

<<使用Perl实现系统管理自动化>>

图书基本信息

书名：<<使用Perl实现系统管理自动化>>

13位ISBN编号：9787564119287

10位ISBN编号：7564119284

出版时间：2010-1

出版时间：东南大学出版社

作者：艾德尔曼

页数：639

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

## 前言

Do you need tools for making your system administration work easier and more efficient? You've come to the right place. Perl is a powerful programming language that grew out of the traditional system administration toolbox. Over the years it has adapted and expanded to meet the challenges of new operating systems and new tasks. If you know a little Perl, and you need to perform system administration tasks, this is the right book for you. Readers with varying levels of both Perl programming experience and system administration experience will all find something of use within these pages. What's New in This Edition? A tremendous amount of work went into updating this book so it could be even better than the first edition. Here's some of what has been improved in the second edition: New title My editors and I realized that the material in this book was more about how to automate your system administration work in ways that would make your working life more efficient and pleasant than it was about Perl. While Perl is still the toolshed that makes all this possible, it isn't the main focus of the book. New material It's hard to know where to begin on this one. The new edition is four chapters and two appendixes bigger (with a total page count that is 50% greater) than the last one. Included in this edition are a cornucopia of new tools and techniques that you are going to love. I tried to add material on the things I wished I had sysadmintargeted material on, including: XML and YAML best practices (using XML::LibXML, XML::Twig, and XPath); dealing with config files; more advanced LDAP topics (including updated Net::LDAP information); email-related topics (including POP3/IMAP, MIME, and spam); new ways of dealing with filesystems; more advanced log file creation and parsing tools; DHCP; mapping/monitoring a network using Nmap and other tools; packet creation and sniffing; information reporting using tools like GraphViz, RRDtool, and Timeline; using SHA-2 instead of MD5; SNMPv3; Mac OS X; converting VBScript code to Perl; geocoding; MP3 file manipulation; using Google Maps; and so on. New advice Part of the value of this book is the advice you can pick up from an experienced system administrator like me who has been doing this stuff for a long time and has compared notes with many other seasoned veterans. This new edition is packed with more sidebars to explain not only the what, but also the why behind the material. Operating system and software information updates All of the text and code has been updated and augmented to work with the latest versions of Unix- (including Linux and Mac OS X) and Windows-based operating systems. Module and code updates/improvements The descriptions and code in this book match the latest versions of the modules mentioned in the first edition. In cases where a module is no longer available or a better alternative has emerged, the appropriate replacement modules have been substituted. Also, all example code is now "use strict" friendly. Errata corrected I have attempted to address all of the errata I received from all of the printings of the first edition. I appreciate the time readers took to report errors to O'Reilly and me so I could fix them at each printing and in this edition. Special thanks go to Andreas Karrer, the German translator for the first edition. Andi pored over every single byte of the original text and submitted almost 200 (mostly layout-related) corrections, all with good cheer. How This Book Is Structured Each chapter in this book addresses a different system administration domain and ends with a list of the Perl modules used in that chapter and references to facilitate deeper exploration of the information presented. The chapters are as follows: Chapter 1, Introduction This introductory chapter describes the material covered in the book in more detail, explaining how it will serve you and what you need to get the most from it. The material in this book is powerful and is meant to be used by powerful people (e.g., Unix superusers and Windows-based operating system administrators). The introduction provides some important guidelines to help you write more secure Perl programs.

## <<使用Perl实现系统管理自动化>>

### 内容概要

《使用 Perl实现系统管理自动化(第2版)(影印版)》内容简介：如果你从事任何系统管理方面的工作，就必须应对日益复杂的工作环境以及对你的时间不断增加的需求。

《使用Perl实现系统管理自动化 第二版》不仅提供了可用于工作的恰当工具，还给出了许多建议，帮助你解决特定问题以及安全地自动处理重复事务。

这一版的“水獭书”经过更新和扩充，涵盖了最新的操作系统、技术和Perl模块，将会帮助你：

- \* 管理用户账户
- \* 监测文件系统和进程
- \* 处理XML和YAML等格式的配置文件
- \* 使用DBI管理数据库，包括MySQL、MS SQL和Oracle
- \* 处理LDAP和Active Directory等目录服务
- \* 编写脚本管理电子邮件协议和垃圾邮件
- \* 高效地创建、处理和分析日志文件
- \* 管理网络名称和配置服务，包括NIS、DNS和DHCP
- \* 维护、监测和映射网络服务
- \* 提高文件系统、进程和网络的安全性

这一版的附录中还包含了额外内容，帮助你快速掌握XML/XPath、LDAP、SNMP和SQL等技术。

《使用 Perl实现系统管理自动化(第2版)(影印版)》在手并结合Perl，你将花费更少的资源，付出更少的劳动，大大减少烦恼，让你事半功倍。

## 作者简介

David N . Blank-Edelman是美国东北大学计算机与信息科学学院的技术主任，拥有25年在多种平台上的系统 / 网络管理员经验。

## 书籍目录

Preface 1. Introduction Automation Is a Must How Perl Can Help You This Book Will Show You How What You Need Some Notes About the Perl Versions Used for This Book What About Perl 5.10? What About Strawberry Perl? What About Perl 6? Some Notes About Using Vista with the Code in This Book Locating and Installing Modules Installing Modules on Unix Installing Modules on Win32 It ' s Not Easy Being Omnipotent Don ' t Do It Drop Your Privileges As Soon As Possible Be Careful When Reading Data Be Careful When Writing Data Avoid Race Conditions .Enjoy References for More Information 2. Filesystems Perl to the Rescue Filesystem Differences Unix Windows-Based Operating Systems Mac OS X Filesystem Differences Summary Dealing with Filesystem Differences from Perl Walking or Traversing the Filesystem by Hand Walking the Filesystem Using the File::Find Module Walking the Filesystem Using the File::Find::Rule Module Manipulating Disk Quotas Editing Quotas with edquota Trickery Editing Quotas Using the Quota Module Editing NTFS Quotas Under Windows Querying Filesystem Usage Module Information for This Chapter References for More Information 3. User Accounts Unix User Identities The Classic Unix Password File Changes to the Password File in BSD 4.4 Systems Shadow Passwords Windows-Based Operating System User Identities Windows User Identity Storage and Access Windows User ID Numbers Windows Passwords Don ' t Play Nice with Unix Passwords Windows Groups Windows User Rights Building an Account System to Manage Users The Backend Database The Low-Level Component Library The Process Scripts Account System Wrap-Up Module Information for This Chapter References for More Information Unix Password Files Windows User Administration 4. User Activity Process Management Windows-Based Operating System Process Control Unix Process Control File and Network Operations Tracking File Operations on Windows Tracking Network Operations on Windows Tracking File and Network Operations in Unix Module Information for This Chapter Installing Win32::Setupsup References for More Information 5. TCP/IP Name and Configuration Services Host Files Generating Host Files Error-Checking the Host File Generation Process Improving the Host File Output Incorporating a Source Code Control System NIS, NIS+, and WINS NIS+ Windows Internet Name Server (WINS) Domain Name Service (DNS) Generating DNS (BIND) Configuration Files DNS Checking: An Iterative Approach DHCP Active Probing for Rogue DHCP Servers Monitoring Legitimate DHCP Servers Module Information for This Chapter References for More Information 6. Working with Configuration Files Configuration File Formats Binary Naked Delimited Data Key/Value Pairs Markup Languages All-in-One Modules Advanced Configuration Storage Mechanisms Module Information for This Chapter References for More Information XML and YAML 7. SQL Database Administration Interacting with a SQL Server from Perl Using the DBI Framework Using ODBC from Within DBI Server Documentation MySQL Server via DBI Oracle Server via DBI Microsoft SQL Server via ODBC Database Logins Monitoring Space Usage on a Database Server Module Information for This Chapter References for More Information DBI Microsoft SQL Server ODBC Oracle 8. Email Sending Mail Getting sendmail (or a Similar Mail Transport Agent) Using the OS-Specific IPC Framework to Drive a Mail Client Speaking the Mail Protocols Directly Common Mistakes in Sending Email Overzealous Message Sending Subject Line Waste Insufficient Information in the Message Body Fetching Mail Talking POP3 to Fetch Mail Talking IMAP4rev1 to Fetch Mail Processing Mail Dissecting a Single Message Dissecting a Whole Mailbox Dealing with Spam Support Mail Augmentation Module Information for This Chapter References for More Information 9. Directory Services What ' s a Directory? Finger: A Simple Directory Service The WHOIS Directory Service LDAP: A Sophisticated Directory Service LDAP Programming with Perl The Initial LDAP Connection Performing LDAP Searches Entry Representation in Perl Adding Entries with LDIF Adding Entries with Standard LDAP Operations Deleting Entries Modifying Entry Names Modifying Entry Attributes Deeper LDAP Topics Putting It All Together Active Directory Service Interfaces ADSI Basics Using ADSI from Perl Dealing with Container/Collection Objects Identifying a Container Object So How Do You Know Anything About an Object? Searching Performing Common Tasks Using the WinNT and LDAP Namespaces Working with Users via ADSI Working with Groups via ADSI Working with File Shares via ADSI Working with Print Queues and Print Jobs via ADSI Working with

<<使用Perl实现系统管理自动化>>

Windows-Based Operating System Services via ADSI Module Information for This Chapter References for More Information LDAP ADSI 10. Log Files Reading Text Logs Reading Binary Log Files Using unpack() Calling an OS (or Someone Else ' s) Binary Using the OS ' s Logging API Structure of Log File Data Dealing with Log File Information Space Management of Logging Information Log Parsing and Analysis Writing Your Own Log Files Logging Shortcuts and Formatting Help Basic/Intermediate Logging Frameworks Advanced Logging Framework Module Information for This Chapter References for More Information 11. Security Noticing Unexpected or Unauthorized Changes Local Filesystem Changes Changes in Data Served Over the Network Noticing Suspicious Activities Local Signs of Peril Finding Problematic Patterns Danger on the Wire, or “ Perl Saves the Day ” Preventing Suspicious Activities Suggest Better Passwords Reject Bad Passwords Module Information for This Chapter References for More Information 12. SNMP Using SNMP from Perl Sending and Receiving SNMP Traps, Notifications, and Informs Alternative SNMP Programming Interfaces Module Information for This Chapter References for More Information 13. Network Mapping and Monitoring Network Mapping Discovering Hosts Discovering Network Services Physical Location Presenting the Information Textual Presentation Tools Graphical Presentation Tools Monitoring Frameworks Extending Existing Monitoring Packages What ' s Left? Module Information for This Chapter References for More Information 14. Experiential Learning Playing with Timelines Task One: Parsing crontab Files Task Two: Displaying the Timeline Task Three: Writing Out the Correct XML File Putting It All Together Summary: What Can We Learn from This? Playing with Geocoding Geocoding from Postal Addresses Geocoding from IP Addresses Summary: What Can We Learn from This? Playing with an MP3 Collection Summary: What Can We Learn from This? One Final Exploration Part One: Retrieving the Wiki Page with WWW::Mechanize Part Two: Extracting the Data Part Three: Geocoding and Mapping the Data Summary: What Can We Learn from This? Remember to Play Module Information for This Chapter Source Material for This Chapter A. The Eight-Minute XML Tutorial B. The 10-Minute XPath Tutorial C. The 10-Minute LDAP Tutorial D. The 15-Minute SQL Tutorial E. The Five-Minute RCS Tutorial F. The Two-Minute VBScript-to-Perl Tutorial G. The 20-Minute SNMP Tutorial Index

## 章节摘录

插图：FAT filesystems are case-insensitive. In Unix, an attempt to open a file using the wrong case ( i.e., MYFAVORITEFILE versus myfavoritefile ) will fail, but with FAT or VFAT, this will succeed with no problem. Instead of a forward slash, FAT uses the backward slash ( \ ) as its path separator. This has a direct ramification for the Perl programmer, because the backslash is a quoting character in Perl. Paths written in single quotes with only single separators ( e.g., \$path = 'dir\dir\filename' ) are just fine. However, situations in which you need to place multiple backslashes next to each other ( e.g., server\dir\file ) are potential trouble. In those cases, you have to be vigilant in doubling any multiple backslashes. Some Perl functions and some Perl modules will accept paths with forward slashes, but you shouldn't count on this convention when programming. It is better to bite the bullet and write `winnttemp` than to learn that your code breaks because the conversion hasn't been done for you. FAT files and directories have special flags associated with them that are called attributes. Example attributes include "Read-only" and "System." The root of a FAT filesystem is specified starting with the drive letter on which the filesystem resides. For instance, the absolute path for a file might be specified as `c:\home\cindy\docs\resume\current.doc`. FAT32 and NTFS filesystems have the same semantics as VFAT filesystems. They share the same support for long filenames and use the same root designator. NTFS is more sophisticated in its name support, however, because it allows these names to be specified using Unicode. Unicode is a multibyte character encoding scheme that can be used to represent all of the characters of all of the written languages on the planet. NTFS also has some functional differences that distinguish it from the other Windows and basic Unix filesystems. Later in this chapter, we will write some code to take advantage of some of these differences, such as filesystem quotas. NTFS supports ACLs, which provide a fine-grained permission mechanism for file and directory access.

## <<使用Perl实现系统管理自动化>>

### 媒体关注与评论

“直到系统管理员阅读本书前，存在太多的任务本可以(并且应该)自动化完成但却没有。Perl是一种强大的工具，David向我们展示了如何让系统管理员付出更少劳动就能将系统掌控得更好。”  
——Peter Baer Galvin，Corporate Technologies 公司首席技术官、IT架构师



编辑推荐

《使用 Perl实现系统管理自动化(第2版)(影印版)》是由东南大学出版社出版的。

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>