue to combine external Linux commands. By taking full advantage of shell internals, shell programs can perform as snappily as utilities written in C or other compiled languages. And you will see how, without assuming Unix lore, you can write professional bash 4.0 programs through standard programming techniques. Complete bash coverage Teaches bash as a programming language Helps you master bash 4.0 features

A Desktop Quick Reference

Solutions and Examples for Bash Users

Bash Cookbook

Mastering Linux Shell Scripting,