

Index

SYMBOLS AND NUMERICS

- * (asterisk) wildcard character, 54
- ? (question mark) wildcard character, 54
- #! (shebang), 559
- 4Front Technologies, 246

A

- abandonware, 260
- absolute pathnames, 46
- accepting print jobs, 503
- access rules
 - MySQL database server, 524–526
 - PostgreSQL database server, 516–518
 - printers, 502–503
- accessibility, 247
- AccessLog directive (CUPS), 509
- accounts
 - root, 104–105
 - superuser, 104
- addgroup package, 111
- adding
 - groups, 109, 111
 - users, 109, 111
- add-ons for The GIMP program, 245
- addresses
 - e-mail, 304–305
 - IP addresses
 - assigning, 427–430
 - conflicts, 427
 - Domain Name System (DNS), 393–395
 - dotted quad notation, 117, 393–395
 - dynamic IP addresses, 429
 - static IP addresses, 429
- adduser package, 110–111
- adm group, 114
- administration
 - ease of, 18–19
 - full sessions as root, 108–109
 - groups
 - adding, 109, 111
 - managing group membership, 114–115
 - removing, 111–113
 - privilege separation, 104
 - root account, 104–105
 - sudo
 - auditing sudo logs, 108
 - configuring, 105–107
 - installing, 105
 - running, 107–108
 - superuser account, 104
 - users
 - adding, 109–111
 - removing, 111–112
- Advanced Bash-Scripting Guide Web site, 70
- Advanced Linux Sound Architecture (ALSA), 166, 174–175, 246
- adventure games, 258–259
- adzapper package, 432
- AGNULA project, 252
- AI (Artificial Intelligence) Lab at MIT, 532
- aliases (shell programming language), 65
- alien package, 5
- Alioth Open Source software-hosting site, 585–586
- all architecture, 8
- Allow directive (CUPS), 509
- alpha architecture, 7
- ALSA (Advanced Linux Sound Architecture), 166, 174–175, 246
- alsa-base package, 174
- alsa-utils package, 174
- Amanda backup program, 149–151
- amd64 architecture, 8
- America's Army: Operations game, 273
- America's Army: Special Forces game, 273
- amrecover utility, 151
- Anaconda installer, 22
- analog Realtime synthesis (aRts) sound server, 247
- Angband game, 257
- announcing package release, 592
- anonymous FTP, 366
- Apache 1.3 Web server
 - configuring, 337–346
 - directives, 339–346
 - features, 335–337
 - installing, 337
 - Perl, 352–355
 - PHP, 357–360
 - Python, 355–357

- Apache 2.0 Web server
 - configuring, 348–352
 - features, 346
 - installing, 346–347
 - server pool, 348–349
- apache-perl package, 353
- Apple Mac OS X, 7
- applications
 - OpenOffice.org, 228
 - software distributions, 7
- application-specific configuration, 91
- apt family of package management tools
 - apt-cache
 - examining packages, 82–83
 - policy command, 97–98
 - searching packages, 83
 - apt-get
 - installing packages, 85–86
 - pinning feature, 96–97, 100–101
 - purging packages, 89–90
 - removing packages, 89–90
 - upgrading packages, 94–95
 - features, 76–77
- apt-ftparchive program, 586–587
- aptitude package management tool
 - examining packages, 82
 - features, 77
 - installing packages, 86–87
 - listing packages, 80–81
 - purging packages, 90–91
 - removing packages, 90–91
 - searching packages, 83–84
 - upgrading packages, 95
- apt-utils package, 586
- architectures supported, 7–8, 11
- archives
 - announcing package release, 592
 - complex, 588–589
 - Debian-style, 589–590
 - defined, 583
 - finding, 583
 - layouts, 587–590
 - maintenance, 592
 - Release file, 590–591
 - simple, 587–588
- arm architecture, 7
- The Art of Deception*, Kevin Mitnick, 288

- Artificial Intelligence (AI) Lab at MIT, 532
- aRTs (analog Realtime synthesis) sound server, 247
- assigning IP addresses, 427–430
- asterisk (*) wildcard character, 54
- Atari Age Web site, 261
- Atari 2600 emulator, 261
- Atlantik game, 269
- attacks on networks, 285–288
- AT&T's Bell Labs, 532
- audio drivers, 166, 174–176
- audio group, 114, 174–175
- auditing
 - network security, 278, 280–281
 - sudo logs, 108
- AuthClass directive (CUPS), 510
- authentication
 - network security, 278–280
 - SSH (Secure Shell), 413–415
- authorization, 278, 280
- autoconf program, 548
- automake program, 548
- AVI video format, 250
- awareness of network security issues, 283

B

- backports, 9
- backup programs
 - Amanda, 149–151
 - backuppc, 155–160
 - backup21, 162
 - cdbbackup, 162
 - dirvish, 162
 - faubackup, 162
 - flexbackup, 162
 - hdup, 162
 - mondoarchive, 162
 - multicd, 162
 - pdumpfs, 162
 - rdiff-backup, 145–149
 - rsnapshot, 151–155
 - rsync, 145
 - storebackup, 162
 - tar, 142–144
 - Unison, 160–161
- backuppc backup program, 155–160
- backup21 backup program, 162

- backups
 - compression programs, 140
 - frequency, 138
 - importance of, 125
 - incremental backups, 140–141
 - in-use files, 141–142
 - media options
 - CD-RW, 130–131
 - disk drives, 132–133
 - DVDs, 131–132
 - factors to consider, 129–130
 - tape drives, 133–138
 - MySQL database server, 526
 - needs analysis, 126
 - network backups, 141
 - network security, 284
 - packages, 128
 - PostgreSQL database server, 521
 - strategies, 127–129
 - testing, 139
- bash shell
 - Advanced Bash-Scripting Guide Web site, 70
 - character ranges, 56–57
 - command prompt, 41–42
 - commands
 - arguments, 42
 - chgrp, 60
 - chown, 60
 - ls, 43, 49–50
 - man, 44–45
 - mkdir, 57
 - mv, 58
 - options, 42
 - pwd, 42
 - rm, 58
 - running, 42
 - stat, 51
 - current working directory, 42, 46–47
 - customizing, 68–70
 - defined, 6, 33
 - escaping, 52–53
 - globbing, 53–57
 - home directory, 41
 - lists, 56–57
 - login mode, 68
 - manpages, 44, 46
 - mv command, 59
 - normal mode, 68
 - quoting, 52
 - sequences, 55–56
 - shell programming language, 61–68
 - spaces, 51
 - tab-completion, 43
 - wildcards, 53–55
- bastille package, 302
- Battle for Wesnoth game, 270
- Bell Labs (AT&T), 532
- Berkeley Internet Name Domain (BIND), 394, 397–398
- BerliOs Open Source software-hosting site, 586
- Bernstein, Dan, “Using maildir format” article, 481
- bin directory, 35
- binary packages, 72–73
- BIND (Berkeley Internet Name Domain), 394, 397–398
- black hat hackers, 292
- block devices, 37
- Boa Web server, 360–364
- body (e-mail), 308
- bookmarks
 - Epiphany Web browser, 210–211
 - Firefox Web browser, 214
- boot directory, 35
- boot floppies, 21
- boot loaders, 26–28
- border security, 284–285
- bounced e-mail, 313–314
- Bourne Shell, 6
- browsers
 - Epiphany, 208–212
 - Firefox, 208, 212–215
 - Konqueror, 208, 215–217
 - Mozilla, 208, 212–213
 - proxy servers, 430–432
- bsdgames package, 255
- bsdgames-nonfree package, 255
- bug reporting, 541–544
- Bug-Tracking System (BTS), 542
- BugTraq mailing list, 291, 293
- build dependencies, 554
- build-essential package, 545–546
- building kernels, 548–551

building packages

- command execution, 577–579
- devscripts package, 581
- doc-base system for documentation, 576
- dummy packages, 581–582
- manpages, 576
- quality control, 555, 579–580
- from scratch, 554–556

Bunk, Carey, *Grokking the GIMP*, 245

burning CDs/DVDs, 252

bzip2 package, 140, 549

C

“The Cathedral and the Bazaar”, Raymond,
Eric, 537–538

ccze package, 432

CD burning, 252

cdbackup backup program, 162

cdrecord package, 252

cdrom group, 114

CD-ROMs (accompanying this book)

- customer care, 596
- Debian Installation CD, 593–595
- Debian Live CD, 595–596
- source code coupon, 596
- system requirements, 593

CD-RW drives, 130–131

Cedega (TransGaming Technologies), 265

changelog file, 570–572

changing

- default settings for compilers, 72
- ownership of files, 59–60
- permissions, 59–60

character devices, 37

character ranges, 56

chastity-list package, 432

chess games, 269–270

chgrp command, 60

choosing

- database servers, 514
- printing services, 490

chown command, 60

CIFS (Common Internet File System), 437

Cinelerra video editor, 254

cinelpaint package, 254

CinePaint video editor, 254

client/server computing, 435

codecs (coder/decoders), 250

Colossal Cave game, 258–259

command shells. *See* shells

command substitution (shell programming
language), 65–66

commands (bash shell)

- arguments, 42
- chgrp, 60
- chown, 60
- ls, 43, 49–50
- man, 44
- mkdir, 57
- mv, 58–59
- options, 42
- pwd command, 42
- rm, 58
- running, 42
- stat, 51

commercial Debian distributions, 16–17

Commodore computer emulators, 261

Common Internet File System (CIFS), 437

community. *See* Debian community

compat file, 573

compiler settings, 72

compiling packages, 72

Comprehensive Perl Archive Network Web site, 352

compression programs, 140

conffiles file, 576

configuration

- application-specific, 91
- debconf-based, 91–92

configuration files

- hostname resolution, 118–120
- packages, 75, 92–94

configuring

- Advanced Linux Sound Architecture (ALSA), 174
- Amanda backup program, 151
- Apache 1.3 Web server, 337–346
- Apache 2.0 Web server, 348–352
- backuppc backup program, 155–159
- Boa Web server, 362–364
- CUPS printing service, 494
- Dynamic Host Configuration Protocol (DHCP), 428
- Epiphany Web browser, 212
- Evolution e-mail client, 218–219
- Exim Mail Transport Agent, 315–319
- Firefox Web browser, 214–215
- firewalls, 296–298
- Gaim instant messenger, 223–224

- GNOME Display Manager, 181–183
 - IMAP4 e-mail server, 479–481
 - KDE, 198–199
 - kernels, 549–550
 - KMail e-mail client, 219–221
 - Konqueror Web browser, 216
 - lpd (line printer daemon) printing service, 492–493
 - lpr (lprng) printing service, 492–493
 - MySQL database server, 522
 - NFS client, 454–456
 - NFS server, 448–454
 - packages, 91–92
 - ProFTPD, 379–389
 - rsnapshot backup program, 152–154
 - Samba, 437–441
 - Squid proxy server, 431
 - sudo, 105–107
 - system, 29
 - vsftpd (Very Secure FTP Daemon), 369–375
 - XFree86 graphics system, 169–172
 - conflicts package relationship, 74, 558
 - conflicts with IP addresses, 427
 - Constitution for the Debian Project
 - decision-making bodies and individuals, 597–598
 - delegates, 605–606
 - developers by way of general resolution or election, 599–600
 - individual developers, 598–599
 - project leader, 600–602
 - project secretary, 604–605
 - software in the public interest, 606–607
 - standard resolution procedure, 607–610
 - technical committee, 602–604
 - contrib section of a distribution, 9
 - control file, 556–559
 - converting rpms into debs, 5
 - copyleft, 532
 - copyright file, 572–573
 - Could not claim the USB device
 - error message, 241
 - coupon for source code, 596
 - Crawl game, 257
 - creating
 - databases
 - MySQL database server, 523
 - PostgreSQL database server, 515–516
 - directories, 57
 - Crossfire game, 257
 - CUPS printing service
 - adding printers, 495–497, 500
 - client configuration, 505–508, 511
 - command line, 499–500
 - configuring, 494
 - directives, 508–511
 - features, 490
 - installing, 494
 - lpadmin program, 499–500
 - modifying printer settings, 500–501
 - troubleshooting, 501
 - Web interface, 494–495
 - cupsys package, 494
 - cupsys-client package, 494
 - cupsys-driver-gimpprint package, 244
 - current working directory, 46–47
 - custom Debian distributions, 16
 - customer care for CD-ROMs accompanying
 - this book, 596
 - customizing
 - GNOME, 191–194
 - KDE, 202–206
 - shells, 68–70
- ## D
- daemons
 - defined, 6
 - Network File System (NFS), 447–448
 - network security, 299–302
 - router advertisement daemon (radvd), 430
 - database client tools, 527
 - database servers
 - choosing, 514
 - client tools, 527
 - MySQL
 - access types, 524–526
 - backups, 526
 - configuring, 522
 - creating databases, 523
 - features, 514
 - installing, 521
 - interactive queries, 523
 - removing databases, 526
 - user configuration, 523–524
 - PostgreSQL
 - access rules, 516–518
 - authentication types, 518
 - backups, 521

Continued

- database servers (*continued*)
 - connections, 519
 - creating databases, 515–516
 - creating users, 515–516
 - features, 514
 - installing, 515
 - removing databases, 520
 - removing users, 520
 - restarting, 519
 - testing, 519–520
 - upgrading, 520
- DataDir directive (CUPS), 510
- de Icaza, Miguel, creator of the GNOME project, 178
- debconf script, 75
- debconf-based configuration, 91–92
- debhelper package, 555
- Debian community
 - Debian Developers, 15–16, 539
 - defined, 13
 - Free Software/Open Source movement, 13–14
 - New Maintainers, 15–16, 539–541
- Debian directory
 - changeLog file, 570–572
 - compat file, 573
 - conffiles file, 576
 - control file, 556–559
 - copyright file, 572–573
 - dirs file, 574
 - docs file, 574
 - menu file, 574–575
 - README.Debian file, 573–574
 - rules file, 559–569
 - watch file, 575
- Debian Installation CD, 593–595
- Debian Installer
 - boot floppies, 21
 - difficulty of, 21
 - partitioning, 25–26
 - step-by-step directions, 22–27
- Debian Jr., 267
- Debian Live CD, 595–596
- Debian package Web site, 84
- Debian platform, 538–539
- Debian Project
 - bug reporting, 541–544
 - Constitution
 - decision-making bodies and individuals, 597–598
 - delegates, 605–606
 - developers by way of general resolution or election, 599–600
 - individual developers, 598–599
 - project leader, 600–602
 - project secretary, 604–605
 - software in the public interest, 606–607
 - standard resolution procedure, 607–610
 - technical committee, 602–604
 - Free Software Guidelines, 534–536
 - history, 531–534
 - New Maintainers, 539–541
 - organization, 537–538
 - Policy Manual, 539
 - Social Contract, 14–16, 534–535
- Debian software distribution
 - administration, 18–19
 - breadth of software, 17–18
 - commercial distributions, 16–17
 - custom distributions, 16
 - desktop workstation, 10
 - development history, 3
 - development platform, 11
 - Internet servers, 10
 - Intranet servers, 10
 - maintenance, 19
 - number of package maintainers, 4
 - packages, 4
 - popularity of, 17
 - portability, 18
 - sarge release, 4, 8, 21
 - woody release, 21
- Debian-Edu, 16
- Debian-JR, 16
- Debian-legal mailing list, 584
- Debian-Med, 16
- Debian-NP, 16
- debian-policy package, 555
- Debian-style archives, 589–590
- Debian-user mailing list, 248
- debs, 5
- debsums tool, 95
- default printer, 503
- deleting
 - directories, 58
 - files, 57–58
 - groups, 111–113
 - users, 111–112
- delgroup package, 112–113
- deluser package, 111–112

- DeMuDi multimedia distribution, 252
- Deny directive (CUPS), 510
- dependencies (packages), 73
- depends package relationship, 74, 558
- desktop access, 409
- desktop environments
 - GNOME
 - applets, 184
 - customizing, 191–194
 - development history, 178
 - Display Manager, 178, 180–183
 - Epiphany Web browser, 208–212
 - Evolution e-mail client, 217–219
 - features, 178
 - file manager, 188–191
 - Firefox Web browser, 213
 - Inkscape program, 245–246
 - installing, 178–180
 - junior-gnome package, 267
 - kino package, 253
 - kinoplus package, 253
 - launchers, 184
 - oooqs-gnome package, 229
 - OpenOffice.org, 229
 - panels, 183–185
 - personalizing, 191–194
 - preferences, 194–195
 - sound server, 247
 - themes, 195
 - totem (xine video player front end), 251
 - Trash bin, 191
 - windows, 183, 185–188
 - KDE
 - configuring, 198–199
 - Control Center, 205
 - customizing, 202–206
 - Digikam program, 242–243
 - features, 196
 - Firefox Web browser, 213
 - installing, 196–197
 - junior-kde package, 267
 - kaffeine (xine video player front end), 251
 - kamera package, 242
 - KMail e-mail client, 217, 219–222
 - Konqueror file manager, 200–202
 - Konqueror Web browser, 208, 215–217
 - new-user wizard, 197–198
 - oooqs-kde package, 229
 - OpenOffice.org, 229
 - panels, 199–200
 - personalizing, 202–206
 - sound server, 247
 - themes, 205–206
 - windows, 199–200
- desktop publishing, 233–234
- desktop workstation, 10
- dev directory, 35
- development platform, 11
- device drivers, 5
- devscripts package, 581
- devscripts package, 555
- DFSG (Debian Free Software Guidelines), 534–536
- DHCP (Dynamic Host Configuration Protocol), 427–429
- dh-make package, 555
- dialout group, 114
- Digikam program, 242–243
- digital cameras, 239–243
- digital video, 250
- digital video editors, 253–254
- direct sound card access, 247
- directives
 - Apache 1.3 Web server, 339–346
 - Boa Web server, 362–364
 - CUPS printing service, 509–511
 - ProFTPD, 381–384
- directories
 - bin, 35
 - boot, 35
 - creating, 57
 - current working directory, 46–47
 - Debian directory
 - changelog file, 570–572
 - compat file, 573
 - conffiles file, 576
 - control file, 556–559
 - copyright file, 572–573
 - dirs file, 574
 - docs file, 574
 - menu file, 574–575
 - README.Debian file, 573–574
 - rules file, 559–569
 - watch file, 575
 - defined, 37
 - deleting, 58
 - dev, 35

Continued

directories (*continued*)

- dot, 48–49
 - double-dot, 48–49
 - etc, 35
 - GNOME, 188–190
 - home, 36
 - KDE, 201–202
 - lib, 35
 - listing, 49–50
 - mnt, 36
 - permissions, 38–41, 59–60
 - removing, 58
 - root, 35–36
 - sbin, 35
 - sharing with Samba, 441–445
 - usr, 36
 - /usr/games, 257
 - var, 36
 - virtual, 48–49
- directory services
- defined, 459
 - Lightweight Directory Access Protocol (LDAP), 460
 - OpenLDAP, 460–462
- dirs file, 574
- dirvish backup program, 162
- discover utility, 168
- disk drives, 132–133
- distributed filesystems
- defined, 435
 - file server, 435–436
 - Network File System (NFS)
 - configuration file, 448
 - daemons, 447–448
 - NFS mount, 446
 - NFS-exported filesystem, 446
 - pure file-sharing environment, 445
 - remote procedure calls (RPCs), 446
 - sensitivity to network latency, 446
 - services, 447
 - nonvolatile caches, 436
- Samba
- Common Internet File System (CIFS), 437
 - configuration file, 441–445
 - configuring, 437–441
 - installing, 437
 - volatile caches, 436

distributions

- contrib section, 9
 - main section, 8
 - nonfree section, 9
 - stable, 8–9
 - testing, 8–9
 - unstable, 8–9
- DNS (Domain Name System) server
- Berkeley Internet Name Domain (BIND), 394, 397–398
 - DNS server file, 396–397
 - hostnames, 393–394
 - installing, 394
 - IP addresses, 393–395
 - maintenance, 407–408
 - named.conf file, 394
 - primary DNS server, 395
 - recursion, 403
 - reloading configuration files, 403
 - resolv.conf file, 394, 406–407
 - secondary DNS server, 395, 403–406
 - security holes, 401–403
 - survey of network machines, 396–397
 - tertiary DNS server, 396
 - testing, 407
 - zone files, 394, 398–401
- doc-base system for documentation, 576
- docs file, 574
- document exchange, 232–233
- Domain Name System (DNS) server
- Berkeley Internet Name Domain (BIND), 394, 397–398
 - DNS server file, 396–397
 - hostnames, 393–394
 - installing, 394
 - IP addresses, 393–395
 - maintenance, 407–408
 - named.conf file, 394
 - primary DNS server, 395
 - recursion, 403
 - reloading configuration files, 403
 - resolv.conf file, 394, 406–407
 - secondary DNS server, 395, 403–406
 - security holes, 401–403
 - survey of network machines, 396–397
 - tertiary DNS server, 396

- testing, 407
 - zone files, 394, 398–401
- domain sockets, 37
- domain zone file, 398–399
- Doom game, 271–272
- Doom Legacy game, 272
- doom-wad-shareware package, 272
- DOS games, 261–262
- DOSbox emulator, 262
- dot directory, 48–49
- dotted quad notation (IP addresses), 117
- double-dot directory, 48–49
- downloading
 - copyrighted songs, 249
 - packages, 583
- dpkg package management tool
 - features, 77
 - listing mode, 78–80
- dpkg-buildpackage program, 553
- dpkg-dev package, 546, 586
- dpkg-scanpackages program, 586
- dummy packages, 581–582
- DVD backups, 131–132
- DVD burning, 252
- dvdrtools package, 252
- dvgrab package, 253
- Dynamic Host Configuration Protocol (DHCP), 427–429
- dynamic IP addresses, 429

E

- Easy Software Products (ESP), 494
- editing
 - files, 61
 - video, 253–254
- editors, 61
- education of network security issues, 283
- Egoboo game, 257
- e-mail
 - addresses, 304–305
 - body, 308
 - bounces, 313–314
 - failures, 313
 - headers, 305–307
 - MIME (Multipurpose Internet Mail Extensions), 308
 - transmission, 308

- e-mail clients
 - Evolution, 217–219
 - KMail, 217, 219–222
 - Thunderbird, 217, 222
- e-mail servers
 - delivery process overview, 476–478
 - IMAP4
 - configuring, 479–481
 - features, 478
 - installing, 478–479
 - Maildir mailbox format, 481–483
 - testing, 483–485
 - Local Delivery Agents (LDAs), 476
 - Mail Transfer Agents (MTAs), 476
 - Mail User Agents (MUAs), 476
 - mailbox formats, 312, 481–483
 - notification programs, 476
 - POP3
 - features, 485
 - installing, 486–487
 - testing, 487–488
- emulators
 - Atari 2600, 261
 - DOSbox, 262
 - history, 259–260
 - Nintendo Entertainment System (NES), 261
 - Sinclair Spectrum, 260–261
 - Super NES, 261
 - VICE (Versatile Commodore Emulator), 261
 - Windows, 262–265
- Encryption directive (CUPS), 510–511
- enhances package relationship, 558
- Enigma game, 268
- Enlightened Sound daemon (ESD) sound server, 247
- Epiphany Web browser, 208–212
- epiphany-browser package, 209
- equivs package, 581–582
- error redirection (shell programming language), 67–68
- ErrorLog directive (CUPS), 510
- escaping, 52–53
- ESD (Enlightened Sound daemon) sound server, 247
- ESP (Easy Software Products), 494
- etc directory, 35
 - /etc/apt/preferences, 98–99
 - /etc/apt/sources.list, 96–97

- Ethernet interfaces, 122
- Evolution e-mail client, 217–219
- examining packages, 82–83
- exchanging documents, 232–233
- execute permission, 39
- Exim Mail Transport Agent
 - access control list (ACL), 320–323
 - configuration file, 319
 - configuring, 315–319
 - e-mail delivery process, 328–332
 - features, 314–315
 - rewriting addresses, 327
 - routers, 323–325
 - transports, 325–327
 - usage types, 316–317
 - variables, 319–320
 - virtual domains, 332–333
- export filters (OpenOffice.org), 232
- eXtensible Markup Language (XML), 228
- ext3 filesystem, 33

F

- failures (e-mail), 313
- fakeroot package, 549
- Falcon's Eye game, 257
- faubackup backup program, 162
- fault tolerance, 290
- FCE Ultra emulator, 261
- FHS (Filesystem Hierarchy Standard), 35–36
- file ownership, 38, 59–60
- file server, 435–436
- file sharing
 - Network File System (NFS)
 - configuration file, 448
 - daemons, 447–448
 - NFS mount, 446
 - NFS-exported filesystem, 446
 - pure file-sharing environment, 445
 - remote procedure calls (RPCs), 446
 - sensitivity to network latency, 446
 - services, 447
 - Samba
 - Common Internet File System (CIFS), 437
 - configuration file, 441–445
 - configuring, 437–441
 - installing, 437

- file transfers
 - anonymous FTP, 366
 - FTP servers, 365–367
 - SCP (Secure Copy), 415
 - SFTP, 416
 - SSH (Secure Shell), 415–416
- files
 - block devices, 37
 - character devices, 37
 - configuration files
 - hostname resolution, 118–120
 - packages, 75, 92–94
 - deleting, 57–58
 - domain sockets, 37
 - editing, 61
 - GNOME, 188–191
 - KDE, 200–202
 - listing, 49–50
 - modifying, 57
 - moving, 58–59
 - named pipes, 37
 - permissions, 38–41, 59–60
 - properties, 51
 - README.Debian file, 573
 - regular files, 37
 - removing, 58
 - renaming, 58–59
 - symbolic links, 37
 - synchronizing, 160–161
- Filesystem Hierarchy Standard (FHS), 35–36
- filesystems
 - CIFS (Common Internet File System), 437
 - defined, 5
 - distributed filesystems
 - defined, 435
 - file server, 435–436
 - Network File System (NFS), 445–448
 - nonvolatile caches, 436
 - Samba, 437–445
 - volatile caches, 436
 - ext3 filesystem, 33
 - namespaces, 34
 - object types, 36–37
 - trees, 34
- finding
 - archives, 583
 - manpages, 45–46
 - packages, 77–78

- Fink project Web site, 7
 - Firefox Web browser, 208, 212–215
 - firewalls
 - shorewall, 294–299
 - SSH (Secure Shell), 419–420
 - flat namespaces, 34
 - flexbackup backup program, 162
 - Flightgear game, 272
 - floppy group, 114
 - font management, 169
 - fontconfig package, 169
 - forwarder host, 397
 - 4Front Technologies, 246
 - Frank's Corner Web site, 264
 - Free Software (defined), 533
 - Free Software Foundation (FSF), 532–534, 586
 - Free Software Guidelines, 534–536
 - Free Software/Open Source movement, 13–14
 - FreeBSD kernel, 6–7
 - Freeciv game, 270
 - freeciv-client package, 270
 - freeciv-server package, 270
 - FreeCraft game, 272
 - freecraft package, 272
 - freeswan package, 434
 - frequency of backups, 138
 - frotz package, 259
 - Frozen Bubble game, 268–269
 - FSF (Free Software Foundation), 532–534, 586
 - FTP servers
 - ProFTPd
 - advanced configuration, 384–389
 - default configuration, 379–384
 - directives, 381–384
 - features, 375–376
 - installing, 376–379
 - virtual FTP server, 389–390
 - Secure FTP, 390–391
 - security, 365–367
 - vsftpd (Very Secure FTP Daemon)
 - configuring, 369–375
 - installing, 368–369
- G**
- Gaim instant messenger, 223–224
 - Gameboy emulators, 261
 - games
 - abandonware, 260
 - adventure games, 258–259
 - America's Army: Operations, 273
 - America's Army: Special Forces, 273
 - Angband, 257
 - Atlantik, 269
 - Battle for Wesnoth, 270
 - bsdgames package, 255
 - bsdgames-nonfree package, 255
 - chess, 269–270
 - Colossal Cave, 258–259
 - Crawl, 257
 - Crossfire, 257
 - Debian Jr., 267
 - Doom, 271–272
 - Doom Legacy, 272
 - DOS games, 261–262
 - Egoboo, 257
 - emulators
 - Atari 2600, 261
 - DOSbox, 262
 - history, 259–260
 - Nintendo Entertainment System (NES), 261
 - Sinclair Spectrum, 260–261
 - Super NES, 261
 - VICE (Versatile Commodore Emulator), 261
 - Windows, 262–265
 - Enigma, 268
 - Falcon's Eye, 257
 - Flightgear, 272
 - Freeciv, 270
 - FreeCraft, 272
 - Frozen Bubble, 268–269
 - gcompris package, 268
 - GNU chess, 269–270
 - Infocom, 259
 - interactive fiction, 259
 - kmines package, 256
 - kpat package, 256
 - Ktuberling, 266
 - Lbreakout, 272
 - Lincity, 270
 - Linux games, 266–273
 - Minesweeper, 256

Continued

- games (*continued*)
 - Monopoly, 269
 - Moria, 257
 - NetHack, 257
 - Omega, 257
 - Pingus, 272
 - Potato Guy, 266
 - Pydance, 271
 - Quake 2, 272
 - retrogaming, 255
 - Rogue, 256–257
 - Slash'EM, 257
 - Solitaire, 256
 - Tetris, 268
 - ToME, 257
 - Tuxkart, 272
 - `/usr/games` directory, 257
 - Windows games, 262–265
 - Zangband, 257
 - Zork trilogy, 259
- gcc package, 545
- gcc-doc package, 545
- gcompri s package, 268
- gdm package, 178, 180
- Ghostscript, 491
- gimp package, 244
- GIMP Print printing service, 497
- The GIMP program
 - add-ons, 245
 - development history, 243
 - GIF support, 245
 - GTK+ programming toolkit, 243
 - image layers, 245
 - installing, 244
 - interface, 244–245
 - Script-Fu, 245
- gimp-data-extras package, 245
- gimp-help package, 244
- global address book (OpenLDAP server), 470–473
- globbing
 - character ranges, 56–57
 - lists, 56–57
 - sequences, 55–56
 - wildcards, 53–55
- GNOME
 - applets, 184
 - customizing, 191–194
 - development history, 178
 - Display Manager, 178, 180–183
 - Epiphany Web browser, 208–212
 - Evolution e-mail client, 217–219
 - features, 178
 - file manager, 188–191
 - Firefox Web browser, 213
 - Inkscape program, 245–246
 - installing, 178–180
 - junior-gnome package, 267
 - kino package, 253
 - kinoplus package, 253
 - launchers, 184
 - oooqs-gnome package, 229
 - OpenOffice.org, 229
 - panels, 183–185
 - personalizing, 191–194
 - preferences, 194–195
 - sound server, 247
 - themes, 195
 - totem (xine video player front end), 251
 - Trash bin, 191
 - windows, 183, 185–188
- gnome package, 178
- gnome-games package, 268
- GNU chess game, 269
- GNU General Public License, 3
- GNU HURD kernel, 6–7
- GNU operating system, 532
- GNU Project Web site, 3
- Gnuboy emulator, 261
- GNU/Linux operating system, 534
- GNU/Linux user groups, 292
- gocr package, 238
- Gordon, Ryan, Linux game developer, 273
- gphoto2 package, 240–242
- g++ package, 545
- GRand Unified Bootloader (GRUB), 26–28
- granting access to printers, 502–503
- graphical interfaces. *See* GNOME; KDE
- graphics applications
 - The GIMP program
 - add-ons, 245
 - development history, 243
 - GIF support, 245
 - GTK+ programming toolkit, 243
 - image layers, 245

- installing, 244
- interface, 244–245
- Script-Fu, 245
- Inkscape program, 245–246
- graphics systems
 - XFree86, 165–173
 - X.Org, 166
- gray hat hackers, 292
- groff program, 226–227
- Grokking the GIMP*, Carey Bunk, 245
- groups
 - adding, 109, 111
 - adm, 114
 - audio, 114, 174–175
 - cdrom, 114
 - defined, 38
 - deleting, 111–113
 - dialout, 114
 - floppy, 114
 - lp, 114
 - mail, 114
 - managing group membership, 114–115
 - permissions, 40
 - removing, 111, 113
 - video, 114
- GRUB (GRand Unified Bootloader), 26–28
- GTK+ programming toolkit, 243
- gzip compression program, 140

H

- hackers, 292
- hard links, 151–152
- hardware detection utilities, 168
- hdup backup program, 162
- headers (e-mail), 305–307
- help with network security, 290–293
- hierarchical namespaces, 34
- home directory, 36
- hosting Open Source software
 - Alioth, 585–586
 - BerliOs, 586
 - mentors.debian.net, 586
 - Savannah, 586
 - SourceForge, 584–585
- hostname resolution, 117–120
- hostnames, 393–394
- hotplug package, 240

- hotplug utility, 168
- “How to Ask Questions the Smart Way”, Eric Raymond and Rick Moen, 541
- hppa architecture, 8
- HTML (HyperText Markup Language), 227
- HURD kernel, 6–7

I

- ia64 architecture, 8
- ID Software’s Doom game, 271–272
- identification (network security), 278–279
- IM (instant messaging), 223–224
- image scanning, 236–238
- IMAP4 (Internet Message Access Protocol 4)
 - e-mail server
 - configuring, 479–481
 - features, 478
 - installing, 478–479
 - Maildir mailbox format, 481–483
 - testing, 483–485
- incremental backups, 140–141
- Infocom games, 259
- Inkscape program, 245–246
- installation scripts (packages), 73
- installed packages, 78–80
- installers
 - Anaconda, 22
 - boot floppies, 21
 - Debian Installer
 - partitioning, 25–26
 - step-by-step directions, 22–27
 - difficulty of, 21
 - list of, 22
- installing
 - Advanced Linux Sound Architecture (ALSA), 174
 - Apache 1.3 Web server, 337
 - Apache 2.0 Web server, 346–347
 - apt-ftpparchive program, 587
 - backuppcc backup program, 155
 - BIND (Berkeley Internet Name Domain), 397–398
 - Boa Web server, 361
 - CUPS printing service, 494
 - Domain Name System (DNS) server, 394
 - Dynamic Host Configuration Protocol (DHCP), 428

Continued

installing (*continued*)

- Epiphany Web browser, 209
 - Evolution e-mail client, 218
 - Firefox Web browser, 212–213
 - firewalls, 296
 - Gaim instant messenger, 223
 - The GIMP program, 244
 - GNOME, 178–180
 - hardware detection utilities, 168
 - IMAP4 e-mail server, 478–479
 - KDE, 196–197
 - kernels, 549
 - KMail e-mail client, 219–220
 - Konqueror Web browser, 215
 - MySQL database server, 521
 - non-Debian packages, 547–548
 - OpenLDAP software, 462–466
 - OpenOffice.org, 228–229
 - packages
 - with `apt-get`, 85–86
 - with `aptitude`, 86–88
 - from multiple distributions, 99–100
 - from a specific site, 100
 - from a specific version, 100–101
 - POP3 e-mail server, 486–487
 - PostgreSQL database server, 515
 - ProFTPD, 376–379
 - `rsnapshot` backup program, 152
 - Samba, 437
 - SANE (Scanner Access Now Easy), 237
 - software, 29–31
 - Squid proxy server, 431
 - `sudo`, 105
 - `tarballs`, 547–548
 - `vsftpd` (Very Secure FTP Daemon), 368–369
 - XFree86 graphics system, 166–169
- instant messaging (IM), 223–224
- integrity-checking packages, 95
- interactive fiction, 259
- Internet Fiction Archive, 259
- Internet Message Access Protocol 4 (IMAP4)
- e-mail server
 - configuring, 479–481
 - features, 478
 - installing, 478–479
 - Maildir mailbox format, 481–483
 - testing, 483–485

Internet Protocol (IP)

- defined, 116
 - IPv4, 430
 - IPv6, 430
- Internet servers, 10
- `int-fictioninstaller` package, 259
- Intranet servers, 10
- in-use file backups, 141–142
- IP (Internet Protocol)
- defined, 116
 - IPv4, 430
 - IPv6, 430
- IP addresses
- assigning, 427–430
 - conflicts, 427
 - Domain Name System (DNS), 393–395
 - dotted quad notation, 117
 - dynamic IP addresses, 429
 - static IP addresses, 429
- IPsec, 432–434
- `ipsec-tools` package, 434
- ISA sound card, 174
- `isakmpd` package, 434
- isolation, 288–290
- i386 architecture, 7

J

- JACK (Jack Audio Connection Kit) sound server, 247
- Java JDBC, 527
- `junior-arcade` package, 267
- `junior-art` package, 267
- `junior-doc` package, 267
- `junior-games-card` package, 267
- `junior-games-gl` package, 267
- `junior-games-net` package, 267
- `junior-games-sim` package, 267
- `junior-games-text` package, 267
- `junior-gnome` package, 267
- `junior-internet` package, 267
- `junior-kde` package, 267
- `junior-math` package, 267
- `junior-programming` package, 267
- `junior-puzzle` package, 267
- `junior-sound` package, 267
- `junior-system` package, 267
- `junior-toys` package, 267
- `junior-typing` package, 267
- `junior-writing` package, 267

K

kaffeine (xine video player front end), 251

kamera package, 242

KDE

configuring, 198–199

Control Center, 205

customizing, 202–206

Digikam program, 242–243

features, 196

Firefox Web browser, 213

installing, 196–197

junior-kde package, 267

kaffeine (xine video player front end), 251

kamera package, 242

KMail e-mail client, 217, 219–222

Konqueror

file management, 200–202

Web browsing, 208, 215–217

new-user wizard, 197–198

oooqs-kde package, 229

OpenOffice.org, 229

panels, 199–200

personalizing, 202–206

sound server, 247

themes, 205–206

windows, 199–200

kde package, 196

kernel-package package, 549

kernel-patch-freeswan package, 434

kernel-patch-lowlatency-2.4 package, 247

kernel-patch-openswan package, 434

kernel-patch-preempt-2.4 package, 247

kernel-patch-usagi package, 434

kernels

building, 548–551

configuring, 549–550

defined, 5

device drivers, 5

filesystems, 5

FreeBSD, 6–7

GNU HURD, 6–7

installing, 549

Linux

defined, 6

development history and philosophy, 11–12

features, 12–13

source code, 13

NetBSD, 6–7

network stack, 5

optimizing, 551–552

programming interface, 6

kino package, 253

kino-dvtitle package, 253

kinoplus package, 253

kino-timfx package, 253

KMail e-mail client, 217, 219–222

kmines package, 256

Knoppix Live CD, 595

Konqueror Web browser, 208, 215–217

kooka package, 238

Kooka SANE front end, 238

kpat package, 256

krfb package, 423

k3b package, 252–253

Ktuberling game, 266

L

Lamo, Adrian, hacker, 287

latency, 247

LaTeX markup language, 227

layouts of archives, 587–590

Lbreakout game, 272

lbreakout2 package, 272

LDAP (Lightweight Directory Access Protocol), 460

LDAP Directories: Building an Enterprise Directory,

Marcel Rizcallah, 462

ldap-utils package, 462

LDAs (Local Delivery Agents), 476

legal issues

Open Source software, 584

pirated MP3 files, 249

lib directory, 35

libc6-dev package, 546

libgimpprint1 package, 244

libldap package, 462

libldap2-dev package, 462

libraries, 6

libsane package, 237

libsane-extras package, 237

libwine-alsa package, 263

libwine-arts package, 263

libwine-jack package, 263

libwine-nas package, 263

libwine-print package, 263

- licenses
 - GNU General Public License, 3
 - Open Source software, 584
 - Lightweight Directory Access Protocol (LDAP), 460
 - Lincity game, 270
 - lincity package, 270
 - line printer daemon (lpd) printing service
 - configuring, 492–493
 - features, 490
 - testing, 493
 - lintian package, 555, 579–580
 - Linux Filesystems, William von Hagen, 436
 - Linux Game Publishing, 273
 - Linux Game Tome Web site, 266
 - Linux games, 266–273
 - Linux kernel
 - defined, 6
 - development history and philosophy, 11–12
 - features, 12–13
 - source code, 13
 - Linux LDAP-HOWTO, 466
 - Linux Networking HOWTO, 116
 - Linux operating system, 534
 - Linux Sound HOWTO, 174
 - linuxprinting.org Web site, 498
 - linuxvnc package, 423
 - list globs, 56–57
 - listing
 - directories, 49–50
 - files, 49–50
 - packages
 - with aptitude, 80–81
 - with dpkg, 78–79
 - Live CD, 595–596
 - Local Delivery Agents (LDAs), 476
 - logging on, 41
 - login mode (bash shell), 68
 - Loki Games, 272–273
 - lp group, 114
 - lpd (line printer daemon) printing service
 - configuring, 492–493
 - features, 490
 - testing, 493
 - lpr (lprng) printing service
 - configuring, 492–493
 - features, 490
 - testing, 493
 - ls command, 43, 49–50
 - lxdoom package, 272
 - lxdoom-sndsrv package, 272
 - lxmussrv package, 272
- ## M
- Mac OS X, 7
 - mail group, 114
 - Mail Transfer Agents (MTAs), 476
 - Mail User Agents (MUAs), 476
 - Maildir mailbox format, 312, 481–483
 - mailing lists
 - BugTraq, 291, 293
 - Debian-legal, 584
 - Debian-user, 248
 - MARC (Mailing list ARChives), 291
 - North American Network Operators Group (NANOG), 292–293
 - main section of a distribution, 8
 - maintainer scripts (packages), 75
 - maintaining package relationships, 75
 - maintenance
 - archives, 592
 - Debian Project, 19
 - DNS server, 407–408
 - make package, 546
 - make-doc package, 546
 - makefiles, 546–547
 - make-kpkg package, 550–552
 - malicious users, 281–282
 - man command, 44
 - managing group membership, 114–115
 - manpages, 44–46, 576
 - manual package selection, 30
 - mapping computer names to computer addresses, 117–120
 - MARC (Mailing list ARChives), 291
 - Marillat, Christian, Debian Developer, 250
 - markup languages
 - groff, 226–227
 - history, 225–226
 - HTML (HyperText Markup Language), 227
 - LaTeX, 227
 - SGML (Standard Generalized Markup Language), 227–228
 - TeX, 227
 - XML (eXtensible Markup Language), 228

Massachusetts Institute of Technology (MIT), 532
 mbox mailbox format, 312, 481
 mentors.debian.net Open Source software-hosting site, 586
 menu file, 574–575
 metacharacter, 51
 MIDI (Musical Instrument Digital Interface), 249–250
 MIME (Multipurpose Internet Mail Extensions), 308
 Minesweeper, 256
 MINIX Unix clone, 533
 mips/mipsel architecture, 7
 MIT (Massachusetts Institute of Technology), 532
 Mitnick, Kevin, *The Art of Deception*, 288
 mkdir command, 57
 mkisofs package, 252
 mnt directory, 36
 modifying files, 57
 Moen, Rick, “How to Ask Questions the Smart Way”, 541
 mondoarchive backup program, 162
 monitor specifications, 167
 Monopoly game, 269
 Moria game, 257
 mouse types and connectors, 167–168
 moving files, 58–59
 Mozilla Web browser, 208, 212–213
 MPEG video format, 250
 MP3 format, 249
 MP3/ogg players, 248
 mplayer video player, 250
 m68k architecture, 7
 MTAs (Mail Transfer Agents), 476
 MUAs (Mail User Agents), 476
 multica backup program, 162
 multimedia software library, 250
 multiple-server printing, 507–508
 Multipurpose Internet Mail Extensions (MIME), 308
 Murdock, Ian, creator of the Debian software distribution, 3
 music

- CD burning, 252
- downloading copyrighted songs, 249
- Musical Instrument Digital Interface (MIDI), 249–250
- X MultiMedia System (XMMS), 248

 mv command, 58–59

myspell-dictionary package, 229
 MySQL database server

- access types, 524–526
- backups, 526
- client tools, 527
- configuring, 522
- databases
 - creating, 523
 - removing, 526
- features, 514
- installing, 521
- interactive queries, 523
- user configuration, 523–524

N

named pipes, 37
 named.conf file, 394
 namespaces, 34
 nano text editor, 61
 NANOG (North American Network Operators) mailing list, 292–293
 NAT (Network Address Translations), 419
 NES (Nintendo Entertainment System) emulators, 261
 nessus package, 302
 NetBSD kernel, 6–7
 NetHack game, 257
 netmasks, 116–117
 Network Address Translations (NAT), 419
 network administration

- ease of, 18–19
- full sessions as root, 108–109
- groups
 - adding, 109, 111
 - managing group membership, 114–115
 - removing, 111–113
- privilege separation, 104
- root account, 104–105
- sudo
 - auditing sudo logs, 108
 - configuring, 105–107
 - installing, 105
 - running, 107–108
- superuser account, 104
- users
 - adding, 109–111
 - removing, 111–112

- network backups, 141
 - Network File System (NFS)
 - configuration file, 448
 - daemons, 447–448
 - NFS mount, 446
 - NFS-exported filesystem, 446
 - pure file-sharing environment, 445
 - remote procedure calls (RPCs), 446
 - sensitivity to network latency, 446
 - services, 447
 - network security
 - attacks, 285–288
 - auditing, 278, 280–281
 - authentication, 278–280
 - authorization, 278, 280
 - awareness, 283
 - backups, 284
 - border security, 284–285
 - BugTraq mailing list, 291, 293
 - daemons, 299–302
 - education, 283
 - fault tolerance, 290
 - firewalls, 294–299
 - FTP servers, 366–367
 - hackers, 292
 - help, 290–293
 - identification, 278–279
 - isolation, 288–290
 - malicious users, 281–282
 - pervasive security, 284–285
 - procedures, 293–295
 - segregation, 284
 - separation, 284
 - testing, 302
 - viruses, 287
 - worms, 287
 - network stack, 5
 - networked filesystems. *See* distributed filesystems
 - networking
 - Internet protocol, 116–117
 - Linux Networking HOWTO, 116
 - mapping computer names to computer addresses, 117–120
 - network interfaces, 120–123
 - Virtual Private Networks (VPNs), 416, 432–434
 - network-transparent environments, 6
 - New Maintainers, 15–16, 539–541
 - NFS (Network File System)
 - configuration file, 448
 - daemons, 447
 - NFS mount, 446
 - NFS-exported filesystem, 446
 - pure file-sharing environment, 445
 - remote procedure calls (RPCs), 446
 - sensitivity to network latency, 446
 - services, 447
 - NFS client
 - configuring, 454–456
 - example NFS client, 457
 - NFS server configuration
 - /etc/exports, 450
 - /etc/exports export options, 451–453
 - exporting the filesystems, 453–454
 - planning process, 448–449
 - Nintendo Entertainment System (NES) emulators, 261
 - non-Debian package installation, 547–548
 - nonfree section of a distribution, 9
 - non-PostScript printers, 491
 - normal mode (*bash* shell), 68
 - North American Network Operators Group (NANOG)
 - mailing list, 292–293
 - notification programs for e-mail delivery, 476
 - nvi* package, 61
- ## O
- object types, 36–37
 - OCaml OCamlDBI, 527
 - OCR (Optical Character Recognition), 238
 - ogg (Ogg Vorbis) format, 249
 - Omega game, 257
 - oooqs-gnome package, 229
 - oooqs-kde package, 229
 - Open Sound System (OSS), 166, 174, 246
 - Open Source Definition, 533
 - Open Source Initiative (OSI), 533
 - Open Source software
 - Free Software/Open Source movement, 13–14
 - licenses, 584
 - Open Source software-hosting sites
 - Alioth, 585–586
 - BerliOs, 586
 - mentors.debian.net, 586
 - Savannah, 586
 - SourceForge, 584–585

- OpenBSD, 411
 - OpenLDAP
 - client applications, 460–461
 - data model, 461–462
 - Lightweight Directory Access Protocol (LDAP), 460
 - software installation, 462–466
 - OpenLDAP Foundation, 461
 - OpenLDAP Project, 461
 - OpenLDAP server
 - adding entries to the database, 466–469
 - connections, 469–470
 - creating, 462–466
 - global address book, 470–473
 - OpenOffice.org
 - applications (complete list), 228
 - exchanging documents, 232–233
 - export filters, 232
 - GNOME, 229
 - installing, 228–229
 - KDE, 229
 - Writer application, 229–232
 - openoffice.org package, 228
 - openoffice.org-crashrep package, 229
 - openoffice.org-help package, 229
 - openoffice.org-hyphenation package, 229
 - openoffice.org-l10n package, 229
 - openoffice.org-mimelnk package, 229
 - openoffice.org-thesaurus package, 229
 - OpenSSH project, 411
 - openswan package, 434
 - Optical Character Recognition (OCR), 238
 - optimizing kernels, 551–552
 - organization of the Debian Project, 537–538
 - OSI (Open Source Initiative), 533
 - OSS (Open Sound System), 166, 174, 246
 - other user permissions, 40
 - output redirection (shell programming
 - language), 66–67
 - ownership of files, 38, 59–60
 - owner-user permissions, 40
- P**
- package formats, 5
 - package management tools
 - apt family, 76–77
 - aptitude, 77
 - dpkg, 77
 - package relationships
 - conflicts, 74, 558
 - defined, 73
 - dependencies, 73
 - depends, 74, 558
 - enhances, 558
 - maintaining, 75
 - pre-depends, 74, 558
 - provides, 74
 - recommends, 74, 558
 - replaces, 74
 - suggests, 74, 558
 - package scripts, 573
 - packages
 - addgroup, 111
 - adduser, 110–111
 - adzapper, 432
 - alien, 5
 - alsa-base, 174
 - alsa-utils, 174
 - announcing package release, 592
 - apache-perl, 353
 - apt-utils, 586
 - backports, 9
 - backups, 128
 - bastille, 302
 - binary packages, 72–73
 - bsdgames, 255
 - bsdgames-nonfree, 255
 - build dependencies, 554
 - build-essential, 545–546
 - building
 - command execution, 577–579
 - devscripts package, 581
 - doc-base system for documentation, 576
 - dummy packages, 581–582
 - manpages, 576
 - quality control, 555, 579–580
 - from scratch, 554–556
 - bzip2, 549
 - calamaris, 432
 - ccze, 432
 - cdrecord, 252
 - chastity-list, 432
 - cinpaint, 254
 - compiling, 72

Continued

packages (*continued*)

- configuration files, 75, 92–94

- configuring with debconf, 91–92

- cupsys, 494

- cupsys-client, 494

- cupsys-driver-gimpprint, 244

- debhelper, 555

Debian directory

- changelog file, 570–572

- compat file, 573

- conffiles file, 576

- control file, 556–559

- copyright file, 572–573

- dirs file, 574

- docs file, 574

- menu file, 574–575

- README.Debian file, 573–574

- rules file, 559–569

- watch file, 575

- Debian package Web site, 84

- debian-policy, 555

- defined, 4

- delgroup, 112–113

- deluser, 111–112

- dependencies, 73

- devscripts, 581

- devscripts, 555

- dh-make, 555

- doom-wad-shareware, 272

- downloading, 583

- dpkg-dev, 546, 586

- dvdrttools, 252

- dvgrab, 253

- epiphany-browser, 209

- equivs, 581–582

- /etc/apt/preferences, 98–99

- /etc/apt/sources.list, 96–97

- examining, 82–83

- fakeroot, 549

- features, 4

- finding, 77–78

- fontconfig, 169

- freeciv-client, 270

- freeciv-server, 270

- freecraft, 272

- freeswan, 434

- frotz, 259

- gcc, 545

- gcc-doc, 545

- gcompris, 268

- gdm, 178, 180

- gimp, 244

- gimp-data-extras, 245

- gimp-help, 244

- gnome, 178

- gnome-games, 268

- gocr, 238

- gphoto2, 240–242

- g++, 545

- hotplug, 240

- installation scripts, 73

installing

- with apt-get, 85–86

- with aptitude, 86–88

- from multiple distributions, 99–100

- from a specific site, 100

- from a specific version, 100–101

- integrity-checking, 95

- int-fictioninstaller, 259

- ipsec-tools, 434

- isakmpd, 434

- junior-arcade, 267

- junior-art, 267

- junior-doc, 267

- junior-games-card, 267

- junior-games-gl, 267

- junior-games-net, 267

- junior-games-sim, 267

- junior-games-text, 267

- junior-gnome, 267

- junior-internet, 267

- junior-kde, 267

- junior-math, 267

- junior-programming, 267

- junior-puzzle, 267

- junior-sound, 267

- junior-system, 267

- junior-toys, 267

- junior-typing, 267

- junior-writing, 267

- kamera, 242

- kde, 196

- kernel-package, 549
- kernel-patch-freeswan, 434
- kernel-patch-lowlatency-2.4, 247
- kernel-patch-openswan, 434
- kernel-patch-preempt-2.4, 247
- kernel-patch-usagi, 434
- kino, 253
- kino-dvttitler, 253
- kinoplus, 253
- kino-timfx, 253
- kmimes, 256
- kooka, 238
- kpat, 256
- krfb, 423
- k3b, 252–253
- lbreakout2, 272
- ldap-utils, 462
- libc6-dev, 546
- libgimpprint1, 244
- libldap2, 462
- libldap2-dev, 462
- libsane, 237
- libsane-extras, 237
- libwine-alsa, 263
- libwine-arts, 263
- libwine-jack, 263
- libwine-nas, 263
- libwine-print, 263
- lincity, 270
- lintian, 555, 579–580
- linuxvnc, 423
- listing**
 - with aptitude, 80–81
 - with dpkg, 78–80
- lxdoom, 272
- lxdoom-sndsrv, 272
- lxmussrv, 272
- maintainer scripts**, 75
- make, 546
- make-doc, 546
- make-kpkg, 550–552
- manual package selection**, 30
- mkisofs, 252
- myspell-dictionary, 229
- nessus, 302
- non-Debian packages**, 547–548
- nvi, 61
- oooqs-gnome, 229
- oooqs-kde, 229
- openoffice.org, 228
- openoffice.org-crashrep, 229
- openoffice.org-help, 229
- openoffice.org-hyphenation, 229
- openoffice.org-l10n, 229
- openoffice.org-mime1nk, 229
- openoffice.org-thesaurus, 229
- openswan, 434
- pg_dump, 521
- postgres, 515
- pttp-client, 433
- properties**, 71
- purging**
 - with apt-get, 89–90
 - with aptitude, 90–91
- pwgen, 279
- quake2, 272
- quanta, 234
- rebuilding**, 552–554
- removing**
 - with apt-get, 89–90
 - with aptitude, 90–91
- reportbug, 544
- repositories**, 76, 96–97, 99
- rfb, 423
- samba, 437
- sane-utils, 237
- sarg, 432
- scribus, 233
- searching**, 83–84
- sftp-server, 390–391
- shorewall, 295
- showing package details**, 82–83
- signing**, 579, 592
- sirtet, 268
- slapd, 462
- smbclient, 437
- sound-icons, 175
- source packages**, 72
- spectemu-x11, 260
- squidguard, 432
- stella, 261

Continued

- packages (*continued*)
 - tetex-bin, 227
 - tetex-doc, 227
 - tetex-extra, 227
 - tightvncserver, 423
- upgrading
 - with apt-get, 94–95
 - with aptitude, 95
- vncserver, 423
- wesnoth, 270
- wesnoth-editor, 270
- wesnoth-music, 270
- wesnoth-server, 270
- wine, 263
- wine-doc, 263
- winesetuptk, 263
- wine-utils, 263
- x11vnc, 423
- xboard, 269–270
- xine-ui, 251
- xmms, 248
- xsane, 237
- xserver-xfree86, 169
- panels
 - GNOME, 183–185
 - KDE, 199–200
- partimage utility, 161
- partition images, 161
- partitioning, 25–26
- passwords
 - root password, 29
 - SSH (Secure Shell), 413–414
- patches
 - kernel-patch-lowlatency-2.4, 247
 - kernel-patch-preempt-2.4 package, 247
- pathnames, 34, 46–48
- paths, 34
- pdumpfs backup program, 162
- Perens, Bruce, Debian Developer, 8, 534
- Perl
 - Apache 1.3, 352–355
 - Boa, 364
- Perl DBI, 527
- Perl Web site, 352
- permissions
 - changing, 59–60
 - defined, 38
 - execute, 39
 - group, 40
 - other user, 40
 - owner-user, 40
 - read, 39
 - setgid, 40–41
 - setuid, 40–41
 - sticky, 40–41
 - turning on/off, 39
 - write, 39
- personalizing
 - GNOME, 191–194
 - KDE, 202–206
- pervasive security, 284–285
- pg_dump package, 521
- pg_dumpall script, 521
- phone number for Wiley Product Technical Support, 596
- PHP (Apache 1.3), 357–360
- Pingus game, 272
- pinning feature of apt-get, 96–97, 100–101
- pipes
 - defined, 37
 - shell programming language, 68
- pirated MP3 files, 249
- Point to Point Protocol (PPP) interfaces, 122–123
- Policy Manual of the Debian Project, 539
- POP3 e-mail server
 - features, 485
 - installing, 486–487
 - testing, 487–488
- port forwarding, 416–418
- portability, 18
- ports (Internet protocol), 117
- Postfix, 333–334
- postgres package, 515
- PostgreSQL database server
 - access rules, 516–518
 - authentication types, 518
 - backups, 521
 - client tools, 527
 - connections, 519
 - databases
 - creating, 515–516
 - removing, 520
 - features, 514
 - installing, 515

- restarting, 519
- testing, 519–520
- upgrading, 520
- users
 - creating, 515–516
 - removing, 520
- postinst script, 573
- post-installation script, 75
- post-removal script, 75
- postrm script, 573
- PostScript printers, 491
- Potato Guy game, 266
- powerpc architecture, 7
- PPP (Point to Point Protocol) interfaces, 122–123
- PPTP, 432–433
- ptpp-client package, 433
- pre-depends package relationship, 74, 558
- preinst script, 573
- pre-installation script, 75
- pre-removal script, 75
- prerm script, 573
- PreserveJobFiles directive (CUPS), 510
- PreserveJobHistory directive (CUPS), 510
- primary DNS server, 395
- print queue
 - accepting print jobs, 503
 - defined, 491
 - rejecting print jobs, 503
 - starting, 502
 - stopping, 502
- print spooling, 490–492
- printer classes, 505
- printers
 - access rules, 502–503
 - default printer, 503
 - granting access, 502–503
 - quotas, 503–504
 - restricting access, 502–503
- printing services
 - choosing, 490
 - CUPS
 - adding printers, 495–497, 500
 - client configuration, 505–508, 511
 - command line, 499–500
 - configuring, 494
 - directives, 508–511
 - features, 490
 - installing, 494
 - lpadmin program, 499–500
 - modifying printer settings, 500–501
 - troubleshooting, 501
 - Web interface, 494–495
 - defined, 489–490
 - GIMP Print, 497
 - lpd (line printer daemon)
 - configuring, 492–493
 - features, 490
 - testing, 493
 - lpr (lprng)
 - configuring, 492–493
 - features, 490
 - testing, 493
 - non-PostScript printers, 491
 - PostScript printers, 491
- privilege separation, 104
- procedures for network security, 293–295
- ProFTPD
 - advanced configuration, 384–389
 - default configuration, 379–384
 - directives, 381–384
 - features, 375–376
 - installing, 376–379
 - virtual FTP server, 389–390
- programming interface, 6
- properties
 - file properties, 51
 - GNOME panels, 192
 - KDE panels, 203–204
 - package properties, 71
- provides package relationship, 74
- proxy servers, 430–432
- proxying, 418
- purging packages
 - with apt-get, 89–90
 - with aptitude, 90–91
- pwd command, 42
- pwgen package, 279
- Pydance game, 271
- Python (Apache 1.3), 355–357
- Python DB-API 2.0, 527
- Python Web site, 355

Q

Quake 2 game, 272
 quake2 package, 272
 quality control, 555, 579–580
 quanta package, 234
 Quanta+ Web authoring tool, 234–236
 question mark (?) wildcard character, 54
 quotas for printers, 503–504
 quoting, 52

R

radvd (router advertisement daemon), 430
 Raymond, Eric
 “The Cathedral and the Bazaar”, 537–538
 “How to Ask Questions the Smart Way”, 541
 rdiff-backup backup program, 145–149
 read permission, 39
 README.Debian file, 573–574
 rebuilding packages, 552–554
 recommends package relationship, 74, 558
 Recording Industry Association of America (RIAA), 249
 recursion, 403
 redirection (shell programming language), 66–68
 regular files (defined), 37
 RehMuDi multimedia distribution, 252
 rejecting print jobs, 503
 relationships (packages)
 conflicts, 74, 558
 defined, 73
 dependencies, 73
 depends, 74, 558
 enhances, 558
 maintaining, 75
 pre-depends, 74, 558
 provides, 74
 recommends, 74, 558
 replaces, 74
 suggests, 74, 558
 relative pathnames, 46–48
 relay printing, 508
 Release file (archive), 590–591
 remote access
 defined, 409
 desktop access, 409
 rlogin (remote login), 410
 RSH (remote shell), 410–411
 shell access, 409
 SSH (Secure Shell)
 authentication, 413–415
 connections, 411–413
 firewalls, 419–420
 OpenSSH, 411
 port forwarding, 416–418
 proxying, 418
 transferring files, 415–416
 X-forwarding, 422
 telnet, 410–411
 VNC (Virtual Network Computing), 422–424
 X-forwarding, 420–422
 remote login (rlogin), 410
 removing
 databases
 MySQL database server, 526
 from PostgreSQL database server, 520
 directories, 58
 files, 58
 groups, 111, 113
 packages
 with apt-get, 89–90
 with aptitude, 90–91
 users, 111–112
 renaming files, 58–59
 replaces package relationship, 74
 reportbug package, 544
 reporting bugs, 541–544
 repositories, 76, 96–97, 99
 resolv.conf file, 394, 406–407
 restarting PostgreSQL database server, 519
 restoring files
 with Amanda, 151
 with backuppc, 159–160
 with rdiff-backup, 148
 with rsnapshot, 154–155
 restricting access to printers, 502–503
 retrogaming, 255
 reverse zone file, 399–401
 rfb package, 423
 RIAA (Recording Industry Association of America), 249
 Rizcallah, Marcel, *LDAP Directories: Building an Enterprise Directory*, 462
 rlogin (remote login), 410
 rm command, 58
 Rogue game, 256–257

- root account, 104–105
- root directory, 35–36
- root password, 29
- router advertisement daemon (radvd), 430
- rpms, 5
- RSH (remote shell), 410–411
- rsnapshot backup program, 151–155
- rsync backup program, 145
- Ruby/DBI, 527
- rules file, 559–569

S

Samba

- Common Internet File System (CIFS), 437
- configuration file, 441–445
- configuring, 437–441
- installing, 437
- sharing directories, 441–445
- samba package, 437
- SANE (Scanner Access Now Easy), 236–238
- sane-utils package, 237
- sarg package, 432
- sarge release, 4, 8, 21
- Savannah Open Source software-hosting site, 586
- Savolainen, Hannu, creator of OSS (Open Sound System), 246
- sbin directory, 35
- scanimage program, 237
- Scanner Access Now Easy (SANE), 236–238
- scanning images, 236–238
- SCP (Secure Copy), 415
- screen readers, 247
- Scribus desktop publishing, 233–234
- scribus package, 233
- Script-Fu (The GIMP program), 245
- scripts
 - installation scripts (packages), 73
 - maintainer scripts (packages), 75
 - makefiles, 546–547
 - package scripts, 573
 - pg_dumpall, 521
- SCSI drives, 134
- searching for packages, 83–84
- secondary DNS server, 395, 403–406
- Secure Copy (SCP), 415
- Secure FTP (SFTP), 390–391

Secure Shell (SSH)

- authentication, 413–415
- connections, 411–413
- firewalls, 419–420
- OpenSSH, 411
- port forwarding, 416–418
- proxying, 418
- sftp-server package, 390–391
- transferring files, 415–416
- X-forwarding, 422

Securing Debian HOWTO, 301

security

- attacks, 285–288
- auditing, 278, 280–281
- authentication, 278–280
- authorization, 278, 280
- awareness, 283
- backups, 284
- border security, 284–285
- BugTraq mailing list, 291, 293
- daemons, 299–302
- education, 283
- fault tolerance, 290
- firewalls, 294–299
- FTP servers, 366–367
- hackers, 292
- help, 290–293
- identification, 278–279
- isolation, 288–290
- malicious users, 281–282
- pervasive security, 284–285
- procedures, 293–295
- segregation, 284
- separation, 284
- testing, 302
- viruses, 287
- worms, 287

Security Enhanced Linux (SELinux), 104

- security holes in the DNS server, 401–403

SecurityFocus, 291

- segregation, 284

SELinux privilege-separation scheme, 104

Sendmail, 333

- separation, 284
- sequences, 55–56

Server Message Block (SMB) protocol, 437

- ServerAdmin directive (CUPS), 510
- ServerName directive (CUPS), 511
- ServerRoot directive (CUPS), 511
- services
 - defined, 6
 - Network File System (NFS), 447
- setgid permissions, 40–41
- setuid permissions, 40–41
- SFTP (Secure FTP), 416
- sftp-server package, 390–391
- SGML (Standard Generalized Markup Language), 227–228
- sh architecture, 8
- sharing directories with Samba, 441–445
- sharing files
 - Network File System (NFS)
 - configuration file, 448
 - daemons, 447–448
 - NFS mount, 446
 - NFS-exported filesystem, 446
 - pure file-sharing environment, 445
 - remote procedure calls (RPCs), 446
 - sensitivity to network latency, 446
 - services, 447
 - Samba
 - Common Internet File System (CIFS), 437
 - configuration file, 441–445
 - configuring, 437–441
 - installing, 437
- shebang (#!), 559
- shell access, 409
- shell programming language
 - aliases, 65
 - command substitution, 65–66
 - defined, 61
 - pipes, 68
 - redirection, 66–68
 - variable substitution, 62
 - variables, 62–65
- shells
 - bash
 - Advanced Bash-Scripting Guide Web site, 70
 - character ranges, 56–57
 - chgrp command, 60
 - chown command, 60
 - command arguments, 42
 - command options, 42
 - command prompt, 41–42
 - current working directory, 42, 46–47
 - customizing, 68–70
 - defined, 6, 33
 - escaping, 52–53
 - globbing, 53–57
 - home directory, 41
 - lists, 56–57
 - login mode, 68
 - ls command, 43, 49–50
 - man command, 45
 - manpages, 44–46
 - mkdir command, 57
 - mv command, 58–59
 - normal mode, 68
 - pwd command, 42
 - quoting, 52
 - rm command, 58
 - running commands, 42
 - sequences, 55–56
 - spaces, 51
 - stat command, 51
 - tab-completion, 43
 - wildcards, 53–55
 - Bourne Shell, 6
 - defined, 6
 - shorewall package, 294–299
 - showing package details, 82–83
 - signing packages, 579, 592
- Simple Message Transport Protocol (SMTP), 309–314
- Sinclair Spectrum emulators, 260–261
- single-server printing, 507
- sirtet package, 268
- slapd package, 462
- Slash'EM game, 257
- SMB (Server Message Block) protocol, 437
- smbclient package, 437
- SMTP (Simple Message Transport Protocol), 309–314
- Social Contract of the Debian project, 14–16, 534–535
- SOCKS4 proxy, 418
- SOCKS5 proxy, 418
- software
 - Free Software (defined), 533
 - installing, 29–31
 - multimedia software library, 250

- software distributions
 - applications, 7
 - daemons, 6
 - kernel
 - defined, 5
 - device drivers, 5
 - filesystems, 5
 - FreeBSD, 6
 - GNU HURD, 6
 - Linux, 6
 - NetBSD, 6
 - network stack, 5
 - programming interface, 6
 - libraries, 6
 - package formats, 5
 - services, 6
 - software, 6
 - utilities, 6
- software packages. *See* packages
- Solitaire, 256
- sound
 - Advanced Linux Sound Architecture (ALSA), 166, 174–175, 246
 - direct sound card access, 247
 - Linux Sound HOWTO, 174
 - Open Sound System (OSS), 166, 174, 246
 - screen readers, 247
 - testing, 175–176
 - troubleshooting, 175–176, 248
 - volume levels, 175
- sound servers, 246–247
- sound-*icons* package, 175
- source code coupon, 596
- source packages, 72
- SourceForge Open Source software-hosting site, 584–585
- sparc/sparc64 architecture, 7
- spectemu-x11 package, 260
- Spectrum emulators, 260–261
- SQL database servers
 - choosing, 514
 - client tools, 527
 - MySQL
 - access types, 524–526
 - backups, 526
 - configuring, 522
 - creating databases, 523
 - features, 514
 - installing, 521
 - interactive queries, 523
 - removing databases, 526
 - user configuration, 523–524
- PostgreSQL
 - access rules, 516–518
 - authentication types, 518
 - backups, 521
 - connections, 519
 - creating users/databases, 515–516
 - features, 514
 - installing, 515
 - removing users/databases, 520
 - restarting, 519
 - testing, 519–520
 - upgrading, 520
- Squid proxy server, 431–432
- squidguard package, 432
- SSH (Secure Shell)
 - authentication, 413–415
 - connections, 411–413
 - firewalls, 419–420
 - OpenSSH, 411
 - port forwarding, 416–418
 - proxying, 418
 - sftp-server package, 390–391
 - transferring files, 415–416
 - X-forwarding, 422
- ssmtp, 334
- stable distribution, 8–9
- Stallman, Richard M., founder of the Free Software Foundation, 532
- Standard Generalized Markup Language (SGML), 227–228
- Star Division, 228
- starting print queues, 502
- stat command, 51
- static IP addresses, 429
- stella package, 261
- s390 architecture, 8
- sticky permissions, 40–41
- stopping print queues, 502
- storebackup backup program, 162
- submitting bug reports, 544

- sudo
 - auditing sudo logs, 108
 - configuring, 105–107
 - installing, 105
 - running, 107–108
 - suggests package relationship, 74, 558
 - Sun Microsystems, 228
 - Super NES emulators, 261
 - superuser account, 29, 104
 - supported architectures, 7–8, 11
 - symbolic links, 37
 - synchronizing files, 160–161
 - system administration
 - ease of, 18–19
 - full sessions as root, 108–109
 - groups
 - adding, 109, 111
 - managing group membership, 114–115
 - removing, 111–113
 - privilege separation, 104
 - root account, 104–105
 - sudo
 - auditing sudo logs, 108
 - configuring, 105–107
 - installing, 105
 - running, 107–108
 - superuser account, 104
 - users
 - adding, 109–111
 - removing, 111–112
 - system configuration, 29
 - system requirements for CD-ROMs accompanying
 - this book, 593
 - system user, 29
- ## T
- tabbed browsing, 211
 - tab-completion, 43
 - Tanenbaum, Andrew, creator of the
 - MINIX Unix clone, 533
 - tape drives, 133–138
 - tar backup program, 142–144
 - tarballs
 - defined, 4
 - installing, 547–548
 - TCP/IP, 116
 - technical support for Wiley products, 596
 - telephone number for Wiley Product Technical
 - Support, 596
 - television, 252
 - telnet, 410–411
 - TempDir directive (CUPS), 511
 - tertiary DNS server, 396
 - testing
 - audio drivers, 175–176
 - DNS server, 407
 - IMAP4 e-mail server, 483–485
 - lpd (line printer daemon) printing service, 493
 - lpr (lprng) printing service, 493
 - network security, 302
 - POP3 e-mail server, 487–488
 - PostgreSQL database server, 519–520
 - XFree86 graphics system, 172–173
 - testing backups, 139
 - testing distribution, 8–9
 - tetex-bin package, 227
 - tetex-doc package, 227
 - tetex-extra package, 227
 - Tetris game, 268
 - TeX markup language, 227
 - text editors, 61
 - themes
 - GNOME, 195
 - KDE, 205–206
 - Thunderbird e-mail client, 217, 222
 - tightvncserver package, 423
 - time zone, 29
 - Timeout directive (CUPS), 511
 - ToME game, 257
 - tools
 - database client tools, 527
 - debsums tool, 95
 - package management tools
 - apt family, 76–77
 - aptitude, 77
 - dpkg, 77
 - Web authoring tool, 234–236
 - Torvalds, Linus, creator of Linux, 3, 11, 534
 - totem (xine video player front end), 251
 - transferring files
 - anonymous FTP, 366
 - FTP servers, 365–367
 - SCP (Secure Copy), 415
 - SFTP, 416
 - SSH (Secure Shell), 415–416

TransGaming Technologies, 265

trees, 34

troubleshooting

audio drivers, 175–176

CUPS printing service, 501

sound, 248

XFree86 graphics system, 172–173

turning on/off permissions, 39

Tux Games, 273

Tuxkart game, 272

TV, 252

U

Ubuntu, 16–17

Unison backup program, 160–161

United States National Security Agency's Security
Enhanced Linux, 104

UNIX operating system, 532

unstable distribution, 8–9

upgrading

packages

with `apt-get`, 94–95

with `aptitude`, 95

PostgreSQL database server, 520

USB digital cameras, 240

user groups, 292

UserLinux, 16–17

users

adding, 109, 111

defined, 38

deleting, 111–112

MySQL database server, 523–524

PostgreSQL database server, 515–516

removing, 111–112

superuser, 29

system user, 29

usernames, 38

visually impaired, 247

“Using maildir format” article, Bernstein, Dan, 481

`usr` directory, 36

`/usr/games` directory, 257

utilities

`amrecover`, 151

`apt-cache`, 82–83

`apt-get`, 85–86

`discover`, 168

hardware detection utilities, 168

`hotplug`, 168

`partimage`, 161

software distributions, 6

V

VA Software, 584

`var` directory, 36

variable substitution (shell programming language), 62

variables (shell programming language), 62–65

Versatile Commodore Emulator (VICE), 261

Very Secure FTP Daemon (`vsftpd`)

configuring, 369–375

installing, 368–369

`vi` text editor, 61

VICE (Versatile Commodore Emulator), 261

video, 250–251

video card information, 168

video editing, 253–254

video group, 114

video players

`mplayer`, 250

`xine`, 251

Video4Linux project, 252

viewing manpages, 44–45

`vim` text editor, 61

virtual directories, 48–49

virtual FTP server, 389–390

Virtual Network Computing (VNC), 422–424

Virtual Private Networks (VPNs), 416, 432–434

viruses, 287

visually impaired users, 247

VNC (Virtual Network Computing), 422–424

`vncserver` package, 423

volume levels, 175

von Hagen, William, *Linux Filesystems*, 436

Vorbis Web site, 249

VPNs (Virtual Private Networks), 416, 432–434

`vsftpd` (Very Secure FTP Daemon)

configuring, 369–375

installing, 368–369

W

`warez`, 366

`watch` file, 575

Web authoring tool, 234–236

Web browsers

Epiphany, 208–212

Firefox, 208, 212–215

Continued

Web browsers (*continued*)

- Konqueror, 208, 215–217
- Mozilla, 208, 212–213
- proxy servers, 430–432

Web interface for the CUPS printing service, 494–495

Web servers

- Apache 1.3
 - configuring, 337–346
 - directives, 341–346
 - features, 335–337
 - installing, 337
 - Perl, 352–355
 - PHP, 357–360
 - Python, 355–357
- Apache 2.0
 - configuring, 348–352
 - features, 346
 - installing, 346–347
 - server pool, 348–349
- Boa, 360–364

Web sites

- Advanced Bash-Scripting Guide, 70
- Atari Age, 261
- Comprehensive Perl Archive Network, 352
- Debian package, 84
- Fink project, 7
- Frank's Corner, 264
- GNU Project, 3
- Internet Fiction Archive, 259
- Linux Game Tome, 266
- linuxprinting.org, 498
- Loki Games, 272–273
- Musical Instrument Digital Interface (MIDI), 250
- OpenLDAP, 461
- OSI (Open Source Initiative), 533
- Perl, 352
- Python, 355
- SecurityFocus, 291
- Tux Games, 273
- Ubuntu, 16
- UserLinux, 16
- Vorbis, 249
- Wiley Product Technical Support, 596
- The World Of Spectrum, 261

wesnoth package, 270

wesnoth-editor package, 270

wesnoth-music package, 270

wesnoth-server package, 270

white hat hackers, 292

wildcards, 53–55

Wiley Product Technical Support, 596

windows

- GNOME, 183, 185–188
- KDE, 199–200

Windows emulator, 262–265

Windows games, 262–265

wine package, 263

WINE project, 262–265

wine-doc package, 263

winesetuptk package, 263

wine-utils package, 263

WineX (TransGaming Technologies), 265

Wirzenius, Lars, Debian Developer, 534

woody release, 21

word processing, 228

The World Of Spectrum Web site, 261

worms, 287

write permission, 39

Writer application (OpenOffice.org), 229–232

X

X MultiMedia System (XMMS), 248

X11 protocol, 165–166

x11vnc package, 423

xboard package, 269–270

X-forwarding, 420–422

XFree86 graphics system

- configuring, 169–172

- features, 165–166

- installing, 166–169

- testing, 172–173

- troubleshooting, 172–173

xine video player, 251

xine-ui package, 251

XML (eXtensible Markup Language), 228

xmms package, 248

XMMS (X MultiMedia System), 248

X.Org graphics system, 166

xsane package, 237

Xsane SANE front end, 237

xscanimage SANE front end, 237

xserver-xfree86 package, 169

xspect program, 260–261

Z

Zangband game, 257

zone files (DNS server), 394, 398–401

Zork trilogy games, 259