

ADOBE® ILLUSTRATOR® CS4

FREEHAND TO ILLUSTRATOR MIGRATION GUIDE



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Introduction



Welcome, and thank you for having made the move or thinking about moving from Macromedia® FreeHand® to Adobe Illustrator® CS4.

FreeHand is no longer being developed to be compatible with new operating systems and hardware, or to integrate with other key design applications, such as Adobe Photoshop® CS4 and Adobe InDesign® CS4. Your move to Illustrator is an important step to ensure that you can take advantage of new technologies and capabilities as they become available.

This guide explains the main differences between the two programs and introduces you to some of the new features in Illustrator CS4. It is written specifically for FreeHand users like you, to help you transition to Illustrator as quickly and as smoothly as possible.

Your experience using FreeHand gives you a good foundation for moving to Illustrator. If you have been using Adobe Photoshop or Adobe InDesign, your move will be even easier, because all Adobe graphics applications have common commands, panels, and keyboard shortcuts. Further, Illustrator is tightly integrated with the components of Adobe Creative Suite® 4, providing the industry-standard vector software that completes your toolset for print, web, interactive, motion, and mobile content design.

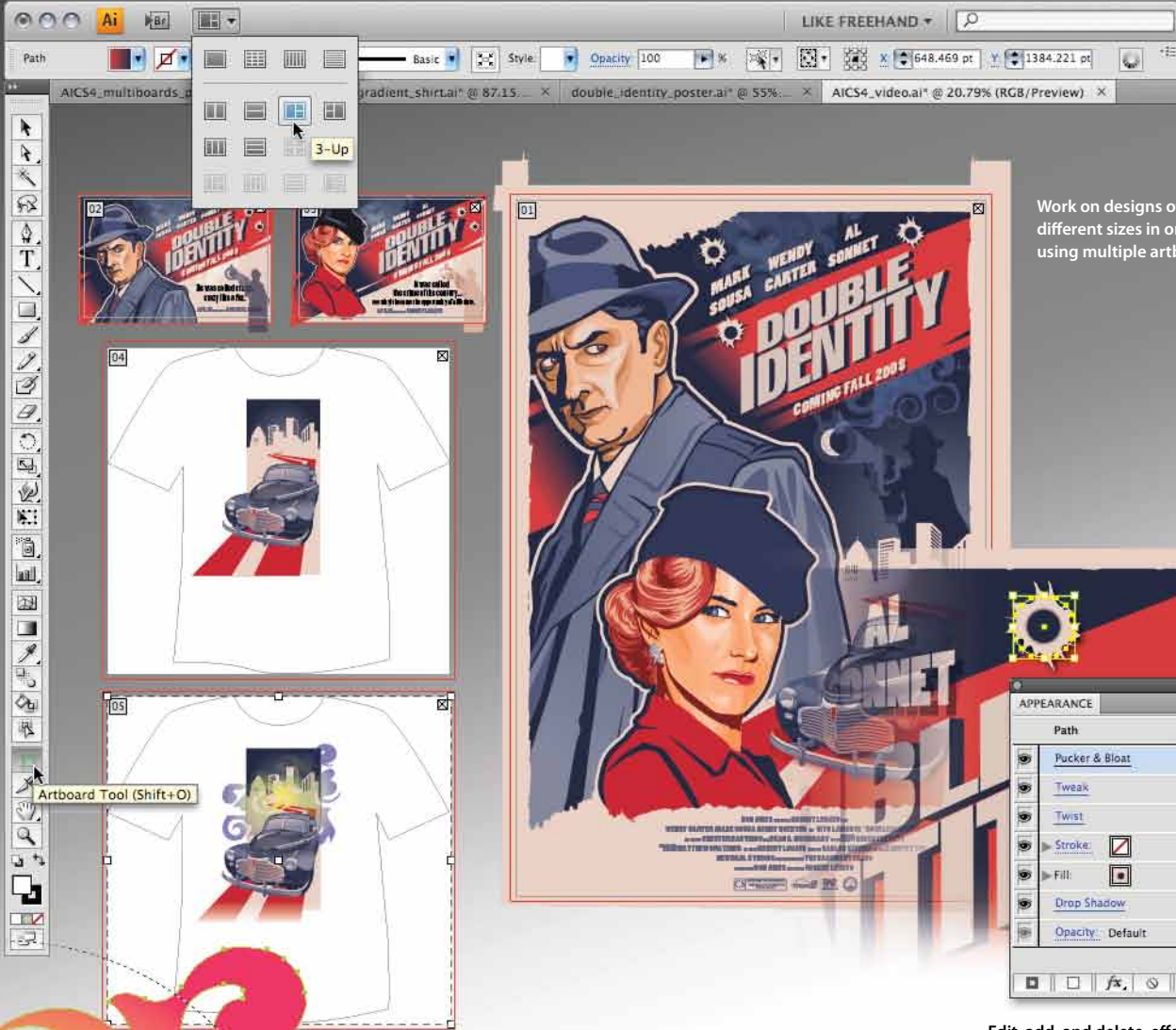
One of the new features in Illustrator CS4 that appeals to FreeHand users is multiple artboards. You can now work among many artboards of varying size in one file, and export them separately or together as a multipage PDF.

Also of interest to FreeHand users is the ability to work with tools and control effects directly on your objects, including the application of transparency to colors in a gradient.

We hope this guide gives you the basics to explore Illustrator CS4, and makes your transition from FreeHand a little bit easier.

Work among multiple files displayed in tabs or tiled.

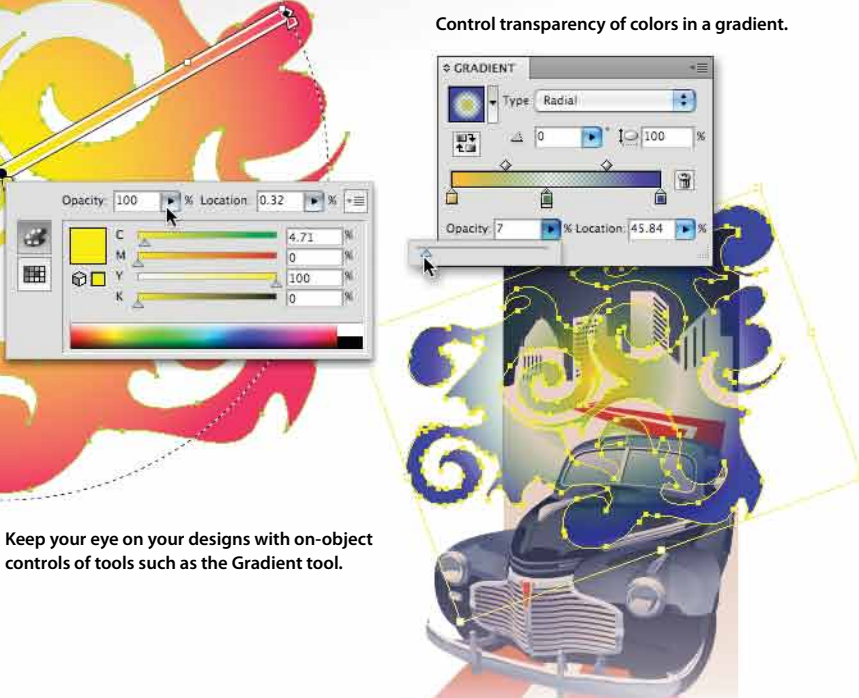
Quickly switch between workspaces, choosing presets or your own custom arrangements.



Work on designs of different sizes in one file using multiple artboards.

Edit, add, and delete effects, fills, and strokes right in the Appearance panel.

Control transparency of colors in a gradient.



Keep your eye on your designs with on-object controls of tools such as the Gradient tool.



Sketch with the Blob Brush tool that merges your strokes, then smoothly erase using the Eraser tool.

Key Terms

Because FreeHand and Illustrator are both vector drawing programs, they share many common tools and commands.

Many of the terms used in the Illustrator menus, dialog boxes, and panels are identical to those used in FreeHand. For example, tools and layers are essentially the same in both programs. In some cases, FreeHand and Illustrator use different terms for the same concept. For example, in FreeHand you work with pages, while in Illustrator you work with artboards. Once you understand the differences in terms, you are likely to find the concepts quite similar. Here are some key terms that differ between FreeHand and Illustrator:

FreeHand Term » Illustrator Term

Pasteboard » Canvas

What you know as the pasteboard in FreeHand is called the canvas in Illustrator. The canvas is the area outside the artboards that extends to the edge of a 227-inch square window. The canvas represents the space where you can arrange artboards, or create, edit, and store elements of artwork before moving them onto an artboard. Objects placed on the canvas are visible onscreen, but they do not print.

Pages » Artboards

In FreeHand, you can set up multiple pages within a single document; Illustrator provides multiple artboards within a file that serve as multiple pages or spreads. Alternately, you can divide the area of one artboard using page tiling to define multiple pages.

Object Properties Panel » Appearance panel

In FreeHand, the Object Properties panel is a context-sensitive area where you access formatting options for any selected object. In Illustrator, to achieve the same function, you use the Appearance panel. The Appearance panel lets you view and adjust the appearance of attributes for any object, group, or layer.

Multiple fills and strokes are listed in stacking order in the panel and effects are listed from top to bottom in the order in which they are applied to the artwork. Additionally, you can edit fills, strokes, and effects directly from the Appearance panel, and you can control their display with a quick toggle of the eye-icon.



Control object attributes in the Appearance panel.

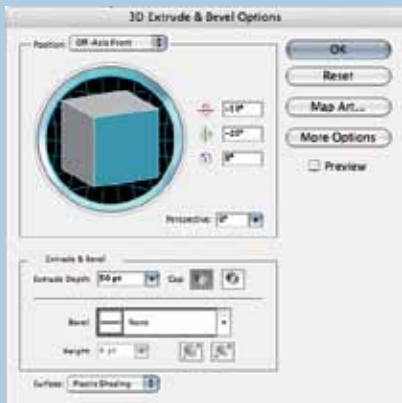
Import » Place

In Illustrator, you can place both graphic and text files; placed graphics can be either linked or embedded into the document and are accessible from the Links panel. Integration across Adobe Creative Suite components allows you, for example, to choose layer comps when you place Photoshop files into Illustrator.

FreeHand Term » Illustrator Term



The bounding box in Illustrator helps you apply transformations to selected objects.



Extrude, revolve, and rotate artwork and type to create complex three-dimensional objects using 3D effects in Illustrator.

Transform Handles » Bounding box

When you select objects with the Selection tool, Illustrator displays a bounding box around them. The bounding box lets you move, rotate, duplicate, and scale objects easily by dragging the object or dragging a handle (one of the hollow squares along the edge of the bounding box). To view the bounding box, choose View > Show Bounding Box.

Keyline View » Outline

By default, Illustrator displays all artwork in color. However, you can choose to display artwork so that only its outlines (or paths) are visible. Viewing artwork without paint attributes speeds up the time it takes to redraw the screen when working with complex artwork. To view artwork as outlines, choose View > Outline. To view artwork in color, choose View > Preview.

Live Vector Effects » Effects

Effects in Illustrator are live, which means that you can modify them even after they are applied. You can apply effects to any object and then modify its vectors or the effect's options, or you can remove the effect entirely using the Appearance panel. Once you apply an effect to an object, the Appearance panel lists the effect and enables you to edit, move, duplicate, or delete it, or save it as part of a graphic style.

Extrude Tool » 3D effects

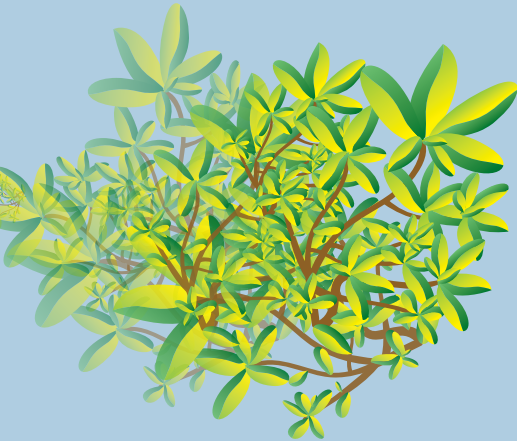
3D effects enable you to create three-dimensional objects by either extruding or revolving two-dimensional objects. You can control the appearance of three-dimensional objects with lighting, shading, rotation, and other properties.

Edit In External Editor » Edit Original

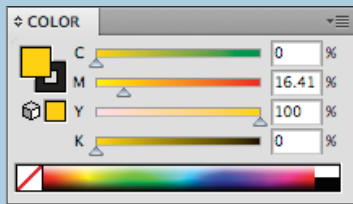
Illustrator is highly integrated with Photoshop. Edit a linked bitmap using Photoshop by selecting the placed image and choosing Edit Original in the Control panel or Links panel, or from the Edit menu.

Attach to Path » Type on a Path

In Illustrator, you select a path and type text on that path using the Type on a Path tool. You can then move or flip text along the path by dragging handles on the sides of the text. You can also choose to apply options such as Skew and 3D Ribbon while text remains editable.

FreeHand Term » Illustrator Term

This intricate foliage was created using the symbolism tools in Illustrator.



The Color panel

Graphic Hose Tool » Symbol Sprayer

The symbolism tools let you create and modify sets of symbol instances. You create a symbol set using the Symbol Sprayer tool. You can then use the other symbolism tools to change the density, color, location, size, rotation, transparency, and style of the instances in the set. You are not limited to a particular set of symbols; you can create and use as many as you want. All the symbols you create are available in the Symbols panel.

Output Area Tool » Multiple Artboards

Controlling the boundaries of your output is best accomplished with multiple artboards in Illustrator CS4. You can create up to 100 artboards in one file, each of any size and arranged as you like. You can control ruler parameters, video and title-safe indicators, and even create artboards within artboards to define custom subset areas of artwork. By default all artwork is cropped to an artboard upon output, and you can choose whether your multiple artboards are automatically output as separate pages or separate files.

Eraser » Eraser tool

Quickly remove areas of artwork as easily as you erase pixels in Photoshop by stroking with your mouse or stylus over any shape or set of shapes. New paths will automatically be created along the edges of your erased stroke with points laid down economically, but still preserving the smoothness of your erasure.

Styles » Graphic styles

A graphic style is a set of reusable appearance attributes. Graphic styles allow you to quickly change the look of an object. For example, you can change its fill and stroke color, alter its transparency, and apply effects in one step. All the changes you apply with graphic styles are completely reversible and editing the attributes that make up the graphic style is easy using the Appearances panel. You can even add styles to an object or group of objects without destroying existing attributes.

Mixer » Color panel

You use the Color panel to apply color to an object's fill and stroke, and also to edit and mix colors. The Color panel can display color values using different color models. By default, only the most commonly used options are visible in the Color panel. To display the panel, choose Window > Color. To change the color model, choose Grayscale, RGB, HSB, CMYK, or Web Safe RGB from the panel menu.

Paste Inside » Clipping Mask

Hide parts of an object or group of objects by defining a path as a clipping mask, with similar results as pasting contents into a closed path in FreeHand. Work easily with both masks and masked objects, quickly switching between them for editing and controlling visibility.

Converting Macromedia FreeHand documents

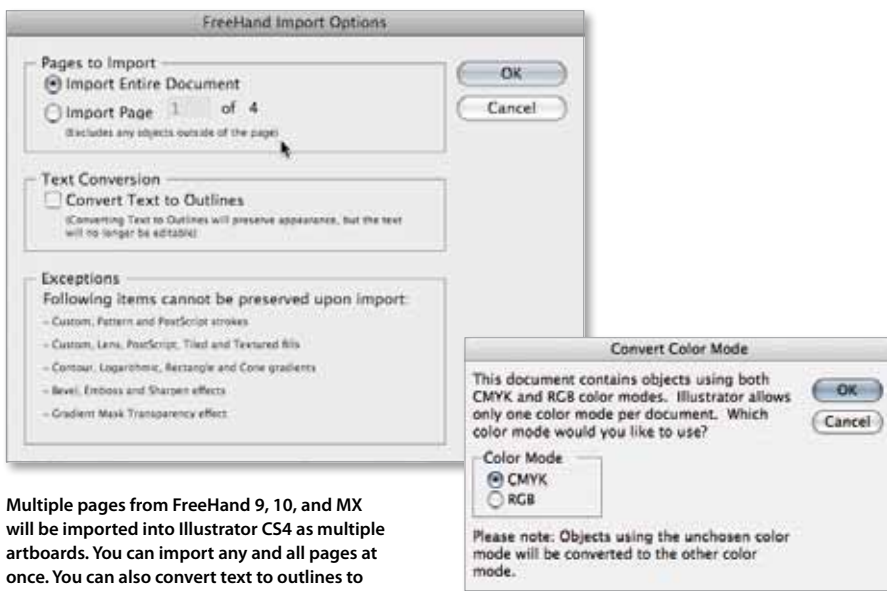
Illustrator can open FreeHand files up to version 10 and FreeHand MX (version 11). Artwork from FreeHand versions 7 and 8 will open with fewer options than later versions.

FreeHand allows you to import both CMYK and RGB image files. If you open a FreeHand document that contains both CMYK and RGB images in Illustrator, you'll be prompted to choose a specific color space (see "Setting up a New Document" on page 15).

If the original FreeHand document contains more than one page, these will become separate artboards in the Illustrator document; multiple artboards in Illustrator CS4 can be printed and saved separately or as a multipage PDF. You also have the option import only a specific page from a FreeHand file (see "Multiple Artboards" on page 17).

Other import features include:

- Import of FreeHand swatches, defined in the Swatches palette in FreeHand, as swatches in Illustrator CS4.
- Import of FreeHand symbols as symbols in Illustrator CS4.
- Import of FreeHand raster effects—drop shadow, basic and feather transparency—as live effects in Illustrator CS4.
- Import of FreeHand Envelopes as Envelope effects in Illustrator CS4.
- Import of FreeHand custom guides as Illustrator CS4 guides.
- The ability to outline text upon import so that text appearance in FreeHand is preserved in Illustrator CS4.
- Proper positioning of FreeHand text, including text alignment, text wrap, vertical text, and text inset, upon import into Illustrator CS4.



Multiple pages from FreeHand 9, 10, and MX will be imported into Illustrator CS4 as multiple artboards. You can import any and all pages at once. You can also convert text to outlines to preserve FreeHand appearances.

Illustrator can work in either CMYK or RGB color mode. You will be prompted to choose one or the other when you open a FreeHand 9, 10, or MX document that contains objects that use both CMYK and RGB color modes.

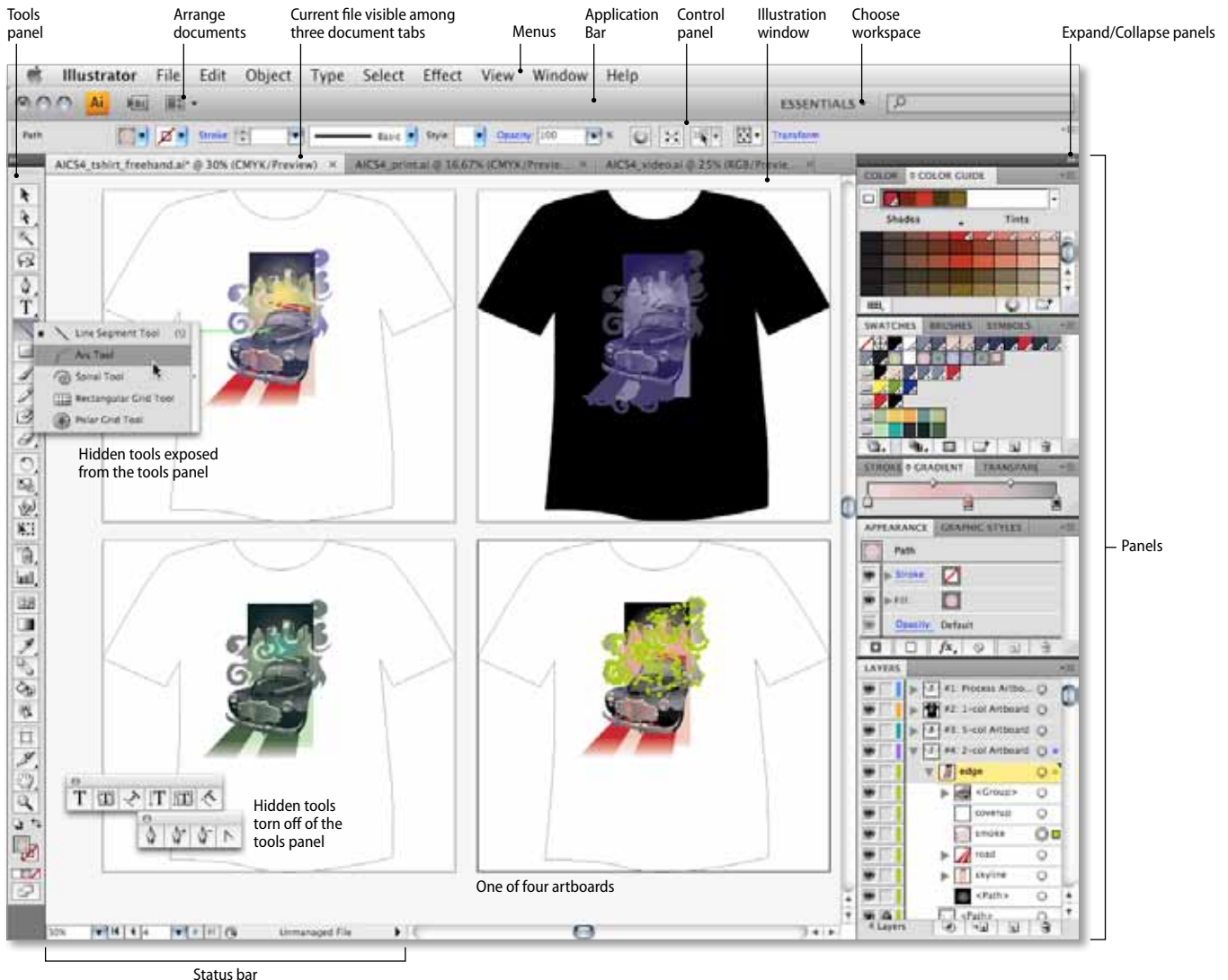
The Illustrator Workspace

Illustrator shares the same user interface with Photoshop, InDesign, Fireworks, and Flash Professional CS4, so you can quickly access familiar tools. You can dock panels in your favorite configuration, pull them out to float free anywhere on your screen, and collapse them to an icon view. You can save custom workspace configurations and move between files easily with tabbed and tiled views of multiple documents.

The basic workspace in Illustrator consists of an illustration window where you draw and lay out your artwork, a Tools panel that holds the tools for drawing and editing artwork, and panels to help you monitor and modify your artwork. Panels include a context-sensitive Control panel across the top or the workspace that displays controls based on your selection.

The status bar (at the lower-left edge of the illustration window) displays the current zoom level, the current artboard with an artboard navigation menu, and current tool. It shows date and time, number of undos and redos available, document color profile, and more.

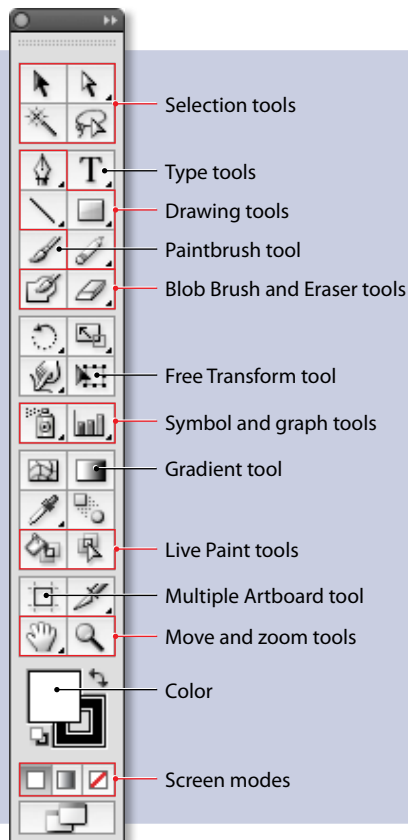
The Illustrator CS4 workspace



The Tools panel

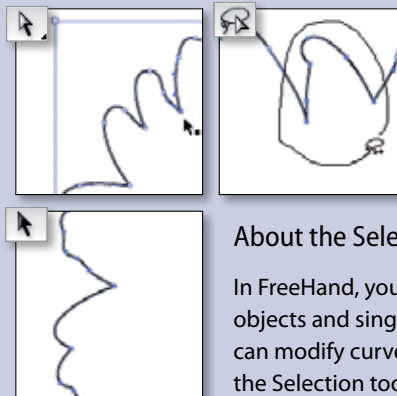
Use the tools in the Tools panel to create, select, and manipulate objects in Illustrator. Choose to display tools in a double or single column by clicking on the double arrows at the top of the Tools panel. Some tools have additional tools beneath them (hidden tools), indicated by a small triangle at the lower right corner of the tool. Click and hold to reveal hidden tools.

You can tear off hidden tools into separate panels by clicking and holding the tool, and then moving your cursor to the right and releasing at the edge of the hidden tool pop-up. Hover your cursor over any tool to see its name and keyboard shortcuts.






Illustrator tools

The first time you start Illustrator, the Tools panel appears at the left side of the screen. You can move the Tools panel by dragging its panel tab. You can also show or hide the Tools panel by choosing Window > Tools.



About the Selection tools

In FreeHand, you use the Pointer tool to select both objects and single points; with the Subselect tool, you can modify curves and objects in groups. In Illustrator, the Selection tool  lets you select objects or groups; the Direct Selection tool  lets you modify objects or groups and select multiple single points on a path. Use the Lasso tool  to select multiple points by making a free-form selection.

The Application Bar

The Application Bar is the top frame of the application window and includes options for arranging your workspace as well as fast access to Adobe Bridge (see page 14). The Arrange Documents menu enables layout of multiple Illustrator documents in a variety of tiled arrangements. The Favorites pulldown provides fast access to all preset workspaces and your custom saved workspaces. You can ensure that the Application Bar appears by choosing Window > Application Frame.

The Control panel

The Control panel is context sensitive and offers quick access to options related to the objects you select. For example, if you select a vector object, many controls you will need to change its attributes appear there, including commands for precise positioning. You can access anchor point controls, selection tools, clipping masks, envelope distortions, character attributes, and more, all exposed contextually so you can use the Control panel as your primary tool for editing your artwork.

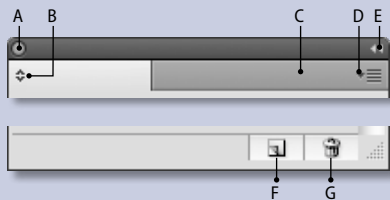
The Control panel also provides fast access to panels, which, in some cases, offer additional options. Click a blue hyperlink to open another panel for easy access. To configure the Control panel, choose options from the panel's pop-up menu, also called the panel menu.

The Application bar provides direct access to Bridge, document viewing options, a full selection of workspaces, and search.



The context-sensitive Control panel gives you immediate access to formatting options that pertain to your current selection.

Common panel actions



- A. Click to close panel.
- B. Click to show/hide panel options.
- C. Click to collapse/expand panel height.
- D. Click to show pop-up menu for the panel.
- E. Click to collapse/expand panel width.
- F. Creates a new iteration of the panel's "subject," such as an action, brush, style, layer, or swatch. Option-click (Mac OS) or Alt-click (Windows) to set options (except action and brush). Drag onto button to duplicate action, brush, style, layer, swatch, or appearance.
- G. Deletes action, brush, style, layer, swatch, or appearance; Option-click (Mac OS) or Alt-click (Windows) to delete without confirmation (except in Variables panel).

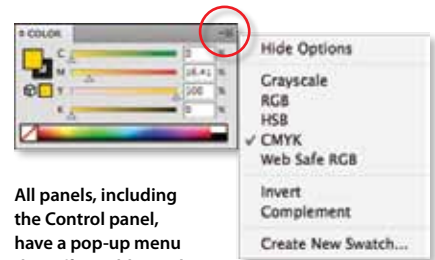
Other panel shortcuts

- Shift+Click selects range of actions, brushes, layers, links, styles, or swatches.
- Shift+Return/Enter applies value and keeps text box active.
- Command/Ctrl+click selects non-contiguous actions, brushes, layers (same level), links, styles, or swatches.
- Tab shows/hides all panels.
- Shift+Tab shows/hides all panels except Tools panel and Control panel.

Panels

You can access all panels in Illustrator from the Window menu; some can also be activated by clicking the blue hyperlinks in the Control panel.

A panel can be grouped with another by dragging its tab onto the other panel. To dock panels so that they move together, drag a panel's tab to the bottom of another panel until you see a blue line. When the panels are grouped or stacked in panes, they can be collapsed into an icon view to further optimize the working space. Once you have organized the panels, you can save your setup as a Workspace by choosing Window > Workspace > Save Workspace.



All panels, including the Control panel, have a pop-up menu that offers additional tool options and panel viewing options.



Panels can be collapsed into an icon view to optimize your screen space.

Context-sensitive menus

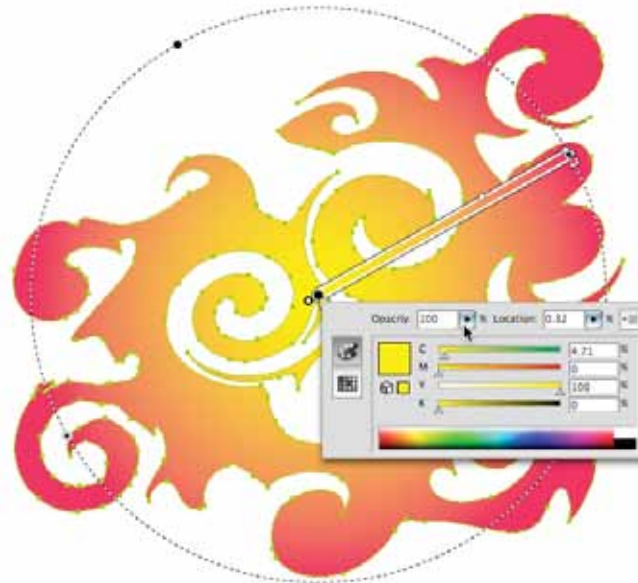
You can quickly access many commands using context-sensitive menus that display commands relevant to the active tool, selection, or panel. To display a context-sensitive menu, right-click in the document window or panel (or Control-click on Mac OS).



Right-click (or Control-click, Mac) on an object to display a menu providing fast access to contextual commands.

On-object controls

A number of tool control panels appear directly on your selected object. For example, when you click the gradient tool and then select an object, gradient panel controls appear on the selection so you can quickly edit your gradient and more easily stay focused on your work.



The gradient panel appears right on the selected object for instant feedback as you adjust the characteristics of your gradient.

Keyboard shortcuts

Tip: To print the list of keyboard shortcuts from within Illustrator, choose Edit > Keyboard Shortcuts to open the dialog box, and click Export Text.

Illustrator lets you assign keyboard shortcuts for many operations. The Keyboard Shortcuts dialog box (choose Edit > Keyboard Shortcuts) serves as your shortcut editor, and includes all commands that support shortcuts, some of which aren't in the default shortcut set. For a list of keyboard shortcuts, see page 40.



File Handling & Clipboard preferences let you choose how to copy artwork to other applications. You can also choose selection and snap tolerances, and how to display anchors and handles.

Preferences

Before you begin creating artwork with Illustrator, familiarize yourself with the program's default settings—specifically the options available in the Preferences dialog box (in Mac OS, choose **Illustrator > Preferences > General**, or in Windows, choose **Edit > Preferences > General**). You can customize these settings to suit your needs, creating a work environment that's both productive and comfortable. As you look through the panes in the Preferences dialog box, you'll see that many of the options are identical to those in FreeHand. You'll also find several unfamiliar but useful options, such as the option to use the clipboard to transfer selections between an Illustrator file and other Adobe applications.

The clipboard is particularly useful for moving paths from one application to another because paths are copied to the clipboard as PostScript language descriptions. Artwork copied to the clipboard is pasted in PICT format in most applications. However, some applications, such as InDesign, accept PDF or AICB (Adobe Illustrator Clipboard) data. PDF preserves transparency; AICB lets you specify whether you want to preserve the overall appearance of the selection or copy the selection as a set of paths (which can be useful in Photoshop and InDesign).

Color management

The Adobe color management system helps maintain the appearance of colors as you import images, edit or transfer documents between Adobe applications, and as you output your finished work.

By default, color management is turned on in Adobe Creative Suite 4 components. You can synchronize color settings to provide consistent display of RGB and CMYK colors no matter which application you view them in.

To change color settings within Illustrator, choose **Edit > Color Settings**. To ensure that your colors are synchronized across Adobe Creative Suite components, open Adobe Bridge, choose **Edit > Creative Suite Color Settings**, and select an appropriate profile. For more information about color management, search Illustrator Help.

Help and training

Adobe provides a number of ways to get help with learning to use Illustrator. Your first stop is Adobe Community Help, accessible by choosing **Help > Illustrator Help**. Not only will you find complete tools help, but thanks to a powerful search engine, you'll also find a variety of online resources from industry experts.

You can also watch videos on Adobe TV that both instruct and inspire. Get tips, tricks, and step-by-step tutorials that show you just how to achieve effects from the very simple to the wonderfully sophisticated. Use Adobe TV to discover the most current techniques developed by Illustrator users and to stay connected with the creative world.

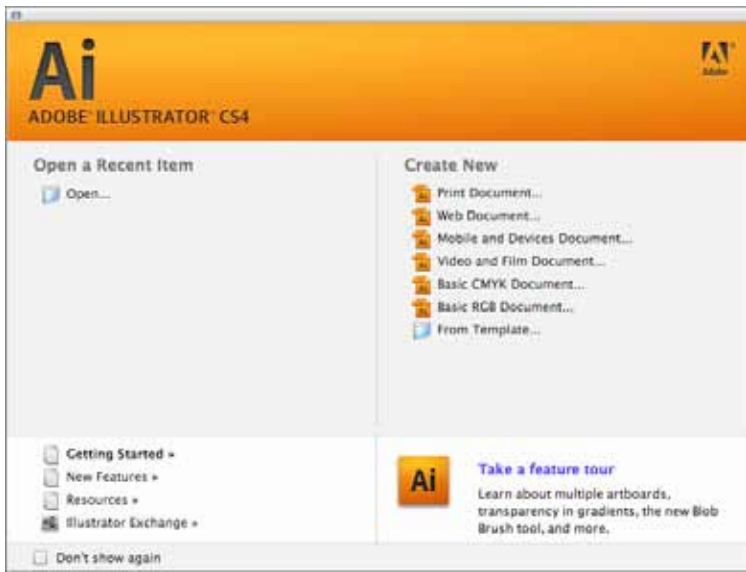
Find a comprehensive list of these and additional resources on page 44.



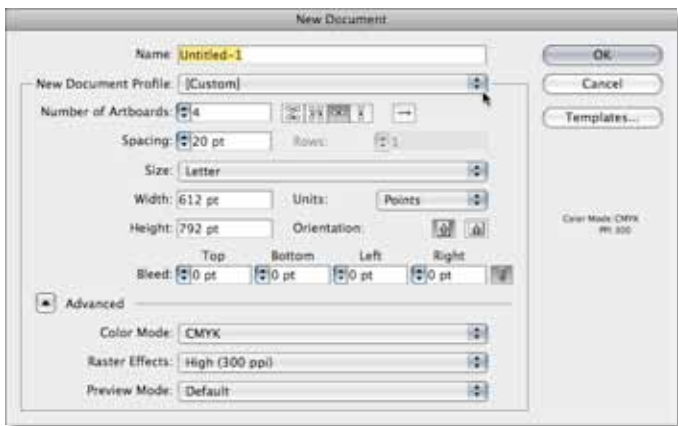
What is Bridge?

Adobe Bridge CS4 is a powerful, easy-to-use media manager for visual people, letting you easily organize, browse, locate, and view creative assets. Bridge provides centralized access to project files and global settings, as well as to XMP metadata tagging and searching capabilities.

Setting up a New Document



The Illustrator Welcome screen—your starting point for a new project.



When you create a new document, you can determine number of artboards, multiple artboard arrangement, document size, units of measurement, and bleeds. You can also choose a color mode.

When you start Illustrator, the Welcome screen lets you access your recent documents or choose a new type of document for your choice of media.

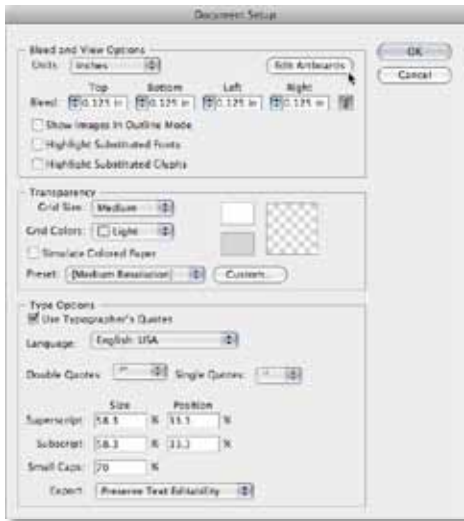
You can choose how many artboards you wish to work with, up to 100, arranged any way you want. For example, you can create a 12-page document for print with 12 letter-sized artboards arranged in three rows of four. And you can set bleed sizes for all artboards when you create a new document. All of these settings are easily changed at any time.

If you're working on a video project, choose a New Document profile for video, selecting a size such as NTSC DV. Your color mode will be set to RGB and your artboard will automatically show the format's dimensions with guides for video and title-safe areas.

If you're working on a web project, choose a New Document Profile for the web to automatically set raster resolution to 72ppi and color to RGB. Print profiles default to CMYK color and offer a range of popular artboard setups including preset raster-effects resolutions. You can also save your own custom profiles that specify setup parameters such as artboard dimensions, swatches, brushes, styles, and color spaces.

To create a new document, you can also choose File > New and choose a New Document Profile depending on the intended use of your illustration. As noted above, the New Document Profile will set dimensions, units, color mode and raster effects parameters based on the profile selected. Any of these settings can be modified to suit your needs.

You can change raster effects settings at any time by choosing Effects > Document Raster Effects settings. To change the color mode, choose File > Document Color Mode.



You can change the document setup at any time by choosing File > Document Setup.

Where's the Document panel?

In FreeHand, you use the Document panel to target and select pages and to choose page dimensions, orientation, bleed settings, and printer resolution.

In Illustrator, choose File > Document Setup to access artboards options and choose settings for type and transparency at the document level. You can also define the dictionary used for spell-checking and hyphenation, the position of superscripts, the scale for small caps, or how to copy transparency effects over to the clipboard for use within Illustrator or in other applications. Bleeds are also defined and edited in the Document Setup dialog box.

Document templates

You can use templates to create new documents that share common settings and design elements. The template can also contain symbols for common design elements (such as logos) and specific sets of color swatches, brushes, and graphic styles. Save your artwork in Adobe Illustrator Template (AIT) format and when you select a template using the New From Template command, Illustrator creates a new document with identical content to the template.



- Printable area
- Nonprintable area (printer margins)
- Artboard
- Canvas

The Illustrator document

Artboards represent the areas that can contain printable artwork. They can be of any dimension, as can your page size. For example, one artboard may be 15x15 inches, while your print settings specify 8-1/2x11-inch paper.

You can view page boundaries by showing page tiling (View > Show Page Tiling). When page tiling is on, the printable and nonprintable areas are represented by a series of solid and dotted lines. You can move the printable area by using the Page tool.

The canvas is the 227-square inch area outside of all artboards. This is the total area available for arranging and working with your artboards.

You can create, edit, and store elements of artwork in the canvas, but they will not print.

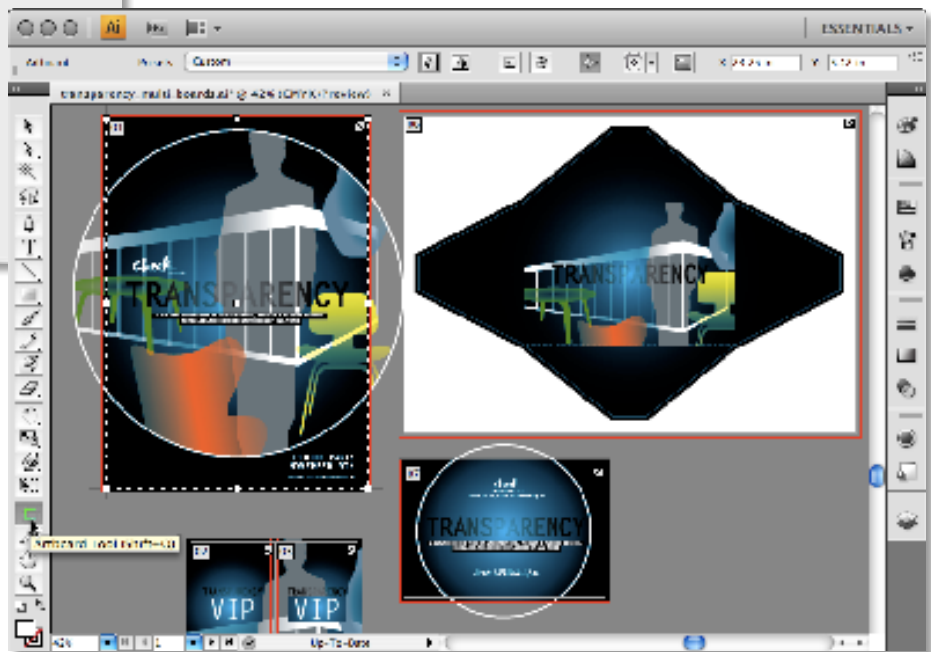
Multiple Artboards

When you open a multipage FreeHand file with Illustrator CS4, the pages are imported as individual artboards. Not only does this support pages of the same size, your artboards can be of any dimension so you can work on a variety of projects in a single file. Arrange up to 100 artboards on your canvas any way you want—tiled, overlapping or freeform. You can even create an artboard inside an artboard to easily export just a piece of a composition.

Multiple artboards provide a powerful way to organize projects with multiple pages or diverse outputs by sharing settings and content across designs. And you can export your artboards in any supported file format as a series of files that are automatically numbered in sequence, or save as a single, multipage PDF file—your choice.



Open multipage FreeHand documents in Illustrator, choosing which pages to import as multiple artboards.



How do I set up measurement units?

In Illustrator, there are several ways to select units of measurement and change units display as you work:

- In the Preferences dialog box, choose Units & Display Performance and select units of measurement for your document, and for Stroke and Type.
- Choose a global measurement unit when you create a new document. You can always change it later by using the Document Setup dialog box.
- Override defaults by typing units in the Control panel. For example, follow your numeric value with abbreviations such as cm, mm, in, Q, pt, pc, or px.
- Turn on ruler visibility by selecting View > View Rulers. You can then quickly switch ruler units by right-clicking (or Control-clicking in Mac OS) on the ruler itself.



Units & Display Performance preferences let you choose your measurement system.

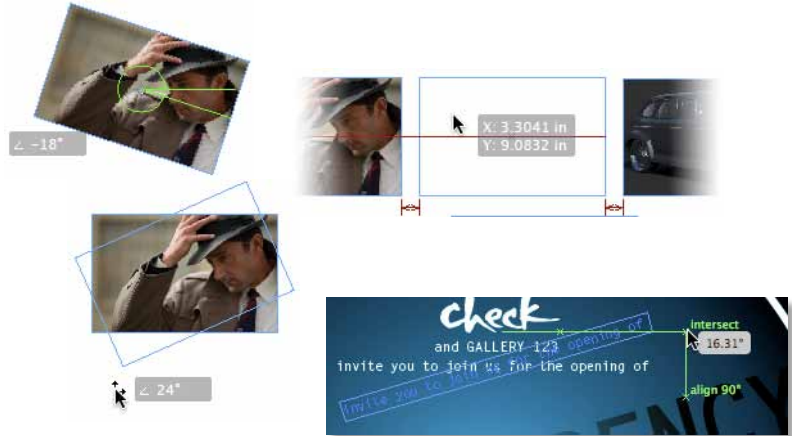


Smart Guides preferences enable customization of Smart Guide behaviors and display.

Using guides and grids

Guides help you align text and graphic objects. You can create ruler guides (straight vertical or horizontal lines) and guide objects (vector objects that you convert to guides). You can choose guide styles and color. By default, guides are unlocked, and can be moved, modified, or deleted. Lock guides in place by choosing View > Guides > Lock Guides.

Additional indicators called Smart Guides assist you while you work. Align objects and artboards with each other using Smart Guides and see on-cursor readouts showing location coordinates. You can also see rotation angle, and relation to nearby objects according to your selection's edge rather than cursor position—continuously, while you transform your object. Smart Guide options are set up in the Preferences dialog box.



Smart Guides with on-object readouts enable fast, accurate positioning of objects in relation to each other.

Tip: To emulate the snapping feature in FreeHand, activate Smart Guides in Illustrator by choosing View > Smart Guides. Smart Guides are temporary snap-to guides that help you create, align, edit, and transform objects relative to other objects.

Tip: You can perform simple math in any box that accepts numeric values using a single mathematical operator, such as + (addition), - (subtraction), x (multiplication), / (division), or % (percent).

When you choose View > Show Grid, a grid appears behind your artwork in the illustration window. Change the spacing between gridlines, grid color, and grid style using the Preferences dialog box. Grids and guides do not print.

Where is the Guides Layer?

In FreeHand, there is a default layer called Guides that allows you to move guides over or under the artwork. In Illustrator, guides belong to the layer on which they were created; to emulate FreeHand's behavior, create a layer and name it Guides. You can add guides to that layer, turn the layer on or off, and move it over or under the layers of your artwork.

Using layers

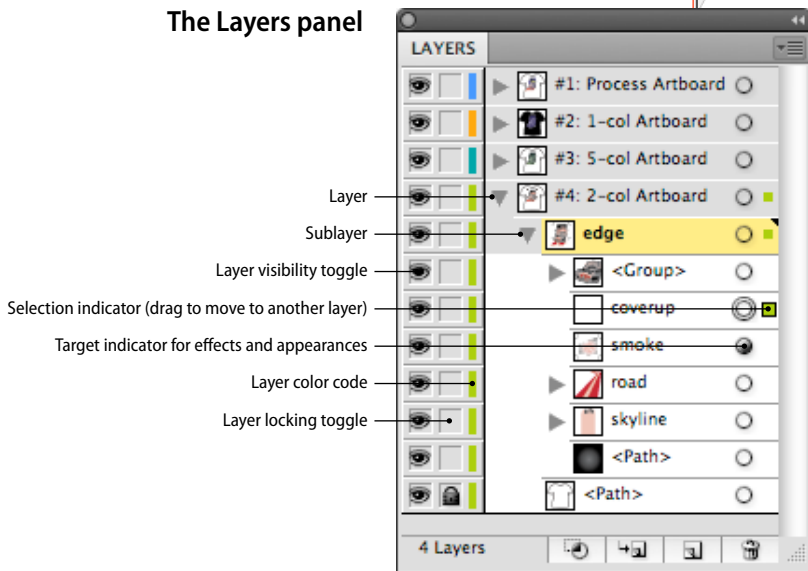
When creating complex artwork, it's a challenge to keep track of all the items in your document window. Small items get hidden under larger items, and selecting artwork becomes difficult. Layers provide a way to manage all the items that make up your artwork. Think of layers as clear folders that contain artwork. If you reshuffle the folders, you change the stacking order of the items in your artwork. You can move items between folders and create subfolders. To display the Layers panel, choose Window > Layers.

The structure of layers in your document can be as simple or complex as you want it to be. By default, all items are organized in a single layer. However, you can create new layers and move items into them, or move elements from one layer to another. The Layers panel provides an easy way to select, hide, lock, and change the appearance attributes of artwork. You can even create template layers, which you can use to trace artwork, or exchange layers with Photoshop.

By default, Illustrator assigns a unique color to each layer in the Layers panel. The color appears in the layer's selection column when one or more objects within the layer are selected. The same color appears in the document window in the bounding box, path, anchor points, and center point of the selected object. You can use this color to quickly locate an object's corresponding layer in the Layers panel, and you can change this layer color to suit your needs.

When a layer or an object contains other layers or objects, a triangle appears to the left of the item's name in the Layers panel. Click the triangle to show or hide the contents. When a layer or an object is selected, a colored square appears at the right edge of the item's name in the Layers panel; to move the selected item to another layer or change its stacking order, drag the colored square to the desired layer.

The Layers panel



Working with Brushes and Gradients







Use a wide variety of drawing tools in Illustrator to create vector graphics.

Tip: While using the Polygon or Star tool, press the Up Arrow and Down Arrow keys to add and remove sides from a polygon or points from a star.




Drawing

Drawing in Illustrator is very similar to drawing in FreeHand; you use the Pen, Paintbrush, Blob Brush, and Pencil tools to draw vector graphics in Illustrator.

Using the Pen tool

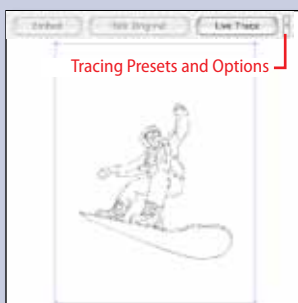
The Pen tool  is the principal tool for drawing straight lines, Bézier curves, and complex shapes. Three related tools enable manipulation of anchor points: the Add Anchor Point tool  adds anchor points to a path, the Remove Anchor Point tool  removes anchor points, and the Convert Anchor Point tool  converts a corner point to a smooth point or vice versa. You can also quickly access many Pen tool options in the Control panel such as control for removing, connecting, and cutting paths.

Selecting and modifying paths and anchor points

In Illustrator, you select entire paths (all anchor points selected) using the Selection tool . To select individual anchor points, you can use the Direct Selection tool  or the Lasso tool ; then move and modify anchor points. When you run your cursor over any anchor point you can easily see and select it. In FreeHand, selected anchor points are indicated by a hollow square; in Illustrator, selected anchor points are indicated by a filled square.

To align and distribute points, just as you would objects, make a selection with the Direct Selection tool and use the alignment controls in the Control panel or in the Align panel.

There are a variety of ways to divide paths and add anchor points. Use the Path Eraser tool to remove parts of a path by stroking across a single selected object or path segment. Ready access to controls in the Control panel enables anchor point connection, conversion to corner or smooth, addition and removal of anchor points, and control of handle visibility.



Create a Live Trace object.



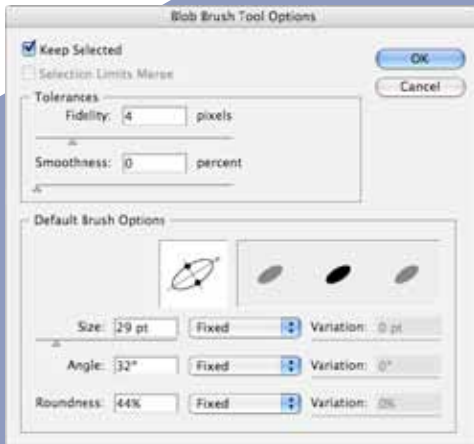
Easily control resulting line quality.

Live Trace

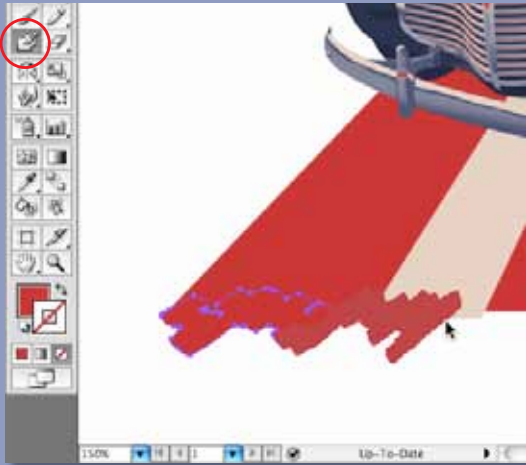
Live Trace automatically turns placed images into beautifully detailed vector graphics that are easy to edit, resize, and manipulate. You simply select a placed bitmap image, and click the Live Trace button in the Control panel to create a Live Trace object. All settings are fully adjustable to achieve exactly the line quality and tracing characteristics you need, or select from a number of presets.

Tip: For more on Live Trace, see *Creating Vector Content Using Live Trace* on the Adobe website (www.adobe.com/products/illustrator/pdfs/creating_vector_content.pdf).

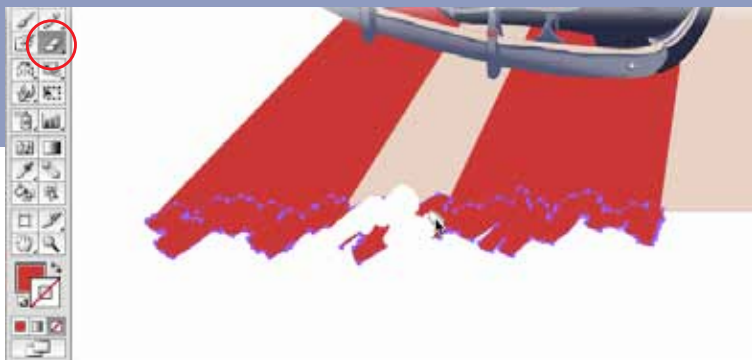
A New Way to Draw



The Blob Brush tool works with the calligraphic brushes in Illustrator CS4 or you can create custom brush shapes.



The flexibility of the Blob Brush tool, with its shape options and easy switch to the Eraser and Smooth tools, results in the most natural and fluid way of drawing yet in Illustrator.



In Illustrator, you can create shapes using natural sketching, thanks to the BlobBrush tool, the Eraser tool, and the Smooth tool. With a combination of strokes and erasures, you can quickly experiment with new shapes and then perfect your objects without having to use any geometric tools or open any panels.

Using the Blob Brush

Sketch with strokes that flow together using the Blob Brush tool. Recapture the joy of fingerpainting with a tool that provides amazing control while you sketch naturally and fluidly. The Blob Brush tool generates a clean, filled, vector shape while you sketch, even when strokes overlap, merging your paths naturally into a single object that's easily selected and edited. And you can customize how your drawing flows together, choosing options for stroke character and pressure sensitivity.

Using the Eraser tool

As with the Blob Brush tool, you can define the diameter, angle, and roundness of your Eraser tool. Stroke over your artwork to remove areas regardless of the structure of the shape, and with an economy of new anchor points. You can erase through all objects on all layers with no selection, you can isolate specific objects or groups to erase, or you can toggle off visibility of layers you wish to remain intact. Double-click the Eraser tool to show the Options dialog box, where you can set behaviors to achieve just the effect you want.

Using the Smooth tool

Reduce or eliminate unwanted bumps in a path using the Smooth tool. Stoke along a selected path and see a clean smoothing of the shape the without adding unwanted anchor points. Control the fidelity of new points and amount of smoothness. Not only can you smooth the appearance of a bumpy path, the Smooth tool is perfect for simplifying a path by removing extra anchor points.



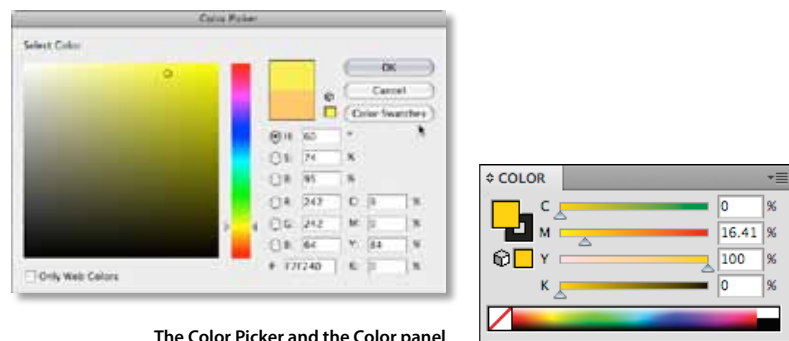
The color selection area in the Tools panel

Creating and applying color

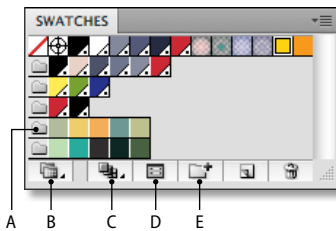
In Illustrator, there are several ways you can apply color to strokes and fills.

The Color Picker lets you select an object’s fill or stroke color by choosing from a color spectrum, defining colors numerically, or clicking a swatch. To display the Color Picker, double-click the fill or stroke color selection box in the Tools panel or Color panel.

In addition, you can use the Color panel to apply color to an object’s fill or stroke, and use it to edit or mix colors. The Color panel can display color values using different color models. To display the panel, choose Window > Color or click on Fill or Stroke in the Tools panel.



The Color Picker and the Color panel



The Swatches panel lets you view and organize named colors in groups.

- A. Color Group
- B. Swatch Libraries
- C. Show Swatch Kinds
- D. Swatch Options
- E. New Color Group

Tip: Note that with artwork selected, double-clicking on a Color Group icon will recolor the selected artwork using the new colors in that color group. And a Recolor Artwork dialog box will open automatically for fine-tuning.

Working with swatches

Swatches are named colors, tints, gradients, and patterns. The swatches associated with a document appear in the Swatches panel. In addition, you can open libraries of swatches from other Illustrator documents, and access various color systems. Swatch libraries appear in separate panels and are not saved with the document until you drag and drop specific swatches to the Swatches panel. Swatches can be organized into groups and viewed in organized hierarchies.

In FreeHand, swatches are global (meaning that when you modify the swatch, all items colored with it change accordingly); in Illustrator, you can choose whether or not swatches are global. You can save your own swatch libraries to use in other Illustrator documents by saving in Illustrator format (AI). You can also share solid swatches between Photoshop, Illustrator, and InDesign by saving a swatch library for exchange (ASE, Adobe Swatch Exchange). The colors appear the same across applications as long as your color settings are synchronized. You can also create and share color group swatches by using the Kuler panel or the Kuler website.

How do I access Pantone Libraries?

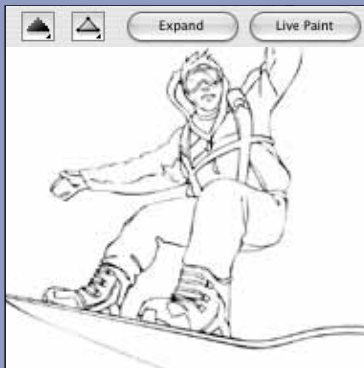
To open a specific swatch library, including PANTONE®, HKS, Trumatch, FOCOLTONE, DIC, TOYO, and Web, choose it from the Window > Swatch Libraries submenu or from the Swatch Libraries menu in the Swatches panel. When you open a swatch library, it appears in a new panel (not in the Swatches panel as in FreeHand).

Live Paint

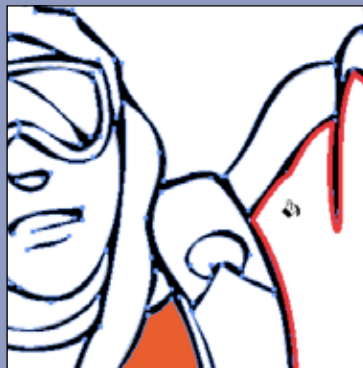
Tip: Triple-click with the Live Paint Selection tool to select all regions in a Live Paint group that are filled with the same color.

Live Paint lets you fill vector graphics intuitively by automatically detecting shapes and correcting gaps. You can use Live Paint on any group of shapes, or try it on a traced image. Select the traced vectors, and click the Live Paint button in the Control panel to convert them to a Live Paint group. Select the Live Paint Bucket tool and click to fill regions with color or gradients, using the arrow keys to choose which color swatch to apply. A red outline indicates regions that you can fill in individually. Or, drag the bucket across multiple regions to select them and fill them at once.

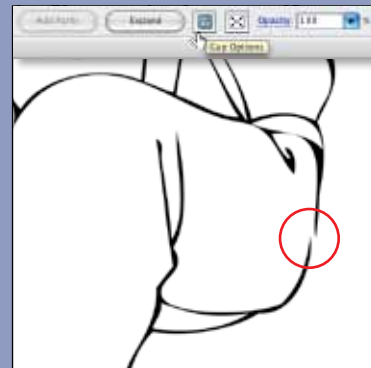
Live Paint enables location and repair of gaps where color leaks through open edges into adjacent regions by clicking the Gap Options button in the Control panel.



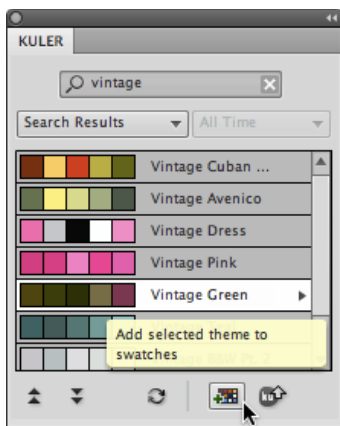
Convert vectors to a Live Paint group.



Paint with the Live Paint Bucket.



Control gaps in your artwork.



Use Kuler inside Illustrator to browse and search for Kuler themes. Add colors from the Kuler community to your Swatches panel with a single click.

Kuler

The Kuler panel is your portal to groups of colors, or themes, created by the online community of designers. You can use it to browse thousands of themes on Kuler, and then download some to edit or to include in your own projects. You can also use the Kuler panel to share your themes with the Kuler community by uploading them.

Open the Kuler panel by selecting Window > Extensions > Kuler. Search for color themes by keywords and add selected themes to your swatches panel. You can also save your search terms and quickly save themes that catch your eye to your own Kuler list of saved themes.

You will need an internet connection to access the Kuler community from within Illustrator. You can also work with Kuler in any standard browser by visiting <http://kuler.adobe.com>.

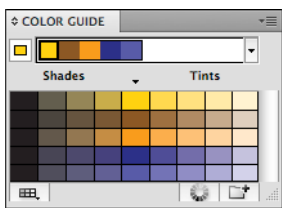
Live Color

Live Color is a complete color exploration environment within Illustrator CS4. If you have ever been frustrated by having to color objects individually, you will appreciate this interactive way to create and apply color schemes.

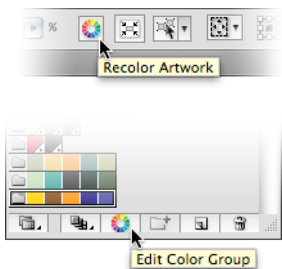
Live Color lets you work with color in a variety of ways. Discover new and unique color combinations that you can save and reuse. Interactively apply color to multiple objects at once, test color schemes quickly, and re-color artwork according to specific schemes such as PANTONE or any custom library.

Live Color includes the Color Guide panel, which invites exploration of color groups without affecting your artwork. Use the Color Guide panel to find compelling colors and save them to organized color groups in your Swatches panel. You can create color schemes based on 23 classic color-harmony rules such as Complementary, Analogous, Monochromatic, and Triad, or you can create custom harmony rules. Choose a base color, and then see what variations you come up with according to rules you choose. You can also limit color schemes to existing libraries such as PANTONE solids or any set of colors you may have saved in a previous project.

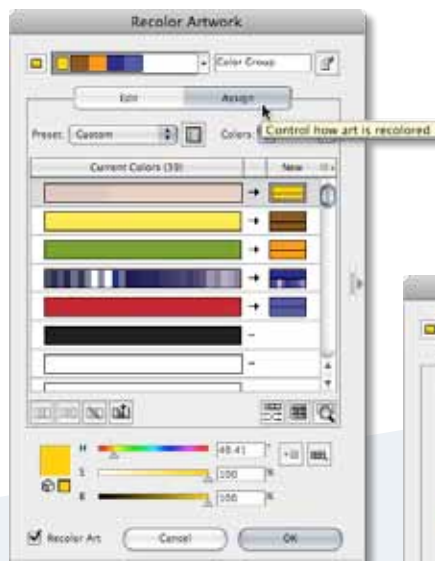
Live Color is also ideal for presenting color options to clients. Quickly change the entire look and feel of a logo, a piece of collateral, or an illustration to present likely color schemes in the comp phase of a project. And saving color variations is easier than ever, so moving from comps to final production is efficient, thanks to quick application of saved schemes.



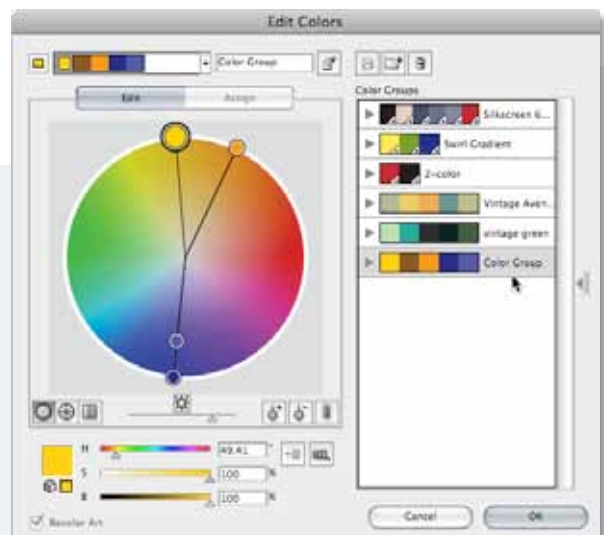
Use the Color Guide panel to quickly redefine color schemes based on a selection or by limiting the colors to a specific swatch library.



Access Live Color via the Control panel or via the Swatches and Color Guide panels.



Open Live Color's Edit Colors and Recolor Artwork dialog boxes that enable creative color scheme experimentation and fast recoloring of selected artwork.



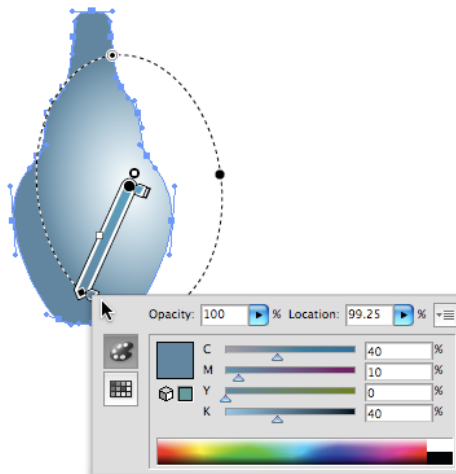
Transparency in Gradients

In Illustrator, you apply gradient fills to objects using the Gradient tool that features on-object controls for easy editing. When you click the Gradient tool, the default gradient or last-applied gradient will be immediately applied to your selected object. You can then edit the gradient and see results as you work, right on your object.

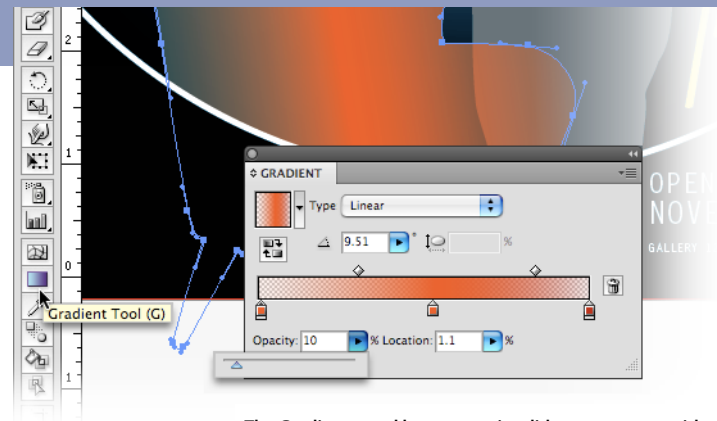
Gradients can also be added and edited using the Gradient panel. You can save gradients to the Swatches panel for quick application to other objects and you can adjust the transparency of any color in your gradients.

You will find that Illustrator gradients are smoother than those you create in FreeHand (without visible linear or radial steps) and output exactly as you have created them.

Gradients are defined by a series of stops in the gradient slider (a minimum of two). A stop is the point at which a gradient changes from one color to the next, and is identified by a square below the gradient slider.

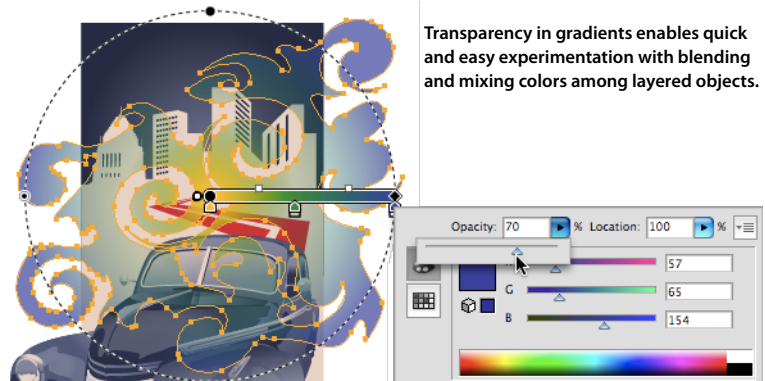


Gradient controls on your object provide instant visual feedback. Add and edit color stops, adjust the location and angle of a gradient, and even change the shape of an elliptical gradient—all right on the object.



The Gradient panel has an opacity slider you can use with any gradient stop to create transparent colors. Opacity is indicated by a checkerboard pattern in the gradient bar.

You can also set the angle of your gradient with a slider and define the dimension of a radial gradient to get an ellipse.



Transparency in gradients enables quick and easy experimentation with blending and mixing colors among layered objects.



Drag vector graphics into the Swatches panel and use them as patterns that you can apply to fills and strokes.

Patterns

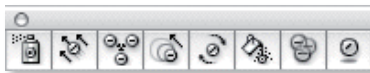
Illustrator comes with many patterns that you can access in the Swatches panel and in the Illustrator Extras folder on the Illustrator CD. Patterns in Illustrator can be much more intricate than the patterns offered in FreeHand, and you can also design patterns from scratch with any of the Illustrator tools, customize existing patterns, and see the resulting patterns onscreen as you work.

Patterns tile from left to right from the ruler origin (by default, the bottom left of the artboard) to the opposite side of the artwork. To adjust where all patterns in your artwork begin tiling, change the document's ruler origin. Patterns intended for filling objects (fill patterns) differ in design and tiling from brush patterns. For best results, use fill patterns and brush patterns on the objects the way they were intended. Brush patterns can consist of up to five tiles (for the sides, outer corners, inner corners, and the beginning and end of the path). The additional corner tiles enable brush patterns to flow smoothly at corners.

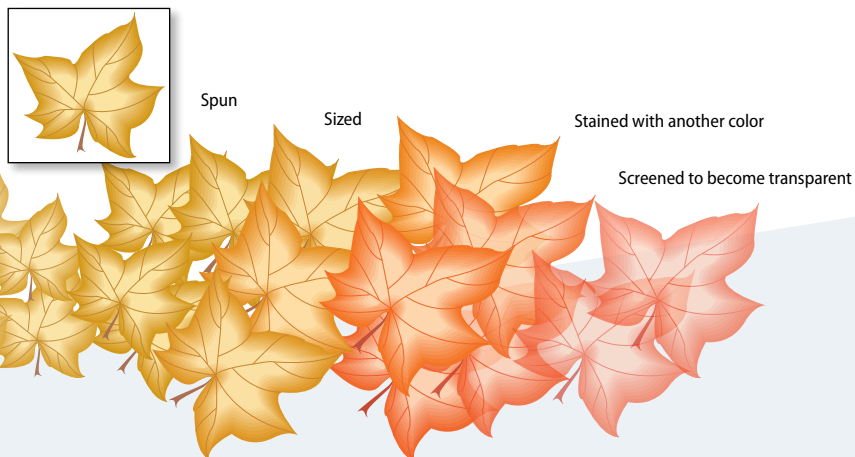
Symbols

Working with symbols is similar to working with graphic elements in a FreeHand Library. A symbol is an art object that you can reuse in a document. For example, if you create a symbol from a leaf, you can then add instances of that symbol multiple times to your artwork without adding the complex art itself. Each symbol instance is linked to the master symbol in the Symbols panel or a symbols library. Using symbols saves you time and greatly reduces file size.

You can make a symbol from any vector, raster, or type object in your document or use Illustrator's built-in Symbols library. To create a symbol, drag and drop a graphic element into the Symbols panel. After you place a symbol on the artboard, you can edit the symbol's instances and, if you want, redefine the original symbol.



Use the symbolism tools to add and manipulate multiple symbol instances at once. You can spray, shift, scrunch, size, spin, stain, screen, or style symbols using styles from the Graphics Styles panel.



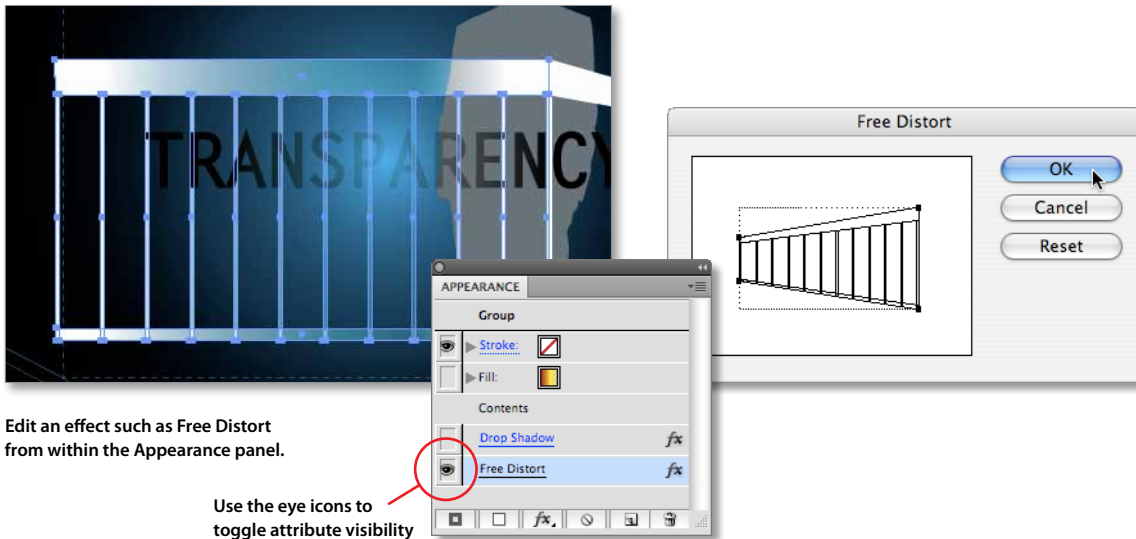
Working with Appearances and Styles

The Appearance panel

In FreeHand, you determine the properties of your objects in the Object Properties panel. In Illustrator, you use the Appearance panel to view and adjust the appearance attributes for an object, group, or layer.

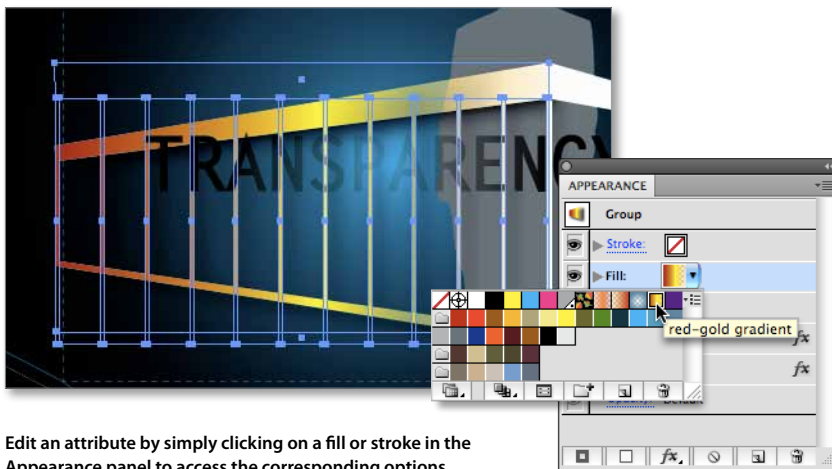
Appearance attributes are properties that affect the look of an object without altering its underlying structure. Appearance attributes include fills, strokes, transparency, and effects that you can apply to one object or multiple objects. You can then edit, remove, or toggle the visibility of attributes from within the Appearance panel in Illustrator CS4. You can even copy and paste inside the panel, so adding attributes to any object is fast and simple.

In the Appearance panel, fills and strokes are listed in stacking order; top to bottom in the panel as they correlate to front to back in the artwork. Effects are listed from top to bottom in the order in which they are applied to the artwork. To display, choose Window > Appearance.



Edit an effect such as Free Distort from within the Appearance panel.

Use the eye icons to toggle attribute visibility



Edit an attribute by simply clicking on a fill or stroke in the Appearance panel to access the corresponding options.

If you wish to select all objects in your artwork that have certain attributes, you can use the Select menu to choose Same Appearance Attribute. Once you have selected objects with at least one common attribute, edit that attribute in the Appearance panel and see immediate results on all objects at once.

The power of editing attributes in the Appearance panel lies in easy control of advanced effects without interacting with multiple panels. You can work in a more centralized manner, manipulating styles and complex combinations of attributes across many objects—all from one place.



Thumbnail previews show you the style, even on live text.

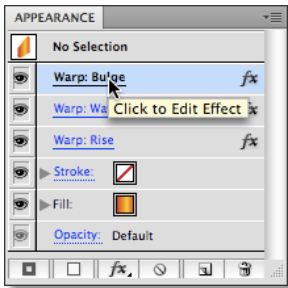


Graphic styles

As in FreeHand, graphic styles in Illustrator are combinations of fills, strokes, and effects that are saved together as a style. In Illustrator, combinations of attributes can be applied to objects or text as a single graphic style, and you can layer and combine multiple styles for unique effects. The Graphic Styles panel includes an option to preview all your styles on the selected object or group of objects. See how a style will look without having to actually apply it.

The Graphic Styles panel and the Appearance panel work hand in hand. To see all the attributes that make up a graphic style, click on the style and find its attributes listed in the Appearance panel—each easily edited individually. And you can add a new style to an object while pressing the Option key (Mac OS) or the Alt key (Windows) and observe that it doesn't replace existing appearances.

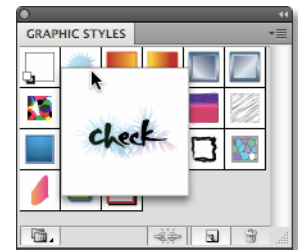
Illustrator CS4 includes a new library of prebuilt styles to jump-start your creative exploration. It includes sets of effects such as pre-set blurs and drop shadows that you can add without affecting fills. And, of course, you can generate your own libraries of graphic styles that you can use again and again.



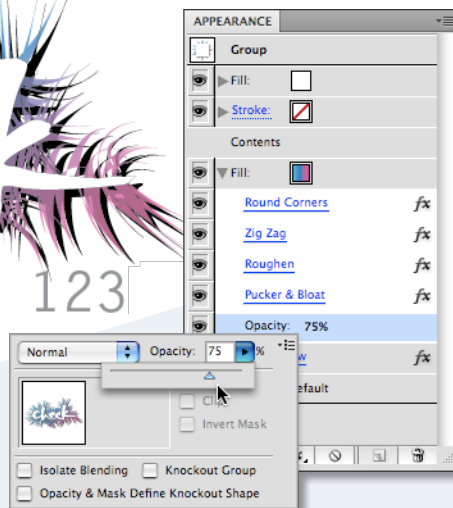
Change style attributes in the Appearance panel and text remains editable.



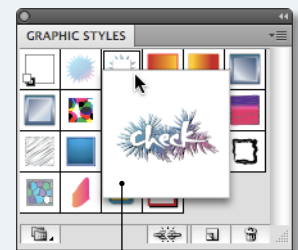
and GALLERY 123



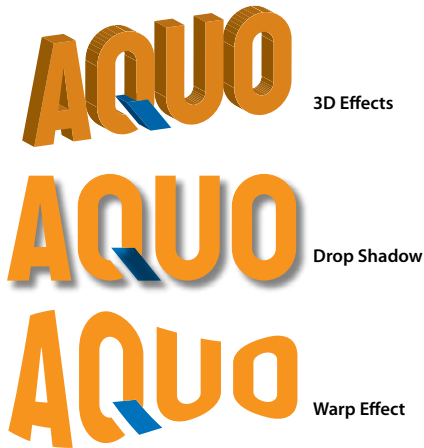
and GALLERY 123



Edit attributes of a graphic style in the Appearance panel, then quickly redefine your style or create a new one.



New style



Effects

Many commands for changing the look of objects are available in the Effect menu. Effects are live, which means you can apply an effect to an object and then modify or remove it using the Appearance panel. To apply an effect, select an object, multiple objects, or groups of objects and choose an effect from the Effect menu. The effect appears in the Appearance panel where you can edit it, move it, duplicate it, delete it, or save it as part of a graphic style.

The effects in the top half of the Effect menu are vector effects. You can apply these effects only to vector objects or to the fill or stroke of a bitmap object in the Appearance panel. The following effects and effects categories from the top section are exceptions to this rule and can be applied to both vector and bitmap objects: 3D effects, SVG Filters, Warp effects, Transform effects, Drop Shadow, Feather, Inner Glow, and Outer Glow.

The effects in the bottom half of the Effect menu are raster effects. You can apply them to either vector or bitmap objects.

When you use an effect, it doesn't change the underlying geometry of the object. To make the effect permanent so that you can access new points and paths, you must expand the object by choosing Object > Expand.

Placing graphics

The Place command is the primary method of importing graphics, because it provides the highest level of support for file formats, placement options, and color. After you place files, use the Links panel to identify, select, monitor, and update any of your links. Alternatively, you can use Bridge to drag and drop assets onto any artboard. Learn more about Adobe Bridge CS4 on page 14.

One of the benefits of Creative Suite 4 is integration among its components. This means that you can not only place EPS, TIFF, and other files, but also place native Photoshop files that include transparency, and control the visibility of layer comps in linked, embedded, and opened Photoshop files as easily as you control the visibility of regular Photoshop layers. Edit a placed image by choosing Edit Original from the Control panel or the Links panel in Illustrator. The placed file will open in Photoshop where you perform your edit, then, when you save the file, it will automatically be updated in Illustrator.

Thanks to the Adobe Color Engine (ACE), placed graphics don't suffer color shifts when moved from one application to another.

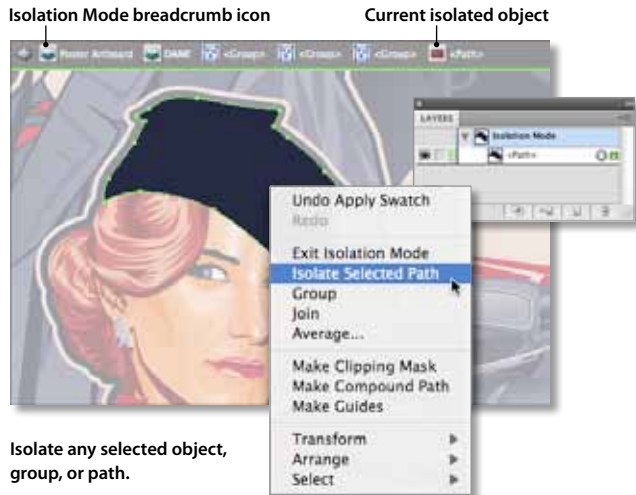


Edit Original enables convenient editing of raster images with Photoshop, showing the high level of integration among Creative Suite tools.

Document raster effects settings

Whenever you apply a raster effect such as Blur or Sketch, Illustrator uses the document's raster effects settings to determine the resolution of the resulting image. These settings can have a large impact on your artwork; therefore, it's important to check them before you start working with effects and, more importantly, before you export or print your work. Set rasterization options by choosing Effect > Document Raster Effects Settings. Document Raster Effects Settings will be set correctly when you choose the appropriate New Document profile for a particular medium.





Isolate any selected object, group, or path.

Isolation mode

In Illustrator CS4, Isolation mode is an essential method for working with complex artwork. Isolation mode is a boon for designers who spend a lot of time grouping, hiding, locking, and restacking layers to access objects for editing while protecting areas of artwork that need to remain untouched.

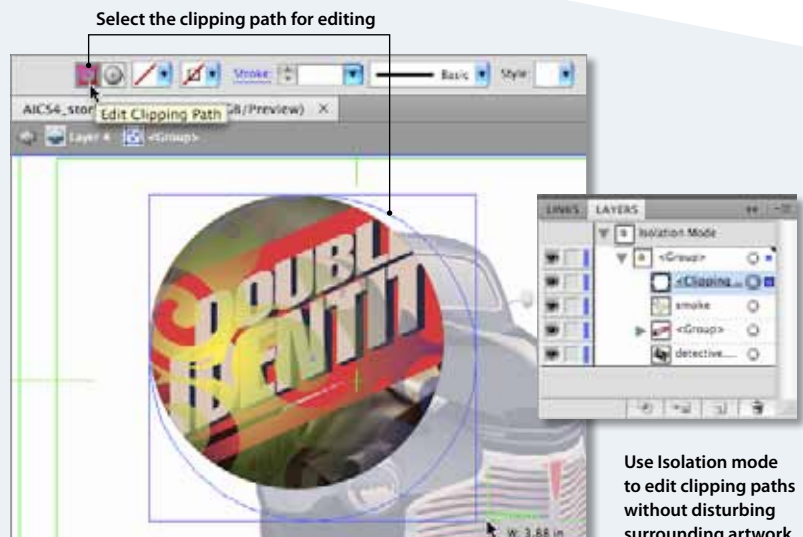
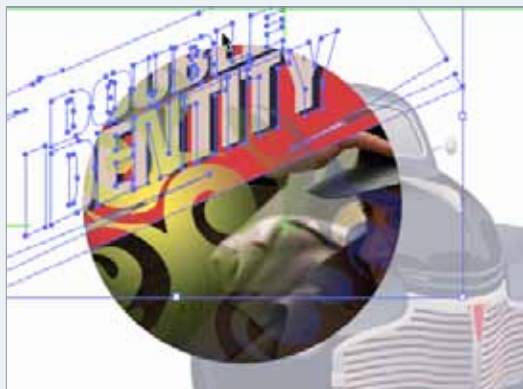
Objects that can be isolated include layers, sublayers, groups, symbols, clipping masks, compound paths, gradient meshes, paths, and brushes (for editing brush definitions). Activate Isolation mode by double-clicking with the Selection tool on a group of objects, and see that the rest of your artwork becomes inaccessible. Continue to double-click on a single object and see that Isolation Mode drills into your nested groups to isolate just that object. Clickable, iconic breadcrumbs show you just where you are, and you can add new objects at that very location in your stacking order—you can delete, replace, and add new art relative to the isolated art.

Clipping Masks

A clipping mask is an object whose shape masks other artwork so that only areas that lie within the shape are visible—in effect, clipping the artwork to the shape of the mask. Work with masks easily, thanks to true WYSIWYG behavior. When the clipping object or group is selected, you will see only the clipped area. Edit the clipping object in Isolation Mode or choose to make it visible using the Clipping Path menu options.

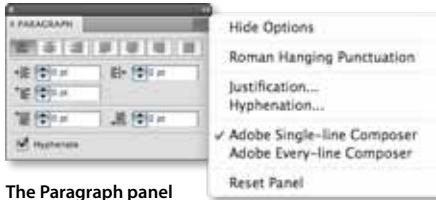
The clipping path and the objects that are masked are called a clipping set. You can make a clipping set from a selection of two or more objects (object-level) or from all objects in a group or layer (layer-level). Easily see how your clipping and masked objects relate in the Layers panel. Object-level clipping sets are combined as a group in the Layers panel. With layer-level clipping sets, the object on top of the layer clips all of the objects below it.

Work easily back and forth between masked objects and the clipping object, thanks to accurate selection of paths.



Use Isolation mode to edit clipping paths without disturbing surrounding artwork.

Working with Text



The Paragraph panel and the menu options.

The appearance of type on the page depends on a complex interaction of processes called composition. Using the word spacing, letter spacing, glyph spacing, and hyphenation options you've selected, Illustrator evaluates possible line breaks and chooses the one that best supports the specified parameters.

Single-line Composer

The appearance of type on the page depends on a complex interaction of processes called composition. Using the word spacing, letter spacing, glyph spacing, and hyphenation options you've selected, Illustrator evaluates possible line breaks and chooses the one that best supports the specified parameters.

Every-line Composer

Text composition methods

The appearance of type on the page depends on a complex interaction of processes called composition. Using the word spacing, letter spacing, glyph scaling, and hyphenation options you've selected, Illustrator evaluates possible line breaks and chooses the one that best conforms to the specified parameters. Illustrator offers two composition methods: the Adobe Every-line Composer and the Adobe Single-line Composer.

The single-line composer offers a traditional approach to composing type—one line at a time. This option is useful if you want manual control over how lines break or if you are working with legacy text that you do not want to reflow.

The every-line composer considers a network of break points for a range of lines, and can optimize earlier lines in the paragraph in order to eliminate especially unattractive breaks later on.

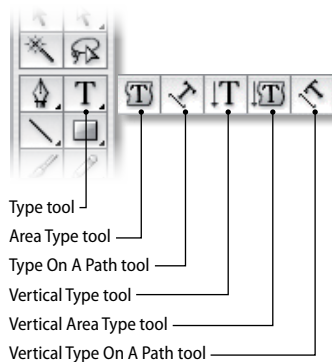
To choose one of these methods use the Paragraph panel menu. If you select your type object with the Selection tool, Illustrator applies the method to all paragraphs that are contained in it; if you click the text insertion point in a paragraph the option will be applied only to that paragraph.

FreeHand uses a text composition engine that is very similar to the Adobe Single Line Composer; if you notice unwanted text-reflow in a converted document, try changing the composition method.

Type tools

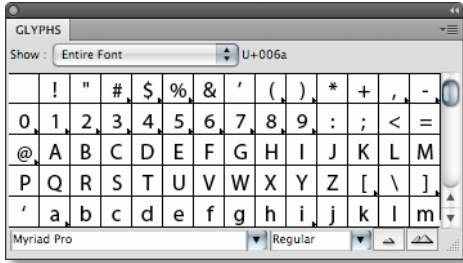
In FreeHand, you use the Text tool to enter text, either into fixed size or auto expanding text blocks, and then flow it into a shape or attach it to a path. In Illustrator, there are three methods for creating type: at a point, inside an area, and along a path.

Type tools in the Tools panel



- Point type is a horizontal or vertical line of text that begins where you click on the artboard with the Type tool and expands as you enter characters. This method is useful for adding a few words to your artwork. Point type resizes when you drag the handles of the bounding box.
- Area type uses the boundaries of a selected vector object to control the flow of characters. When the text reaches a boundary, it automatically wraps to fit inside the defined area. This method is useful when you want to create one or more paragraphs, such as for a brochure. Create a container for area type by clicking and dragging a rectangular shape with the Type tool, or use the Area Type tool to select any closed path to contain your text. You can also create a text area by clicking and dragging on the artboard with the Type tool. You can modify the shape of the type area by dragging handles of the bounding box; text will reflow in the new shape.
- Type on a path flows along the edge of an open or closed path. The text flows in the direction in which points were added to the path.

In addition to typing text in your artwork, you can import it from a variety of text file formats (for example Microsoft Word, RTF format, or plain text documents) by choosing File > Place.



Glyphs panel

How do I insert special characters?

To insert special characters or characters for which you do not know the keyboard shortcut, use the Glyphs panel (choose Type > Glyphs). Using any type tool, click an insertion point where you want to enter the character, and then double-click the character you want in the Glyphs panel.

How do I format text?

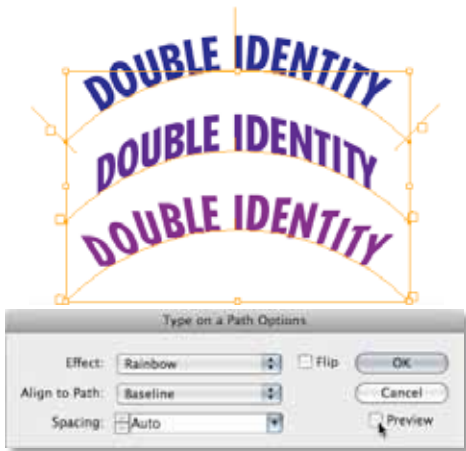
In FreeHand, you can format text in both the Object Panel and the Text toolbar. In Illustrator, you can format selected text directly in the Control panel or by using the Character and Paragraph panels.

Where are the text effects?

In Illustrator, there are no text-specific effects such as highlight, shadow, or zoom. You apply text effects from the Effect menu just as you would with any graphic element. You'll find strikethrough and underline in the Character panel (if you do not see these options, choose Show Options from the panel menu).

How do I create rows and columns in a text area?

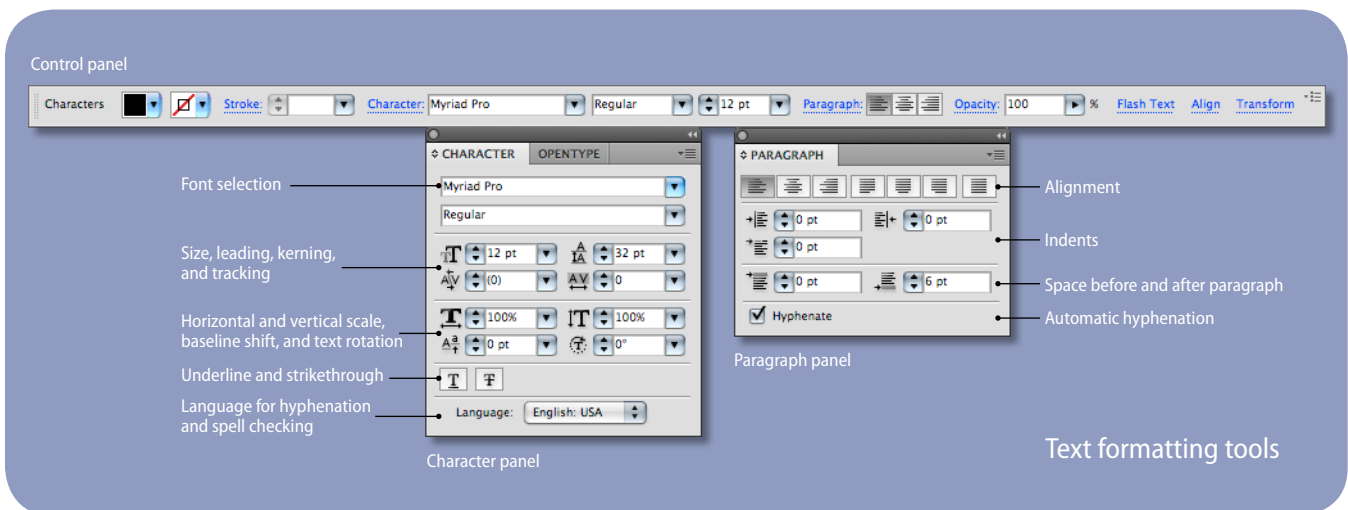
In FreeHand, you create multiple columns and rows in the Object panel; in Illustrator, you use the Area Type Options dialog box. Select the text box in which you want to add columns or rows, and choose Type > Area Type Options.



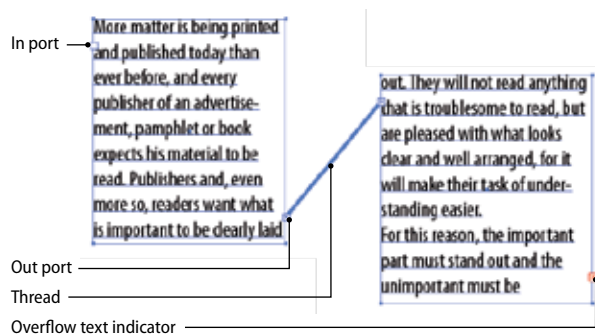
Type path effects include (from top to bottom) Rainbow, Skew, and 3D Ribbon.

Type on a path

In FreeHand, you attach text to a path; Illustrator lets you type text on a path. You can then move or flip text along the path by dragging handles on the sides of the text. Choose Type > Type On A Path to specify effects and other options, such as spacing.



Text formatting tools



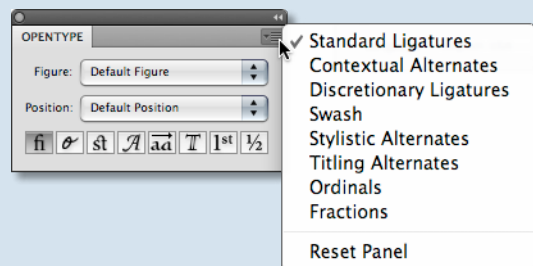
Illustrator CS4 threads text between objects. Click the in or out port of a selected type object, and then click and drag the loaded text icon to create a second threaded object. To break a thread, select a linked type object, and then double-click the port on either end of the thread.

Linking text objects

If you want to insert text that will flow from one text area to another, you must link the areas. Each area shows an in port and an out port; an empty port indicates that all text is visible. An arrow indicates that the object is linked to another object. A red plus sign in an out port indicates that the object contains additional text (overflow text).

When working with text that threads among objects, it can be useful to show the threads; if they are hidden, choose View > Show Text Threads, and then select a linked object.

Use the OpenType panel to apply such special characters as ligatures, true fractions, ordinals, and stylistic alternatives.



OpenType support

The OpenType font standard was developed jointly by Adobe and Microsoft, and it brings the advantages of the PostScript Type 1 and TrueType font formats into a format that takes advantage of Unicode character encoding. OpenType fonts use a single font file for both Windows and Macintosh computers.

When working with OpenType fonts, you can automatically activate alternate glyphs, such as ligatures, small capitals, fractions, and old style proportional figures. In Illustrator, these options are available in the OpenType panel (Window > Type > OpenType).

Coffee & Tea for Breakfast Coffee & Tea for Breakfast

Paragraph and character styles

Tip: To create a style based on any selected text, click the Create New Style button in the Character Styles or Paragraph Styles panel.

In FreeHand, text formatting is saved at the object level; Illustrator allows you to save both paragraph styles and character styles to quickly apply them to other text. If you modify a paragraph or character style, the changes affect all text in the document with that style applied. And you do not lose local formatting such as bold or italic when you update a style.

Converting text to paths

The Create Outlines command lets you turn type into a set of compound paths that you can edit and manipulate as you would any other graphic object. Outlined text is converted in its current position and characters retain all graphics formatting, such as stroke and fill.

For more information, see *Working with Type in Illustrator CS2* on the Adobe website (www.adobe.com/products/illustrator/pdfs/Text_in_AICS2.pdf).

Saving and Exporting Files



The Save Adobe PDF dialog box allows you to save your artwork for distribution, review cycles, and high-quality printing.

Saving

In FreeHand, you can save your pages as a FreeHand document, template, or editable EPS. In Illustrator, you can save your work as an Illustrator file or template, Illustrator EPS, Adobe PDF, and SVG (all are native formats easily reused or imported because they preserve all Illustrator data).

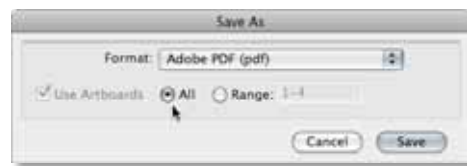
If you need to use the Illustrator file in an Adobe workflow, you can leave it in the Illustrator file format (select the Create PDF Compatible File option in the Save As dialog box). You will then be able to place the file into InDesign layouts or further edit the file in Photoshop.

If you need to use your Illustrator artwork in applications outside of Creative Suite you can save it as EPS, which is accepted by virtually all page layout, word-processing, and graphic applications. Note that EPS files can contain both vector and bitmap graphics.

Adobe PDF is the standard for the secure, reliable distribution and exchange of electronic documents around the world. PDF is highly effective in print publishing workflows and you can also choose to create a PDF/X-compliant file to eliminate many of the color, font, and trapping variables that can lead to printing problems.

Saving multiple artboards

Multiple artboards can be saved as multiple pages in a single PDF document, or can be saved as individual files that are automatically numbered sequentially in, for example, EPS format.

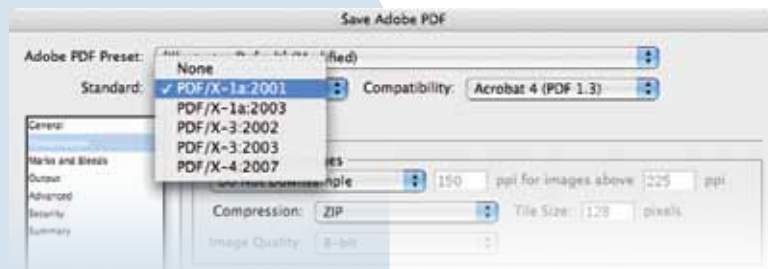


About PDF/X

PDF/X (Portable Document Format Exchange) is an ISO standard used for graphic content exchange and professional workflows.

The benefit of using PDF/X is that the produced PDF will not contain unnecessary information and will not include elements that may cause problems during output (such as RGB images).

Choose an Adobe PDF standard from the Standard menu at the top of the Save Adobe PDF dialog box. For more information on PDF/X, visit www.adobe.com/designcenter/acrobat/articles/acr8ap_pdfx.html.



When saving Illustrator files as PDF, you can also choose from several PDF/X standards.

Adobe Device Central

With Adobe Device Central CS4, you can preview how your artwork will display on mobile devices. It helps preview, test, and optimize your content as you work by providing specific target device templates so you can quickly switch back and forth between your Illustrator view and device preview. Use Adobe Device Central to streamline your mobile publishing workflow and save time when working on mobile content.

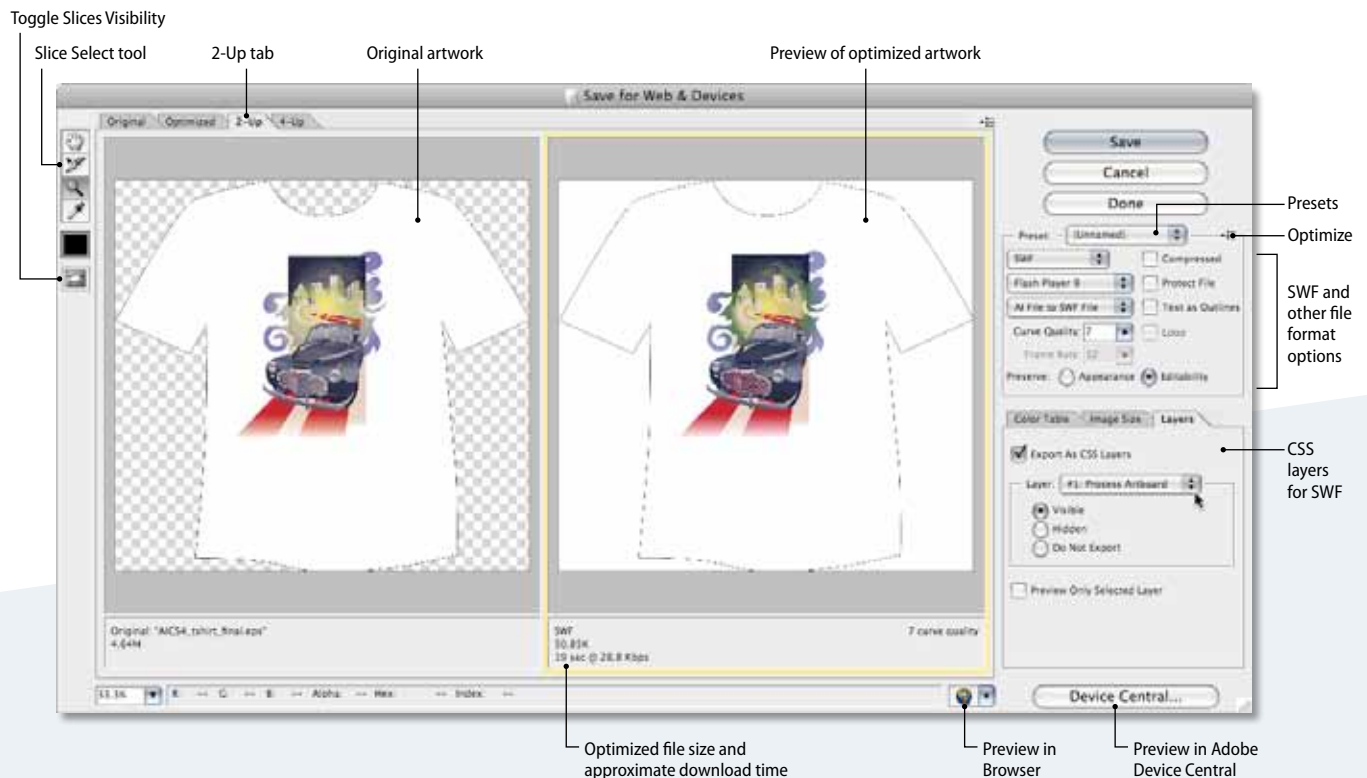
Saving for the web and for devices

Although you can save your artwork as web-friendly files using the Export command, it is much simpler to use the Save For Web & Devices command.

Save For Web & Devices allows you to choose web file formats, select compression and color options, and preview the optimized artwork. Additionally, you can change the image size and export CSS (cascading style sheets) layers.

In Illustrator, you can use slices to define the boundaries of different web elements (such as HTML text, bitmap images, or vector graphics) in your artwork. For example, if your artwork contains a bitmap image that needs to be optimized in JPEG format, while the rest of the image is better optimized as a GIF, you can isolate the bitmap image using a slice. When you save the artwork as a web page using the Save For Web & Devices command, you can choose to save each slice as an independent file with its own format, settings, and color panel. Slices in an Illustrator document correspond to table cells in the resulting web page.

Save For Web & Devices dialog box



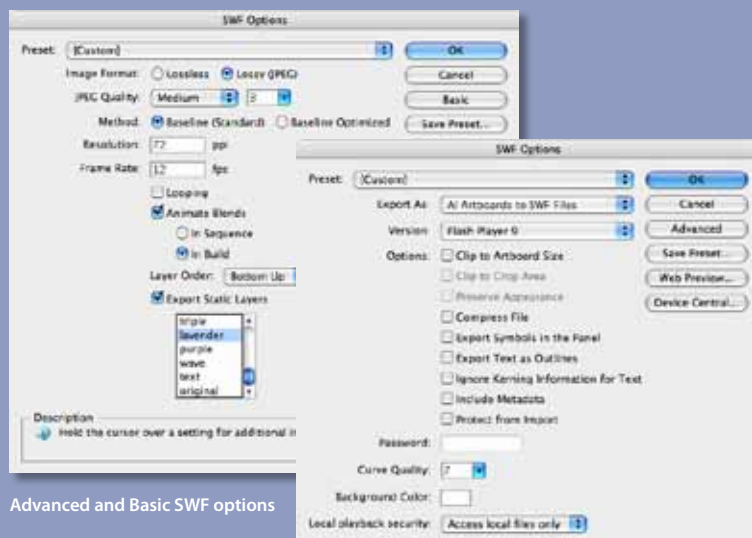
Adobe Flash CS4 Professional integration

Kick off your Flash projects with Illustrator CS4 and have confidence that your vectors will copy/paste and import reliably. The integrity of critical elements is fully maintained in Flash Professional CS4, with intact paths—and correct anchor point positions—as well as gradients, clipping masks, and symbols. Plus, your entire Illustrator layer and grouping structure is preserved, along with all object names. Use the strengths of Illustrator to create intricate and unique vectors for your animations.

Features of particular interest to Flash designers include Illustrator symbols and type tools. Save any Illustrator shape as a symbol to paste into Flash, and use Symbol tool options that are similar. Take advantage of the power of Illustrator type tools to create text for Flash, choosing to define it as Regular Text, Dynamic Text, or Input Text, and assigning properties accordingly.

Exporting Flash animation from Illustrator

Export artwork as SWF files using the Export command or the Save For Web & Devices command. Options in the Export dialog box provide control over animation and bitmap compression options, while options in the Save For Web & Devices dialog box give you control over the mix of SWF and bitmap formats in a sliced layout. You can also use Save For Web & Devices to preview animation in a web browser.



Advanced and Basic SWF options

Creating frame-based animation

Flash animation is frame based. Keep that in mind when working with layers; each layer of your Illustrator document can become a frame of animation. For Flash animation that plays at 12 frames per second, you will need 12 layers for each second of animation.

Using symbols

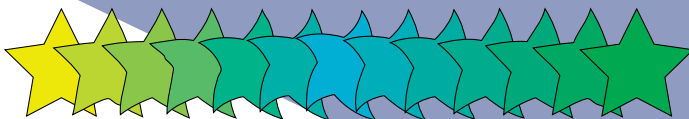
If you create a layer-based animation of repeated shapes, you can use symbols instead of adding complex art to every layer. Each symbol instance is linked to the symbol in the Symbols panel or a symbols library, resulting in smaller file sizes. And after you place a symbol, you can edit the instances and redefine the original symbol.

Using blends to animate objects

Illustrator blends are useful if you want to morph shapes or change colors during the animation. You can modify the blend's path using drawing tools to create very intricate movements.



Blend options



In this example, the star in the center has a Warp effect applied to it.

Exporting

If you need to use your file in workflows that do not support native Illustrator file formats, you can export the artwork into many alternate file types, including AutoCAD Drawing (DWG), Flash (SWF), or TIFF. These formats are called non-native because Illustrator doesn't include all of the data necessary to reopen the file in Illustrator. For this reason, it is recommended that you save artwork in AI format until you completed it, and then export the artwork to the desired format.

Printing

Illustrator CS4 output for print is reliable and accurate, thanks to features such as transparency flattening and overprint preview, whether you are sending your artwork directly to a printer or exporting as Adobe PDF. You can be confident that your work will print just as you have created it.

Separations Preview

Deliver reliably to print using Separations Preview to check your colors. Avoid color output surprises such as unexpected spot colors, unwanted overprinting, overprints that don't overprint, white overprinting, and CMYK blacks in text and placed files. The Separations Preview panel displays a list of spot and process colors; you can choose to display individual colors for previewing color separations onscreen.



The Separations Preview panel shows spot colors as well as CMYK separations.



Check how your color separations will look, individually or in combination, by turning on the visibility of each color in the Separations Preview panel.

See the preview on your artboard while you work.

Overprint setup

Tip: Ensure all your blacks are the same and set them all to overprint at once. Select your black swatch or a black object and choose **Select > Same > Fill Color**. Add to your selection if needed. Then click **Overprint Fill** in the Attributes panel. Check your work using Separations Preview.

In the Attributes panel, you can set the fills and strokes of elements of your artwork to overprint when it is separated for professional printing. Select the object or objects that you want to overprint, and in the Attributes panel, select **Overprint Fill**, **Overprint Stroke**, or both.



Use Separations Preview to identify overprint problems, in this case, where black knocks out the color

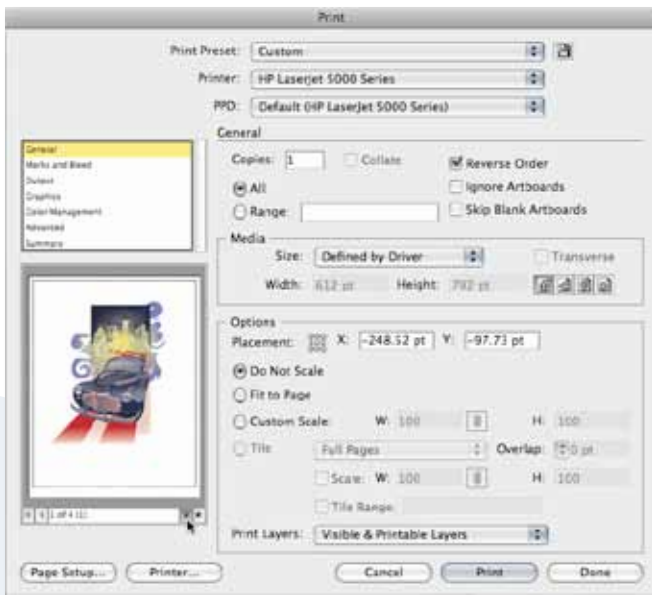
Use the Attributes panel to set up the black for the type object as an overprint fill

The Print dialog box

Printing your artwork in Illustrator is very similar to using the Advanced Print Settings in FreeHand. The Print dialog box lets you click through panes that provide controls over general settings, document setup, marks and bleeds, output, graphics, and color management. Click Page Setup to specify page setup options.

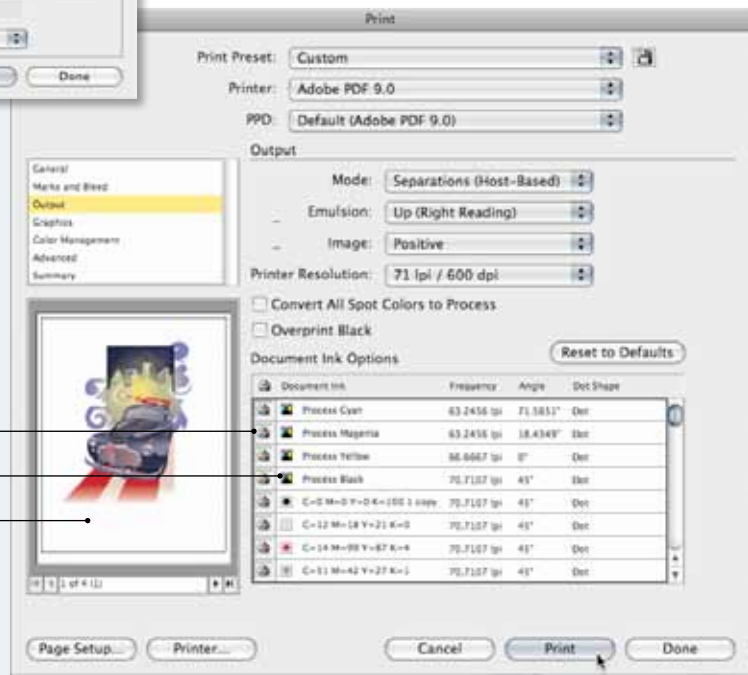
Each category of options in the Print dialog box in Illustrator—from General to Summary—is organized to guide you through the printing process:

The Print dialog box



Specify print options and preview multiple artboards in the Print dialog box.

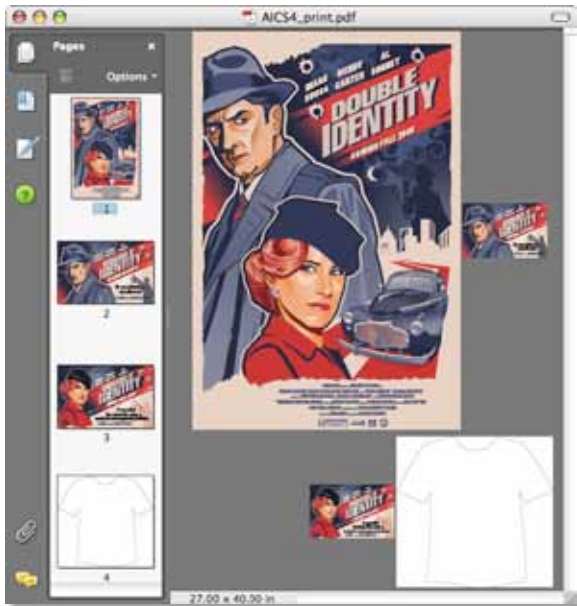
- **General**—Set the page size and orientation, specify how many pages and artboards to print, define your media, and choose which layers to print. Scale and change placement of artwork on the page, and control tiling.
- **Marks & Bleed**—Select printer’s marks and create a bleed.
- **Output**—Create color separations or choose plates to print.
- **Graphics**—Set printing options for paths, fonts, PostScript files, gradients, meshes, and blends.
- **Color Management** Select—a color profile and rendering intent for printing.
- **Advanced**—Control the flattening (rasterization) of vector artwork during printing.
- **Summary**—View and save a summary of print settings and warnings about possible output problems.



Toggle to print plate
 CMYK plate
 Print preview

Tip: Visit the Adobe Print Resource Center for a variety of resources that can help you achieve high-quality print results, quickly and reliably. <http://www.adobe.com/studio/print/index.html>

In the Output pane of the Print dialog box choose to print color separations and specify ink, screen, and film or plate settings.



Multipage PDF creation is even more compelling when you have artboards of different sizes. Send a variety of artwork to print using one PDF file.

Printing multiple artboards and tiled artwork

Illustrator provides maximum flexibility in printing pages and artboards:

- Print all artboards as separate pages, choosing any or all artboards
- Print all the artwork together as a single page by ignoring artboards
- Print art from a single artboard that has been tiled or scaled to fit pages.

By default, Illustrator prints each artboard on a single sheet of paper, and you can choose to print all artboards, or a range of artboards. You can also save multiple artboards to multipage print-ready PDF files.

If your artwork on an artboard is larger than available print page sizes, you can print onto multiple sheets of paper by tiling the artboard. Choose a tiling option in the General section of the Print dialog box and view tiling boundaries on the artboard by choosing View > Show Print Tiling.



Flattener Preview panel with highlight menu

Flattening transparency

Transparent effects in artwork must be flattened before they can be printed. Flattening divides transparent artwork into vector-based areas and rasterized areas. To see areas that need to be flattened, choose Window > Flattener Preview, and then click Refresh. To fine-tune the transparency flattening settings or select another preset, choose Show Options from the panel menu. Click Refresh again to preview the results. Or, select an object, and then choose Object > Flatten Transparency.

Illustrator CS4 offers three flattening presets—Low, Medium, and High Resolution—so that you can quickly and easily flatten artwork for common print conditions. To edit these presets or to create your own, choose Edit > Transparency Flattener Presets.

Illustrator allows you to apply very complex transparency effects such as blends and fades, soft drop shadows, and feathered edges to your graphics. Furthermore, you can change the opacity and apply blending modes to any object in Illustrator. Thanks to the integration between components in Creative Suite, you can place native transparent Photoshop (PSD) files into your Illustrator artwork without rasterizing your compositions.

If you are new to native transparency, note that transparency is flattened when you export a document to a file format that doesn't support native transparency from Illustrator, or when you print the document.



Tip: For more about flattening, download *A Designer's Guide to Transparency for Print Output* by visiting www.adobe.com/products/creativesuite/pdfs/dgt.pdf.

Keyboard Shortcuts

Illustrator CS4 offers keyboard shortcuts to functions otherwise available in menus or panels. You can customize your own sets of shortcuts, change individual shortcuts within a set, and switch between sets by choosing **Edit > Keyboard Shortcuts**.

Here are some of the most useful Illustrator CS4 keyboard shortcuts.

Creating objects *(Hold down keys until after releasing the mouse button.)*

RESULT	ACTION	
	WINDOWS	MAC OS
Constrains objects horizontally, vertically, or proportionally.	Shift	Shift
Draws objects from their centers.	Alt	Option
Opens dialog boxes with transformation tools.	Alt-click	Option-click
Turns the cursor into the Hand tool.	Spacebar	Spacebar
Repositions an object while it is being drawn.	Spacebar-drag	Spacebar-drag
Maintains star inner radius.	Star tool+Ctrl-drag	Star tool+Command-drag
Adds/subtracts sides, corner radius, star points, or spiral coils.	Start drawing, and press the Up or Down Arrow	Start drawing, and press the Up or Down Arrow
Changes the pointer to a cross hair for selected tools.	Caps lock	Caps lock

Viewing objects

RESULT	ACTION	
	WINDOWS	MAC OS
Fits active artboard in window.	Double-click Hand tool or Ctrl+0	Double-click Hand tool or Command+0
Fits all artboards in window.	Ctrl+Alt+0	Command+Option+0
Sets magnification to 100%.	Double-click Zoom tool or Ctrl+1	Double-click Zoom tool or Command+1
Turns the cursor into the Zoom-in tool. Click or select an area to zoom in.	Ctrl+spacebar	Command+spacebar
Turns the cursor into the Zoom-out tool. Click to zoom out.	Ctrl+Alt+spacebar	Command+Option+spacebar
Locks/unlocks guides.	Ctrl+Alt+;	Command+Option+;

Selecting and moving objects *(Watch the cursor to make sure you've pressed the correct keys.)*

RESULT	ACTION	
	WINDOWS	MAC OS
Switches to the last-used selection tool.	Ctrl	Command
Switches between the Direct Selection tool and the Group Selection tool.	Alt	Option
Chooses whether an object, path, or point is selected or deselected.	Shift-click	Shift-click
Toggles selection/deselection for an object, path, point or group when using the Direct Selection or Group Selection tools.	Shift-click	Shift-click
Duplicates selection when using a selection or transformation tool.	Alt-drag	Option-drag
Moves selection in user-defined increments.	Arrow keys	Arrow keys
Moves selection in 10x user-defined increments.	Shift+arrow keys	Shift+arrow keys
Constrains movement to a 45-degree angle (except Reflect).	Shift	Shift

Transforming objects *(Hold down keys until after releasing the mouse button.)*

RESULT	ACTION	
	WINDOWS	MAC OS
Constrains transformation proportionally, vertically, or horizontally.	Shift	Shift
Leaves the original object and transforms a copy.	Drag transformation tool+Alt	Drag transformation tool+Option
Performs an Undo.	Ctrl+Z	Command+Z
Performs a Redo.	Shift+Ctrl+Z	Shift+Command+Z
Transforms pattern independent of object when using the Selection, Scale, Reflect, or Shear tool.	Tilde (~)-drag	Tilde (~)-drag
Resizes selection proportionally when using the Free Transform or Direct Selection tool.	Shift-drag	Shift-drag
Resizes selection from center when using the Free Transform or Direct Selection tool.	Alt-drag	Option-drag

Painting

RESULT	ACTION	
	WINDOWS	MAC OS
Interchanges fill and stroke colors.	Shift+X	Shift+X
Samples color from an image or intermediate color from a gradient when using the eyedropper.	Shift-click	Shift-click
Samples the style and appends the appearance of the currently selected item when using the eyedropper.	Alt+Shift-click	Option+Shift-click
Tints process color.	Shift-drag color slider	Shift-drag color slider
Cycles through color modes.	Shift-click color spectrum bar	Shift-click color spectrum bar

Live Paint Bucket tool

RESULT	ACTION	
	WINDOWS	MAC OS
Applies new paint to fill color (ignoring stroke).	Click	Click
Applies new paint to stroke color (ignoring fill).	Shift-click	Shift-click
Changes to the eyedropper, which picks up stroke and fill. Live Paint Bucket setting determines which is applied.	Alt	Option
Changes to the eyedropper, which picks up pixel value of object.	Alt+Shift	Option+Shift
Fills all adjoining areas of the same paint fill that are not separated with a painted stroke.	Double-click	Double-click
Paints similarly painted faces/edges that aren't connected.	Triple-click	Triple-click

Live Paint Selection tool

RESULT	ACTION	
	WINDOWS	MAC OS
Switches to the eyedropper, which applies the current appearance to selected objects.	Alt	Option
Switches to the eyedropper, which applies the pixel value of an object, such as selection along gradient, to selected objects.	Alt+Shift	Option+Shift
Adds/subtracts from selection.	Shift-click	Shift-click
Selects all adjoining areas of the same paint fill that are not separated with a painted stroke.	Double-click	Double-click
Selects similarly painted faces/edges that aren't connected.	Triple-click	Triple-click

Live Trace button

RESULT	ACTION	
	WINDOWS	MAC OS
Creates a tracing object and converts it to paths.	Alt-click button	Option-click button

Isolation mode

RESULT	ACTION	
	WINDOWS	MAC OS
Enters Isolation mode when using the Selection tool.	Double-click a path or a group	Double-click a path or a group
Exits Isolation mode when using the Selection tool.	Double-click outside the isolated path or group	Double-click outside the isolated path or group

Document control

RESULT	ACTION	
	WINDOWS	MAC OS
Switches between open Illustrator documents.	Ctrl+Tab	Command+tilde (~)


Additional Resources

This guide is not meant to replace documentation that comes with Illustrator CS4 or to be a comprehensive reference for the features in Illustrator CS4. To that end, this guide has mentioned many documents that offer more information on specific topics. In addition, Adobe offers many other useful resources for anyone who wants to learn more about Illustrator features, tools, and techniques.

Illustrator Help

Choose Help > Illustrator Help to explore Adobe Community Help, which aggregates the best learning and support content available for Illustrator CS4, and features a powerful new online search that pulls the most current resources from Adobe and from today's experts in the Adobe community.

Adobe Bridge CS4

Adobe Bridge CS4 is a powerful, easy-to-use media manager for visual people, letting you easily organize, browse, locate, and view creative assets. Available in all six editions of Adobe Creative Suite 4 software and in most of Adobe's professional creative applications, Bridge provides centralized access to project files and global settings, as well as to XMP metadata tagging and searching capabilities. Open Bridge from within Illustrator CS4 by clicking the icon  located in the Application bar. Find out more about Bridge by visiting <http://www.adobe.com/products/creativesuite/bridge>.

Adobe TV

For training, techniques, and a creative jump-start, watch videos on Adobe TV. Choose from tutorials, demos, tips and tricks, and inspirational programs. See how tools work between Adobe applications and get step-by-step instruction on what it takes to achieve certain effects. Check out profiles of industry-leading designers who present how-to's and let you in on their secrets to great design. Visit <http://tv.adobe.com>, and find videos on a huge array of topics and for every level of expertise.

Illustrator Design Center

Find a wealth of artist galleries, design ideas, links, plug-ins, actions, and instructional content by visiting <http://www.adobe.com/designcenter>. See how today's designers engage with technology and what their experiences mean for design, design tools, and society.

Adobe Illustrator product pages

Go to the Adobe website at www.adobe.com/products/illustrator for complete information about Illustrator CS4 and for links to useful documents. Navigate to the Features pages to learn, in detail, about all the features in Illustrator CS4.

Support Center

The Support Center on the Adobe website at www.adobe.com/support offers a searchable knowledgebase, user forums, and other timely information about all Adobe products.