HUNDREDS OF TIPS, TRICKS, AND TECHNIQUES FROM TOP ILLUSTRATOR ARTISTS

The Adobe Illustrator WOW! Book for CS6 and CC

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Sharon Steuer AND THE ILLUSTRATOR WOW! TEAM

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PEACHPIT PRESS

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Sharon Steuer

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The Adobe Illustrator WOW! Team
for CS6 and CC

photo courtesy of lynda.com

Sharon Steuer has been teaching, exhibiting, and writing in the digital art world since 1983. Sharon is the originator and lead author of **The Adobe Illustrator WOW! Book** series (this is the fourteenth edition), and author of **Creative Thinking in Photoshop: A New Approach to Digital Art**. In between publishing projects Sharon is a full-time artist working in traditional and digital media. She lives with the love of her life, her sound and radio professor husband Jeff Jacoby (jeffjacoby.net). As always, she is extremely grateful to **WOW!** team members (past and present), Peachpit, Adobe, and of course the amazingly talented **WOW!** artists for constant inspiration, and for making this book possible. Keep up-to-date with new **WOW!** content from **WOWartist.com**, and find links to her **lynda.com** digital art courses (along with 7-day free trial links) on sharonsteuer.com/lynda. Keep in touch with her via **sharonsteuer.com/contact**, **facebook.com/SharonSteuer**, and **@SharonSteuer** (Twitter).

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Lisa Jackmore writes both Galleries and step-by-step Techniques. She is an artist both on and off the computer creating artwork for nearly anyone who asks nicely. Lisa's doodles and designs are often inspired by her life's events and observations—whether the mundane or the extraordinary– and is continually grateful for those who provide the inspiration for her illustrated thoughts. She so thoroughly enjoys being a part of the **WOW!** team that she doesn't consider it work at all.

Aaron McGarry is a San Diego-based writer and illustrator who spends time in Ireland, where he is from. While writing provides his bread, commercial illustration supplements the bread with butter. He paints and draws to escape and relax, but finds his greatest source of joy with his wife Shannon, a glass artist, and their gorgeous 9-year-old daughter Fiona. Please visit: www.aaronmcgarry.com.

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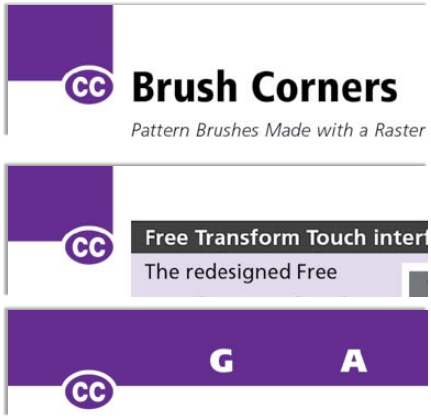
For a thorough listing of the **WOW!** *team of testers and contributors to this CS6 and CC edition, please also see the* **Acknowledgments** and **Production Notes**, *and (of course!) the* **Artists** *appendix.*

How to use this book…

Look for the WOW! ONLINE icon

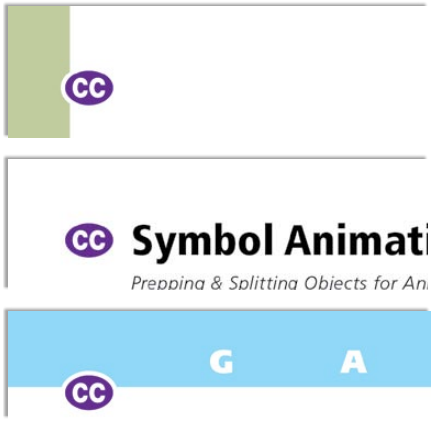
Register this book at **Peachpit.com** to access **WOW! ONLINE** files. If you don't already have an account, create one, and then access the files on the Registered Products tab on your Account page.

1



Dedicated CC content is signalled by the CC icon overlapping a purple rectangle in the upper corner on Introduction, Step-by-Step lesson pages (top and middle), or across the top on Gallery pages (bottom)

2



If a CC icon is the only purple in the upper corner of a page, then this signals a change between CS6 and CC functions or features

Although **The Adobe Illustrator WOW! Book** *for CS6 and CC* contains much to inspire users at all levels, it has been designed and tested for intermediate through professional-level users of Adobe Illustrator. To follow along with the lessons, you'll need to know enough about the basics of Illustrator to create your own art for the techniques being demonstrated. Lessons in this book are designed to help you master techniques while you create your own art along the way. Lessons are kept deliberately short to encourage the use of this book within the confines of a supervised classroom. This icon indicates you can look for featured artwork related to that lesson within a chapter's folder from **WOW! ONLINE** (see Tip "Look for the **WOW! ONLINE** icon" at left for details).

Alerting you to CC content

Whether you're using Illustrator CS6 or CC, you can safely assume that unless we indicate otherwise as described below, everything you're reading is applicable to both CS6 and CC (updates to the CC creative workflow posted after the June 2014 release will be noted at wowartist.com).

Look for this CC icon in the upper corner of a page to identify CC changes big and small, as follows:

1 Each universal CS6/CC section of the book is followed by a special section dedicated to CC content. This means that within each chapter you'll find two CC sections; the CC introduction will immediately follow the universal chapter introduction, and CC lessons and galleries will immediately follow that chapter's universal lessons and gallery section. You can identify CC introductions, lessons, and galleries by the CC icon overlapping a purple rectangle at the top of a page; for Introduction and lesson sections the rectangle will be in the upper corner of the page, while on Gallery pages the rectangle will be a purple banner across the entire top of the page.

2 **Within the universal CS6/CC section,** if a CC icon is the only purple in the upper corner of a page, then this signals a change between CC/CS6 functions or features. In this case, purple CC text and/or a purple-tinted Tip on that page will explain the change, and may also direct you to find more information.

Shortcuts and keystrokes

Please start by looking at the **WOW! Glossary** in an appendix at the back of the book for a thorough list of power-user shortcuts that you'll want to become familiar with. The **WOW! Glossary** provides definitions for the terms used throughout this book, always starting with Macintosh shortcuts first, then the Windows equivalent (⌘-Z/Ctrl-Z). Conventions covered range from simple general things such as the ⌘ symbol for the Mac's Command or Apple key, and the Cut, Copy, Paste, and Undo shortcuts, to important Illustrator-specific conventions, such as ⌘-G/Ctrl-G for grouping objects, and Paste In Front (⌘-F/Ctrl-F)/Paste In Back (⌘-B/Ctrl-B) to paste items copied to the clipboard directly in front/back of the selected object, and in perfect registration. Because you can now customize keyboard shortcuts, we're restricting the keystroke references in the book to those instances when it's so standard that we assume you'll keep the default, or when there is no other way to achieve that function (such as Lock All Unselected Objects).

A critical Appearance panel setting

Illustrator initially launches with an application default that could inhibit the way Illustrator experts work. One of the most powerful features of Illustrator is that, when properly set, you can easily style your next object and choose where it will be in the stacking order by merely selecting a similar object. But in order for your currently selected object to set all the styling attributes for the next object you draw (including brush strokes, live effects, transparency, etc.), you must first disable the New Art Has Basic Appearance setting from the pop-up menu in the

Cool Extras—templates & more

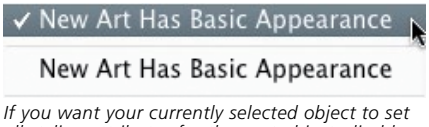
Choose File> New from Template and navigate to the Templates folder, which is within the Cool Extras folder (which is within the Adobe Illustrator application folder). You'll find more templates and CS6 sample art in Cool Extras.

Keyboard language differences

This book assumes English as the user language, but we realize that many of you are from other countries and use keyboards adapted to your own language. Non-English keyboards won't necessarily use the same keyboard shortcuts that we specify throughout the book, so we encourage you to check with the Adobe site for a list of keyboard shortcuts applicable to your own language.

Keeping up-to-date…

To keep up with the latest CC features and updates, make sure to visit us at **www.wowartist.com**.



If you want your currently selected object to set all styling attributes for the next object, disable New Art Has Basic Appearance by choosing it from the pop-up menu in the Appearance panel

Everything's under Window…

If we don't tell you where to find a panel, look for it in the Window menu!

Locating CC Content

The color purple throughout this book indicates a reference to Illustrator CC. For more details and information about how this works, read "Alerting you to **CC** content," and the "How This Book Is Organized," and "What's new in CC?" sections that follow.

1

Rethinking Construction

The white snap-to cursor

With Snap to Point enabled (the toggle is on by default in the View menu), grab objects with your Selection tool (from any path or point) and drag until they "snap to" a guide or another anchor point (the cursor turns white).

Modifier keys for drawing...

For a long list of modifier keys to control how you draw with the geometric tools (e.g., increase or decrease sides of a polygon or points in a star, modify the radius of a spiral, and reposition the object as you draw), search *Illustrator Help* for "keys for drawing."

Constructing objects is at the heart of artwork in Illustrator, and nowhere has Illustrator been more innovative than in finding new ways to construct new objects from the amalgamation of simple paths and shapes. The early days of painstakingly constructing and joining every path, anchor point by anchor point, is giving way to methods of coloring shapes in ways that create new objects or that more closely simulate drawing with pencil and paper. This chapter works its way from newer methods for combining and editing shapes—using the semi-automatic methods of the Eraser, Blob Brush, the Shape Builder tools, Live Paint, and Image Trace—to older methods such as the Pathfinder panel and working with compound paths and shapes. Here also you'll find drawing assistants—such as drawing inside or behind objects, joining paths, and aligning objects and anchor points—that will help you to combine basic paths and objects.

THE ERASER TOOLS & THE BLOB BRUSH

One of the easiest ways to separate and combine objects is using the Eraser and the Blob Brush tools. With the Eraser tool you can cut an object into many parts, and with the Blob Brush you can combine multiple objects with the same fill attributes (and no stroke).

The Eraser tools

If nothing is selected, the Eraser tool (or the eraser end of your stylus if you're using a graphics tablet) erases objects as you drag over them. To restrict the effect of the Eraser tool, select the paths you want to edit, then drag the Eraser tool through them, or enter isolation mode. If you want certain paths to be protected from the Eraser tool when nothing is selected, lock or hide those paths or their layer. You can constrain the direction of the Eraser tool by Shift-dragging, or by Option-dragging/Alt-dragging a marquee to erase a rectangular area. The Eraser tool also

66 Chapter 3 Rethinking Construction

Every chapter begins with an Introduction section that focuses on overviews of features

2

Tip boxes

Look for these gray boxes to find Tips about Adobe Illustrator.

Red Tip boxes

Red text and these red Tip boxes convey warnings or other essential information.

Purple CC Tip boxes

Look for purple boxes to find Tips about something new in **CC**.

Appearance panel (✓ shows if it's enabled). Your new setting sticks even after you've quit, but needs to be reset if you reinstall Illustrator or trash the preferences. In a few cases, we'll remind you to disable it when necessary, and also, at times, when it's helpful to have it enabled.

HOW THIS BOOK IS ORGANIZED...

You'll find a number of different kinds of information woven throughout this book— **Introductions, Tips, Techniques, Galleries, References, and Resources.** The book progresses in difficulty both within each chapter, and from chapter to chapter.

1 **Introductions.** Every chapter starts with a brief, general universal introduction that applies to CS6 and CC, followed by a dedicated **CC** section. In these introductions you'll find a quick overview of relevant creative features, as well as a robust collection of tips and tricks. In fact, there is so much info crammed in there it's likely that you'll discover new, useful information every time you take a look.

2 **Tips.** Don't miss the useful information organized into the universal gray, **CC** purple, and **red** (important) Tip boxes throughout the book. Usually you'll find them alongside related text, but if you're in an impatient mood, you can quickly flip through, looking for interesting or relevant Tips. The red arrows, red outlines, and **red text** found in Tips (and sometimes with artwork) have been added to emphasize or further explain a concept or technique.

3 **Step-by-step lessons.** In these detailed sections, you'll find step-by-step techniques gathered from artists and designers around the world. Most **WOW!** lessons focus on one aspect of how an image was created, though we'll often refer you to related techniques covered elsewhere in the book. In the universal lessons, we've noted those Illustrator CC features that have been updated and could alter the lesson's workflow. Feel free to start with almost any

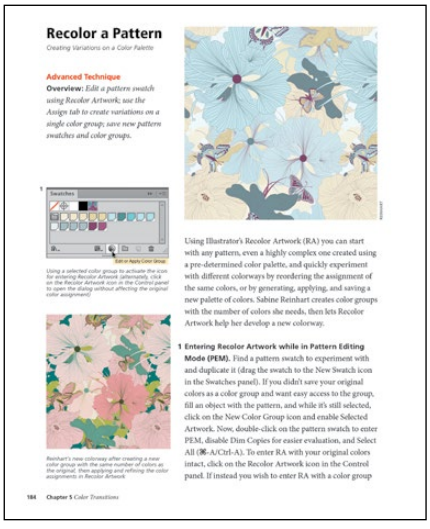
chapter, but be aware that each technique builds on those previously explained, so you should try to follow the techniques within each chapter sequentially. The later chapters include **Advanced Technique** lessons, which assume that you've assimilated the techniques found throughout the chapter. The *Mastering Complexity* chapter is packed with lessons dedicated to advanced tips, tricks, and techniques, and most will integrate techniques introduced in the earlier chapters.

4 Galleries. The Gallery pages consist of images related to techniques demonstrated nearby. Each Gallery piece is accompanied by a description of how the artist created that image, and may include steps showing the progression of a technique detailed elsewhere. Galleries that demonstrate an artist's use of a new CC feature are clearly marked with a purple banner at the top. Because these are short and descriptive, you'll want to take a look even if you're a CS6 user, in order to get a clear idea of what updating to Illustrator CC might do for your own artwork.

5 References & Resources. Within the text you'll occasionally be directed to *Illustrator Help* for more details; to access this, choose Help>Illustrator Help. Illustrator CC subscribers will also be directed to the Adobe site for more information regarding Creative Cloud services that are included with their subscription. In the back of the book you'll also find a **WOW! Glossary,** a listing of the artists featured in this book, and a **General Index**.

6 Where and what is WOW! ONLINE? The best way to learn to create with Illustrator is to examine complex art created by professionals. You're in luck! Many of the artists have allowed us to post their works for you to pick apart. Please contact the artists (find their contact info in the **Artists** appendix) to request permissions beyond personal exploration. To find these artworks and other goodies, see the tip "Look for the **WOW! ONLINE** icon" at the start of this "How to use this book" section.

3


Recolor a Pattern

Creating Variations on a Color Palette

Advanced Technique

Overview: Edit a pattern swatch using Recolor Artwork; use the Assign tab to create variations on a single color group; save new pattern swatches and color groups.

Using Illustrator's Recolor Artwork (RA) you can start with any pattern, even a highly complex one created using a pre-determined color palette, and quickly experiment with different colorways by reordering the assignment of the same colors, or by generating, applying, and saving a new palette of colors. Sabine Reinhart creates color groups with the number of colors she needs, then lets Recolor Artwork help her develop a new colorway.

1 Entering Recolor Artwork while in Pattern Editing Mode (PEM). Find a pattern swatch to experiment with and duplicate it (drag the swatch to the New Swatch icon in the Swatches panel). If you didn't save your original colors as a color group and want easy access to the group, fill an object with the pattern, and while it's still selected, click on the New Color Group icon and enable Selected Artwork. Now, double-click on the pattern swatch to enter PEM, disable Dim Copies for easier evaluation, and Select All (⌘-A/Ctrl-A). To enter RA with your original colors intact, click on the Recolor Artwork icon in the Control panel. If instead you wish to enter RA with a color group

184 Chapter 5 Color Transitions

Step-by-step lessons show you how an artist or designer uses a feature to tackle a creative task

4

Galleries provide inspiration from artists and designers living all over the world, as well as a peek into their approach to creating artwork

5

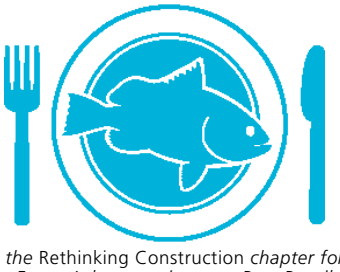
Help is still available from the Window menu or by pressing the F1 key (if the OS isn't using that function), providing access to the latest list of new features and short tutorials

What's New in CC?

How to keep in touch with us

We'll post notes for you on **wowartist.com** when new creative features are added to Illustrator CC or if something changes that might impact your workflow. Here you'll also find announcements about future printed or electronic versions of the **WOW!** books, **Zen of the Pen™** courses (when they're available), and links to related articles on CreativePro. Communicate directly with Sharon via **facebook.com/SharonSteuer**, Twitter (**@SharonSteuer**), or from her website where you can see artwork, sign up for occasional eNewsletters or blog, or send her links to view your artwork via **sharonsteuer.com/contact**.

FERSTER



See the Rethinking Construction *chapter for Gary Ferster's lesson using new Pen, Pencil, and path features, and that chapter's* CC *Introduction section for more details on these features*

JACKMORE

See Lisa Jackmore's gallery in the Expressive Strokes chapter to learn about creating a pattern brush from a raster image using auto-generated corner tiles

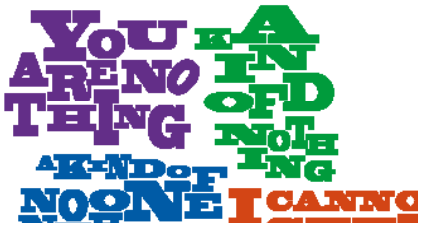
When Adobe ceased releasing a new Creative Suite in favor of the Creative Cloud (CC) model, they deliberately blurred the lines between "versions" of Illustrator. Although there will still be "announce dates" for the introduction of new features, Illustrator CC can add new features at any time during the year. Because feature sets are constantly evolving, we can no longer wait to update this book based on a finished feature set. What we describe today may have changed by the time you read this book. To keep up with this ever-changing CC, we plan to actively maintain a "What's New?" section at **wowartist.com**, which we'll update as we learn about newly released creative tools and features. We also invite you to contribute to the site as you discover new features or new ways of working; staying on top of the frequent updates calls for a community effort.

Not all the features introduced since CC was first released will immediately capture your imagination, but if you've used Illustrator long enough, you know that the original power of this amazing program was unleashed with only a few basic tools. It's the basics that give us the power to make magic with Illustrator, and the past year has seen updates that will likely change the way you interact with Illustrator in a fundamental fashion. The list of new features below illustrates how some of the enhancements can have a big impact on your workflow.

- **For vector drawing—**the newly re-engineered Pencil, Blob Brush, and Paintbrush tools have a combined Fidelity slider that replaces the two Fidelity and Smooth sliders. The Pen, Anchor Point, and Direct Selection tools have a new Reshape Segment feature, as well as several other new behaviors using modifier keys. Path corner points and rectangles can be reshaped with Live Corners and Live Rectangles. You can alter a Perspective Grid's vanishing point, and at the same time, alter the artwork on the grid to conform to the new perspective.

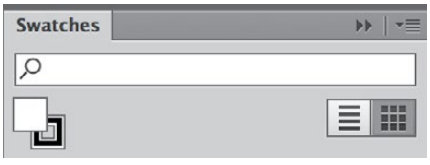
- **For brush creations—**you can now use raster images as a component in your Art, Scatter, and Pattern brushes. It's also easier to create Pattern brushes with the new Auto Generated Corner Tiles.
- **For working with Type—**a Touch Type tool lets you alter the position and scale of a single letter within a word without losing that word's editability. A search feature in the Control and Character panels makes it easier to find the font you want to use, while a Typekit membership through your Creative Cloud account lets you use fonts in projects by syncing with their website.
- **For working with color—**you'll find an enhanced Swatches panel that includes easier searching for a specific color, and a new way to interact with the Kuler website and create color palettes.
- **For web design—**a CSS panel assists in automatically generating the CSS for both individual objects and for an entire page, which you then can copy or export to your HTML editor. Along with it, added SVG features such as saving for responsive sites and copying the code to an HTML editor, have greatly improved using that standard.
- **Interface improvements—**including support for pen pressure sensitivity on Windows 8 devices, Custom Tools panels, onscreen Free Transform widgets, the ability to place multiple files at once, easier Guides placement, and unembedding files. These new features will make your workflow more flexible and productive.
- **For working with others—**you can embed/unembed linked files, package your files so linked images travel with your files, or export a personal settings file to share with colleagues. If you need to work on different computers, you can try the Sync Settings feature that takes advantage of your Creative Cloud account (and connection) to share preferences, libraries, and other files between computers.

Whether you're designing or creating a new illustration, these and other improvements—especially in the area of performance—have combined to make Illustrator more productive and more flexible to work with when you add your creative inspiration into the mix.

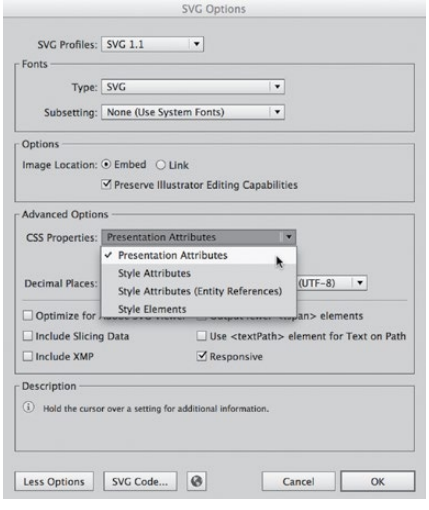


FRANCK PAYEN

Frank Payen used the new Touch Type tool to create an animation. See his gallery in the Designing Type & Layout *chapter.*



The updated Swatches panel sports new icons (see the Color Transitions *chapter)*



Web design has seen significant updates in generating code for CSS and SVG, and options for SVG have been expanded in Illustrator CC (see the Creatively Combining Apps *chapter)*

Don't forget CS6 features!

CS6 was a major upgrade that included a Pattern Options panel for creating patterns, an enhanced Image Trace panel, gradients on Strokes, a quick access Locate Object icon in the Layers panel, and major performance upgrades.

Acknowledgments

As always, my most heartfelt gratitude goes to the many artists and Illustrator experts who generously allowed us to include their work and divulge their techniques. Thanks to Von Glitschka for allowing us to feature his wonderful art on the cover.

Special thanks to Jean-Claude Tremblay, our amazing technical editor. We are so lucky to have JC advising us on every technical detail of this project. Thanks to all the folks at Adobe who help answer our questions and solve our emergency issues, including Chris Kitchener, Terry Hemphill, Neeraj Nandkeolyar, Pallab Jyotee Hazarika, Anubhav Rohatgi, Brenda Sutherland, and Michael Ninness (back again at Adobe). Thanks Russell Brown for valuing the book with "3 zombie brains."

This fourteenth revision is the result of a major team effort by an amazing group of friends and collaborators. Thankfully Cristen Gillespie is sticking with Illustrator **WOW!** Also blessedly returning are several veteran **WOW!** cohorts: cartographer/writer Steven Gordon (who continues to create and update important lessons and Galleries, join me on curatorial duties, and contributes dry wit when needed), lyrical artist/writer Lisa Jackmore (who creates Galleries, lessons, and updates the **Adobe Illustrator WOW! Course Outline**), and artist/writer Aaron McGarry (who continues as our resident 3D and perspective expert). Also returning as contributing **WOW!** writers are the wonderful artists George Coghill, Raymond Larrett, and Gary Ferster. One of the most important features of this project is our incredible team of dedicated **WOW!** testers, who join the writing team in making sure that everything in the book actually works as described. With deep gratitude I thank the multi-talented group of professionals and artists who take the time to test each project, contribute artwork, and lend their explanations: Franck Payen, Monika Gause, Federico Platón, Chana Messer, Stéphane Nahmani, Brian Stoppee, Janet Stoppee, Victor van Dijk, Kevin Stohlmeyer, Katharine Gilbert, and Nini Tjäder. Thank you Eric Schumacher-Rasmussen for master-juggling all the myriad edits. Big thanks as well to Darren Meiss for proofreading, and Jack Lewis for the index.

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Many thanks of course to everyone at Peachpit Press for all their help to make this book happen, *especially* Nancy Peterson, Tracey Croom, Nancy Davis, Nancy Ruenzel, Mimi Heft (for another lovely cover design), Alison Serafini, Sara Jane Todd, Mimi Vitetta, Eric Geoffrey, Jay Payne, and Glenn Bisignani. Thank you Linnea Dayton for spearheading the **WOW!** series and for sharing Cristen, and thanks to **Painter WOW!** author Cher Threinan-Pendarvis for the ongoing camaraderie. And last but *not* least, tons of love and thanks to my wonderful family and friends.

1

Your Creative Workspace

Your Creative Workspace

Tabbed docs & the App Frame

- Change whether documents are tabbed (the default) or not through Preferences> User Interface.
- If more documents are open than are visible on tabs, a double-arrow at the tab bar's right will list them.
- Drag documents away from the tab to make them free-floating.
- Drag an object from one document into another by dragging over that document's tab. The tab will spring open to let you drop the object in place.
- On a Mac, you can also turn on the Application Frame (disabled by default) from the Window menu. The frame contains all the panels and documents, and everything you can do in AI takes place within the frame.

Note: *You should turn off the Application Frame when using an extended monitor setup (or during video projection).*

Magically appearing panels

If you have used Tab or Shift-Tab to hide your panels, mouse carefully over the narrow strip just before the very edge of the monitor where the panels were and they'll reappear, then hide themselves again when you move away.

OK, this might not seem like sexy **WOW!** stuff, but to save time and stay focused on being creative, you need to work efficiently. In this chapter you'll find tons of things you might have missed or overlooked. You'll find tips for customizing your workspace and in-depth coverage of newer organizational features such as working with multiple artboards and the multi-functional Appearance panel, which can take the place of several panels.

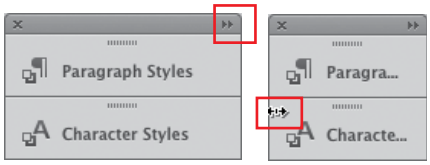
ORGANIZING YOUR WORKSPACE

You can save time and frustration if you spend a few minutes choosing your user interface Brightness level, setting up custom workspaces, and creating your own document profiles. The panels you want handy in order to create a bristle brush painting are probably different from what you need when creating a technical illustration or the layout for a series of brochures. Not all panels are needed for every job, but by organizing all that you definitely need—eliminating all you'll rarely need or won't need at all—you'll be able to locate quickly just what you need when you need it. In addition, the Control and Appearance panels often contain the same information found in the special-purpose panels, permitting you to close some of those panels and streamline your interface even more than you might think possible (see the "Using the Appearance panel" section later in this chapter).

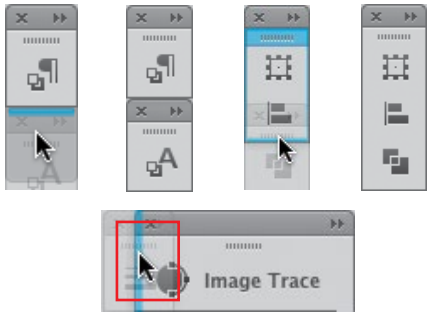
In deciding which panels you want on your desktop for any given project, you'll probably first want to cluster panels that you will frequently use in sequence, such as Paragraph and Character Styles or Transform and Align. You'll also decide where each panel or group of panels should live, and whether, when you collapse them to get them out of your way, you want them to collapse to their icon and label, or all the way down to their icon. When you have everything arranged to your liking, choose New Workspace from either Window> Workspace, or from

the pop-up menu in the Application bar. Once you've created and saved a custom workspace, its name will show up in the Window> Workspace submenu and on the Application bar (by default at the top of your working area). Switch workspaces by choosing its name. Note that any changes to a workspace, such as a panel opened or moved, are temporarily saved when you quit Illustrator so that Illustrator reopens right where you left off. To restore a workspace to its original configuration, select the workspace and choose Reset (workspace name) from the submenu. Following are tips for arranging your panels:

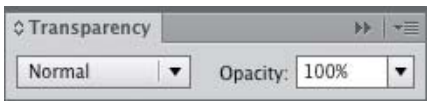
- **Dock panels** to the edges of your screen or, if you want them closer to your work, drag them around freely. (The Control panel docks to the top or bottom of the screen.)
- **Resize most panels** once they're open. Look for the double-headed arrow when hovering over an edge to see if the panel can be dragged in that direction.
- **Collapse and expand free-floating or fully expanded columns to their title bar** by double-clicking the panel name. (If the open panel is one in a column of icons that has been temporarily opened by itself, it can't be reduced to its title bar.) Double-click on the top gray bar to collapse a free-floating panel to an icon. Experiment with expanding and minimizing open panels in your workspace to get used to how the panels work, and you'll save time and frustration later when you want to get a panel out of your way quickly.
- **If you need multiple panels open at once**, place each panel you want open in a separate column (drag to the side of an existing column until you see the vertical blue bar). Only one item in a column of panel icons can be open, but one from each column can be open simultaneously and will remain open until you manually close it by clicking on its double arrow in the upper right corner. The exception is if you have enabled Auto Collapse Icon Panels in Preferences> User Interface. In that case, clicking anywhere outside a panel that was opened from an icon will close it for you. Since panels are "spring-loaded," you can still drag items into them even when they're closed.



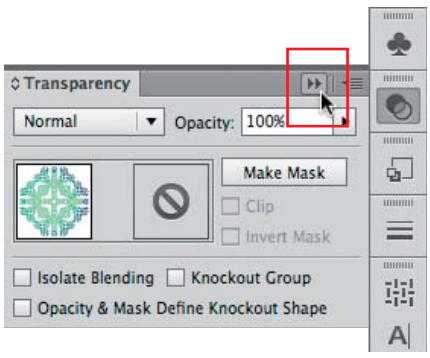
When you click the double arrow in the upper right, open panels will cycle through contracted and expanded states, which will vary depending on how you've customized the panel; customizing the width manually when the cursor turns into a double-headed arrow allows you to click-drag to resize the panel



Dock and stack panels with different results by watching where the blue highlight shows up



A double-headed arrow in the upper left (next to the panel name) indicates that you can display more, or fewer, options in the panel; the fewest options will be shown by default



To minimize a panel opened from a column of panels that have been reduced to icons, click the double arrow in the upper right (you can't minimize it by double-clicking the dark gray bar)

Units and math in panels

To enter the current unit of measurement, type a number, then press Return/Enter, or Tab to the next text field. To use a different unit of measurement, *follow* the number with **in** or **"** (for inch), **pt** (point), **p** (pica), **px** (pixel), or **mm** (millimeter), and press Return/Enter or Tab. To resume typing into an image text block, press Shift-Return. To enter *calculations* in panels, for example, type **72pt+2mm** into the H field, or type **+2** to add two of whatever unit you're currently using. Try it!

What does (pt) mean?

You'll sometimes see parentheses around units in this book, such as 1 (pt). If your document is using that unit, you can just enter that numeric value into fields. To enter the value *and* unit use **1pt**, but do *not* include the parentheses.

Changing measurement units

Control-click/right-click on a ruler to change units of measurement, or cycle units using ⌘-Option-Shift-U/Ctrl-Alt-Shift-U. Set default units in Preferences> Units.

Shifting patterns with rulers

When ruler origins move patterns:

- The pattern will NOT shift if you change an Artboard ruler origin.
- All patterns WILL shift if you change a Global ruler origin.

Using New Document Profiles

When you create a New Document Profile, you can establish not only the size, color mode, and resolution of your document, but also whether or not that document includes specific swatches, symbols, graphic styles, brushes, and even what font is chosen as the default. By saving this to the New Document Profiles preset folder along with your other user Library presets, the document appears in the New Document dialog.

Rulers, guides, Smart Guides, and grids

Now that Illustrator offers multiple artboards, you can choose to display the ruler (⌘-R/Ctrl-R) as a Global ruler that extends across all your artboards, or as an Artboard ruler, one for each artboard with its own *x,y* coordinate system. The rulers look the same, but if you Control-click/right-click on a ruler, or press ⌘-Option-R/Ctrl-Alt-R, the Change to (Global/Artboard ruler) command reveals which ruler is active, and you can switch rulers here. In order to be consistent with other Adobe programs, new documents by default use Artboard rulers and set the origin point at the upper left corner, instead of the lower left. Documents created in older versions will still open with Artboard rulers active and the origin point in the upper left, but if you switch to the Global Ruler, the origin point will be at the legacy lower left corner, as it was when the document was originally created. If you need to work with legacy positioning, switch to Global Rulers with your legacy documents to see the old *x,y* coordinates. You can still change the location of the origin point by dragging from the upper left corner of the rulers to the desired location, but you can give each artboard its own origin point when you choose Artboard Rulers.

You can apply guides globally or to individual artboards. To place a non-global guide with the Artboard tool selected (Shift-O), drag a guide from the ruler to the active artboard, being careful to drag right over the board, not between it and another. If you drag a guide in between the artboards, it will place the guide across all artboards.

If you intend to use several guides in a project, you should probably create separate layers for specific sets of guides. By keeping guides on named layers, you not only can easily control which guides are visible at any time, but also how the global locking, visibility, and clearing of guides is applied. (CC has enhanced guide placement.)

You can also create guides by selecting an object and defining it as a guide by choosing Object> Make Guides (⌘-5/Ctrl-5, or via View> Guides). By default, guides are unlocked, but you can lock them using the Lock/Unlock toggle (in the context-sensitive or View menus); the Lock/Unlock Guides toggle is global, and affects all guides in all documents. Any unlocked guide can be changed into a regular, editable path by targeting the guide and, again in the context-sensitive menu, choosing Release Guides. Guides not targeted will not be converted.

Smart Guides, which can be powerful aids for constructing and aligning objects as you draw, are helpful enough to become an essential part of your workflow. Try keeping them on (the toggle is ⌘-U/Ctrl-U). Enable or disable viewing options in Preferences> Smart Guides.

MASTERING OBJECT MANAGEMENT

Take control of the stacking order of objects right from the beginning, and become familiar with the different ways to focus on just the necessary objects at one time.

Although probably the easiest and most important thing that you can do to keep your file organized is to name your layers as you create them, it's easy to get lazy and just click the New Layer icon. To avoid amassing a stack of ambiguously numbered layers, try to get in the habit of holding Option/Alt when you click the New Layer icon to name it in the Layer Options dialog, or double-click on the layer name itself to rename it. (Of course you can double-click to the right of the layer name at any time to access Layer Options and edit the name or other settings.) Both the Layers and the Appearance panel are designed primarily to help you locate, select, and modify your artwork objects, so you want to take full advantage

Changing Constrain Angle

CC

If you adjust the X and Y axes in Preferences> General> Constrain Angle, it will affect the drawn objects and transformations of your grid, as they will follow the adjusted angle when you create a new object. This can be helpful if you're working in isometrics or another layout requiring alignment of objects at an angle.

Hide/Show Edges

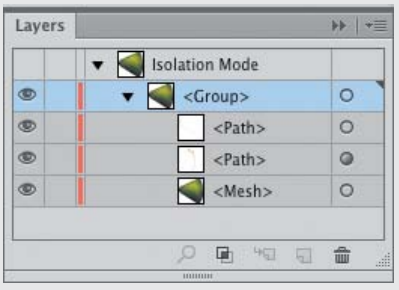
The shortcut for Hide/Show Edges is ⌘-H/Ctrl-H (or choose View> Hide/Show Edges). Once you hide the selection edges (paths and anchor points), all path edges in that file will remain hidden until you show them again—and that hidden state is saved with your file! Get in the habit of toggling it off when you're done with the task at hand. And, if you open a file and can't decode the mystery of why things don't appear selected, remember to try ⌘-H/Ctrl-H.

Three grids

View Illustrator's automatic grid using View> Show Grid (⌘-"/Ctrl-"). Illustrator also offers a Perspective Grid and a Pixel Grid. For details on the Perspective Grid, see the *Reshaping Dimensions* chapter, and for information on using the Pixel Grid, see the "Web Graphics" section in the *Creatively Combining Apps* chapter.

Layers panel and isolation

When you enter isolation mode, only the artwork in the group or layer that's isolated will be visible in the Layers panel. Once you exit isolation mode, the other layers and groups will once again appear in the Layers panel.



Isolation ins and outs

To enter isolation mode:

- Double-click on an object or group
- Select an object or group and click on the Isolate Selected Object button on the Control panel
- Choose Enter Isolation Mode in the Layers panel menu

To exit isolation mode:

- Press the Esc key
- Click on any empty spot on the gray isolation bar
- Double-click an empty spot on the artboard
- Click on the Back arrow on the isolation bar until you're out
- Choose Exit Isolation Mode from the Layers panel menu
- ⌘-click/Ctrl-click to back out to the next level of isolation

of Illustrator's changing interface to know just where you are and what you'll be affecting.

Using isolation mode

Isolation mode is a quick way to isolate selected objects so you can work on them without accidentally affecting other objects. The next time you want to edit an object, group, or layer, use isolation mode instead of locking or hiding things that are in the way. In addition to *you* choosing to enter isolation mode, Illustrator will also at times automatically place you into a special form of isolation mode, such as when editing symbols, creating patterns, or working with opacity masks. Isolation mode focuses your attention as you create and edit various types of objects.

See the Tip at left for a summary of how to enter and exit isolation mode. Once you enter, a gray bar appears at the top of your document window, indicating that you're now in isolation mode, and the gray bar displays the hierarchy that contains the isolated object. Everything on your artboard *except* the object(s) you've just isolated will be dimmed, indicating that those other objects are temporarily locked. If you have isolated an object or group, you can expand the isolation to the sublayer or layer that the object is on by clicking on the word for that layer in the gray bar. As long as isolation mode is active, anything you add to your artboard will automatically become part of the isolated group. (Disable "Double-click to Isolate" in Preferences> General to prevent a double-click from putting you in isolation mode.)

Isolation mode isn't limited to objects you've grouped yourself. Remember that other types of objects—such as blends, envelopes, or Live Paint objects—exist as groups, and isolation mode works for them, too. In addition to using isolation mode on groups, you can also use it on almost anything—layers, symbols, clipping masks, compound paths, opacity masks, images, gradient meshes, and even a single path. The next time you think you have to enter Outline mode, or lock or hide objects to avoid grabbing other objects, try isolation mode instead.

Select Behind

To select objects from the document window that are hidden by other objects without first having to lock or hide those objects, ⌘-click/Ctrl-click to Select Object Behind (toggle it on/off in Preferences> Selection and Anchor Display). The first click brings up the Select Behind cursor and selects the topmost object, and each subsequent ⌘-click/Ctrl-click targets the Fill for the next objects in the stacking order. You can't target Strokes in this manner, but if the object has a Fill, you can target the object and use the Appearance panel to change the Stroke.

Selecting & targeting indicators in the Layers panel

Many seasoned Illustrator artists have missed the introduction of targeting versus selecting. When you simply select objects and apply effects or adjust opacity, the effects might not be applied as you expected, and in order to remove or edit the effects you'll have to carefully reproduce this level of selection (see "Decoding appearances" on the next page). If instead you apply an effect to a targeted group, layer, or sublayer, then the effects are easy to remove (simply target that level again).

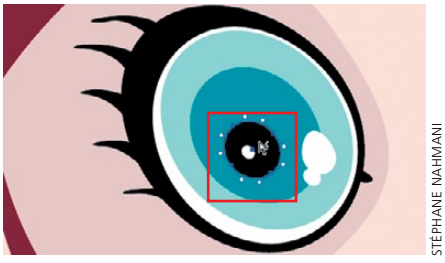
To know for sure whether you have successfully targeted a layer, look in the Layers panel, where you should see the double-circle as the target indicator for that layer, and a large square box indicating that you've selected all objects within that layer (a small square means you have only some objects on that level selected). In addition, in the Appearance panel you should see the word "Layer" listed first as the thumbnail name (as opposed to "Group," "Path", or "Mixed Objects"). When a group, layer, or sublayer has an effect applied to it, any new objects placed into that level will immediately acquire those effects.

Copy and paste techniques

When you copy an object, Illustrator offers a number of power options for how the objects are pasted, including Paste in Front, Paste in Back, Paste in Place, and Paste on All Artboards. Note that none of these are affected by the

Great layers feature…

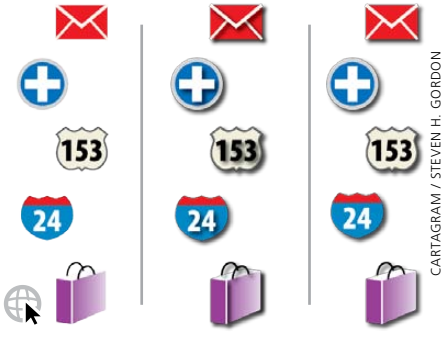
With Paste Remembers Layers enabled (it's off by default in the Layers panel menu), pasted objects retain their layer order, and if the layers don't exist, Paste Remembers Layers makes them for you! If you paste, and it pastes flattened (because it's disabled), Undo, reverse the toggle, and paste again.



STÉPHANE NAHMANI

⌘-click/Ctrl-click on the topmost object to bring up the Select Behind cursor

Selection and target indicators (from left to right): 1) target indicator for any layer or subcomponent, 2) selection is also currently targeted, 3) target indicator for any targeted component with effect applied, 4) selection indicator for a container layer, 5) selection indicator when an object is selected, 6) selection indicator when all objects on a layer are selected

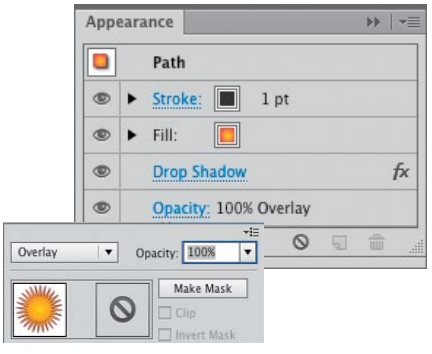


CARTAGRAM / STEVEN H. GORDON

Steven Gordon at Cartagram applies drop shadows to his map icons: (left) original; (middle) after selecting ungrouped objects (or all objects on a layer) and applying an effect (it applies to each object separately); (right) after targeting *the layer or selecting the group and applying the effect (it applies to the bounding paths only)*

Decoding appearances

A basic appearance does not include multiple fills or strokes, transparency, effects, or brush strokes. More complex appearances are indicated by a gradient-filled circle in the Layers panel. When you need to modify artwork created by others (or open artwork you created earlier), it's essential to have both the Appearance and Layers panels visible. Unless an effect is applied at the level of a layer or a group, you might not see the filled circle icon until you expand your view of the layer to locate the object that has the effect applied.



Many functions reside in the Appearance panel

Duplicating fills/strokes/effects

To duplicate a fill or stroke: select the object and click on the Add New Stroke or Add New Fill icon at the bottom of the Appearance panel, from the panel menu, or select one or more strokes, fills, and effects in the panel and drag them to the Duplicate Selected Item icon at the bottom of the panel.

ruler origin, but are positioned in the same relative position to the upper left corner of the artboard. Here are some of the distinctions:

- **If you choose Paste in Front or Paste in Back with nothing selected,** Illustrator pastes the cut or copied object at the extreme front or back of the current layer.
- **If you choose Paste in Front or Paste in Back with an object selected,** Illustrator pastes the object directly on top of or behind the selected object in the stacking order.
- **Paste in Place** is the same as Paste in Front with nothing selected, but it pastes to any selected artboard.
- **Paste on All Artboards** pastes the object in the same relative position onto each artboard.

Using the Appearance panel

You probably know by now that many functions can be handled in the Control panel instead of individual panels. The Appearance panel also can replace a number of separate panels, making it an indispensable hub for a productive and efficient workflow. Here you can view or edit a selected object's stroke, fill, or transparency; check to see if it's part of a group; or adjust an effect or named graphic style applied to it.

In the Appearance panel with a group or layer targeted, double-clicking on Contents reveals object-level attributes. With a text object, double-click on Characters to see the basic text attributes. You can also add additional strokes or fills to the object, apply effects and access effect dialogs, choose whether or not the next object you draw will have the same appearance, or construct a new graphic style to save for future objects. Important concepts for using the Appearance panel include the following:

- **The basic appearance** consists of a stroke and fill (even if set to None), and its transparency (0%–100% Opacity).
- **Apply an appearance** to any path, object, group, layer or sublayer.
- **The stacking order of attributes** affects the final appearance, and can be changed simply by dragging the attribute up or down in the list.

- **The visibility of attributes** can be toggled on or off by clicking the Eye icon, and multiple selected items can be unhidden with Show All Hidden Attributes from the panel menu. The visibility of thumbnails can be toggled on or off with Show/Hide Thumbnail in the panel menu.
- **Click on underlined words**, such as Stroke, Opacity, or Drop Shadow to open their respective panels; Shift-click on a swatch icon to open the Color panel.

Graphic styles and the Appearance panel

A graphic style consists of all the attributes applied to an object, group, or layer. If you have a single object selected, Control-click/right-click on a style to see a large thumbnail preview of the style applied to your object (this won't work with more than one object selected). Save a current appearance by clicking the New Graphic Style button (you can also drag the thumbnail from the Appearance panel, or drag the object itself to the Graphic Styles panel). Option-drag/Alt-drag the thumbnail on top of an existing graphic style in the Graphic Styles panel to replace it.

To add a graphic style to an object that already has a graphic style without removing any of the existing attributes, Option-click/Alt-click on the graphic style in the Graphic Styles panel. When you look at the Appearance panel, you'll see the new attributes stacked on top of the original attributes.

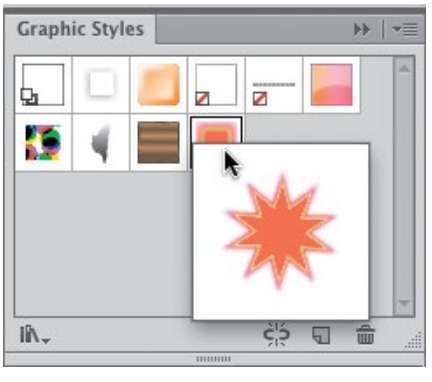
MANAGING MULTIPLE ARTBOARDS

Having multiple artboards allows you to organize work within and across projects in a single document, whether you need to create multi-panel storyboards, set up elaborate character stagings for animations, organize many elements within a single complex project, or even keep multi-sized, collateral business material (such as cards, stationery, envelopes, postcards, and brochures) within one document. And then, of course, you can print or export to PDF any combination of the artboards that you want into one multi-page PDF, even one with multi-sized pages. To help you set up, organize, and work with

Drawing with Appearances

Whether or not your new object will have the same attributes as your last-drawn object depends upon settings in the Appearance panel menu.

- **If New Art Has Basic Appearance is enabled,** you'll be drawing with only the current Stroke, Fill, and Opacity. Any other attributes from your last-drawn object are ignored.
- **If you have disabled New Art Has Basic Appearance**, your new art will have the exact same Appearance as your last object, but you can choose Reduce to Basic Appearance in the panel menu to remove all attributes except the Stroke, Fill, and Opacity.
- **To eliminate even the Basic Appearance,** click on the Clear Appearance icon at the bottom of the panel, which reduces the selected object to None for Stroke and Fill, and the Default (100%) Opacity.



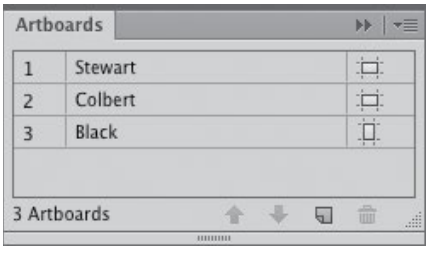
With a single object selected, Control-click/right-click on a graphic style; an enlarged thumbnail shows the style applied to the selected object

Why use New Window?

Choose Window> New Window to display different aspects of your current image simultaneously. You can view the same art separately, and in different View modes (Preview, Outline, Overprint, or Pixel), or with different Proof Setups (including for color blindness), or Zoom levels. Use Arrange Documents on the Application bar to organize them or to make edges hidden or visible. Most choices from the View menu are saved with the file along with the new windows.

Design to the edge

By default, artwork that extends beyond an artboard won't print, making it important to watch not only for artwork left off the artboard, but for artwork that has been manually positioned on the page in the Print dialog. If your artwork extends beyond the edge of an artboard, make sure you add a bleed setting value; if the artwork gets placed in InDesign or saved as EPS, it's all still visible.



Artboards panel with reorder arrows, orientation icon (double-click to enter the Options dialog), and New Artboard and Delete Artboard icons

artboards, both the Artboards panel and the Control panel options with the Artboard tool selected provide the access and features you'll need. To manage the artboards themselves, make sure you're familiar with basic artboard functions:

- **Set up artboards** when you're configuring a new document, or later on using the Artboards panel or the Control panel with the Artboard tool active. Artboard configurations can be saved as part of a New Document Profile.
- **To add an artboard** using the same properties as the currently highlighted artboard, click on the New Artboard icon. It will be added to the same row as the current artboard, but you can rearrange the artboards later.
- **Modify artboard settings in the Artboard Options dialog** by choosing Artboard Options from the Artboards menu; double-clicking on the artboard orientation icon in the Artboards panel (single-click if the artboard is already active); double-clicking on the Artboard tool; or clicking the Artboard Options icon on the Control panel when the Artboard tool is active.
- **Create and manage artboards manually** and interactively by selecting the Artboard tool (Shift-O) instead of invoking the dialog, dragging artboards to scale and position them, and using the Control panel options. Enabling Smart Guides can help with precise manual alignment.
- **Name your active artboard** by double-clicking on the Artboard name and renaming it directly. Or select the Artboard tool and change its name in either the Control panel or in the Artboards Options dialog. The name is listed in the Artboards panel and in the list of artboard panels in the status bar (Artboard Navigation, located at the bottom right of the document window).
- **Rearrange artboards** through the Artboards panel menu or Object> Artboards> Rearrange, choose rows, columns, and spacing; whether or not to move your artwork with the artboard; and the last-used settings persist.
- **Reorder the list of artboards** in the Artboards panel using the up and down arrow icons. Reordering artboards within the Artboards panel doesn't change the way the

actual artboards are arranged in your workspace. However, be aware that the order of artboards in the panel determines the order in which artboards print or are ordered when saved as a multi-page PDF.

- **Use Shift-Page Up or Shift-Page Down to navigate** the Artboard panel layers, which will fill the window with your selected artboard as you navigate.
- **Artboards have a reference point**. In the Position area of Artboard Options, choose the reference point from which artboards get resized.
- **Overlapping art across multiple artboards, or overlapping artboards onto one piece of art,** allows you to develop multiple versions of the same image without duplicating elements. Each artboard will print only those portions of the art wholly contained within its borders, allowing you to print or export duplicates, and/or portions of an art piece, from the one instance of the art (this is a useful technique for storyboarding and comic strips).
- **Convert a non-rotated rectangle** to an artboard by choosing Object> Artboards> Convert to Artboard.
- **Use Fit to Artwork Bounds and Fit to Selected Art** commands (in the Preset list on the Control panel when the Artboard tool is selected, or under Object> Artboards), for resizing artboards according to their contents.
- **To locate an artboard visually** when another artboard fills your view, choose View> Fit All in Window (⌘-Option-0/Ctrl-Alt-0). To activate it, click on the artboard with the Selection tool or click on its name in the Artboards panel.
- **When zooming,** the commands Fit Artboard in Window (⌘-0/Ctrl-0) and Actual Size (⌘-1/Ctrl-1) affect the active artboard. Double-clicking in the Artboards panel to the right of an inactive artboard's name or on its number on the left (single-click if it's active), also zooms that artboard to Fit Artboard in Window size.
- **Export artboards as separate TIFF, JPEG, PSD, or PNG files** when you need a rasterized version of every artboard in your document.

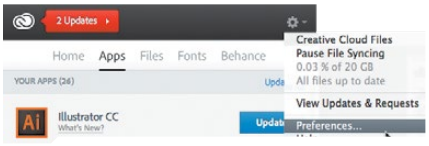
Copying art between artboards

Working productively and maintaining consistency within a project often means duplicating elements from one document to another. With multiple artboards you have a variety of methods to accomplish this task, depending upon your needs:

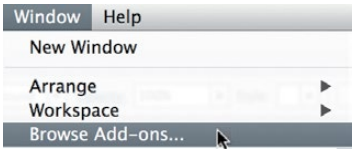
- With the "Move/Copy Artwork with Artboard" icon enabled in the Control panel (Artboard tool selected), hold down the Option/Alt key while dragging an active artboard to a new location in order to duplicate the artboard and all its contents.
- Use Edit> Paste (⌘-Option-Shift-V/Ctrl-Alt-Shift-V) on all artboards to copy artwork from one artboard to the same position on all artboards of any size.
- Turn artwork created on one artboard into a symbol, then drag that symbol from the shared Symbols panel to any other artboard. Now just update the symbol to update all instances of it used on any artboards.
- Using the Measure tool, measure the distance between the artwork and where you want it on another artboard, and use Transform> Move to move or copy the artwork.
- Apply the Transform effect on a layer to copy "instances" of artwork to another artboard in the same relative position.

Behance

Your subscription includes membership in Behance. Adobe's social media site encourages artists to collaborate privately, ask advice from others, or display a portfolio for interested parties. Typical of sharing sites, terms of service may claim the right to use images posted to Behance without permission or compensation.



The Creative Cloud app displaying update status; the Creative Cloud pop-up menu



Adobe Add-ons is the new online marketplace for plug-ins, scripts, and other assets offered through the Adobe Exchange

Keep it closed, please

When you save your file, Illustrator now remembers which of your layers were in an expanded state and which were collapsed. You'll find them as you left them when you reopen the document.

Seeing spots

If you ever use Separations Preview with Overprint enabled, you'll be pleased to notice that Illustrator now includes the option to display only those spot colors actually used in the artwork.

THE CREATIVE CLOUD WORKSPACE

Your subscription to Creative Cloud comes with new interface options and features. Most of the time, you can run Illustrator CC without being connected to the internet or logged into your Creative Cloud account. However, some options require that you are both online and signed into Creative Cloud. For example, in order to receive notification of available updates, to sync your settings, post to Behance, or use Typekit fonts (see the *Designing Type and Layout* chapter for more on this), you'll need to have an active connection to your Creative Cloud account.

In addition to discussing new CC settings and services that are integrated with Illustrator, this section will also cover updates to the way Illustrator CC itself looks and functions, including HiDPI (high DPI) compatibility for Windows 7 & 8 (support for retina displays was added in CS6), creating a Custom Tools panel, and new implementation of keyboard modifiers for added functionality.

Illustrator and the Creative Cloud app

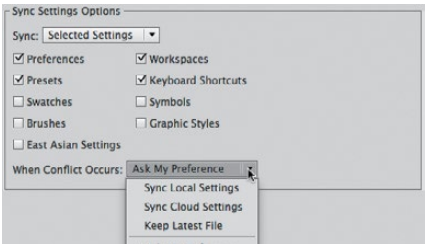
Now that Illustrator is integrated with Adobe's Cloud services, you're able to use the Creative Cloud app to do myriad things, such as manage your subscription to Illustrator, keep your version up to date, sync fonts from the Typekit service, access files you have uploaded to your personal Creative Cloud, and manage your Behance account. By default the Creative Cloud app installs an icon on your Apple menu bar, or your Windows taskbar, and launches when you log in to your computer. However, you can change this behavior from the Preferences command in its pop-up menu. If you're having trouble signing in to your Adobe services or updating Illustrator, your Creative Cloud app is the first place to look for clues as to why.

Sync your settings and assets

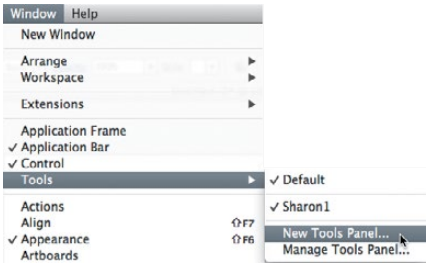
If you have more than one computer, Sync Settings is a Creative Cloud feature that lets you use your Cloud storage to quickly copy your workspaces, shortcuts, preferences, presets, and assets such as swatches and brushes

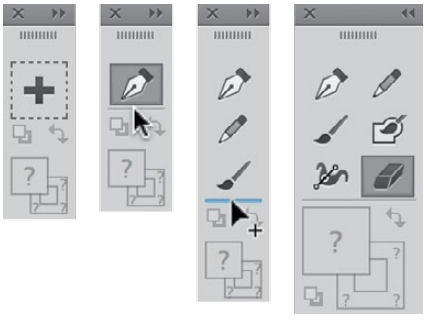
from one computer to another. To decide what settings to sync, choose Preferences> Sync Settings, or choose your Adobe ID (Illustrator menu on Mac or Edit menu on Windows)> Manage Sync Settings. Enable the settings you want to transfer, then select what to do if a conflict arises between settings on your machine and settings stored in the Cloud. You can then choose Sync Settings Now in Preferences, or you can sync any time a document is open by clicking on the Sync Settings icon in the bottom left corner of a document window. Just remember that Sync Local means your local settings become top dog, uploading settings to the Cloud, while Sync Cloud downloads settings from the Cloud to your computer. You can also simply choose to overwrite the oldest file with the newest, wherever it is.

Edit> Settings> Import/Export also allows you to import a settings file, or create a file from settings to export as a conventional file. Use the file for backup, or to share settings with others without using the Cloud.



Sync Settings in the Preferences dialog





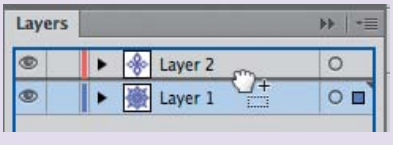
A custom Tools panel begins with just a + sign, but you can drag in as many tools as you wish, and even display it in two rows by clicking the upper-right double arrow

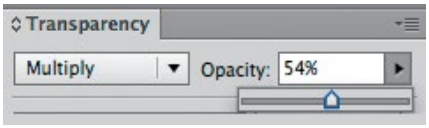
The Custom Tools panel

Although Illustrator has long allowed you to "tear off" sets of tools when you drag on the arrow at the right end of the tearaway strip, you can now build your own custom collections with any icons from the Tools panel. To make a custom panel, choose Window> Tools> New Tools panel and name it. Initially, your custom panel will only contain the Swatch Proxy icon, which can't be removed. To add the first tool, drag it to the custom panel and drop it on the large + icon (plus), which is then replaced by your tool. For each additional tool, your cursor will display a + (plus) to indicate you can add the tool, while a blue line indicates where in the panel the tool will be added when you let go. To access tools hidden beneath others, first use the tear-off panel to make all those tools visible. Swap the position of one tool with another in your panel by holding down the Option/Alt key and dragging one tool on top of the other. To remove a tool from the panel, first make sure you have a document open, then simply drag the tool off

Layers panel cursors

Illustrator CC restores copying feedback missing from the CS6 Layers panel: holding Option/Alt as you drag a layer or selection indicator, you'll once again see a + indicating you're about to copy (instead of move).

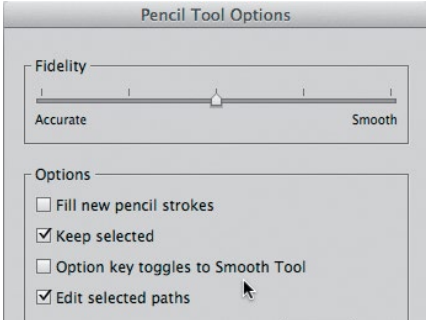




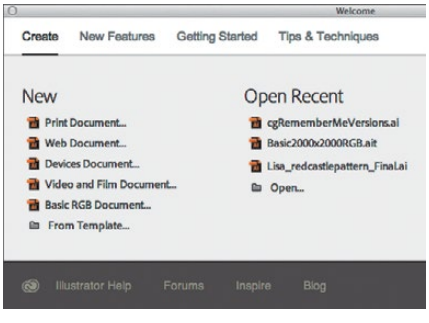
Back by popular demand, the Opacity slider (found in the Transparency, Control, and Appearance panels), replaces the CS6 list of presets

New Pen, Pencil, & path editing

For details about changes to the Pen and Pencil tools, as well as the new path editing cursor, see the CC section of the *Rethinking Construction* chapter.



The Pencil Tool Options dialog displaying the new Fidelity slider—also shared by the Paintbrush, Blob, and Smooth tools—plus a new preference for whether to toggle to the Smooth tool instead of drawing straight lines with the Pencil. For more on this, see the CC section in the Rethinking Construction *chapter introduction.*



The Welcome screen is evolving even as we write this, but one version you might get includes a Create tab for opening your documents and tabs with short videos to help you learn to use Illustrator. You should be able to prevent the Welcome screen from launching (look for a Don't Show Again checkbox, though it might not be easy to locate). If your Welcome screen is closed, you can look for it in the Help menu.

the panel and release when you see the minus sign added to your cursor.

To rename, copy, or delete your panels, choose Window> Tools> Manage Tools Panel. You can create multiple custom Tools panels and have multiple Tools panels open at the same time. They behave like other panels—open one and it persists in the workspace until you decide to reset that workspace to its default configuration.

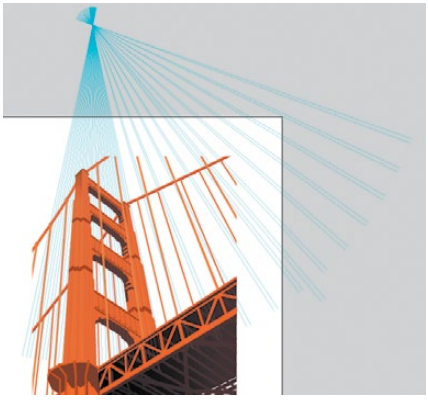
Enhanced keyboard and mouse functions

You can now access enhanced functionality and added controls via your keyboard or mouse (see Tip at left for where to find info about Pen tool changes):

- **To draw or resize an artboard from its center,** hold down the Option/Alt key when dragging on a corner with the Artboard tool.
- **To place files without opening the File menu,** press ⌘-Shift-P/Ctrl-Shift-P.
- **To change Opacity,** click on the triangle beside the numeric input field to access a slider (in CS6 you'll see a list of presets). The slider was restored by popular request.
- **To cancel creating guides or altering zoom level with the Zoom tool,** press the Esc key while still dragging and before releasing the mouse. This also cancels dragging with the Selection, Direct Selection, and Print Tiling tools, and ends drawing an open path with the Pen tool.

Better guide creation

To quickly create a guide at a specific location, double-click directly on the ruler at that location. For instance, double-click on a horizontal guide to place a vertical ruler, or press Shift and double-click to force the guide to the nearest tick mark. To create crossing horizontal and vertical guides at a specific point, hold ⌘ (Mac)/Ctrl (Windows), and then click-drag the guide from the upper-left corner of the rulers to your artboard. Pressing the Esc key before completing the drag cancels creating guides, including dragging to change the 0 location of the x,y coordinates.



Mike Kimball

Commissioned by the Golden Gate National Parks Conservancy to create a poster for the 75th anniversary of the Golden Gate Bridge, Mike Kimball produced an illustration that focused on the bridge's streamlined Art Deco design. He simplified the detail in the bridge to eliminate construction details that distracted from its design lines, and restricted the number of colors in keeping with posters of that period. Critical to achieving the strong perspective favored by the client were the hand-drawn perspective guides Kimball placed on a layer above the artwork. To make them, he drew a line along the left and right cables (the extreme right was cropped from view later), created intermediate lines with Object> Blend> Make, then chose View> Guides> Make Guides. A second set of guides marked the cable width. He organized the illustration with separate layers for the bridge itself, the highlights, shadows, and the sky. He made extensive use of blending modes, opacity, and gradients to create highlights and shadows, while Gaussian Blur softened the clouds. When finished, Kimball's poster echoed a style from the day the famous bridge opened.

Tracing a Template

Manually Tracing a Template Layer

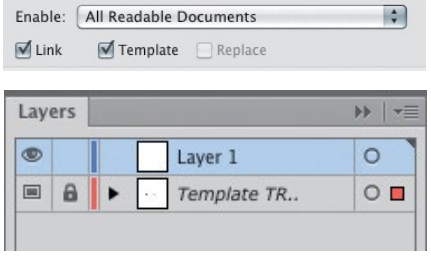
Overview: *Place a scan on a template layer in Illustrator; manually trace over the template using the Pencil, Pen, and Arc tools; modify paths with the Direct Selection tool; use geometric objects for ease and speed.*

SELLERS

Rachel Sellers used Illustrator's basic drawing tools to build this skyline for Thirty-Third Latitude Properties. Using a scanned sketch as a template, Sellers relied on Illustrator's Pencil, Pen, and basic geometric tools to draw the skyline and artwork in the logo.

1

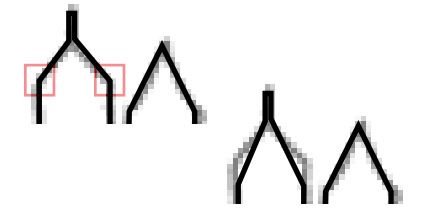
Part of the high-contrast scan of Seller's pen sketch from photographs of Atlanta's skyline



Creating the template and a drawing layer by choosing File> Place

1 Placing a scanned image as a template. Scan your source image at a high enough resolution and contrast to see the detail you need for tracing, and save it as a PSD, TIFF, or JPG. In a new Illustrator document, choose File> Place, select your scan, enable the Template option at the lower-left of the dialog, and click Place. Your scan is now on a Template layer beneath the original layer. Template names are italic, indicating that they're non-printing layers. Template layers are also automatically dimmed to 50% opacity, but you can adjust the opacity by double-clicking the Template thumbnail in the Layers panel.

2



Using the Direct Selection tool and repositioning two anchor points after tracing (left) to reshape the drawing of a building (right)

2 Tracing straight lines and corners; repositioning points. With the template as a guide, select Layer 1 (the default layer in the Layers panel) and with the Pen tool, using the scan as a guide, click to place anchor points that will connect with straight lines. To draw horizontal, vertical, or diagonal lines while you trace, hold down the Shift key as you click with the Pen tool. Once you've drawn a