

# Illustrator<sup>®</sup> CS4 for Production

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## Helpful Links

<http://tv.adobe.com>

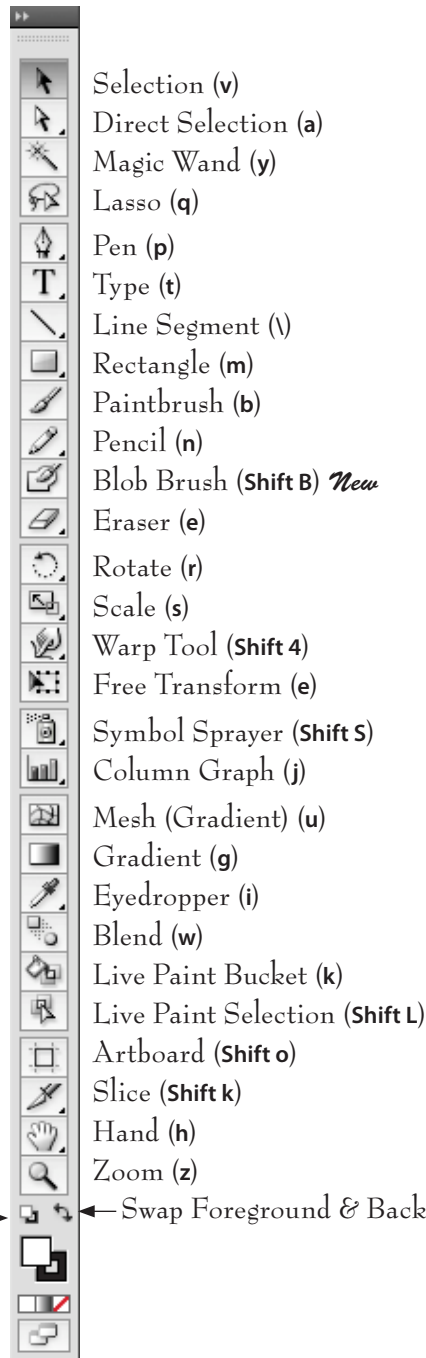
<http://public.me.com/kmccathran>

<http://www.adobe.com/designcenter>

[http://www.adobe.com/designcenter/video\\_workshop](http://www.adobe.com/designcenter/video_workshop)

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# Illustrator Tools



## Tips

Hide all Panels (**tab**)

Hide all Panels except toolbar (**shift tab**)

Switch Full Screen Mode (**f**), works 3 times as a toggle between each mode

To **Fit your Page in Window**, double click the **Hand tool** on the toolbar.

To zoom to **100%** double click the **Zoom tool**.

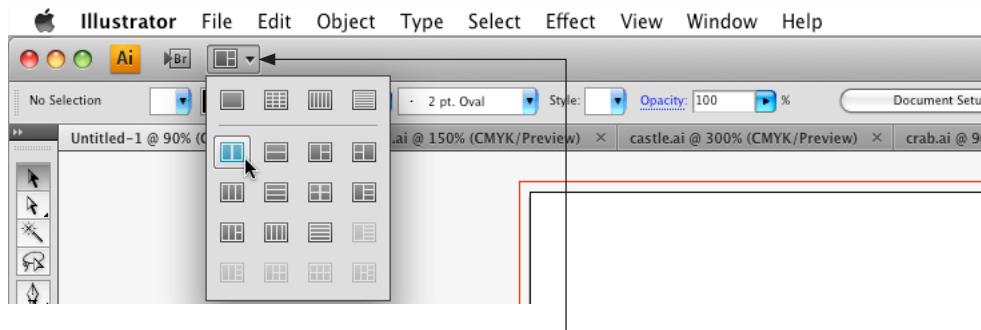


Default Colors (d) →

← Swap Foreground & Background Color (x) or (Shift x)

## New Application Bar

You may be wondering where they moved the screen modes that used to appear at the bottom of the toolbar. They are on the new Application bar across the top of the screen (*above the options bar*).



### New Arrange Documents

This new menu allows you to control the new layouts for the tabbed windows. You can select 2-up, horizontal or vertical, 4 up, etc.

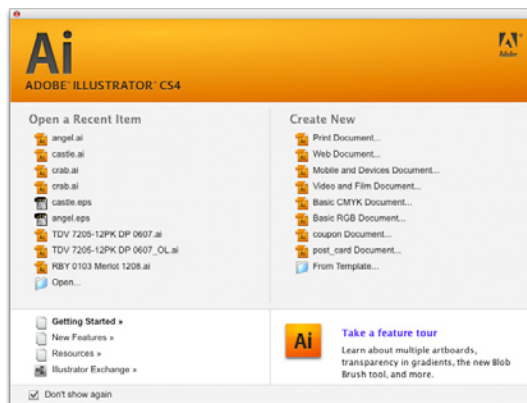
### Tip

The keyboard shortcut **Command ~** or **Ctrl ~** toggles active windows. This shortcut works in **EVERY** Mac program and is now also supported in Photoshop CS4.



## Illustrator Splash Screen

All of the CS4 Applications include a welcome or “splash screen” or Welcome screen. Personally, I’m not a big fan of them, so I tend to check **Don’t show again** in the lower left corner, but that’s your call. If you do turn off the welcome screen, it can be brought back up under the **Help** menu **Welcome Screen...**



## Default Panels

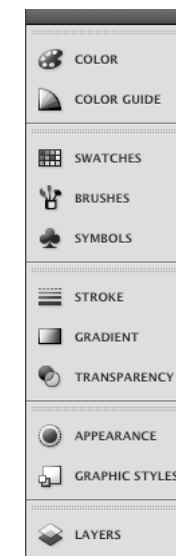
The default workspace for all CS4 programs is called Essentials. The **panels** in Illustrator (*formerly called palettes*) are collapsed to icons only. You can click and drag on the left edge to extend them and show the name of the panel (*as shown on the right*).

## Panel Layout

### Default



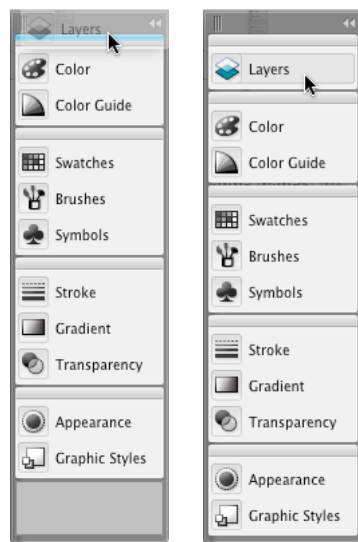
### Stretched



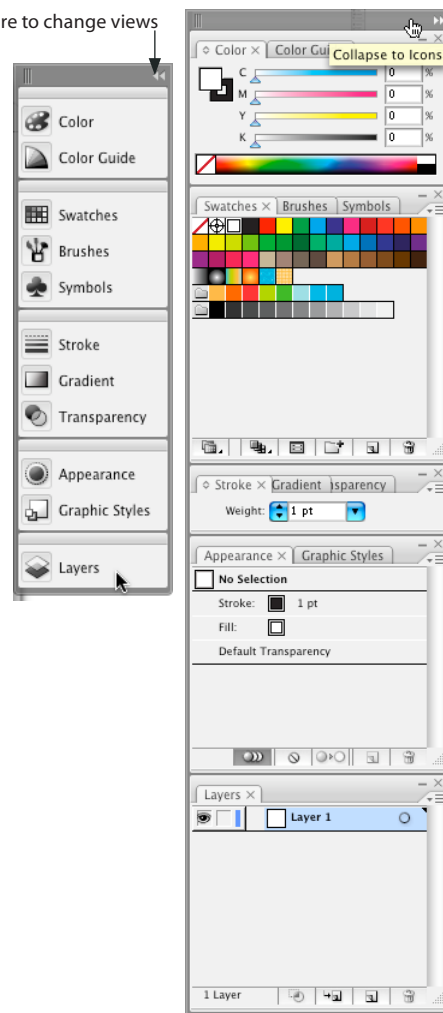
## Workspaces

Starting with Creative Suite 3, Panels can be docked in **collapsible Panel bays** that are tucked on the right edge of your window. Panels can be re-organized by grabbing the top of the Panel and dragging it to the desired location. One click on the name of the Panel will collapse or expand it.

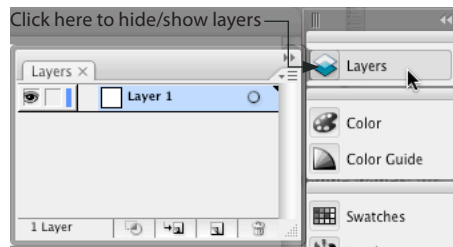
Drag the panel to a new location



Click here to change views



Click here to hide/show layers

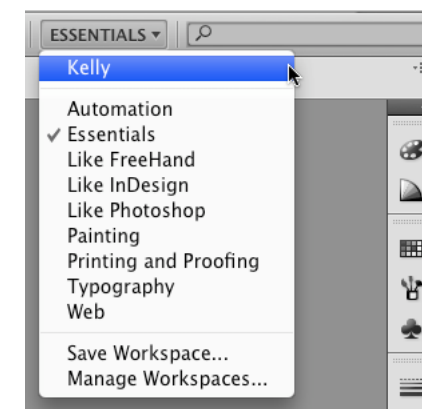


Recommended panel layout



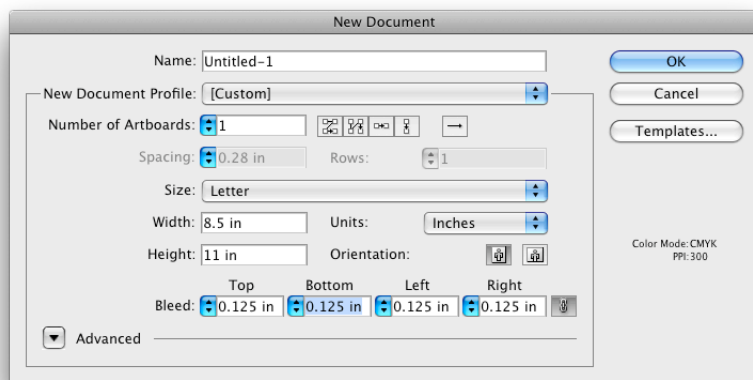
## Savable Workspaces

**Savable Workspaces** are very useful to recall frequently used panel layouts. Arrange your Panels in a logical order, then choose **Window > Workspace > Save Workspace** or you can select Save Workspace from the new **Panel menu** on the **Application bar** located at the top right corner of your screen.



## Creating a New Document

New to Illustrator CS4 is the ability to finally add **BLEED**. Also, in the new document window the unit of measure can be selected, without changing your preferences and by choosing CMYK, all colors will be built with Process colors. RGB is typically used for the web.



## Templates

Illustrator CS3 & 4 include more than 200 templates which can help you start projects quickly. Many include custom styles, swatches and symbols. Illustrator also has a template file format, so you can now save your own templates. To start from a Template Choose **File > New From Template** (**Command Shift N** or **Ctrl Shift N**).

# Illustrator CS4 New Features

To see online demos of many new features visit:

<http://tv.adobe.com>

[http://www.adobe.com/designcenter/video\\_workshop](http://www.adobe.com/designcenter/video_workshop)

<http://www.adobe.com/products/photoshop/photoshop/features/?view=topnew>

## ADOBE ILLUSTRATOR CS4



### Which editions is Illustrator CS4 in?

- Design Premium
- Design Standard
- Web Premium
- Production Premium
- Master Collection

### DESIGN WITH POWERFUL, CREATIVE TOOLS

Explore multiple design options and generate intricate graphics using robust creative features. Industry-standard drawing tools and powerful effects allow you to experiment freely and quickly achieve just the look you want.

#### Sophisticated vector drawing controls

##### Blob Brush tool **NEW**

Create a single, clean vector shape as you sketch, even when strokes overlap. Use the Blob Brush tool together with the Eraser and Smooth tools for natural vector painting.

##### Eraser tool

Remove areas of artwork with the Eraser tool as easily as you erase pixels in Adobe® Photoshop® software, and enjoy complete control over the width, shape, and smoothness of the erasure.

##### Precise positioning **ENHANCED**

Position objects and anchor points with expert precision using the Align, Transform, and Control panels along with newly refined Smart Guides. Align to the artboard, key object, or crop area with visual feedback, thanks to on-object readouts.

##### Flexible brushes **ENHANCED**

Add flair to paths with customized brushes. Choose from calligraphic, scatter, art, and pattern brushes, or make your own custom brush. For tablet users, pressure sensitivity is even more subtle and controllable in Adobe Illustrator® CS4.

##### Smooth tool

##### Path editing

Remove, connect, and split paths — and convert anchor points — using options in the Control panel. Select points more easily with rollover enlargement and toggle the visibility of your curve handles.

##### Point alignment

Align and distribute anchor points with one click using options in the Control panel. It's as easy as aligning and distributing objects.

##### Pen tool

Draw with precision using the Pen tool, which provides full control over anchor points and Bezier curves.

##### Pencil tool

Draw onscreen as you would on paper using the Pencil tool. Smooth out paths by simply drawing a new line near the path you want to alter.

##### Stroke options

Define solid and dashed lines in the Stroke panel. Specify weight, miter limit, the style of joins and caps, and whether the stroke is inside, centered on, or outside the path.

#### Workspace and tool accessibility

##### Multiple artboards **NEW**

Create files containing up to 100 artboards of varying sizes. Display the artboards any way you want — overlapping, side by side, or stacked. Save, export, and print artboards independently or together.

##### In-panel appearance editing **NEW**

Edit object characteristics directly in the Appearance panel, eliminating the need to open fill, stroke, or effects panels. Work with shared attributes and control display for faster rendering.

##### Actions on the artboard **NEW**

Choose options without interrupting your train of thought. Actions on the artboard provide contextual menus right where you're working so you can set options without moving your attention to panels at the edges of your workspace.

##### Gradients exposed **NEW**

Use gradient stop controls for color and opacity that appear right on your object, and directly control the angle and position of the gradient. Set dimensions of a radial gradient to create an elliptical gradient of any proportion.

##### Spring-loaded panels **NEW**

Get to your panels and options even more quickly with spring loading. Panels now expand automatically when you drag an object on top of the panel icon.

##### Tabbed document view **NEW**

Work with multiple open documents in a tabbed view so you can bring windows to the front with one click. You can also arrange multiple windows in tiled or cascaded views for easy visual comparison and to click and drag objects across documents for copying.

##### Flexible workspace **ENHANCED**

Increase your efficiency using space-saving features and custom viewing options. View the toolbar in one column, dock self-adjusting panels as icons, set panel overlap just the way you like it, choose darker or lighter workspace color, and more.

##### Color-blind workspace **NEW**

Proof your artwork to help ensure that your color selections convey information properly for viewers who are color-blind. Illustrator CS4 supports proofing for both protanopia and deuteranopia, types of red-green color blindness.

##### Custom workspaces

Work more efficiently using custom workspaces that display only the panels you need for a specific task. Save, share, or access any workspace at any time, or use workspace presets.

##### Layers panel

Organize complex artwork using an unlimited number of layers, nested layers, and layer masks. Find selected objects quickly by displaying the layer selection color.

##### Photoshop layer comp support

Control the visibility of layer comps in linked, embedded, or opened Photoshop files from within Illustrator CS4.

##### Tool option quick access

Instantly access the options for tools, including the Brush, Eraser, Eyedropper, Graph, and Symbol tools, by double-clicking them in the Tools panel.

##### Adobe Bridge CS4 **ENHANCED**

Use Adobe Bridge to efficiently browse and preview your creative assets, run automation scripts, access new Adobe services, and more.

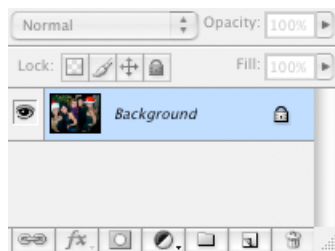
## File Formats

### To EPS or Not to EPS

In the past, most people worked with **EPS** as their primary format for placing Illustrator files into other applications. This is now introducing some **issues** with **Transparency** and **Spot colors**, especially when using **InDesign**. If you are having problems, try **re-linking** to a native **AI** (*Adobe Illustrator*) file, instead of EPS. The **preferred formats** are **AI**, **PSD** or **TIF**, *not* **EPS**.

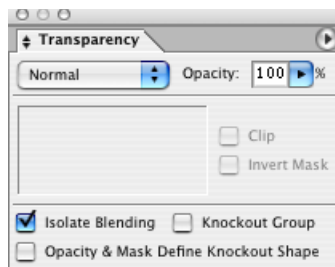
### Photoshop to Illustrator

When saving as **PSD**, be sure there is a **locked Background layer**, otherwise Illustrator may perform Transparency flattening and create **huge** files.



### Illustrator to Photoshop

When exporting files from **Illustrator** to **Photoshop**, **Layers** may not always import properly. If this occurs, go to the **Transparency panel** and choose **Isolate Blending**.

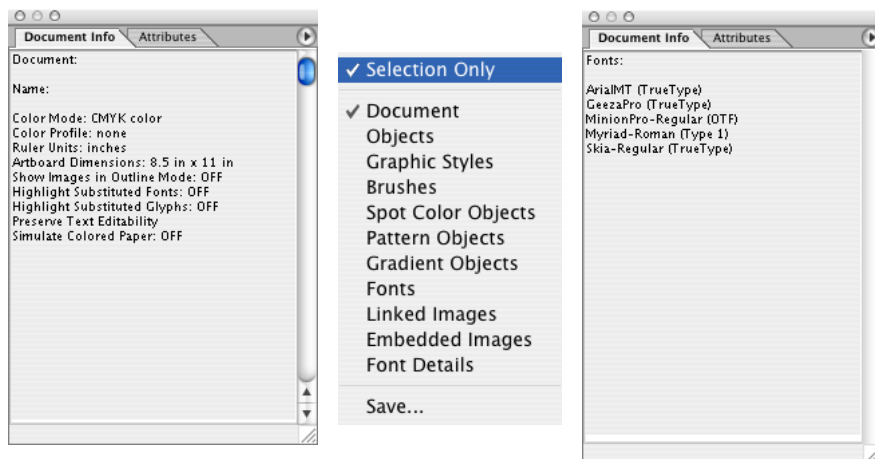


## Document Info

Illustrator has no built in Preflight, but one way to get some important information is with **Window > Document Info**.

In order to see all the fonts used in a document:

1. **Select All** (**Command A** or *Ctrl A*).
2. Go to the **Document Info pop-up menu** and choose **Fonts**.
3. If you would like to save a **text file** with **all the document info**, go back to the **Document Info pop-up menu** and choose **Save**.

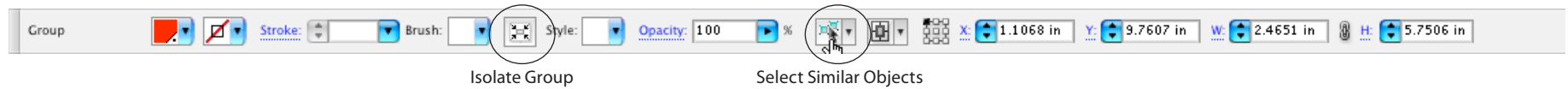


## Control Panel

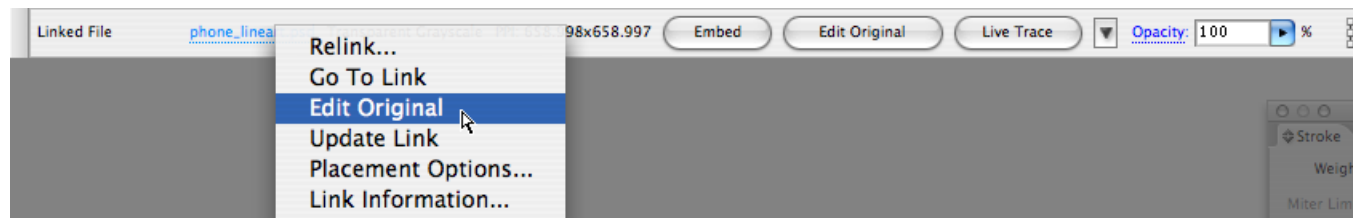
Illustrator CS3 expanded the functionality of the **Control Panel**, which reduces the need for most floating panels. Now, roughly 80% of tasks can be performed through the new **Context Sensitive Control panel**, which is a huge relief to laptop users. In addition, clicking on a blue, underlined link will display full panels, to accomplish quick tasks.

Notice the new **Select Similar Objects** button and **Isolate Group** button.

### Object Selected



### Placed Image Selected



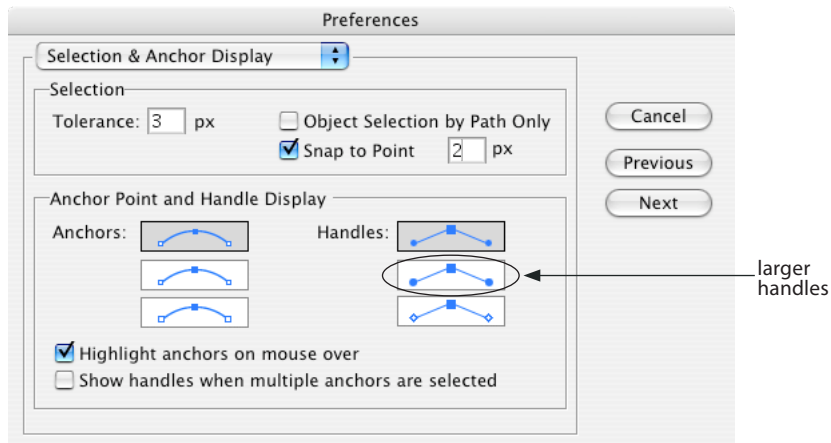
## Cut Path at Selected Points Feature

When you select 2 points on a shape, you can now create a cut between them. This is located on the Control panel when you have two points selected with the Direct Selection tool.



## Snap to Distance

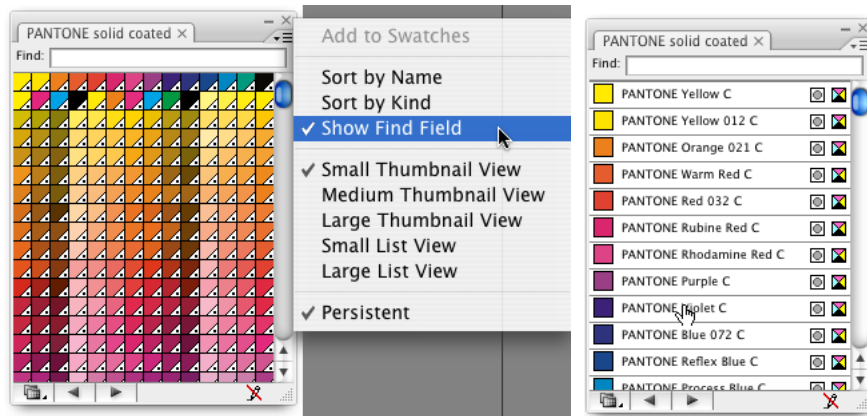
To make Illustrator snap to your guides more carefully, choose **Illustrator > Preferences > Selection & Anchor Display** (Mac) **Edit > Preferences > Selection & Anchor Display** (PC). In this dialog, I also like to select larger handles for my selected anchor points.





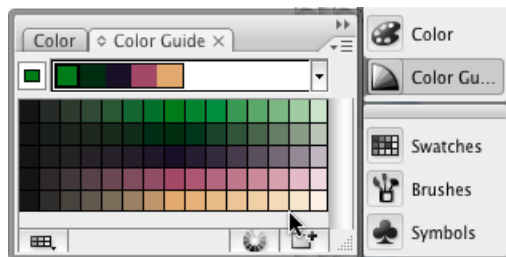
## Changes in the Color Panels

The Pantone libraries have been moved to **Window > Swatch Libraries > Color Books > Pantone solid coated**. In order to search by number, click the pop-up menu and choose **Show Find Field**. In order for Illustrator to remember to leave the find field on click the pop-up menu and choose **Persistent**. The **Small List View** setting was lost in earlier versions of Illustrator, but is now remembered in CS4.



## Color Guide

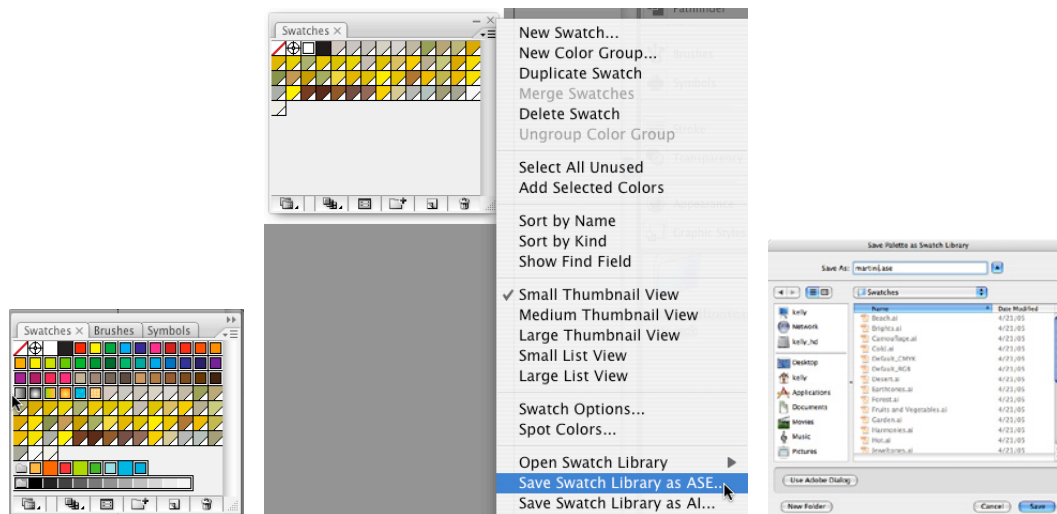
The new Color guide panel gives shades of complementary colors for the object you have selected, or the document colors.



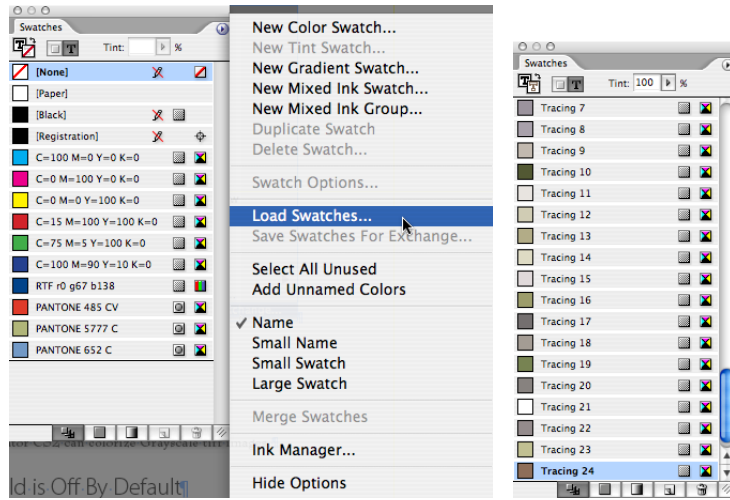
## Save Swatches as ASE

Once the Swatches are created from the Tracing result they can be saved and pulled into other Creative Suite applications. This file is saved as an **ASE** (*Adobe Swatch Exchange*), which can be loaded into the Swatches panel in Photoshop, InDesign and of course Illustrator.

1. Go to the **Swatches** panel **pop-up** menu and choose **Select All Unused**, then hit the trash can icon to delete the swatches that weren't part of the tracing.
2. Then go back to the **Swatches** panel **pop-up** menu and choose **Save Swatch Library as ASE...**



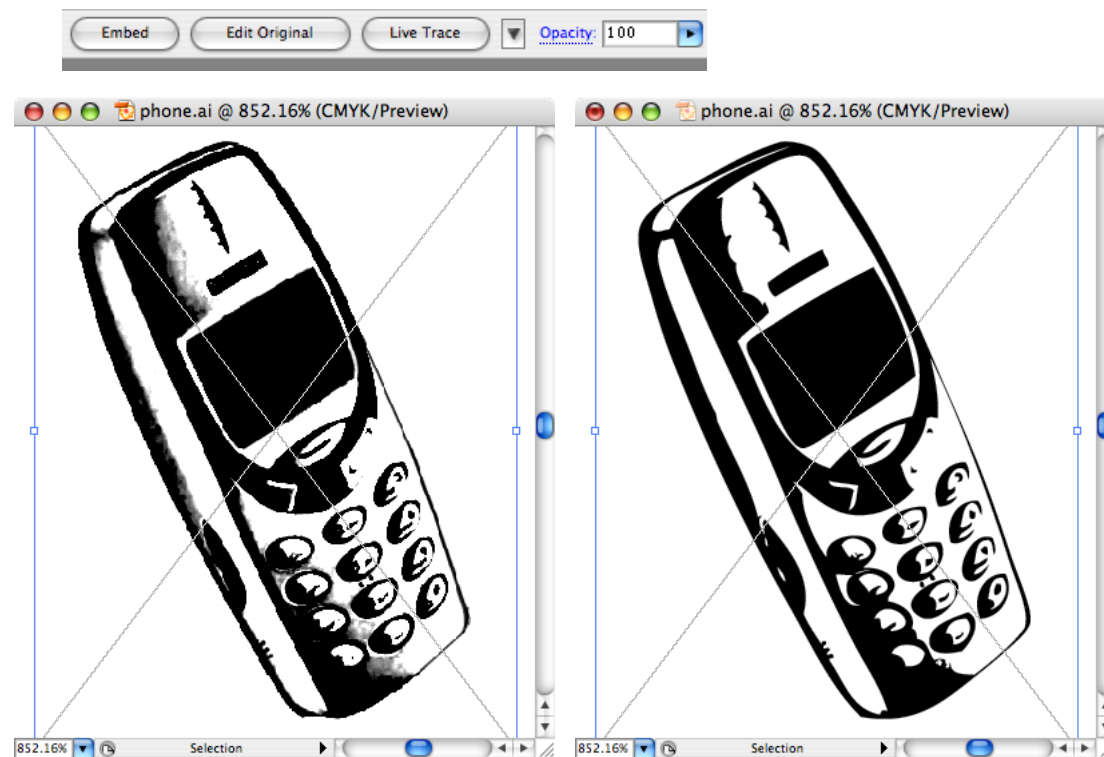
3. Once the swatches are saved, you can switch applications. In the example below the **InDesign Swatches Panel** is shown. To **load** the **Live Trace swatches** (*created earlier*) go to the **pop-up menu** and select **Load Swatches...**



## Enhancements to Live Trace

Live Trace and Live Paint were two of the most exciting new features of Creative Suite 2. The Live Paint feature was **improved** in Creative Suite 3. **Live Trace** automatically turns placed **raster (pixel-based) images** into **scalable vector (point based) graphics**. Many artists have not mastered the pen tool, and can create artwork more easily with pen and paper. If you have a scanner, virtually any image (*color or black and white*) can be turned into Illustrator artwork. The results of a Live Trace object can be easily manipulated with tools such as preprocessing, tracing gap options, and overlay settings.

1. To start, choose **File > Place** and locate a raster (scanned) image (it's best to start with a black and white Line Art drawing).
2. With your image selected, click on the **Live Trace** button, located on the new **Control Panel**. Once the image is traced the original placed image is gone from the page, there is no need to look for it or delete it.



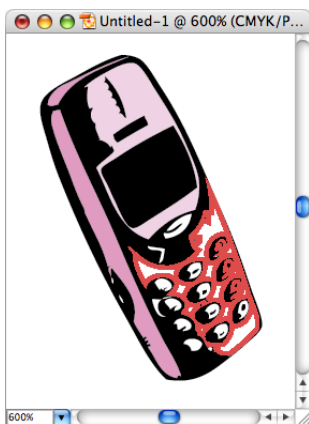
## Improved Live Paint Features

Once an object is traced, you can use the new **Live Paint tool** to fill the shapes.

1. Click on the **Live Paint tool**.



2. Select a **color** from the **Control Panel**, **Color Panel** or **Swatches Panel**.
3. Move over the object and **click** on the areas you would like to fill.



4. Select a new color and click on the area to fill with that color.

## Live Paint Selection Tool

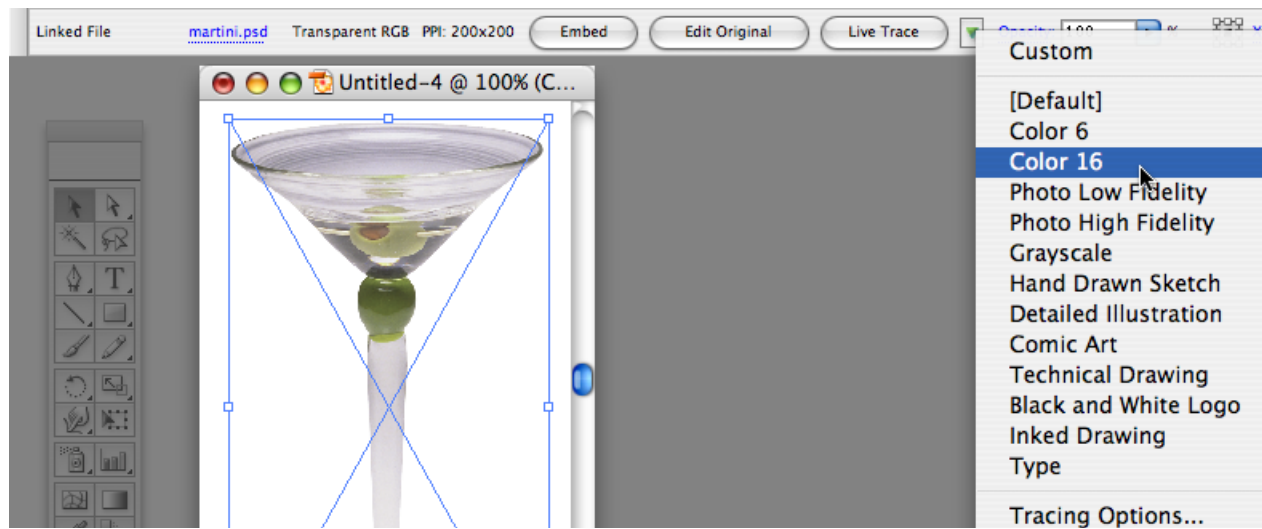
If you use the Live Paint tool, the **Direct Select** and **Select** tool will not work for selecting a shape and changing the fill or stroke. You can tell that you have a Live Paint group by the Stars over the Selection points. If this is the case you can use the **Live Paint Selection Tool**, to grab a piece of the art and re-color it.



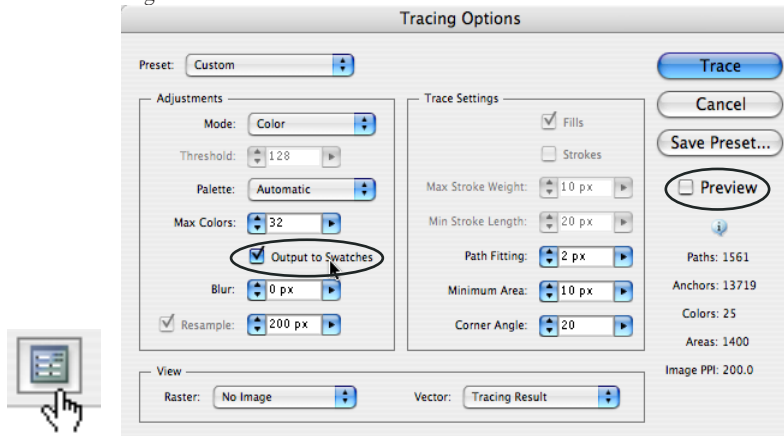
## Tracing Options Dialog

When tracing color images, the settings may need to be adjusted. The default settings work well for Line Art or Bitmap images.

1. Choose **File > Place** and import a color raster image (*you may also drag and drop from Bridge into an Illustrator document*).
2. Next to the **Live Trace** button on the **Control Panel** is a **downward-facing arrow** that you can use to change the default tracing options.



3. If you are still not satisfied with the result, you can click the **Tracing Options** button on the **Control Panel**. This will allow you to customize your settings. You may want to change some of the settings then click **Preview**, on the right of the dialog box.

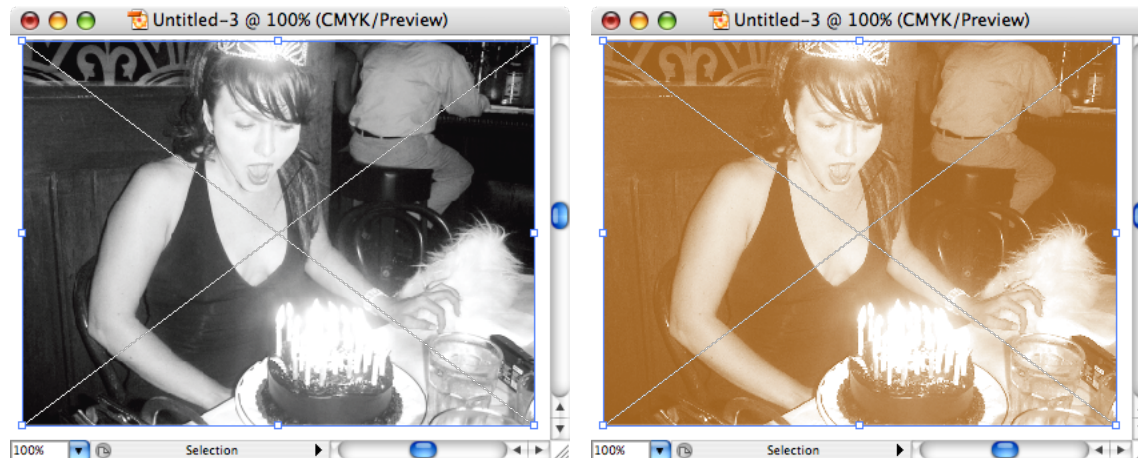


4. By clicking **Output to Swatches**, the colors from the scan that were used to make the tracing are added to the Swatches Panel as **Global Colors**.

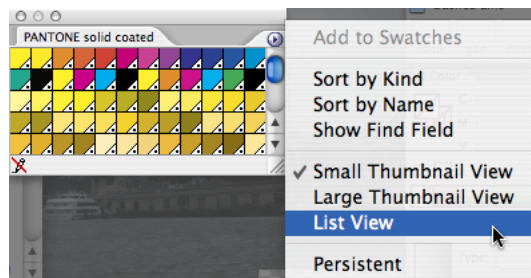


## Colorize Grayscale Tiffs

Now Illustrator CS4 can colorize Grayscale tiff images, even with Pantone® Swatches.

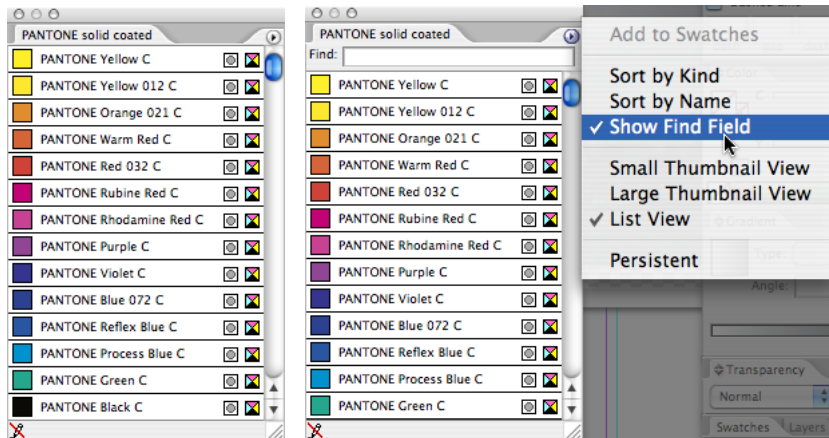


1. Start by going to **File > Place**, and select a Grayscale Tiff image.
2. Now choose **Window > Swatches**, you can select one of the built in CMYK or RGB swatches and you are finished at this step.
3. To select a Pantone® Color go to **Window > Swatch Libraries > Pantone Solid Coated**. The default view is icons, which makes it hard to select your desired color. To see the swatch numbers, go to the **pop-up menu** and choose **List View**.





4. By default, in Illustrator CS4 the **Find Field** is **off**. This makes it slower to select the Pantone® number, you have to scroll until you come across the correct one. If you would like to type in a **PMS** (*Pantone Matching System*) number, go to the Pantone solid coated pop-up menu and choose **Show Find Field**



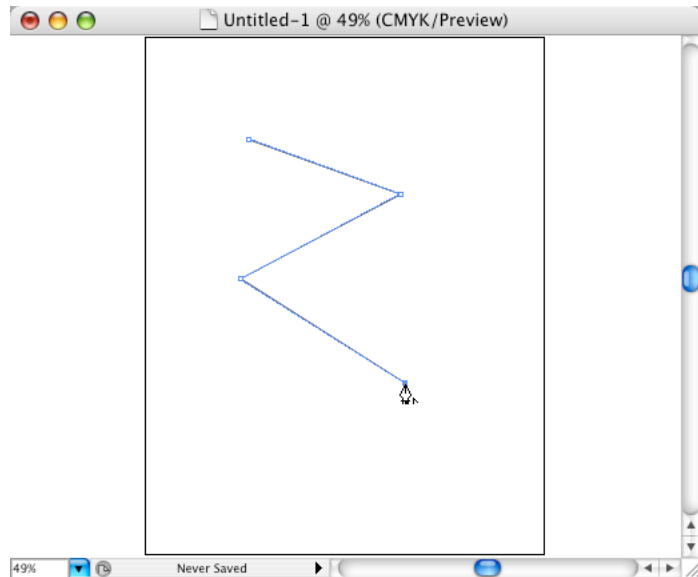
5. Now type the number of the Pantone you would like, I used **Pantone® 470**.

## The Pen Tool

The heart of the Illustrator application is the Pen tool. All good computer artists should master it. Many find that a mouse is cumbersome to draw with, so they opt for a Stylus, such as a Wacom tablet. Once you let go of your natural instinct, when it comes to drawing, and accept the logic of Illustrator's pen tool, it gets much easier.

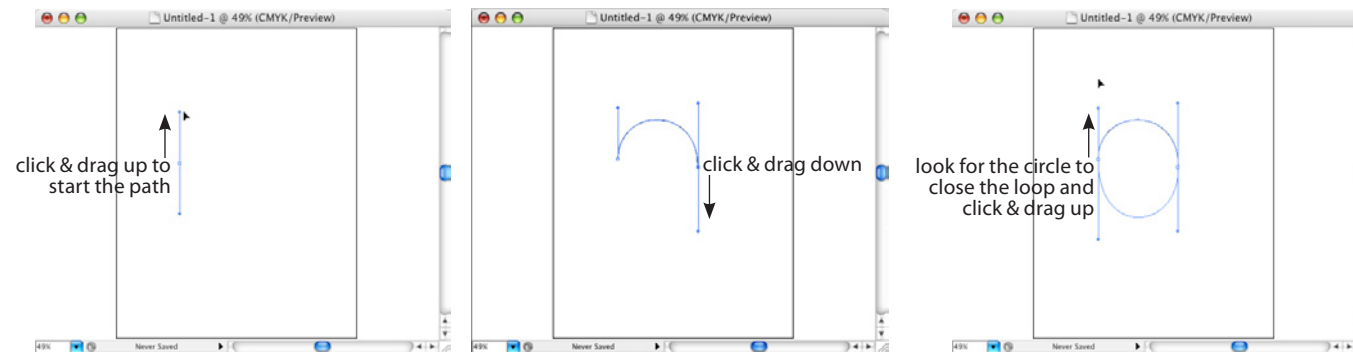
## Straight Lines

When you do **quick clicks** with the Pen tool, from point to point, Illustrator plays **connect the dots**. You are telling the application to create lines. If you click and drag, you are instructing Illustrator to create a curve.









## Curves

If you click and hold the mouse down while dragging to start a path, then let go and move away and click & hold again, you are telling Illustrator to create a curve. The perfect example is an egg shape.



## Pen States

Illustrator's cursor will indicate what mode the pen tool is in. Here are some helpful icons:

-  Start a **New Path** or shape
-  Close a path or shape
-  **Convert Anchor Point** (*changes a curve to a corner or a corner to a curve*)
-  **Continue a Path** or shape that has not been closed
-  Add an Anchor Point
-  Delete an Anchor Point

## Pen Tips

**Option** or *Alt* will convert direction while drawing.

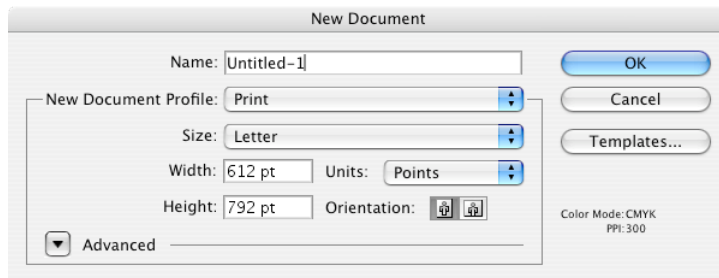
**Command** or *Ctrl* will switch to the **Select** arrow or **Direct Select** arrow (*which ever one you were on before you started drawing the shape*).

## New Features (added to CS3)

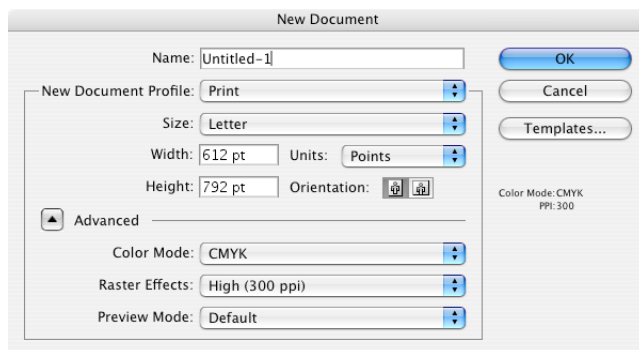
With the latest release of Illustrator, version CS3, there is a plethora of new and exciting features, along with improvements to old favorites. All of Creative Suite 3 has also been rewritten to work on the Intel Macs and Windows Vista.

## New Document Improvements

New Document Templates allow you to create new documents that share common settings and design elements, such as colors, patterns, gradients, brushes, graphic styles and symbols. Other settings stored in the template are: default artboard size, view settings (*such as guides*), and print options.



In the new document window, click on Advanced at the bottom to see Document Color Mode, Raster Effect Settings and Preview mode.

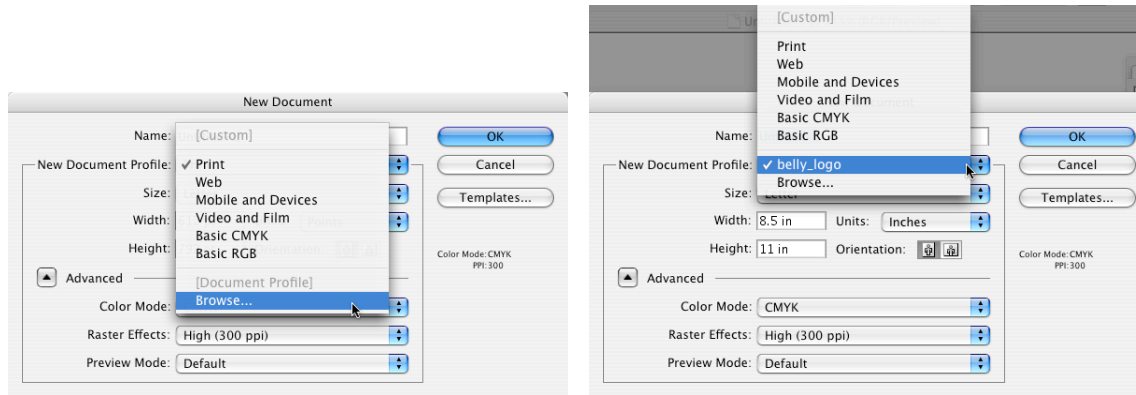


*Note:*

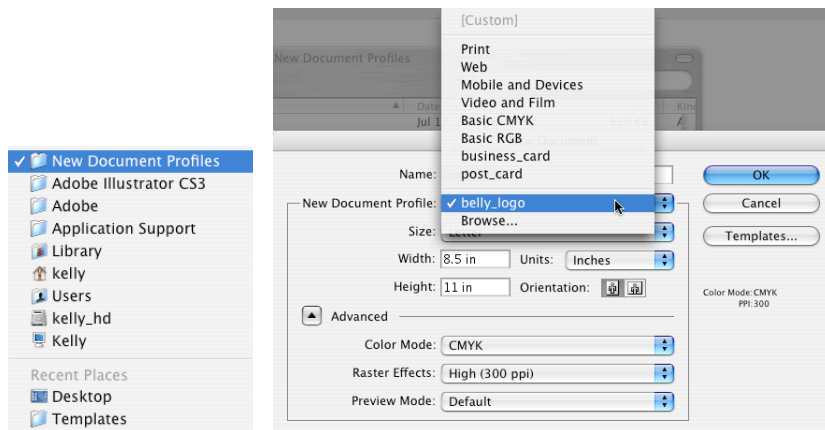
*Illustrator CS2 & older used to default to a low resolution (72 ppi) raster effect setting to speed up screen redraw when you run Effects or Filters. This caused some issues for designers who didn't know to up the resolution before they printed the illustration. With CS3 they changed this setting to 300 ppi, but this will slow down your computer when you run an Effect or Filter. If you're finding performance slow. Lower this resolution to 72 ppi, but remember to set it back to 300 ppi before you print.*

## New Document Profile

Illustrator CS3 can now load custom colors, page size document color mode, raster effect settings and preview mode and much more by selecting a document with these settings in place from the **New Document Profile** pop-up menu. You can Browse to an already created document and it will appear in the menu the next time you create a new file.



When you browse to a new document template, it only lets you save the last one you used (*as shown above*). If you'd like multiple new document templates, save them here (*the Windows location is different*):



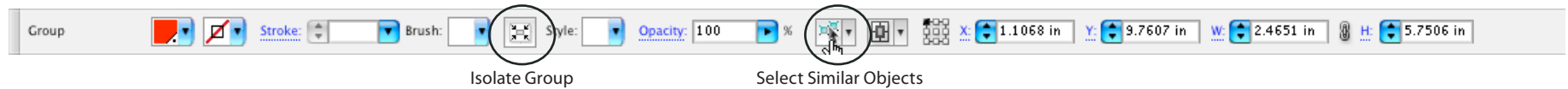
*Note: You must quit, then re-launch Illustrator for your new profiles to show up.*

## Control Panel

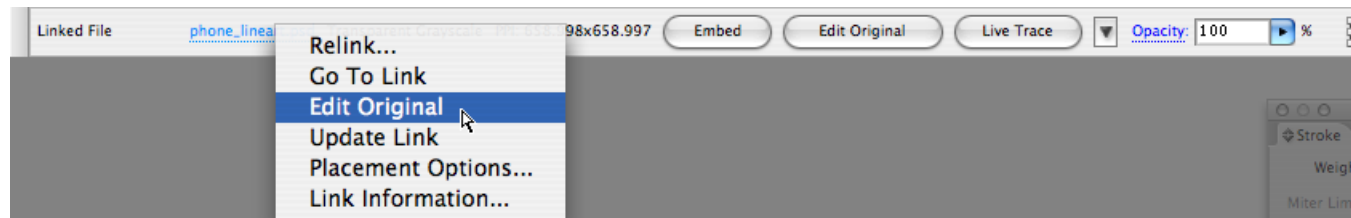
Illustrator CS3 expanded the functionality of the **Control Panel**, which reduces the need for most floating panels. Now, roughly 80% of tasks can be performed through the new **Context Sensitive Control panel**, which is a huge relief to laptop users. In addition, clicking on a blue, underlined link will display full panels, to accomplish quick tasks.

Notice the new **Select Similar Objects** button and **Isolate Group** button.

### Object Selected

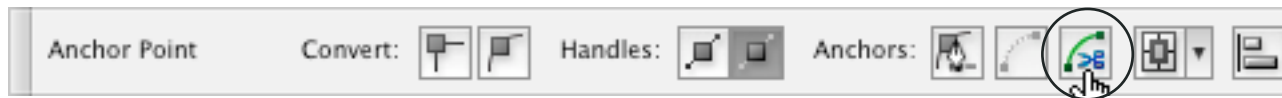


### Placed Image Selected



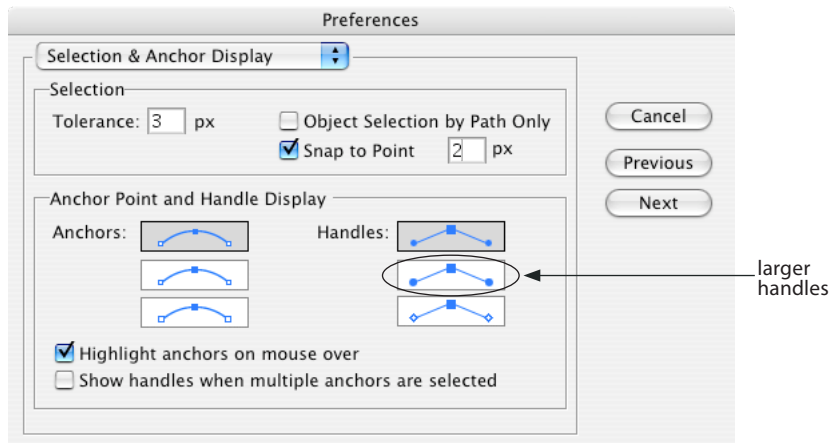
## New Cut Path at Selected Points Feature

When you select 2 points on a shape, you can now create a cut between them. This is located on the Control panel when you have two points selected with the Direct Selection tool.



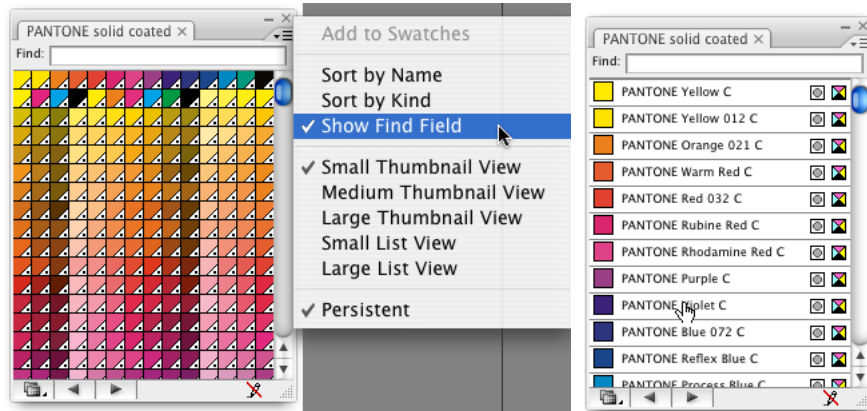
## Snap to Distance

To make Illustrator snap to your guides more carefully, choose **Illustrator > Preferences > Selection & Anchor Display** (Mac) **Edit > Preferences > Selection & Anchor Display** (PC). In this dialog, I also like to select larger handles for my selected anchor points.



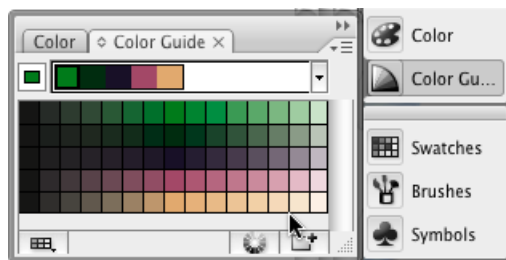
## Changes in the Color Panels

The Pantone libraries have been moved to **Window > Swatch Libraries > Color Books > Pantone solid coated**. In order to search by number, click the pop-up menu and choose **Show Find Field**. In order for Illustrator to remember to leave the find field on click the pop-up menu and choose **Persistent**.



## Color Guide

The new Color guide panel gives shades of complementary colors for the object you have selected, or the document colors.

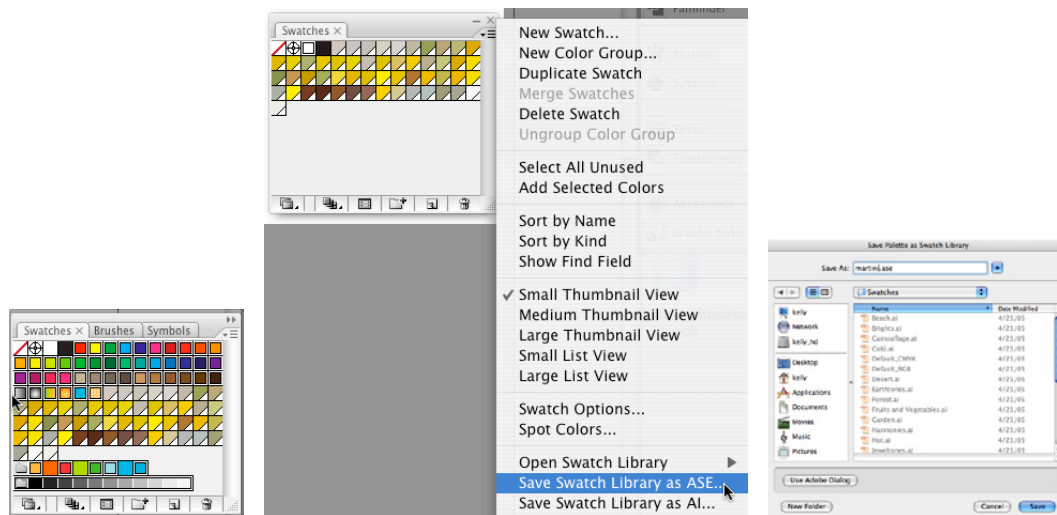




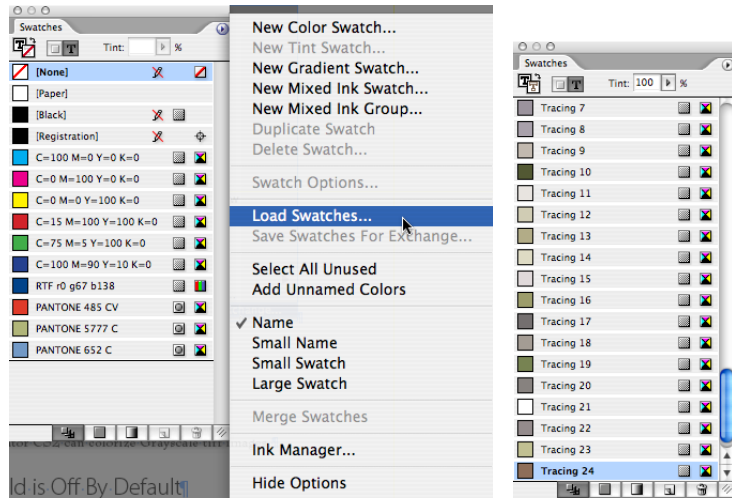
## Save Swatches for Exchange

Once the Swatches are created from the Tracing result they can be saved and pulled into other Creative Suite applications. This file is saved as an **ASE** (*Adobe Swatch Exchange*), which can be loaded into the Swatches panel in Photoshop, InDesign and of course Illustrator.

1. Go to the **Swatches** panel **pop-up** menu and choose **Select All Unused**, then hit the trash can icon to delete the swatches that weren't part of the tracing.
2. Then go back to the **Swatches** panel **pop-up** menu and choose **Save Swatch Library as ASE...**



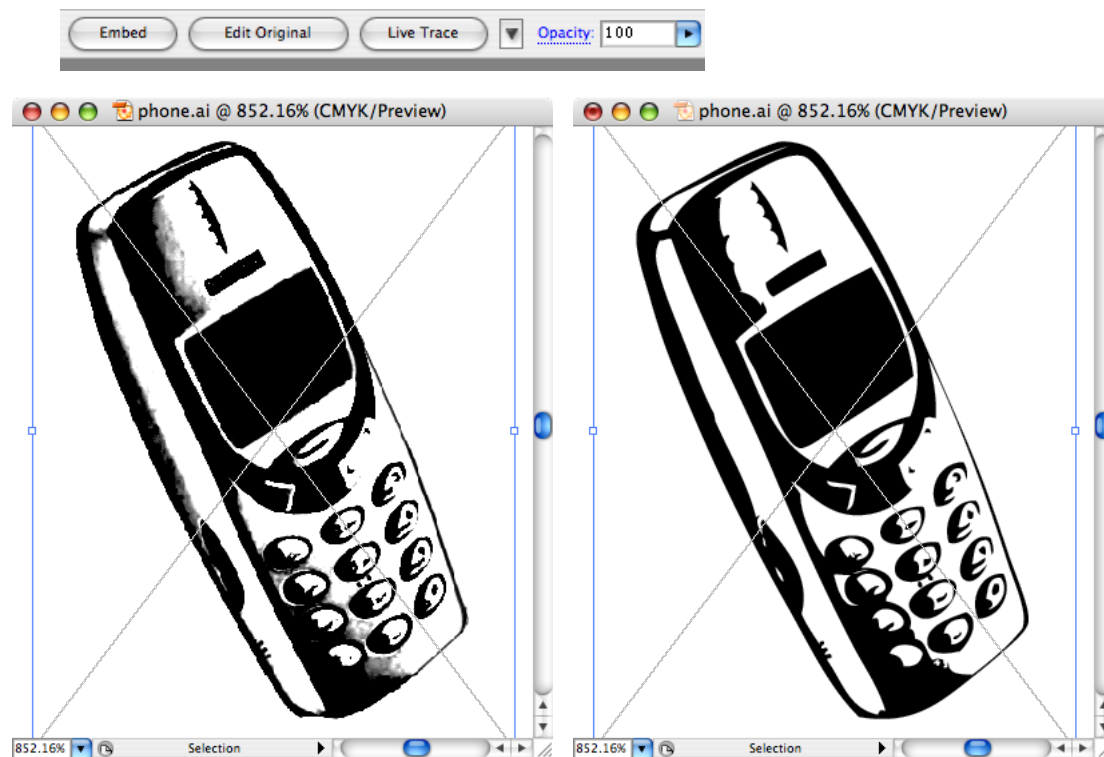
3. Once the swatches are saved, you can switch applications. In the example below the **InDesign Swatches Panel** is shown. To **load** the **Live Trace swatches** (*created earlier*) go to the **pop-up menu** and select **Load Swatches...**



## Enhancements to Live Trace

Live Trace and Live Paint were two of the most exciting new features of Creative Suite 2. The Live Paint feature was **improved** in Creative Suite 3. **Live Trace** automatically turns placed **raster (pixel-based) images** into **scalable vector (point based) graphics**. Many artists have not mastered the pen tool, and can create artwork more easily with pen and paper. If you have a scanner, virtually any image (*color or black and white*) can be turned into Illustrator artwork. The results of a Live Trace object can be easily manipulated with tools such as preprocessing, tracing gap options, and overlay settings.

1. To start, choose **File > Place** and locate a raster (scanned) image (it's best to start with a black and white Line Art drawing).
2. With your image selected, click on the **Live Trace** button, located on the new **Control Panel**. Once the image is traced the original placed image is gone from the page, there is no need to look for it or delete it.



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## Improved Live Paint Features

Once an object is traced, you can use the new **Live Paint tool** to fill the shapes.

1. Click on the **Live Paint tool**.



2. Select a **color** from the **Control Panel**, **Color Panel** or **Swatches Panel**.
3. Move over the object and **click** on the areas you would like to fill.



4. Select a new color and click on the area to fill with that color.

## Live Paint Selection Tool

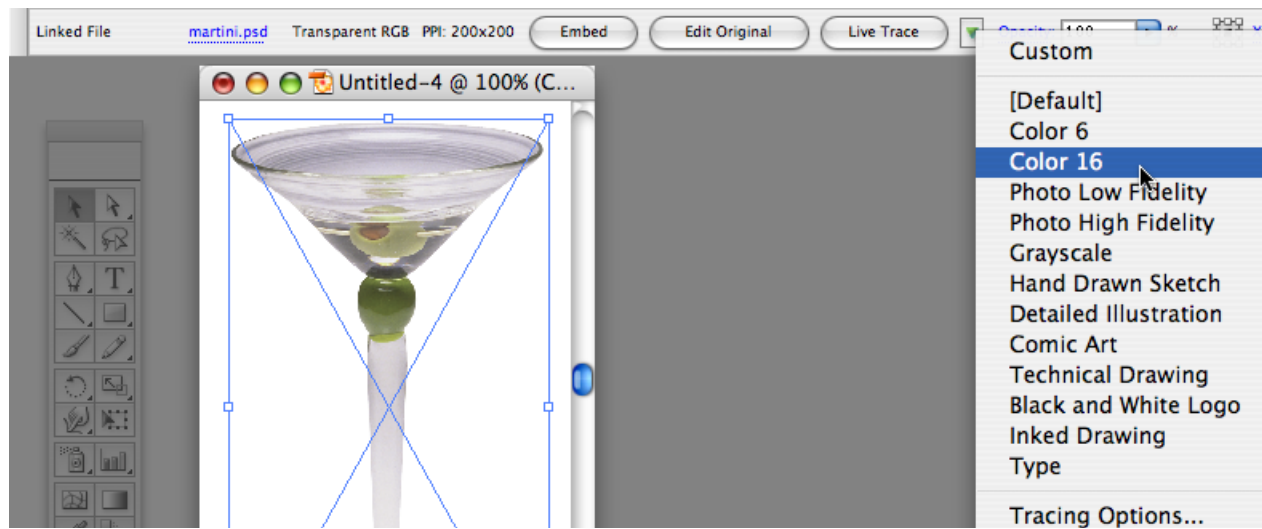
If you use the Live Paint tool, the **Direct Select** and **Select** tool will not work for selecting a shape and changing the fill or stroke. You can tell that you have a Live Paint group by the Stars over the Selection points. If this is the case you can use the **Live Paint Selection Tool**, to grab a piece of the art and re-color it.



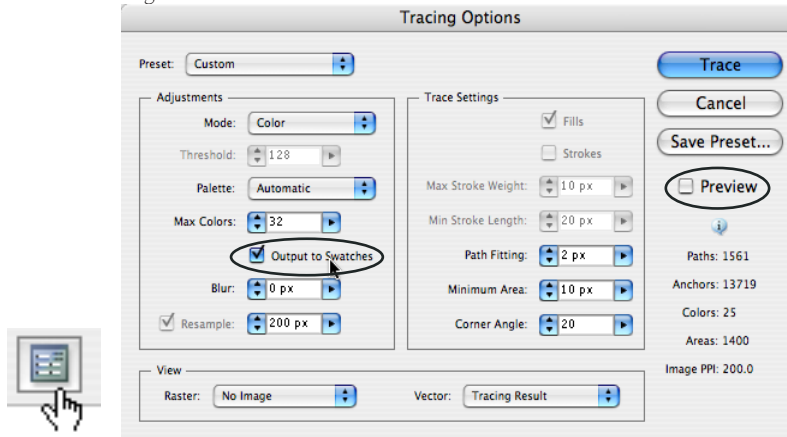
## Tracing Options Dialog

When tracing color images, the settings may need to be adjusted. The default settings work well for Line Art or Bitmap images.

1. Choose **File > Place** and import a color raster image (*you may also drag and drop from Bridge into an Illustrator document*).
2. Next to the **Live Trace** button on the **Control Panel** is a **downward-facing arrow** that you can use to change the default tracing options.



- If you are still not satisfied with the result, you can click the **Tracing Options** button on the **Control Panel**. This will allow you to customize your settings. You may want to change some of the settings then click **Preview**, on the right of the dialog box.

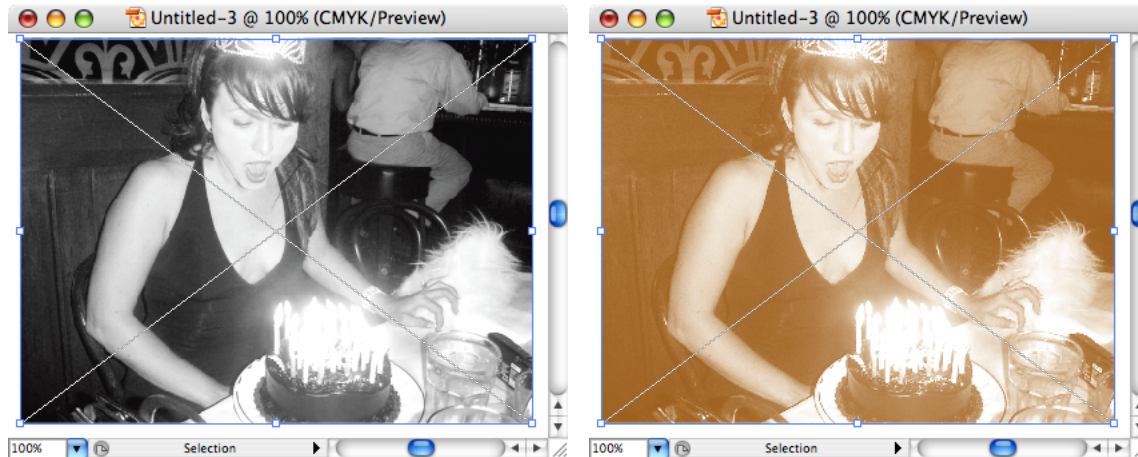


- By clicking **Output to Swatches**, the colors from the scan that were used to make the tracing are added to the Swatches Panel as **Global Colors**.

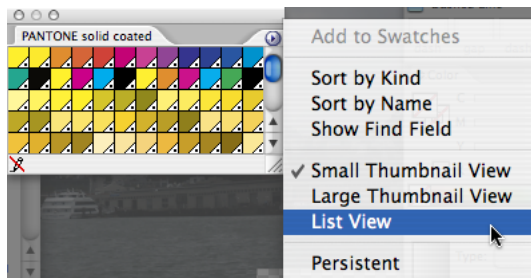


## Colorize Grayscale Tiffs

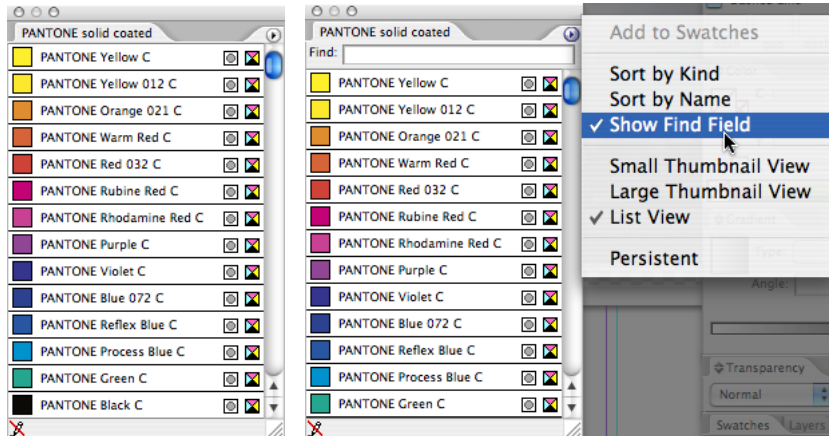
Now Illustrator CS3 can colorize Grayscale tiff images, even with Pantone® Swatches.



1. Start by going to **File > Place**, and select a Grayscale Tiff image.
2. Now choose **Window > Swatches**, you can select one of the built in CMYK or RGB swatches and you are finished at this step.
3. To select a Pantone® Color go to **Window > Swatch Libraries > Pantone Solid Coated**. The default view is icons, which makes it hard to select your desired color. To see the swatch numbers, go to the **pop-up menu** and choose **List View**.



4. By default, in Illustrator CS3 the **Find Field** is **off**. This makes it slower to select the Pantone® number, you have to scroll until you come across the correct one. If you would like to type in a **PMS** (*Pantone Matching System*) number, go to the Pantone solid coated pop-up menu and choose **Show Find Field**



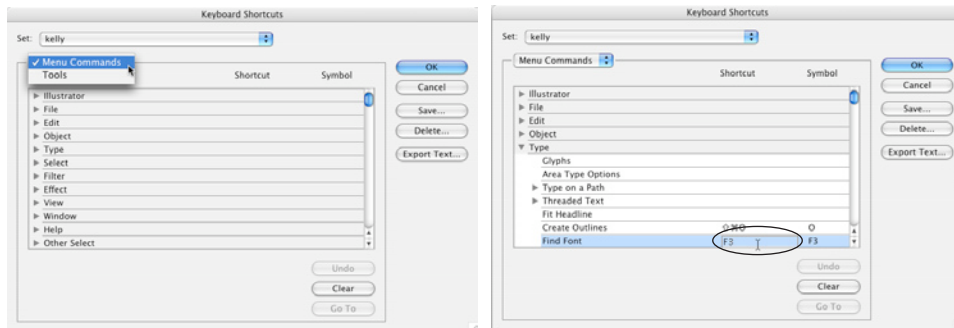
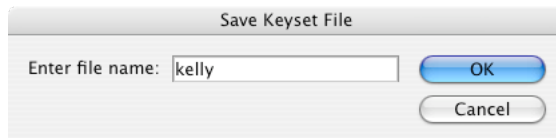
5. Now type the number of the Pantone you would like, I used **Pantone® 470**.



## Assigning Keyboard Shortcuts

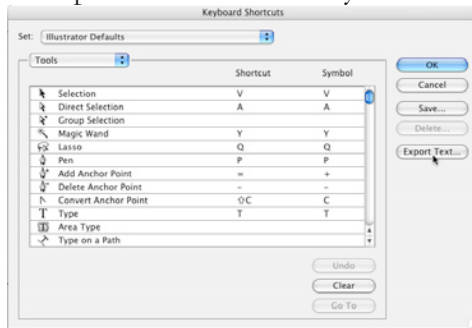
If there are menu commands that don't have an Illustrator shortcut you can assign your own through **Edit > Keyboard Shortcuts**. Simply locate the item you'd like to give a shortcut to, click on it, then click in the column below shortcut. Now hit the desired key or keys on your keyboard. The Function keys across the top of the keyboard are good for this. F1, F2, F3, F4, etc. If they aren't taken for other panels or menu commands.

It is always a good idea to save a new Shortcut Set (Keyset) before changing or adding any shortcuts to Illustrator.

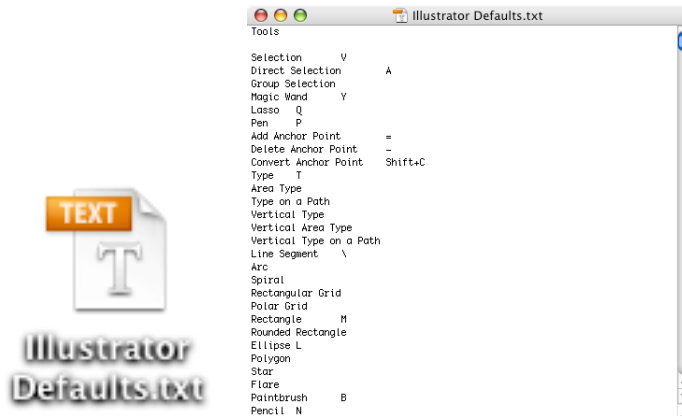


## Viewing All Shortcuts

1. To export a list of all the Keyboard shortcuts in Illustrator, choose **Edit > Keyboard Shortcuts**.



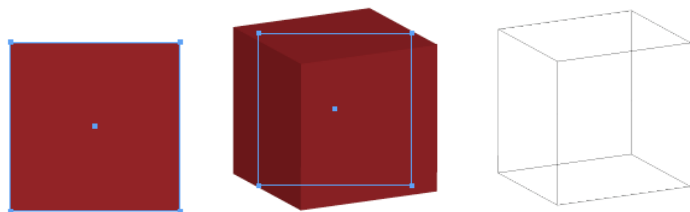
2. Then click Export Text. Illustrator will create a Text file that you will need to open (through File > Open, not with a double-click) in TextEdit, WordPad or Notepad. If you double-click it will try to open Illustrator, since that program created it, not open the text file.



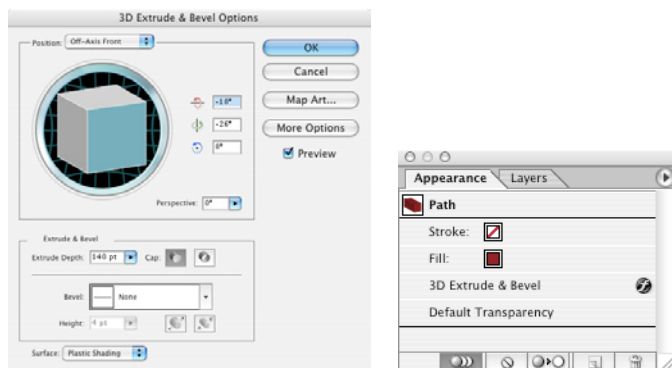
## 3D Extrude & Bevel

Illustrator CS made it easy to add 3D effects to your artwork. Type and other shapes can be made into 3D objects, rotated in 3D wrap artwork around the shape.

1. Start by creating a simple shape, *(in this example we built a 2 x 2 inch square)*.



2. Choose **Effect > 3D > Extrude & Bevel**. In the example below the **Extrude Depth** was increased to **120**, also **check Preview** to see the effect as you make changes. In the **lower left corner** under **Surface** you can choose **Wireframe**, instead of **Plastic Shading**.




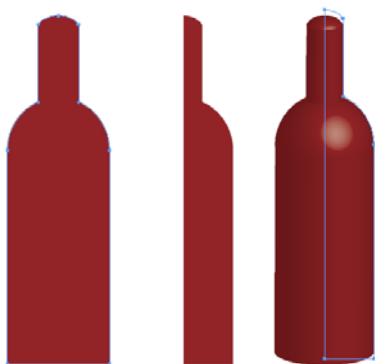
3. To **Edit** the Effect choose **Window > Appearance** and **double click Extrude & Bevel**.  
**Warning: Do NOT** go back to **Effect > 3D > Extrude & Bevel**, this will apply the Effect again and **dramatically slow down your machine**.

## 3D Revolve

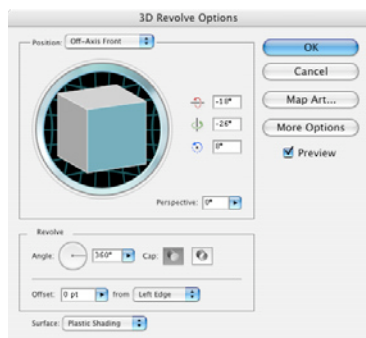
In order to give depth to a custom shape use **Effect > 3D > Revolve**.

1. Start by creating a custom shape, then use the **Knife** tool to **cut the shape in half** (*hold down **Option** or **Alt** to create a line, use **Shift** to keep the line straight*).

Note: the **Knife**  tool is hidden under the Scissors tool.

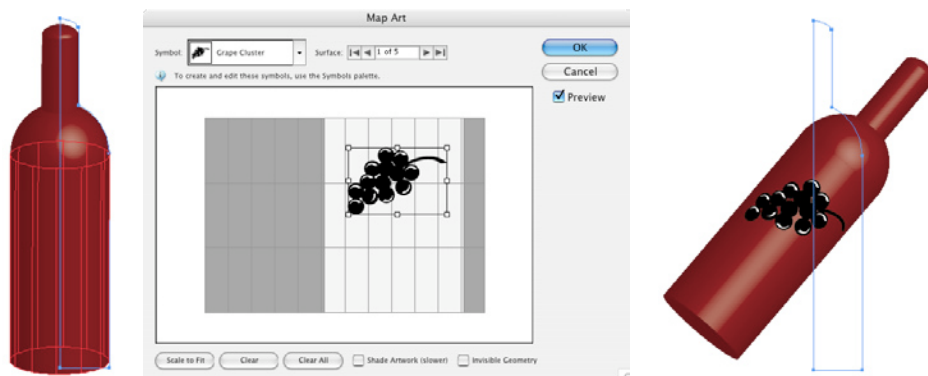


2. Choose **Effect > 3D > Revolve**.

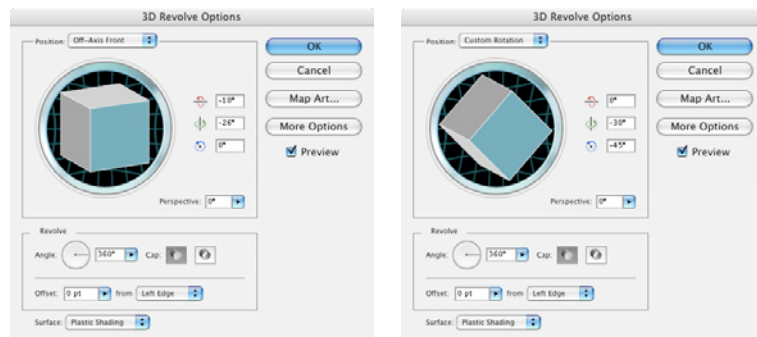


## Wrapping Artwork Around a Shape

- Once the 3D Effect has been applied, click **Map Art** (in the *Revolve dialog box*). Make sure to click the **arrow** next to **Surface** until **red lines** appear around the base of the object.



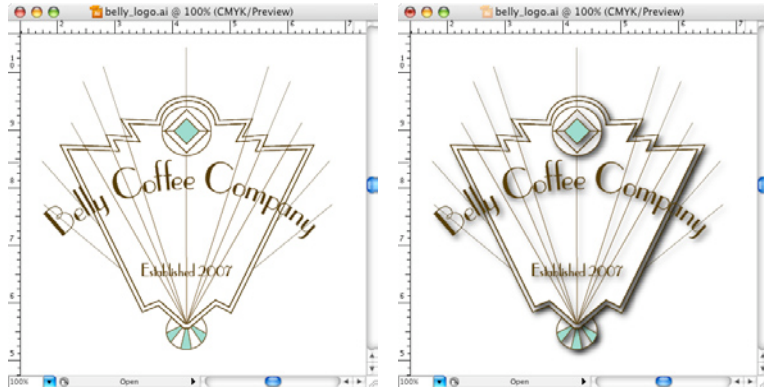
- To **Rotate** the art, **grab the cube** in the **Revolve dialog** box and as you drag the artwork will re-draw.



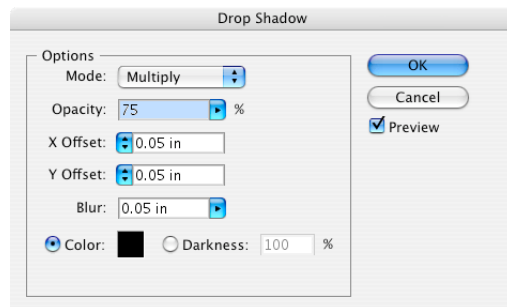
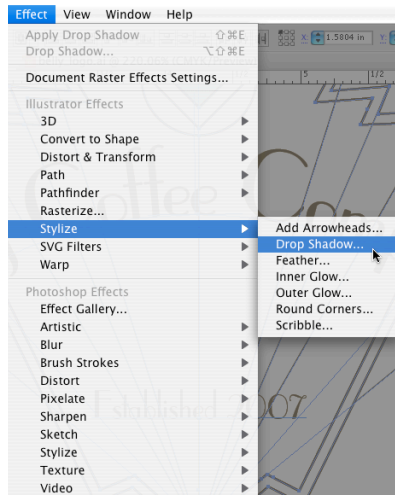
- Once the Artwork is finished (and there are no more changes to be made) you may want to choose **Object > Expand Appearance**. This **Permanently** applies the 3D Effect.

## Drop Shadow Effect

One of the most popular effects is a Drop Shadow **Effect > Stylize > Drop Shadow**. Be sure that your object is selected first and when you look at the Effect menu, there are two sections. The items at the top relate to Illustrator artwork and the ones below the Photoshop Effects line relate to placed raster images.



Click Preview on and use your up and down arrow keys on your keyboard to adjust the X & Y offset , Opacity or Blur.



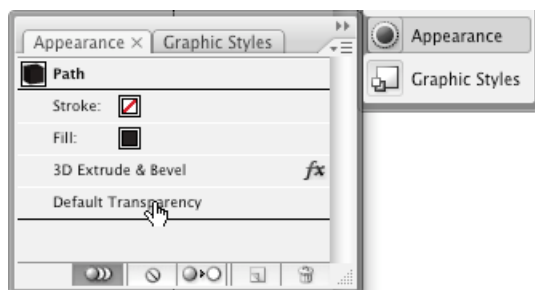
## Document Raster Effects Settings

Illustrator CS2 & older used to default to a low resolution (72 ppi) raster effect setting to speed up screen redraw when you run Effects or Filters. This caused some issues for designers who didn't know to up the resolution before they printed the illustration. With CS3 they changed this setting to 300 ppi, but this will slow down your computer when you run an Effect or Filter. If you're finding performance slow. Lower this resolution to 72 ppi, but remember to set it back to 300 ppi before you print.

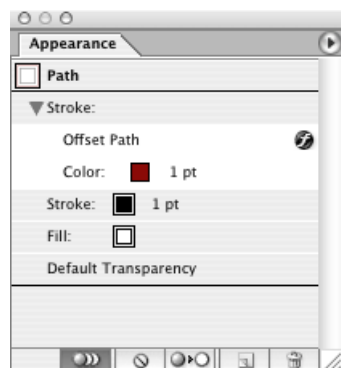


## Appearance Panel

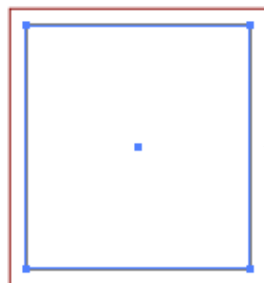
If you run something under the **Effects menu**, to edit that Effect, choose **Window > Appearance**. Remember, Effects are editable, Filters are permanent.



Objects can also have **multiple fills** and **strokes**. The Appearance panel is also used to modify anything done under the **Effects menu**. To keep the fill and stroke of the last object created, **de-select New Art Has Basic Appearance** by clicking the button in the lower left corner of the panel.



↑  
New Art Has Basic Appearance



← Object with two strokes

## Expanding Effects

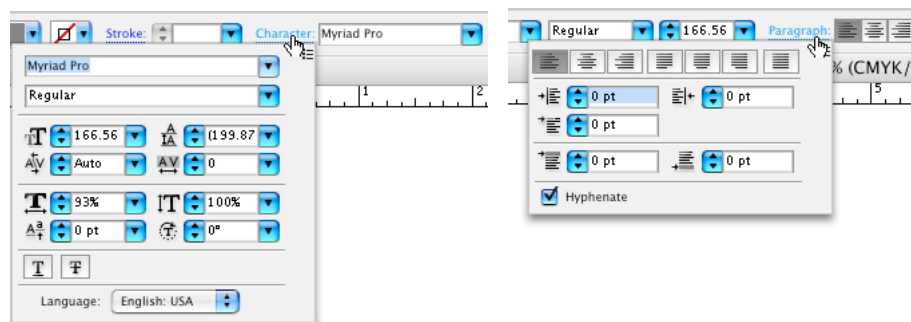
After an Effect has been applied to an object, individual points can be edited through **Object > Expand Appearance**.



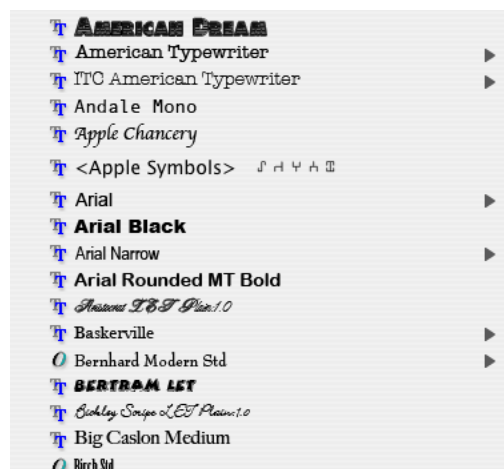
## Type in Illustrator

The type features of Illustrator are some of its most powerful aspects, not to mention that the vector of the type is maintained throughout the design process. You can create columns or rows of text, flow text into a shape or along a path and turn letters into graphic objects.

Clicking on Character or Paragraph in the Control panel brings up the panel.



## WYSIWYG Font Display

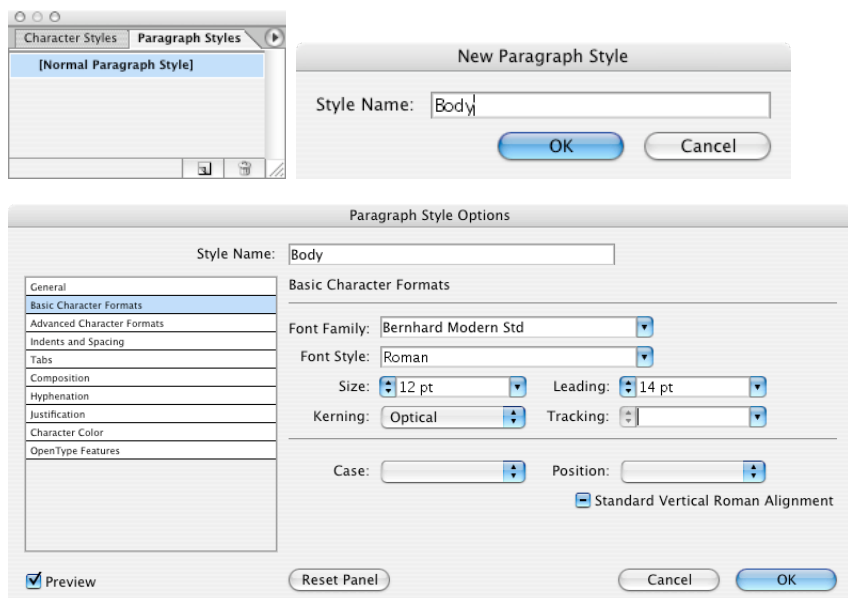


Illustrator CS added **WYSIWYG** (*What You See Is What You Get*) font menus, which means each font displays in its actual typeface.

*Note: On Windows, this does not show up on the Character panel, only from **Type > Font**.*

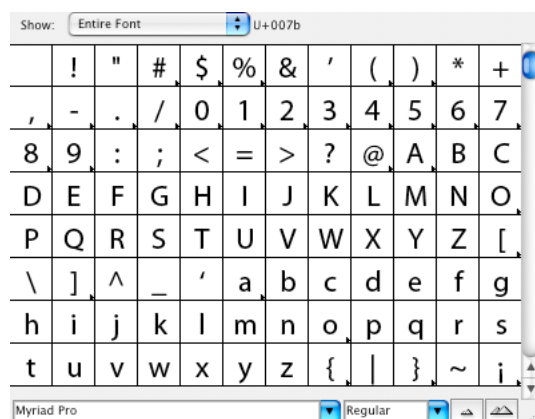
## Paragraph and Character Styles

**Paragraph** and **Character Styles** have finally been added to Illustrator. **Window > Type > Paragraph Styles** or **Window > Type > Character Styles**.



## Glyphs Panel

The Glyphs panel in Illustrator CS4 offers Ornaments, Terminal Forms, Discretionary Ligatures, and more. Simply double-clicking inserts the selected glyph.

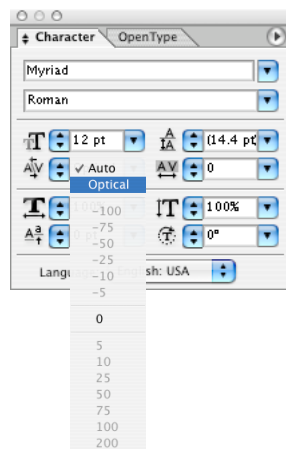


## Columns, Rows, and Area Type Improvements

You can now define columns and rows in any text area. Specify the number of columns and rows, the width and height and set the size of the inset between the text and the object.

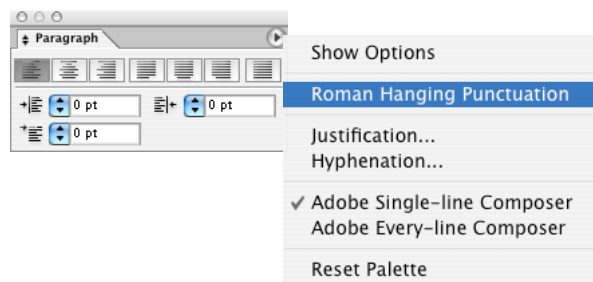
## Optical Kerning

Optical kerning visually kerns text to produce better spacing. This is located under **Window > Type > Character**.



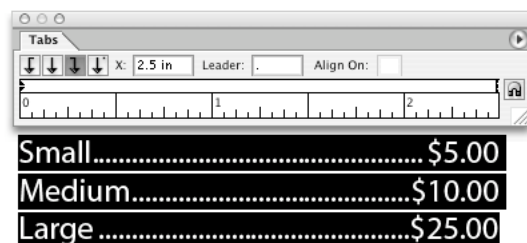
## Hanging Punctuation

Optical margin alignment sets punctuation and text characters at either end of a line to hang and make the edges of a text block look more visually even. This is located on the Paragraph Panel, **Window > Type > Paragraph**, under the pop-up menu.



## Custom Tab Leaders

Now you can create custom dot leaders and set unlimited numbers of tabs through **Window > Type > Tabs**.



## Better Hyphenation and Justification

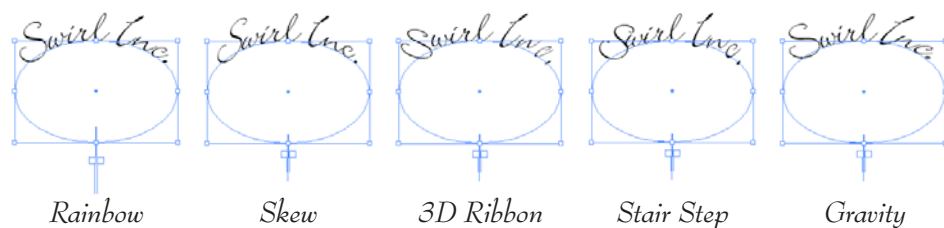
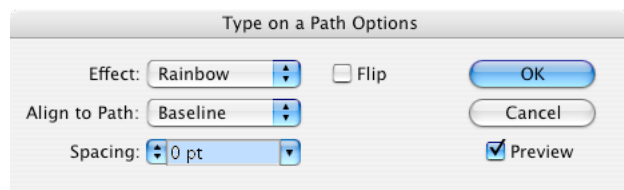
Now you can control how long a word must be before Illustrator hyphenates it, whether Illustrator hyphenates capitalized words, and whether it favors better word and character spacing or fewer hyphens. Also, you can set minimum, maximum, and desired settings for word spacing, letter spacing, glyph scaling, and more.

## Expanded Language Support

Illustrator documents support spell check and hyphenate in 29 languages.

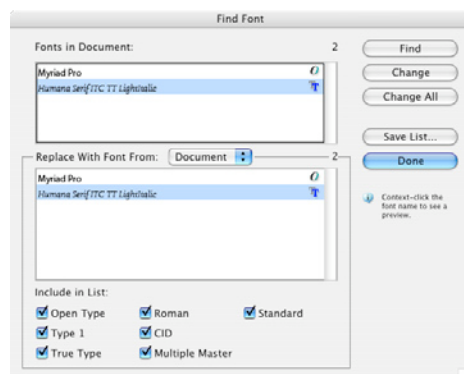
## Path Type Options

There are five new preset alignment options for text on a Path under **Type > Type on a Path > Type on a Path Options**.



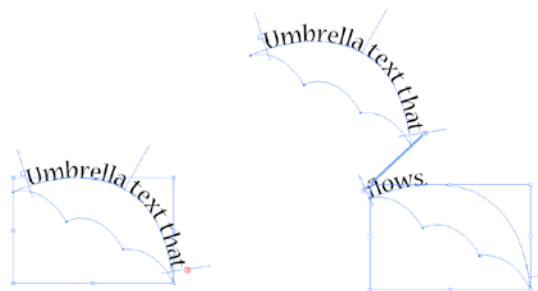
## Find Font

Through **Type > Find Font** (added in and earlier version of *Illustrator*) you can replace the missing fonts.



## Improved Text Linking

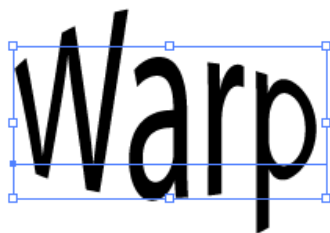
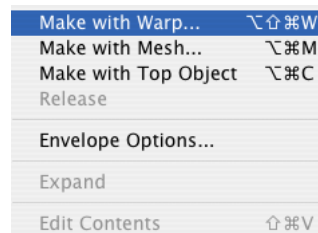
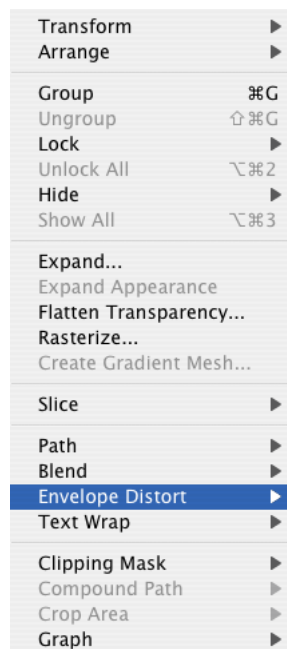
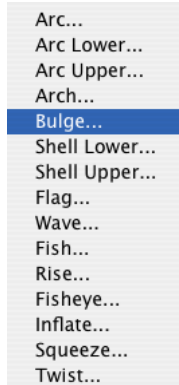
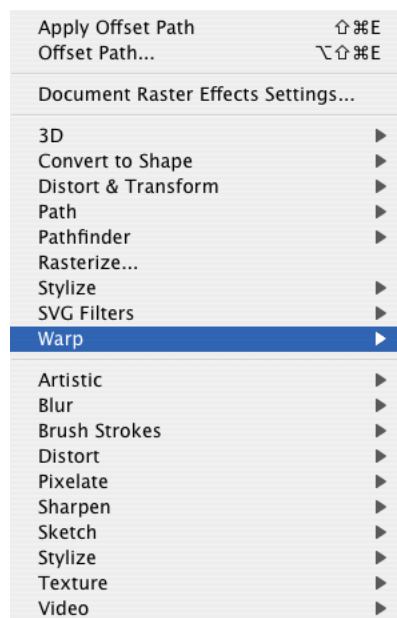
Any text area, even type on a path, can be linked to any other text area. Plus, you can now delete a linked text block without also deleting any text it contains—the text will flow back into the previous box. Illustrator also now reduces clutter in your documents by automatically deleting empty text blocks that are created by clicking a type tool and not entering text.



In the example above, the 2nd umbrella was **automatically created** by clicking the **out port (red plus sign)** and clicking once anywhere on the page.

# Warping

Effect > Warp or Object > Envelope Distort > Make with Warp





## Paste in Front

This now pastes only in front of the object that was cut or copied, not in front of all objects. To work like previous versions choose **Edit > Copy**, **Edit > Paste in Front** then **Object > Arrange > Bring to Front (Command Shift ] or Ctrl Shift ]**.

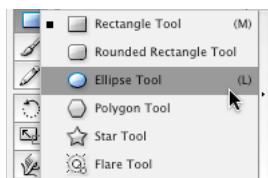
## Rectangle Tool

To create Rectangles or Squares, choose the **Rectangle tool (m)**, then click and drag anywhere on the page. Holding down the **Shift key** as you drag constrains the rectangle to a **perfect square**. Holding down **Option** or *Alt* creates a rectangle from the center out (*instead of upper left corner*).



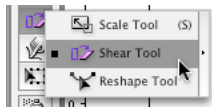
## Ellipse Tool

Click and hold on the Rectangle tool and choose the **Ellipse tool** or hit the letter **l** on your keyboard. Holding down the **Shift key** as you drag constrains the ellipse to a **perfect circle**. Holding down **Option** or *Alt* creates an ellipse from the center out (*instead of upper left corner*).

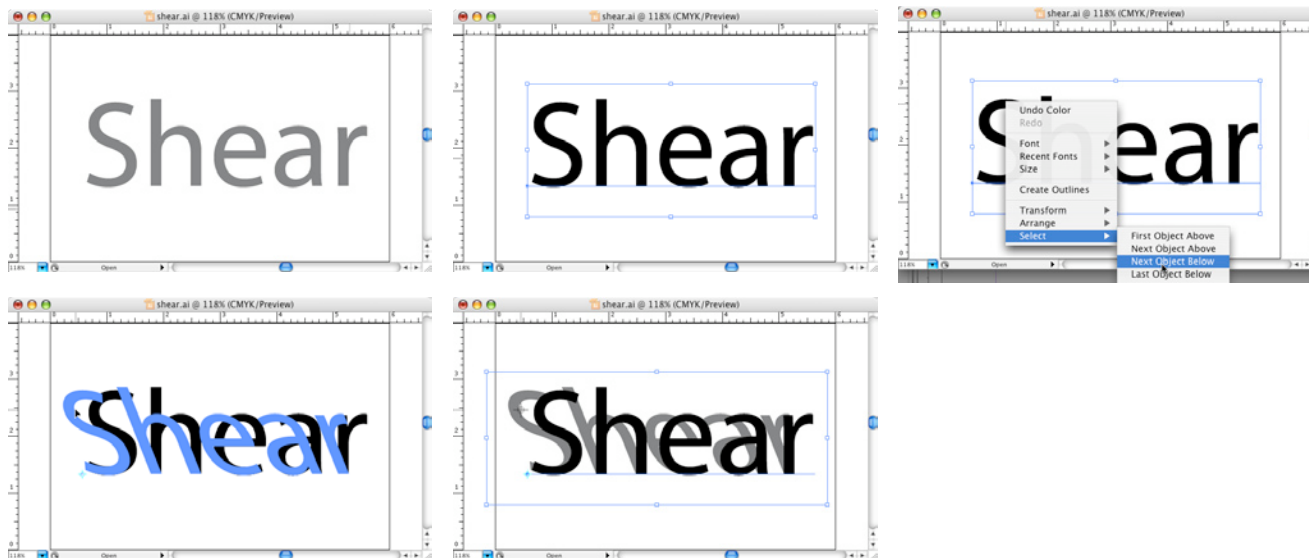


## Shear tool

The **Shear tool** is located under the Scale tool and is used to distort objects, often to create shadow that looks like it has perspective.

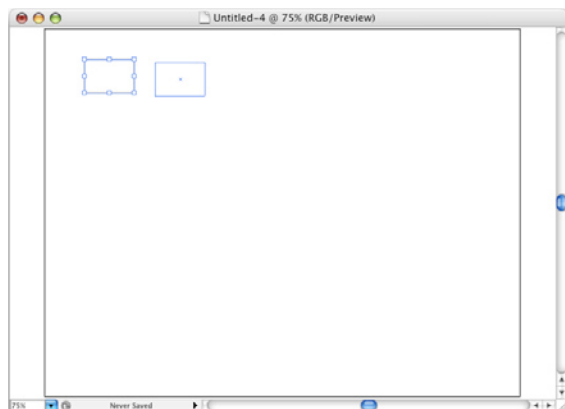


1. Start with an object the color of the shadow you'd like to create.
2. Copy the object and choose Edit > Paste in Front.
3. Change the color of the top object.
4. Right-click or ctrl-click on the object to select the one below.
5. Select the Shear tool and adjust your object.

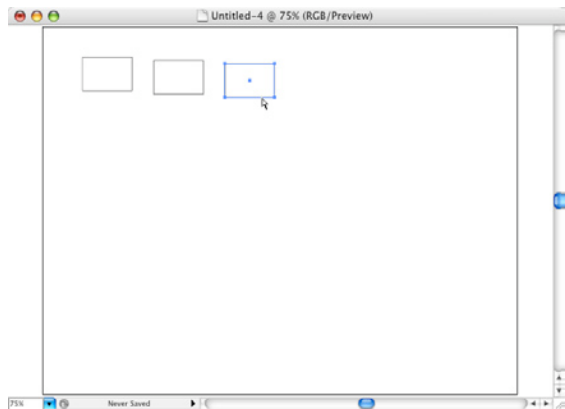


## Duplicating Objects

Once you've drawn a rectangle or ellipse, hold down the **Option** or *Alt* key as you drag the object to make a copy. Be sure you let go of the mouse first, otherwise you will just move the shape, not copy it.

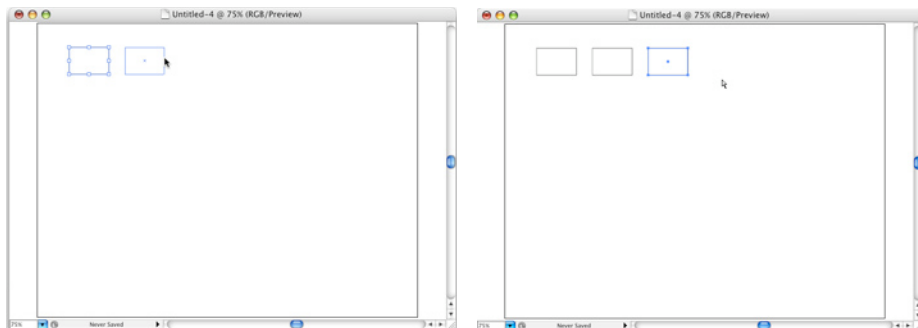


If you like the copy and want another one the same distance apart, hit **Command D** or *Ctrl D* to duplicate the copy or choose **Object > Transform Again > Transform Again**.



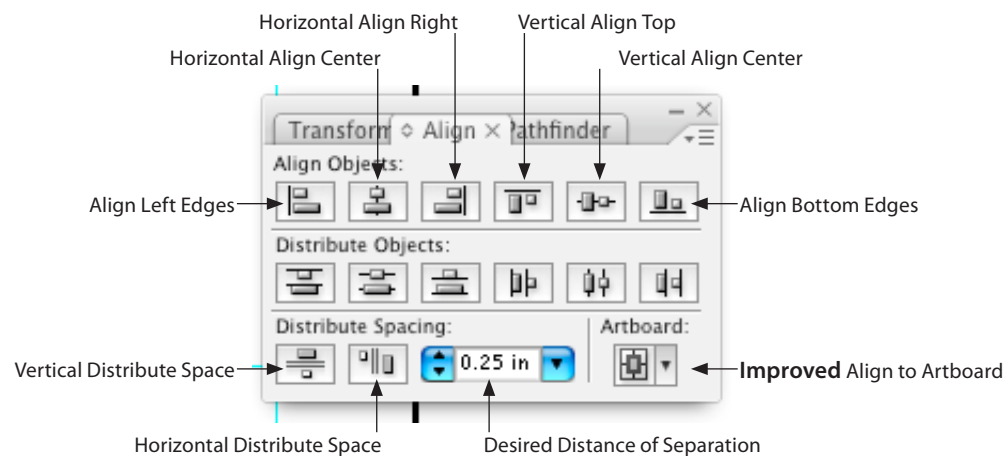
## Aligning Objects

If you hold down the **Shift** key after you start dragging (*while Option or Alt is held down*), Illustrator will constrain the copy to a perfect horizontal, vertical or 45° angle. Then hit **Command D** or *Ctrl D* to duplicate the move.



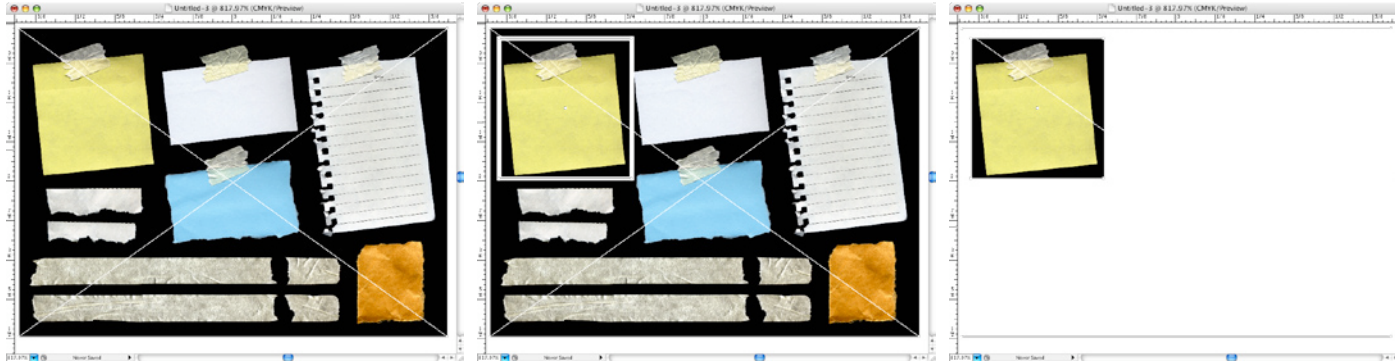
## The Align Panel

To further Align objects choose **Window > Align**. To align to a specific object, click on that object before hitting one of the buttons in the Align panel.

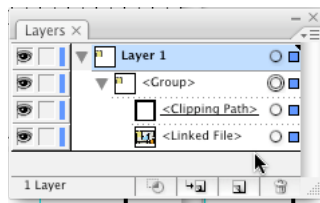


## Clipping Masks

A clipping mask is an object whose shape masks (or *hides*) other artwork to only show a selected area. To create a clipping mask, place an image, then draw a rectangle or circle over that shape to be used as the mask. Then choose **Object > Clipping Mask > Make (Command 7 or *Ctrl 7*)**.

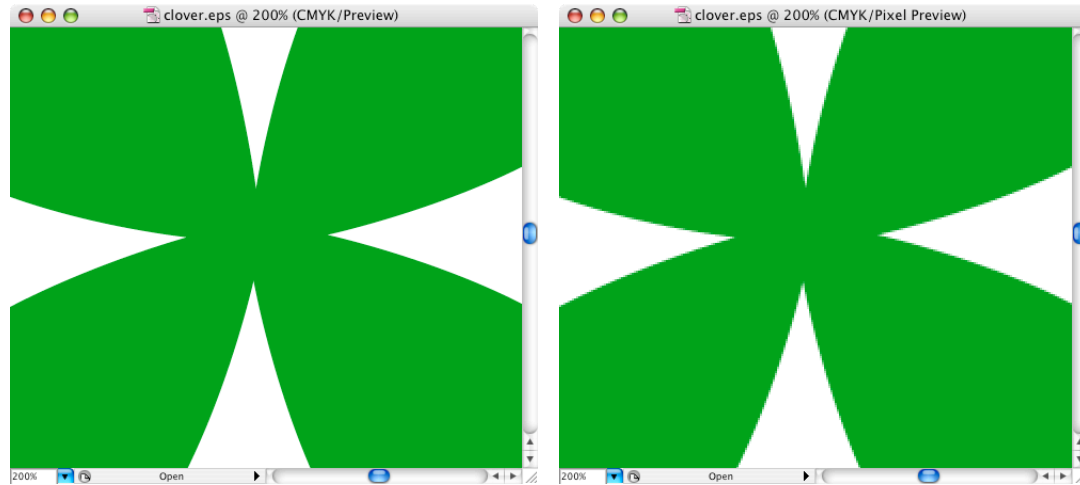


A clipping mask and the objects that are masked are called a clipping set and are marked with a dotted line in the Layers panel.



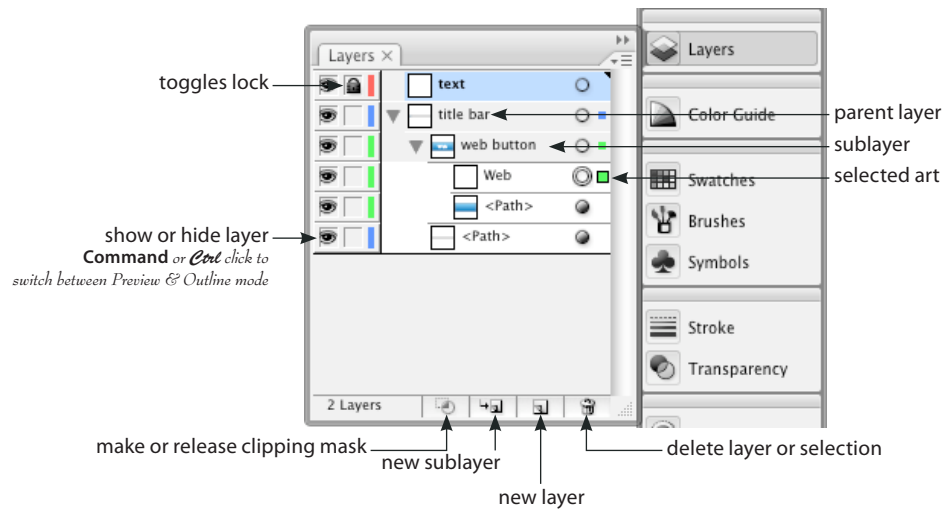
## Pixel Preview

When you save artwork in a raster format, such as jpg or gif, Illustrator rasterizes the artwork at 72 pixels per inch. To preview how objects will appear when rasterized choose **View > Pixel Preview**. This is especially helpful when you want to control the exact placement, size and anti-aliasing of objects.



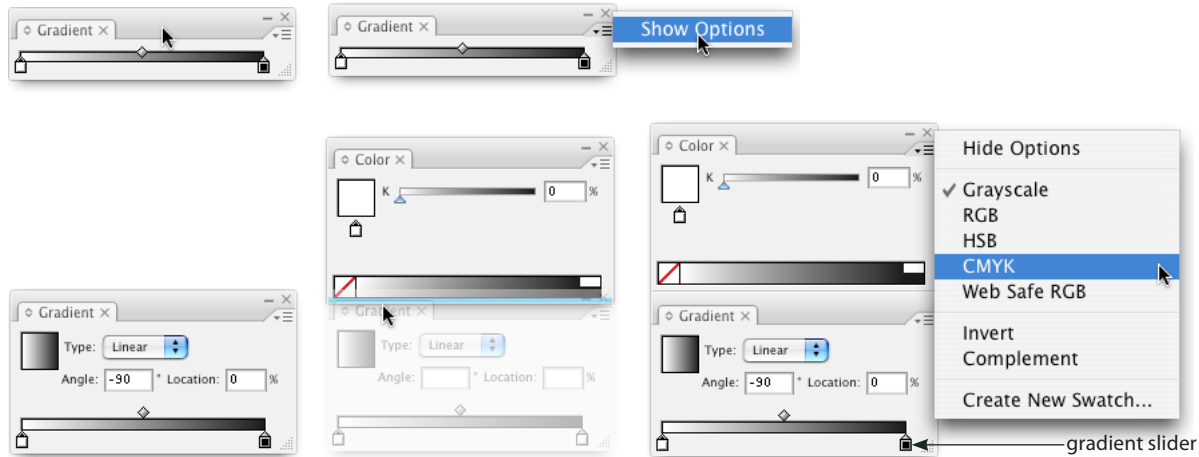
## Layers

When creating complex artwork, it can be difficult to keep track of all items without layers. Smaller objects can get hidden under larger objects, and selecting individual pieces can be difficult. Layers let you organize your page elements in a manner that makes the most sense to you. By default, all items are placed in a single layer. However, you can create new layers and move items between them at any time. .

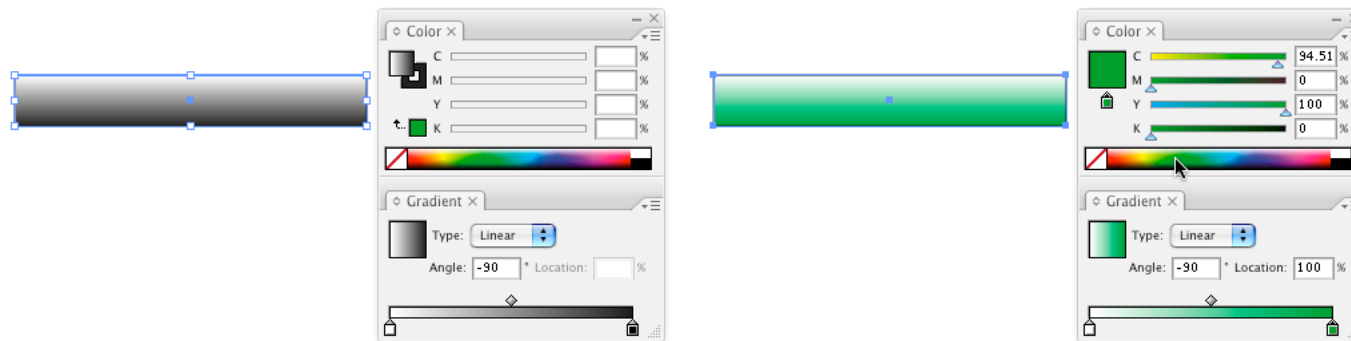


## Gradients

The Gradient tool (**g**) can be used to set the angle of Gradients, but before we do that we'll choose the colors to blend. When getting ready to apply gradients, it is helpful to dock the Color and Gradient panel together.



To apply colors to the gradient, you can drag & drop colors from Swatches to Gradient, or choose one in the Color panel. To apply colors, first click the Gradient slider square (at the bottom of the panel), then click the **pop-up menu** on the Color panel and choose **CMYK**.





## Lasso Tool

An easier way to select multiple points is with the new **Lasso** tool (L). Simply marquee (*in a circular shape*) the points you would like to grab.



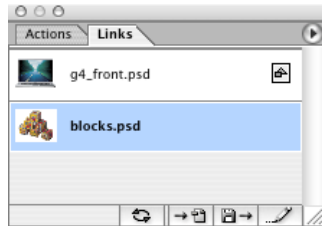
## Scribble Effect

The Scribble effect, **Effect > Stylize > Scribble**, is handy for making a design element look casual, masking images, creating scratch board style illustrations.



## Links

The icon to the right of g4\_front.psd means the image is **embedded**, not **linked**.



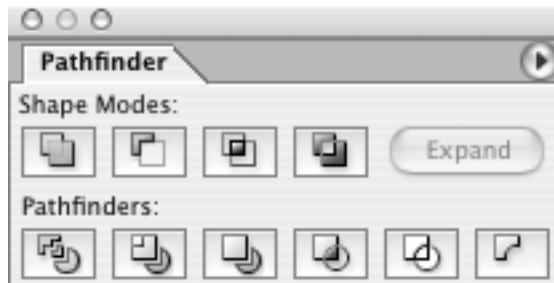
## Magic Wand

The Magic Wand tool can select objects of the same color, or objects within 10% (for example) of that color.



## Pathfinder

In the Pathfinder panel, **avoid** the top row (*shapes*) and use the bottom row (*pathfinders*).



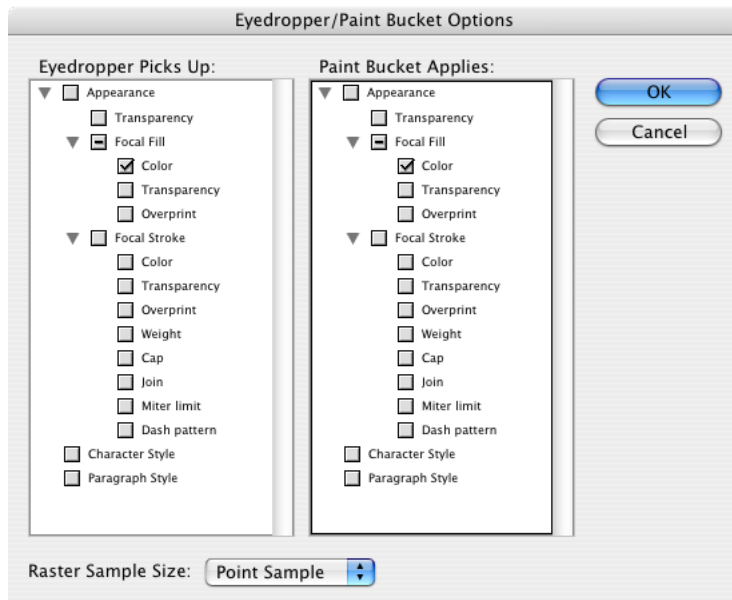
## Page Tool

When you open a document that has been created on another machine, the printable area may be off. To reset the Page tiling **Double click** the **Page** tool (*located under the Hand tool*) to re-set the 0 point to the lower left corner of the document.



## Eyedropper Tool

Adobe has dramatically changed how the eyedropper tool functions. To make it behave like the earlier version of Illustrator, double click the tool for options.

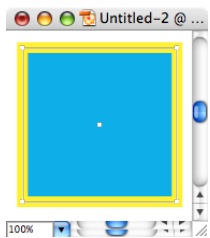
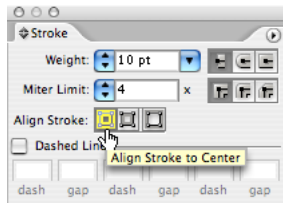


## Stroke Placement

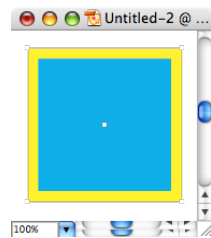
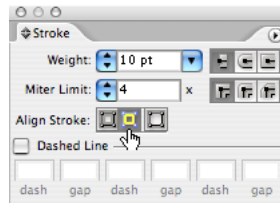
Stroke placement was added to Illustrator CS2, strokes can now be aligned **Center**, **Inside** or **Outside** an object. To change the stroke alignment, go to the **Stroke Panel** and change the Align stroke placement (or do this on the Control panel at the top of the screen).

*Note: Changing the stroke placement does not affect Illustrator's trapping method, it will still perform a centerline trap. If your stroke weight is 2 points, you will get a 1 point trap when the stroke is set to overprint.*

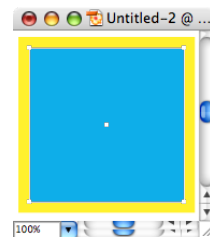
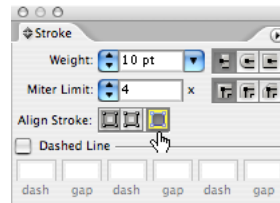
**Center** (the default)



**Inside**

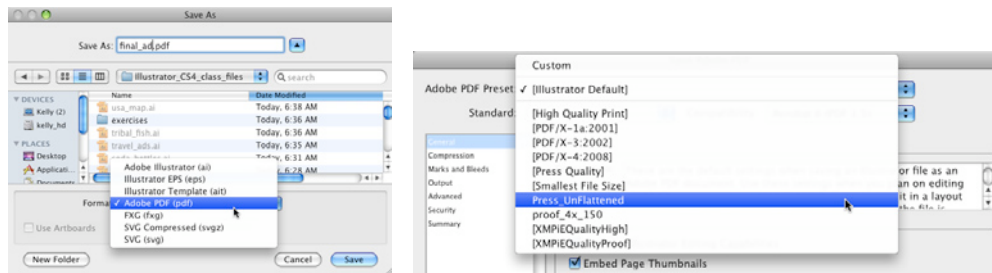


**Outside**



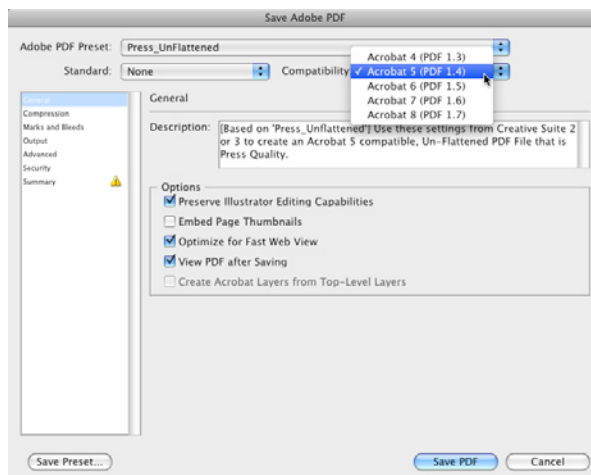
## General PDF Settings

To create a PDF in Illustrator choose **File > Save As** and select Adobe PDF. Once you click **Save** in the PDF dialog, select the appropriate **PDF Preset**.



In the **General** tab, PDF authors can select version **Compatibility** with Acrobat 4, 5, 6, 7 or 8. The current recommended setting is **Acrobat 4 (PDF 1.3)**. Most print shops and high-end production workflows are still based on Acrobat 4. Additionally, web users viewing PDF links or email attachments, may not upgrade their software very often, this will ensure that most of the population can read the PDF that is being created.

**Acrobat 4** compatibility also forces the **Transparency** to be **Flattened**, if you choose Acrobat 5, 6, 7 or 8 your transparency is unflattened, which may produce unpredictable files.



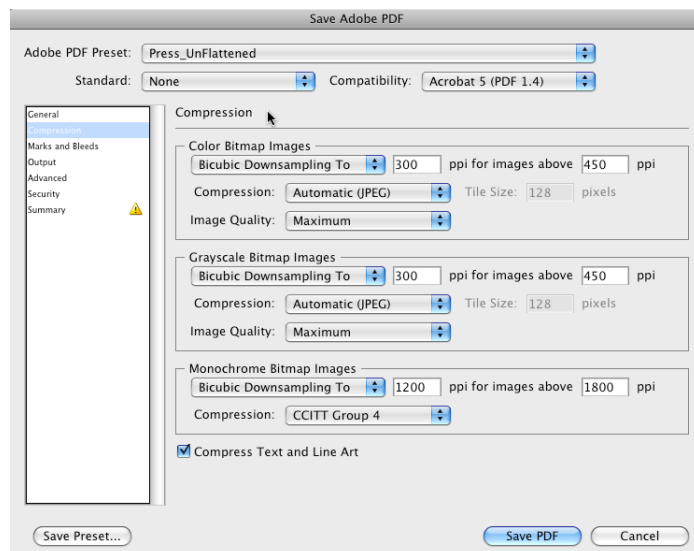
When in doubt, most printers will recommend using PDF/x-1a. This does 4 very important things to the file:

- Acrobat 4 Compatibility (which means the Transparency is flattened)
- 300 PPI resolution (not part of the spec)
- All RGB is converted to CMYK and Spot colors are preserved
- Fonts are at least Subset (but not fully Embedded)

## Compression Settings

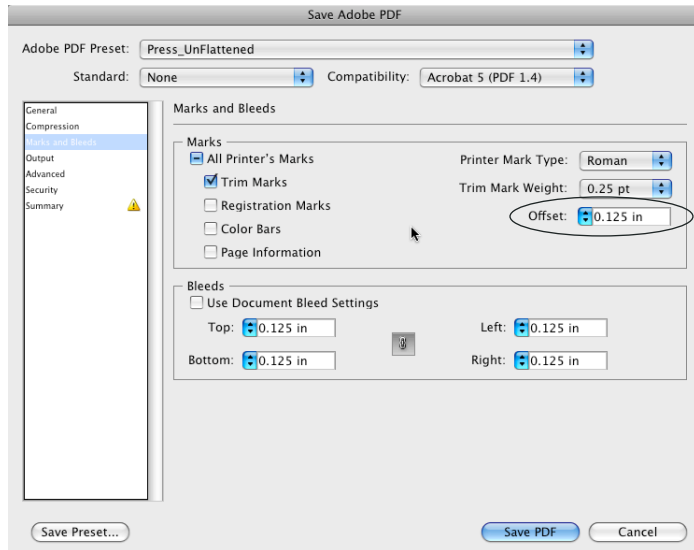
For most office printers, a resolution of **150 - 225 ppi** (*pixels per inch*) is sufficient for color or grayscale photos. Line Art (*Monochrome or Bitmap meaning no shades of gray*) is typically acceptable between **300 - 450 ppi**. For high end printing, **2 x lpi** (*lines per inch*) is the best resolution for color and grayscale, typically **600 - 1200 ppi** is recommended for Line Art, always check with your print shop for recommended settings. For Web based PDFs **72 & 72 ppi** is standard and **300 ppi** is sufficient for Line Art.

For **Image quality** in **Color** and **Grayscale** images, a setting of **High** or **Maximum** is recommended, so that too much data is not thrown away.



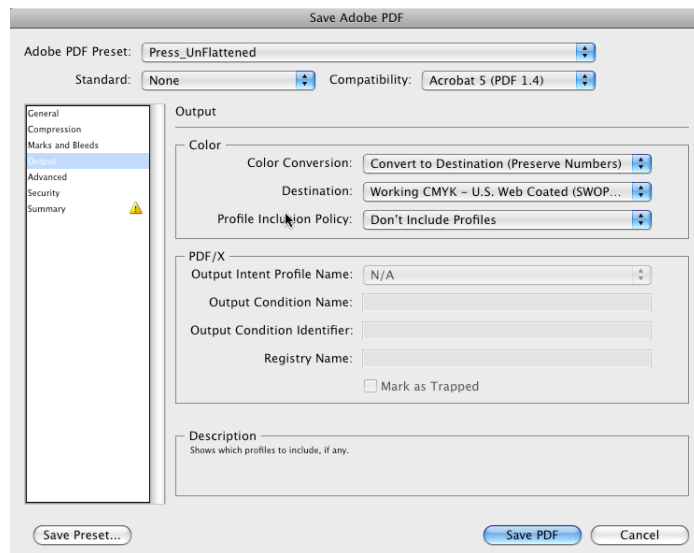
## Marks & Bleeds

If the print shop requests that marks & bleeds be included in the document, you can turn them on here. Be aware that including Slug Area may cause some problems with electronic imposition programs. For some reason Adobe keeps getting the offset value for marks wrong. Be sure if you include any marks they are offset at least p9 or .125”.



## Output

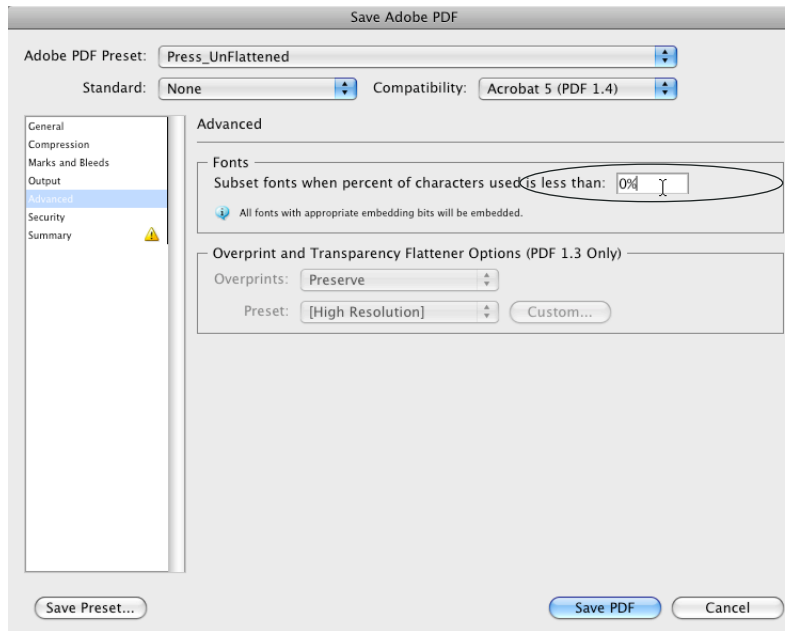
The **Output** tab has been added to InDesign CS3 to enable you to select **Color Management** Policies. Color Management is on by default. If you are not familiar with the settings, it is safest to select **Convert to Destination (Preserve Numbers)** and select **Don't Include Profiles**. In the shot below, I chose **No Color Conversion**, because I'm doing Print on Demand (POD) and the images do not need to be **CMYK**.





## Advanced

InDesign has an **RGB to CMYK conversion engine built in**, so in the Advanced section of you select CMYK all RGB images will be converted to CMYK in the final PDF file.



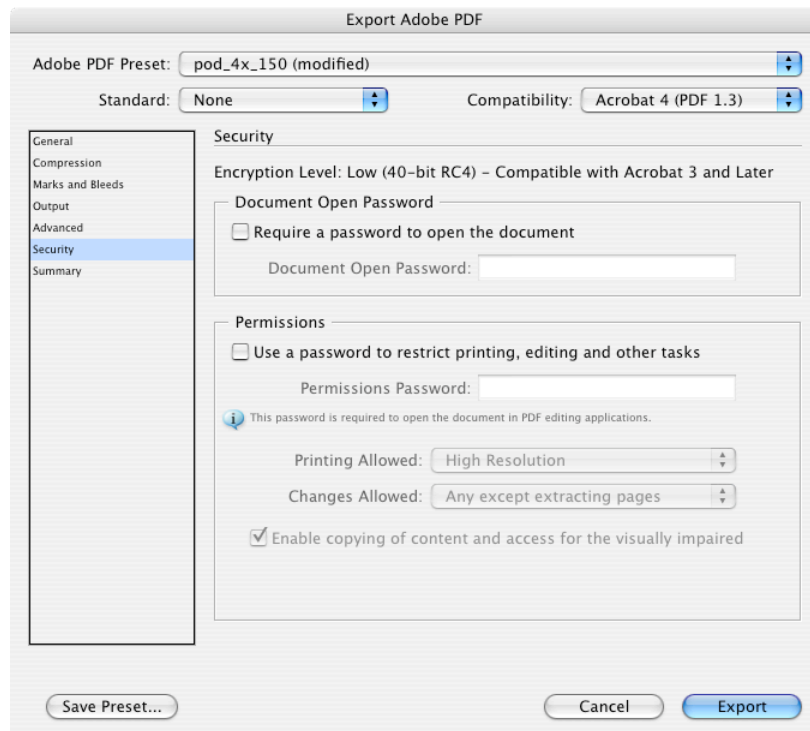
**Subset %** refers to the maximum percentage of characters (*glyphs*) in a font that can be used before the entire font is Embedded instead of Subset. The range is 1 through 100. For example, a value of 50 means that a font will be embedded in full (*not subset*) if more than 50% of characters are used; a value of 100 means all fonts will be subset no matter how many characters are used (*because more than 100% of characters can't be used*). For **Web based PDFs**, embedding all the fonts causes the file to become too large, therefore **Subset at 100%** is recommended. This means that InDesign will Subset all fonts (*write in the unique characters used*) and not fully Embed all characters in the font. This will keep the file size down.

The value for **Subset** should be **0%** to ensure that all fonts are **fully embedded**, not Subset. This means Subset 0% of the time.

Transparency Flattening also occurs here, **High Resolution** is recommended for all non web-based PDFs. If Acrobat 5, 6 or 7 is selected in general this option will not be available.

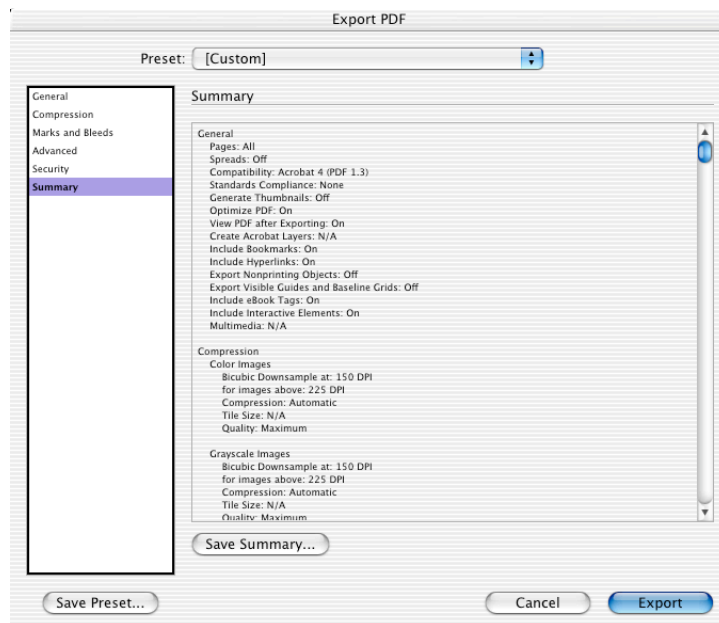
## PDF Security

To prevent content copying or extraction, users may want to enable PDF security. Security can not be saved in a set, it must be enabled every time you Export the PDF.



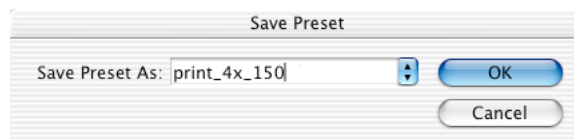
## PDF Summary

Finally, InDesign provides a summary of all the selected PDF options.



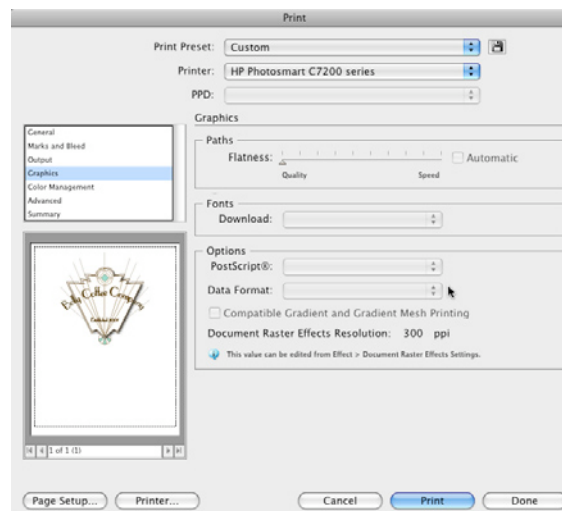
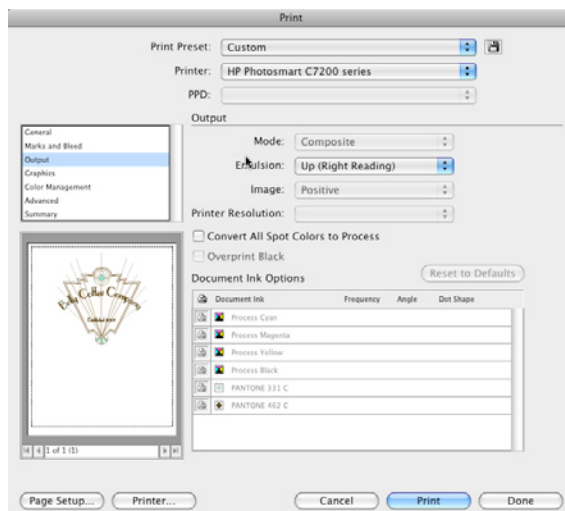
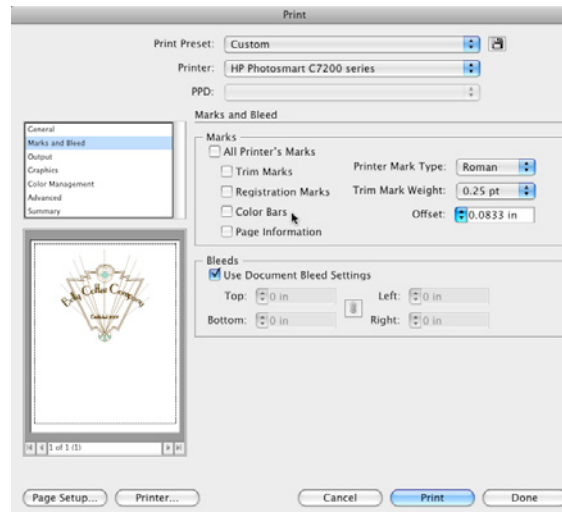
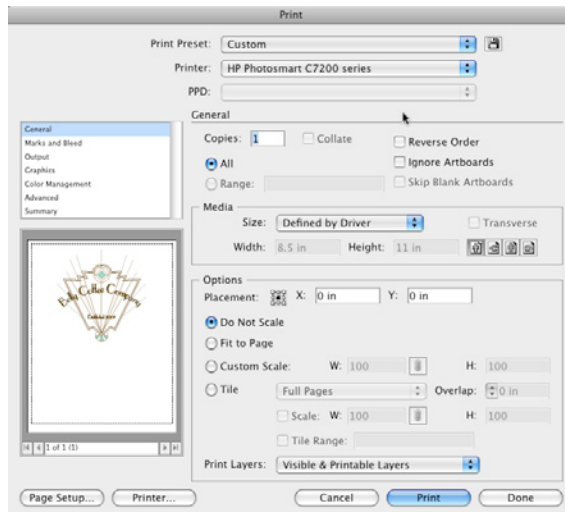
## Save Preset

For frequent PDF exports, you may save all the selected PDF options for quick access. These will be available for future use under the Preset menu at the top of the export dialog box.



## Enhanced Printing Controls

InDesign CS4 offers more support for printer drivers, the Adobe PS printer is no longer required. Adobe has also re-designed the interface to make it more intuitive and added the ability to print thumbnails. In the **Mark and Bleed** section dialog you can include the new **Bleed** area.

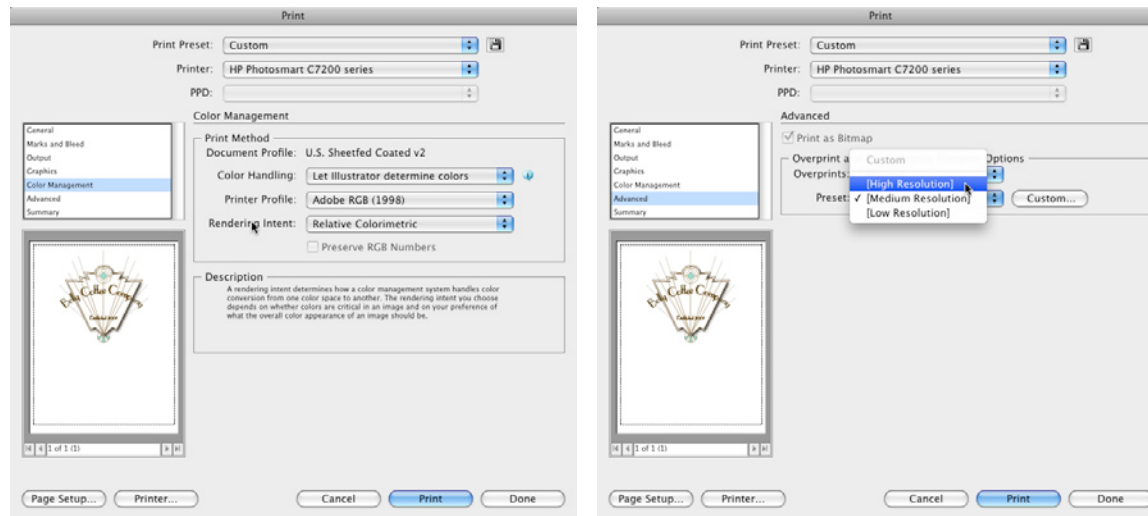


## Output

In the **Output** section you can access colors, set your **Line Screen**, choose color output options and more.


## Advanced

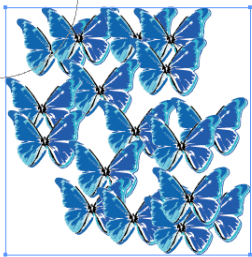
In the **Advanced** section, you can enable **OPI** (*Open Prepress Interface - high res low res image swapping*). If you are writing PostScript and using **Transparency**, this is where it gets **flattened**.



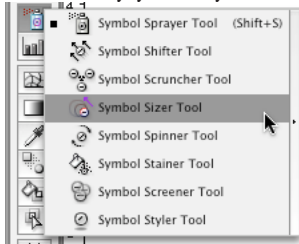
## Animating in Illustrator

Not many people realize that Illustrator 9 and newer can create animated images and Export them to the Macromedia Flash (swf) format. Here are simple instructions for creating an animated image:

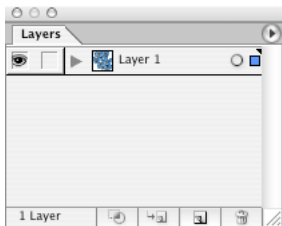
1. Select **Symbol Sprayer** tool. 
2. Go to the Symbol panel, **Window > Symbols (Shift F11)** then select a Symbol, in this example we used the **Blue Morpho**.



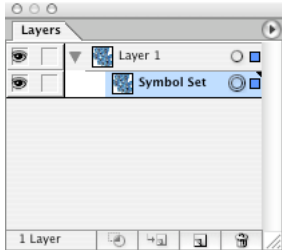
To modify your Symbols hold down on the Symbol Sprayer tool on the toolbar and you will see the nested tools.



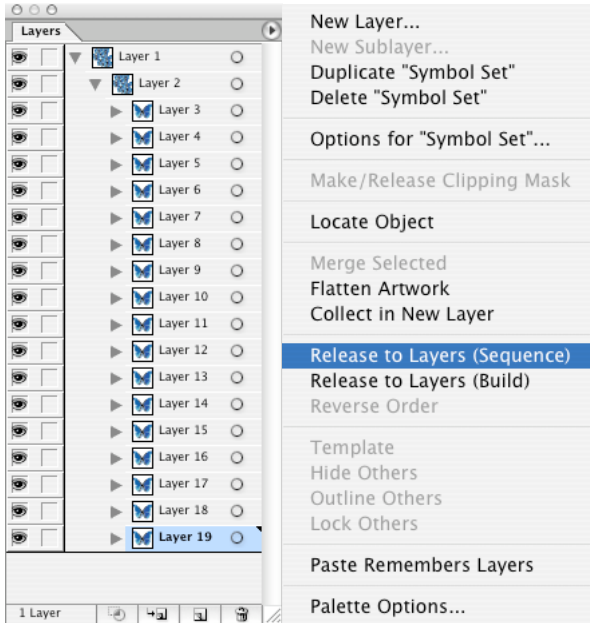
3. Now, bring up the **Layers** panel, **Window > Layers**.



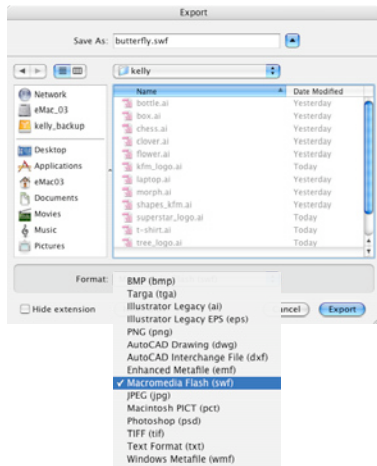
4. Click the **Triangle** to the left of **Layer 1**, this will expand the layer to see the contents, locate **Symbol Set**.



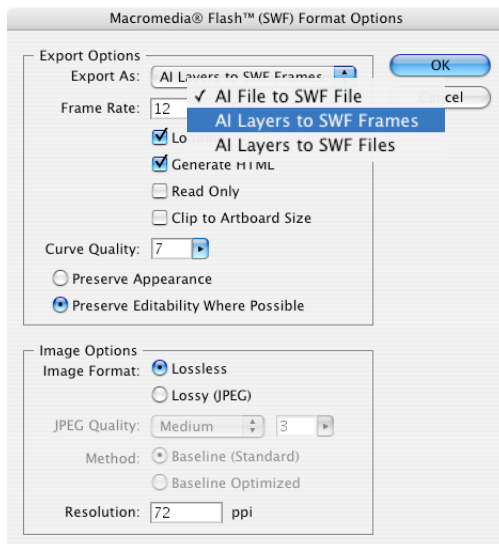
5. Click on the words **Symbol Set** and hit the **Layers Panel pop-up menu**, choose **Release to Layers Sequence**.



6. Go to **File > Export**.



7. In the dialog box choose **AI Layers to SWF Frames** and **Looping**.



8. Hide Illustrator and open the **HTML** document you just created in a web browser.