

# INDEX

## Symbols and Numbers

- <...> (angle brackets), in XML, 370
- (bullet), in text, 268
- :
- : (colon), in SVG
  - in element and attribute names, 372
  - in style properties, 77, 378
- © (copyright sign), in text, 268
- “...” (curly double quotes), in text, 268
- ‘...’ (curly single quotes), in text, 268
- «...» (double guillemets), in text, 268
- ... (ellipsis), in text, 268
- (em dash), in text, 268
- (en dash), in text, 268
- = (equal sign), in XML, 371
- / (forward slash), in XML, 370
- # (hash mark), in SVG, 77, 379
- × (multiplication sign), in text, 268
- ® (registered sign), in text, 268
- ; (semicolon), in SVG, 378
- "..." (straight double quotes), in XML, 371
- ™ (trademark sign), in text, 268
- 3D Box tool, 6, 14, 24, 171–172, 337–340, 416–417
  - controls bar of, 166–167
  - deselecting in, 78, 416
  - dragging in, 166, 416
  - editing
    - clones in, 272–273
    - gradients in, 150
    - path effects in, 217
    - patterns in, 163
    - shapes in, 166
  - rotating in, 416
  - selecting in, 68, 71, 166, 416
  - styling in, 167, 174, 177
  - switching to, 172, 399, 406
- 3D boxes, 165, 171–177
  - as drawing aid, 337–341
  - converting to
    - groups of paths, 165, 171, 176, 363
    - guides, 102
  - creating, 166, 172, 416
  - editing handles of, 166, 172, 174–176, 416–417

- opacity of, 176–177
- perspective of, 173–174, 416–417
- selecting, 166, 171, 176–177
- sides of, 171, 176–177
- snapping, 175–176, 339
- styling, 166–167, 174, 176–177
- tessellation with, 363–365
- tweaking, 177
- vanishing points of, 173–174, 338–339, 416–417
  - see also* shapes
- 3D effects, 229–230
- 3D software, 6, 171

## A

- ABCs (Filters submenu), 291
- About dialog, 18, 172
- sodipodi:absref attribute, 305
- Add Layer command, 61, 330
- Add Nodes extension, 144, 195, 231, 233
- Add Noise extension, 309
- Adobe Distiller, 12
- Adobe Flash, 3, 8–9, 329, 333, 390
- Adobe Freehand, 390
- Adobe Illustrator (AI), 10
  - Bloat tool in, 208
  - color management in, 320, 328
  - dragging in, 82
  - gradient meshes in, 14, 132, 388
  - importing Inkscape SVG into, 376
  - Knife tool in, 194
  - layers in, 62, 384, 388
  - panning in, 48
  - Pucker tool in, 208
  - selecting in, 72
  - shapes in, 166
  - speed of, 10
  - transformations in, 12
  - UI of, 10–11, 13
  - version 9 or newer, 8, 12, 388
- Adobe Illustrator (AI) file format, 8, 12, 39, 384, 388
- Adobe InDesign, 6

- Adobe Photoshop, 5, 10
    - color management in, 320
    - PNG converting with, 327
    - running from Inkscape, 304
    - selecting in, 2
    - soft brush in, 132
  - Adobe RGB, 123
  - Affect buttons, 96–97, 159, 170, 274
  - AI, *see* Adobe Illustrator
  - Align and Distribute dialog, 109–114, 206, 364
    - opening by keyboard, 109, 400
  - alignment, 109–111
    - checking, 100
    - of clones, 273
    - of path nodes, 112
    - of text objects, 110, 261
  - alpha, *see* opacity
  - anchor boxes, 110
  - angle brackets (<...>), in XML, 370
  - animations, 3, 7, 9, 329–336
    - templates for, 330
  - antialiasing, 2, 13, 128
  - Apache FOP, 6
  - approximating strokes, 223
  - arcs, 177–180
    - creating, 179–180, 417
    - editing handles of, 177
    - turning into a whole ellipse, 180, 417
    - see also* ellipses
  - arrowheads and tails, 142–143, 374
  - artistic drawings, 5
    - checking with temporary flipping, 89
    - distortions in, 196, 223, 324, 347–348
    - paths in, 96, 194, 208
    - patterns in, 163
    - photorealistic, 286, 365–366
    - randomness in, 184
    - tools for, 25, 68, 238, 244, 343–348
    - tracing, 358
    - visual bounding boxes in, 54
  - ArtRage, 5
  - attributes, in XML, 65, 371, 378
    - order of, 65, 371
    - setting in XML Editor, 400
  - AutoCAD, 6
  - Autodesk Maya, 6
  - Autopackage program, 18
  - avatars, 330
  - axonometric drawings, 349–355
    - duplicating in, 169
    - using grids for, 103–105, 349
- B**
- background, of Inkscape SVG documents, 40, 129
  - banners, 5, 330
  - Barcode extension, 7, 233
  - baseline origin point, 110, 112
  - Bend effect, 217–220
  - bevels, 196, 291
  - Bevels (Filters submenu), 291
  - Bézier curves, 190–191
    - converting into straight lines, 204, 231, 413, 420
    - creating, 238, 240, 413, 419
    - cusps in the middle of, 137
    - dragging, 203
    - nodes of, 143, 191
    - vs. spirals, 186
    - vs. Spiro splines, 225
  - Bézier handles, 191, 197–198, 202–204, 419
    - hiding, 197–198, 202–203, 207
    - jittering, 232
    - moving, 203–205, 411–412, 419
    - retracting, 191, 202–204, 411–412
    - rotating, 411–412, 419
    - scaling, 412
    - visualizing, 235
  - bitmap editors, 5, 237
    - canvas size in, 3
    - converting formats in, 314
    - layers in, 2
    - natural-media tools in, 5
    - running from Inkscape, 305
    - selecting in, 2
    - zooming in, 3
  - bitmaps, 1–2, 303–320
    - blending vector objects with, 128, 308
    - clones of, 309
    - converting to vector, *see* tracing, bitmaps
    - copies of, 404
    - cropping, 306
    - editing, 304–305, 308
    - embedding, 305
    - exporting, *see* export, to PNG
    - fading the edges out, 160, 307
    - file sizes of, 3
    - filtering, 308
    - importing, 4, 8, 303–305, 317–318, 357, 390, 403–404
    - in Outline mode, 49
    - linked, 304–305, 309, 372
    - opacity of, 121
    - optimizing, 314
    - picking color from, 128
    - pixel-sized, 316, 393
    - resampling, 310
    - resolution of, 31, 302, 304, 310, 312, 316–318, 327, 377, 386, 388, 393
    - searching, 77
    - styling, 120, 151
    - thumbnails from, 94, 115
    - tinting, 289–290
    - tracing, *see* tracing, bitmaps

- transforming, 304
  - using in patterns, 120, 306
  - Blender suite, 6
  - blend modes, 63, 289–290
  - blogs, 330
  - blur, 4, 9, 286–289, 346
    - and bounding box, 286
    - applied to
      - 3D boxes, 176
      - clones, 274, 282, 287
      - groups, 287–288
      - multiple bushstrokes, 366
      - text objects, 264
    - bitmap editing with, 308
    - blending bushstrokes with, 342, 359
    - for shaders, 160
    - motion, 288, 291
    - picking color from, 128
    - rendering, 14
    - simulated with inset/outset paths, 229
    - transforming, 287–288
  - Blur Content preset filter, 291
  - Blur primitive, *see* Gaussian Blur
  - Blurs (Filters submenu), 291
  - BMP format, 303
  - bounding boxes, 54
    - and repeated randomization, 113
    - and rubber band selection, 72
    - as selection cue, 54, 68
    - converting to guides, 103
    - geometric center of, 86, 88
    - handles around, 83, 85
    - of blurred objects, 286, 300
    - of flowed text, 258
    - querying via command line, 395
    - types of, 54, 301
  - Box tool, *see* 3D Box tool
  - Break Apart command, 188–190
  - Brighter extension, 133
  - brightness, 123, 309
  - browsers
    - PNG support in, 31, 315
    - SVG support in, 8–9, 31
  - bullets
    - special character for, 268
    - using clones for, 271
  - business cards, 321–328
- C**
- CAD (Computer-Aided Design), 6, 349, 389
  - Cairo library, 386
  - Calligraphic pen tool, 25, 135, 238, 244–250, 420
    - applying stroke style, 126
    - background tracing with, 245, 248–249, 335
    - bitmap tracing with, 358
    - Boolean operations on paths with, 193
    - controls bar of, 244–248, 250
    - guide tracking with, 245, 248–250, 360, 420
    - hatching with, 333–335
    - parameters of
      - Angle, 246, 343, 420
      - Caps, 247–248
      - Fixation, 246, 248, 343, 366
      - Mass, 247, 250
      - Pressure Sensitivity, 245–248, 343
      - Thinning, 245, 248
      - Tremor, 247–248, 250, 324, 334, 347–348, 366
      - Width, 33, 244–245, 248, 324, 334, 343, 366, 420
      - Wiggle, 247–248
    - presets of, 248
    - selection cue in, 68
    - sketching with, 341
    - switching to, 399
    - tool style of, 25
  - Camouflage pattern, 164
  - canvas, 19–21, 40, 42
    - background of, 40, 129
    - current position on, 374
    - empty, 70, 72, 78
    - returning focus to, from a dialog, 400
    - scrolling
      - automatic, 256
      - by keys, 402
      - by mouse, 23, 401
      - size of, 373
  - Canvas vector editor, 39
  - cartoons, 5, 25
    - adding depth to, 160
    - drawing, 238
  - CCX format, 389
  - CDR format, 389, 392
  - CDT format, 389
  - Celtic knots, 222
  - CGM format, 389
  - Chalk and Sponge preset filter, 292
  - Channel extension, 309
  - channels, 121–123
    - correcting, 309
    - removing from bitmaps, 309
    - tweaking, 132
  - characters
    - kerning, 261–263, 425
    - rotating, 262
    - selecting, 256
    - special, 268, 424
  - Charcoal extension, 309
  - Check Spelling dialog, 267–268

- Checkerboard pattern, 164
- circles, 177
  - creating, 178–179, 417
  - locking, 417
  - skewing, 179
  - see also* dots, ellipses
- click/drag threshold, 70–71, 82
- clipart, 7, 324, 389
- clipboard operations, 56–57, 404
  - and layers, 59, 332
  - on clones, 275
  - on colors, 122, 126, 128
  - on gradients, 154, 156, 404
  - on path effects, 215, 404
  - on patterns, 162
  - on sizes, 93
  - on styles, 30, 118, 154, 156, 162, 404
  - on text, 256–257, 404
- clipping paths, 193, 306–307
  - applied to 3D boxes, 176
  - definitions of, 374
  - editing, 198, 306
  - in Outline mode, 49
- clones, 271–284
  - aligning/distributing, 273
  - blurred, 274, 282
  - Boolean operations on, 405
  - chaining, 275–276
  - converting into stroke markers, 146
  - copying/pasting into another document, 275
  - creating, 272, 404
  - duplicating, 275
  - editing, 272–273
  - for printing business cards, 328
  - moving, 273
  - of bitmaps, 309
  - of groups, 272, 275, 277, 404
  - opacity of, 121, 274, 282
  - original of, 272
    - deleting, 276
    - finding, 78, 275–276, 278, 404
  - rotation center of, 86
  - searching, 77
  - snapping, 273
  - styling, 118, 120, 132, 151, 272–275, 283, 363
  - tiling, *see* Create Tiled Clones dialog
  - transforming, 272–274
  - unlinking/relinking, 276–277, 404
- Cloth pattern, 164
- CMX format, 389
- CMYK color model, 122–123, 320
  - calibrating, 123
  - converting from/to RGB, 123
  - device-independent, 9, 11
  - device-specific, 328
  - in Inkscape, 6, 14
- `inkscape:collect` attribute, 374, 381
- colon (:), in SVG
  - in element and attribute names, 372
  - in style properties, 77, 378
- Color (Extensions submenu), 133
- Color (Filters submenu), 133, 292
- color gestures, 126–128
  - using with gradients, 155
- color management, 318–320, 328
- Color Markers to Match Stroke extension, 145
- Color Matrix primitive, 133, 274, 300
- color palette, *see* palette control
- color profiles, *see* ICC color profiles
- colorimeters, 319
- Colorize preset filter, 292
- colors
  - assigning, 128–130
    - in Dropper tool, 129, 155, 353, 422
    - in Tweak tool, 130
    - without selecting an object, 21, 124
  - averaged, 122, 128
  - black, 121–123, 126, 128, 323
  - clipboard operations on, 122, 126, 128, 423
  - flat, 118, 126
  - gray, 121, 123, 128, 133
  - in Outline mode, 48
  - in RRGGBB form, 77
  - inverting, 126, 133, 422
  - last selected, 125
  - last set, 125
  - models of, 121–123
  - names of, 124
  - picking, 128–130, 156, 308, 353, 364–365, 422
  - randomizing, 131, 336
  - range of, 319
  - red, 323
  - separated for printing, 320
  - tweaking, 130–133
  - under cursor, 128
  - white, 121–123, 126, 128
- Combine command, 188–190, 192–193, 269, 331
- command-line interface, 41, 391–397
  - exporting via, 79, 302, 317, 333, 392–394
  - help in, 397
  - parameters in, 392
  - querying in, 394–395
  - selecting objects via, 393–394, 397
  - shell mode of, 395–396
  - verbs in, 396–397
- Command Line Options command, 397
- commands bar, 22, 42
- complex artwork
  - organizing, 52, 58, 60
  - temporarily simplifying, 60
- Composite primitive, 297–298, 359
- Connector tool, 6
  - deselecting in, 78
  - selecting in, 68, 71
  - switching to, 400

- construction lines, 223
- constructivism, 323
- context-sensitive controls, 13
- Contrast extension, 309
- controls bar, 22
  - accessing by keys, 42, 401
  - see also individual tools*
- Convert to Text command, 259
- coordinates, 376
  - in Selector controls bar, 54
  - in status bar, 53
  - origin of, 53, 89, 377
- Copy command, 56, 93, 404
  - and layers, 59
  - on clones, 275
  - on colors, 122, 126, 128
  - on gradients, 154
  - on path effects, 215
  - on patterns, 162
  - on styles, 30, 156, 423
  - on text, 256–257
  - see also clipboard operations*
- copyright sign (©), in text, 268
- CorelDRAW, 12, 15
  - selecting in, 72, 84
  - supporting in Inkscape, 8, 39, 389
  - UI of, 12–13
- Corel Painter, 5
- CorelXARA, 13
  - see also Xara*
- Create Clone command, 272
- Create Tiled Clones dialog, 14, 105, 115, 277–284, 328, 362
  - Blur & Opacity tab, 282
  - Color tab, 132, 283, 336
  - creating tiles in, 278, 362
  - pattern size in, 277–278
  - randomizing tiles in, 278, 281, 363
  - Rotation tab, 281–282, 363
  - Scale tab, 281–282, 363
  - Shift tab, 281–282, 363
  - Symmetry tab, 162, 279–282, 361
  - Trace tab, 283–284, 362
  - unclumping tiles in, 278, 364
- Cross-Smooth preset filter, 291
- CSS (Cascading Style Sheets), 118
- cubes, *see* 3D boxes
- current layer indicator, 62, 69, 345–346
  - order of layers in, 64
- Custom extension, 133
- Cut command, 56, 61, 332, 404
  - and layers, 59
  - on gradients, 154
  - see also clipboard operations*
- Cut Path command, 194
- Cycle Colormap extension, 309
- cylinders, drawing, 352–353

## D

- d attribute, 214, 380
- Darker extension, 133
- dash patterns, 135, 139–141, 367
  - of dots, 140
  - on spirals, 141, 186
- default.svg* (default template), 38, 43
- default.xml* (key configuration file), 39
- defs element, 78, 143, 147, 214, 306, 374, 379, 381
- Delete Current Layer command, 61
- Desaturate extension, 133
- Desaturate preset filter, 292
- desc element, 52
- Despeckle extension, 309
- Dia program, 6
- Diagram tool, 68
- diagrams, *see* technical drawings
- dialogs, 44
  - activating, 400
  - closing, 45, 400
  - docked/floating, 22–23, 44–45
  - modal, 101, 315
  - multitab, 400
  - navigating by keyboard, 44, 400
  - temporary hiding, 400
- Difference command, 192–193, 248
- Diffuse Light preset filter, 291
- dimension lines, 143, 235
- Dimensions extension, 235
- Displacement Map primitive, 299, 359
- display calibration, 319
- Distiller, *see* Adobe Distiller
- Distort (Filters submenu), 292
- distribution, 111–114
  - of clones, 273
  - of path nodes, 112
  - of text objects, 112
  - using grids for, 103
- Dither extension, 310
- Division command, 194
- dock, 22, 45
  - hidden, 42
  - scrollbar in, 23
- Document Metadata dialog, 375
- document order, 64
- Document Properties dialog, 37, 53, 375, 377
  - Grids tab, 103–105, 350
  - Guides tab, 101
  - opening by keyboard, 400
  - Page tab, 39, 41, 129, 322
  - Snap tab, 108, 339
- document templates, *see* templates
- documents
  - closing, 403
  - creating, 32, 37, 403
  - file size of, 10, 154, 271, 304–305, 374, 388

- documents (*continued*)
    - multipage, 6, 14
    - opening, 403
      - in multiple windows, 41, 67, 392
      - via command line, 41, 79, 392
    - properties saved in, 37, 374, 381
      - current layer, 60
      - export hints, 316, 394
      - gradient definitions, 153
      - guides, 99, 101
      - rotation centers, 85–86, 381
      - view area and zoom level, 44
    - saving, 9, 21, 31, 40, 326, 383, 392, 403
  - dots
    - as markers, 143–144
    - creating with Pen or Pencil tool, 178, 241, 420
    - randomizing, 114, 141, 164, 178, 420
    - rectangular grids of, 105
    - sequentially numbered, 235
    - strokes of, 139–140
    - see also* bullets, circles
  - double guillemets («...»), in text, 268
  - double quotes
    - curly (“...”), in text, 268
    - straight (“...”), in XML, 371
  - dpi (unit of resolution), 316, 377, 393
  - drafts, *see* technical drawings
  - dragging
    - and interactive transforming, 97
    - from any point, 82
    - in 3D Box tool, 166, 416
    - in Ellipse tool, 166, 417
    - in Rectangle tool, 166, 415
    - in Selector tool, 21, 32, 70, 72–73, 81–82, 408
    - in Spiral tool, 166, 418
    - in Star tool, 166, 417
    - off a ruler, 100
  - Draw Handles extension, 235
  - Drop Glow preset filter, 293
  - Drop Shadow preset filter, 293, 326
  - Dropper tool, 128–130, 422–423
    - gradients in, 155–156, 308, 353
    - picking and assigning
      - colors, 128–129, 155–156, 308, 353, 364–365, 422
      - opacity, 129–130
    - selection cue in, 68
    - switching to, 399
  - Duplicate command, 56
    - on axonometric rectangles, 169
    - on clones, 275
    - on gradients, 154
    - on linked offsets, 228
  - Duplicate Window command, 41
  - duplicating, 28, 56, 331, 363, 404
    - and rotation center, 86
    - axonometric rectangles, 169
    - clones, 275, 277, 404
    - linked offsets, 228
    - nodes, 200–201
    - objects with gradients, 154
    - paths while dragging, 205
    - random, 96, 415
  - dx attribute, 263
  - DXF format, 389
  - dy attribute, 263
  - Dynamic Offset command, 228
  - dynamic offsets, 196, 228–229, 406
- ## E
- Edge Detect preset filter, 292
  - elements, in XML, 64–65, 370
    - empty, 370
    - linking, 379–380
    - order of, 55
    - parent, 370, 378–379
    - root, 371–373
  - ellipse element, 166, 177–180
  - Ellipse tool, 24, 417
    - controls bar of, 166–167, 180
    - deselecting in, 78, 417
    - dragging in, 166, 417
    - editing
      - clones in, 272–273
      - gradients in, 150
      - path effects in, 217
      - patterns in, 163
      - shapes in, 166
    - rotating in, 179
    - scaling in, 179, 417
    - selecting in, 68, 71, 166, 417
    - styling in, 32, 167
    - switching to, 178, 399, 406
  - ellipses, 165
    - converting to path, 165
    - creating, 32, 166, 178, 417
      - by rounding a rectangle, 352
      - from center, 178, 417
    - editing handles of, 166, 177–180, 417
    - in Inkscape vs. SVG, 166
    - integer-ratio, 178, 417
    - selecting, 166
    - styling, 166–167
    - transforming, 179, 417
    - see also* arcs, circles, segments, shapes
  - ellipsis (...), in text, 268
  - em dash (—), in text, 268
  - Embed Images extension, 305
  - Emboss preset filter, 292
  - EMF format, 389
  - en dash (–), in text, 268
  - engravings, 114, 249, 360–361
  - Enhance extension, 309
  - Envelope Deformation effect, 227, 335

- Envelope extension, 231
  - EPS (Encapsulated PostScript), 12
    - and filters, 301–302
    - exporting to, 301, 327, 386–387, 392–394
    - importing, 387
    - supporting in Inkscape, 8, 387
    - viewing, 327
  - equal sign (=), in XML, 371
  - Equalize extension, 309
  - equalizing gaps, 112–113
  - Eraser preset filter, 292
  - Eraser tool, 73, 248
    - selection cue in, 68
    - switching to, 399
  - Ermine pattern, 164
  - Evanescence preset filter, 291
  - Exclusion command, 193
  - export, 31, 383–390
    - and filters, 394
    - area of, 31, 40, 315–316, 386, 392–393
    - background for, 40, 393–394
    - filenames for, 77, 316, 381, 394
    - filter rasterization for, 301–302
    - resolution for, 316, 386, 388, 393–394
    - to EPS, 301–302, 386–387, 392–394
    - to multiple files at once, 316
    - to PDF, 301–302, 386, 392–394
    - to PNG, 2, 31, 301–302, 314–318, 327, 390, 392–394, 403
    - to PostScript, 301–302, 386–387, 392–394
    - via command line, 302, 317, 333, 392–394
    - vs. saving, 383
  - Export Bitmap dialog, 31–32, 315–316, 381, 383
    - opening by keyboard, 315, 400
  - inkscape:export-filename attribute, 77, 381
  - extensions, 7
    - and selection, 79
    - assigning keyboard shortcuts to, 39
    - for bitmaps, 308–310
    - for colors, 128, 133
    - for paths, 229–235
    - for text objects, 266
    - undoing, 229
    - via command line, 396
    - vs. path effects, 229
  - Extensions menu, 229–235
  - Extract Image extension, 305
  - Extrude extension, 229–230
- F**
- facial expressions, 34
  - fantasy art, 5, 232, 367
  - favicons, 38
  - Feather preset filter, 287, 291
  - fidelity, *see* Tweak tool
  - fill, 4
    - adjusting
      - with color gestures, 126–128
      - with extension effects, 133
    - assigning, 129
      - from palette, 29, 402
      - in Dropper tool, 422
      - in Paint bucket tool, 251, 253, 421
      - in Tweak tool, 130
    - default, 25, 118, 126
    - in Outline mode, 48
    - in SVG, 77
    - none, 30, 70, 77, 118, 126
    - opacity of, 120, 126
    - painted with
      - flat color, 118
      - gradient, 118, 150, 379
      - pattern, 118, 162, 306, 326
    - swapping with stroke, 126
    - unset, 118, 120, 126, 151, 274, 283, 363–364, 379
    - see also* colors, style
  - Fill and Stroke dialog, 118–120, 133
    - Blur slider, 285–286, 365
    - CMS tab, 123
    - CMYK tab, 123
    - Fill tab, 118, 190, 275
    - HSL tab, 123
    - Linear gradient tab, 153–155
    - opening
      - by keyboard, 400
      - from selected style indicator, 125
    - Pattern tab, 162–164, 326, 354
    - Radial gradient tab, 153–155
    - RGB tab, 122
    - Stroke paint tab, 118, 136, 275
    - Stroke style tab, 136–142, 146
    - Wheel tab, 123
  - Filter Editor dialog, 285, 288, 291, 294–302
  - filters, 4, 9, 285–302
    - adding to Filters menu, 294
    - and bounding box, 54, 300
    - and zoom level, 288
    - applying, 295
    - complex, 291
    - creating, 133, 294–295
    - definitions of, 374
    - exporting, 301–302, 327, 386, 394
    - for colors, 133
    - preset, 133, 285, 290–294, 308, 396
    - primitives, 295
    - rasterizing, 301–302, 386–388
    - removing, 294–295
    - scaling, 287–288, 294
    - slow-rendering, 133, 288, 301, 318
    - stacking, 285
  - Filters menu, 290–294
    - adding custom filters to, 294

- Find dialog, 76, 400
- Firefox browser, 315
- fixation, *see* Calligraphic pen tool
- Flash, *see* Adobe Flash
- Flatten Béziers extension, 231
- FLIP cASE extension, 266
- flipping, 89
  - around rotation center, 409
  - by keys, 89, 409, 413
- Flow into Frame command, 258
- flowcharts, *see* technical drawings
- flowed text, 9, 25, 257–259, 261, 263, 266, 423–424
- fonts
  - available to Inkscape, 265
  - built-in kerning of, 262
  - embedded, 385–386, 394
  - families of, 264–265
  - installing, 322
  - names of, 385
  - size of, 264, 266, 322
  - variants of, 265
- force, *see* Tweak tool
- forking, 15
- forward slash (/), in XML, 370
- Fractalize extension, 232
- fractals, 7, 227–228
- Freehand, *see* Macromedia Freehand
- Fullscreen command, 42
- fullscreen mode, 6, 21, 42, 403
- Function Plotter extension, 233

## G

- g element, 58, 60, 64, 374–376, 381
- Gauss, Carl Friedrich, 286
- Gaussian Blur primitive, 14, 229, 286, 288, 296, 298, 359
- Generate from Path (Extensions submenu), 229–230
- generate-layers.py*, 330
- Gentium font, 322
- Ghostscript interpreter, 12, 327, 387
- GIF format, 303
  - animated, 329, 333
  - importing, 390
- Gifsicle utility, 333
- Gill vector editor, 15
- GIMP (GNU Image Manipulation Program), 5, 15
  - color separation in, 320
  - drawing shapes in, 7
  - palettes on, 125
  - PNG converting with, 327
  - running from Inkscape, 304
  - selecting in, 2
  - soft brush in, 132

- Google search engine, 344
- GPL (General Public License), 15
- Gradient Editor dialog, 422
- gradient meshes, 4, 14, 132, 388
- gradient stops, 150–159
  - clipboard operations on, 404
  - color of
    - adjusting, 126, 128, 133
    - assigning, 128, 422
    - interpolating between, 122
    - picking, 128
  - connection lines between, 150, 158
  - creating, 421
  - deleting, 158, 421–422
  - deselecting, 155, 421
  - end, 156–157, 422
  - for elliptic gradients, 152
  - for linear gradients, 151
  - middle, 156, 158–159, 421–422
  - moving, 156, 158–159, 422
  - opacity of, 154
  - painting, 155–156, 158
  - sculpting, 422
  - selecting, 69, 155, 421
  - snapping, 106, 157
- Gradient tool, 149, 421–422
  - controls bar of, 421
  - deselecting in, 78, 421
  - gradient definitions in, 153
  - selecting in, 68–69, 71, 150, 421
  - switching to, 399
- gradients, 4, 149–161
  - approximating nonlinear profiles, 159–160
  - bitmap editing with, 308
  - creating, 150–152, 421
  - default, 421
  - definitions of, 150, 153–154, 374, 379
    - removing unused, 154
    - shared, 154
  - editing handles of, *see* gradient stops
  - elliptic, 14, 149–153, 336, 421
  - from opaque to transparent color, 149–150, 160, 325
  - in Outline mode, 48
  - linear, 14, 149–151, 154, 421
  - multistage, 158–159
  - on fill, 118, 150
  - on objects with an existing gradient, 150
  - on stroke, 118, 150
  - on text objects, 264
  - overlying, 161
  - picking color from, 128
  - removing, 151, 421
  - repeat mode, 154–155
  - reversing, 154, 422
  - simplifying, 158, 195
  - transforming, 97, 156, 159–160
  - tweaking, 161

- graphs, *see* technical drawings
- Grayscale extension, 133
- greater-than sign (>), in XML, 370
- Grid extension, 105, 233
- grids, 103–105
  - axonometric, 103–105, 350
  - color of, 105, 374
  - density of, 104–105, 374
  - generating, 233
  - hidden, 104–105
  - major lines of, 104–105, 350
  - pixel-sized, 103, 316, 318, 393
  - rectangular, 103–105
  - snapping to, 103, 169, 205, 349, 402, 408
- Group command, 57
- `inkscape:groupmode` attribute, 381
- groups, 57–59
  - applying
    - blur to, 287–288
    - path effects to, 214–215
  - clones of, 272, 275, 404
  - creating, 405
  - entering, 60, 62, 74–75, 272, 366, 376, 406, 408
  - impossible for objects from different layers, 59, 371
  - in SVG, 375, 381
  - nested, 405
  - of a single object, 57, 277
  - searching, 77
  - selecting, 57, 74
    - individual objects in, 71, 74
  - styling, 120
  - transforming, 378
  - transparency of, 58–59
  - ungrouping, 57–59, 405
- guide tracking (Calligraphic pen), 245, 248–250, 360, 420
- Guideline dialog, 100–101
- guides (guidelines), 99–102
  - creating, 100, 402
  - deleting, 100, 402
  - diagonal, 100–101, 402
  - from objects, 102–103
  - hidden, 100, 402
  - moving, 100, 402
  - snapping to, 100, 105, 169, 205, 402, 408

## H

- halos, 196
- hash mark (#), in SVG, 77, 379
- hatching, 249, 333–335
- Hello, world! example, 19–21
- Hewlett-Packard plotters, 389
- holiday cards, 5
- HPGL format, 389

- `xlink:href` attribute, 260, 273, 305, 372, 379–380
- HSB Adjust extension, 309
- HSB color model, 123
- HSL color model, 123, 127
- HSV color model, 123
- hue, 123, 127
  - adjusting, 133, 309
  - randomizing, 336
  - tweaking, 132

## I

- ICC color profiles, 319–320, 328
- Icon Preview dialog, 317
- icons, 5, 317
  - collections of, 41
  - using clones for, 271
- `id` attribute, 51, 76, 379, 381, 393, 405
- IE, *see* Microsoft Internet Explorer
- Illustrator, *see* Adobe Illustrator
- Image Effects (Filters submenu), 292, 308
- image element, 305, 372–373
- ImageMagick suite, 314, 327, 333
- images, *see* bitmaps
- Import command, 26, 56, 303, 357, 387
- importing, 59, 403
  - bitmaps, 4, 8, 303–305, 317–318, 357, 390, 403–404
  - PDF files, 8, 12, 384–385, 392
  - PostScript files, 12, 387
- Impress, *see* OpenOffice.org Impress
- InDesign, *see* Adobe InDesign
- inking, 344–345
- Inkscape
  - compiling, 19, 392
  - coordinate origin in, 53
  - destructive operations in, 166, 196, 228–229, 308
  - developers of, 14, 16, 18
  - floating tooltips in, 53
  - fully automated editing sessions in, 79
  - installing, 17–19
  - instances of, 41–42, 67
  - interface of, 14, 19, 21–23
  - language support in, 16
  - limitations of, 5–7, 9, 14, 159, 258, 263, 273
  - memory consumption of, 14, 391
  - menu of, 42, 403
  - namespace of, 373
  - older versions of, 215
  - patching, 16
  - printing from, 122
  - rendering in, 48
  - speed of, 14, 60, 133, 181, 188, 212, 221, 253, 271, 301, 318, 360, 388, 391
  - stability of, 14, 17–18

Inkscape (*continued*)

- starting, 19, 41
- testing, 16, 18
- usability of, 5, 14
- users of, 7–8, 17
- versions of, 16, 18–19, 373, 397
- window of, 21, 41–44
- inkscape.gpl* (palette file), 125
- inkscape.xml* (key configuration file), 39
- Inkscape Preferences dialog, 36–37
  - Bitmaps tab, 304, 318, 327
  - Calligraphy tab, 68, 244
  - Clones tab, 273–274, 276–277
  - Color management tab, 123, 319
  - Connector tab, 68
  - Dropper tab, 68
  - Eraser tab, 68
  - Filters tab, 301–302
  - Gradient tab, 68
  - Misc tab, 154, 195, 406
  - Mouse tab, 70
  - Node tab, 68
  - opening
    - by double-click a tool button, 167, 241, 244, 253, 400
    - by keyboard, 400
  - Paint Bucket tab, 68
  - Pencil tab, 68, 243
  - Pen tab, 68, 178, 241, 420
  - Scrolling tab, 36, 46–48, 399, 401–402
  - Selecting tab, 75, 78, 407
  - Selector tab, 68
  - Shapes tab, 68, 167
  - Spellcheck tab, 267
  - Steps tab, 46, 85, 87–88, 151, 239, 409
  - Text tab, 68
  - Tools tab, 54, 102
  - Transforms tab, 378
  - Tweak tab, 68
  - Windows tab, 44–45
  - Zoom tab, 68
- Inkscape Wiki, 8, 18
- Inkview, 6
- Input Devices command, 245
- Inset command, 197, 210, 253
- Inset/Outset Halo extension, 229
- insets, *see* offsets
- Internet Explorer, *see* Microsoft Internet Explorer
- Interpolate extension, 230, 331–332, 335
- interruptible display, 14
- Intersection command, 193
- Invert Hue preset filter, 292
- Invert preset filter, 292

## J

- JavaFX, 390
- Javascript, 52
- JessyInk, 7
- Jigsaw Piece preset filter, 362
- Jitter Nodes extension, 231
- JPG format
  - converting from PNG, 314
  - importing, 303, 390

## K

- Kaplinski, Lauris, 15
- kerning, 261–263, 323, 425
- keyboard focus, 44–45
- keyboard shortcuts, 14, 39, 399–425
  - configuring, 39, 407
- keyframes, 331–332
- Keys and Mouse Reference command, 39
- Knot effect, 222–223
- Krita raster editor, 5

## L

- `inkscape:label` attribute, 52, 61, 381
- L<sup>A</sup>T<sub>E</sub>X typesetting system, 390
- Layer to Bottom command, 61
- Layer to Top command, 61
- layers, 59–63
  - and selection, 59
  - creating, 61–62, 403
    - with a script, 330
  - current, 59–62, 72, 75, 78, 374, 407
    - switching, 61–62, 69, 78
  - deleting, 61–62
  - hidden, 52, 60–62, 76, 78, 407
  - hierarchy of, 60, 406
  - in SVC, 375, 381
  - locked, 52, 60–62, 70, 76, 78, 346, 357, 407
  - moving objects between, 56, 61, 332, 403
  - naming, 61–62, 357, 381
  - rearranging, 61–62, 403
  - transparency of, 63, 336
  - used for
    - animation frames, 330
    - print preparation, 327
- Layers dialog, 52, 61–63, 330
  - blend modes in, 289–290
  - layer opacity in, 336
  - opening by keyboard, 61, 400
  - order of layers in, 64
- leaflets, 5–6

- Less Hue extension, 133
- Less Light extension, 133
- Less Saturation extension, 133
- less-than sign (<), in XML, 370
- Level Channel extension, 309
- Level extension, 309
- Levien, Raph, 15
- lightness, 123, 127
  - adjusting, 133
  - of sides of 3D boxes, 177
  - tweaking, 132
- Lindenmeyer systems, 7, 234–235
- linearGradient element, 374, 379
- Linked Offset command, 228
- linked offsets, 196, 228–229, 406
  - finding source path of, 78, 406
- Linux
  - Aspell dictionaries for, 267
  - configuring window manager on, 407–408
  - Inkscape version for, 18
- LittleCMS library, 328
- logos, 5
  - collections of, 41
  - importing, 322
  - on business cards, 322, 324
- Lorem ipsum extension, 266
- Lower command, 55–56
- Lower Layer command, 61
- Lower to Bottom command, 55–56
- lowercase extension, 266
- L-system extension, 234–235

## M

- Mac OS X, 19
- Macromedia Flash, *see* Adobe Flash
- Macromedia Freehand, 12, 39
- Make a Bitmap Copy command, 317
- marker element, 147
- markers, 142–147
  - anchor point of, 146
  - and bounding box, 54
  - color of, 145
  - converting to path, 190
  - creating, 145–147
  - definitions of, 374
  - middle, 142–144
  - on an invisible path, 145
  - on spirals, 186
  - start/end, 142–143, 189
  - z-order of, 145
- marker-start style property, 146
- markerUnits attribute, 147
- marquee, *see* rubber band
- Masking Tools (Filters submenu), 292

- masks, 5, 151, 159, 162, 307
  - applied to 3D boxes, 176
  - definitions of, 374
  - editing, 198, 307
  - in Outline mode, 49
  - with gradients or blurs, 307
- Materials (Filters submenu), 292
- Measure Path extension, 235
- Median extension, 309
- metadata element, 9, 375
- Microsoft Expression, 217
- Microsoft Internet Explorer, 9, 31
- Microsoft Office, 389
- Microsoft PowerPoint, 6–7
- Microsoft Silverlight, 389
- Modify Path (Extensions submenu), 230–233
- Moonarize preset filter, 292
- More Hue extension, 133
- More Light extension, 133
- More Saturation extension, 133
- Morphology (Filters submenu), 293
- motion blur, 288, 291
- mouse
  - click/drag threshold of, 70–71, 82
  - cursor changing, 70
  - freehand drawings with, 348
  - grab sensitivity of, 70
  - see also* dragging
- Move Selection to Layer Above command, 61
- Move Selection to Layer Below command, 61
- moving, 27, 377
  - and zoom level, 87
  - automatic panning with, 48
  - away and back, 87
  - between layers, 56, 61, 332, 403
  - by keys, 29, 82, 87, 204, 408, 411
  - by mouse, 21, 28, 70, 408, 411, 411–412
  - by numbers, 89–90
  - by tablet pen, 70
  - canceling, 410, 414
  - constrained, 82, 408, 411
  - in Pen tool, 419
  - in Selector tool, 21, 28, 70, 81–82, 408
  - in Tweak tool, 95, 414
  - see also* transformations
- MSIE, *see* Microsoft Internet Explorer
- multiplication sign (×), in text, 268

## N

- sodipodi:namedview attribute, 374, 381
- namespaces, 64, 372–373
- natural-media tools, 5
- Negative extension, 133
- .NET Framework, 389

- New command, 322, 330
- Next Zoom command, 47
- No Filters mode, 301, 360
- no-break space, in text, 424
- Node tool, 197–208, 410–414
  - adding nodes in, 144, 195, 233
  - aligning and distributing in, 112
  - Bézier handles in, 191, 197
  - controls bar of, 197–198, 201–202, 207, 215–216, 227, 242, 306–307
  - deselecting in, 78
  - editing
    - clones in, 272–273
    - gradients in, 150, 198, 414
    - path effects in, 217, 414
    - paths in, 197–198, 208, 215, 227
    - patterns in, 163, 306, 414
    - shapes in, 166, 198, 414
    - text in, 198
  - moving guides in, 100
  - rotating in, 411–412
  - scaling in, 162, 412, 412
  - selecting in, 68, 71, 197–199, 410–411
  - switching to, 197, 399, 406
- nodes, 188, 197
  - adding, 144, 191, 195, 200, 207, 231, 233, 331, 352, 413–414
  - adjacent but not connected by segments, 188
  - aligning, 205–206
  - auto, 202, 204, 413
  - breaking, 413
  - cuspl, 137, 202, 226, 238–239, 241, 310, 381, 413, 419
  - deleting, 144, 191, 195, 199–200, 413
  - deselecting, 199, 410–411
  - distances between, 199
  - distributing, 144
  - duplicating, 200–201
  - editing, 208
  - end, 188–189, 199, 201, 240, 243
  - flipping, 207, 413
  - half-smooth, 202, 204, 226, 413
  - jittering, 231
  - joining, 201, 413
  - middle, 188, 199, 202
  - moving, 204–208, 411, 419
  - no styling for, 198
  - reducing, *see* paths, simplifying
  - rotating, 207–208, 412
  - scaling, 207–208, 412
  - sculpting, 206–207, 209, 335, 411
  - selecting, 197–199, 410–411
  - smooth, 202, 226, 238–239, 241, 381, 413
  - snapping, 106, 169–170, 205
  - start, 189
  - symmetric, 202, 381, 413
  - see also* Bézier curves, paths, segments, subpaths

- sodipodi:nodetypes attribute, 381
- Noise Fill preset filter, 291
- Noise Transparency preset filter, 291
- Noisy Blur preset filter, 291
- Non Realistic Shaders (Filters submenu), 293
- Normalize extension, 309
- Normal view mode, 48, 402
- Number Nodes extension, 235

## O

- Object Properties dialog, 51–52, 400
- Object to Path command, 171, 215, 229, 242, 259, 269
- objects, 2, 51–65
  - arranging, 99, 114–115
  - background, 60, 70
  - clipboard operations on, 30, 56–57, 59, 61, 93, 118, 154, 156, 162, 332
  - converting
    - to guides, 102–103
    - to path, 405–406
  - coordinates of, 53–54
  - creating, 23–26, 55, 59
  - deleting, 73
  - duplicating, 33–34, 331, 404
  - edges of, 160, 287, 291–292, 307, 365
  - editing, 2
  - exchanging places of, 89
  - hidden, 52, 64, 68, 72–73, 76, 78
  - IDs of, 51–52, 76, 79, 316, 381
  - infinite, 93
  - in Outline mode, 48
  - interpolating, 230, 331–332, 335
  - invisible, 30, 49, 72–73
  - labels of, 52, 381
  - locked, 52, 64, 68, 72–73, 76, 78
  - metadata of, 52
  - next/previous, 27
  - order of, *see* z-order
  - overlapping, 112, 114–115
  - properties of, 5, 51–52
  - reusability of, 3
  - rotation center of, 85–86, 381
  - searching, 76–78
  - size of, 53–54, 93
  - snapping, 106, 205
  - types of, 5, 77, 165
- Objects to Guides command, 102
- Objects to Marker command, 146
- Objects to Pattern command, 162
- ODF format, 390
- offsets, 196–197, 228, 405–406
  - from stars, 183
  - searching, 77
  - see also* dynamic offsets, linked offsets
- Oil Painting preset filter, 292

- Old Paint pattern, 164
  - opacity, 30, 120–121
    - accumulated, 129
    - assigning, 128–129
    - master, 120–121, 126, 132, 154, 160
    - of clones, 274, 282
    - of fill, 120, 126
    - of stroke, 120, 126
    - picking, 128–129
    - rasterizing, 387–388
    - reduced for tracing, 357
    - tweaking, 132
    - see also* style
  - Open Clip Art Library, 8
  - Open command, 41, 303, 387
  - open source applications, 8, 13–15
  - OpenOffice.org suite, 6, 390
  - OpenType fonts, 265, 322
  - orient attribute, 147
  - inkscape:original-d attribute, 214
  - Outline mode, 48–49, 54, 137, 181, 301, 360, 402
    - selecting objects in, 70
  - outlines, 196
  - Outset command, 197, 210, 253
  - offsets, *see* offsets
  - Overlays (Filters submenu), 293
- P**
- Packed Circles pattern, 164
  - page
    - and coordinate origin, 53
    - frame of, 21, 31
    - orientation of, 40
    - size of, 40, 303, 322
  - paint, *see* colors, fill, stroke
  - Paint bucket tool, 25, 238, 251–253, 346, 420–421
    - parameters of
      - Close gaps, 253
      - Fill by, 252
      - Grow/shrink by, 253
      - Threshold, 252
    - selection cue in, 68
    - switching to, 399
    - tool style of, 25, 253
  - paint programs, 237
  - Painter, *see* Corel Painter
  - palette control, 22, 124–125, 402–403
    - clicking, 29, 32–33
    - dragging from, 21, 124, 158
    - hidden, 42
    - scrollbar of, 124
    - using with gradients, 155
  - panning, 23, 47–48
    - automatic, 48
    - by keys, 48
    - by mouse, 23, 48, 399, 402
    - in Pen tool, 239
  - parametric modeling, 6
  - Paste command, 56–57, 404
    - and layers, 59
    - on clones, 275
    - on colors, 122, 126, 128
    - on gradients, 154
    - on text, 257, 404
    - see also* clipboard operations
  - Paste in Place command, 56–57, 61, 332, 404
  - Paste Path Effect command, 215, 404
  - Paste Size command, 93–94
  - Paste Style command, 30, 118, 155–156, 162, 404
    - on gradients, 154, 404
  - Path Effect Editor dialog, 215–217, 242
    - opening by keyboard, 215, 400
  - inkscape:path-effect attribute, 214
  - path effects, 213–228
    - applied to
      - groups, 214–215
      - shapes, 214
      - spirals, 186
    - clipboard operations on, 215, 404
    - editing, 198
    - removing, 215
    - variable-width strokes with, 135
    - vs. extensions, 229
  - path element, 166, 214, 380
  - PATH environment variable, 383, 387
  - paths, 4, 165, 187–212
    - averaging, 243
    - blending, 230, 249
    - Boolean operations on, 190–194, 248, 251, 306, 324, 347, 363, 405
    - breaking apart, 215, 406
    - closed, 208, 239
    - combining, 188–189, 214–215, 269, 406
    - continuing, 240, 243, 419–420
    - converting
      - from a stroke, 146, 190, 405
      - from objects, 405–406
      - from text, 132, 192, 269, 327, 335, 394
      - to guides, 102
    - creating, 419
    - curvilinear, 138
    - direction of, 199, 211, 230, 260, 414
    - editing, 197, 215
    - erasing, 211
    - fill of, 119, 189–190, 194, 251
    - fill rule of, 119, 189
    - gaps in, 188
    - highlighting, 197–198, 215, 227
    - holes in, 119, 190, 192–193
    - in Outline mode, 49, 54
    - invisible, 188
    - length of, 188, 235
    - linked, 216

- paths (*continued*)
  - offsetting, 196–197, 324–325, 347, 360, 405–406
  - open, 119, 139, 196, 208, 240, 243
  - randomizing, 231–232
  - skeleton, 217
  - searching, 77
  - selecting, 197
  - self-intersecting, 107, 119, 169, 189–190, 222
  - simplifying, 191–192, 194–196, 200, 207, 209, 325, 347, 406
  - snapping, 169–170, 419
  - stroke of, 190, 194
  - style of, 189, 198
  - text on, 189, 258–261, 263, 424
  - tweaking, 208–212, 345–346, 361
  - see also* nodes, segments, subpaths
- Pattern Along Path effect, 217–221, 241–242
- Pattern Along Path extension, 230
- Pattern to Objects command, 163
- patterns, 162–164
  - creating, 162, 405
  - definitions of, 374
  - extracting tile objects from, 163, 405
  - margins around tiles in, 162
  - of clones, *see* Create Tiled Clones dialog
  - on fill, 118
  - on stroke, 118, 135
  - on text objects, 264
  - stock, 164, 326, 354
  - symmetric, 271
  - transforming, 97, 163–164, 306
- patterns.svg*, 164
- PDF (Portable Document Format), 9, 12
  - and filters, 4, 301–302, 327, 386
  - exporting to, 4, 301–302, 320, 327, 386, 392–394
  - importing, 8, 12, 384–385, 392
  - printing, 328, 388
  - supporting in Inkscape, 4, 8, 12, 31, 384–385
  - viewers for, 31
- PDF Import Settings dialog, 384–385, 388
- pebbles, 184
- Pen tool, 24–25, 238–242, 419–420
  - bitmap tracing with, 310, 358
  - canceling current line in, 420
  - controls bar of, 218, 240–242
  - creating dots with, 178, 241, 420
  - finishing current line in, 420
  - modes of, 240–242
    - default, 240, 419
    - Paraxial, 178, 241, 420
    - Spiro, 225, 240, 242, 310
    - Straight lines, 178, 241, 310, 420
  - moving in, 419
  - panning in, 239
  - rotating in, 419
  - scrolling in, 239
  - selection cue in, 68
  - shaped strokes in, 218, 241–242
  - switching to, 399
  - tool style of, 25, 242
  - zooming in, 239
- Pencil tool, 24, 238, 243, 419
  - applying fill style, 29, 126
  - averaging in, 243
  - bitmap tracing with, 358
  - controls bar of, 218, 243
  - modes of, 243
    - default, 243
    - Sketch, 243
    - Spiro, 225, 243, 310
  - selection cue in, 68
  - shaped strokes in, 218, 243
  - smoothness of, 243
  - switching to, 399
  - tool style of, 25, 242
- Personal (Filters submenu), 294
- perspective, 171, 173–174, 337, 339, 377, 416–417
- Perspective extension, 231
- photos
  - importing, 4, 26
  - retouching, 5, 308
  - tracing, 324
  - see also* bitmaps
- Photoshop, *see* Adobe Photoshop
- Pixel Smear preset filter, 292
- pixels, 1–2, 304
  - see also* screen pixel, SVG pixel
- PNG format
  - converting into
    - JPG, 314
    - TIFF, 314, 320, 327–328
  - displaying in browsers, 31
  - exporting to, 2, 31, 40, 301, 314–318, 327, 390, 392–394, 403
  - importing, 303, 390
- Polka Dots pattern, 114, 164
- polygon element, 166
- polygons, 165, 180–184
  - converting to path, 165
  - creating, 181
  - editing handles of, 181, 183
  - randomizing, 183–184
  - rounding, 182–183
  - transforming, 181
  - see also* stars, shapes
- Poppler library, 386
- Portable Document Format dialog (for export), 386
- posters, 5–6
- PostScript dialog (for export), 387

- PostScript format, 9, 11–12
    - and filters, 301–302
    - Encapsulated, *see* EPS
    - exporting to, 301–302, 327, 386–387, 392–394
    - gradients in, 11
    - importing, 12, 387
    - memory consumption of, 11
    - printing, 388
    - supporting in Inkscape, 8, 387
    - viewing, 327
  - Potrace utility, 311
  - POV-Ray package, 390
  - PowerPoint, *see* Microsoft PowerPoint
  - preferences, 36–37
    - see also* Inkscape Preferences dialog
    - preferences.xml*, 36, 49, 140
    - calligraphic presets in, 248
  - presentations, 6
  - pressure-sensitive tablet, *see* tablet pen
  - Previous Zoom command, 47
  - Print dialog, 327, 388
  - print service providers, 319, 327–328
  - printers, 11
    - color management in, 122, 318–319
    - output previewing, 319
    - preparing design for, 327
  - printing, 6, 388, 403
    - and document page, 40
    - from SVG, 122
    - produce-gif.py*, 333, 336
  - PSTricks package, 390
  - Put on Path command, 259
  - px, *see* SVG pixel
  - Python language, 330, 333, 389
- Q**
- QCAD package, 6
- R**
- Raise command, 55–56
  - Raise Layer command, 61
  - Raise to Top command, 55–56
  - rANdOm CasE extension, 266
  - Random Tree extension, 7, 235
  - randomizing, 184
    - colors, 131, 336
    - dots, 114, 141, 164, 178, 420
    - duplicated objects, 96, 415
    - objects, 113
    - paths, 231–232
    - polygons, 183–184
    - stars, 183–184, 418
    - tiled clones, 278, 281, 363
  - raster editors, *see* bitmap editors
  - Raster (Extensions submenu), 308–310
  - raster graphics, *see* bitmaps
  - RDF (Resource Description Framework), 375
  - rect element, 64, 166, 377, 379
  - Rectangle tool, 20, 24, 415–416
    - controls bar of, 166–167, 169–170
    - deselecting in, 78, 415
    - dragging in, 166, 415
    - editing
      - clones in, 272–273
      - gradients in, 150
      - path effects in, 217
      - patterns in, 163, 306
      - shapes in, 166
    - rotating in, 169
    - scaling in, 162, 169, 416
    - selecting in, 68, 71, 166, 415
    - styling in, 167
    - switching to, 168, 399, 406
  - rectangles, 165, 168–171, 349
    - axonometric, 169–170, 350
    - converting
      - from bitmaps, 120, 306
      - to guides, 102
      - to path, 165, 306
    - creating, 166, 415
      - from the center, 168, 415
    - editing handles of, 166, 168–171
    - integer-ratio, 168, 415
    - selecting, 166
    - styling, 166–168
    - transforming, 168–170, 306, 416
    - with rounded corners, 168–171, 351–353, 416
      - circular, 416
      - elliptic, 170, 416
      - removing rounding, 171, 416
      - scaling, 97, 170
    - see also* shapes
  - Redo command, 404
  - Reduce Noise extension, 309
  - registered sign (®), in text, 268
  - Release command (Clip submenu), 307
  - Release command (Mask submenu), 307
  - Relink to Copied command, 276
  - Remove Blue extension, 133
  - Remove Filters command, 294
  - Remove from Path command, 260
  - Remove Green extension, 133
  - Remove Path Effect command, 215
  - Remove Red extension, 133
  - Rename Layer command, 61
  - Render (Extensions submenu), 233–235
  - Replace Text extension, 266
  - Resample extension, 310
  - resizing, *see* scaling
  - Restack extension, 364
  - retouching, 5, 308
  - Reverse command, 189, 220, 230, 260

- RGB color model, 77, 121–122, 128
    - converting from/to CMYK, 123
    - inverting colors in, 126
    - modifying channels in, 133
  - Ridges (Filters submenu), 293
  - right-handed-illustration.xml*, 39
  - Ripple preset filter, 292
  - rot attribute, 263
  - rotating, 27–29, 54, 377
    - and zoom level, 88
    - by 90 degrees, 89, 409
    - by handles, 409
    - by keys, 29, 88–89, 409, 412
    - by numbers, 92
    - constrained, 85, 88, 151, 163, 239, 409, 412, 416, 419
    - in 3D Box tool, 416
    - in Ellipse tool, 179
    - in Node tool, 411–412
    - in Pen tool, 419
    - in Rectangle tool, 169
    - in Selector tool, 84–86, 408–409
    - in Spiral tool, 419
    - in Star tool, 183
    - in Text tool, 425
    - in Tweak tool, 95, 415
    - see also* transformations
  - rotation center, 85–86, 88, 381
    - as marker's anchor point, 146
    - default, 86
    - moving, 86, 409
    - snapping, 409
  - Roughen Inside preset filter, 292
  - Roughen preset filter, 291, 367
  - Rows and Columns dialog, 114–115
  - rubber band, 46
    - canceling, 410, 414
    - selecting with, 27, 33, 41, 71–72, 155, 407, 421
      - in Node tool, 199, 410
    - zooming with, 47
  - Rubber Stretch extension, 232
  - rulers, 21, 53
    - dragging off, 100
    - hidden, 42, 53, 403
    - triangular markers on, 53
    - visible, 100, 403
- S**
- Sand pattern, 164
  - Sandy Blur filter, 296–300, 360
  - saturation, 123, 127
    - adjusting, 133, 309
    - desaturating, 133
    - maximizing, 128
    - tweaking, 132
  - Save a Copy command, 383–384
  - Save As command, 383–384, 386
  - Save command, 31, 38, 383, 386
  - scaling, 27–28, 32–33, 377
    - and stroke width, 96, 274
    - and zoom level, 88
    - around rotation center, 83–84, 86, 91, 408
    - aspect ratio of, 83, 88, 96
    - by integer multipliers, 84, 408
    - by keys, 29, 88, 409, 412
    - by numbers, 90–91
    - by percent, 90–91
    - in Ellipse tool, 179, 417
    - in Node tool, 412, 412
    - in Rectangle tool, 169, 416
    - in Selector tool, 83–84, 169, 408–409
    - in Spiral tool, 419
    - in Tweak tool, 95, 415
    - multiple objects, 91, 94
    - nonuniform, 288
    - proportional, 54, 83, 91, 163, 408
    - rectangles with rounded corners, 97
    - to unify sizes of selected objects, 94
    - twice, 88, 90–91, 353, 409
    - undoing, 83
    - see also* transformations
  - Scatter (Filters submenu), 293
  - schemes, *see* technical drawings
  - scissors markers, 143
  - screen pixel, 70, 87–88, 376, 406
  - screen proofing, 319
  - Scribus, 6, 320
  - scrollbars, 21, 47
    - hidden, 23, 36, 42, 47, 403
    - visible, 403
  - scrolling, 47
    - accelerated, 402
    - almost infinite, 22
    - by keys, 23, 402
    - by mouse, 48, 401
    - in Pen tool, 239
  - segments (of ellipses), 177
    - creating, 179–180, 417
    - editing handles of, 177
    - turning into a whole ellipse, 180, 417
  - segments (of paths), 188, 201
    - changing types of, 204, 413
    - clicking, 199
    - curved, *see* Bézier curves
    - deleting, 420
    - linear, *see* straight lines
    - number of, 231
  - selected style indicator
    - and subselection, 69
    - color gestures in, 126–128, 155
    - for multiple selected
      - gradient stops, 156
      - objects, 69, 122
      - opacity field in, 120

- paint controls in, 30, 33, 119, 122, 125–126, 133, 275, 403
    - middle-clicking on, 30, 32, 126, 131, 145
    - using with gradients, 151–152, 155–156
  - stroke width in, 136
- selecting, 26–27, 406
  - all objects, 27, 41, 407
  - by keys, 27, 155, 250, 407–408, 410–411
  - groups, 57–58, 74
  - in 3D Box tool, 71, 166, 416
  - in bitmap editors, 2
  - in Connector tool, 71
  - in Ellipse tool, 71, 166, 417
  - in Gradient tool, 69, 71, 150, 155
  - in Node tool, 71, 198–199, 410–411
  - in Outline mode, 49, 70
  - in Rectangle tool, 71, 166, 415
  - in Selector tool, 26
  - in Spiral tool, 71, 166, 418
  - in Star tool, 71, 166, 418
  - in Text tool, 69, 71, 256–257, 261, 263
  - in XML Editor, 64
  - inside groups, 82, 407, 415, 417–418
  - locked or hidden objects, 52, 68, 72–73
  - multiple objects, 27, 54, 69
    - in different layers, 56
  - multiple paths, 197
  - next/previous object, 75, 407
  - small objects, 70
  - touch, 72–73, 407
  - under, 73–74, 82, 407, 410–421
  - via command line, 79, 393–394, 397
  - with rubber band, 27, 30, 33, 41, 71–72, 199, 407
- selection, 67–79
  - adding objects to, 26, 71, 73–74, 166, 406–407
  - and current layer, 59, 69, 72
  - and z-order, 55, 86
  - clipboard operations on, 404
  - current, 29
  - deleting, 407
  - deselecting, 26–27, 72, 78, 407, 415–418, 420–423
  - dimensions of, 89
  - empty, 67
  - exporting, 31
  - inverting, 199, 407, 410
  - of multiple objects, 118, 122, 137, 170
  - panning into, 48, 68
  - position of, 89
  - removing objects from, 26, 71, 74, 166, 406
  - rotation center of, 86
  - searching within, 78
  - style of, 30
    - average, 69, 122
  - zooming into, 47
- Selection command (Zoom submenu), 233
- selection cue, 26, 54, 68
- Selector tool, 12, 26, 40, 70–71
  - automatic panning in, 48
  - controls bar of
    - Affect buttons, 96–97, 159, 170, 274
    - lock toggle, 83, 90
    - transformation buttons, 89
    - W and H fields, 54, 89, 91
    - X and Y fields, 54, 89–90
    - z-order buttons, 55–56
  - deselecting in, 78, 407
  - dragging in, 21, 32, 70, 72–73, 81–82, 408
  - moving guides in, 100
  - moving in, 81–82
  - no perspective transformations in, 377
  - on groups, 57–58
  - rotating in, 28, 84–86, 88, 408–409
  - scaling in, 28, 83–84, 169, 408–409
  - selection cue in, 68
  - skewing in, 85
  - stamping in, 57
  - switching to, 26, 48, 399
  - text objects in, 255, 257
- semicolon (;), in SVG, 378
- Sentence case extension, 266
- Separate+ plugin, 320
- Sepia preset filter, 292
- Set command (Clip submenu), 306
- Set command (Mask submenu), 307
- shaders, 159–162
- shadows, 196
- Shadows and Glows (Filters submenu), 293
- shapes, 12, 24, 165–186, 380
  - applying path effects to, 214
  - approximating with paths, 188
  - Boolean operations on, 192
  - combining, 215
  - converting to path, 165, 192
  - creating, 24, 166
  - editing, 24, 166, 380–381
  - in Outline mode, 49
  - parameters of, 166–167
  - searching, 77
  - selecting, 166
    - see also* individual shapes
- Sharpen preset filter, 292
- shears, *see* skewing
- Show/Hide (View submenu), 23, 36, 42
- Simple Blur preset filter, 291
- Simplify command, 144, 191, 194–196, 243
- single curly quotes ('...'), in text, 268
- Sketch effect, 214, 223–224
- sketching, 243–244, 341
- SketchUp suite, 6
- skewing, 27–29, 377
  - around rotation center, 86
  - by 90 degrees, 93
  - by numbers, 92–93, 350
  - constrained, 85, 409

- skewing (*continued*)
  - in Selector tool, 85
  - in shape tools, 169, 179
  - see also* transformations
- snapping, 99, 105, 349
  - clones, 273
  - current modes of, 374
  - destination of, 105
  - disabling, 100, 106, 402, 408, 411
  - to bounding boxes, 157
  - to gradient stops, 106, 157
  - to grids, 103, 169, 205, 402, 408, 419
  - to guides, 100, 105, 169, 205, 402, 408, 419
  - to intersections, 107, 169, 176
  - to nodes, 106, 169–170, 176, 205, 339
  - to objects, 106, 205, 402
  - to paths, 107, 169, 176, 339, 419
  - to rotation centers, 157
- Sodipodi vector editor, 15, 373
- Solarize preset filter, 292
- space XML attribute, 424
- span element, 257, 264
- spans, 264
  - clipboard operations on, 404
  - formatting, 256, 424
  - selecting, 424
  - styling, 264
- Speckle preset filter, 365
- Specular Light preset filter, 291
- spellchecker, 267–268
- Spiral tool, 24, 418–419
  - controls bar of, 166–167, 185, 418
  - deselecting in, 78
  - dragging in, 166, 418
  - editing
    - clones in, 272–273
    - gradients in, 150
    - path effects in, 217
    - patterns in, 163
    - shapes in, 166
  - fixed style of, 185
  - selecting in, 68, 71, 166, 418
  - styling in, 167
  - switching to, 185, 400, 406
  - transforming in, 419
- spirals, 165, 185–186
  - converting to path, 165
  - creating, 166, 418
  - dashed, 141, 186
  - divergence of, 185–186, 418
  - editing handles of, 166, 185, 418–419
  - selecting, 166
  - styling, 166–167
  - transforming, 185, 419
  - vs. Bézier curves, 186
  - see also* shapes
- Spiro paths, 225–227
  - creating with Pen or Pencil tools, 225, 240, 243, 310
  - shaped, 242
  - vs. Bézier curves, 225
- Spiro Spline effect, 202, 242
- Spirograph extension, 7, 235
- squares, 168, 415
  - see also* rectangles
- sRGB screen color space, 328
- stamping, 57, 408, 411
- Star tool, 24, 417–418
  - controls bar of, 166–167, 181–183
  - deselecting in, 78, 418
  - dragging in, 166, 417
  - editing
    - clones in, 272–273
    - gradients in, 150
    - path effects in, 217
    - patterns in, 163
    - shapes in, 166
  - rotating in, 183
  - selecting in, 68, 71, 166, 418
  - styling in, 167
  - switching to, 180, 400, 406
- stars, 165, 180–184
  - converting to path, 165
  - creating, 166, 181, 417
  - editing handles of, 166, 180–183, 418
  - in Inkscape vs. SVG, 166
  - offsetting, 183
  - randomizing, 183–184, 418
  - rounding, 182–183, 418
  - selecting, 166
  - spoke ratio of, 181
  - styling, 166–167
  - transforming, 182
  - see also* polygons, shapes
- status bar, 22
  - coordinates in, 53
  - hidden, 42
  - indicators in, *see* current layer indicator, selected style indicator
  - messages in, 22, 26, 68–69
    - error, 78
    - for Bézier handles, 204
    - for bitmaps, 304–305
    - for clones, 275
    - for colors, 127–128
    - for filters, 290
    - for gradients, 155
    - for groups, 58
    - for guide tracking, 249
    - for layers, 59
    - for shapes, 166
    - for text objects, 257, 268
  - zoom field in, 53, 376, 401

- Stitch Sub-Paths effect, 221–222
- straight lines, 25, 144, 189–190
  - bitmap tracing with, 310
  - converting into Bézier curves, 204, 413, 420
  - creating, 102, 238, 240, 413
  - grids of, 326
  - horizontal or vertical, 239, 241, 331
  - moving nodes along or perpendicular to, 411
- Straighten Segments extension, 231
- Stripes pattern, 164
- stroke, 4, 135–147
  - adjusting
    - with color gestures, 126–128
    - with extension effects, 133
  - and bounding box, 54
  - assigning, 129
    - from palette, 402
    - in Dropper tool, 422
    - in Paint bucket tool, 421
    - in Tweak tool, 130
    - to selected objects, 30, 137
  - caps of, 139–140
  - converting to a filled path, 146, 190, 405
  - cusps of, 137–138
  - dashed, 135, 139–141, 367
  - default, 25, 126
  - in Outline mode, 49, 137
  - joins of, 137–138
  - markers of, 142–147
  - miters of, 138
    - in SVG, 77
  - opacity of, 120, 126
  - painted with
    - flat color, 118
    - gradient, 118, 150
    - pattern, 118, 135, 162–163
    - the same color as fill, 196
  - removing, 32
  - shape of, 218, 241–243
  - swapping with fill, 126
  - unset, 118, 120, 126, 151, 274, 283, 379
    - averaged, 137
    - while scaling, 96
  - z-order of, 120, 190
    - see also* colors, style
- Stroke to Path command, 146, 190
- stroke-dasharray style property, 140
- stroke-linecap style property, 139
- stroke-linejoin style property, 138
- stroke-miterlimit style property, 138
- style, 29, 117–133, 378–379
  - and z-order, 55
  - average, 69
  - clipboard operations on, 30, 118, 404
  - inheriting, 379
  - last set, 242, 253
    - properties of, in SVG, 378–379
    - searching, 76
    - unset, 58, 379
      - see also* fill, stroke, opacity
- style attribute, 65, 275, 385
- subpaths, 188
  - adding to/subtracting from an existing path, 250
  - breaking, 188–189, 199, 201
  - closed, 188–189, 199, 201
  - creating, 419
  - direction of, 189–190
  - inside another subpath, 189
  - joining, 201
  - open, 188–189, 201
  - removing, 193, 240
    - without affecting fill, 190, 192
  - selecting, 199, 410
  - stitching, 221–222
    - see also* nodes, paths, segments
- subselection, 69, 78
- Sun Microsystems, 390
- SVG editors
  - path effects in, 215
  - shapes in, 380
- svg element, 371–373
- SVG pixel, 40, 54, 136, 215, 266, 376–377, 406
- SVG (Scalable Vector Graphics), 369–381
  - animated, 3, 9, 329
  - color management for, 328
  - compressed, *see* SVGZ
  - coordinate origin in, 53
  - displaying in browsers, 8–9, 31
  - document properties in, 37
  - embedded fonts in, 9
  - filters in, 285
  - history of, 8–10
  - Inkscape SVG, 9, 31, 373, 381, 384
  - limitations of, 14, 159, 188, 214, 241, 259
  - manual editing, 3, 53, 63
  - namespace of, 373
  - Plain SVG, 9, 373, 384, 392
  - primary color model in, 121
  - printing, 122
  - searching on the Web, 8
  - supporting in Inkscape, 4, 9
  - text nodes in, 65
  - versions of, 9, 31
- SVG specification, 296, 298, 369
- SVG viewers, 381
  - background color and opacity in, 40
  - displaying page only, 21, 40
  - in Inkscape, *see* Inkview
  - Javascript-enabled, 52
  - plugins for IE, 9
  - svg2swf utility, 333
- SVGZ (Compressed Scalable Vector Graphics), 10, 384

- Swatches dialog, 124, 402–403
  - opening by keyboard, 124, 400
- SWF format, 333, 390
- SWF Tools library, 333
- Swirl extension, 310
- Switch to Layer Above command, 61
- Switch to Layer Below command, 61

## T

- tables of objects, 114–115
- tablet pen
  - node sculpting with, 207, 411
  - pressure-sensitivity of, 94, 96, 131–132, 207, 209, 244–248, 289, 343, 358, 411, 415
  - with Calligraphic pen tool, 244–248, 343, 348, 358
  - with Tweak tool, 94, 96, 131–132, 208–209, 289, 415
- tags, in XML, 370
- technical drawings, 5, 135, 233
  - connector lines in, 6, 114, 142, 145
  - creating, 349–355
  - dots in, 241
  - geometric bounding boxes in, 54
  - isometric, 350
  - paths in, 194, 208
  - patterns in, 163
  - rectangles with rounded corners in, 97, 170
  - tracing, 358
- templates, 6, 37–39, 322
  - creating, 38
  - default, 38
  - for animations, 330
  - initial layers in, 60
- tessellation, 280, 361–365
- TeX typesetting system, 6
- text, 255, 263–269
  - aligning, 110, 261
  - and automatic hyphenation, 258
  - applying filters to, 264, 288
  - baseline origin of, 263
  - Boolean operations on, 192
  - case of, 266
  - clipboard operations on, 256–257, 404
  - converting to path, 132, 192, 269, 327, 335, 394
  - creating, 25, 256–259, 423
  - deselecting, 423
  - direction of, 260
  - distributing, 112
  - editing, 25, 255–256, 424
  - flowed, 9, 25, 257–259, 261, 263, 266, 423–424
  - formatting, 255–257
  - in Outline mode, 49
  - in SVG, 64
  - kerning, 261–263, 323, 425
  - letter spacing, 263, 323, 424
  - line spacing, 263, 425
  - line wrapping, 256–257, 424
  - on path, 78, 189, 259–261, 263, 424
  - rotating characters in, 262, 425
  - scaling, 266
  - searching, 76–77, 266
  - selecting, 256–257, 261, 263, 423–424
  - special characters in, 268
  - spellchecking, 267–268
  - styling, 264–266
- Text and Font dialog, 263–266, 322
  - opening by keyboard, 263, 400
  - Text tab, 256
- text editing cursor, 255–257
  - moving, 255–256, 261, 423
- text editors, 255
- text element, 257
- Text (Extensions submenu), 266, 266
- text nodes, in XML, 64
- Text tool, 20, 25, 255–269, 423–425
  - controls bar of, 260–261, 264–266, 322
  - default style of, 265
  - deselecting in, 78
  - rotating in, 425
  - selecting in, 68–69, 71
  - status bar messages in, 257, 268
  - switching to, 255, 400, 406
  - zooming in, 46
- textPath element, 260
- textures, 4–5
  - adding, 164, 326
  - imitating, 292–294, 309
  - in bitmaps, 308
- Textures (Filters submenu), 294
- thinning, *see* Calligraphic pen tool
- thumbnails, 94, 115
- TIFF format
  - color-separated, 320
  - converting from PNG, 314, 327–328
  - importing, 303, 390
- tiffcc utility, 328
- Title Case extension, 266
- title element, 52
- tool controls bar, *see* controls bar
- toolbox, 22, 24–26
  - double-clicking a button in, 167, 241, 244, 253, 400
  - hidden, 42
- Torn Edges preset filter, 292
- touch selection, 72–73
- Trace Bitmap dialog, 251, 311–314, 367
  - Mode tab, 311–314
  - opening by keyboard, 311, 400, 404
  - Options tab, 312

- tracing
    - background with Calligraphic pen, 245, 248–249, 335
    - background with clone tiler, 283–284, 362–364
    - bitmaps, 8, 191, 207, 251, 310–314, 322, 324, 357–358, 367
      - automatic, 311–314
      - low-resolution, 318
      - manual, 310–311
      - quality of, 312–313
    - tracking, *see* text, letter spacing of
    - trademark sign (™), in text, 268
    - transform attribute, 81, 93, 288, 377–378
    - Transform dialog, 90–93
      - Matrix tab, 93
      - Move tab, 90
      - opening by keyboard, 90, 400
      - Rotate tab, 92
      - Scale tab, 91
      - Skew tab, 92–93, 350
    - transformations, 12, 27–29, 81–97, 377–378
      - affected properties of, 96–97, 159, 306
      - and z-order, 55
      - by keys, 87–89, 273
      - by mouse, 57
      - by numbers, 89–90, 349
      - canceling, 410
      - matrix of, 93, 377
        - see also* moving, scaling, rotating, skewing
      - inkscape:transform-center-x attribute, 381
      - inkscape:transform-center-y attribute, 381
      - translations, *see* moving
    - transparency, 4, 121
      - and selection, 70
      - group, 58–59
      - in Outline mode, 48
      - in SVG, 77
    - tremor, *see* Calligraphic pen tool
    - triangles, 181
    - TrueType fonts, 265, 322
    - Turbulence primitive, 296–297, 359, 365
    - Tweak tool, 388, 414–415
      - color modes of, 14, 128, 130–133, 177, 346
        - Blur, 289, 415
        - channels in, 132
        - Color Jitter, 130–132, 415
        - Color Paint, 130–131, 364, 415
      - on 3D boxes, 177
      - on gradients, 161
      - parameters of
        - Fidelity, 209, 212
        - Force, 94, 208, 415
        - Width, 94, 208, 415
      - path modes of, 177, 208–212
        - Attract/Repel, 211, 415
        - Grow/Shrink, 197, 210–211, 250, 358, 361, 414–415
        - Push, 209–210, 250, 361, 415
        - Roughen, 211–212, 415
      - selection cue in, 68
      - simplifying paths in, 207, 209
      - switching to, 399
      - transform modes of, 94–96
        - Attract/Repel Objects, 95, 414
        - Duplicate/Delete, 96, 415
        - Move, 95, 414
        - Move Jitter, 95, 415
        - Rotate, 95, 415
        - Scale, 95, 415
      - tweening, 331–332
      - Type 1 fonts, 265, 322
      - sodipodi:type attribute, 380–381
- ## U
- Ubuntu, 124
  - unclumping, 113–114, 184
    - tiled clones, 278, 364
  - Undo command, 33, 404
    - and current selection, 79
    - and extensions, 229, 308
    - and offsetting, 196
    - and rotation centers, 86
    - and scaling, 83
    - and z-order, 59
    - history of, 3
    - limitations of, 47, 61
  - Undo History dialog, 400
  - Unflow command, 259
  - Ungroup command, 58, 171
  - Unhide All command, 52
  - Unicode, 268, 322, 424
  - UniConvertor utility, 389
  - Union command, 190, 192, 248, 251
  - units, 53–54, 90, 376
    - absolute, 92, 137
    - angular, 93
    - current, 374
    - default, 40, 54, 136, 377
    - percent, 90–92, 137
  - Unix, palettes on, 125
  - Unlink Clone command, 276
  - Unlock All command, 52
  - Unsharp Mask extension, 310
  - UPPERCASE extension, 266
  - URLs (Universal Resource Locators), 372, 379
  - use element, 273
- ## V
- Vacuum Defs command, 143, 154, 295, 374
  - vanishing points, 173–174, 338–339, 416–417
  - vector editors, 237
    - importing Inkscape SVG into, 376

- vector formats, 4
  - and document page, 40
  - supporting in Inkscape, 383–390
  - see also individual formats*
- vector graphics, 1–5, 237
  - file sizes of, 3
  - memory consumption of, 3
  - reusing, 7
  - scalability of, 2–3, 45
  - studying, 8
- video, 8
- view area, 44
- vignettes, 5
- Visio, 6
- Visualize Path (Extensions submenu), 235
- vocabularies, in XML, 370, 372
- VonKoch effect, 227–228

## W

- W3C (World Wide Web Consortium), 9
- watercolor imitation, 296–300, 359
- Wave extension, 310
- Wavy pattern, 164
- Whirl extension, 233
- wiggle, *see* Calligraphic pen tool
- Wikimedia Commons, 8
- Wikipedia, 279
- Windows
  - .7z archive files for, 18
  - command-line applications on, 391
  - dictionaries on, 267
  - Inkscape version for, 18, 391
  - palettes on, 125
  - UI palette for, 124
- WMF format, 389
- word processors, 255
- WordPerfect text processor, 389
- WPG format, 389

## X

- XAML (Extensible Application Markup Language), 389
- Xara, 13
  - gradients in, 14
  - selecting in, 68, 72, 84
  - speed of, 13
  - UI of, 13–14
- Xara LX, 13
- Xara Xtreme, 8, 13, 39
- XHTML (Extensible HyperText Markup Language), 370, 372
- XLink, 373, 379–380

- XML Editor dialog, 63–65
  - adding animation attributes with, 329
  - editing
    - attributes in, 400
    - coordinates in, 53
    - dash patterns in, 139
    - font names in, 385
    - gradient definition names in, 153
    - markers in, 146
    - patterns, 162
  - hidden or locked objects in, 64, 68
  - opening by keyboard, 400
  - order of layers in, 64
  - status bar of, 64
- XML (Extensible Markup Language), 8, 369–373

## Z

- Zoner Draw vector editor, 39
- zoom, 45–47
  - amount of, 46
  - and grid lines, 104
  - and moving by keyboard, 87
  - and transformations, 87–88
  - by keys, 23, 45, 47, 401
  - by mouse, 23, 46, 401, 419
  - by tablet pen, 46
  - current level of, 45, 374
  - depth of, 3, 22, 45
  - different in multiple windows, 42
  - displayed in status bar, 53
  - history of, 47, 401
  - in Outline mode, 48
  - in Pen tool, 239
  - in Text tool, 46
  - into an area, 419
  - into selection, 47, 401
  - saving with documents, 44
  - with rubber band, 46
- Zoom tool, 23, 46–47, 419
  - selection cue in, 68
  - switching to, 399
- Zoom (View submenu), 47
- z-order
  - and combining paths, 189
  - and document order, 64
  - and selection, 75, 86, 407
  - of a stroke, 120, 145
  - of groups, 59
  - of layers, 56–57
  - of objects, 49, 55–57, 72–74, 375
  - of sides in 3D boxes, 176
  - rearranging, 55–56, 61, 364, 405