ADOBE

Illustrator

A Complete

COURSE

AND

COMPENDIUM

OF FEATURES

Lessons

Master best practices
through well-tested exercises

Reference

Easily find and explore
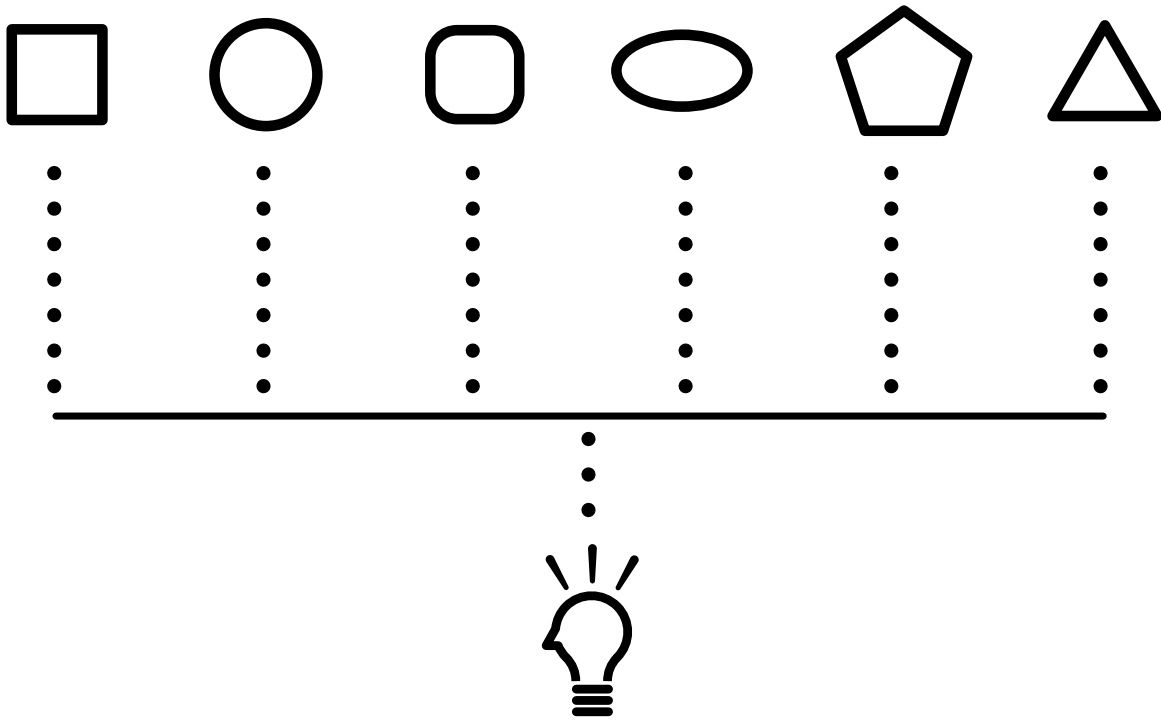key features and concepts

rockynook

JASON HOPPE

Visit the following websites to learn more about this book:

1 Preferences and Workspaces

# Preferences

Document-Specific and Global

For Illustrator to run as smoothly as possible within your workflow, you will need to set up your preferences to your liking. Preferences on a Mac are under the Illustrator menu > Preferences. On a PC they are under the Edit Menu > Preferences.

VERY Important Note: I strongly recommend that you change the preferences with no document open because this will set the preferences for the application. Any preferences set with a document open will *only* be applied to that document.

At times, preferences may become damaged and may need to be reset to their default values. To restore preferences, press and hold Option+Command+Shift (Mac) or Alt+Control+Shift (PC) as you start Illustrator. The new preferences files are created the next time you launch Illustrator.

General

The General section contains the preferences that don't fit neatly in the other categories. These are all global preferences.
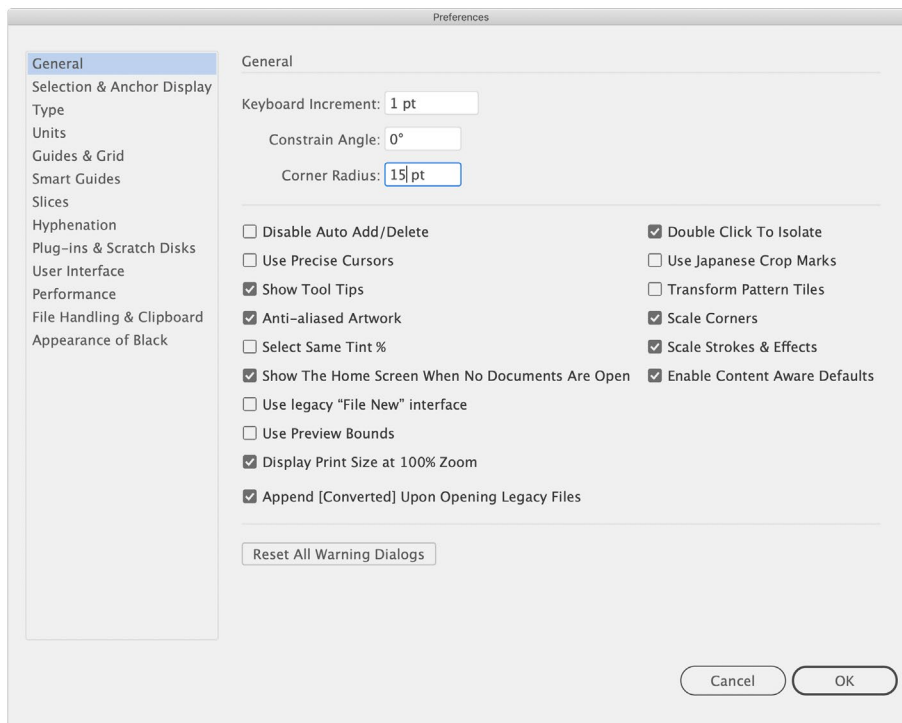
Keyboard Increment
This value represents how much an object will move when you use the arrow keys on the keyboard.

Constrain Angle
This the degree to which an object will rotate when you hold down the Shift key while turning the object.

Corner Radius
This describes the default rounded corner size when drawing a rounded rectangle.

Show Tool Tips
The Tool Tips become visible when you hover the cursor over a tool. This feature is useful for new users but these impact the performance of Illustrator.

Anti-aliased Artwork
Anti-aliasing is the smoothing of jagged edges when the artwork is being viewed in Pixel Preview.

Select Same Tint %
This allows the selection of a color that has a tint applied to it and other colors with that same tint percentage.

Show The Home Screen When No Documents Are Open
The Home Screen shows recent documents, new document presets, and Adobe stock templates.

Use Legacy "File New" Interface
The legacy File New interface is an older version of creating a New File.

Use Preview Bounds
When aligning objects, the coordination is based on the object's shape and not its boundary or edge. That is to say that when a stroke is applied to an object, the object will not align to the edge of the stroke, but instead to the shape of the object. Preview Bounds will have them align to the edge of the stroke or what you preview on screen.

Display Print Size at 100% Zoom
Shows the actual size of the printed piece when the zoom size is at 100%.

Append [Converted] Upon Opening Legacy Files
This setting will convert and update older files to the current version of Illustrator. A Dialog box appears informing you of how the file is being converted.

Double Click To Isolate

This function is used isolate a layer, sublayer, path, or group of objects without having to ungroup the file or find the objects in the layers panel. If you find that you are a frequent "double-clicker" and you are in Isolation mode inadvertently, turn this option off.

Use Japanese Crop Marks

This creates crop marks for Japanese printing.

Transform Pattern Tiles

This transforms the pattern in an object when the object is scaled. This can also be set in the Transform panel.

Scale Corners

When scaling or transforming an object with rounded corners, this option scales the corners in proportion with the object. This can also be turned on and off in the Transform panel.

Scale Stroke & Effects

When scaling or transforming an object with a stroke and/or effect, this option scales the stroke/effect in proportion with the object. This can also be turned on and off in the Transform panel.

Enable Content Aware Defaults

This feature works with the Puppet Warp tool to add pins where it identifies the best location for warping.

Reset All Warning Dialogs

From time to time, dialog boxes will pop up warnings informing you of important items. Those dialog boxes may have a checkbox that says "Don't Show Again." Once that box is checked and you click OK, the dialog will not appear again. Click the reset button to see the dialog boxes again.

Selection & Anchor Display

This is where you adjust how lines and anchor points act and appear.
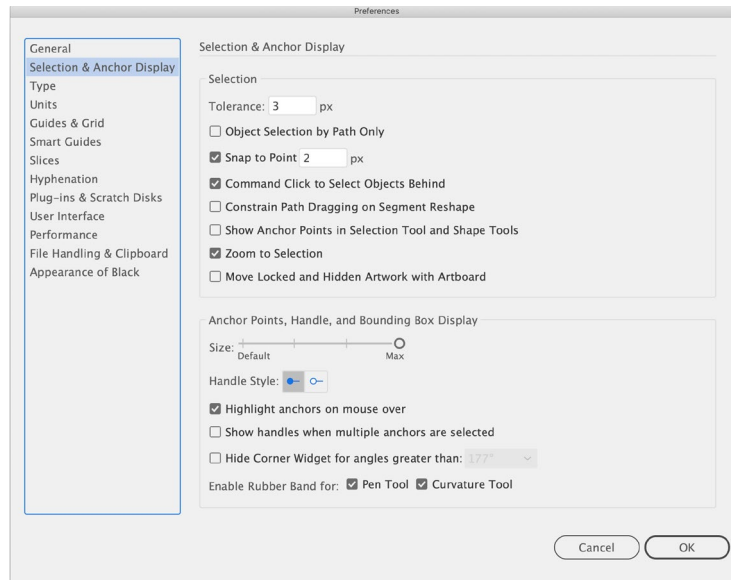
Selection

This defines how items can be selected, and how they will look once selected.

Tolerance

This sets the pixel range for anchor points. A lower values means you have to be closer to an anchor point to be able to select it.

Object Selection by Path Only

This limits selection of an object to clicking on just the path—not inside the shape. I would not use this option because it makes it more work selecting objects.

Snap to Point

This snaps objects to anchor points and guides. You can set the distance between the object and anchor point or guide; larger number means it will snap from farther away.

Command Click to Select Objects Behind

When objects are stacked on each other, use Command+Click (Mac) or Control-Click (PC) to select objects on the bottom of the stack without moving the objects on top out of the way.

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Constrain Path Dragging on Segment Reshape

This feature allows you to reshape a path in a relative transformation. This keeps the control handles in alignment on their original angles when transforming.

Show Anchor Points in Selection Tool and Shape Tools

When this is enabled, anchor points will show on an object when using the Selection or Shape tools.

Zoom to Selection

When this feature is enabled, the point of the zoom will be centered on a selected object.

Move Locked and Hidden Artwork with Artboard

Moving artboards around will move all the visible and unlocked content. To have everything move with the artboard, check this box to enable this feature.

Anchor Points, Handle, and Bounding Box Display

Size

This sets the size of the handles and anchor points.

Handle Style

This sets the look of the handles but does not change their functionality.

Highlight Anchors on Mouse Over

With this function enabled, anchor points on an object will be indicated when you mouse over them.

Show Handles When Multiple Anchors Are Selected

By default, when an anchor is selected, it will only show the handles associated with that point. Click this box to have it show all the handles on the shape when a point is selected.

### Hide Corner Widget for Angles Greater Than:

This hides the corner widget indicator when angles are set to a specified value.

Enable Rubber Band for:

When you enable the Rubber Band for any lines made with either the Pen tool or the Curvature tool, it will show both the curve of a path and how the points on the line connect.

Type

This section controls text behavior and display.
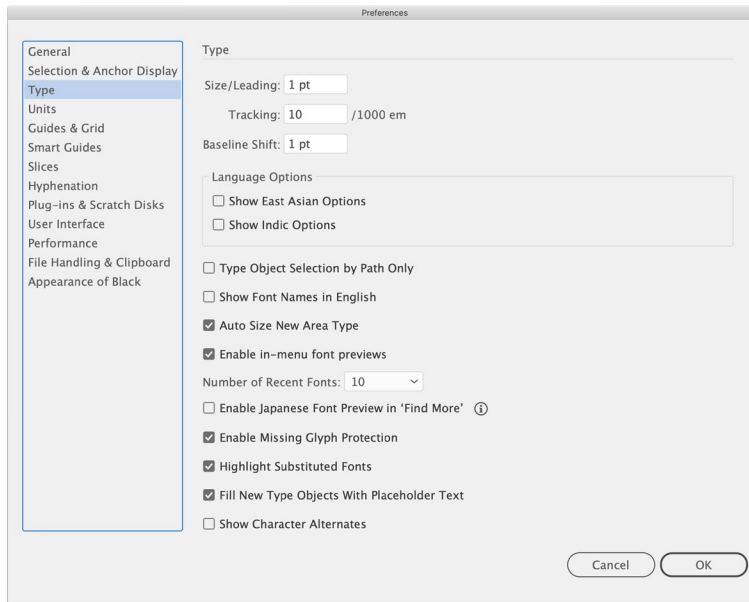
Size/Leading:

This controls the increments in which the size/leading will change using the keyboard short-cuts. The default setting for the size of type is 2 pt; I suggest 1 pt for finer adjustments. Press ⌘+Shift+</Ctrl+Shift+< to decrease the size or ⌘+Shift+>/Ctrl+Shift+> to increase the size (respectively). To adjust the leading, press ⌥+↑ / Alt-↑ to decrease leading or ⌥+↓ / Alt-↓ to increase the leading.

Tracking:

This controls the increments in which the kerning will change using the keyboard shortcuts. The default is 20/1000; I suggest 10 pt for finer kerning adjustments. To kern the space between two character, place the type cursor between the characters and use ⌥+← / Alt-← to tighten the letter spacing or ⌥+→ / Alt-→ to loosen the letter spacing. Tracking works the same as kerning; the only difference is tracking is spacing that is applied to multiple characters at one time. The shortcuts for tracking and kerning are the same.

Baseline Shift:

This controls the increments in which the baseline will change using the keyboard shortcuts. The default is 2 pt; I suggest 1 pt for finer adjustments.

Language Options
When creating Illustrator files in different languages, check the applicable language box.

Type Object Selection by Path Only
This limits the selection of text to clicking on just the path, not on the text areas. This is not recommended because it makes for more work selecting text.

Show Font Names in English
This displays font names in English if the fonts are not in English originally.

Auto Size New Area Type
This function automatically resizes the Area Type container to fit the amount of text entered. It's a helpful feature because it saves a step in closing and opening up Area Type containers.

Enable In-Menu Font Previews
This displays the name of the font and the selected text in that font.

Number of Recent Fonts
This displays the listed number of recently used fonts in the font menu.

Enable Japanese Font Preview in 'Find More'
Click this box to display Japanese fonts when you click on the Find More (fonts) item in the font menu.

Enable Missing Glyph Protection
Choose this item to automatically select incorrect, unreadable characters between roman and non-roman fonts.

Highlight Substituted Fonts
When opening an Illustrator file, there may be fonts that are missing from your system and don't display correctly. This feature highlights the incorrect font to make you aware that it is substituted.

Fill New Type Objects with Placeholder Text
When drawing a new area text container, this feature autofills the container with place-holder text.

Show Character Alternates
Character Alternates are different styles of the same letter. With this option enabled, a small menu will appear below a letter with alternate options available in that typeface.

Units
Units are basic settings for how things are measured.
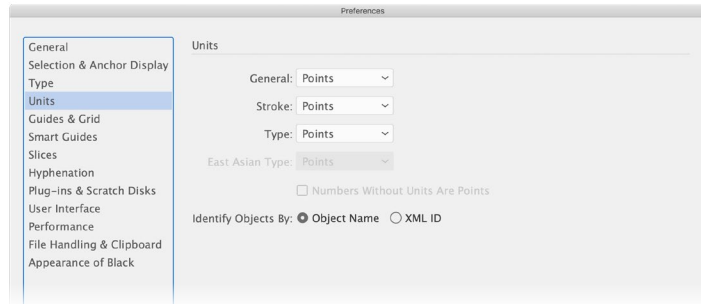
General:
These are the increments for measuring objects, position, spacing, and size. The available choices are points, inches, millimeters, centimeters, and pixels.

Stroke:
Your choices for units to measure the weight of the stroke are points, inches, millimeters, centimeters, and pixels.
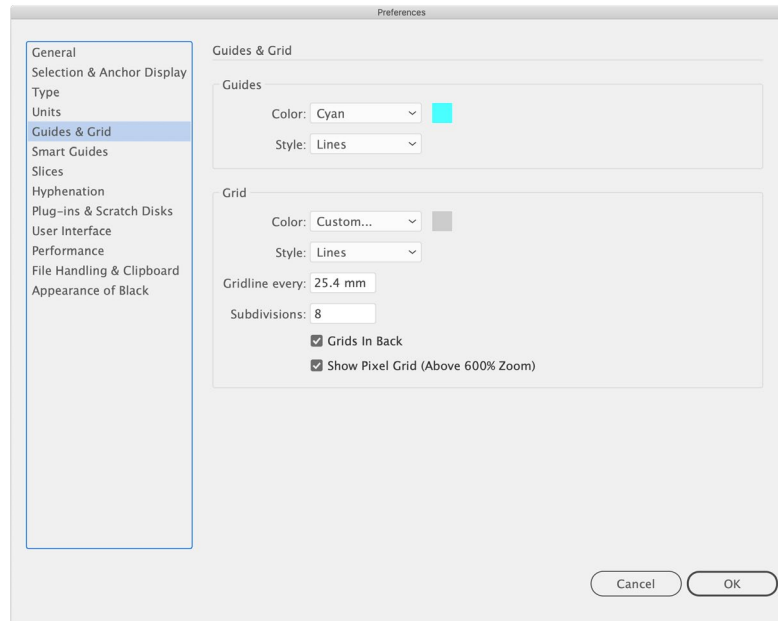
Type:
Here you can chose a unit to measure the size of the type. Points are the standard for measuring type.

Identify Objects By:
This feature identifies the object by its description. XML identifies each object by a unique tag.

Preferences & Workspaces

Guides & Grid

For alignment and control of artwork, guides and grids are helpful.

Guides

Color:
Set the color of the guides by clicking on the color square.

Style:
Guides can be displayed as colored lines or dots.

Grid

Color:
Set the color of the guides by clicking on the color square.

Style:
Guides can be displayed as colored lines or dots.

Gridline Every:
This draws major grid lines based on this value.

Subdivisions:

This divides the major grid lines into subdivisions based on the value.
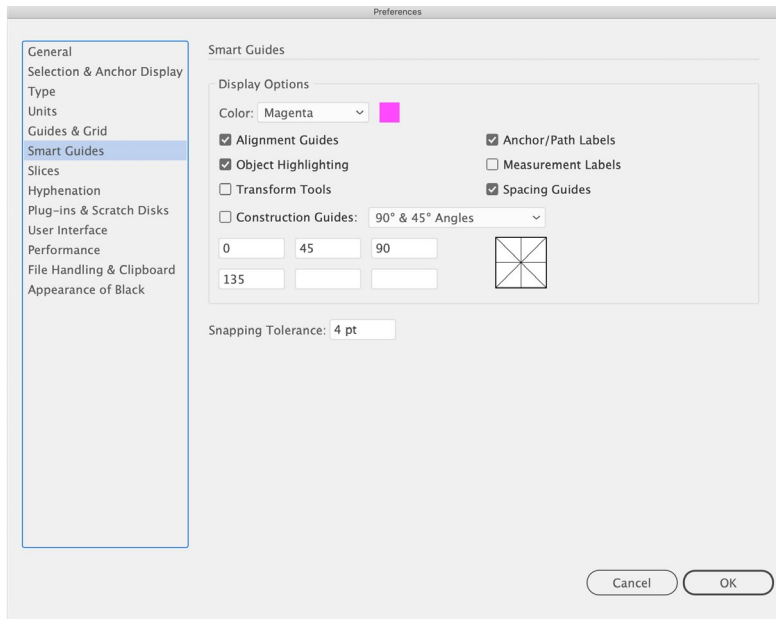
Grids in Back:

This creates the grid to appear behind the artwork.

Show Pixel Grid

When working in Pixel Preview mode, this option will show the grid only when the file is zoomed into 600% or greater.

Smart Guides

These options provide you with more ways to give structure to your layout. Here you set the appearance and action of Smart Guides.

Display Options

Here you can choose how close the Smart Guides appear and function.

Color:

Here you can choose the color of the Smart Guides from a full spectrum of color.

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Alignment Guides

This feature shows alignment to edges and centers of other objects and the artboard when Smart Guides are active.

Anchor/Paths Labels

This features shows tool hints identifying an anchor, point, path, or center on an object when these items intersect or align.

Object Highlighting

With this function enabled, objects will be highlighted as you drag them around the workspace. The highlight color matches the object's layer color.

Measurement Labels

This function displays size information for many drawing tools and text tools. Labels show the position of the object on the artboard using X and Y coordinates. While you create, select, move, or transform objects, these labels appear.

Transform Tools

This displays size and angle values when you scale, rotate, and shear objects.

Spacing Guides

These display guides show the spacing between two objects when a third object is being placed to match the spacing of the first two objects.

Construction Guides:

These guidelines appear as you draw new objects. The values represent the angles at which the guidelines will be drawn from the anchor points of a nearby object.

Snapping Tolerance:

This value specifies the number of points the object must be from another object for Smart Guides to take effect.

Slices

This section is for slicing a file for web use.
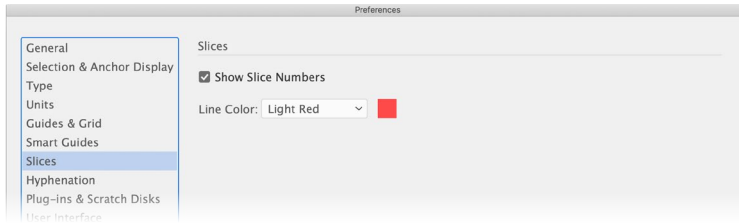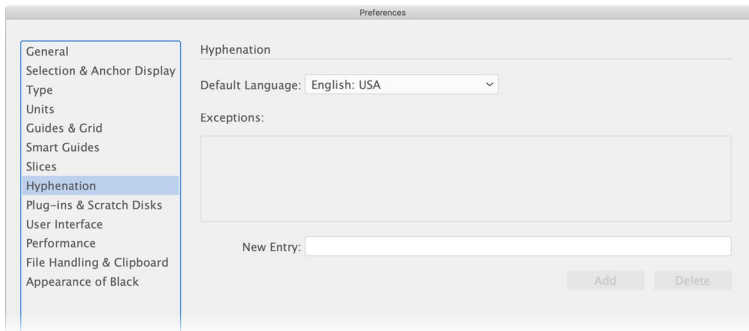

Show Slice Numbers

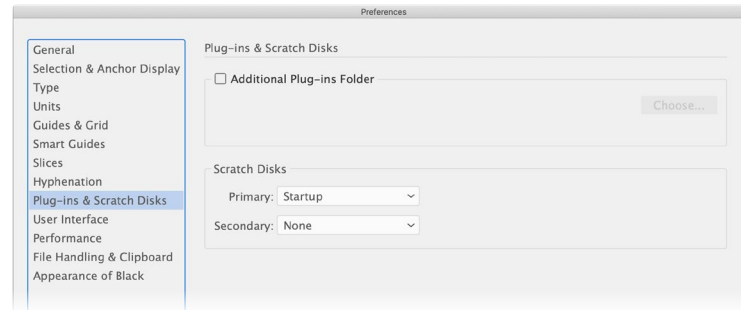This labels each slice with a number for easier identification.

Line Color:

Here you can choose the color of the divider lines that indicate the slices.

Hyphenation

This section allows you to set the language for the hyphenation regulations. These corrections, (or exceptions) are typically stored in the User Dictionary.

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Plug-ins & Scratch Disks

Additional Plug-ins Folder
Plug-ins add more features and capabilities and are generated by third parties outside of Adobe. Check the box to choose the appropriate folder to locate the plug-ins.

Scratch Disks
Scratch space on the hard disk drive is dedicated to temporary storage while working in Illustrator. A disk that is near full or full can slow down the performance of the program.

Primary
This indicates the main hard drive in your device.

Secondary
This indicates a backup device to allow for more room as needed if the primary become full.

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User Interface

These options allow you to configure how light or dark the interface appears, how the panels function, and the overall size of the interface.
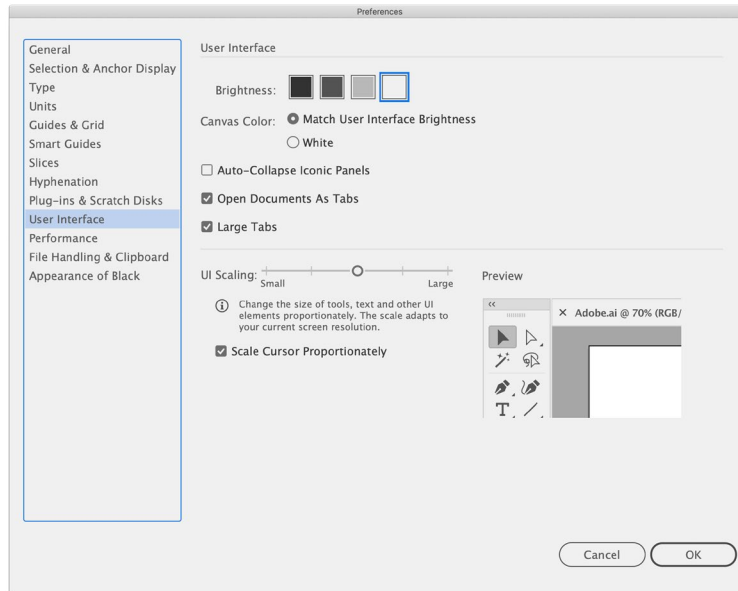
Brightness:

This allows you to choose either a dark interface with light callouts or a light interface with dark callouts.

Canvas Color:

This allows you to set the canvas area outside the artboard to your chosen interface color. Select white if you don't want the canvas to match the interface.

Auto-Collapse Iconic Panels

When using the panels, this option allows you to expand and auto-collapse a panel when done. If you need the space on your screen, this helps. If you don't need space, this adds the extra step of opening the panel each time you need to use it.

Open Documents as Tabs

This opens all documents in one window with each document identified as a tab instead of an individual floating window.

Large Tabs

This creates larger tabs that identify each open document window.

UI Scaling

This scales the user interface up so it's larger and easier to see. As indicated, it changes the size of tools, text, and other UI elements proportionally. The scale adapts to your current screen resolution.

Scale Cursor Proportionately

This scales the cursor size when the user interface is scaled.

Performance
Not your performance—the performance of Illustrator!
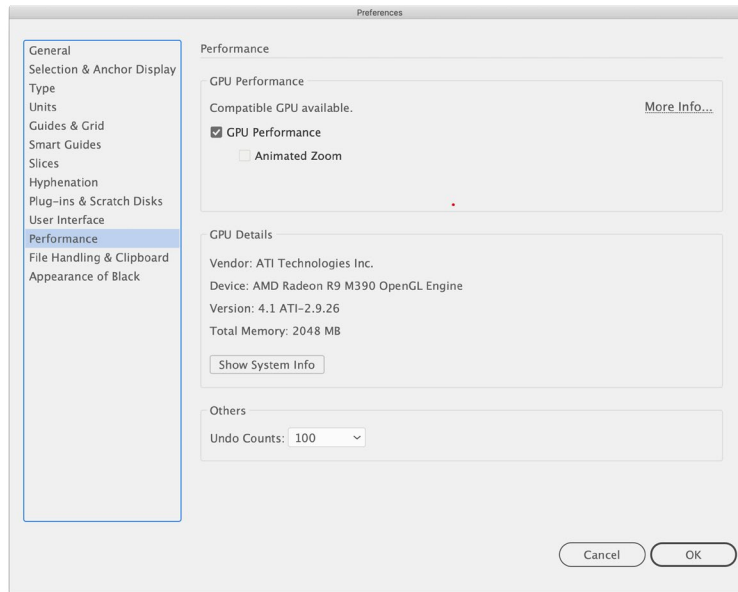
GPU Performance
The Graphics Processing Unit (GPU) is part of the video card/display and is designed to rapidly execute commands for manipulating and displaying images. There are known issues that may be encountered when GPU Performance is enabled. They are: Rendered artwork appears jagged, black, or white; or Illustrator crashes. Documents appear in black-and-white. You may receive an error message that GPU Performance Features are not available in the document you are currently working on, or the width lines may look tapered, or the ends vanish.

Turn off GPU Performance to see if these problems are part of the GPU.

Animated Zoom
This makes zooming actions smooth and animated.

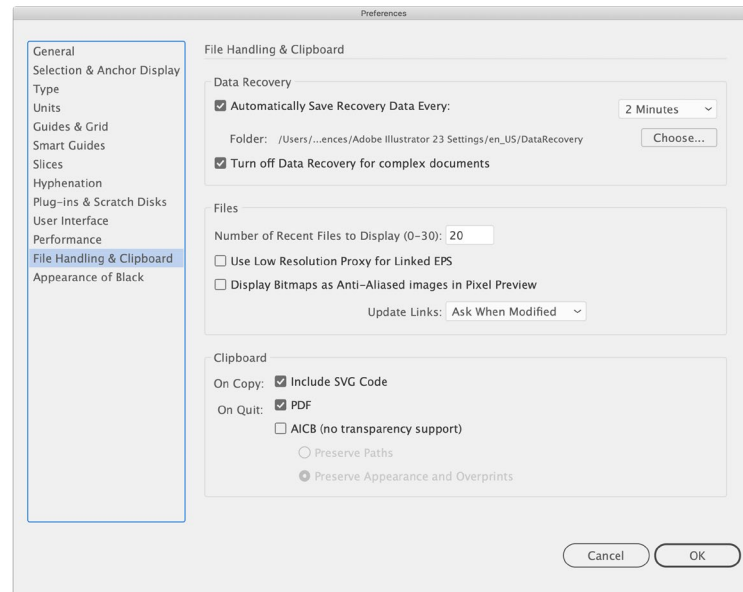## GPU Details
This displays an overview of your system.

Others

Undo Counts:
This value controls the number of undos available. The default is 100. More undos may slow performance.

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File Handling & Clipboard

The options in this section control file saving and the copying of data.

Data Recovery

Automatically Save Recovery Data Every:

Yes, you do want to automatically recover data in case Illustrator crashes (and it will crash). This options sets up an "auto save" every two minutes as a default. This is not a substitute for frequent saving of the file but it is a worthwhile safety net.

Turn off Data Recovery for Complex Documents

When data recovery is turned on, Illustrator may pause while backing up large or complex files. If this slows down or interrupts your workflow, select the checkbox to turn off data recovery.

Files

Number of Recent Files to Display (0-30):

This sets the number of recent files that will appear in the File menu or the Startup window.

Use Low Resolution Proxy for Linked EPS

In this mode, linked EPS files will display as low resolution to save memory and increase program performance.

Display Bitmaps as Anti-Aliased Images in Pixel Preview

This smooths the appearance of a Bitmap image when in Pixel Preview mode.

Updates Links

This determines how links will be updated. The options are Automatically, Manually, or Ask When Modified.

Clipboard

On Copy:

When copying content, check this option to include SVG data.

On Quit:

If you have copied content and quit Illustrator, a dialog box will appear and ask what you want to do with the clipboard contents. Content can be saved as a PDF, as paths, or as paths that preserve the Appearance and Overprints as they were created in Illustrator.

Appearance of Black

Just when you thought black was black! These options allow you to set the appearance of black elements in your workspace.
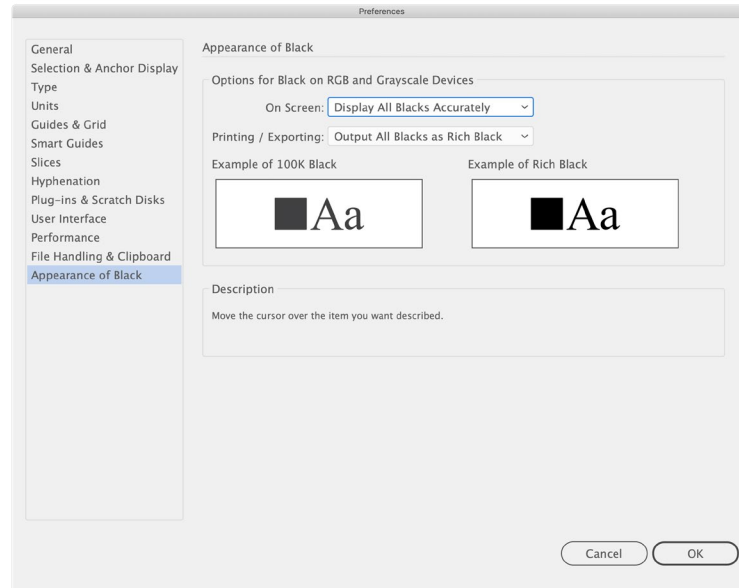
On Screen:

I choose to display all blacks accurately on-screen. This means that items that use the pure black (100% K) swatch will look slightly lighter or more gray than a rich black, which is made from black ink plus other inks to make it appear more saturated.

Printing/Exporting:

This is the confusing one. Choose Output All Blacks as Rich Black, then hover your cursor over that choice and note the description below that attempts—but fails—to clarify what that means. What it means is that on a device that has only black ink or toner, both rich blacks and pure blacks will print as dark as possible. RGB devices refers to common desktop inkjet printers. However, with this choice, color laser printers and printing presses (true CMYK devices) will still produce blacks accurately: pure black will use black ink or toner only, and rich black will be output as designed. Since I output to all of these devices, I choose the confusing Output All Blacks as Rich Black setting. It works!
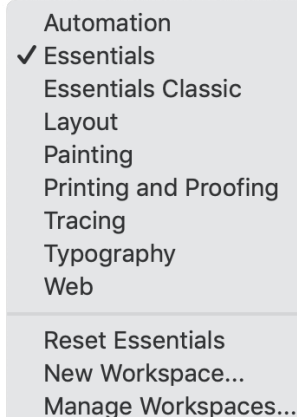
Workspaces

Panel Locations

Illustrator has lots of panels that can crowd your work area. Each panel can be moved, minimized, attached to other panels, or made free-floating. You can create a combination of panels and designate them as a workspace. Setting up workspaces based on your workflow can be very helpful. I use certain panels for creating logos and other panels when creating infographics, and I set a workspace based on the panels I use for that task.

Choose A More Useful Initial Workspace

When you open or create a document, select Window > Workspaces and choose from a preset list of workspaces depending on the type of creation you intend to work on.

In each of these preset workspaces, Illustrator has included a set of panels it recommends for that type of work. Once you choose a workspace, the panels will appear on your screen. This can be a great way to get started; as you progress you may want to change the arrangement or location of the panels to best suit your needs.

Automation
✓ Essentials
Essentials Classic
Layout
Painting
Printing and Proofing
Tracing
Typography
Web

Reset Essentials
New Workspace...
Manage Workspaces...

Creating a New Column of Panels

To create a new dock of panels alongside the first, drag a panel by its name toward the original dock until a dense blue vertical "drop zone" appears. Collapse the new column with the small double arrow (>>) in its upper-right corner. Drag in more panels under the first. I suggest adding the Properties panel to this second dock to easily access (and collapse) it.

Adjust the width of this new dock by dragging its left edge. You can shrink it until the names are gone and only icons remain if you like.

Individual panels have drop zones, too. If you drag one panel to the bottom edge of a free-floating panel, you will create a free-floating dock. Or, if you drag a panel's name next to another panel's name, the drop zone is the small window itself; that is, both panels' tabs will be side by side in the same window.

Once your panels are located where you want them, return to the workspace menu and choose New Workspace.... We can name this "Real Essentials." Later, if this workspace becomes untidy, we can once again use the workspace menu and choose Reset Real Essentials.

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122   **Customizing Menus and Keyboard Shortcuts** | What's on the Menu?

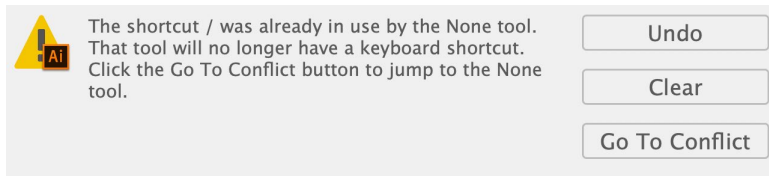# Customizing Menus and Keyboard Shortcuts

Keyboard shortcuts are fantastic. When you are starting to learn a new application there may be a bit of time hunting and pecking through the menus trying to find commands, but these tips will help for both menus and tools shortcuts.

What's on the Menu?

Go to Edit > Keyboard Shortcuts to be presented with a large dialog box with lots of options. There is a dropdown list for setting shortcuts for the tools and for menu commands.
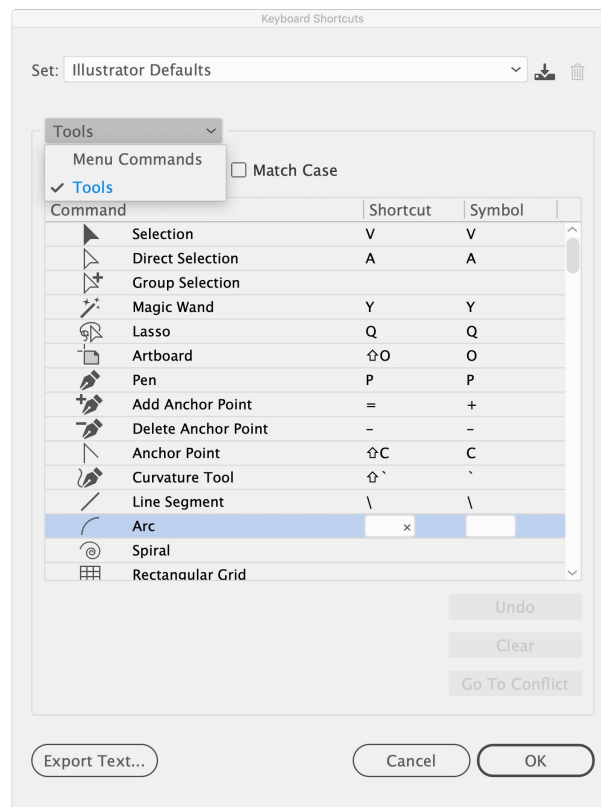
The Keyboard Shortcuts dialog box will list all the tools and any shortcuts associated with those tools. Not all tool will have shortcuts, but the most-used tools will. If your workflow requires the use of tools that do not have shortcuts applied as a default, click on the tool and the Shortcut and Symbol field will become active. Enter in a shortcut that best fits your workflow. If you enter a shortcut that is already in use (that is, it's applied to another tool), there will be a conflict. You can override that conflict and use your shortcut as the default or choose different shortcut command, keeping the original shortcut intact.

The shortcut / was already in use by the None tool.
That tool will no longer have a keyboard shortcut.
Click the Go To Conflict button to jump to the None
tool.

Undo

Clear

Go To Conflict

Undo will return the original shortcut to the default. Go To Conflict will go to the tool that has that keyboard shortcut you want to use. Clear will clear the default shortcut on that tools and allow you to enter that shortcut for another tool.

Once a new default shortcut is created, the Tool Hint will reflect that new shortcut when you hover your cursor over the tool.

This process is the same when you choose Menu Items from the list. Any new shortcuts will be reflected next to the Menu command.

Any changes to the default shortcuts will require you save the shortcuts as a new set. The Illustrator defaults cannot be overwritten so any changes will require a newly named set of shortcuts when you click OK. A dialog box will appear asking for a new name for your custom presets. Enter in a name and click OK.

Keys to Success

You have seen those posters online that can show you all the shortcuts—and you can purchase it for $25.00. Instead, you can make your own for free! Click on the Export Text... button and you will get a text file that reflects all the default and customized shortcuts.

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Creating a New Document

Let's gets started. You will need to create a new document so you can begin creating. Choose File>New... to begin. The New Document window displays preset sizes, any recent files, Adobe Stock Templates, presets for the type of file you will be creating, as well as sizes and artboard orientation.
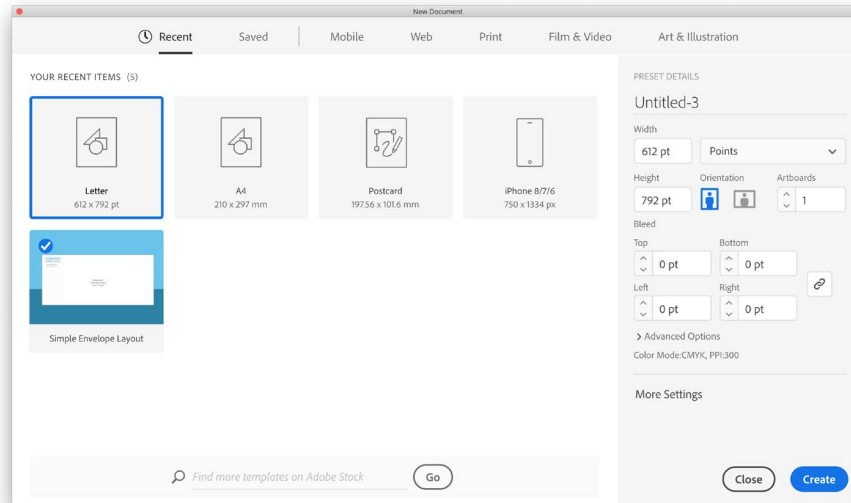
Presets

At the top of the New Document window there are presets for Mobile, Web, Print, Film & Video, and Art & Illustration. The presets will give you a list of common document sizes to choose from to begin creating. Or you can create a custom-size document from the settings on the right side of the dialog box.

Mobile, **Web, and Film & Video:** This preset displays common phone and tablet sizes (Mobile), commonly used web sizes, or common film and video formats. Below the presets you have access to Adobe Stock Templates, some of which are free. These presets use pixels as the unit of measure, the document is in RGB mode, and the resolution is set to 72 ppi.

Print: This preset displays paper sizes and Adobe Stock Templates for print work. Print presets use points as the default unit of measure, which can be changed via the Unit dropdown menu and the document is in CMYK mode. The resolution is set to 300 ppi.

Art & Illustration: This preset displays paper sizes and Adobe Stock Templates for creating artwork or Illustrations work. Art & Illustrations presets use points as the default unit of measure (which can be changed) and the document is in RGB mode. The resolution is set to 72 ppi.

Document Sizes

Creating a new custom document can be done easily if the presets are not what you are looking for. On the right side of the New Document window you can set the parameters for your document.

Set the width and height of the document. The unit of measure can be changed from the dropdown menu. Choices include Points, Picas, Millimeters, Centimeters, Inches, and Pixels.

Set the orientation of the document to be portrait or landscape.

Set the number of pages… umm, artboards. Illustrator does not use pages since it is not a page layout application—that is what Adobe InDesign is for. Illustrator uses artboards yet you may hear them refereed to as pages as a generic descriptor.

Bleed can be set on all sides of the document. This does not change the size of the document, it creates guides outside the artboard for extending artwork for bleed purposes.

Advanced Options

To set more options for the new document, click on the Advanced Options arrow.

Color Mode: Choose RGB for work that will be displayed on phones, tablets, computers, or TV screens. Choose CMYK if the creations will be printed.

Raster Effects: This setting allows the rendering of any raster effects to be high resolution (300 ppi), medium resolution (150 ppi), or low resolution (72 ppi). This may not seem relevant since Illustrator is a vector-based application but there are some effects that can be applied that render as raster (pixel-based) output.

Preview Mode: Choose from Default preview, Pixel preview, or Overprint preview. I leave it as Default and change it in the document when I need to preview artwork in the other modes.

More Settings: Click to find a few extra settings for setting up artboards.

Artboards

Illustrator has artboards instead of pages. Since Illustrator is more about creation and than it is about formatting books, we use artboards instead of page layouts. When creating a new document, you can specify how many artboards you would like, or you can easily add them later.

Artboard Panel
The Artboard panel is located under Window>Artboards. This displays the artboards in order and by name, and offers options to edit, add, or delete artboards.
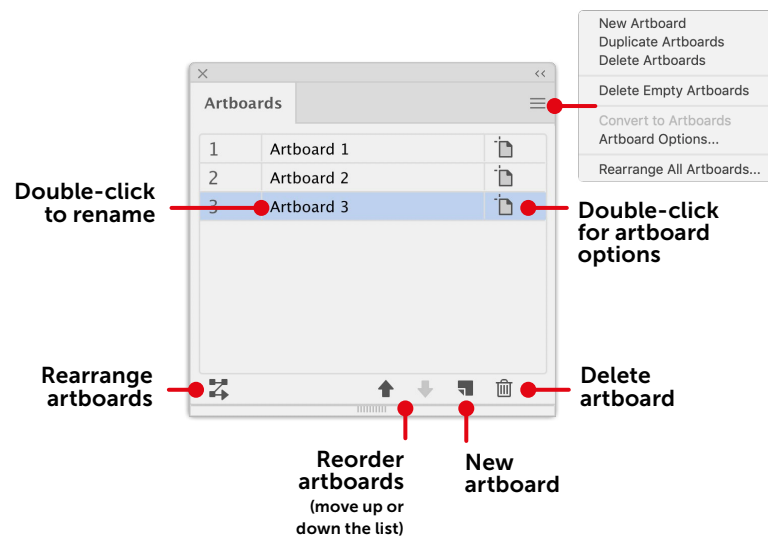
Naming the artboard can be done by double-clicking on the name to open the edit field. Type in the new name and click Return. Options can be accessed by double-clicking on the artboard icon. Use the dropdown menu to access other options such as add, delete, or duplicate artboards.

Artboard Tool

The Artboard tool (Shift + O) is an easy way to edit, add, or modify artboards. When you click on the Artboard tool, the artboard(s) in your document will be directly editable. The background around the artboards will darken and one of the artboards will have a blue dashed line around it idicating it is ready for editing.

Click on any artboard with the Artboard tool to begin editing. You can pull the corner pull handles to change the artboard size and position. To exit out of editing mode, select any tool from the toolbar.

Artboard Options

To get more Artboard Options, double-click on the Artboard tool to open the options panel.

Name the artboard

Size presets

Reference point location

Orientation

Constrain proportions when resizing

Display and guide options

This is a great option

Artboard Options

Name: Artboard 3

Preset: Letter
Width: 612 pt   X: 1570 pt
Height: 792 pt   Y: 396 pt
Orientation:
☐ Constrain proportions

Display
☐ Show Center Mark
☐ Show Cross Hairs
☐ Show Video Safe Areas
Video Ruler Pixel Aspect Ratio: 1

Global
☑ Fade region outside Artboard
  ☑ Update while dragging

ⓘ Artboards: 3
ⓘ Press Option+Drag cursor to duplicate artboard.

Delete   Cancel   OK

Layout Artboards

To layout and arrange the artboards, dou-
ble-click on the zigzag icon at the bottom left of
the Artboard panel. You can also choose Rear-
range All Artboards... from the Artboard panel
drop- down menu.

    The default layout is left to right. Change the
layout order by clicking the icon from up to down
or in a line vertically or horizontally. Layout order
can read left to right or right to left.

    If the column layout is chosen and there are
enough artboards, you can set the number of columns. Spacing between the columns is set
here as well.

    Move Artwork with Artboard is a good option that will keep track of artwork if the art-
boards move.
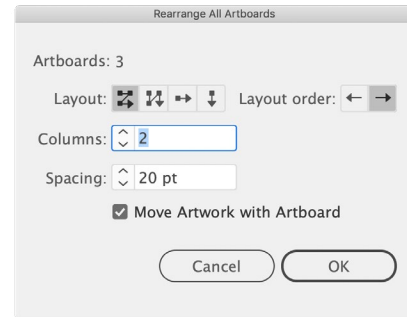
Convert to Artboards

If using the Artboard tool to create artboards is not working, or the add artboard command
is to hard to get to, you can draw a rectangle or square using the Rectangle tool. Select the
rectangle and choose Convert to Artboard from the Artboard panel dropdown menu. This
does not work with any other shape tool but the Rectangle tool.

Duplicate Artboards

I love this feature. When I am working on a logo for a client and they want several different
versions, I will make one logo per artboard. Then, for different versions I will duplicate the
artboard and begin a new version. Why create multiple artboards instead of just one art-
board with several logos? Good question! It is easier to reference the designs if they are on
separate artboards and when I save them as a PDF, each artboard will be a page in the PDF
document. I can also print any artboard or artboards I want instead of one artboard with all
the logos on it.

    My favorite method of duplicating an artboard is to select the Artboard tool and Option
+ click (Mac) and drag the artboard to duplicate it (use Alt + click and drag on a PC). You
can select the artboard and choose Duplicate artboard from the Artboard panel dropdown
menu as well.

Printing Artboards

When it comes time to print, the artboards can be printed as separate pages. Any artwork
that is not on an artboard will not print so make sure all your work is done on an artboard
and nothing is off the edge. We will discuss this is greater detail in the section on printing.

Layers Panel

Layer

Sublayers

Click to lock/
unlock layer

Click to turn
on/off layer
visibility

Double-
click to edit
layer name

Bounding
box color

Collect for
Asset Export

Active and
selected
object

Target (select)
the object in
the layout

Delete layer

Locate
Object

Make/release
Clipping Mask

New
layer

New
sublayer

Layers

New Layer...
New Sublayer...
Duplicate "Backpack"
Delete Selection

Options for "Backpack"...

Make Clipping Mask
Enter Isolation Mode
Exit Isolation Mode

Locate Object

Merge Selected
Flatten Artwork
Collect in New Layer

Release to Layers (Sequence)
Release to Layers (Build)
Reverse Order

Template
Hide All Layers
Outline All Layers
Lock All Layers

Paste Remembers Layers

Panel Options...

About Layers

When creating artwork in Illustrator things can get complicated. It can be challenging to keep track of, select, group, edit, move, and find all the items of your artwork. Objects can be inside groups or in a clipping mask, behind other items, or locked, and selecting that object becomes difficult or frustrating. Layers provide a way to manage all the items that you have created in your artwork. One way of understanding Layers it to think of them as clear folders that contain artwork. You can put items into the folder (those are sublayers) and easily move the layers above or below to bring them in front of or behind other layers. These layers can be grouped to move or transform as one unit and can be locked or hidden so they are protected.

The Layers panel (Window > Layers) will help organize, list, and edit the objects in a document. The blue bounding box around each shape is the color indicator of the layer. The same color shows the bounding boxes, paths, anchor points, and then center point of the object. This color is a reference to quickly locate what layer the object is on in the Layers panel. You can change the layer color to suit your needs.

Every new Illustrator document contains one layer, and each object you create is listed under that layer as a sublayer. You don't need the layers panel for simple artwork, but it will make navigating, editing, working with, and creating so much easier and efficient that once you get the swing of it, it will become a must-have in all your Illustrator creating.

Layer Panel Overview

The Layers panel has one layer by default. Under this layer is where all the content you create in the artwork will be—these are sublayers.

When a layer in the Layers panel contains other sublayers, a triangle shows in the upper left of the layer's name. To see all the sublayers click on the arrow to the left of the layer thumbnail to open it.

Visibility Column

An eye icon shows the visibility of the layer or sublayer. Click the eye to turn on or off the visibility. Keep in mind that when you print a file, that layer will not print unless you either turn the visibility back on or you choose Print All Layers from the Print layers section of the Print dialog box.

Edit Column

Second in from the eye icon shows whether the layer or sublayer is locked or unlocked. Click the area to show the lock and that layer will not be moveable or editable. Click the lock to unlock the layer for editing.

Target Column

Target seems like the wrong word to use here if you think of a target as something that is being selected. Illustrator uses the word target to indicate whether the item has an effect or attribute applied from the Appearance panel. When the target button appears as a double ring icon, the item is targeted (it has an effect or attribute applied); a single ring icon indicates that the item is not targeted. The effect or attribute could be a drop shadow or transform effect or an opacity on the object, and the target informs you that this object has something extra.

Selection Column

This column indicates whether or not items are selected via a small box (the same color as the one on the far right of the layer, next to the target icon). When an item is selected within a group, a smaller color box appears next to the parent item (the group that it is in) as well as the top-level layer of sublayers. If all of the objects within the parent item are selected, the selection color boxes are the same size as the marks that appear next to selected objects. You can dim any linked images and bitmap objects to make it easier to edit or trace over artwork on top of the image.

Layer Management Best Practices

There is no ideal way of managing layers, layer order, and naming in Illustrator; yet there are some very helpful tips to make your life, and your Illustrator files, easier to manage and navigate.

Let's look at the artwork as though you are building a house. Start building the house (your new document) by choosing the size and color modes.

The build process may begin with an image placed in a file on a layer so you can trace over it; or the sketch may be in your mind ready to go. Build your foundation, then build the house on the foundation. Think about what goes into all the behind-the-scenes content. Naming the layer Background or Base may be a good start.

Once the base is done, create new layers for the more detailed levels of the "house": first floor, second floor, roof layer. Now you can go back and turn on and off the visibility of the layers and begin to add details. You may have a layer right above the first floor that is all the rooms. You may want to break out each room on that floor as a layer—name the rooms something that makes sense and is easy to understand.

How far do you go with layers? Each room as a layer may be just right. Is there furniture in each room? Is there a layer for each piece? Possibly: it can be very easy to select the "chair" and edit it as one layer. I would not, however, break down the chair into further folders beyond that one item.
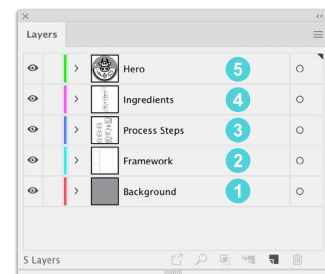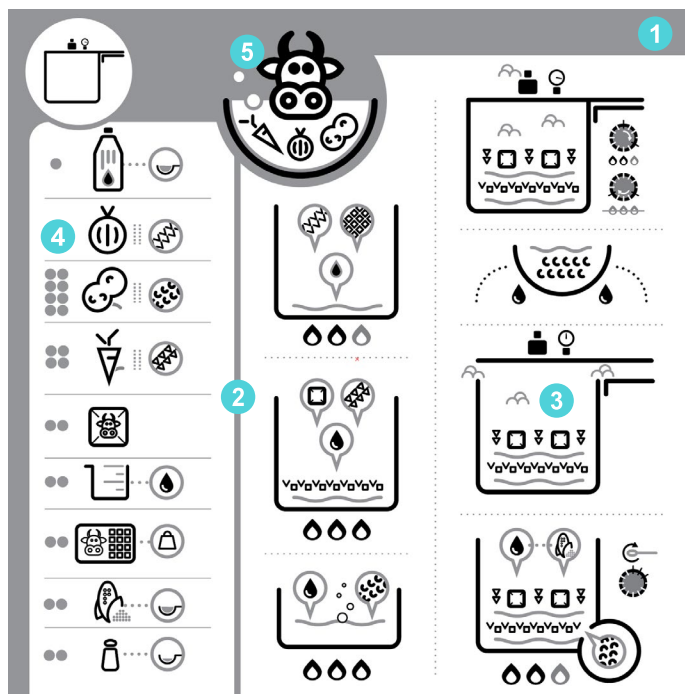
Naming

An important aspect of working with layers is naming everything
in a way that helps you stay organized. The default layer-naming
convention is Layer 1, Layer, 2, Layer 3..., yet when you create art-
work, Illustrator assigns names to each sublayer (indented below
the layer) based on what the shape, type, or image is. For instance,
if you draw a rectangle, that sublayer will be labeled sublayer
<Rectangle>. You can edit this title by typing in a line of text that
describes the contents of the layer. This is very helpful for identifying each object that makes
up your artwork.
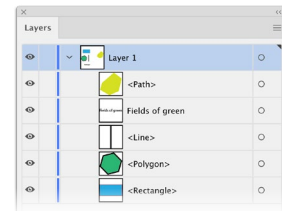
When I create artwork I begin with the base artwork (the content in the background).
What goes on the artboard first? It may be a shape filled with color, a pattern, or an image.
Since layers build on top of each other, any layer that is added to the Layers panel is added on
top of the previous layer by default. Layer order can be changed, but I like to think of a pro-
cess of building this list like I think about the house. Start with the foundation and frame and
build the house one floor at a time. Put the roof on it, then start adding the colors and details.

Be consistent when naming layers: be careful of uppercase and lowercase letters, and be
brief and descriptive for optimum efficiency. The Layers panel doesn't take up much screen
space, so using long layer names may require you to open the panel up wider—taking up
more working space. Be especially careful about naming the top layer, because that's the title
heading by which you'll search for filed objects.

**Think of layer order
and naming like
building a house.**

**Start with the foundation,
build each floor, add
the roof, and then
add the details.**

**In this example, I use
a recipe for beef stew.
In this infographic I
break down the main
components into folders,
then each complete
step (or ingredient) gets
a folder within it.**

For Segregating Content

With the example of the beef stew recipe, the main components of the recipe are the Background, Framework, Ingredients, Steps, and Hero image. Segregating the content into these top-level folders makes it much easier to find and isolate each component within the artwork.
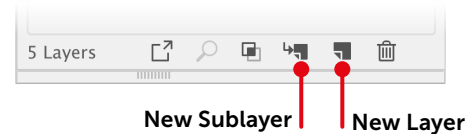
For Protecting Content

When your file has many components, trying to select, edit or move, modify or remove a shape, path or fill can be harder than you think. Some may be grouped together, behind another object, or inside a Clipping mask. If I wanted to select the background shape, I may end up selecting the content above and not be able to get to the background shape without moving my upper level content.

Layers allow you to segregate the content into its main components, which can be locked or have their visibility turned off so that other content can be accessed without modifying or moving anything to get to the underlying content. This makes the workflow very efficient and much less frustrating.

Creating New Layers

In the Layers panel, click the name of the layer above which (or in which) you want to add the new layer. Layers are added on top of the layer you have selected

To add a new layer above the selected layer, click the Create New Layer button in lower-right side of the Layers panel. To create a new sublayer inside the selected layer, click the Create New Sublayer button in the Layers panel.

5 Layers

New Sublayer   **New Layer**

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Layer Options

To set layer and sublayer options, double-click the item name in the Layers panel or select the layer name and choose Options For <item name> from the Layers panel dropdown menu.

Name: Add a name for the layer or sublayer.

Color: Select a color that identifies that layer. The layer color shows on the selected items' bounding box to indicate the layer the object is on.

**Template**: This makes the layer a template layer.

Lock: This prevents changes to the item.

Show: This turns on or off the visibility of all artwork contained in the layer on the artboard.

Print: This makes the artwork contained in the layer printable or not printable.

Preview: This displays the artwork contained in the layer in color instead of an outline.

Dim Images: This reduces the intensity of linked and bitmap images contained in the layer to a specified percentage.
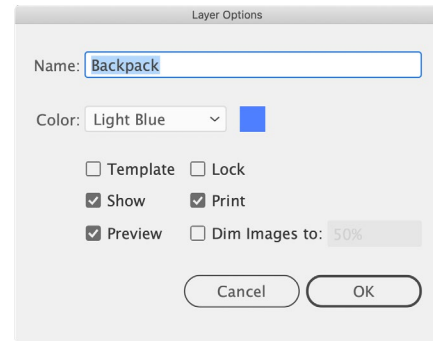
Panel Options

Row Size

In these options you can set the size of the layer thumbnails. By default they are small, so you have your choice of a preset size or to enter in a pixel preview size in the Other field.

Thumbnails

You can set the visibility of thumbnails for all the layers and sublayers (they are all on by default). Unchecking the boxes will show the layer with no corresponding thumbnail.
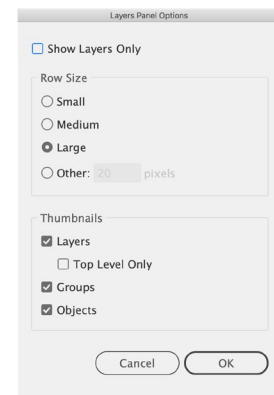
Layer Order

Moving Objects to Layers

You can move an object from one layer to another in a few different ways. Make sure the layer with the object and the destination layer are both unlocked.

Select the object you want to move with the Selection tool. Click the name of the destination layer in the Layers panel, then choose Object > Arrange > Send To Current Layer from the Layers panel dropdown menu.

Drag the selected-art indicator (small color square), located at the right of the layer in the Layers panel, to the layer you want.
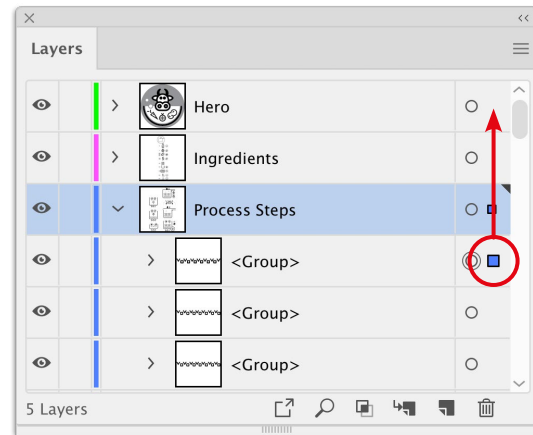
Create a New Layer While Moving

You can move objects or layers into a new layer by selecting the items and choosing Collect in New Layer from the Layers panel dropdown menu. Hold down Command (Mac) or Control (PC) to select nonconsecutive items; hold down Shift to select consecutive items.

Reordering Layers

This is helpful for moving items into and out of groups, as well as reordering layers and their content. To move or reorder layers or sublayers, click on the name of the layer or sublayer and drag it up or down the Layer panel to reorder the content.

Bring to Front/Send to Back

You can use the Object>Arrange> (Bring Forward, Bring to Front, Send Backward, Send to Back) to reorder the layers as well.
- **Bring Forward**: Moves the object forward one layer at a time.
- **Bring to Front**: Moves the object forward to the top of the group or to the top of the layer.
- **Bring Backward**: Moves the object backward one layer at a time.
- **Bring to Back**: Moves the object backward to the bottom of the group or to the bottom of the layer.

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Selecting Objects

When your files get complicated, trying to select or locate them can be a monumental task if you're trying to click on it with the selection tool. In the Layers panel you can select the object by clicking on the layer, then clicking to the right of the target icon. A color box will appear showing that the object is selected. That object will now be selected in the artwork.

Locating Objects

You may be working on your artwork and have an item selected, and now you want to find where it is in the Layers panel. Use the Locate Object command from the Layers panel drop-down menu. This command is especially helpful for locating items in collapsed layers.

Editing Groups

To edit a group of items, you do not need to ungroup the objects, make an edit, and then try to select all the parts and regroup them. Keep everything grouped and locate the group in the Layers panel.

Open the group by using the arrow to the left of the group name. Inside the group, select the layer you want to edit, then click on the circle (target) at the right of the layer. A color square will show next to the target, and the object will be selected on the artboard. This isolates the object so you can make edits to the selected object artwork without having to ungroup it.

Add Objects to a Group

To add objects to a group without ungrouping the content, select the layer that is outside the group and drag the layer into the group in the stacking order you want.

Remove Objects From a Group

To remove objects from a group without selecting the layer that is in the group, drag the layer outside of the group or into another group.

Editing Clipping Masks

There are several ways to work on Clipping masks, but the Layers panel makes it easy because it works in the same way as editing groups. The one difference is the mask itself acts as a "window" where the artwork appears.

Drag artwork into a clipping group

Drag artwork out of a clipping group
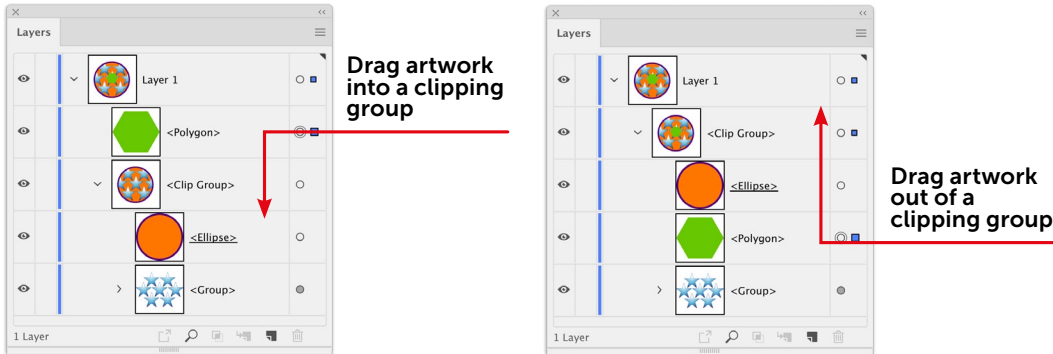
Adding to an existing mask requires releasing the mask, adding or editing the content, and remasking. In the Layers panel, you keep the mask and clipping intact and add, edit, or delete content like you would a layer group.

Consolidate Layers and Groups

Merging and flattening layers are similar in that they both let you consolidate objects, groups, and sublayers into a single layer or group. Merging layers allows you to select which items you want to consolidate into one layer. Flattening takes all the visible items in the artwork and consolidates them into a single layer. Both merging and flattening retains the stacking order of the artwork, but other layer-level attributes, such as clipping masks, aren't preserved.

Merge Selected

To merge items into a single layer or group, hold Command (Mac) or Ctrl (PC) and click the names of the layers or groups that you want to merge. This allows nonconsecutive selection of the layers. To select a set of layers that are consecutive, click on the first layer then hold Shift and click on the last layer. This selects everything between the two layers or groups you clicked on. Then, select Merge Selected from the Layers panel dropdown menu. All items will be merged into the layer or group you selected last.

Layers can only merge with other layers that are on the same hierarchical level in the Layers panel. Likewise, sublayers can only merge with other sublayers that are within the same layer and at the same hierarchical level. Objects can't be merged with other objects.

To flatten layers, click the name of the layer into which you want to consolidate the artwork. Then select Flatten Artwork from the Layers panel dropdown menu.

Release Items to Separate Layers

Release To Layers is used to prep files for web animation in which each object needs to be on a layer. The Release To Layers command redistributes all of the items in a layer and creates individual layers for each object.

- **Release each item to a new layer**: Choose Release To Layers (Sequence) from the Layers panel menu after you click on the layer.
- **Release To Layers (Build):** To release items into layers and duplicate objects to create a cumulative sequence, choose Release To Layers (Build) from the Layers panel dropdown menu. The bottommost object appears in each of the new layers, and the topmost object only appears in the topmost layer. This is how cumulative animation sequences are created using this feature.