



Adobe® Illustrator® CS2

FreeHand to Illustrator Migration Guide



Adobe® Illustrator® CS2

FreeHand to Illustrator Migration Guide



© 2006 Adobe Systems Incorporated. All rights reserved.

Macromedia® FreeHand® to Adobe® Illustrator® CS2 Migration Guide

If this guide is distributed with software that includes an end user agreement, this guide, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. Except as permitted by any such license, no part of this guide may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written permission of Adobe Systems Incorporated. Please note that the content in this guide is protected under copyright law even if it is not distributed with software that includes an end user license agreement.

The content of this guide is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by Adobe Systems Incorporated. Adobe Systems Incorporated assumes no responsibility or liability for any errors or inaccuracies that may appear in the informational content contained in this guide.

Please remember that existing artwork or images that you may want to include in your project may be protected under copyright law. The unauthorized incorporation of such material into your new work could be a violation of the rights of the copyright owner. Please be sure to obtain any permission required from the copyright owner.

Any references to company names in sample templates are for demonstration purposes only and are not intended to refer to any actual organization.

Adobe, the Adobe logo, Acrobat, Flash, GoLive, Illustrator, InDesign, Photoshop, PostScript, Reader, and Version Cue are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Mac is a trademark of Apple Computer, Inc., registered in the United States and other countries. Microsoft and OpenType are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. All other trademarks are the property of their respective owners.

Adobe Systems Incorporated, 345 Park Avenue, San Jose, California 95110-2704, USA.

Notice to U.S. Government End Users. The Software and Documentation are "Commercial Items," as that term is defined at 48 C.F.R. §2.101, consisting of "Commercial Computer Software" and "Commercial Computer Software Documentation," as such terms are used in 48 C.F.R. §12.212 or 48 C.F.R. §227.7202, as applicable. Consistent with 48 C.F.R. §12.212 or 48 C.F.R. §§227.7202-1 through 227.7202-4, as applicable, the Commercial Computer Software and Commercial Computer Software Documentation are being licensed to U.S. Government end users (a) only as Commercial Items and (b) with only those rights as are granted to all other end users pursuant to the terms and conditions herein. Unpublished-rights reserved under the copyright laws of the United States. Adobe Systems Incorporated, 345 Park Avenue, San Jose, CA 95110-2704, USA. For U.S. Government End Users, Adobe agrees to comply with all applicable equal opportunity laws including, if appropriate, the provisions of Executive Order 11246, as amended, Section 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974 (38 USC 4212), and Section 503 of the Rehabilitation Act of 1973, as amended, and the regulations at 41 CFR Parts 60-1 through 60-60, 60-250, and 60-741. The affirmative action clause and regulations contained in the preceding sentence shall be incorporated by reference.

Part number: 95006283

Contents

Introduction	4
The purpose of this guide and how it can be useful for FreeHand users.	
Key Terms	6
Learn how Illustrator terms compare with those in FreeHand.	
Converting FreeHand Documents	9
Discover how to open your FreeHand documents in Illustrator.	
The Illustrator Workspace	10
Take a tour of the Illustrator CS2 workspace, which offers robust new creativity tools, a context-sensitive Control palette, and custom workspaces for personal preferences or project requirements.	
Setting Up a New Document	14
Learn how to best prepare your artboard for your illustrations.	
Working with Graphics	18
See easy it is to create predictable gradients, patterns and elaborate effects.	
Working with Text	26
Take your text to a new level with extensive and powerful text tools, including Character and Paragraph palettes and styles, flexible OpenType fonts, support for text on a path, and more.	
Saving and Exporting Files	30
Save and export your artwork to many standard file formats such as PDF, SVG, or Flash for print workflows and the web.	
Printing Illustrator Artwork	34
Print your artwork reliably thanks to a streamlined print interface and such features as support for transparency flattening and Adobe PDF output.	
Keyboard Shortcuts	38
A list of some of the most useful Illustrator CS2 keyboard shortcuts.	
Additional Resources	42
Information on many useful resources for anyone who wants to learn more about Illustrator features, tools, and techniques.	

Introduction

Welcome, and thank you for having made the move or thinking about moving from Macromedia® FreeHand® to Adobe Illustrator® CS2.

This guide explains the main differences between the two programs and introduces you to some of the features that make Illustrator the best choice for creating vector graphics for any media. It was written specifically for FreeHand users like you to help you transition as quickly and as smoothly as possible.



With the experience you have acquired using FreeHand, the transition will be an easy one. If you have been using Adobe Photoshop® or Adobe InDesign®, your move will be even easier because all Adobe graphics applications share common commands, palettes, and keyboard shortcuts.

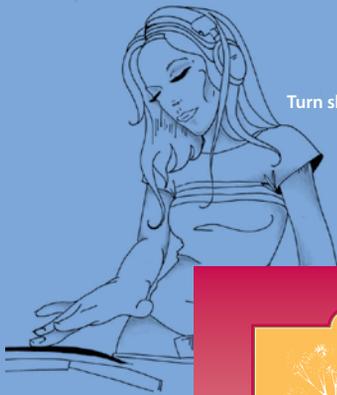
Illustrator is perfectly integrated with all applications in the Adobe Creative Suite and with Adobe Bridge, it has become easier than ever to manage and organize files.

The Live Trace and Live Paint features in Illustrator make it easier to get your sketches onto your workspace as vector graphics. Integration with Photoshop, including the ability to choose Layer Comps during import and support for Photoshop filters and effects, opens new horizons for vector graphics. Illustrator also gives you access to many OpenType® features to help you create beautiful typography.

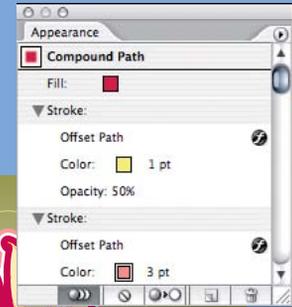
Discover the power of integration between all Adobe applications. For example, link directly to multilayered Photoshop files, export your Illustrator layers directly to Photoshop, or save your documents as Adobe PDF or export them for the web or mobile devices.

Your experience in FreeHand will get you up-to-speed very rapidly.

Turn sketches into vector graphics



Get total control of your objects

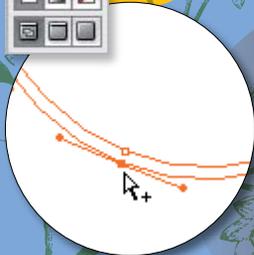
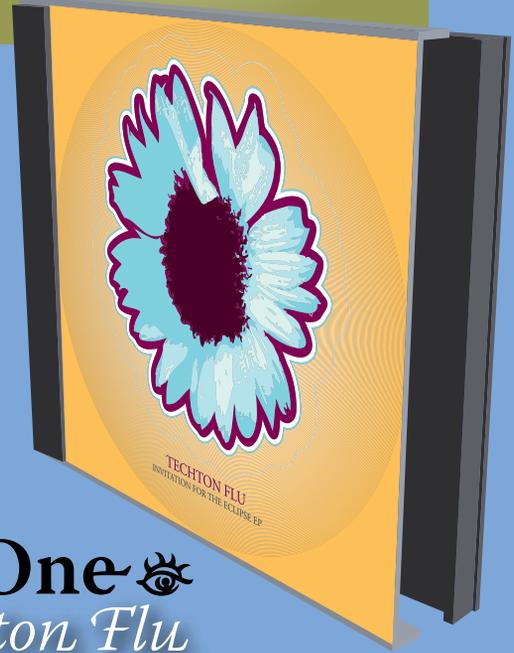


TECHTON FLU
INVITATION FOR THE ECLIPSE EP

Make elaborate and predictable blends



Create sophisticated transparency



Use familiar tools

Set beautiful typography

Take advantage of advanced 3D features

Feast for One

with Tecton Flu

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 palettes 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

FreeHand Term » Illustrator Term

Pasteboard » Scratch Area

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

Pages » Artboard

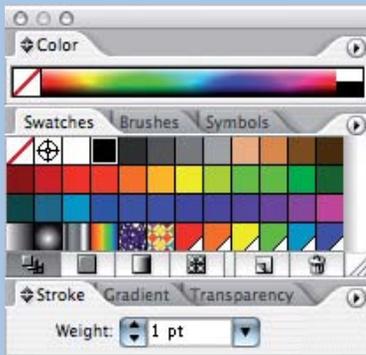
In FreeHand you can set up multiple pages within a single document; Illustrator considers the document and its artboard as one illustration. If you need to output specific areas of your illustration you can use the Page tool, apply a Crop Area, or print overlapping tiles.

Panels » Palettes

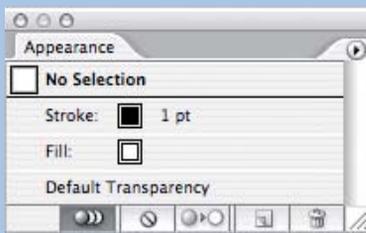
In FreeHand you use panels to monitor and modify your work. In Illustrator, you use palettes. You can move, dock, group, or save the position of a palette in the Workspace.

Object Properties Panel » Appearance palette

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 both the Appearance palette and the context-sensitive Control palette. The Appearance palette lets you view and adjust the appearance of attributes for any object, group, or layer. Fills and strokes are listed in stacking order in the palette. Effects are listed from top to bottom in the order in which they are applied to the artwork. To display the palette, choose Window > Appearance.

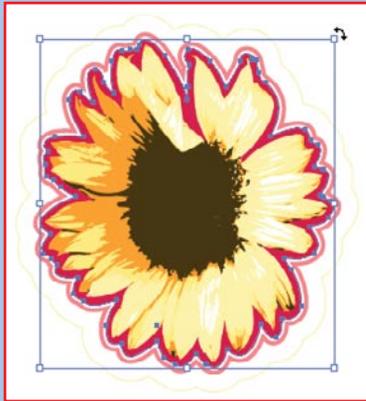


Palettes can be moved, docked, and grouped.



You control the attributes of objects in the Appearance palette.

different terms for the same concept. For example, in FreeHand you work with pages, while in Illustrator you work with an artboard. Once you understand the difference in terms, you are likely to find that the concepts are quite similar. Here are some key terms that differ between FreeHand and Illustrator:



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

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 palette. Integration across the Adobe Creative Suite allows you, for example, to choose layers or layer comps when you place Photoshop files into 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 a handle (one of the hollow squares along the bounding box). To view the bounding box, choose View > Show Bounding Box.

Keyline View » Outline

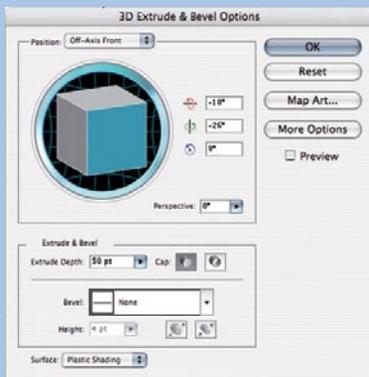
By default, Illustrator displays all artwork in color. However, you can improve redraw and performance by viewing artwork as outlines (or paths). To view artwork as outlines, choose View > Outline. Choose View > Preview to view artwork in color.

Extrude Tool » 3D effects

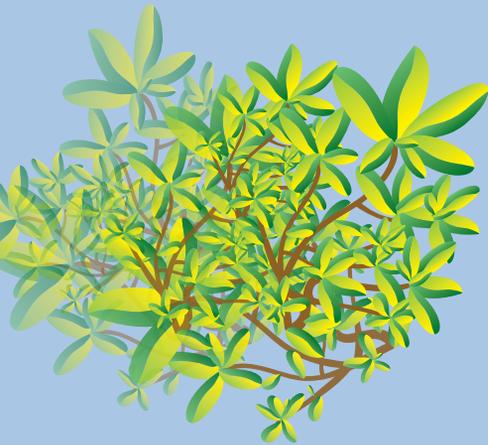
3D effects enable you to create three-dimensional objects from two-dimensional artwork or text. You can control the appearance of three-dimensional objects with lighting, shading, rotation, and other properties.

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 remove the effect using the Appearance palette. Once you apply an effect to an object, the Appearance palette lists the effect and enables you to edit it, move it, duplicate it, delete it, or save it as part of a graphic style.



Extrude artwork and create complex three-dimensional objects using 3D effects in Illustrator.

FreeHand Term » Illustrator Term

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

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 use as many as are available in the Symbols palette.

Edit in External Editor » Edit Original

Illustrator is highly integrated with Photoshop. To open a linked bitmap file in Photoshop, select the graphic and choose Edit Original in the Control palette or Links palette, or from the Edit menu.

Output Area Tool » Crop Area

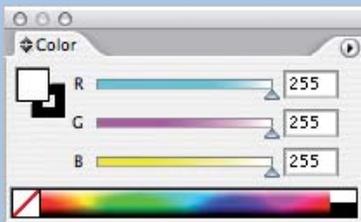
By default, Illustrator crops artwork to the boundaries of the artboard. However, you can choose to crop to the edges of the artwork or to a crop area that you define. The option you choose sets the position of the printer's marks on your document and defines the printable boundaries of the artwork. These printable boundaries, called the print bounding box, are represented by a dashed line in the preview section of the Print dialog box.

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.

Mixer » Color palette

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



The Color palette

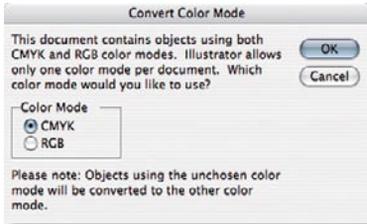
Converting Macromedia FreeHand documents

Illustrator can open FreeHand files up to version 9. If you are using a later version, open your file in FreeHand and export it to an earlier version (choose File > Export and then choose the correct format) prior to opening it in Illustrator. If you find that some elements are lost when you open a FreeHand 9 file, try exporting the file as FreeHand 8 format.

Note: Exporting a FreeHand file as EPS for use in Illustrator can yield unexpected results (for example, gradients may not transfer accurately).

FreeHand allows you to import both CMYK and RGB image files. If you open a FreeHand document that contains both CMYK and RGB images, you'll be prompted to choose a specific color space (see "Setting up a New Document" on page 14).

If the original FreeHand document contains more than one page, the first page (numbered 1 in FreeHand's Document Pane) will convert to an Illustrator artboard and everything on subsequent pages will appear on the scratch area.

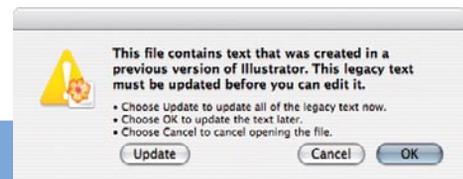


Illustrator can work in either CMYK or RGB color mode. You will be prompted to choose one or the other when you open a FreeHand document that contains objects that use both CMYK and RGB color modes.



By default, Illustrator appends the word "[Converted]" to the filename when you open a FreeHand document and when you update text in a file.

Illustrator prompts you to choose whether to update the text or leave the conversion for later.



Updating legacy text

When you open FreeHand files that have been exported as Illustrator 9 or earlier, text cannot be edited until it's updated. After updating, you have access to all the text features in Illustrator CS2, such as paragraph and character styles, optical kerning, and full OpenType font support.

You don't have to update the text if you don't need to edit it. Text that has not been updated is called legacy text. You can view, move, and print legacy text, but you can't edit it. Legacy text has an X through its bounding box when selected.

To update all legacy text in a document when you open it, click Update when prompted by Illustrator. Or, after opening the document, choose Type > Legacy Text > Update All Legacy Text.

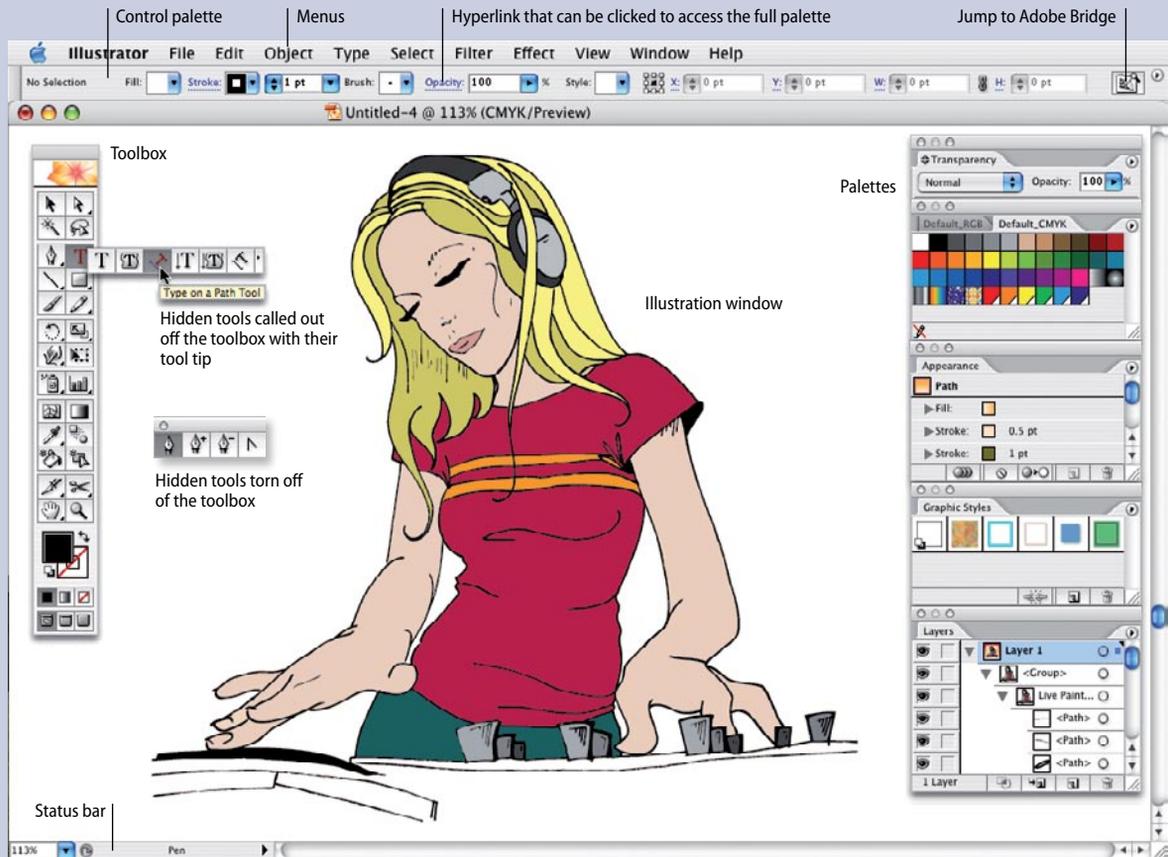
The Illustrator Workspace

As a FreeHand user, you will feel at home in the Illustrator workspace.

The default workspace in Illustrator (Window > Workspace > [Default]) consists of an illustration window where you draw and lay out your artwork, a toolbox that holds the tools for drawing and editing artwork, and palettes to help you monitor and modify your artwork.

The status bar (at the bottom left edge of the illustration window) displays the current zoom level as well as the following information: the current tool, the date and time, the number of undos and redos available, the document color profile, or the status of a managed file (Version Cue).

The Illustrator CS2 workspace



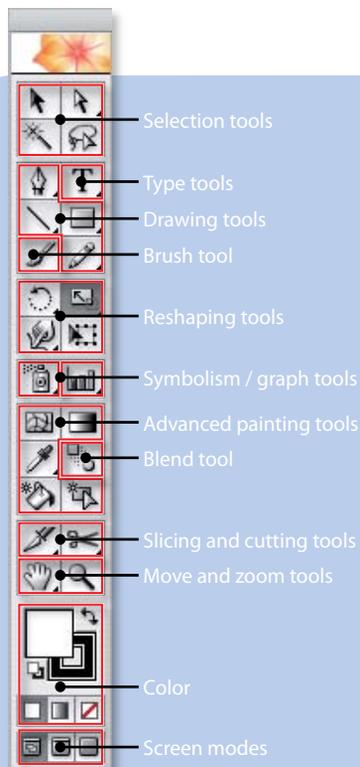
The Control palette

The Control palette is context sensitive and offers quick access to options related to the objects you select. For example, if you select a text object, many controls you will need to format text appear there. Use the Control palette as your primary tool for editing your artwork.

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

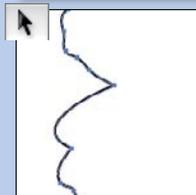
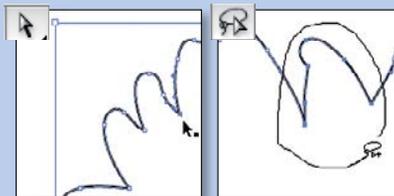
The toolbox

You use the tools in the toolbox to create, select, and manipulate objects in Illustrator. Some tools have additional tools beneath them (hidden tools). A small triangle at the lower right corner of the tool indicates that there are hidden tools.



Illustrator tools

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



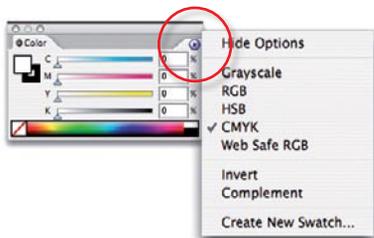
About the Selection tools

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 and the Direct Selection tool  lets you modify objects or groups and select single points on a path. Use the Lasso tool  to select multiple points.

You can tear off hidden tools into separate palettes to have them readily available. To tear off a palette, click and hold the tool, and then drag your cursor to the right and release it at the edge of the pop-up tool palette. The name of the tool and its keyboard shortcut appear when you hold the pointer over the tool.

Where are tools such as 3D Rotation, Extrude, and Fisheye lens?

In Illustrator you apply effects such as 3D and Warping effects using the Effect menu (see page 25).



All palettes, including the Control palette, have a pop-up menu, which lets you choose a variety of other attributes. To open the pop-up menu, click the arrow at the top right of the palette .

Palettes

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

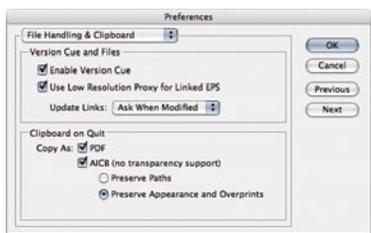
A palette can be grouped with another by dragging its tab onto the other palette. To dock palettes so that they move together, drag a palette's tab to the bottom of another palette until you see a black line.

Once you have organized the palettes, you can save your setup as a Workspace by choosing Window > Workspace > Save Workspace.

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; 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.



File handling & Clipboard preferences let you choose how to copy your artwork to other applications.

The Clipboard is particularly useful for moving paths from one application to the other 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 also accept PDF data (such as InDesign) or AICB (Adobe Illustrator Clipboard). 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).

Tip: To print a list of Illustrator shortcuts, click Export text in the Keyboard Shortcuts dialog box.

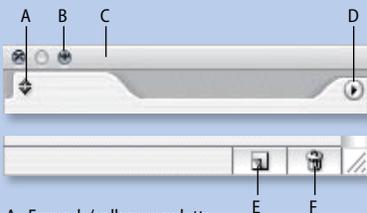
Keyboard shortcuts

Illustrator lets you assign keyboard shortcuts for many operations. The Keyboard Shortcuts dialog box serves as a 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 38.

Context-sensitive menus

In addition to using keyboard shortcuts, you can access many commands using context-sensitive menus. Context-sensitive menus display commands that are relevant to the active tool, selection, or palette. To display a context-sensitive menu, Control-click (Mac OS) or right-click (Windows) in the document window or palette.

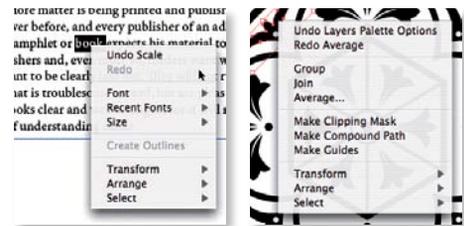
Common palette shortcuts



- A. Expands/collapses palette.
- B. Click to collapse/expand palette.
- C. Double-click to collapse/expand palette.
- D. Show pop-up menu for the palette.
- E. Creates action, brush, style, fill/stroke (appearance), 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, fill/stroke (appearance), layer, or swatch.
- F. Deletes action, brush, layer, or swatch; Option-click (Mac OS) or Alt-click (Windows) to delete without confirmation (except for Variable palette).

Other palette shortcuts

- Shift+Return to apply value and keep text box active.
- Command+~ (tilde) to highlight last-used text box in palette.
- Command+click to select noncontiguous actions, brushes, layers (same level only), links, styles, or swatches.
- Tab to show/hide palettes.
- Shift+Tab to show/hide all palettes except the toolbox.



When you right-click (Windows) or Control-click (Mac OS) on selected text (left) or a path (right), a menu allows you fast access to contextual commands.

Color management

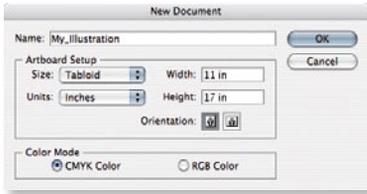
The Adobe color management system helps you maintain the appearance of colors as you import images, edit or transfer documents between Adobe applications, and output your finished compositions.

By default, color management is turned on in Adobe Creative Suite 2 applications. You can synchronize color settings to provide consistent display for RGB and CMYK colors no matter which application you view them in.

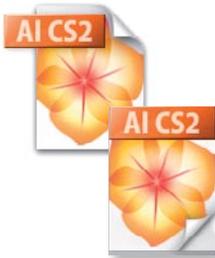
To change color settings, choose Edit > Color Settings. To ensure that your Adobe Creative Suite applications (except Acrobat) are synchronized using the same color settings for consistent color management, choose Edit > Creative Suite Color Settings in Adobe Bridge and select an appropriate profile.

For more information about color management, see Illustrator Help.

Setting Up a New Document



When you create a new document, you can determine size, units of measurement, and orientation of the artboard. You will also be prompted to choose a color mode.



The icons for Illustrator documents (top) and templates (bottom) help you determine the type of file before you open it.

An Illustrator document consists of one single-page artboard that can be up to 227 square inches.

To create a new document, choose File > New and define the size, orientation, and measurement units for your artboard (the area that contains your artwork). To determine how Illustrator represents color, choose either RGB or CMYK color mode. Choose CMYK when preparing a document to be printed using process inks or spot colors such as Pantone. Choose RGB when your artwork is intended for on-screen viewing. Also note that most Photoshop effects in Illustrator can only be applied while you are in RGB mode, which lets you access a larger color gamut. If you need to use your artwork for both print and online (for example, the web), you can take advantage of all features available in the RGB color mode and then convert to CMYK when you output the artwork or place it into a page layout application such as InDesign.

To change the color mode, choose File > Document Color Mode (you can't change the color mode in the Document Setup dialog box). Note that if you have used raster effects (such as Photoshop Effects found under the Effect menu) in the RGB color mode, all effects will be lost when you change the color mode to CMYK.

Document templates

You can use templates to create new documents that share common settings and design elements. For example, if you need to design a series of business cards with a similar look and feel, you can create a template with the desired artboard size, view settings (such as guides), and print options. The template can also contain symbols for common design elements (such as logos) and specific sets of color swatches, brushes, and graphic styles.

Illustrator comes with 200 professionally designed templates, including templates for letterhead, business cards, envelopes, brochures, labels, certificates, postcards, greeting cards, and websites.



Two of the many templates included with Illustrator CS2. You can save any design or layout as a template by choosing File > Save As Template.

You can save your artwork as Adobe Illustrator Template (.ait) to reuse it or share it with others. When you select a template using the New From Template command, Illustrator creates a new document with identical content to the template, but leaves the original template file untouched.



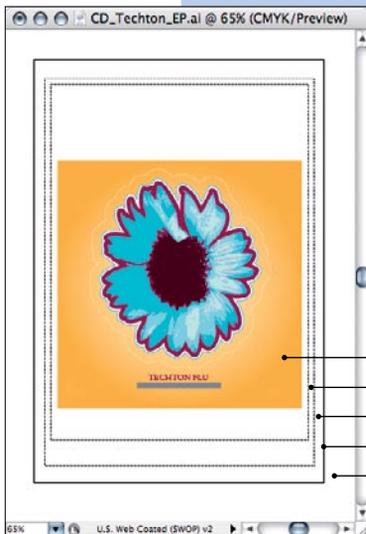
You can change the document setup by choosing File > Document Setup.

Where's the Document panel?

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

In Illustrator choose File > Document Setup to change the attributes of the artboard. You use the Document Setup dialog box to choose settings for Type and Transparency at the document level. You can also define the dictionary used for spell check 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.

In FreeHand, you determine the Bleed Area in the Document panel; in Illustrator, the Bleed area is assigned during printing in the print dialog box.

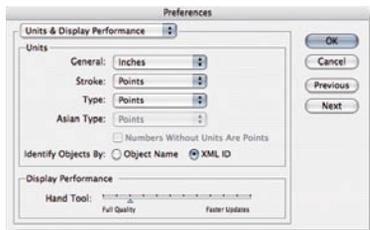


The Illustrator document

The artboard represents the entire area that can contain printable artwork. The artboard's dimensions may not match the current page size. For example, your artboard may be 10 x 20 inches while your print settings specify 8-1/2 x 11-inch paper. You can view the page boundaries in relation to the artboard 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 across the artboard by using the Page tool.

The scratch area is the area outside of the artboard that extends to the edge of the 227-square inch window. The scratch area represents a space on which you can create, edit, and store elements of artwork before moving them onto the artboard. Objects placed onto the scratch area are visible on-screen, but they do not print.



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

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

Tip: To emulate FreeHand's snapping feature, 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: Ctrl-click (Mac OS) or right-click (Windows) in the ruler to open a menu from which you can select unit of measurement.

How do I set up measurement units?

In Illustrator, there are several ways to select units of measurement:

- In the Preferences dialog box, choose Units & Display Performance and select a unit of measurement. You can also choose different units for Stroke and Type, which are typically measured in points.
- Choose the global measurement unit when you create a new document. You can always change the unit of measurement later by using the Document Setup dialog box.
- Override the default units by entering a value in the Control palette. For example, follow the value by any of these abbreviations: inch, inches, in, millimeters, millimetres, mm, Qs (one Q equals 0.25 millimeter), centimeters, centimetres, cm, points, p, pt, picas, pc, pixel, pixels, and px.

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 between two guide styles—dots and lines—and you can change the color of guides by using either predefined grid colors or colors you select using a color picker. By default, guides are locked in place, but you can unlock them to move, modify, delete, or revert them.

When you choose View > Show Grid, a grid appears behind your artwork in the illustration window. To change the spacing between gridlines, color of the gridlines, or grid style, choose Illustrator > Preferences > Guides & Grid (Mac OS) or Edit > Preferences > Guides & Grid (Windows). Grids and guides do not print.

Where is the Guides Layer?

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

Using layers

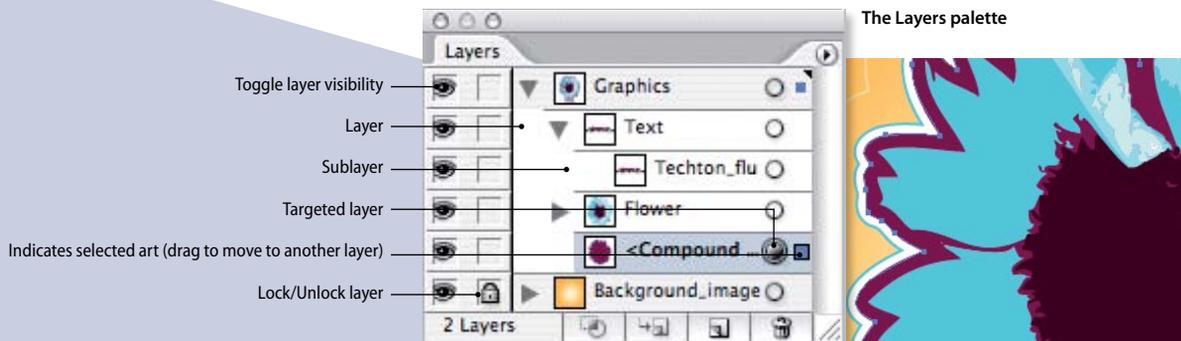
When creating complex artwork, it's a challenge to keep track of all the items in your document window. Small items get hidden under larger items, and selecting artwork becomes difficult. Layers provide a way to manage all the items that make up your artwork. Think of layers as clear folders that contain 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 palette, 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, parent layer. However, you can create new layers and move items into them, or move elements from one layer to another. The Layers palette 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.

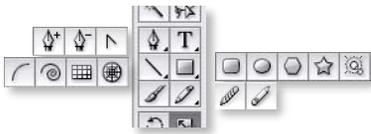
By default, Illustrator assigns a unique color to each layer in the Layers palette. The color appears in the layer's selection column when one or more objects within the layer are selected, and also appears in the selected object's selection column. In addition, the same color appears in the document 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 palette and you can change this layer color to suit your needs.

When an item in the Layers palette contains other items, a triangle appears to the left of the item's name. Click the triangle to show or hide the contents.

When an item is selected, a colored square appears at the right edge of the layer in the palette; to move the item to another layer or change its stacking order, drag the colored square to the desired layer.



Working with Graphics



Use the drawing tools in Illustrator to create vector graphics.

Tip: While using the Polygon or Star tool press the up arrow or down arrow keys to add and remove sides from a polygon or to add and remove points from a star.

Drawing

Drawing in Illustrator is very similar to drawing in FreeHand; you use the Pen, Paintbrush, or Pencil tools to draw vector graphics in Illustrator. You can also draw basic geometric shapes by using tools such as the Rectangle, Ellipse, or Polygon tools.

Using the Pen tool

The Pen tool  is the principal tool for drawing straight lines, Bézier curves, and complex shapes. You can also use the Pen tool to perform the actions of the following three tools:

- Use the Add Anchor Point tool  to add anchor points to a path (or use the Pen tool on a segment of a selected path).
- Use the Remove Anchor Point tool  to remove anchor points (or use the Pen tool on existing points of a selected path).
- Use the Convert Anchor Point tool  to convert a corner point to a smooth point or vice-versa (or press Alt while using the Pen tool).

Selecting and modifying paths and anchor points

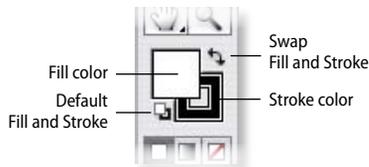
To select entire paths (with all anchor points selected) use the Selection tool. In Illustrator, you cannot use the Selection tool to select individual anchor points. To select anchor points, you use the Direct Selection tool or the Lasso tool; you can then move and modify individual anchor points. In FreeHand, selected anchor points are indicated by a hollow square; in Illustrator selected anchor points are indicated by a filled square.

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 toolbox or Color palette.

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



The color selection box in the Toolbox

Live Trace

Live Trace automatically turns placed images into beautifully detailed vector graphics that are easy to edit, resize, and manipulate.

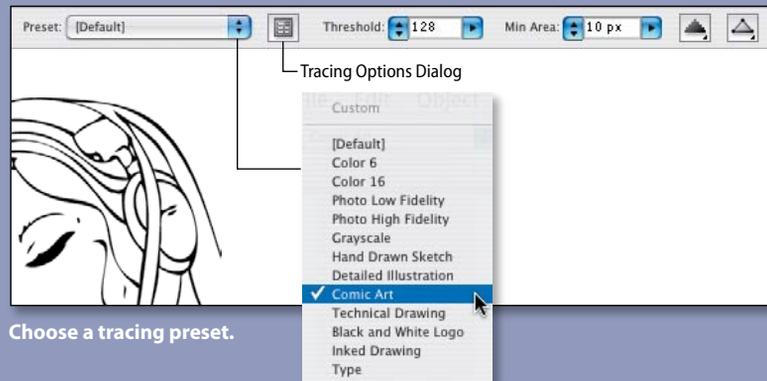
To use Live Trace:

Step 1: Select a placed bitmap image and click the Live Trace button on the Control palette to create a Live Trace object.

Step 2: See the results in the workspace, and adjust your settings if desired on the Control palette. For example, choose a preset for a different type of image, and choose the type of raster or vector preview you want to see. Click the Tracing Options Dialog button to access more advanced tracing options.



Create a Live Trace object.



Choose a tracing preset.



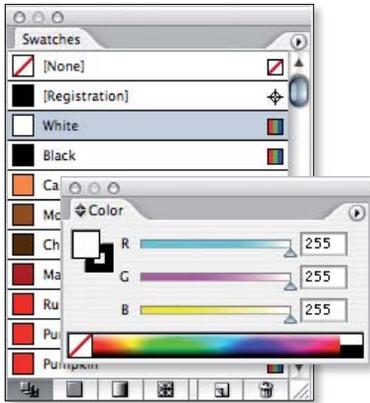
Adjust the threshold to fine-tune the contrast of the traced image.

Step 3: When tracing black-and-white images, adjust the Threshold setting on the Control palette. Illustrator converts pixels lighter than the Threshold value to white and converts pixels darker than the Threshold value to black.

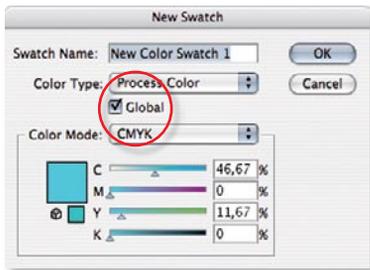
Note: After you trace a bitmap image, you may find details that you'd like to remove. Use the Edit Original command in the Links palette to open the image in Photoshop where, for instance, you can remove a border or extraneous detail. Save your changes, and Live Trace automatically retraces the placed image.

Tip: Batch-process bitmap images or sketches using the Live Trace command in Bridge.

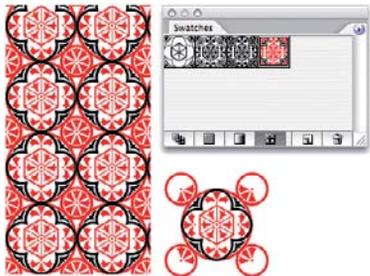
Tip: For more on Live Trace, see "Creating Vector Content Using Live Trace" on the Adobe website (www.adobe.com/products/illustrator/pdfs/creating_vector_content.pdf).



The Color and Swatches palettes



Swatches in Illustrator are not necessarily Global.



Drag vector graphics into the Swatches palette and use them as patterns to be applied to fills and strokes.

Working with swatches

Swatches are named colors, tints, gradients, and patterns. The swatches associated with a document appear in the Swatches palette. In addition, you can open libraries of swatches from other Illustrator documents and access various color systems. Swatch libraries appear in separate palettes and are not saved with the document until you drag and drop specific swatches to your Swatches palette.

How do I access Pantone Libraries?

To open a specific swatch library, including PANTONE®, HKS, Trumatch, FOCOLTONE, DIC, TOYO, and web colors, choose it from the Window > Swatch Libraries submenu or the Open Swatch Library pop-up menu in the Swatches palette menu. When you open a swatch library, it appears in a new palette (not the Swatches palette as in FreeHand). You select, sort, and view swatches in a swatch library the same as you do in the Swatches palette.

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. You can also share the swatches you create in one Adobe Creative Suite 2 application with any other Adobe Creative Suite 2 application by saving a swatch library for exchange. The colors look the same across applications as long as your color settings are synchronized.

Patterns

Illustrator comes with many patterns that you can access in the Swatches palette 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 more importantly, see the resulting patterns on-screen 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, you can change the document's ruler origin. Patterns intended for filling objects (fill patterns) differ in design and tiling from patterns intended to be applied to a path with the Brushes palette (brush patterns). For best results, use fill patterns to fill objects and brush patterns to outline objects. 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.

Live Paint

Live Paint lets you paint vector graphics more intuitively by automatically detecting shapes and correcting gaps.

To use Live Paint:

Step 1: Select a group of objects, and click the Live Paint button on the Control palette to convert the traced vectors or objects to a Live Paint group.

Step 2: Use the Live Paint Bucket to fill regions with color or gradients with the click of a button. A red outline indicates regions that can be filled. Or, drag the bucket across multiple regions to select them and fill them at once.

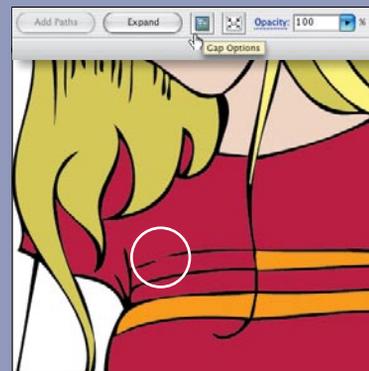
Step 3: Click the Gap Options button on the Control palette to locate and repair gaps where color leaks through open edges into adjacent regions.



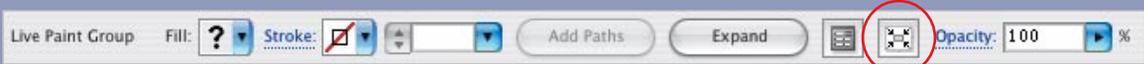
Convert vectors to a Live Paint group.



Use the Live Paint Bucket for painting.



Control gaps in your artwork.



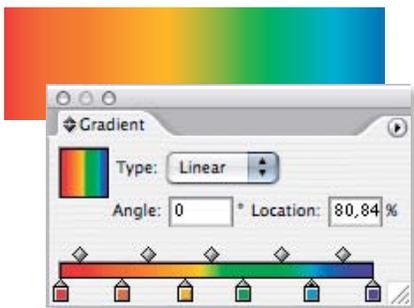
Live Paint options in the Control palette

Isolates selected group

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.

Note: With a Live Paint group selected, you can click the Isolates Selected Group button on the Control palette to enter Isolation mode. This mode effectively isolates the group, placing a gray border around it so that you can easily add paths to it.

Gradients



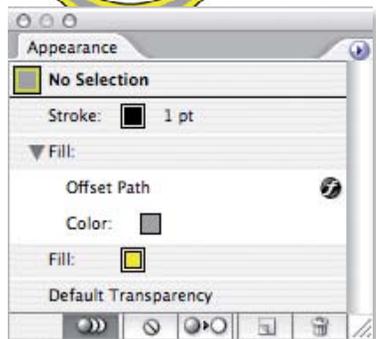
In the Gradient palette, you can determine the type and angle of the gradient or add stops by dragging swatches or colors into it.

In Illustrator, you apply gradients to fills and objects from the Swatches palette or the toolbox. You will find that gradients in Illustrator are much smoother than those you can create in FreeHand (without visible linear or radial steps) and output exactly as you have created them. In the Gradient palette, you can choose between radial and linear gradients, and determine the angle of the gradient and the location of colors. There are no handles to manually determine the starting and ending points of a gradient. Click the Gradient tool at the desired starting point and then drag the cursor to the desired ending point.

Gradient colors 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. To change the color of a gradient stop, drag a color from the Color palette or the Swatches palette onto it. The squares in the Gradient palette display the color currently assigned to each gradient stop. With a radial gradient, the leftmost gradient slider defines the center point's color fill, which radiates outward to the color of the right most gradient slider.

Once you create or modify a gradient, save it as a swatch by clicking the New Swatch button in the Swatches palette. Alternatively, drag the gradient from the Gradient palette or toolbox to the Swatches palette.

The Appearance palette



The Appearance palette

In FreeHand, you determine the properties of your objects in the Object Properties panel. In Illustrator, you use the Appearance palette to view and adjust the appearance attributes for an object, group, or layer. Fills and strokes are listed in stacking order; top to bottom in the palette correlates 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 the palette, choose Window > Appearance.

Appearance attributes are properties that affect the look of an object without altering its underlying structure. Appearance attributes include fills, strokes, transparency, and effects. If you apply an appearance attribute to an object and later edit or remove that attribute, the underlying object or any other attributes applied to the object don't change.

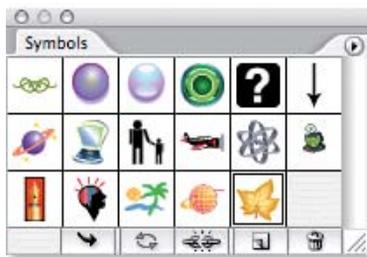
You can set appearance attributes at any level of the layer hierarchy. For example, if you apply a drop shadow effect to a layer, all objects in the layer take on the drop shadow. However, if you move an object out of the layer, that object will no longer have a drop shadow because the effect belongs to the layer, not to each object within the layer.

The Appearance palette is the gateway to working with appearance attributes. Because you can apply appearance attributes to layers, groups, and objects—and often to fills and strokes too—the hierarchy of attributes in your artwork can become very complex. For example, if you apply one effect to an entire layer and another effect to an object in the layer, it may be difficult to determine which effect is causing the artwork to change. The Appearance palette shows you the fills, strokes, graphic styles, and effects that have been applied to an object, group, or layer.

Using 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 symbol in the Symbols palette or a symbols library. Using symbols can save you time and greatly reduce file size.

You can make a symbol from any kind of graphic element in your document or use Illustrator's built-in Symbols library. To create a symbol, drag and drop a graphic element into the Symbols palette.



The Symbols palette

After you place a symbol on the artboard, you can edit the symbol's instances and, if you want, redefine the original symbol. To edit a symbol and access its paths, select an instance and choose Break Link to Symbol in the Symbols palette.

The symbolism tools let you add and manipulate multiple symbol instances at once.



Using the Symbolism tools, you can spray, shift, scrunch, resize, spin, stain, screen, or style symbols using styles from the Graphics Styles palette.





Live Transparency in placed Photoshop files allows you to create a stunning mix of vector and bitmap art.

Tip: To see the transparency grid (similar to the one in Photoshop) choose View > Show Transparency Grid.

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 a file, use the Links palette to identify, select, monitor, and update it.

Alternatively, you can use Adobe Bridge to drag and drop your assets onto the artboard. Bridge lets you organize and browse Illustrator and other creative assets. You can open Bridge from the Control palette in Illustrator CS2.

One of the benefits of the Adobe Creative Suite is integration among applications. This means that you can not only place EPS or TIFF files, but also place native Photoshop files with transparency or control the visibility of layer comps in linked, embedded, and opened Photoshop files as easily as you control the visibility of regular Photoshop layers. From the Links palette in Illustrator, choose Edit original to open the file in Photoshop. When you save the file in Photoshop, the linked file 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.



Drag and drop your assets from Adobe Bridge onto your Illustrator artboard.





3D effect



Drop shadow with spot color



Warping effect

Filters and effects

Many commands for changing the look of objects are available in both the Filter and Effect menus. For example, all of the commands in the Filter > Artistic submenu are also listed in the Effect > Artistic submenu. However, filters and effects result in different outcomes, so it's important to understand the difference in their use.

Effects are live, which means you can apply an effect to an object and then continue to modify the effect's options or remove the effect using the Appearance palette. Effects are nondestructive because they don't change the underlying object. Once you apply an effect to an object, the Appearance palette lists the effect and enables you to edit, move, duplicate, or delete the effect, or save it as part of a graphic style.

Filters, on the other hand, change the underlying object, and the changes can't be modified or removed after the filter is applied. One advantage to reshaping an object with a filter command is that you have immediate access to the new or modified anchor points created by the filter. (An effect must be expanded before you have access to the new points.)

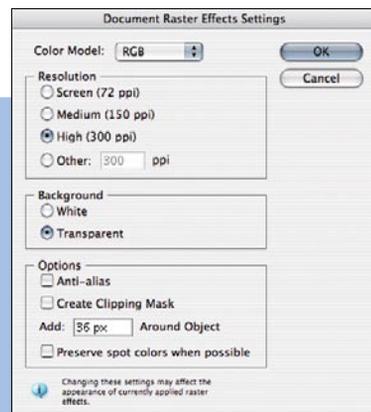
If the filters and effects are unavailable, check the color mode of your document (File > Document Color Mode); most filters and effects work only on documents that are in the RGB color mode.

Also note that when you apply filters or effects to linked bitmap images, the images will be unlinked and be embedded in the document.

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 have a large impact on the resulting artwork; therefore, it's important to check the document raster effects settings before you start working with filters and effects, and more importantly, before you export or print your artwork. You set rasterization options in the Document Raster Effects Settings dialog box (Effect > Document Raster Effects Settings)..

Document Raster Effects Settings



Working with Text

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

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.

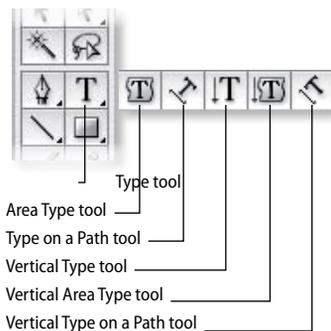
Every-line Composer—Considers a network of break points for a range of lines and can optimize earlier lines in the paragraph in order to eliminate especially unattractive breaks later on.

To choose one of these methods, select it from the Paragraph palette menu. Illustrator applies the method to all paragraphs if you first select the type object with the selection tool or to the current paragraph only if you first insert the text cursor in that paragraph.

Type Tools

In FreeHand, you use the text tool to enter text, either into fixed size or auto-expanding text blocks to 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.

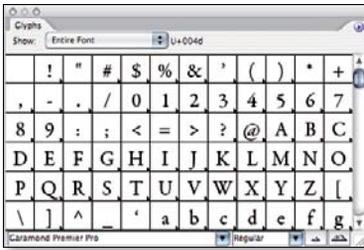
- Point type is a horizontal or vertical line of text that begins where you click on the artboard with the Type tool and expands as you enter characters. Entering text this way is useful for adding a few words to your artwork. Point type resizes when you drag the handles of the bounding box.
- You can also create a text area by clicking and dragging on the artboard with the Type tool. When you modify the shape of the type area by dragging handles of the bounding box, text reflows in the new shape
- 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. Entering text this way is useful when you want to create one or more paragraphs, such as for a brochure. Use the Text tool by



Type tools in the Toolbox

clicking and dragging a rectangular shape or use the Area Type tool to select any closed path to contain your text.

- 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, or plain text documents) by choosing File > Place.



Glyphs palette

How do I insert special characters?

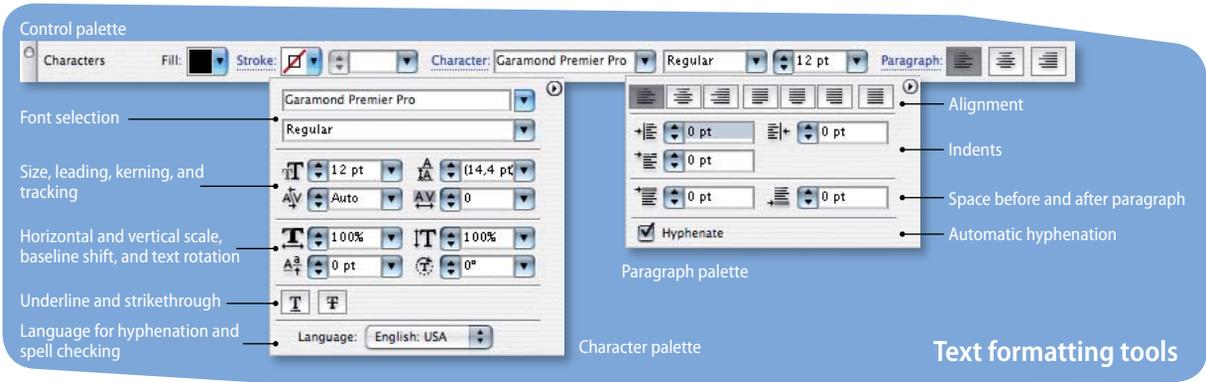
To insert special characters or characters for which you do not know the keyboard shortcut, use the Glyphs palette. Using any type tool, click an insertion point where you want to enter the character and then double-click the character you want in the Glyphs palette.

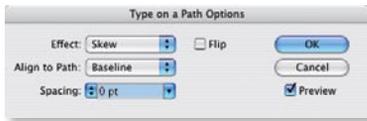
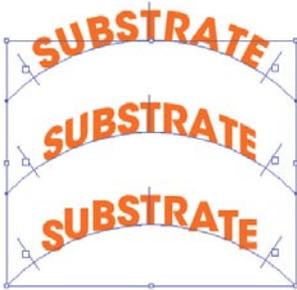
How do I format text?

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

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 Effects menu just as you would with any graphic element. You'll find strikethrough and underline in the Character palette (if you do not see these options, choose Show Options from the palette menu).





Type path effects include Rainbow, Skew, and Stair Step (shown at top).

Tip: Illustrator CS2 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 double-click the port on either end of the thread.

Text on a path

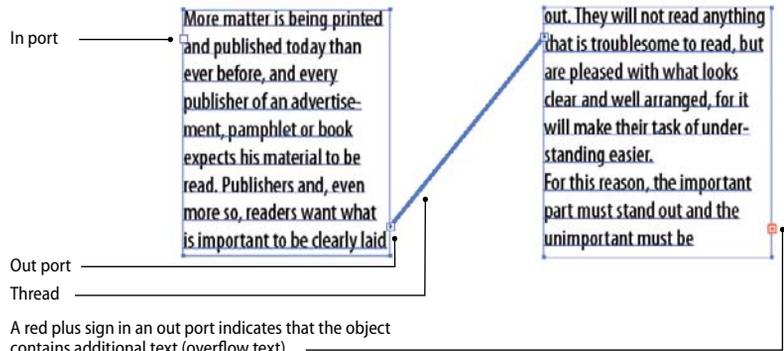
In FreeHand, you attach text to a path; Illustrator lets you type text on a path. You can then move or flip text along the path by dragging the handles that appear on the sides of the text. Choose Type > Type on a Path to specify effects and other options, such as spacing.

How do I place text around a circle?

In FreeHand, you can press the return key to align a second paragraph of text in the lower part of an object. In Illustrator, you must first divide the object into two sections with the Scissors tool, and then you can flow the text along one path and onto the second path by linking the text objects.

Linking text objects

If you want to insert text that will flow from one text area to another you must link them. Each area type object contains an in port and an out port; an empty port indicates that all the text is visible and that the object isn't linked. An arrow in a port 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.

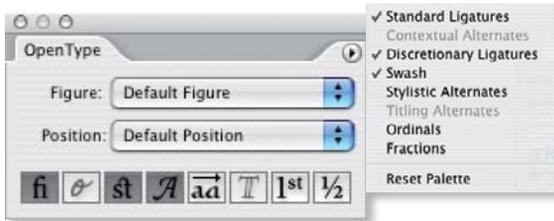
How do I create rows and columns in a text area?

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

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 new format that takes advantage of Unicode character encoding. OpenType fonts use a single font file for both Windows and Macintosh computers, so that you can move files from one platform to another without worrying about font substitution and other problems that may cause text to reflow.

When working with an OpenType font, 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 palette (Window > Type > OpenType).



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

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

Coffee & Tea
for Breakfast

Coffee & Tea
for Breakfast

Paragraph and character styles

In FreeHand you can save text formatting at the object level; Illustrator allows you to save both paragraph styles and character styles. If you modify a paragraph or character style, the changes affect all text in the document with that style applied. A benefit of using styled text is that 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. When you create outlines from type, characters are converted in their current positions; they retain all graphics formatting such as their 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

Saving

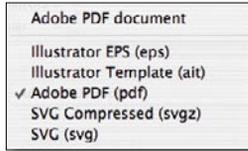
In FreeHand, you can save your pages as a FreeHand Document, Template, or Editable EPS (a file that you can both place in page layout programs and edit if necessary). In Illustrator, you can save your work as Illustrator files or templates, Illustrator EPS, Adobe PDF, and SVG (all of these are native formats that can easily be 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 (make sure that Create PDF Compatible File option is selected 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.

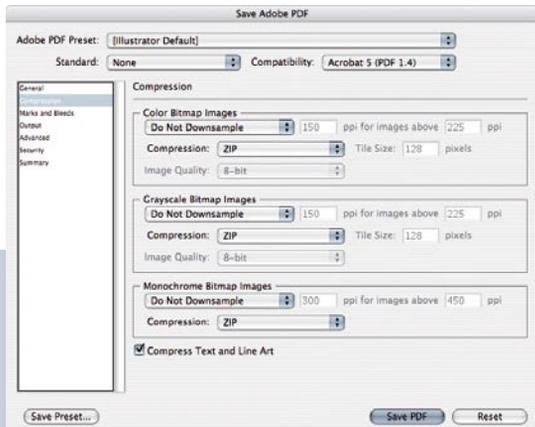
Virtually all page layout, word-processing, and graphic applications accept EPS files. Note that EPS files can contain both vector and bitmap graphics.

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. When you save as PDF, you can also choose to create a PDF/X-compliant file. PDF/X (Portable Document Format Exchange) is a subset of PDF that eliminates many of the color, font, and trapping variables that can lead to printing problems.

The SVG format is entirely XML-based and offers many advantages to developers and users alike. With SVG, you can use XML and JavaScript to create web graphics that respond to user actions with sophisticated effects such as highlighting, tool tips, audio, and animation.



The native Illustrator file formats, which you can access by choosing File > Save, Save As, or Save a Copy.



Save as PDF allows you to save your artwork for distribution, review cycles, and high-quality printing.



A scalable vector graphic in Illustrator (left) and displayed on a mobile device (right)

- BMP (bmp)
- Targa (tga)
- PNG (png)
- AutoCAD Drawing (dwg)
- AutoCAD Interchange File (dxf)
- Enhanced Metafile (emf)
- ✓ Macromedia Flash (swf)
- JPEG (jpg)
- Macintosh PICT (pct)
- Photoshop (psd)
- TIFF (tif)
- Text Format (txt)
- Windows Metafile (wmf)

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), Macromedia Flash (.swf), or TIFF.

These formats are called nonnative formats 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 are finished creating it, and then export the artwork to the desired format.

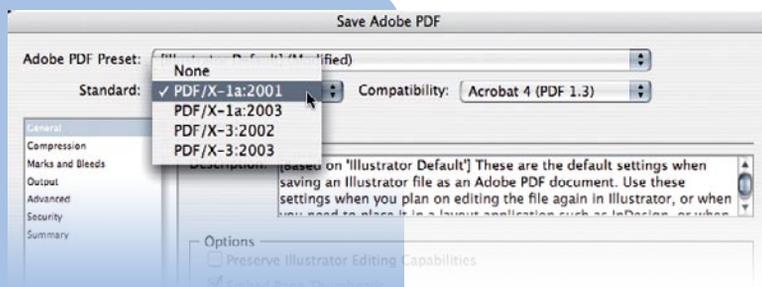
About PDF/X

PDF/X is a standard used for professional printing 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 Standards menu at the top of the Save Adobe PDF dialog box. Currently, the most widely used standards for a print publishing workflow are available in two different types of PDF/X formats, PDF/X-1a and PDF/X-3. For more information on PDF/X, see the Adobe website (www.adobe.com/studio/print/psp.html).

PDF/X-1a PDF/X-1a is an ISO standard for graphic content exchange. PDF/X-1a requires all fonts to be embedded, the appropriate PDF bounding boxes to be specified, and color to appear as CMYK, spot colors, or both. PDF/X-compliant files must contain information describing the printing condition for which they are prepared. You can open PDF files created with PDF/X-1a compliance in Acrobat 4.0 and later and Acrobat Reader 4.0 and later.

PDF/X-3 PDF/X-3 is another ISO standard for graphic content exchange. The main difference between it and PDF/X-1a is that PDF/X-3 allows the use of color management and device-independent color (CIE L*a*b, ICC-based color spaces, CalRGB, and CalGray) in addition to CMYK and spot colors. PDF/X-3 allows you to use ICC color profiles to specify color data later in the workflow at the output device. You can open PDF files created with PDF/X-3 compliance in Acrobat 4.0 and later and Acrobat Reader 4.0 and later.

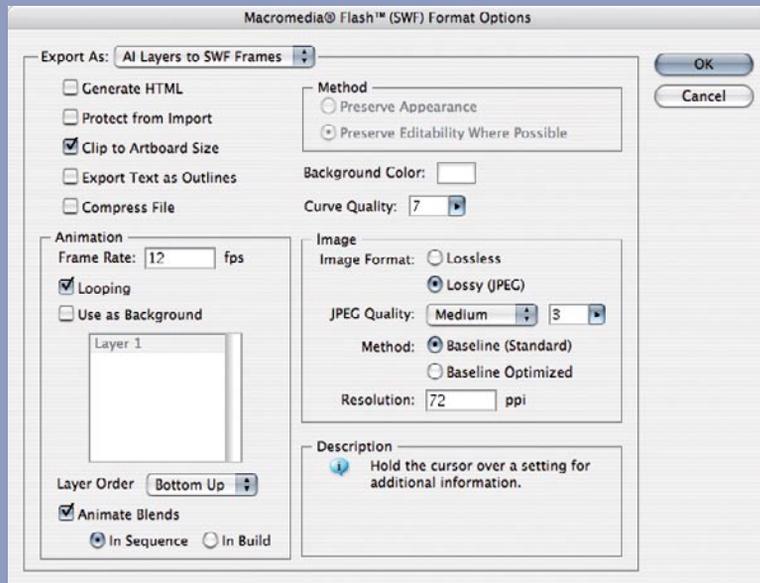


When saving Illustrator files as PDF, you can also choose from several PDF/X standards.

Exporting Flash animation from Illustrator

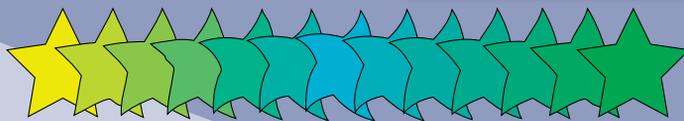
You export artwork in SWF format using the Export command or the Save For Web command. Options in the Export dialog box give you more control over animation and bitmap compression options, while options in the Save For Web dialog box give you more control over the mix of SWF and bitmap formats in a sliced layout. Although the Save For Web dialog box doesn't let you set the Image options that are available for the Export (SWF) command, the Save For Web command does use the Export command's last-used settings.

The Save For Web dialog box can also be a very convenient for previewing your animation in a web browser.



Flash format options

Blend options



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

Creating frame-based animation

Flash animation is frame based. Keep that in mind when working with layers; each layer of the Illustrator document will become a frame of the animation. Considering that Flash animation typically 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 palette or a symbols library.

Apply effects to symbols using the Symbols palette. The resulting file size will be smaller.

After you place a symbol, you can edit the symbol's instances on the artboard and, if you want, redefine the original symbol.

Using blends to animate objects

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

Save for web



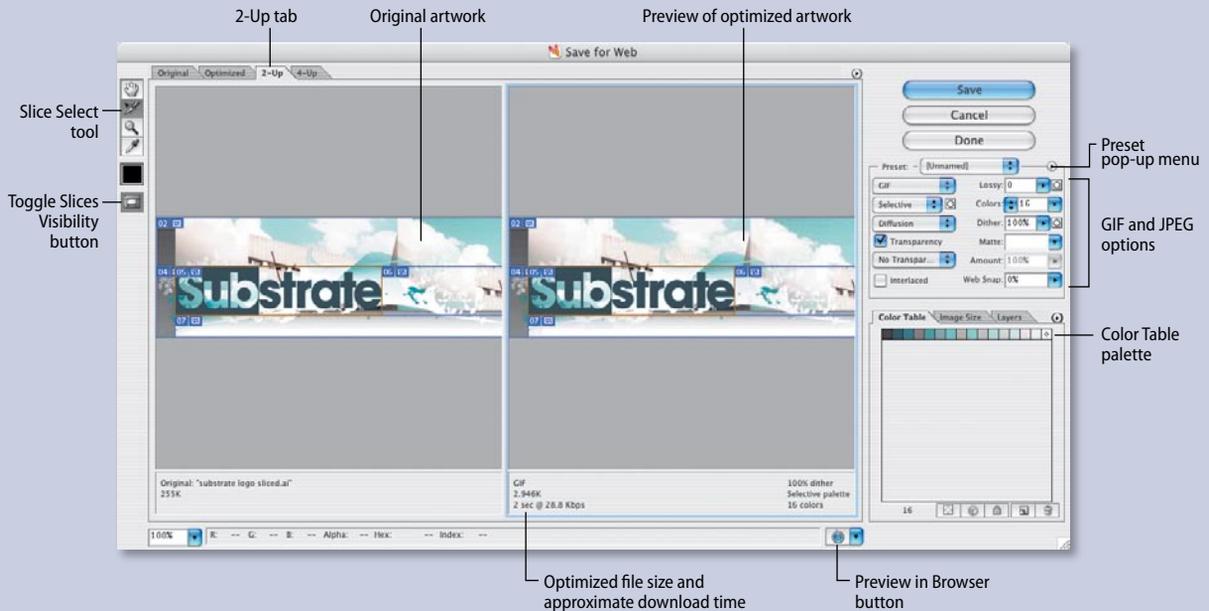
A sliced, optimized header on a web page.

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

Save for Web 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 StyleSheets) 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 file, you can isolate the bitmap image using a slice. When you save the artwork as a web page using the Save For Web command, you can choose to save each slice as an independent file with its own format, settings, and color palette. Slices in an Illustrator document correspond to table cells in the resulting web page.

The Save for Web dialog box



Printing

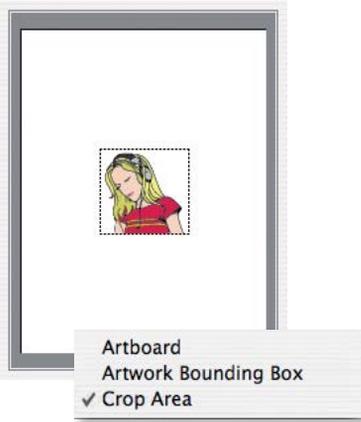
Illustrator CS2 output is reliable and accurate, thanks to improved performance and such features as transparency flattening and overprint preview, whether you output to a printer or export as Adobe PDF output. Feel confident that your Illustrator CS2 artwork will print as you have created it.

The Page tool

An Illustrator document can be up to 227 square inches, but the paper you print on comes in standard sizes. You use the Page tool to define which part of the artwork appears on the printed page.

To view and use the page tool:

1. In the Print dialog box, choose a printer and a media size, and then click Done.
2. Choose View > Show Page Tiling. Illustrator outlines the area that will print on the selected media size.
3. Select the Page tool (hidden behind the Hand tool in the toolbox) and use it to move the print area as necessary.



Use the Crop Area command to print portions of your artwork.

Where is the Output Area tool?

To print a specific area of your Illustrator artwork, create a rectangular shape with the rectangle tool around the area you want print, and then choose Object > Crop Area > Make. In the Setup pane of the Print dialog box, you can then choose Crop Artwork to: Crop Area.

The Print dialog box

Printing your artwork in Illustrator is very similar to using the Advanced Print Settings in FreeHand.

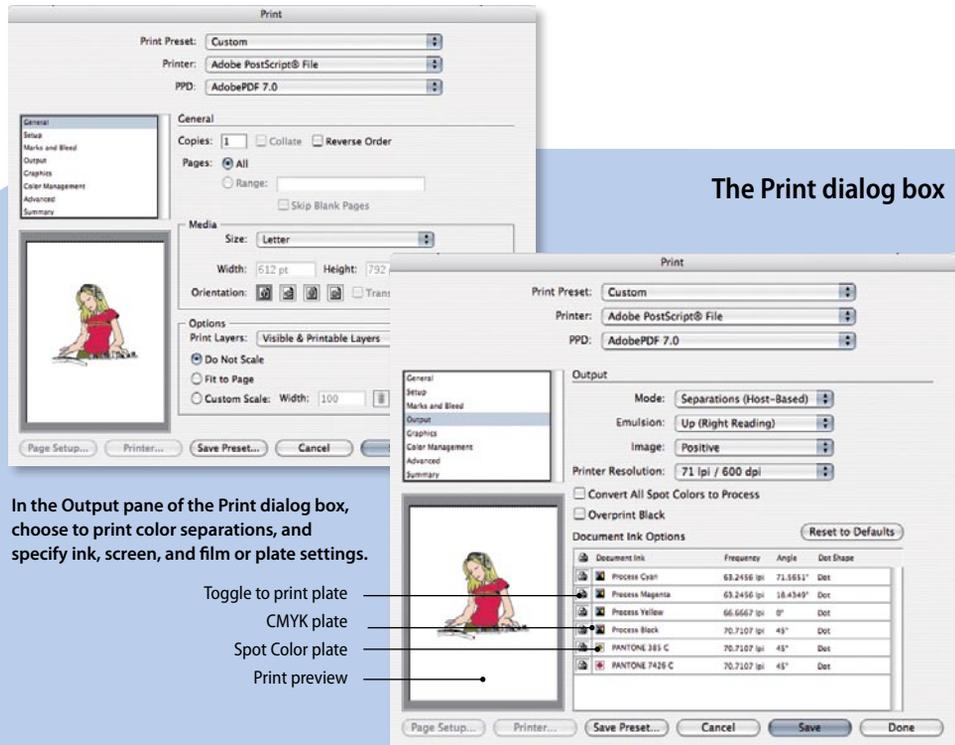
The Print dialog lets you click through panes that provide controls over general settings, document setup, marks and bleeds, output, graphics, and color management. Click Page Setup to specify page setup options.

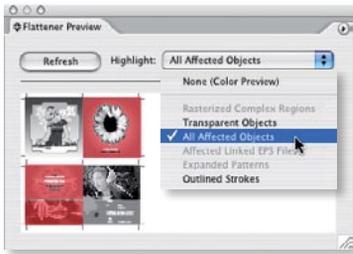
Each category of options in the Print dialog box in Illustrator—from General options to Summary options—is organized to guide you through the printing process:

- **General** Set the page size and orientation, specify how many pages to print, scale the artwork, and choose which layers to print.

- **Setup** Crop the artwork, change the placement of artwork on the page, and specify how to print artwork that doesn't fit on a single page.
- **Marks & Bleed** Select printer's marks and create a bleed.
- **Output** Create color separations or choose what 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.

For more information about printing from Illustrator CS2, see the Print Resource Center at on the Adobe website (www.adobe.com/studio/print/main.html).





Flattener Preview palette

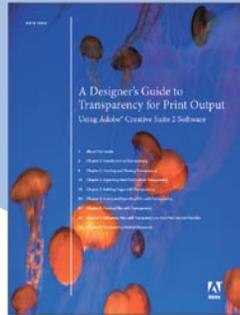
Flattening transparency

Transparent effects in artwork must be flattened before they can be printed. 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 palette pop-up menu. Click Refresh again to preview the results. Or, select an object and choose Object > Flatten Transparency.

Tip: For more information on flattening, see “A Designer’s Guide to Transparency for Print Output” on the Adobe website (www.adobe.com/products/creativesuite/pdfs/dgt.pdf).

About Transparency and the Flattener Preview

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 applications in the Adobe Creative Suite, you can place native transparent Photoshop (.psd) files onto your Illustrator artwork without you rasterizing your compositions first (for example, saving it as EPS or TIFF).

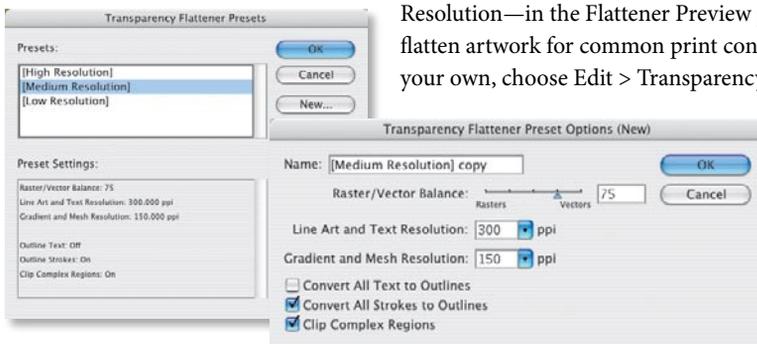


If you are new to native transparency, note that transparency is flattened when you export a document to a file format that doesn't support native transparency from Illustrator, or when you print the document.

You can preview what areas will be flattened, choose Window > Flattener Preview and click Refresh.

Flattening presets

Illustrator CS2 offers three flattening presets—Low, Medium, and High Resolution—in the Flattener Preview palette 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.



Applying transparency flattener presets



Artwork with Overprint Preview on

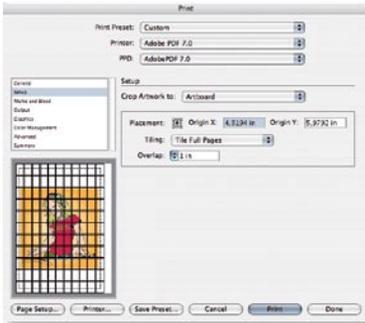


Artwork with Overprint Preview off

Overprint Preview

In the Illustrator Attributes palette, you can set the fills and strokes elements of your artwork to overprint when it is separated for professional printing.

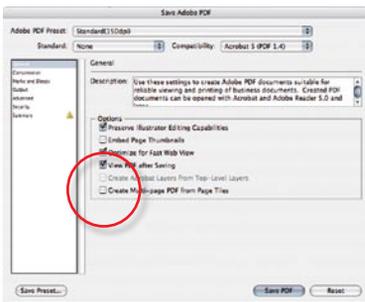
For soft (on-screen) color proofs of your artwork, choose View > Overprint > Preview. Overprint Preview approximates how blending, transparency, and overprinting will appear in color-separated output, which can save time and money by preventing unwanted surprises on press.



In the Setup pane of the Print dialog box, you can define how pages of a large document tile on smaller pages.

Printing overlapping tiles

If your artwork does not fit on a single printed page, you can tile it. Tiling is dividing the artboard to fit a printer's available page sizes. You can choose a tiling option in the Setup section of the Print dialog box. To view the page tiling boundaries on the artboard, choose View > Show Page Tiling.



Once you have defined a tiling method in the Print dialog box, you can save your artwork as a tiled multipage PDF.

The same way Illustrator allows you to print large artwork on multiple pages you can also output a large document to a multipage PDF. To create a multipage PDF, first define tiling in the Print dialog box and click Done. Choose File > Save a Copy and Adobe PDF from the format pop-up menu and then choose Create Multi-page PDF from Page Tiles in the General pane.

Keyboard Shortcuts

Illustrator CS2 offers keyboard shortcuts to functions otherwise available in menus or palettes. You can customize your own sets of shortcuts, change individual shortcuts within a set, and switch between sets by choosing Edit > Keyboard Shortcuts.

Here is a list of some of the most useful Illustrator CS2 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+Cmd-drag
Adds/subtracts sides, corner radius, star, points, or spiral coils.	Click-hold+Up/Down Arrow key	Click-hold+Up/Down Arrow key
Changes the pointer to a cross hair for selected tools.	Caps lock	Caps lock

Viewing objects

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

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 selected tool.	Ctrl	Cmd
Switches between the Direct Selection tool and the Group Selection tool.	Alt	Option
Selects whether the Direct Selection or regular Selection tool is accessed by the Ctrl key.	Ctrl+Tab	n/a
Chooses whether an object, path, or point is selected or deselected.	Shift-click	Shift-click
Click on or select around an object, path, point, or group to choose selection/deselection when using the Direct Selection or Group Selection tool.	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	
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, and horizontally.	Shift	Shift
Leaves the original object and transforms a copy.	Alt	Option
Performs an Undo.	Ctrl+Z	Cmd+Z
Performs a Redo.	Shift+Ctrl+Z	Shift+Cmd+Z
Constrains movement to a 45-degree angle (except Reflect).	Shift	Shift
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
Switches focus between fill and stroke.	X	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	
	<i>WINDOWS</i>	<i>MAC OS</i>
Creates a tracing object and converts it to paths.	Alt-click button	Option-click button

Isolation mode

RESULT	ACTION	
	<i>WINDOWS</i>	<i>MAC OS</i>
Enters Isolation mode when using the Selection tool.	Double-click a group	Double-click a group
Exits Isolation mode when using the Selection tool.	Double-click outside of the group	Double-click outside of the group

Document control

RESULT	ACTION	
	<i>WINDOWS</i>	<i>MAC OS</i>
Switches between open Illustrator documents.	n/a	Cmd+tilde (~)

Additional Resources

This guide is not meant to replace documentation that comes with Illustrator CS2 or to be a comprehensive reference for every feature in Illustrator CS2. 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 for the most complete Illustrator CS2 documentation, available as a floating palette as you work.

Adobe Resource Center

Find a wealth of tips, tutorials, plug-ins, actions, and other design inspiration and instructional content on the Adobe website at www.adobestudio.com.

Adobe Illustrator product pages

Go to the Adobe website at www.adobe.com/products/Illustrator/indepth.html for links to useful documents and more information about Live Trace, OpenType fonts, XMP, and professional printing from Illustrator.

Support Center

The Support Center on the Adobe website at www.adobe.com/support/main.html offers a searchable knowledgebase, user forums, and other timely information about Illustrator CS2.

Demonstrator and Cool Extras

Choose Help > Welcome Screen in Illustrator, and then click Show Me What's New for demonstrations of new features, or click Browse Cool Extras to check out Illustrator templates and sample files in Bridge.

Adobe Store

Purchase Illustrator CS2, instruction books, training materials, and printed user guides on the Adobe website at www.adobe.com/store/main.jhtml.



Adobe Systems Incorporated
345 Park Avenue, San Jose, CA 95110-2704 USA
www.adobe.com

Printed in the USA.
95006283 02/06