Symbols
: (colon), 144
== (double equals sign), 113
= (equals sign), 113
.mc. , entering in Script Pane, 60
_parent, 167
_root, 127, 167
2Advanced Studios web site, 82

A
Accessibility class, 215
ActionScript
advanced programming, 215
comments, 120
controlling cartoon character, 62–64
controlling movie clips with, 62, 64
datatypes (see datatypes)
Drawing API, 86
effects, 109–115
conditional animation, 111–115
versus motion tweens, 109–111
modularizing content for movies, 154–161
MovieClipLoader class (see
MovieClipLoader class)
NetConnection class, 145
NetStream class, 145
onPress( ) event handler, 64
onRelease( ) event handler, 65
operations, 112
parameters, 119
placing on top layer, 44
preloading movies, 157
scripting preloader, 158–161
variables, 144
video streaming (see streaming
video with ActionScript)
ActionScript 2.0, 158
ActionScript commands, 44
getURL( ), 119
lineStyle( ), 86
lineTo( ), 86
loadMovie( ), 154–161
loadMovieNum( ), 156
levels, 157
loadVariablesNum( ), 190
moveTo( ), 86
nextScene( ), 203
play( ), 64
prevScene( ), 203
stop( ), 45
QuickTime movies, 47
trace( ) (see trace( ) command)
ActionScript tab, 223
ActionScript Viewer, 31
actions (see ActionScript commands)
actions layer
deleting, 119
labels and, 125
locking, 44, 45, 86
standard practices, 44
versus attaching ActionScript to
buttons, 126
Actions panel, 45
opening, 62
addListener( ), 159, 160
Add a Mask Layer command, 143
Add Shape command, 89
Adobe Premiere, 45
Advanced Settings dialog box, 72
alignment, 21–26
automatic features, 23
precise, 32
Align panel, 26
Align Top Edge button, 26
American Splendor button site, 84
anchors, named, 125
animations
boxes changing color, 36
boxes changing size, 37–39
conditional, 111–115
frame-by-frame, 83
lengthening, 38
preparation, 30–36
preparing text for, 39–43
repeatedly adding frames to, 38
reversing, 114
sliding text, 41
smoothness of, 38
staggering, 42
synchronization, 42
testing, 39
your first, 30–47
Arrange menu options, 13
ASP (Active Server Pages), 174
assets
importing, 14
loading dynamically versus during
authoring stage, 154
removing unused in components,
166
shared, using, 71
.as files, 64
Audacity, 149
Audio Track, 73
Audition, 149
autorun file, 210

B
background and foreground elements,
managing, 33–35
background color, changing, 31
background images, 63
Bandwidth Profiler, 15
Behaviors panel, 119
Bend it Like Beckham web site, 92
bitmaps
aligning to top-right corner of Stage,
156
compressed in Fireworks, 69
loading on the fly, 154–156
low-quality, 30
movies containing, 30
tracing, 89–92
blank keyframes, 104
blank new documents, creating, 14
blogs, 215, 217
Flash-related, 217
books about Flash, 217
bouncing balls, acceleration, inertia,
and more, code for, 115
boxes
animating, 36–39
changing color, 35–36
creating layers for, 33–35
Boy Meets Pixel, 30
breaking apart items, 13
Break Apart command, 83, 88, 89,
131
Brightness/Contrast dialog box (Fire-
works), 69
Bring to Front command, 13, 71
browsers
  intercepting keystrokes, 207
  launching movies full screen in, 210
buttons
  coding, 126
  hand-coding versus behaviors, 127
  navigating through movies, 122–127
  simple, 226
buttons as symbols, 118–129
  behaviors, 119–121
  simple buttons, 118
Button component, 75
button scripts, 201
button states, 121–122

C
camelCase, 55
cartoon character, 52–62
  adding face, 55
  adding legs, 58
  animating, 61–62
  controlling with ActionScript, 62–64
  creating body, 52–55
  creating independent animations, 56–58
Cascading Style Sheets (see CSS)
cascading text effect, 100–104
CD-ROMs, 198
  applications, creating login and registration capability for, 204–212
  development, 203–212
  running Flash content from, 208–212
CDs, hybrid, 210
CFML (ColdFusion Markup Language), 174
Chambers, Mike, 217
change handler, 190
Check Spelling command, 226
class methods, 162
Clear command, 129
Clear History command, 19
Close All command, 25
code
  making more efficient, 181–183
  referencing objects, 182
codec, 47, 72, 73, 75, 77, 78
  code hints, 60
colon (:) and datatypes, 144
colors
  filling shapes with, 6–14
  setting in Properties panel, 35
  transitioning, 36–39
Color Mixer, 9, 11, 13, 86, 140
  blending gradients, 8
  options, 8
Color Threshold option (Trace Bitmap), 90
commands
  ActionScript (see ActionScript commands)
  adding to Flash interface, 20
  creating, 20–21
  executing, 21
  Make a Box (see Make a Box command)
  Commands menu, 20
  comments in ActionScript, 120
Community MX (CMX), 217
  components
    building your own, 165–171
    defined, 74
    extension name, 168
  packaging assets and ActionScript, 165
  removing unused assets, 166
  using, 185–192
  using Macromedia's, 164
Components folder, 168, 187, 204
Components panel, 77, 162
Component Description dialog box, 168
Component Inspector panel, 77, 78, 131, 132
  image of, 130, 131
  compression/decompression scheme, 47
Comstock, 218
concatenating text, 159
Conclave Obscurum web site, 97
  conditional animation, 111–115
  container movie clips, 64, 155–156, 191
Convert to Blank Keyframe command, 104
Convert to Keyframes command, 83
Convert to Symbol dialog box, 14, 20, 40, 55, 56, 118
The Cooler, 104
Create Motion Tween command, 92
CSS
  formatting text using, 177–181
  using in templates, 174–195
Curtis, Hillman, 218
Curve Fit option (Trace Bitmap), 90
Cut command, 13
CyberScholar web site, 129

D
datatypes, 60, 144, 145, 158, 159, 167, 177, 178
  colon (:) and, 144
data stream, 144
David, Matthew, 217
Development Panels command, 225
device fonts (see system fonts)
DevNet center for mobile devices, 198
Director, 209
  versus Flash, 203
Distribute to Layers command, 33, 40, 61, 83, 101
Donnie Darko web site, 105
double equals sign (==), 113
Downey, Mike, 217
down state (buttons), 122
drawing
  boxes, 3–6
  cartoon character, 52–62
  settings, 223
drawing
  API, 86
  Drop Shadow dialog box, 93
drop shadow effect, 93, 94, 115

E
economizing sequences, 19
Edit Guides command, 22
Edit Multiple Frames button, 107
Edit Symbols button, 226
Edit Symbols command, 24
  effects
    ActionScript (see ActionScript, effects)
    drop shadow (see drop shadow effect)
    motion, 104–109
    text (see text, effects)
  timeline (see timeline effects)
Ellipsis, 216
Flash design, advanced, 215
Flash Developer Center security page, 208
Flash Document command, 4
Flash Exchange, 27, 75, 94, 217, 223
Flash interface, adding commands, 20
Flash MX 2004
accessibility and, 215
ActionsScript 2.0, 158
behaviors, 119–121
bug in drawing settings, 52
component file extension, 168
creating Projector, 198
CSS and, 177
documents created with, 44
History panel (see History panel)
MovieClipLoader class, 170
Script Navigator, 181
software updates, 2
streaming video (see streaming
video with ActionScript)
text editor, 175
timeline effects, 93–97
using video in, 74–79
v2 components, 185, 189
versus Flash Pro, xiii
video codec, 72
Flash MX Professional 2004 (see Flash
Pro)
Flash Out of the Box web site, 2
Flash Player
common versions, 154
preloaders for older versions of, 170
privacy settings, 208
version census, 44
Flash Player 5, 44
Flash Pro
behaviors, 119, 121
CSS (see CSS)
History panel (see History panel)
Script Navigator, 181
streaming video (see streaming
video with ActionScript)
templates for mobile devices, 199
text editor, 175
using video in, 75–79
versus Flash MX 2004, xiii
Flash Reference Guide, 217
Flash Remoting, 218
Flash Search Engine SDK, 135
Flash Video (.flv) file, 75
.fla files, 43
size of, 226
working on multiple, 226
Flip Flop Flyin’, 30
Flip Horizontal command, 139, 149,
201
Flip Vertical command, 149
floor() method, 162
FLV Exporter, 76, 78
.flv files, 75
fonts
choosing, 39
device (see system fonts)
embedding, 82, 100
system (see system fonts)
foreground and background elements
managing, 33–35
forms
compiling and sending data, 190
creating, 187–190
loading into movie, 191–193
fps (frames per second), 38
frame-by-frame animation, 83
frames
converting to keyframes, 41
editing multiple, 107
extending number of, 38
Remove Frames command, 129
repeatedly adding to animation, 38
frames per second (fps), 38
frame labels, 125–127, 205
frame markers, 107
frame rates, changing, 38
frame spans, 37
staggering, 103
FreeHand, importing images from, 69
Free Transform tool, 110
activating, 37
handles used to rotate, skew, or
resize objects, 61
repositioning anchor points, 108
scaling instances, 38
fscmd( ) function, 210
functions, 65, 162

Enable Simple Buttons command, 226
equals sign operator (=), 113
events, keyboard, 207
event handlers, 64
onEnterFrame(), 111, 113
onKeyDown(), 65
onLoadProgress(), 159
onPress(), 64
onRelease(), 65
event listeners, 160
(see also listener objects)
.exe files, 209
Export command, 76
Export Movie dialog box, 46, 74
Export Preview command, 164
Export Preview dialog box (Fire-
works), 165
Export QuickTime Video dialog box,
46, 47, 74
Extension Manager, 185
downloading, 186

F
Falling Text Effect dialog box, 95
file size, optimizing, 31
fills, 6
filters, 69
Motion Blur, 106
Find and Replace dialog box, 183
Fireworks
bitmaps compressed in, 69
Brightness/Contrast command, 69
Brightness/Contrast dialog box, 69
creating motion blur, 106
Export Preview dialog box, 165
importing images from, 68
New command, 106
optimizing images in, 164
Flash
reasons to use, xii
tutorials, 216
versus Director, 203
Flash-related blogs, 217
FlashCom, 78, 146, 215
FlashKit, 217
web site, 170
Flash analogue of JavaScript cookie,
205
Flash Communication Server MX (see
FlashCom)
gotoAndStop() method – listener objects

importing
  from Fireworks, 68
  from Freehand, 69
low-quality bitmaps and graphics, 30
manipulating, 138–143
movies containing bitmap, 30
reversing, 139
scaling, 12
stacking, 13
stock photography, 218
video object, adding to, 140
Import to Library command, 147
Import to Stage command, 68, 69, 72, 90, 147, 202
InformIT.com’s Flash Reference Guide, 217
Info palette, 13
inserting Flash movie, 193
Insert Layer button, 39
Insert Layer Folder button, 35, 39
instances
  naming, 54, 63
  removing, 104
  setting opacity for, 70
iPAQ template, 199

H

Haberle, Ron, 94, 185
handheld devices, 198–212
  building photo galleries, 200–203
  creating your own templates, 199
Flash Pro templates, 199
handles, 37
Help documentation, 170
Hidden Files command, 94
highlight color, changing, 222
history, clearing, 19
History panel, 18–21
  Clear History command, 19
  opening, 18
Hit state (buttons), 122
How Do I command, 170
HTML
  embedding Flash content into web page, 193
  resizing .swf files in, 30
  .swf files and (see .swf files), 193
HTML option, 119, 120
hybrid CD, 210

I

images
  adding dynamically, 183–185
  background, 63
  combining graphic elements to create single image, 138–140
Import to Stage command, 68
Library panel, 14
opening Library, 21
Paste in Place command, 55
Remove Frames command, 129
repeatedly adding frames to animation, 38
Save command, 6
Test Movie command, 57
Test Movie mode, 15
toggling hide/show panels, 224
Undo, 13
Keyframe, Insert command, 36, 45
keyframes
  blank, 104
  converting from frames, 41
  Convert to Blank Keyframe command, 104
  Convert to Keyframes command, 83
defined, 36
keystroke detection, 207

J

JavaScript cookie, Flash analogue of, 205
Jones, Chuck, 37
JPEG compression, 69
JPEG images (see images)
JSP (Java Server Pages), 174

K

keyboard events, 207
keyboard shortcuts
  Actions panel, 62
  Break Apart command, 131
  converting frames to keyframes, 41
  Convert to Blank Keyframe command, 104
  Convert to Symbol command, 14
  creating instances of symbols, 23
  customizing, 224
  Cut command, 55
  grouping items, 13
  Import to Library command, 147
library
  changing symbol names, 22
  importing assets, 14
  opening, 21
  organizing, 150
Library of Congress, 218
Library panel
  opening, 14
title bar, 71
lineStyle( ) command, 86
lineTo( ) command, 86
listener objects, 159–161
List Variables command, 176
Loader component, 163
loadMovie() command, 154–161
loadMovieNum() command, 156, 157
loadVariablesNum() command, 190
LoadVars class, 177, 178
local shared object (LSO), 205
looping, preventing movie from, 44
love+rage web site, 133
low-quality bitmaps and graphics, 30

M
Macromedia’s events listing, 217
Macromedia DevNet, 217
center for mobile devices, 198
Macromedia Director, 45
Macromedia Flash MX 2004 (see Flash MX 2004)
Macromedia Player Licensing FAQ, 212
Macromedia User Group Program (MMUG), 217
Macromedia web site, 92
macros (see commands)
Make a Box command, 21, 22, 105
Manage Saved Commands command, 20
masks, 141–143
mask layers, 142, 146, 149
Math.floor( ), 159
MediaDisplay component, 77
methods, 162
Miniml, 217
Mini USA web site, 157
misalignment, 32
mobile devices (see handheld devices)
modularizing content for Flash movies, 154–161
Moock, Colin, 217, 218
moockmarks, 217
morphing letters, 88
Motion Blur dialog box, 106
motion design, 104
motion effects, 104–109
high-speed blur, 106
paths, animating along, 107
realistic motion, 105
motion tweens, 37, 38
guide layers used for, 107–109
improving with shape hints, 88
Remove Tween command, 87, 111
shape, 84–88
versus ActionScript effects, 109–111
moveTo() command, 86
MovieClip.getDepth( ) method, 162
MovieClip.setMask( ) method, 143
MovieClipLoader class, 158, 160, 161, 170, 193
movies
adding text to, 39
containing bitmap images, 30
launching full screen in a web browser window, 210
loading forms into, 191–193
modularizing content for, 154–161
navigating through, 122–127
playing, 43
preloading, 157
preventing looping, 44
publishing (see publishing movies)
movie clips
controlling with ActionScript, 62, 64
creating independent animations, 56–58
instances, 158
nesting, 63
overview, 56
Movie Explorer, 112, 151
movie properties
changing background color, 31
changing box color, 35
changing stage dimensions, 31
customizing, 30–36
managing foreground and background elements, 33–35
optimizing file size, 31
.mov files, 45
.mxmp files, 185

N
named anchors, 125
naming instances, 54
naming symbols, 54
navigating through movies, 122–127
navigation usability, 128
NetConnection class, 145
NetStream class, 145, 146
New command, 14
New command (Fireworks), 106
new Flash document, creating, 22
nextScene( ) command, 203
Normal mode, 119
Notepad, launching, 175

O
objects
distributing, 25
referencing in code, 182
onClipEvent( ) event handler, 111
onEnterFrame( ) event handler, 111, 113
onion markers, 107
onKeyDown( ) event handler, 65
onLoad() function, 178
onLoadError event, 159, 161, 166
onLoadProgress( ) event handler, 159
onLoadProgress events, 159–161
onPress( ) event handler, 64
onRelease( ) event handler, 65
Open command, 31
Open External Library command, 71, 123
optimizing file size, 31
optimizing images in Fireworks, 164
Other Panels command, 225
Outlines command, 88, 222
outline mode, viewing content in, 222
Output panel, 144, 176
playing movie in browser, 179
Oval tool, 6, 16, 55, 115, 140
Over state (buttons), 122

P
Paint Bucket tool, 11, 13, 53, 54, 86, 123, 139, 140
panels, toggling between hiding/showing, 224
panel layout, customizing, 224
Panel Sets directory, 225
parseFloat( ) function, 162
Paste in Place command, 55, 129
paths, animating along, 107
path layer, 108
patterns, layout of repeating, 25
Pencil tool, 10, 52, 66
configuring, 52
Smooth option, 56
Perl, 174, 218
photo galleries, 25
  building, 200–203
    using keyboard to go forward and
      back, 206
PHP, 174, 218
pictures (see images)
xixeltees web site, 118
PI (see Properties panel)
play() command, 64
play() method, 162
playhead, 37
defined, 34
Play command, 36
PNG images (see images)
Pocket PCs, Flash content for, 204
Pocket PC Content Development Kit (CDK), 204
PolyStar tool, 124
Preferences dialog box, 222–224
ActionScript tab, 223
configuring Pencil tool, 52
Editing tab, 223
drawing settings, 223
project settings, 223
General tab, 222
highlight color, changing, 222
Undo levels, 222
preference file, 205–208
preloaders
defined, 157
  for older versions of Flash Player, 170
  scripting, 158–161
preloader component, 161–171
prevScene() command, 203
printing, 215
privacy, 208
ProgressBar component, 75, 161–164
Projector, 208–212
Project panel, 223
Properties menu command, xiii
Properties panel, 5
setting color in, 35
  using to position objects, 22
Property Inspector (see Properties panel)
publishing movies, 43–47
  online, 43, 193–195
  QuickTime, 45–47
Publish command, 45, 63, 198, 209
Publish Settings command, 193
Publish Settings dialog box, 119, 208
Punchstock, 218
Python, 174
Q
QuickTime
downloading, 68
  publishing for, 45–47
QuickTime movies, 45
quick edits, 226
Quit command, 44
quiz, creating, 129–133
R
RadioButton component, 75
Rectangle tool
  activating, 18
Red Giant, 94
Remove Frames command, 129
Remove Tween command, 87, 111
reversing images, 139
Revert command, 123
Revis, Greg, 217
Rich Internet Application (RIA) deve-
  lopment, 216
round-trip editing feature, 69
rulers, 21
Rulers command, 101, 138
Rulers menu option, 22
S
saved panel layout, restoring, 225
Save and Compact command, 226
Save As menu option, 4
Save as Template command, 200
Save command, 6
Save Panel Layout dialog box, 225
scaling images, 12
scenes
  Insert Scene command, 202
  versus labeled frames, 202
Screens features, 215
scripts layer (see actions layer)
Script Navigator, 181, 182
Script Pane, entering _mc. in, 60
scrubbing, 37, 96
security, 208
Selection tool, 39
  using, 18
Select All command, 91
Send Backward menu option, 13
Send to Back command, 163
sequences
economizing, 19
  making sequence of steps reusable
    (see commands)
server-side scripts, 174, 187, 190, 191, 196
setInterval() function, 162
Settings Manager, 208
shapes, filling with color, 6–14
shape hints, 88
shape tweens, 84–88
SharedObject class, 205, 206
flush() method, 206
getLocal() method, 206
shared assets, 71
shortcuts (see keyboard shortcuts)
Show Hidden Files and Folders com-
  mand, 94
simple buttons, 226
size of .fla files, 226
Slides and Forms, 215
smoothness of animation, 38
Snap Align command, 23
snap align guides, 23, 33
software license, transferring, 226
.sol files, 205–208
sound, 137
  FlashKit, 217
  transitions and, 147–151
SoundEdit, 148
SoundForge, 148
sound clip, 147, 148
sound editing software, 147, 148
Sound End handle, 148
Sound Start handle, 148
spelling, checking, 226
Stage
  aligning bitmaps to top-right corner
    of, 156
dimensions, changing, 31
properties, 30
Standalone Player, running full
  screen, 210
static methods, 162
stock photography, 218
stop ( ) command, 45, 162
QuickTime movies, 47
streaming video with ActionScript, 144–146
loading video clips, 145–146
opening streaming connection with server, 144
strokes, 6, 9–10
stroke and fill color choosers, 7
Stoke Color swatch, 10
.swf files, 168
SWF decomilers, 31
.swf files, 30, 43
embedding in web pages, 193
loading multiple, 191
published, 83
resizing in HTML, 30
SWF Kit, 210
SWF Studio, 210
symbols
automating creation of, 21
changing names, 22
changing stroke attribute of, 25
creating, 14
creating instances of, 23
editing, 24
instances (see instances)
movie clips (see movie clips)
naming, 54
reusing, 15
size and position properties, 33
using multiple instances of same, 31–33
Symbol Editing mode, 24
synchronization, 42
System.capabilities.hasAccessibility property, 215
system fonts, 70, 100

tabbed documents, 226
templates
building reusable ad template, 174–195
creating your own, 199
for mobile devices (Flash Pro), 199
iPAQ, 199
testing
animation, 39
values, 113
Test Movie mode, 15, 57, 59
running movies in, 44
text
adding to movies, 39
compared to other movie elements, 41
concatenating, 159
effects, 82
cascading text, 100–115
typewriter effect, 82–97
formatting using CSS, 177–181
loading dynamically, 175–177
preparing for animation, 39–43
sent out from Flash, 174
sliding (animation), 41
using external text and CSS in template, 174–185
Text tool, 39
Thomson NETg web site, 129
timeline
for typewriter effect, 84
layers and, 34
timeline effects, 81, 93–97, 214
custom, 94
web site, 94
Timeline Effects menu, 95
Timeline panel, 34
Insert Layer button, 39
Insert Layer Folder button, 39
Tools panel, 4
trace ( ) command, 144, 177, 180
overview, 178
Trace Bitmap dialog box, 89, 90, 178
tracing bitmaps, 89–92
Transfer Your Software License command, 226
Transform panel, 110
transitions, 84–92
creating, 149
shape tweens, 84–88
sound and, 147–151
transition layer, 149
tutorials, 72, 100, 105, 216
tweens (see motion tweens)
typewriter effect, 82–84
timeline for, 84
U
underscores ( _ ) in names, 55
Undo command, 5
Up state (buttons), 122
V
variables, 144
var keyword, 144
video
compression/decompression scheme (see codec)
importing, 72–74
importing, compressing, and using, 72–79
object, adding to image, 140
preparing for using in Flash, 72
streaming (see streaming video with ActionScript)
using in Flash MX 2004, 74
using in Flash Pro, 75–79
Video Import Wizard, 72, 73
Advanced Settings screen, 73
W
web sites
2Advanced Studios, 82
accessibility and Macromedia Flash MX 2004, 215
ActionScript Viewer, 31
American Splendor, 84
Audacity, 149
Audition, 149
Bend it Like Beckham, 92
blogs (see blogs)
bouncing balls, acceleration, inertia, and more, code for, 115
Boy Meets Pixel at Flip Flop Flyin’, 30
Community MX (CMX), 217
Comstock, 218
Conclave Obscure, 97
CyberScholar, 129
DevNet center for mobile devices, 198
Donnie Darko, 105
Extension Manager, 186
FlashKit, 170, 217
web sites (continued)
Flash Developer Center security page, 208
Flash Exchange, 27
Flash JavaScript Dictionary, 215
Flash MX 2004 software updates, 2
Flash Out of the Box, 2
Flash out of the Box, 119
Flash Player 5, 44
Flash Player version census, 44
InformIT.com’s Flash Reference Guide, 217
Library of Congress, 218
love+rage, 133
Macromedia, 92
Macromedia’s events listing, 217
Macromedia DevNet, 217
Macromedia Player Licensing FAQ, 212
Macromedia User Group Program (MMUG), 217
Miniml, 217
Mini USA, 157
moockmarks, 217
pixeltees, 118
Punchstock, 218
QuickTime, 68
Red Giant, 94
Settings Manager, 208
SoundEdit, 148
SoundForge, 148
SWF Kit, 210
SWF Studio, 210
Thomson NETg, 129
timeline effects, 94
WidgetMaker blog, 215
Windows Mobile 2003 operating system, 199
workflow, improving, 222–227
workspace, restoring saved panel layout, 225

X
XML, 215

Z
Zoom Out command, 101
Zoom tool, 53, 91, 101, 103