# ILLUSTRATOR INTERFACE

This chapter is an introduction to Illustrator's tools, menus, palettes, and measurement systems.

Note: *If you'd like to glance onscreen at the features discussed in this chapter as you read, launch Illustrator and create a new document (see pages 39–41).*

Chris Spollen
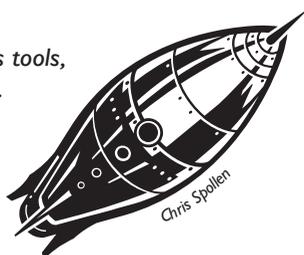
Hide/show

Tab	Hide/show all currently open palettes, including the Toolbox
Shift-Tab	Hide/show all currently open palettes and tearoff toolbars, but not the Toolbox
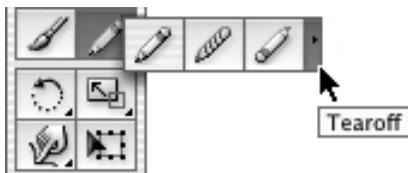
1 *Open a tearoff toolbar by choosing a **tearoff** bar.*
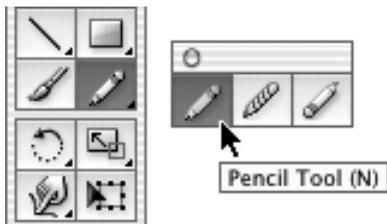
2 *A **tearoff** toolbar*

Tools

Using the Toolbox

The Toolbox contains **74 tools** that are used for object creation and editing. If the Toolbox is hidden, choose Window > Tools to display it. To move the Toolbox, drag the top bar. Click once on a visible tool to select it. Press on any tool that has a tiny arrowhead to choose a related tool from a pop-out menu. When you double-click some tools, an options dialog box opens for the tool.

To create a standalone **tearoff toolbar 1**–**2**, release the mouse when it's over the vertical tearoff bar on the far right side of any tool pop-out menu. Move a tearoff toolbar by dragging its top bar. To restore a tearoff toolbar to the Toolbox, click its close box.

To access a tool quickly, use its letter **short-cut** (see the letters in gray on the next two pages). Some tools can be accessed using a toggle key (e.g., pressing Cmd/Ctrl accesses the Selection tool when the Pen tool is chosen). You'll learn more toggles later.

To turn tool pointers into **crosshairs** for precise positioning, check Use Precise Cursors in Illustrator (Edit, in Windows) > Preferences > General. Or press Caps Lock to turn a tool pointer into a crosshair temporarily.

➤ You'll probably want to leave Disable Warnings unchecked in Preferences > General, at least if you're new to Illustrator. With this option unchecked, an alert prompt will appear when a tool is used incorrectly.

The Toolbox

Note: To assign your own shortcuts to tools, use the **Keyboard Shortcuts** dialog box (see pages 526–528).

Adobe Online access

V Selection
Selects entire objects

Direct Selection A
Selects parts of objects

Y Magic Wand
Selects objects by color

Lasso Q
Selects individual points or segments by lassoing

P Pen
Draws curved and straight line segments

Type T
Creates and edits horizontal type

\ Line Segment
Draws straight lines at any angle

Rectangle M
Draws rectangles and squares

B Paintbrush
Creates Calligraphic, Scatter, Art, and Pattern brush strokes

Pencil N
Creates freehand-style lines

R Rotate
Rotates objects

Scale S
Enlarges or shrinks objects

Shift-R Warp
Distorts shapes

Free Transform E
Rotates, scales, reflects, shears, distorts, or applies perspective

Shift-S Symbol Sprayer
Sprays symbol instances

Column Graph J
Creates graphs

U Mesh
Creates and edits multicolored mesh objects

Gradient G
Changes the direction of existing gradients

I Eyedropper
Samples paint and type attributes

Blend W
Creates shape and color blends between objects

Shift-K Slice
Defines slice areas

Scissors C
Cuts paths

H Hand
Moves the artboard in the document window

Zoom Z
Changes the magnification of the illustration

X Fill
The color, gradient, or pattern that fills the inside of a path

Swap Fill and Stroke Shift-X

D Default Fill and Stroke
(white fill, black stroke)

Stroke X
Color that's applied to the edge of a path (click to activate)

> Gradient
Reapplies last gradient fill

None /
No stroke or fill

< Color
Reapplies last solid color stroke or fill

Full Screen Mode F

F Standard Screen Mode

Full Screen Mode with Menu Bar F

The Toolbox

The tearoff toolbars

Convert Anchor Point Converts corner points to curved, and vice versa **Shift-C**

Add Anchor Point +

Delete Anchor Point −

Group Selection Selects whole groups

Drawing tools

Polar Grid Creates circular grids
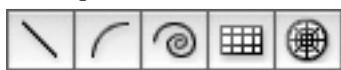
Arc Creates curved line segments

Spiral Creates spiral lines

Rectangular Grid Creates rectangular grids

Area Type Creates and edits type inside an object horizontally

Vertical Type Creates and edits vertical type

Reflect Creates a mirror image of an object **O**

Type on a Path Creates and edits type horizontally along a path

Vertical Area Type Creates and edits type inside an object vertically

Vertical Path Type Creates and edits type vertically along a path
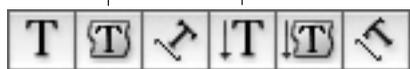
Liquify tools

Crystallize Wrinkle

Object creation tools

Twirl Pucker Bloat Scallop

Rounded Rectangle L

Ellipse

Polygon

Star

Flare Creates lens flares

Symbolism tools

Symbol Shifter

Symbol Scruncher

Symbol Sizer

Symbol Spinner

Symbol Stainer

Symbol Screener

Symbol Styler

Erase Erases sections of paths

Smooth Smooths paths

Measure Measures the distance between points

K Paint Bucket Fills objects with the current paint or type attributes by clicking
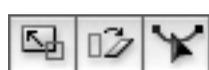
Reshape Reshapes sections of paths

Shear Skews objects

Slice Select Selects slices

Page Defines the printable area

Auto Trace Traces object silhouettes

Knife Carves up paths

Graph tools

Stacked Column Bar Stacked Bar Line Area Scatter Pie Radar

The Toolbox

On the screen

The Illustrator screen in Macintosh

1 *Menu bar*

Illustrator File Edit Object Type Select Filter Effect View Window Help

2 *Close* **3** *Minimize*

4 *Zoom* **5** *Title bar, zoom level, color mode, and view*

Document Window.ai @ 50% (CMYK/Preview)

6 *Rulers*

7a *Imageable area boundary*

Scratch area

Scroll bar

Scroller

7b *Artboard boundary*

8 *Guide*

7c *Page boundary*

9a *Toolbox*

12 *Scroll arrows*

13 *Resize box*

50% Selection

10 *Zoom field and pop-up menu* **11** *Status bar* *Document window*

✓ Current Tool
Date and Time
Number of Undos

Document Color Profile

Status bar pop-up menu

Swatches

Pathfinder
Shape Modes: Expand
Pathfinders:

9b *Pathfinder palette* **9c** *Swatches palette*

Illustrator Screen in Macintosh

Key to the Illustrator screen in Macintosh

1 *Menu bar*
Use the menu bar to open dialog boxes or palettes or to choose commands.

2 *Close button (red)*
To close a document or a palette, click its close button.

3 *Minimize button (yellow)*
Click the minimize button to shrink the document window to an icon in the Dock; click the icon in the Dock to restore the document window to its previous size.

4 *Zoom button (green)*
Click a document window zoom button to enlarge the window. Click again to restore the window to its previous size. (Click a palette zoom button to shrink the palette or restore it to its previous size.)

5 *Title bar, zoom level, color mode, and view*
The illustration's title, zoom level, color mode (CMYK or RGB), and view (Preview, Outline, Pixel Preview, or Overprint Preview) are listed on the title bar.

6 *Rulers*
The current position of the pointer is indicated by a marker on the horizontal and vertical rulers. Ruler increments can be displayed in any of these measurement units: points, picas, inches, millimeters, centimeters, or pixels.

7a–c *Imageable area, artboard boundary, and page boundary*
The imageable area within the margin guides is the area that will print on the paper size currently selected in File > Print (General). The artboard is the user-defined work area and the largest possible printable area. The nonprinting page boundary matches the current paper size. Objects located in the area outside the artboard will save with the file, but they won't print.

8 *Guide*
Drag from the horizontal or vertical ruler to create a guide. Guides are used only for aligning objects; they don't print.

9a–c *Palettes*
Pathfinder and Swatches are five of 31 moveable palettes that open from the Window menu. The Toolbox contains 74 (yes, 74!) drawing and editing tools, as well as color controls and screen mode buttons.

10 *Zoom field*
Enter a new zoom percentage in this field or choose a preset zoom percentage from the pop-up menu.

11 *Status bar*
Depending on which category you choose from the pop-up menu, the status bar displays the name of the Current Tool, the current Date and Time from System Preferences > System > Date & Time, the Number of available Undos/Redos, or the Document Color Profile. Option-press the status bar pop-up menu to learn the Moon Phase, Shopping Days 'til Christmas, and other vital statistics.

12 *Scroll arrows*
Click the downward-pointing scroll arrow to move the illustration upward in the document window. Click the upward-pointing scroll arrow to move the illustration downward in the document window.

13 *Resize box*
To resize a document window, drag its resize box diagonally.

Illustrator Screen in Macintosh

The Illustrator screen in Windows

Illustrator Screen in Windows

1 *Application Control menu*

2 *Document Control menu*

3 *Menu bar*

4 *Title bar, zoom level, color mode, and view*

5 *Application maximize button*

6 *Application minimize button*

7 *Application close box*

5 *Document maximize button*

9 *Document minimize button*

7 *Document close box*

8 *Rulers*

10a *Imageable area boundary*

10b *Artboard and page boundary*

11 *Guide*

12 *Toolbox*

13 *Scroll arrow*

14 *Resize box*

Palettes

15 *Zoom field and pop-up menu*

16 *Status bar*

Status bar pop-up menu

Key to the *Illustrator screen in Windows*

1 *Application Control menu box*
The Application Control menu box commands are Restore, Move, Size, Minimize, Maximize, and Close.

2 *Document Control menu box*
The Document Control menu box commands are Restore, Move, Size, Minimize, Maximize, Close, and Next.

3 *Menu bar*
Use the menu bar to open dialog boxes or palettes or choose commands.

4 *Title bar, zoom level, color mode, view*
The illustration's title, zoom level, color mode (CMYK or RGB), and view (Preview, Outline, Pixel Preview, or Overprint Preview) are listed on the title bar.

5 *Maximize/restore down button*
Click the document or application maximize button to enlarge either window to fill the available space completely. When a window is maximized, the button turns into a restore down button. Click this button to shrink the window to its former size.

6 *Application minimize button*
Click the application minimize button to shrink the application to an icon on the taskbar. Click the icon on the taskbar to restore the application window to its previous size.

7 *Close box*
To close a document or a palette, click its close box.

8 *Rulers*
The current position of the pointer is indicated by a marker on the horizontal and vertical rulers. Ruler increments can be displayed in any of these measurement units: points, picas, inches, millimeters, centimeters, or pixels.

9 *Document minimize button*
Click the document minimize button to shrink the document to an icon at the bottom left corner of the application window. To restore the document to its previous size, double-click the icon or click the restore up button.

10a–b *Imageable area, artboard boundary, and page boundary*
The imageable area within the margin guides is the area that will print on the paper size currently selected in File > Print (General). The artboard is the user-defined work area and the largest possible printable area. The nonprinting page boundary matches the current paper size. Objects outside the artboard save with the file but don't print.

11 *Guide*
Drag from the horizontal or vertical ruler to create a guide. Guides are used only for aligning objects; they don't print.

12 *Toolbox*
The Toolbox contains 74 (yes, 74!) drawing and editing tools, as well as color controls and screen mode buttons. It's one of the 31 moveable palettes that open from the Window menu.

13 *Scroll arrows*
Click the downward-pointing scroll arrow to move the illustration upward in the document window. Click the upward-pointing scroll arrow to move the illustration downward in the document window.

14 *Resize box*
To resize a document window, drag its resize box diagonally or drag the edge of the window.

15 *Zoom field*
Enter a new zoom percentage in this field or choose a preset zoom percentage from the pop-up menu.

16 *Status bar*
Depending on which category you choose from the pop-up menu, the status bar displays the name of the Current Tool, the current Date and Time from the computer's internal clock, the Number of available Undos/Redos, or the Document Color Profile (RGB or CMYK). Alt-press the status bar pop-up menu to learn the Moon Phase, Shopping Days 'til Christmas, and other vital statistics.

Illustrator Screen in Windows

The Illustrator menus

The Menus

Illustrator menu

Illustrator	
About Illustrator...	
About Plug-ins...	
Preferences	▶
Services	▶
Hide Illustrator	
Hide Others	⌥⌘H
Show All	
Quit Illustrator	⌘Q

In Windows, the **Preferences** *command is on the* **Edit** *menu and the* **Exit** *command is on the* **File** *menu.*

File menu

File	
New...	⌘N
New from Template...	⇧⌘N
Open...	⌘O
Open Recent Files	▶
Close	⌘W
Save	⌘S
Save As...	⇧⌘S
Save a Copy...	⌥⌘S
Save as Template...	
Save for Web...	⌥⇧⌘S
Save a Version...	
Revert	F12
Place...	
Save for Microsoft Office...	
Export...	
Scripts	▶
Document Setup...	⌥⌘P
Document Color Mode	▶
File Info...	
Versions...	
Print...	⌘P

Edit menu

Edit	
Undo Paste	⌘Z
Redo	⇧⌘Z
Cut	⌘X
Copy	⌘C
Paste	⌘V
Paste in Front	⌘F
Paste in Back	⌘B
Clear	
Find and Replace...	
Find Next	
Check Spelling...	⌘I
Edit Custom Dictionary...	
Define Pattern...	
Edit Original	
Transparency Flattener Presets...	
Print Presets...	
PDF Presets...	
Color Settings...	⇧⌘K
Assign Profile...	
Keyboard Shortcuts...	⌥⇧⌘K

Object menu

Object	
Transform	▶
Arrange	▶
Group	⌘G
Ungroup	⇧⌘G
Lock	▶
Unlock All	⌥⌘2
Hide	▶
Show All	⌥⌘3
Expand...	
Expand Appearance	
Flatten Transparency...	
Rasterize...	
Create Gradient Mesh...	
Slice	▶
Path	▶
Blend	▶
Envelope Distort	▶
Text Wrap	▶
Clipping Mask	▶
Compound Path	▶
Crop Area	▶
Graph	▶

Type menu

Type	
Font	▶
Recent Fonts	▶
Size	▶
Glyphs	
Area Type Options...	
Type on a Path	▶
Threaded Text	▶
Fit Headline	
Create Outlines	⇧⌘O
Find Font...	
Change Case	▶
Smart Punctuation...	
Optical Margin Alignment	
Show Hidden Characters	⌥⌘I
Type Orientation	▶
Legacy Text	▶

Select menu

Select	
All	⌘A
Deselect	⇧⌘A
Reselect	⌘6
Inverse	
Next Object Above	⌥⌘]
Next Object Below	⌥⌘[
Same	▶
Object	▶
Save Selection...	
Edit Selection...	

Filter menu

Filter

Apply Free Distort	⌘E
Free Distort...	⌥⌘E
Colors	▶
Create	▶
Distort	▶
Stylize	▶
Artistic	▶
Blur	▶
Brush Strokes	▶
Distort	▶
Pixelate	▶
Sharpen	▶
Sketch	▶
Stylize	▶
Texture	▶
Video	▶

Effect menu

Effect

Apply Ellipse	⇧⌘E
Ellipse...	⌥⇧⌘E
Document Raster Effects Settings...	
3D	▶
Convert to Shape	▶
Distort & Transform	▶
Path	▶
Pathfinder	▶
Rasterize...	
Stylize	▶
SVG Filters	▶
Warp	▶
Artistic	▶
Blur	▶
Brush Strokes	▶
Distort	▶
Pixelate	▶
Sharpen	▶
Sketch	▶
Stylize	▶
Texture	▶
Video	▶

View menu

View

Outline	⌘Y
Overprint Preview	⌥⇧⌘Y
Pixel Preview	⌥⌘Y
Proof Setup	▶
Proof Colors	
Zoom In	⌘+
Zoom Out	⌘–
Fit in Window	⌘0
Actual Size	⌘1
Hide Edges	⌘H
Hide Artboard	
Show Page Tiling	
Show Slices	
Lock Slices	
Hide Template	⇧⌘W
Show Rulers	⌘R
Hide Bounding Box	⇧⌘B
Show Transparency Grid	⇧⌘D
Hide Text Threads	⇧⌘Y
Guides	▶
Smart Guides	⌘U
Show Grid	⌘"
Snap to Grid	⇧⌘"
Snap to Point	⌥⌘"
New View...	
Edit Views...	

Window menu

Window

New Window	
Minimize Window	⌘M
Bring All To Front	
Actions	
Align	⇧F7
Appearance	⇧F6
Attributes	F11
Brushes	F5
Color	F6
Document Info	
Flattener Preview	
Gradient	F9
Graphic Styles	⇧F5
Info	F8
Layers	F7
Links	
Magic Wand	
Navigator	
Pathfinder	⇧F9
Stroke	F10
SVG Interactivity	
Swatches	
Symbols	⇧F11
Tools	
Transform	⇧F8
Transparency	⇧F10
Type	▶
Variables	
Brush Libraries	▶
Graphic Style Libraries	▶
Swatch Libraries	▶
Symbol Libraries	▶

Help menu

Help

Illustrator Help...	F1
Welcome Screen...	
Tutorials...	
System Info...	
Online Support...	
Updates...	
Registration...	
Illustrator Online...	

*The Help > **About Illustrator** and **About Plug-ins** commands are available only in Windows.*

*The Window > **Cascade, Tile,** and **Arrange Icons** commands are available only in Windows.*

The Menus

Using dialog boxes

Dialog boxes are like fill-in forms with multiple choices. They are opened from the menu bar or via shortcuts.

In Windows: To activate a menu, type Alt plus the underlined letter, then release Alt and type the underlined letter on the submenu.

Some modifications are made by entering a number in an entry field. Press **Tab** to highlight the next field in a dialog box; press **Shift-Tab** to highlight the previous field. Press or click on a pop-up menu to choose further options.

Click **OK** or press **Return/Enter** to accept modifications and exit a dialog box. To cancel out of a dialog box, click Cancel or press Esc.

Many Illustrator dialog boxes have a **Preview** option that when checked will apply the effect while the dialog box is open. Take advantage of this great timesaver.

Illustrator dialog boxes, like all the other features in the program, function the same way on the Mac as in Windows, though they look slightly different because the graphic interfaces are different.

*In Windows, you can type an **underlined** letter to activate that field (e.g., "U" for "Uniform"). If a field is already highlighted, type **Alt** plus the underlined letter. In Windows XP, you have to press Alt for the underlines to show up.*
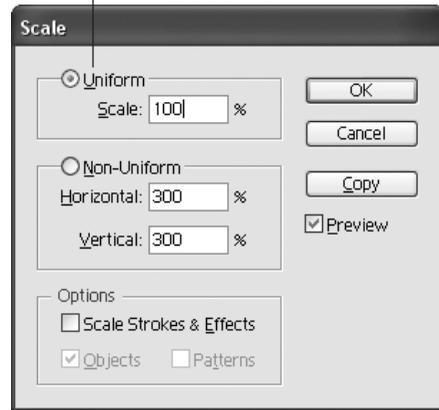
*A dialog box in **Windows***
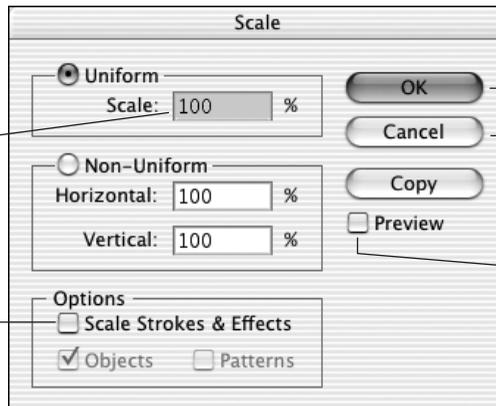
*Type a number into a field. Press **Tab** to jump from one field to the next.*

*Click a **check box** on or off. A "√" means that option is on.*

*Click **OK** or press **Return/Enter** to exit a dialog box and accept the new settings.*

*Click **Cancel** to exit a dialog box with no modifications taking effect.*

*Check **Preview** to preview new settings in your illustration right away.*

*A **dialog box** in Macintosh*

Using the palettes

Illustrator has 31 movable palettes, all of which can be opened from the **Window** menu, and many of which can be opened and closed via assigned shortcuts. To save screen space, the palettes are organized into these default **groups**: Appearance/Layers; Actions/Links; Navigator/Info; Character Styles/Paragraph Styles; Swatches/Color; Document Info/Attributes; Flattener Preview; Glyphs; Stroke/Gradient/Transparency; Tabs; Graphic Styles/Brushes/Symbols; Magic Wand; Transform/Align/Pathfinder; SVG Interactivity/Variables; Character/ Paragraph/Open Type; and Tools. The palette name you choose from the Window menu will appear in front within its group when the group opens.

You can compose your own groups or separate a palette from its group. To **separate** a palette, drag its tab (palette name) away from the group **1**–**2**. To **add** a palette to any group, drag the tab over the group.

➤ When you compose a palette group, start with one of the resizable palette windows.
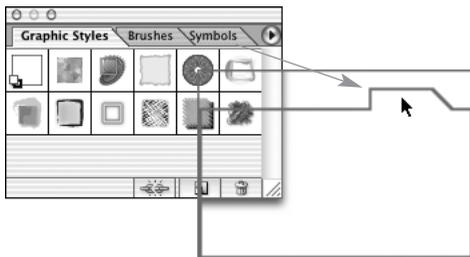
1 *To **separate** a palette from its group, drag the tab (palette name) out of the group.*
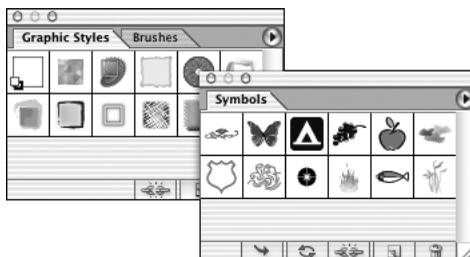
2 *Now the Symbols palette is on its own.*

To **dock** (hook up) one palette to the bottom of another palette or palette group, drag the tab to the bottom of the target palette, and release the mouse when the thick black line appears **3**. To undock, drag a palette tab out of the dock group.

To **display** an open palette at the front of its group, click its tab. Palettes with an up/down arrow on the tab (such as the Color palette) have more than one **panel**. Click this arrow or the tab name to cycle through the palette configurations: tab only, two option panels, or one option panel. Another way to display a full palette is to choose Show Options from the palette menu. To shrink a palette group to just the tabs, on the Mac, click the palette zoom button (green) in the upper left corner; in Windows, click the minimize/ maximize button. Click the button again to restore the palette's previous size.

➤ Press Tab to **hide/show all** currently open palettes, including the Toolbox; press Shift-Tab to hide/show all open palettes except the Toolbox.

Palettes that are open when you quit/exit Illustrator will reappear in the same location when the application is relaunched.

*Use the **palette menus** to access additional commands!*
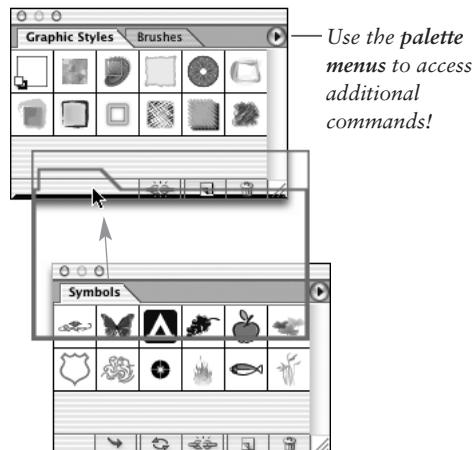
3 *To **dock** palettes together, drag the tab name of one palette to the bottom of another palette, and release the mouse when the thick black line appears across the bottom of the target palette.*

The color controls

The current fill and stroke colors display in color squares on the Toolbox **1** and on the Color palette **2**. The **Color** palette displays the color model and breakdown of the fill or stroke in the currently selected object or objects; use it to choose Web-safe colors or process colors or to adjust global process or spot color tints.

The **Stroke** palette displays the weight and style of the stroke in the currently selected object or objects, and can be used to change those attributes. If no object is selected, changes made on the Color or Stroke palette will apply to subsequently drawn objects.

Whichever box (Fill or Stroke) is currently active (is on top on the Color palette and the Toolbox) will be affected by changes on the Color palette.

1 *Fill color, pattern, or gradient*

Swap Fill and Stroke

Default Fill and Stroke

Stroke color

(Reapply last fill or stroke) Color

(Reapply last) Gradient

None (no color)

Color palette F6

Use the Color palette to mix, choose, and switch between fill and stroke colors. Choose a color model for the palette from the palette menu. Quick-select a color, black, white, or None from the bar at the bottom of the palette.

2

Fill

Stroke

Out of Web Color Warning (click box for Web-safe substitute)

Out of Gamut Warning (click box for printable substitute)

None

◇ Color		
R		245
G		250
B		20

Spectrum
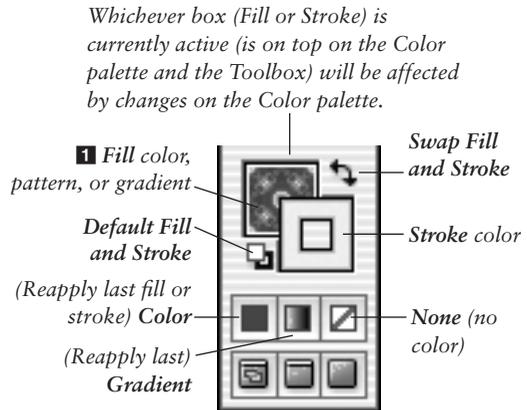
Stroke palette F10

Use the Stroke palette to edit the stroke weight and style of the selected object or objects, and to create dashed lines or frames.
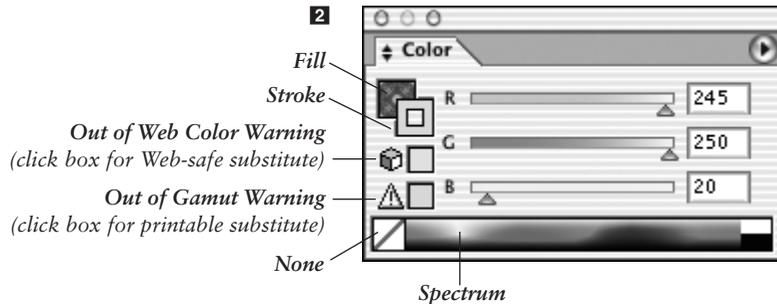
Join (bend) styles

Cap (end) styles

*Stroke **Weight** (thickness)*

Dashed Line segment (dash) and gap lengths (spacing between dashes)

◇ Stroke	
Weight:	1 pt
Miter Limit:	4 x
☑ Dashed Line	
12 pt	4 pt					
dash	gap	dash	gap	dash	gap
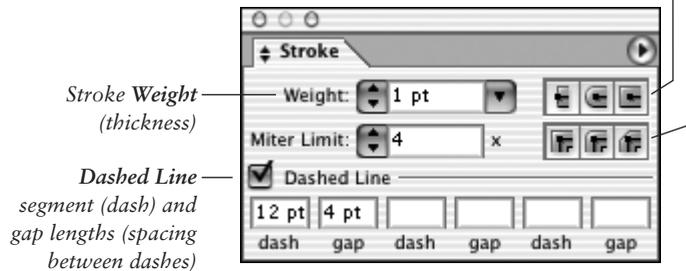
Swatches palette

Use the Swatches palette to choose and store default and user-defined colors. If you click a swatch, it becomes the current fill or stroke color, depending on whether the Fill or Stroke box is currently active on the Toolbox and Color palette.

Drag from the Fill or Stroke color box on the Toolbox or the Color palette to the Swatches palette to save that color as a swatch in the current file. You can merge swatches and perform other tasks via the palette menu.

*A **nonglobal process** color*

*A **spot** color*

*A **global process** color*

All   Colors   Gradients   Patterns   New Swatch   Delete Swatch

Use these buttons to control which categories of swatches are displayed on the palette.
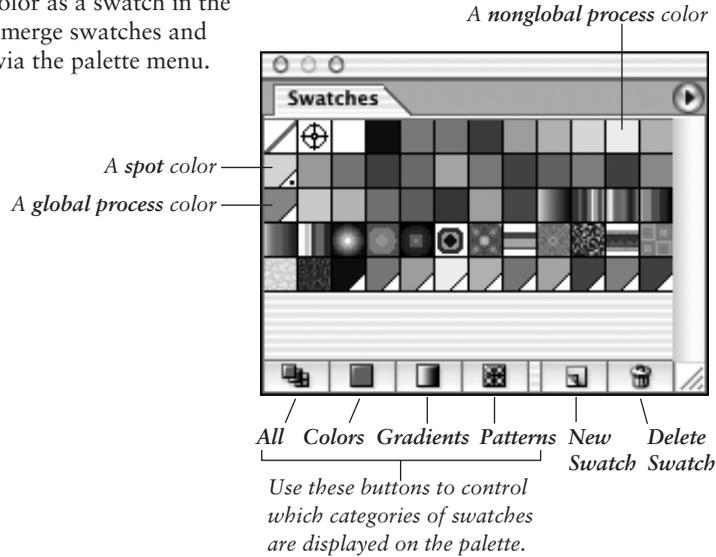
Gradient palette

Use the Gradient palette to create new gradients and edit existing gradients. You can move a color by dragging its stop; choose a different color for a stop from the Color palette; click below the gradient slider to add a new color; move a midpoint diamond to adjust how adjacent colors are distributed; or change the gradient angle.

*The gradient **Type**: Linear or Radial*

*The **Midpoint** diamond marks the point where two adjacent colors are at an equal, 50/50 mix.*

Gradient slider

Starting color stop   *An added color stop*   *Ending color stop*

Swatches Palette; Gradient Palette
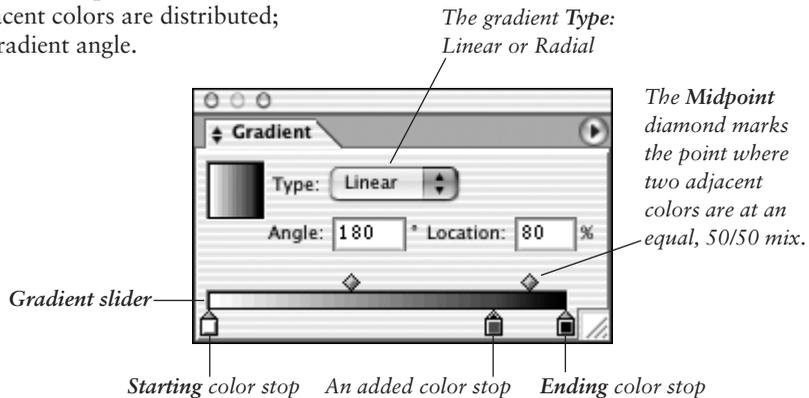
Character palette

Use the Character palette to apply type attributes: font, size, leading, kerning, tracking, horizontal scale, vertical scale, baseline shift, character rotation, and foreign language options. To apply an attribute to currently highlighted text, choose a value from the pop-up menu; or click the up or down arrow; or enter a value in the field and press Return/Enter.

Text-related palettes

The palettes that are used for formatting text are opened from the Window > **Type** submenu: Character, Character Styles, Glyphs, OpenType, Paragraph, Paragraph Styles, and Tabs. Four of these palettes can be opened via a shortcut:

Character	Cmd-T/Ctrl-T
OpenType	Cmd-Option-Shift-T/ **NEW** Ctrl-Alt-Shift-T
Paragraph	Cmd-Option-T/Ctrl-Alt-T **NEW**
Tabs	Cmd-Shift-T/Ctrl-Shift-T

Font — Myriad
Font Style — Roman
Font Size — 12 pt — *Leading* (14.4 pt)
Kerning — Auto — *Tracking* 0
Horizontal Scale — 100% — *Vertical Scale* 100%
Baseline Shift — 0 pt — *Character Rotation* 0° **NEW**
Language: English: USA

*The **Language** for hyphenation for the current document*

Character Styles palette (NEW)

Character styles are collections of character attributes, such as font, point size, leading, tracking, and kerning. Unlike paragraph styles, which are applied to whole paragraphs, character styles are applied to bits and pieces here and there—bullets, boldfaced words, italicized words, large initial caps, etc. When character styles are applied to highlighted text within a paragraph, multiple attributes are applied at a time; when you edit a style, the text that it's associated with updates accordingly. Using the Character Styles palette, you can create, apply, edit, store, duplicate, and delete character styles.

A character style

New Style   Delete Selected Styles
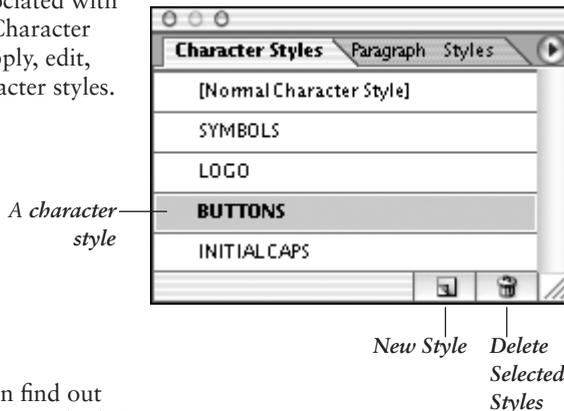
Glyphs palette (NEW)

Using the Glyphs palette, you can find out which character variations (alternate glyphs) are available for any given character in a specific font, and use the palette to insert glyphs from any font into your text (some of which can't be inserted via the keyboard).

*Via the **Show** pop-up menu, you can control whether the palette displays glyphs of a specific category or for an entire font.*

*Font   Pop-up showing **alternate glyphs** for an individual character   Font Style   Zoom Out   Zoom In*

Character Styles Palette; Glyphs Palette
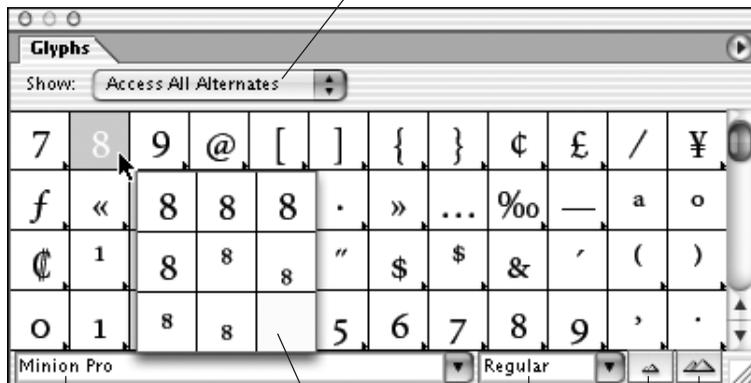
OpenType palette **NEW**

Illustrator CS supplies you with 24 Roman-language OpenType font families, which can be used on both the Mac and Windows systems. Those fonts that contain a particularly large assortment of alternate glyphs are labeled "Pro." By clicking a button on the OpenType palette, you can specify which alternate characters (glyphs) will be used automatically in your text, such as ligatures, swashes, titling characters, stylistic alternates, ordinals, and fractions. You can also use the palette to specify options for numerals, such as style (e.g., tabular lining or oldstyle), and position (e.g., numerator, denominator, superscript, or subscript).

Style and position options for numerals

Standard Ligatures

Fractions

Contextual Alternates

Swash

Titling Alternates

Ordinals

Discretionary Ligatures

Stylistic Alternates
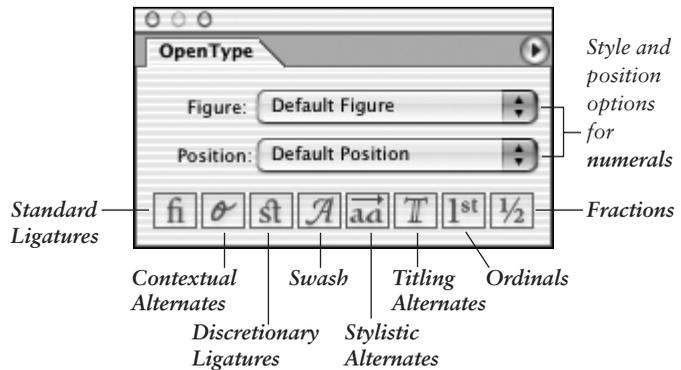
Paragraph palette

Use the Paragraph palette to apply specifications that affect entire paragraphs, including horizontal alignment, indentation, space before/after paragraph, word spacing, letter spacing, hyphenation, and hanging punctuation.

Horizontal Alignment buttons

Left *Center* *Right* *Justify Last Left* *Justify Last Center* *Justify Last Right* *Justify All*

Left Indent — 8 pt   *Right Indent* — 0 pt

First-Line Left Indent — 0 pt

Space Before Paragraph — 12 pt   *Space After Paragraph* — 0 pt

Automatic Hyphenation — Hyphenate
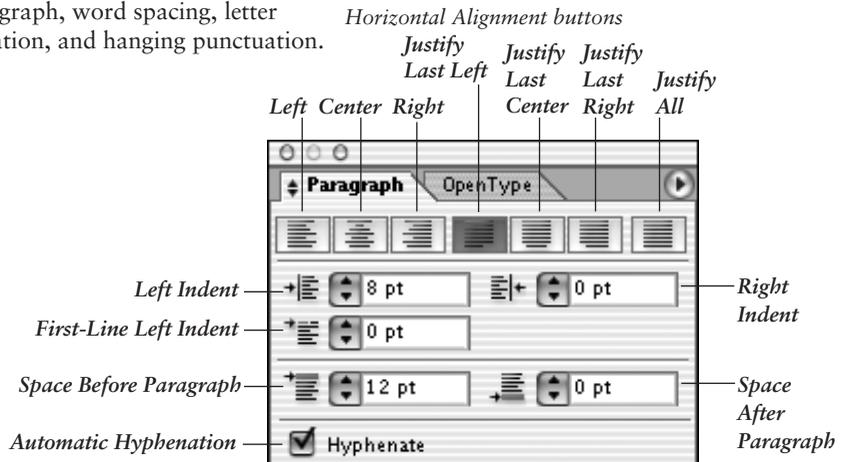
Paragraph Styles palette NEW

A paragraph style is a set of paragraph specifications (e.g., horizontal alignment, indentation, space before paragraph, word spacing, letter spacing, hyphenation, and hanging punctuation) and character attributes, such as font and point size. When a paragraph style is applied, all currently selected paragraphs are reformatted; when a style is edited, the paragraphs that it's associated with update accordingly. Using styles makes light work of formatting type and helps ensure that it looks uniform. You can create, apply, edit, store, duplicate, and delete paragraph styles by using the Paragraph palette.

A paragraph ——
style

New Style *Delete Selected Styles*
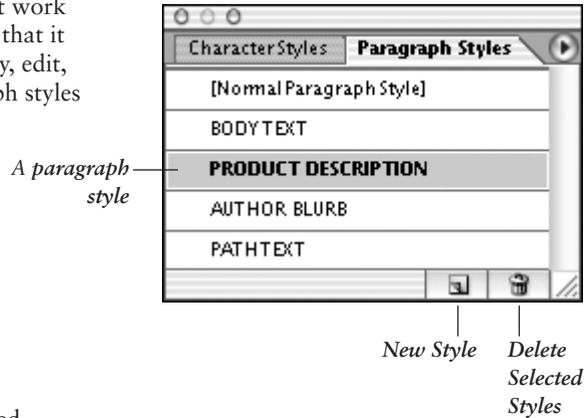
Tabs palette

If you want to create perfectly aligned columns of text, you need to use tabs. Using the Tabs palette, you can insert, move, and change the alignment for custom tab markers, as well as specify optional leader and align-on characters.

NEW *Numeric* **Location** *of the currently selected tab marker*

Optional **Leader** NEW *character*

Optional NEW *character to* **Align On**

Left-, Center-, Right-, and **Decimal-Justified** *alignment buttons (or* **Top-** *and* **Bottom-Justified** *buttons for vertical type)*

A **tab marker** *A selected tab marker* **Position Palette Above Text**

Layers Palette; Info Palette
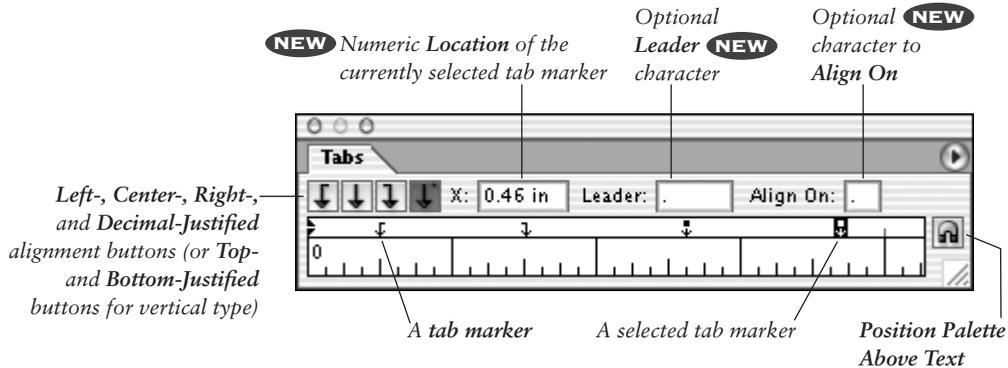
Layers palette F7

Use the indispensable Layers palette to add and delete layers and sublayers from a document. You can also use this palette to select; restack; hide/show; lock/unlock; change the view for; create a clipping set for; target; or dim (for tracing) a layer, sublayer, group, or individual object. When your illustration is finished, it can be flattened into one layer, or the objects can be released to separate layers for export to an animation program.

*Click this icon to **target** an object or group in order to edit its appearances; drag this icon to **move** the object's appearance.*

Current Layer indicator

Selection square
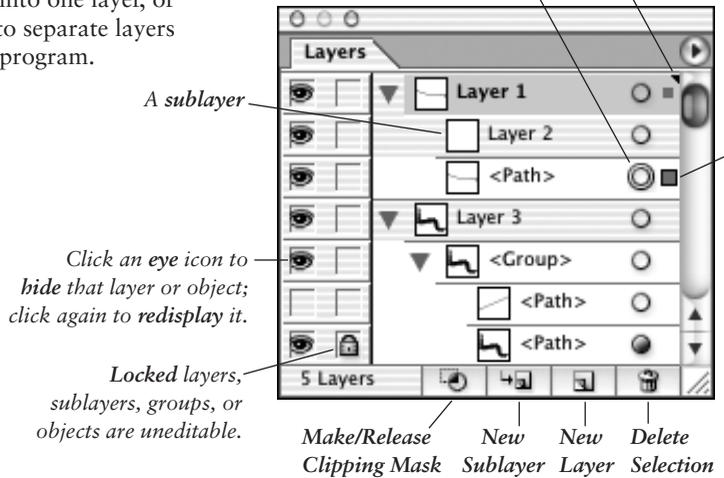
*A **sublayer***

*Click an **eye** icon to **hide** that layer or object; click again to **redisplay** it.*

Locked layers, sublayers, groups, or objects are uneditable.

Make/Release Clipping Mask *New Sublayer* *New Layer* *Delete Selection*

Info palette

If no object is selected in the current document, the Info palette will list the horizontal and vertical location of the pointer in the document window (for most tools). When an object is selected, the palette lists the location of the object on the page and the object's width and height. When a type tool and type object are selected, the palette displays type specifications. The Info palette opens automatically when the Measure tool is used, and lists the distance and angle calculated by that tool.

Horizontal (X) and Vertical (Y) location of the currently selected object

*Object **Width** (W) and **Height** (H)*
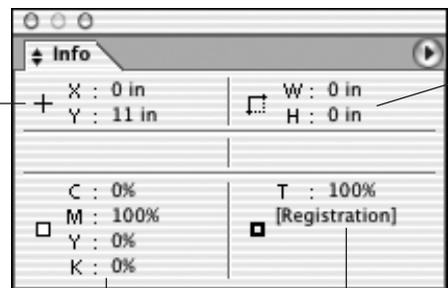
Fill info (color breakdown, or pattern or gradient name) *Stroke info (color breakdown, or pattern or gradient name)*

Align palette Shift-F7

Buttons on the top two rows of the Align palette let you align and/or distribute two or more objects along their centers or along their top, left, right, or bottom edges. Buttons at the bottom of the palette let you equalize (redistribute) the spacing between three or more objects.

Horizontal Align Right

Horizontal Align Center

Vertical Align Top

Horizontal Align Left

Vertical Align Center

Vertical Align Bottom

Vertical Distribute Top

Horizontal Distribute Right

Vertical Distribute Center

Horizontal Distribute Left

Horizontal Distribute Center

Vertical Distribute Bottom

Vertical Distribute Space

Horizontal Distribute Space

Distribute spacing value

Transform palette Shift-F8

The Transform palette displays location, width, and height information for the currently selected object. You can also use the palette to move, scale, rotate, or shear a selected object or objects.

The location of the currently selected object on the x and y axes. Change either or both of these values to move the object.

Reference Point (the part of the object that the palette values are calculated from)

Width

Lock Proportions NEW
(width and height)

Height

Rotation

Shear
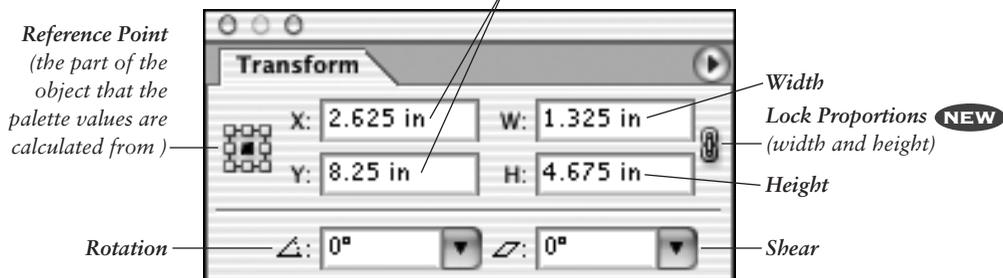
Actions palette

Actions let you automate the application of commands and editing steps. As you create or edit an illustration, you can record a series of commands or steps, then save that series as an action. You can then replay those commands on any object, file, or batch of files by playing the action.

*An actions **set***

*An **action***

*Toggle **command** on or off*

*Toggle **dialog box** pause on or off*

A recorded command

Actions

☑ ▼ 📁 **Default Actions**

☑ ▶ Opacity 60 (selection)

☑ ▶ Opacity 40 Screen (sele...

☑ ▼ Save For Web GIF 64 Di...

☑ ▼ Save for Web

Format: GIF89a

Interlaced: No

Stop (playing/ recording) | *Begin Recording* | *New Set* | *New Action* | *Delete Selection*

Play Current Selection
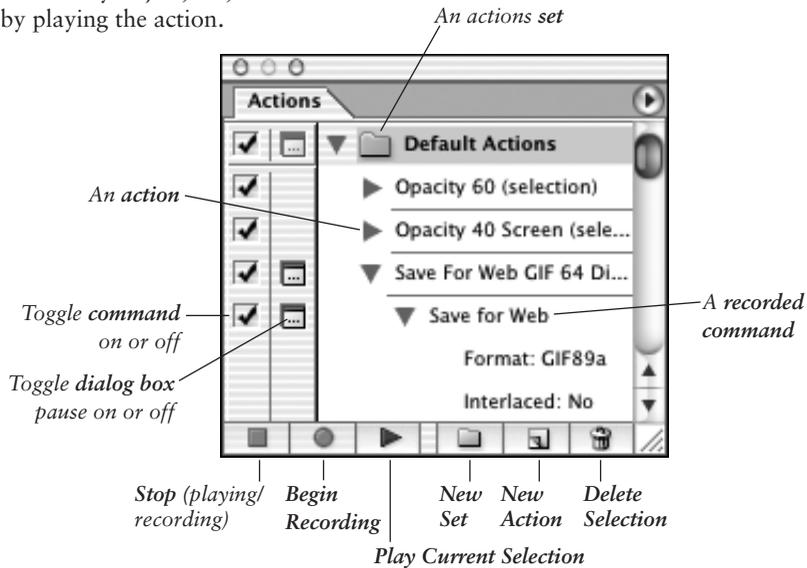
Navigator palette

The Navigator palette lets you move an illustration in its window and change the onscreen magnification (zoom level) of an illustration.

*Drag the **view box** to move the illustration in the document window, or **click** the illustration **thumbnail** to move that area of the illustration into view.*

Navigator

Artboard

*Cmd-drag/Ctrl-drag within the **view box** to define the view area.*

*Enter the desired **zoom percentage** (3.13%–6400%), then press Return/Enter. Or to zoom to a percentage and keep the field highlighted, press Shift-Return/Shift-Enter.*

116.22%

*Click the **Zoom Out** button to reduce the magnification.*

*Move the **Zoom slider** to change the magnification.*

*Click the **Zoom In** button to magnify the image.*

Links palette

A linked image is an image that's placed into an Illustrator file without being embedded into the file. The Links palette lets you keep track of and update linked images, modify linked images in their original applications, and convert linked images to embedded images.

Modified Linked Image indicator

Missing Linked Image indicator

Relink *Go to Link* *Update Link* *Edit Original*
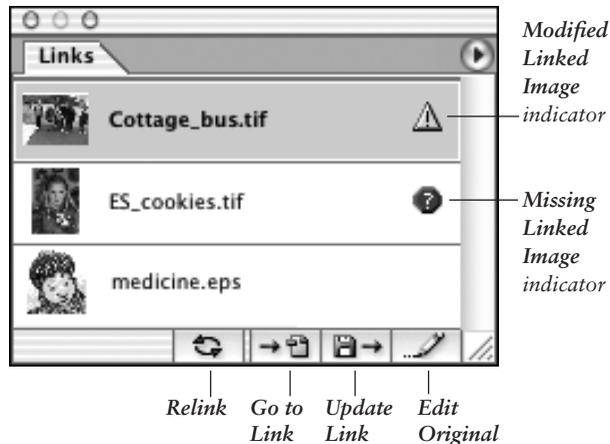
Pathfinder palette Shift-F9

The shape mode buttons on the top row of the Pathfinder palette create new, editable, flexible compound shapes from selected objects. The Expand button converts a compound shape into either a path or a compound path, depending on how the objects originally overlapped. The pathfinder buttons on the bottom row of the Pathfinder palette produce flattened, cut-up shapes from selected objects.

Expand compound shape

Exclude Overlapping Shape Areas

Intersect Shape Areas

Add to Shape Area

Subtract from Shape Area

Divide *Trim* *Merge* *Crop* *Outline* *Minus Back*

Links Palette; Pathfinder Palette
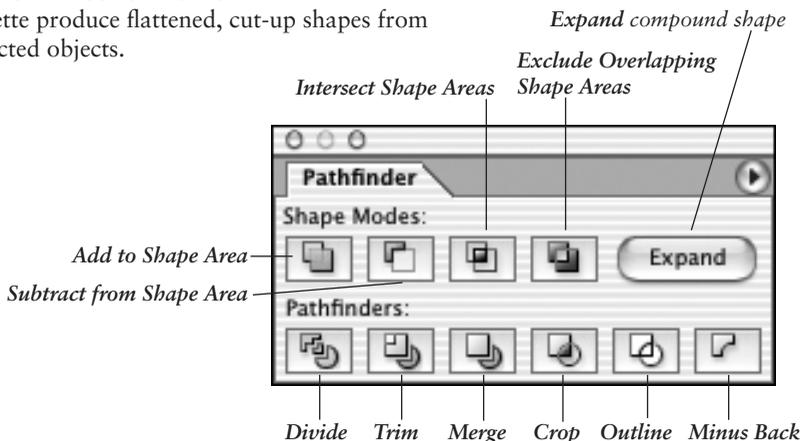
Brushes palette F5

You can use any of the four varieties of brushes on the Brushes palette—Calligraphic, Scatter, Art, or Pattern—to apply brush strokes to paths. There are two methods for doing this. You can either choose the Paintbrush tool and a brush and then draw a shape, or you can apply a brush stroke to an existing path that was drawn using any tool. The brushes that are currently on the Brushes palette save with the document. To personalize your brush strokes, you can create your own brushes.

To change the contour of a brush stroke, you can use any tool or command that you'd normally use to reshape a path (e.g., Erase, Reshape, Pencil, Smooth, Add Anchor Point, or Convert Anchor Point). If you modify a brush that's been applied to any existing paths in a document, you'll be given the option via an alert dialog box to update those paths with the revised brush.

Calligraphic brushes

Scatter brushes

Art brushes

Pattern brushes

Remove Brush Stroke *Options of Selected Object* *New Brush* *Delete Brush*
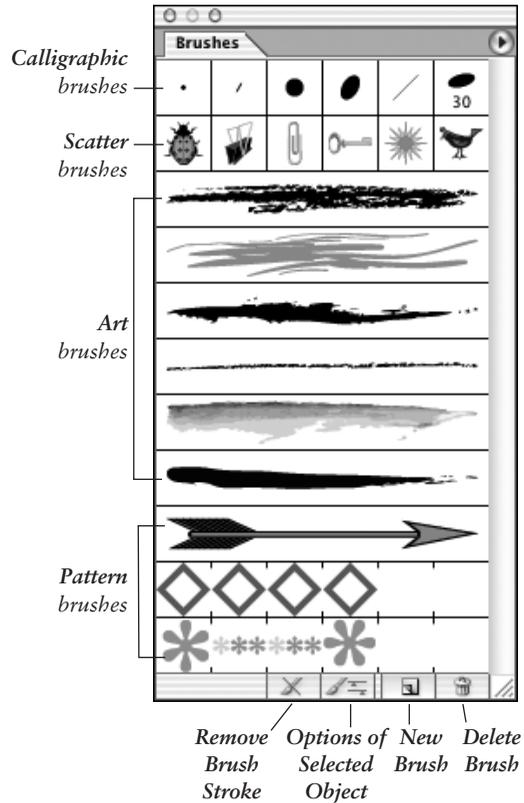
Transparency palette Shift-F10

You can use the Transparency palette to change the blending mode or opacity of any layer, group, or individual object. Via a Transparency palette menu command, you can generate an opacity mask from two or more selected objects.

*Click the **opacity mask** thumbnail to select the opacity mask for editing.*

*Object **Opacity***

Blending mode

Object thumbnail

Isolate Blending limits the blending mode effect to a group.

This option allows nested objects in a knockout group to show through transparent areas of an opacity mask.

Knockout Group prevents objects in a group from showing through each other.
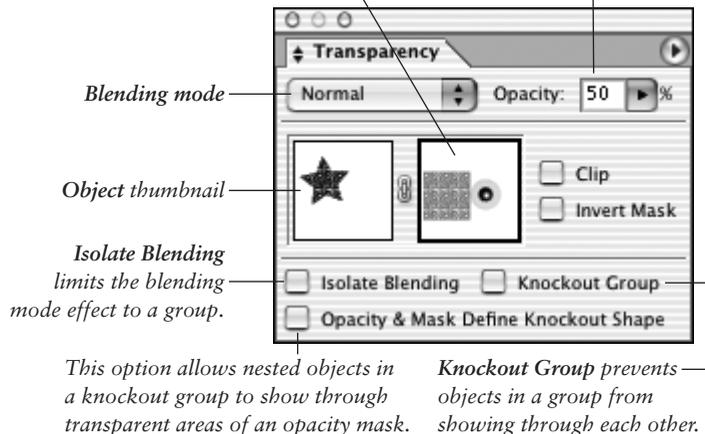
Graphic Styles palette Shift-F5

Graphic styles are sets of attributes that can be used to quickly change an object's appearance. Among the attributes that a style can contain are multiple solid-color or pattern fills, multiple strokes, transparency and overprint settings, blending modes, brush strokes, and effects. Using graphic styles helps you speed up and standardize object styling. (This was formerly called the Styles palette.)

Style thumbnails and names — *Break Link to Graphic Style* — *New Graphic Style* — *Delete Graphic Style*

Appearance palette Shift-F6

The Appearance palette lists in minute detail the individual attributes that are applied to the currently targeted layer(s), group(s), or object(s). You can use the palette to edit, add, or remove attributes, and to edit the attributes of a style in conjunction with the Graphic Styles palette. You can also use this palette to apply multiple fills and/or strokes to a layer, group, or object, and to quickly access the palettes and dialog boxes that were used to apply those attributes.
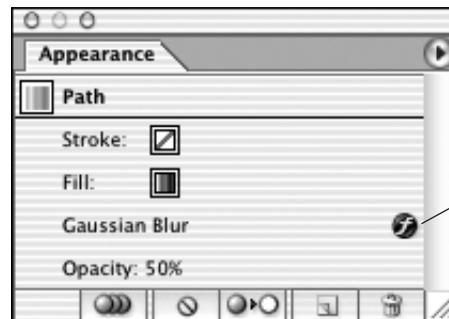
*Click this icon (or the effect name) to **edit the effect.***

New Art Has Basic Appearance — *Clear Appearance* — *Duplicate Selected Item* — *Delete Selected Item*

Reduce to Basic Appearance

SVG Interactivity palette

You can use the SVG Interactivity palette to add interactivity to an Illustrator object for viewing in a Web browser. First you choose from a list of common JavaScript events on the Event pop-up menu. Then you add or enter a JavaScript command that will act on the object when that event occurs in the browser.

Attributes palette FII

You can use the Attributes palette to specify overprint options for an object, show or hide an object's center point, reverse the fill of an object in a compound path, or change an object's fill rule. You can choose a shape for an image map area from the Image Map menu. In the URL field, you can enter a Web address for an object to designate it as a hot point on an image map. Click Browser to launch the currently installed Web browser.

Document Info palette

Like the Info palette, the Document Info palette isn't interactive. It's used solely for reading information about the current document, or individual objects, graphic styles, brushes—or whichever category you choose from the palette menu.

JavaScript Event pop-up menu

SVG Interactivity
Event: onclick
JavaScript: toggle(evt, 'menu')
onclick="toggle(evt, 'menu')"

Link JavaScript Files   *Remove Selected Entry*

Use Even-Odd Fill Rule
Use Non-Zero Winding Fill Rule

Don't Show Center
Show Center

Attributes
☐ Overprint Fill   ☐ Overprint Stroke
Image Map: Rectangle   Browser
URL:

Reverse Path Direction Off and *Reverse Path Direction On* buttons (switch the fill between color and transparency in a compound path)

Document Info
Objects:

Paths: 7 (19 points)
Compound Paths: NONE
Compound Shapes: NONE
Clipping Masks: NONE
Opacity Masks: NONE
Transparent Groups: 1
Transparent Objects: 1
Styled Objects: NONE
Gradient Meshes: NONE
Symbol Instances: NONE
Symbol Instance Sets: NONE

✓ Selection Only

Document
✓ Objects
Graphic Styles
Brushes
Spot Color Objects
Pattern Objects
Gradient Objects
Fonts
Linked Images
Embedded Images
Font Details

Save...

Magic Wand palette

The Magic Wand tool selects objects that have the same or similar fill color, stroke color, stroke weight, opacity, or blending mode as the currently selected object. Using the Magic Wand palette, you can choose parameters for the tool. The Tolerance is the range within which the tool selects that attribute. For example, if you check Opacity, choose an opacity Tolerance of 10%, then select an object that has an opacity of 50%, the tool will find and select all objects that have an opacity between 40% and 60%.

Symbols palette Shift-F11

Any Illustrator object can be stored on the Symbols palette for potential reuse in any document. To place one symbol onto the art-board, all you have to do is drag it out of the Symbols palette. A placed symbol is called an instance. The Symbol Sprayer tool is used to place multiple instances of a symbol in a document. Multiple instances form what is called a symbol set. Using symbols lets you create complex art quickly and easily.

Using any of the other symbolism tools (Symbol Shifter, Scruncher, Sizer, Spinner, Stainer, Screener, or Styler), you can change the closeness (density), position, stacking order, size, rotation, transparency, color tint, or style of multiple symbol instances in a symbol set, while still maintaining the link to the original symbol. If you edit the original symbol, any instances of that symbol in the document will update automatically.

Note: For a very brief synopsis of what the **Variables** palette does, see page 514. For more information about this advanced feature, refer to the Illustrator Help file or get ahold of *Real World Adobe Illustrator CS* by Deke McClelland (Peachpit Press).

Read about the **Flattener Preview** palette in Illustrator Help.

*The **Tolerance** is the range within which the **Magic Wand** will find that attribute.*
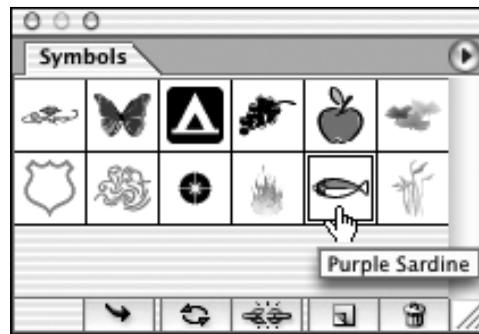
Place Symbol Instance *Break Link to Symbol* *Delete Symbol*

Replace Symbol *New Symbol*

Magic Wand Palette; Symbols Palette

25

Mini-Glossary
A brief introduction to some of the terms that you'll encounter as you read this book.

Objects

Closed path   *Open path*

Direction line

Anchor point   *Curve segment*

Straight segment

Selected object

Selected anchor point
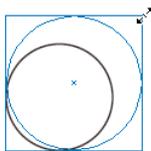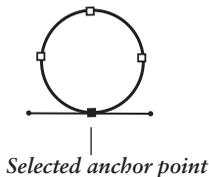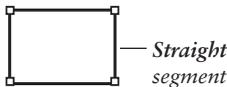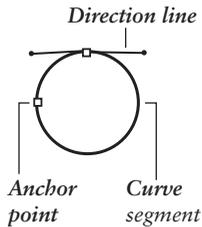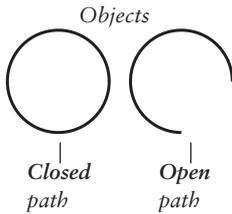
Object undergoing a scale transformation

Path (Or "object") Any individual shape that's created in Illustrator. A path can be open (a line with two endpoints) or closed (no endpoints). Path segments are joined together by smooth and/or corner anchor points.

Smooth anchor points have a pair of direction lines that move in tandem and form a straight line. Corner points can have no direction lines, one direction line, or a pair of direction lines that can be moved independently.

A curve segment can join two smooth points, or a corner point and a smooth point. A straight segment always joins two corner points. You can reshape any path by modifying its anchor points and/or segments.

Direction lines The pair of antennae that stick out from every smooth point. To reshape a curved segment, you'll rotate, lengthen, or shorten a direction line on the anchor point that connects the segment.

Select To highlight an object in the document window for editing. Only selected objects can be modified. When a whole object is selected, its anchor points are solid (not hollow). The Selection tool selects whole objects or groups; the Group Selection tool selects nested groups; the Direct Selection tool and Lasso tool select parts of objects; and the Magic Wand tool selects objects based on such criteria as fill color, stroke color, stroke weight, opacity, or blending mode.

Layer A tier of a document that holds a stack of objects. An illustration can contain multiple top-level layers and sublayers. The actual objects that make up an illustration (paths, type, mesh objects, etc.) are nested within top-level layers or sublayers.

Group Two or more objects that are united via the Group command so they can be moved or modified in unison.

Transform To rotate, scale, reflect, or shear an object, or create a blend between two objects.

Fill *Stroke*
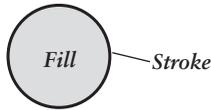
*Blend created using a
circle and a star*

*Art
brush stroke*

*Radial
gradient*

Mesh

*Original
objects*   *Compound shape made
from the three objects*

*Original
objects*   *Compound path made
from the circle and star*
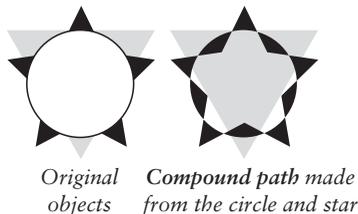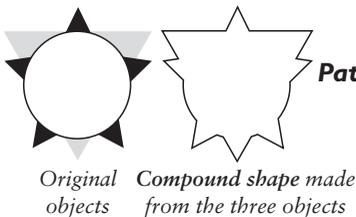
Fill The color, pattern, or gradient that's applied to the inside of an object.

Stroke The solid color that's applied to the edge of an object.

Blend A multistep color and shape progression between two or more objects. If you reshape, recolor, or move any of the individual objects in a blend or reshape, move, or transform the path that controls the whole blend, the blend updates automatically.

Brush stroke A Calligraphic, Art, Scatter, or Pattern embellishment that's either applied to an existing path or drawn using the Paintbrush tool.

Gradient A gradual blending of two or more colors within an object. A gradient fill can be linear (side to side) or radial (radiating outward from a center point).

Mesh An editable object fill, composed of multicolored gradients along mesh lines, that's created by using either the Mesh tool or the Create Gradient Mesh command.

Compound shape An editable (and reversible) union of overlapping objects produced via the Shape Mode buttons on the Pathfinder palette. If individual objects within a compound shape are moved, restacked, or reshaped, the overall compound shape readjusts accordingly.

Compound path Two or more objects combined into one object—that is, until or unless the compound path is released. Where the original objects overlapped, a transparent hole is created, through which shapes or patterns behind the object are revealed.

Pathfinders Commands on the Pathfinder palette that determine where selected paths overlap and then divide, trim, merge, crop, outline, or subtract from them to produce nonoverlapping (flattened) closed paths. These commands aren't reversible, except by using Undo.

Clipping mask A command that uses an object to trim (clip) away parts of other objects that extend beyond its border. The clipped areas don't display or print. An opacity mask applies a mask based on opacity values.

(Continued on the following page)

Mini-Glossary
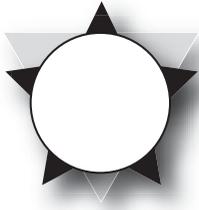
*Drop shadow **effect***

Symbol set

Symbol
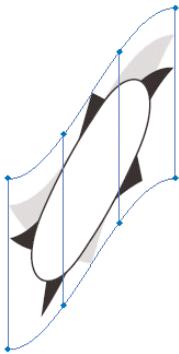

Envelope distortion
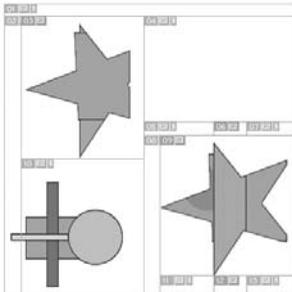
*Illustration divided into **slices***

Appearances Editable and removable attributes, such as multiple fills, strokes, effects, blending modes, transparency values, patterns, and brush strokes.

Style A set of graphic appearance attributes that's saved to, and applied via, the Graphic Styles palette; a set of character attributes that's created and applied via the Character Styles palette; or a set of paragraph and character attributes that's created and applied via the Paragraph Styles palette.

Effects Commands on the Effect menu that modify the appearance of an object without actually changing its path shape. Effects can be edited or removed at any time via the Appearance palette.

Symbol Reusable objects that are stored on the Symbols palette and can be placed into any document. A placed symbol is called an instance; multiple instances form symbol sets. Instances can be modified by using the symbolism tools.

Liquify Seven tools—Warp, Twirl, Pucker, Bloat, Scallop, Crystallize, and Wrinkle—that are used to reshape an object or objects. By pushing and pulling on an object's edges with one of these tools, you can reshape the object as you might sculpt a piece of clay. Many of the Effect commands also produce distortion.

Envelope A special kind of container that's used for applying distortion. When you distort an envelope, everything within the envelope conforms to the distortion. Both an envelope and the object(s) it contains are fully editable.

Action A recorded sequence of editing events that can be replayed on any object, file, or batch of files.

Optimization The process in which file format, storage size, and color parameters are chosen for an image in order to maximize its quality yet enable it to download and display quickly on the Web.

Slicing The division of areas in an illustration. When exporting an illustration using Illustrator's Save for Web dialog box, you can choose different optimization formats and settings for each slice in order to achieve faster download speeds. A separate export file is generated for each slice and the object or objects that it contains. Three types of slices can be created in Illustrator: object slices, text slices, and user slices.

Division the easy way

Let's say you want to reduce an object's width by 25%. Select the object, highlight the *entire* W field on the Transform palette, type "75%", then press Return/Enter. The width will be reduced to three-quarters of its current value (e.g., 4p becomes 3p). You could also click to the right of the current entry, type an asterisk (*), type a percentage value, then press Return/Enter.

Symbols you can use

Unit	Symbol
Picas	**p**
Points	**pt**
Inches	**"** *or* **in**
Millimeters	**mm**
Centimeters	**cm**
Q *(a type unit)*	**q**
Pixels	**px**

Points 'n' picas

12 pt = 1 pica

6 picas = 1 inch
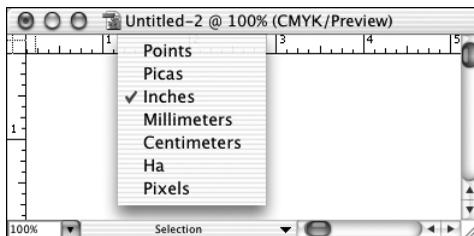
1 *You can choose* **Units** *via a* **context** *menu in the document window…*
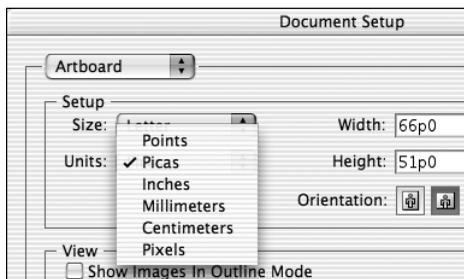
2 *…or from the* **Units** *pop-up menu in the* **Document Setup** *dialog box.*

Measuring up

The measurement unit that you choose for an individual document (instructions below) overrides the measurement unit that's chosen for the application in Illustrator (Edit, in Windows) > Preferences > Units & Display Performance. The current unit is used as the default value in entry fields in most palettes and dialog boxes, and on the rulers.

You can enter values in dialog boxes and palettes in any of the measurement units listed in the sidebar at left, regardless of the current default units. If you enter a value in a nondefault unit, it will be translated into the default unit when you press Tab or Return/Enter.

➤ If you enter the symbol for subtraction (-), addition (+), multiplication (*), division (/), or percent (%) after the current value in any field, Illustrator will do the math for you (see the sidebar).

➤ To enter a combination of picas and points, separate the two numbers by a "p". For example, 4p2 equals 4 picas plus 2 points, or 50 pt. Be sure to highlight the entire entry field first.

Follow the instructions below to change the measurement units just for the current document. To choose a measurement unit for the current and future documents, go to Illustrator (Edit, in Windows) > Preferences > Units & Display Performance.

To change the units for the current document:

If the rulers aren't showing, choose View > Show Rulers (Cmd-R/Ctrl-R), then Control-click/right-click either ruler and choose a unit from the context menu **1**.
or
Choose File > Document Setup (Cmd-Option-P/Ctrl-Alt-P); choose Artboard from the pop-up menu; choose Units: **Points, Picas, Inches, Millimeters, Centimeters,** or **Pixels** **2**; then click OK.

➤ The current location of the pointer is indicated by a dotted line on both rulers. The higher the zoom level, the finer the ruler increments.

Multiple undos

To undo an operation, choose Edit > Undo (Cmd-Z/Ctrl-Z). To undo the second-to-last operation, choose Edit > Undo again, and so on. To reverse an undo, choose Edit > Redo (Cmd-Shift-Z/Ctrl-Shift-Z). You can also Control-click/right-click on the artboard and choose either command from the context menu. You can undo or redo after saving your document, but not after you close and reopen it.

Contextual menus

Contextual menus allow you to choose a command from an onscreen menu without having to mouse to the menu bar or even to a palette. To open a contextual menu (or "context menu," for short), Control-click/right-click on the artboard.

Context menu offerings change depending on which tool is selected and whether any objects are selected in your illustration **1**–**3**. Not all of the commands that appear on a context menu may be applicable to, or available for, the currently selected objects.

And don't forget

Use **tool tips** to help you identify palette buttons, swatch names, tool names, tool shortcuts, and other application features. Simply rest the pointer without clicking on a button, swatch, or icon, and a tip will pop up onscreen **4**.
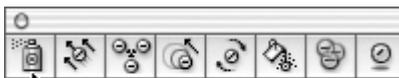
1 *Context menu when **type** is selected*
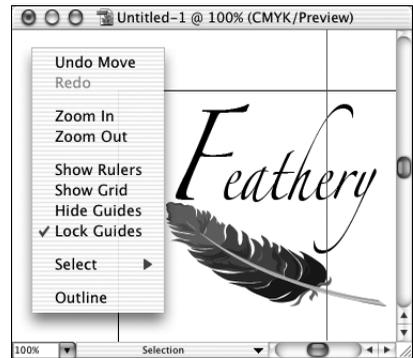
2 *Context menu when **nothing** is selected*

3 *Context menu when two **paths** are selected*

4 *A tool tip*