

Contents

About This Book	20
Introduction	20
How this book is organized	22
Notational conventions used in this book	23
Getting the most from this book	23
About the recommendations made in this book	24
About the Warning and Disclaimer	24
About your license to use this book	24
Acknowledgments	25
<hr/>	
Getting Started with Mac OS X	26
Installing Lion	27
About installing Lion	27
Pre-installation issues and precautions	28
Post-installation issues	30
The author's Lion upgrade process	31
Troubleshooting installation	31
Resolving common installation and post-installation problems	32
Alert "...this disk cannot be used to start up your computer"	32
Alert "Some features of Mac OS X Lion are not supported..."	33
Related links	33
Learning Mac OS X	34
Related links	35
Maintaining Mac OS X	36
Routine maintenance	36
Maintenance myths	36
Related links	37
Upgrades: Planning, Researching, Buying, and Installing	38
Planning upgrades	38
Researching upgrades	39
Buying upgrades	39
Installing upgrades	40
Buying a new Mac	40
Related links	41
Providing Feedback	42
<hr/>	
Prevention and Preparation	43
An Ounce of Prevention	44
Do... ..	44
Do not... ..	45
Additional advice for Mac portable computer users	46
Backup and Recovery	47
About backup and recovery	47
Planning your backup and recovery solution	48

Recommended backup and recovery applications	49
Determining the volume of data to be backed up	50
Backup Devices.....	51
Providing for off-site data protection.....	52
Backup strategy.....	53
Additional considerations in backup and recovery.....	55
Implementing your backup and recovery solution	56
Recovery	57
Recovering an entire disk or volume from a Copy	57
Recovering individual files from a Copy	57
Related links	57
Create a Test Account	58
Creating a test account.....	58
Using a test account in troubleshooting	59
Related links	60
Disk Utilities	61
About disk utilities.....	61
Recommended disk utilities	62
Disk utilities and FileVault	63
Related links	64
Error Codes	65
First Aid Folder	66
Obtaining Help Online	68
Questions about using your Mac or Mac OS X.....	68
Questions about third-party applications	68
Questions not answered in Mac Help	68
Guidelines for creating good posts.....	69
Other sources of help online	70
Tips for using the AppleCare Knowledge Base.....	70
Related Links	70
Organizing Information About Your Mac	71
File computer, peripheral, and software information	71
Protect important CDs and DVDs.....	71
Keep a Mac Diary.....	72
Protecting Against Power Problems	73
Protecting against power outages.....	73
Disconnecting the power is a last resort.....	73
Purchase an Uninterruptible Power Supply	73
How a UPS keeps your computer running during a power outage.....	73
Buying a UPS	74
Automatic shutdown software	75
Using a UPS	76
Protecting against power surges	76
Recovering from power problems.....	76
Related links	76
Security	78
About security.....	78
Apple security updates.....	78

Physical security	78
Temporarily locking your Mac	78
Automatically log out after a period of inactivity.....	78
Smart Cards	79
Passwords.....	79
Choosing a secure password	79
The firmware password.....	79
The Master Password.....	79
Changing and resetting passwords	80
Keychains.....	81
Network security.....	81
AirPort network security.....	81
Routers	82
Firewalls	82
Router vs. firewall	82
Virtual Private Networks.....	82
Data security.....	83
Access Control Lists.....	83
Encrypted disk images	83
FileVault	83
Secure data removal	83
Secure Virtual Memory	84
Parental Controls	84
Detecting and avoiding malware and spyware	85
Hardening Mac OS X.....	86
Related links	86
<hr/>	
Troubleshooting Mac OS X: A-Z	87
General Mac OS X Troubleshooting	91
The last change may be the cause.....	91
If you suspect a software problem... ..	91
If you suspect a hardware problem... ..	92
Use your warranties and support agreements.....	92
Seek help online	92
Related links	92
Activity Monitor	93
About Activity Monitor	93
Troubleshooting with Activity Monitor.....	94
Checking CPU usage	94
Checking RAM usage	96
Checking free space on the startup disk.....	98
Checking disk activity	99
Checking network activity	100
Finding and terminating errant processes	101
Sampling a process	103
Related links	104
AirPort Base Station and Time Capsule Status Lights	105
Related links	105
Applications	106
About applications.....	106

Mac OS X applications.....	106
Java applications.....	106
Universal applications and Rosetta.....	107
Microsoft Windows applications.....	107
Installing applications.....	108
Associating documents with applications.....	109
Changing the preferred application that opens a document.....	111
Opening a document in an application other than its preferred application.....	113
Bundle ID.....	114
App Sandboxing.....	114
Application preferences files.....	115
Resume.....	117
Auto Save and Versions.....	118
Automatic Termination.....	118
Preventing problems with applications.....	118
Uninstalling applications.....	119
Troubleshooting applications.....	120
General application troubleshooting.....	121
Force Quit.....	122
Deleting application preferences files.....	123
Delete the saved state of an application.....	124
Reset Launch Services.....	125
Resolving common problems with applications.....	127
3D graphics performance problems on MacBook and MacBook Air.....	127
Applications open slowly.....	127
Application preferences reset to default values.....	127
Applications quit unexpectedly or fail to open.....	128
Applications are unresponsive.....	128
Cannot install an application.....	129
Cannot use this version alert.....	129
Documents open in the wrong applications.....	129
Error -10660 attempting to open a document.....	130
Error -10810 opening an application.....	130
iDVD '08 quits unexpectedly after installation.....	131
iTunes quits unexpectedly or fails to open.....	131
Problems with Auto Save, Versions, and shared network volumes.....	131
Reinstalling an application bundled with Mac OS X.....	132
Reinstalling a factory-installed application.....	132
Safari quits unexpectedly.....	133
Sandboxed application quits unexpectedly when opened.....	134
Users must register a previously-registered application.....	135
Related links.....	135
AVI and DivX Files.....	136
About AVI and DivX files.....	136
Playing AVI and DivX files on Mac OS X.....	137
Related links.....	137
Burning CDs and DVDs.....	138
About burning CDs and DVDs.....	138
Troubleshooting burning CDs and DVDs.....	139
Resolving common problems burning CDs and DVDs.....	140
You cannot burn a CD or DVD.....	140
Error code -43 when attempting to burn a disk.....	140

Error code -50 while burning a disc in iTunes.....	140
Error codes 0x80020022 or -2147352542.....	141
Error codes 0x80020025 or -2147352539.....	141
Error codes 0x80020060 or -2147352480; buffer underrun error	142
Error codes 0x8002006D or -2147352467.....	142
Error codes 0x8002006E or -2147614830	143
Optical media do not mount or appear on the desktop.....	144
Unknown Error alert while burning	144
Related links	145
Cache Cleaning	146
About cache cleaning.....	146
Side effects of System cache cleaning.....	147
Related links	147
Clean Start	148
Related links	148
Console and Crash Logs	149
About Console.....	149
System Log Queries	150
Diagnostic and Usage Information	151
Files.....	152
Troubleshooting with Console.....	153
Set up Console for troubleshooting.....	153
Checking Console for clues.....	153
Examining some common messages	154
Troubleshooting Console.....	156
Resolving common Console problems	156
Some View options only work in System Log Queries	156
About crash logs.....	157
Application crash logs	158
System-related crash logs	158
Panic logs	158
Troubleshooting with crash logs	159
The case of the crashing apps	160
The case of the corrupted calendar	160
The case of the third-party mouse.....	161
The case of the corrupted preference file	161
Obtaining help with crash logs.....	161
Related links	161
Core Storage	162
Dashboard	163
About Dashboard.....	163
Opening and closing Dashboard	164
Included widgets.....	164
Opening widgets.....	164
Closing widgets.....	165
Configuring a widget's preferences.....	165
Installing and removing widgets.....	165
Refreshing widgets.....	166
Preferences files for Dashboard and widgets.....	166
Finding new widgets.....	166

Developing widgets	166
Troubleshooting Dashboard.....	167
Troubleshooting an individual widget	168
Testing third-party widgets.....	169
Reset Dashboard.....	170
Recovering text from lost or removed Stickies.....	171
Recover Stickies text from a copy of the Stickies preferences file.....	172
Resolving common Dashboard problems	172
DashboardClient consumes increasing amounts of memory.....	172
DashboardClient quit unexpectedly.....	172
Weather widget displays data for the wrong city	173
Web Clip widget is blank.....	173
Widget displays no data	173
Data Recovery	174
Data loss scenarios	174
You trashed important files but have not emptied the Trash.....	174
You trashed important files and emptied the Trash	174
You initialized your hard drive	174
Your hard drive has crashed or your Mac is severely damaged.....	174
Data recovery utilities	175
If you cannot start up your Mac from a data recovery utility disc	175
Data recovery services.....	175
Related links	176
Disk Images	177
About disk images.....	177
Troubleshooting disk images.....	178
Resolving common problems with disk images	179
Cannot eject a disk image because it is in use.....	179
Disk images fails to mount.....	179
Disk images mount slowly	180
Spotlight does not index disk images when mounted.....	180
Disks, Partitions, and Volumes	181
Related links	181
The Dock	182
About the Dock.....	182
Getting the most from the Dock.....	183
Troubleshooting the Dock.....	184
General Dock troubleshooting	184
Quit and relaunch the Dock	184
Reset the Dock	184
Resolving common Dock problems.....	185
Application fails to open when clicking its Dock icon	185
Cannot add or remove icons in the Dock	185
Lost @ icon in the Dock	186
Many icons accidentally dropped into the Dock	186
Minimized QuickTime movies do not play in the Dock.....	186
Related Links	186
Fast User Switching	187
About Fast User Switching.....	187
Troubleshooting Fast User Switching	187

Resolving common Fast User Switching problems	188
Freeze, grey screen, or kernel panic when Fast User Switching	188
Internet connection drops when switching users	188
Remote Mac freezes when switching users via screen sharing	189
Shared network volumes and Fast User Switching	189
FileVault	190
About FileVault	190
FileVault caveats, restrictions, and side effects	191
Should I use FileVault?	193
Before enabling FileVault	194
Enabling FileVault	194
Disabling FileVault	195
Troubleshooting FileVault	195
Resolving common FileVault problems	196
Cannot enable FileVault	196
Enabling or disabling FileVault fails	197
Finder	198
About Finder	198
Hidden and invisible files	198
Troubleshooting Finder	198
Install Refresh Finder	199
Relaunch Finder	200
Delete Finder preferences	201
Reset Finder	202
Troubleshooting third-party Quick Look generators	203
Delete Quick Look preferences	203
Determine installed Quick Look generators	204
Resolving common Finder problems	205
Error -10810 attempting to relaunch Finder	205
Finder displays incorrect date or time for files or folders	205
Finder is slow when moving or copying many files	205
Finder quits unexpectedly or relaunches repeatedly after log in	205
Finder quits unexpectedly or stops responding	206
Finder relaunches when attempting to open a folder	206
Finder returns error code -10660 when opening a document	206
Open With lists multiple copies of the same application	207
Problems after using Apply to enclosed items	207
Quick Look does not work	207
Recent Items is not working	207
Restoring an object removed from the sidebar	208
Unable to copy, move, or modify an object	208
Related links	209
Finding Corrupted Files	210
About corrupted files	210
Troubleshooting corrupted files	210
Related links	210
FireWire Problems	211
About FireWire	211
Troubleshooting FireWire	212
Resolving common FireWire problems	215
Problems saving files to FireWire drives	215
Slow data transfer when videoconferencing	215
Related links	215

Fonts	216
About fonts.....	216
Font management.....	216
Previewing uninstalled fonts.....	216
Protected fonts.....	217
Safe Mode.....	217
Troubleshooting fonts.....	217
Corrupted fonts.....	217
Font cache corruption.....	218
Incompatible fonts.....	218
Missing or disabled fonts.....	219
Resolving common font problems.....	219
Text appears blurry or jagged.....	219
Text appears garbled.....	219
Related links.....	219
Font Book	220
About Font Book.....	220
Validating fonts.....	222
Avoiding common problems from misunderstanding Font Book.....	223
Troubleshooting Font Book.....	224
Delete Font Book preferences.....	224
Check permissions of folders important to Font Book.....	225
Check for corrupted font collections.....	225
Reset Font Book.....	226
Resolving common Font Book problems.....	226
Cannot change or install fonts in the User library.....	226
Cannot create new font collections or change existing collections.....	226
Related links.....	226
Freeing Space on Your Startup Disk	227
Determining available space on your startup disk.....	227
Simple ways to increase available space.....	227
What about moving my Home folder or the Users folders?.....	229
Related Links.....	229
Freezes and Hangs	230
Troubleshooting freezes and hangs.....	230
An application is unresponsive, frozen, or hung.....	230
Your Mac is unresponsive, frozen, or hung.....	230
Killing processes remotely using SSH.....	230
Manually forcing a shutdown or restart.....	235
Determining the cause of a freeze or hang.....	235
Resolving persistent application freezes.....	235
Resolving persistent system freezes.....	235
Related links.....	235
Hard Drive Sleep	236
About hard drive sleep.....	236
To sleep or not to sleep?.....	236
Energy Saver preferences and hard drive sleep.....	237
Issues with hard drive sleep.....	237
Troubleshooting hard drive sleep.....	238
Related links.....	239

Hardware Testing	240
Apple Hardware Test	240
Using the Apple Hardware Test.....	240
Loop Mode.....	241
RAM testing.....	241
Other hardware testing utilities.....	242
Micromat TechTool Deluxe.....	242
Micromat TechTool Pro	242
Resolving common Apple Hardware Test problems	242
Apple Hardware Test does not support this machine.....	242
Related Links	242
Help Center	243
About Help Center.....	243
Troubleshooting Help Center.....	245
Reset Help Center	245
Check for corrupt or incompatible help books	246
Determine if Apple help servers are online	247
Reset Help for all your apps	247
Resolving common Help Center problems	248
Content not available alert	248
Help Center quits unexpectedly or displays a blank window	248
Help for a specific application is missing in Help for all your apps.....	249
Modem connects to the Internet when opening help	249
Search returns no matching items.....	249
The selected topic is currently unavailable alert	250
Hidden Library Folder	251
Isolating Troublesome Peripherals	252
Related links	253
Kernel Panics	254
About kernel panics	254
General causes of kernel panics	255
Known causes of kernel panics.....	255
Troubleshooting kernel panics	256
Troubleshooting roadmap	257
Troubleshooting table.....	258
Troubleshooting third-party kernel extensions	259
Using and interpreting panic logs	260
Obtaining help with panic logs	264
Related links	264
Keyboards and Keyboard Shortcuts	265
About keyboards and keyboard shortcuts	265
Troubleshooting keyboards	266
Troubleshooting keyboard shortcuts	267
Resolving common keyboard problems	268
Cannot type letters, numbers, or symbols	268
Images of keys appear on the screen while typing.....	268
Long delay between pressing keys and characters appearing.....	268
No visual feedback from Brightness, Eject, or Volume keys.....	269
Numeric keypad does not work.....	269
One key fails to work.....	269

Sounds accompany typing	269
Startup keyboard shortcuts do not work	270
Volume keys do not provide audible feedback	270
Related links	270
Keychains	271
About keychains	271
Reset Safari	271
Troubleshooting keychains	272
Troubleshooting keychain passwords	272
Troubleshooting keychain locking	273
Repair, restore, or reset your default keychain	274
Resolving common keychain problems	275
Frequently prompted for keychain password	275
Prompt for metadata keychain password	275
Resetting Safari removes Web site accounts and passwords from keychain	276
Related links	276
Launchpad	277
About Launchpad	277
Troubleshooting Launchpad	278
Resolving common Launchpad problems	278
Duplicate icons appear in Launchpad	278
Related links	278
Login	279
About login	279
Troubleshooting login problems	279
Resolving common login problems	280
Deleted account reappears or cannot enable automatic login	280
Insecure Startup Items alert after log in	280
Login window appears blank after waking display	280
Related links	280
Mac OS X Maintenance Scripts	281
About the Mac OS X maintenance scripts	281
Manually running the maintenance scripts	281
Reviewing the logs from maintenance scripts	282
Verifying maintenance script execution	282
History of the maintenance scripts	282
Related links	282
Mac OS X Standalone Updates	283
About Mac OS X standalone updates	283
Related links	283
Make Yourself the Owner of an Object	284
Determining privileges and ownership	284
Obtain Read & Write privileges and ownership of an object	285
Migration Assistant	286
About Setup Assistant and Migration Assistant	286
Move to a new Mac from an old Mac	287
Move to a new Mac or Mac OS X installation from a backup	287
Old Mac pre-migration checklist	288
New Mac pre-migration checklist	289

Post-migration activities.....	289
Troubleshooting Migration Assistant	290
Resolving common post-migration problems	291
Applications or preference panes do not open after migration.....	291
Mission Control	292
About Mission Control.....	292
Spaces	292
Troubleshooting Mission Control.....	295
General Mission Control troubleshooting.....	295
Rule out incorrect or conflicting preferences	295
Rule out third-party system modifications	295
Rule out problems with third-party applications and Spaces.....	295
Reset Spaces	296
Reset Mission Control.....	297
Resolving common Mission Control problems	298
Applications do not reopen in the same desktops.....	298
Applications pop into view when switching desktops.....	298
Dragging and reordering problems.....	298
Missing application windows after deleting a desktop space.....	299
Spaces do not appear in Mission Control	299
Mouse and Trackpad Problems	300
Troubleshooting mouse problems	300
Troubleshooting trackpad problems.....	302
Resolving common mouse and trackpad problems.....	303
Black rectangle appears and follows the mouse pointer.....	303
Handwriting input menu does not appear in menu extras.....	304
Three-finger swipe gesture do not work in Motion 5.....	304
Related links	304
Networking	305
About networking.....	305
Local networks.....	305
AirPort and Wi-Fi networks	305
Connecting to the Internet	307
File sharing.....	307
Networking in different locations.....	307
Remote access to your Mac	308
Troubleshooting networks.....	309
Resolving common networking problems.....	310
Cannot connect to the Internet with a new AirPort base station	310
Cannot join an iChat audio or video chat.....	310
Cannot place or receive FaceTime calls	310
Cannot send or receive e-mail using Mail.....	311
Cannot transfer files between Macs via Bluetooth	311
Error -50 downloading iTunes Store purchases.....	311
Internet connection terminates unexpectedly	311
No hardware installed message in Wi-Fi status menu.....	312
Web pages or downloads fail to load or complete, respectively	312
Related links	312
Performance	313
About performance.....	313
Troubleshooting performance problems	314

Resolving common performance problems	314
High Inactive or Wired memory use	314
Process kernel_task using high CPU	314
Processes mds, mdimport, and mdworker are using high CPU	315
SystemUIServer shows high CPU usage or is frozen or hung	315
Related links	315
Plug-ins and Input Managers	316
About plug-ins and input managers	316
Plug-Ins	316
Input managers	318
Troubleshooting plug-ins	318
User-installed vs. system-wide plug-ins	318
Problems with application-specific plug-ins	319
Problems with plug-ins for Mac OS X technologies	320
Preventing plug-in problems	320
Troubleshooting input managers	321
Related links	322
Printing and Printer Sharing	323
About printing and printer sharing	323
Troubleshooting printing and printer sharing	323
Troubleshooting printing	323
Troubleshooting printer sharing	323
Troubleshooting with CUPS	324
Resolving common printing and printer sharing problems	324
Cannot print to a printer connected via USB-to-Parallel cable or adapter	324
Shared printers cannot be seen on the local network	324
Related links	324
Problems from Insufficient RAM and Free Disk Space	325
About memory management in Mac OS X	325
Determining if your system is at risk	326
Permanently resolving the problems	326
Related links	327
Recovery Mode	328
About Recovery Mode	328
Confirming Recovery HD is present	329
External Recovery HD	330
OS X Lion Thumb Drive	330
Install Mac OS X 10.7 on an external drive	330
Create a Backup Recovery HD	330
Recovery HD on a Time Machine backup disk	331
Using Recovery Mode	331
Resetting passwords and Home folder permissions	332
Exiting Recovery Mode	332
Recovery Mode and FileVault	333
Related links	333
Reinstalling Mac OS X	334
Reinstalling Mac OS X	334
Erasing and reinstalling Mac OS X	335
Recovering your entire system	336
Reverting to a prior version of Mac OS X	336

Repair Disk Process	337
About Repair Disk.....	337
Repairing your Mac OS X startup disk.....	337
Disk Utility and FileVault.....	337
General Repair Disk process.....	338
Repair your Mac OS X startup disk	339
Repair volumes other than your startup disk.....	339
Repair volumes using a bootable duplicate	340
The emergency Repair Disk process	341
Related links	341
 Repair Permissions Process	 342
About Repair Disk Permissions.....	342
Repair Permissions from your startup disk.....	343
Repair Permissions in Recovery Mode.....	344
Repair Permissions in Terminal	345
Related links	345
 Reset Home Folder Permissions	 346
 Resolving Disk, Permission, and Cache Corruption	 347
Related links	347
 Safe Mode	 348
About Safe Mode.....	348
Performing a Safe Boot for Safe Mode.....	348
Safe Login	349
Starting up in Safe Mode from the Startup Manager.....	349
 Scanners	 350
About scanners	350
Troubleshooting scanners.....	350
 Shutdown	 351
About shutdown.....	351
Troubleshooting shutdown	351
Resolving common shutdown problems	352
Mac restarts after shutdown.....	352
Mac will not shut down.....	352
Related links	352
 Sleep	 353
About Sleep	353
Sleep vs. Shut Down	353
Power management in Mac OS X.....	353
Troubleshooting sleep problems	354
Resolving common sleep problems.....	355
Computer does not sleep or wakes immediately after sleep.....	355
Computer does not wake from sleep.....	356
Sleep indicator light flashes five times.....	356
Related links	356
 SMART Status	 357
Check SMART status using Disk Utility.....	357
Check SMART status in Recovery Mode	358
Related links	358

Software Update	359
About Software Update.....	359
Should I update?.....	359
Obtaining large software updates.....	360
Preventing software update problems.....	360
Troubleshooting Software Update.....	362
Software Update failures.....	362
Problems from third-party system modifications or menu extras.....	363
Problems with third-party hardware.....	363
Recovering from a failed software update.....	364
Resolving common Software Update problems.....	364
Software Update quits when selected.....	364
Software Update quits while installing or checking for updates.....	364
Related links.....	364
Sound	365
About sound.....	365
Unfamiliar noises.....	365
Troubleshooting sound.....	366
Preferences files associated with Sound preferences.....	366
General sound troubleshooting.....	366
Resolving common sound problems.....	367
Audio and sound issues that are design constraints.....	367
No audio from internal speakers.....	368
The Spinning Beach Ball of Death	369
About the SBBOD.....	369
Troubleshooting the SBBOD.....	370
Resolving common SBBOD problems.....	370
The SBBOD appears frequently during your work.....	370
The SBBOD appears temporarily, but frequently in most applications.....	370
The SBBOD appears when accessing a hard disk or optical drive.....	371
The SBBOD appears continuously in one application.....	371
The SBBOD appears continuously in all applications.....	371
The SBBOD appears when quitting a third-party application.....	372
The SBBOD appears while using Help.....	372
The SBBOD and a “slow script” alert appear while loading a Web page.....	373
The SBBOD spins continuously while loading a specific Web page.....	373
The SBBOD appears briefly, but frequently in your Web browser.....	374
SBBOD appears for reasons other than those above.....	374
Related Links.....	374
Spotlight	375
About Spotlight.....	375
Indexing: extracting metadata from files.....	375
Searching: querying metadata.....	376
Searching for system, hidden, or invisible files.....	378
Searching for selected text.....	378
Using Spotlight in Terminal.....	379
Stopping Spotlight indexing.....	379
Troubleshooting Spotlight.....	380
Delete Spotlight preferences.....	380
Verify Spotlight indexing is enabled on a volume.....	381
Rebuild the Spotlight metadata store.....	382
Enable indexing on a volume via Terminal.....	382

Identify installed Spotlight plug-ins	383
Resolving common Spotlight problems.....	384
Disk images are not indexed when mounted.....	384
Files created in a specific application are not found.....	384
Spotlight indexes disks or volumes unexpectedly.....	385
System Preferences search fails.....	385
Related Links	385
Startup	387
About startup	387
Troubleshooting startup	387
Startup beeps and flashing lights	387
The computer will not turn on.....	388
The computer turns on but does not start up.....	389
General startup troubleshooting	390
Resolving common startup problems	390
Cannot start up after resetting PRAM.....	390
Cannot start up from a Mac OS X Install disc	390
Grey progress bar appears during every startup.....	391
Startup is slow.....	391
Startup tone does not sound.....	391
Startup tone is too loud.....	392
White text appears during startup.....	392
Related links	392
Startup and Login Items	393
About Startup Items, Login Items, daemons, and user agents	393
Troubleshooting Startup and Login Items, daemons and agents.....	393
Troubleshooting Startup Items.....	394
Troubleshooting Login Items.....	394
Troubleshooting daemons and user agents.....	395
Rule out third-party applications via process of elimination	396
System Information	397
About System Information.....	397
Troubleshooting System Information.....	398
Resolving common System Information problems.....	398
System Information fails to list some information.....	398
System Information fails to show changes dynamically	398
Related links	398
System Preferences	399
About System Preferences.....	399
Troubleshooting System Preferences.....	403
Delete System Preferences preferences and cache files	403
Corrupted preferences files	403
Incompatible preference panes.....	404
Corrupted preference panes.....	404
Resolving common System Preferences problems	405
Cannot set Desktop & Screen Saver preferences.....	405
Cannot set Energy Saver preferences.....	405
Display preferences: “out of frequency range”	406
Duplicate or missing preferences panes	406
Lingering preference panes from uninstalled applications	406
Spotlight search of System Preferences fails.....	407
System Preferences fails to open or quits unexpectedly	407

Terminating a Process	408
About terminating processes	408
Terminating a process using Activity Monitor	409
Terminating a process using Terminal	410
Time Machine	411
About Time Machine	411
How Time Machine works	411
Time Machine caveats	414
Should I use Time Machine?	416
Sizing your Time Machine backup disk	417
Preparing an external drive for use as a backup disk	418
Avoiding common Time Machine problems	419
Troubleshooting Time Machine	420
Verify that the backup disk is available	421
Restart a Time Capsule	422
Reset Time Machine	422
Troubleshoot a Time Machine backup disk	423
Verify Backups	427
Resolving common Time Machine problems	428
Backup disk image cannot be mounted alert	428
Backup disk is full and related alerts	428
Backup was not performed...error copying files alert	429
Identity of the backup disk has changed... alert	430
Time Machine must create a new backup... alert	430
Related links	431
Trash	433
About Trash	433
Trash architecture	433
Troubleshooting Trash	434
Empty and recreate an account's Trash	435
Stubborn Files	435
Empty and recreate an account-specific subfolder of a volume's Trash	436
Empty and recreate a volume's Trash	437
Resolving common Trash problems	438
Files in use by other applications	438
Item will be deleted immediately alert	439
Recovered files folder in the Trash	439
Removable media retains files from the Trash	440
Request to authenticate or insufficient permissions alert	441
User ID Number	442
Verify Disk Process	443
About Verify Disk	443
Procedure	444
Related links	444
VCD and SVCD Players	445
About VCDs and SVCDs	445
Creating VCDs and SVCDs with Mac OS X	445
Using VCDs and SVCDs with home DVD players	445
Mac OS X support for VCDs and SVCDs	445
Third-party players	445
Related links	446

Zeroing Volumes	447
About zeroing volumes	447
Zeroing volumes with Disk Utility	447
Zeroing a volume other than your startup disk	448
Zeroing your startup disk in Recovery Mode	449
Zeroing your startup disk from a bootable duplicate	450
Related links	450
<hr/>	
Appendices	451
Appendix 1: System Logging	452
System logging in UNIX-based systems	452
Apple System Logging	453
Related links	453
Appendix 2: Kernel Panic Vectors for Intel-based Macs	454
Related links	455
Appendix 3: Spotlight Plug-ins	456
Included Spotlight plug-ins	456
Determining the document types indexed by a Spotlight plug-in	457
Related links	457
Index	458
Colophon	469

Index

Symbols

32-bit 107, 317, 318
 64-bit 107, 317, 318
 802.11 52, 81, 306
 .aiff 365
 .dfont 216
 .DS_Store 206
 ~/Library 251
 /Library/Logs 152
 ~/Library/Logs 152
 .plist 115
 /private/var/log 152
 .sparsebundle 412
 .Spotlight-V100 376
 .Trash 433
 .Trashes 433
 /usr/include 29

A

About This Mac 397
 Accelerate Your Mac 35
 Access Control Lists 83
 accounts
 deleted 280
 Guest User 192
 moving to a new Mac 286–291
 Parental Controls 84–86
 passwords 79–80
 renaming 402
 User ID Number 442
 ACLs 83
 Activity Monitor 93–104, 314–315, 408–409
 Address Book 316
 Advanced Encryption Standard 81
 AES 81
 AFP 52, 411
 agents 393
 AIFF 365
 AirDrop 198, 305, 309
 AirPort
 AirPort Disks 51, 306, 414
 AirPort Express 305
 AirPort Extreme 305
 AirPort Utility 306
 base station printers 306, 323
 disabling 46, 307
 equivalent passwords 306
 networks 305–306
 preferred networks 308

security 81
 status lights 105
 status menu 306
 troubleshooting 309
 turn off 46, 307
 Wi-Fi Diagnostics 306, 309
 Wi-Fi status menu 306
 alias 183
 All My Files 198
 antivirus 86
 Aperture 316
 appfirewall.log 82, 372
 Apple
 Authorized Resellers 38
 Authorized Service Provider 257
 Consultants Network 38
 contacting 42, 46
 Developer 35
 feedback 42
 Retail Stores 34
 security updates 78
 support 70
 Support Communities 35, 39, 68–69
 Technical Support 46
 user groups 34
 AppleCare Knowledge Base 68, 70
 AppleCare Protection Plan 41, 92
 Apple Filing Protocol 52, 411
 Apple Hardware Test 240–241
 Apple ID 68, 72
 AppleScript 106
 Apple System Logging 150, 453
 AppleTalk 307
 Apple Wireless Keyboard 266, 270
 applications 106–135
 32-bit 107
 64-bit 107
 AppleScript 106
 automatic termination 118
 Auto Save 118, 131
 BSD 106
 bundle 108
 bundle ID 114
 cannot open 128
 Carbon 106
 Classic 288
 Cocoa 106
 crash logs 158–161
 default 109–112, 129

- error code -10660 130
 - error code -10810 130
 - Force Quit 122
 - full screen 121
 - input managers 318, 321
 - installing 108, 120, 129
 - Mac OS X 106–107
 - migrating 286
 - open slowly 127
 - packages 108
 - plug-ins 60, 288, 291, 316–322
 - PowerPC 107, 288, 291
 - preferences files 115–116, 123, 127
 - preferred 109–112, 129
 - preventing problems with 118
 - quit unexpectedly 128
 - reinstalling 132
 - repeated registration 135
 - Resume 117–118
 - Rosetta 107
 - sandboxing 114, 134
 - saved state 117–118, 124
 - stop responding 128
 - troubleshooting 120–131
 - uninstalling 119–120
 - Universal 107, 288, 291
 - unresponsive 128
 - Versions 118, 131
 - wrong application opens 129
 - X11 106
 - Apply to enclosed items 207
 - archive 227
 - asl(3) 453
 - asl.conf 453
 - aslmanager 453
 - AssistiveWare 365
 - atsutil 218
 - audio 365–368
 - automatic termination 118
 - Auto Save 118, 131
 - AVI 136–137
- B**
- background processes 93
 - Back to My Mac 308, 309
 - backup and recovery 47–57
 - backup 47
 - bootable duplicate 49
 - CDs and DVDs 51
 - cloud backup services 50
 - destination 47
 - disaster recovery 48, 52
 - encrypted backups 55
 - FileVault 55
 - Internet-based 50
 - iPod 55
 - NAS 51–52
 - Network Attached Storage 51–52
 - off-site data protection 48, 52
 - recovery 47, 57
 - remote backup service 50
 - shared network volumes 51
 - source 47
 - Spotlight 55
 - Time Capsule 51, 419
 - Time Machine 47, 50, 411–432
 - wireless networks 55, 415
 - Backups.backupdb folder 412
 - base station printers 306, 323
 - beach ball 369–374
 - Berkeley Software Distribution 106
 - Bezel Services 269
 - black rectangles 303
 - Bluetooth
 - Apple Wireless Keyboard 266, 270
 - disabling 46, 307
 - file exchange 311
 - Internet connection 307
 - printers 306
 - sleep 355
 - troubleshooting 309
 - turn off 46, 307
 - Bonjour 324
 - bootable duplicate 49
 - Boot Camp 33, 107, 270
 - bootpd 154
 - brightness keys 269
 - BSD 65, 106
 - bundle ID 114
 - burning 138–145, 445
- C**
- cable modem 307
 - cache
 - caching 146
 - cleaning 36, 146–147, 347
 - files 146
 - font cache 218
 - Caps Lock key 265
 - Carbon 106
 - CDs 51, 71, 138–145, 376
 - Central Processing Unit 94–95
 - Cepstral 365
 - chflags 198
 - ClamXav 86
 - Clean Start 148
 - Cocktail 36, 66, 125, 146, 218, 281
 - Cocoa 106

- codec 136
- com.apple.FontRegistry 218
- com.apple.FontRegistry.user.plist 221
- Compress 227
- Console 149–161, 453
- contextual menu items 316
- Core Audio 316
- Core Image 316
- Core Storage 162
- Core Video 316
- CPU 94–95
- cron 282
- CUPS 324

D

- daemons 106, 393
- Dashboard 163–173
- DashboardClient 163, 172
- Dashcode 166
- Database Searches 149
- data recovery 174–176
- Data Rescue 175
- data security 83–85
- defragmenting 36, 61
- deprecated 154
- desktop background 313
- Desktop folder 313
- DHCP 308
- Diagnostic and Usage Information 151–152
- dial-up 307
- disaster recovery 48, 52
- disclaimer 24
- DiscRecording.log 139
- disk encryption 162, 190
- disk images 83–84, 177–180, 384
- diskutil 162, 345
- disk utilities 61–64, 175
- Disk Utility 62
 - disk images 83–84, 177–178
 - disks 181
 - erasing disks 174, 447
 - journaling 62, 443
 - partition 181
 - Repair Disk 337–341, 347
 - Repair Permissions 342–345, 347
 - SMART diagnostics 357–358
 - Verify Disk 443–444
 - volume 181
- DiskWarrior 62
- display 406
- DivX 136–137
- Dock 182–186, 313
- dos2unixtime 154
- DriveSavers Data Recovery 175

- DVD Player 85, 445
- DVD-RAM 376
- DVDs 51, 71, 138–145, 376
- DVD Studio Pro 138
- Dynamic DNS 308
- Dynamic Host Configuration Protocol 308

E

- EasySIMBL 321
- education 34–35
- Eject key 265, 269
- electrostatic discharge 40
- encryption
 - data 83–84
 - disks 337
 - FileVault 190
 - Wi-Fi networks 81
- Energy Star 353
- error codes
 - applications 130
 - burning 140–143, 144
 - Finder 205, 206
 - iTunes 140
 - Mac OS X 65
- ESD 40
- Ethernet 307
- expansion cards 252, 353
- ExpressCard 356
- ext2 52
- ext3 52
- Extensis Suitcase Fusion 216
- External Recovery HD 328, 330–331

F

- FaceTime 310
- Fast User Switching 187–189
- FAT 52, 215, 414
- feedback 42
- FileMaker 414
- file quarantine 85
- files
 - corrupted 210
 - hidden 198, 228, 376, 378, 433
 - invisible 198, 228, 376, 378
 - locked 208
 - system 378
- file sharing 305, 307, 309
- file system consistency check 63, 341
- file system journaling 62, 443
- FileVault 190–197
 - backup and recovery 55
 - Core Storage 162
 - disabling 195

- disk utilities 63
- enabling 194
- FileVault 2 83, 190
- installing Mac OS X 29
- Legacy FileVault 83, 190, 196, 414
- recovery key 190, 194–195
- Recovery Mode 333
- Safe Mode 191, 348
- start up 387
- unlock-enabled users 190, 194
- Final Cut Express 316
- Final Cut Pro 316
- Finder 198–209
 - All My Files 198
 - application associations 109–112
 - Apply to enclosed items 207
 - cannot copy 208
 - contextual menu items 316
 - .DS_Store files 206
 - error code -10660 206
 - error code -10810 205
 - hidden files 198
 - incorrect date 205
 - incorrect time 205
 - invisible files 198
 - Open With 207
 - preferences 201
 - Quick Look 207, 209
 - quits unexpectedly 205–206
 - Refresh Finder 199
 - relaunches 205, 206
 - relaunching 200
 - Secure Empty Trash 174
 - sidebar 198, 201, 208
 - stops responding 206
- Find My Mac 192
- Firefox 373
- firewall 82–83
- FireWire 211–215
 - Target Disk Mode 175
- firmware 353
- firmware password 79, 265, 331, 387
- First Aid folder 66–67
- flash drives 353, 439
- fn key 265
- FontAgent Pro 216
- Font Book 220–226
- FontDoctor 217
- fonts 216–219
 - blurry text 219
 - com.apple.FontRegistry 218
 - disabled fonts 221
 - duplicate fonts 221
 - font cache 218

- garbled text 219
- jagged text 219
- management 216
- performance 314
- previewing 216
- protected 217
- validating 222
- Force Quit 122
- FreeBSD 35
- freezes 188, 189, 230–235
- fsck 63, 341
- fsck_hfs 63
- FTP 308
- full screen 121
- function keys 265

G

- GarageBand 129, 228
- Globally Unique Identifier 51, 411
- GPT 51, 411
- gray screen 188
- grey screen 188
- Guest User 192
- GUID 51, 411
- GUID Partition Table 51, 411

H

- hangs 230–235
- hard disks
 - activity 99
 - available space 98, 227
 - bad sectors 447
 - data recovery 174–176
 - defragmenting 36, 61
 - directory 61, 337, 443
 - encryption 337
 - erasing 174, 447–450
 - FireWire 211–215
 - freeing space 227–229
 - journaling 62, 443
 - NTFS format 52, 215, 414
 - partitioning 51
 - repairing 337–341
 - sleep 236–239
 - verifying 443–444
 - zeroing 447–450
- hard links 413
- hardware
 - Apple Hardware Test 240–241
 - testing 240–242
 - upgrading 38–41
- hdiutil 178
- help books 243

Help Center 243–250
 Help for all your apps 243–244, 247
 Help Viewer 243, 244
 HFS+ 64
 HFS Plus 64
 hibernation mode 353
 hidden files 198, 376, 378
 Home folder
 moving 229
 permissions 332, 346
 renaming 402
 hotspots 308
 hyperlinks 22
I
 iChat 310
 iCloud 192, 228, 289, 308, 309, 312
 iDVD 129, 131, 138, 228
 IEEE 81
 iLife 132
 Image Capture 316, 350
 immutable bit 441
 immutable flag 441
 iMovie 129, 187
 Indeo 136
 input managers 318, 321
 input methods 317
 Internet
 connecting 307
 safety for children 84–86
 security 81–82, 85
 troubleshooting 309
 Internet Protocol Security 82
 Internet Recovery 306, 328
 Internet Service Provider 72
 invisible files 198, 376, 378
 iOS 30, 228
 IOSurface 154
 iPad 228
 IP address 308, 312
 IP firewall 82
 ipfw 82
 iPhone 228
 iPhoto 129, 138, 228, 316
 iPod 55, 414
 iPod touch 228
 IPSec 82
 ISP 72
 iTunes 30
 error code -50 140
 iTunes Store 289, 311
 Library 57, 227
 Music folder 228
 Parental Controls 85

quits unexpectedly 131
 visual effects 313
 visualizer plug-ins 316

J

Java 106
 journaling 62, 443

K

Kerberos 189
 kernel 254
 kernel extension 254, 259
 kernel.log 152
 kernel panics 254–264
 Fast User Switching 188
 panic logs 158, 260–264
 panic vectors 454–455
 kernel_task 314
 keyboard 265–270
 Apple Wireless Keyboard 266, 270
 Boot Camp 270
 brightness keys 265, 269
 Caps Lock key 265
 disinfecting 270
 Eject key 265, 269
 fn key 265
 function keys 265
 mappings in Windows 270
 no visual feedback 269
 numeric keypad 269
 one key fails to work 269
 preferences 265
 shortcuts 265, 267, 270
 sounds when typing 269
 volume keys 269, 270
 Keychains 81, 271–276
 default keychain 271, 272
 Keychain Access 271
 Keychain First Aid 271
 keychain locking 273
 keychain password 272, 275
 login keychain 271, 272
 login.keychain 272
 metadata keychain 275
 repairing 274
 resetting 274
 restoring from backup 274
 kill 234, 410
 killall 234, 410

L

L2TP 82
 LAN 305

- language localizations 228
 - laptops 46, 71, 308, 414
 - launchd 282
 - Launchpad 182, 277–278
 - Launch Services 109–110, 116, 125–126, 147, 206
 - Layer 2 Tunneling Protocol 82
 - LCD 353
 - Legacy FileVault 29, 83, 190, 196, 414
 - Library folder 251
 - Linux 52
 - Little Snitch 86
 - local snapshots 414
 - locations 307
 - LOCKSS 48
 - Logical Volume Management 162
 - login 79, 279–280
 - automatic login 193, 280
 - Clean Start 148
 - login window 280
 - Login Items 393–396
 - logs
 - crash logs 157–161
 - DiscRecording.log 139
 - kernel.log 152
 - log files 152
 - maintenance scripts 282
 - panic logs 158, 260–264
 - system.log 152, 452
 - system logging 452–453
 - System Log Queries 150–151
 - lsregister 126
 - LSSharedFileList 116
 - LVM 162
- M**
- Mac
 - buying 40–41
 - hardware upgrades 38–41
 - record keeping 71–72
 - remote access 308
 - serial number 72, 397
 - MAC address 412, 423
 - Mac App Store 84, 106, 108, 119, 135, 359
 - MacBook 127
 - MacBook Air 41, 127, 291
 - Mac Diary 72
 - MacDrive for Windows 215
 - Mac Help 68
 - Mach Interface Generator 155
 - Mac OS Extended 64
 - Mac OS X
 - applications 106–107
 - background processes 93, 408
 - backup and recovery 47–57, 411–432
 - books 34
 - build information 397
 - error codes 65
 - feedback 42
 - hardening 86
 - installing 27–33
 - learning 34–35
 - maintenance 36–37
 - memory management 325
 - multithreading 159
 - power management 353
 - preventing problems 44–46
 - processes 93, 408
 - reinstalling 334–336
 - security 78–86
 - switching to 34
 - updates 283
 - version 397
 - Web sites 35
 - Mac OS X Hints 35
 - Mac portable 46, 71, 308, 414
 - Mac Pro 367
 - MacUpdate 108
 - MacWindows 35
 - Magic Mouse 300, 304
 - Magic Trackpad 302, 304
 - Mail 30, 311, 438
 - maintenance scripts 281–282
 - malware 85
 - man pages 35
 - mdfind 379
 - mdimport 315, 379
 - mdls 379
 - mds 315, 376
 - mdutil 379
 - mdworker 315, 376
 - mdwrite 275
 - memory
 - Available 97
 - Free 96, 97
 - Inactive 96, 97, 314
 - Wired 96, 97, 314
 - memory card readers 238
 - memory leak 155
 - Memtest 241
 - menu extras 315
 - metadata 375
 - metadata keychain 275
 - metadata store 376, 382
 - Microsoft Office 372
 - MIG 155
 - Migration Assistant 41, 286–291
 - Mission Control 182, 292–299
 - modem 308

Motion 316
 Motion 5 304
 mouse 300–304
 Mozilla
 Plug-In Check 373
 multi-touch 30

N

NAS 29, 51–52, 411
 NAT 82, 305, 308
 Netatalk 29
 Network Address Translation 82, 305, 308
 Network Attached Storage 29, 51–52, 411
 Network Diagnostics 309
 Network File System 189
 networks 305–312
 AirDrop 198
 connection monitor 82, 86
 international travel 308
 locations 307
 network activity 100
 Network Diagnostics 309
 remote access 308
 security 81–82
 Network Utility 244, 309
 NFS 189
 noises 365
 Norton AntiVirus 86
 notational conventions 23
 NTFS 52, 215, 414
 numeric keypad 269

O

off-site data protection 48, 52
 OmniDiskSweeper 228
 OmniWeb 373
 Oracle VirtualBox 107
 O'Reilly & Associates, Inc. 35
 OS X Internet Recovery 306, 328
 OS X Recovery 27, 328–333
 ownership 284–285

P

package 108
 Packet Filter 82
 packet trace 312
 page-ins 325, 326
 page-outs 325, 326
 paging 96, 325
 panic logs 158, 260–264
 Parallels Desktop 107
 Parental Controls 84–86, 185
 partition 181

Password Assistant 79
 passwords 79–81
 resetting 80–81, 332, 333
 performance 313–315
 fonts 223
 paging 96
 RAM 96–97, 325
 spinning beach ball of death 369–374
 spinning wait cursor 369–374
 troubleshooting 93–104
 Perian 137
 peripherals 38–41, 252–253
 permanent version storage 131
 permissions
 changing ownership 284–285
 Home folder 332, 346
 repairing 37, 44, 342–345
 pf 82
 PlistEdit Pro 66
 plug-ins 316–322
 Migration Assistant 288, 291
 Spotlight 317, 375, 456–457
 pmset 237
 Point-to-Point Protocol 307
 Point-to-Point Protocol over Ethernet 307
 Point-to-Point Tunneling Protocol 82
 portable computers 46, 71, 308, 414
 ports 82, 306, 312
 POST 387
 Power-On Self Test 387
 power outages
 protecting against 73–76
 recovering from 76
 PowerPC applications 107
 power surges 76
 PPP 307
 PPPoE 307
 PPTP 82
 prebinding 37
 Preferences Error 404
 preferences files 115–116, 123, 127
 Preferential Treatment 59, 66, 121
 Preview 350, 438
 Previous Systems folder 228
 printers
 base station printers 306, 323
 network 323
 setting up 323
 wireless 306, 323
 printer sharing 323–324
 printing 323–324
 processes
 defined 93, 408
 sampling 103

terminating 101–102, 408–410
 Prosoft Data Rescue 175
 ProtectedFonts folder 217
 public key fingerprint 233

Q

qlmanage 204
 quarantine 85
 Quick Look 203–204, 207, 209, 316
 QuickTime 136–137, 186, 187, 316, 445

R

RAID 28, 387
 RAM 96–97, 241, 313, 325–327
 recommendations 24
 Recovered files 439
 Recovery Disk Assistant 330
 Recovery HD 27, 328
 recovery key 190, 194–195
 Recovery Mode 328–333
 Refresh Finder 199
 reinstalling
 applications 132
 Mac OS X 334–336
 Rember 241
 remote access 308
 Remote Disc 145
 Repair Disk 337–341, 347
 Repair Permissions 37, 44, 342–345, 347
 resetpassword 332, 346
 Reset Safari 133, 271, 276
 restart 73, 235, 352
 Resume 117–118
 root 45
 Rosetta 28, 107
 routers 82, 309
 Roxio Toast 445
 RSA key fingerprint 233

S

Safari
 extensions 316, 373
 quits unexpectedly 133
 Reset Safari 133, 271, 276
 Safe Boot 348
 Safe Login 349
 Safe Mode 348–349
 FileVault 191
 fonts available 217
 safe sleep 255, 353
 Samba 52
 Sample Process 103
 sandboxing 114, 134

saved state 117–118, 124
 SBBOD 93, 237, 369–374
 scanners 350
 screen saver 317, 353, 405
 screen sharing 189, 308
 scrolling 30
 searching 376–378
 search tokens 377
 Secure Shell 308
 security 78–86
 antivirus 86
 data 83–85
 file quarantine 85
 FileVault 83
 hardening 86
 Keychains 81, 271–276
 malware 85
 networks 81–82
 new applications 85
 Parental Controls 84–86, 185
 passwords 79–81
 physical 78
 sandboxing 85, 114
 smart cards 79
 Smart Cards 28
 spyware 82, 85
 Startup Items 387
 updates 78
 serial number 72, 397
 Setup Assistant 41, 286
 shared network volume 189
 Sharing & Permissions 284
 shell scripts 106
 Shirt Pocket SuperDuper! 49
 shut down 351–352
 Clean Start 148
 USB 352
 shutdown
 automatic by UPS 75
 scheduled 354
 via Terminal 234
 vs sleep 353
 sidebar 198, 201, 208
 SIMBL 321
 single-user mode 265
 sleep 353–356
 hard disks 236–239
 hibernation mode 353
 safe sleep 255, 353
 scheduled 354
 sleepimage 255, 356
 USB 355
 vs shutdown 353
 Wake on Demand 307, 353

- sleepimage 255, 356
 - SMART 357–358
 - smart cards 28, 79
 - Smart Folders 377
 - SMB 52
 - Software Reinstall Drive 41
 - Software Update 359–364
 - deciding to update 359
 - downloading 360
 - failed updates 364
 - preventing problems 360–361
 - problems after 362–364
 - sound 269, 365–368
 - Spaces 292–293
 - sparse bundle 177, 412
 - spindump 369
 - spinning beach ball of death 93, 237, 369–374
 - spinning disc pointer 93, 237, 369–374
 - spinning wait cursor 93, 237, 369–374
 - Spotlight 375–386
 - backup and recovery 55
 - CDs 376
 - disk images 384
 - DVD-RAM 376
 - DVDs 376
 - hidden files 376, 378
 - indexing 375–376, 379, 381
 - invisible files 376, 378
 - mdfind 379
 - mdimport 379
 - mdls 379
 - mds 376
 - mdutil 379
 - mdworker 376
 - mdwrite 275
 - metadata importers 316, 317
 - metadata store 376, 382
 - performance impacts 315
 - plug-ins 317, 375, 456–457
 - Raw Query 379
 - rebuilding indices 382
 - Safe Mode 348
 - searching 376–378
 - search tokens 377
 - Smart Folders 377
 - system files 378
 - System Preferences search 377, 385, 407
 - Terminal commands 379
 - Time Machine backup disks 379
 - Uniform Type Identifiers 375, 457
 - spyware 82, 85
 - SSH 230–234, 308
 - start up 387–392
 - Clean Start 148
 - FileVault 387
 - firmware password 387
 - grey progress bar 348, 391
 - keyboard shortcuts 265, 270
 - RAID startup disk 387
 - scheduled 354
 - security 387
 - slow 391
 - tone 391, 392
 - Startup Items 280, 387, 393–396
 - Startup Manager 349
 - Stickies widget 166, 171, 172
 - sudo 44, 45
 - Suitcase Fusion 216
 - SuperDrive 138, 141, 238, 356
 - SuperDuper! 49
 - Superuser 45
 - Super Video Compact Disc 138, 445–446
 - support agreements 92
 - surge protection 76
 - SVCD 138, 445–446
 - swap files 325
 - Symantec Norton AntiVirus 86
 - syslog(1) 453
 - syslog(3) 452
 - syslog.conf 452
 - syslogd 452, 453
 - system files 378
 - system immutable bit 441
 - system immutable flag 441
 - System Information 397–398
 - system.log 152, 452
 - system logging 452–453
 - System Preferences 399–407
 - 32- vs 64-bit 107, 399
 - Desktop & Screen Saver 405
 - Displays 406
 - duplicates 406
 - Energy Saver 75, 237, 353, 354, 405
 - missing 406
 - preference panes 291, 317, 399, 404
 - Preferences Error 404
 - quits unexpectedly 407
 - removing preference panes 406
 - Spotlight search 377, 385, 407
 - UPS 75
 - System Profiler 397
 - System Report 397
 - SystemUIServer 315
- ## T
- Target Disk Mode 175
 - TechTool Deluxe 242
 - TechTool Pro 63, 175, 242

- Terminal 34, 35, 44, 410
- test accounts 58–60
- text-to-speech 365
- The X Lab 24, 35
- thrashing 96, 326
- thread 159
- Thunderbolt 252, 253, 411
- Time Capsule
 - as AirPort base station 305, 310
 - as backup device 51, 411, 425
 - base station printers 306, 323
 - firmware 431
 - restarting 422
 - sizing 417
 - sparse bundle 412
 - status light 105
- Time Machine 411–432
 - AirPort Disks 414
 - backup disk 411, 417–418, 423–426
 - backup drive 423
 - Backups.backupdb folder 412
 - encryption 418
 - FileMaker databases 414
 - local snapshots 414
 - NAS 29
 - Netatalk 29
 - Network Attached Storage 29
 - Recovery HD 331
 - resetting 422–423
 - Safe Mode 348
 - shared network volume 426
 - sparse bundle 412
 - Spotlight indexing 379
 - tutil 413
 - Verify Backups 427
 - vs third-party backup solutions 47, 50
- tutil 413
- Toast 445
- top 233, 326
- trackpad 302–304
- training 34–35
- Trash 433–441
 - emptying 227
 - recovering files from 174
 - Secure Empty Trash 174
- troubleshooting
 - Activity Monitor 93–104
 - AirPort 105, 309
 - applications 120–135
 - Bluetooth 309
 - burning 139–145
 - CDs 139–145
 - Console 156
 - daemons and agents 395
 - Dashboard 167–172
 - disk images 178–180
 - Dock 184–186
 - DVDs 139–145
 - Fast User Switching 187–189
 - file sharing 309
 - FileVault 195
 - Finder 198–209
 - FireWire 212–215, 252–253
 - Font Book 224–226
 - fonts 217–219
 - freezes and hangs 230–235
 - general procedure 91–92
 - hard disks 337–341, 347, 357–358, 443–444
 - hard drive sleep 238–239
 - hardware 92, 240–242
 - Help Center 245–250
 - input managers 321
 - installation 31–33
 - Internet connections 309
 - kernel panics 256–258
 - keyboards 266–270
 - keychains 272–276
 - Launchpad 278
 - log in 279–280
 - login 279–280
 - Login Items 394
 - Migration Assistant 290–291
 - Mission Control 295–299
 - mouse 300–304
 - networks 309–312
 - passwords 79–80
 - performance 93–104, 314–315
 - peripherals 252–253
 - permissions 342–345
 - plug-ins 318–320
 - printer sharing 323–324
 - printing 323–324
 - Quick Look 203–204
 - shutdown 351–352
 - sleep 354–356
 - software 91
 - Software Update 362–364
 - sound 366–368
 - Spaces 295–299
 - spinning beach ball of death 369–374
 - spinning wait cursor 369–374
 - Spotlight 380–386
 - startup 387–392
 - Startup Items 394
 - System Information 398
 - System Preferences 403–407
 - Time Capsule 105
 - Time Machine 420–432

trackpad 302–304
 Trash 434–441
 USB 252–253
 VPNs 310

U

Uniform Type Identifier 375, 457
 uninstalling 119–120
 Uninterruptible Power Supply 73–77
 Universal applications 107, 288, 291
 universal binary 107
 Universally Unique Identifier 261, 430
 UNIX 106
 unlock-enabled users 190, 194
 update prebinding 37
 UPS 73–77
 USB 252–253
 flash drives 353, 439, 440
 modem 259
 shutdown 352
 sleep 355
 user agents 393
 User ID number 442
 UTI 375, 457
 UUID 261, 430

V

VCD 138, 445–446
 Verify Disk 443
 Versions 118, 131
 Video Compact Disc 138, 445–446
 VideoHelp 137, 445
 VirtualBox 107
 Virtual Memory 96–97, 325
 Virtual Network Computing 308
 Virtual Private Networks 82, 306, 310
 VLC Media Player 137, 445
 VM 96–97, 325
 VMware Fusion 107
 VNC 308
 voices 365
 volume (disk) 181
 volume keys 269, 270
 VPN 82, 306, 310
 VueScan 350

W

Wake on Demand 307, 353
 warranties 38, 92, 175
 Web Sharing 308
 WEP 81, 306
 WhatSize 228
 widgets 163–173

Stickies widget 166, 171, 172
 Web Clip widgets 173
 Wi-Fi 81
 AirDrop 305
 hotspots 308
 Internet connection 307
 status menu 306
 troubleshooting 309
 Wi-Fi Diagnostics 306, 309
 Wi-Fi Protected Access 81, 306
 Wi-Fi status menu 306
 Windows
 Boot Camp 107, 270
 MacDrive for Windows 215
 Wired Equivalent Privacy 81, 306
 WPA 81, 306
 WPA2 81, 306

X

X11 106
 X509Anchors 155
 Xcode 27
 X Lab, The 24, 35
 XML 116
 XProtect 85
 Xsan 411

Y

Yasu 36, 66, 126, 146, 218, 281

Z

zeroing 447–450