14 Using Illustrator CC With Other Adobe Applications

Lesson overview

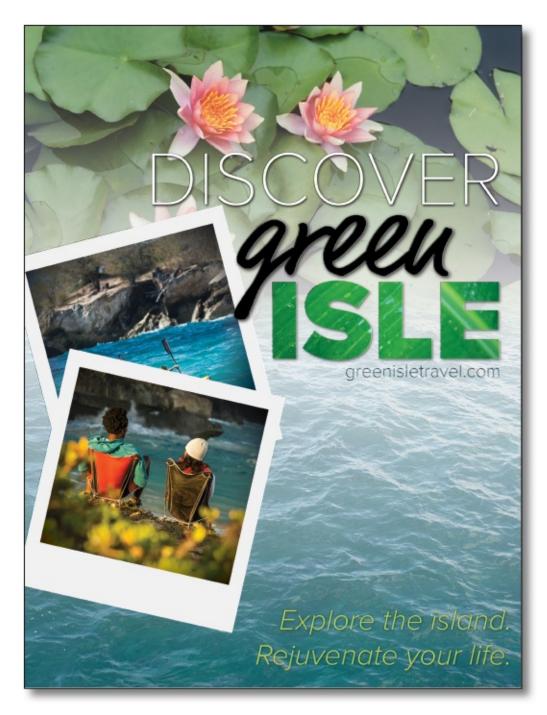
In this lesson, you'll learn how to do the following:

- Place linked and embedded graphics in an Illustrator file.
- Transform and crop images.
- Create and edit clipping masks.
- Use text to mask an image.
- Make and edit an opacity mask.
- Work with the Links panel.
- Embed and unembed images.
- Package a document.



This lesson takes approximately 60 minutes to complete. Please log in to your account on <u>peachpit.com</u> to download the lesson files for this chapter, or go to the "Getting Started" section at the beginning of this book and follow the instructions under "Accessing the lesson files and Web Edition."

Your Account page is also where you'll find any updates to the chapters or to the lesson files. Look on the Lesson & Update Files tab to access the most current content.



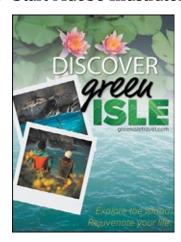
You can easily add images created in an image-editing program to an Adobe Illustrator file. This is a great way to incorporate raster images into your vector artwork to combine the two.

Starting the lesson

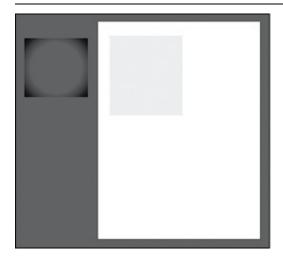
Before you begin, you'll need to restore the default preferences for Adobe Illustrator CC. Then you'll open the finished art file for this lesson to see what you'll create.

• **Note:** If you have not already downloaded the project files for this lesson to your computer from your Account page, make sure to do so now. See the "Getting Started" section at the beginning of the book.

- **1.** To ensure that the tools function and the defaults are set exactly as described in this lesson, delete or deactivate (by renaming) the Adobe Illustrator CC preferences file. See "Restoring default preferences" in the "Getting Started" section at the beginning of the book.
- 2. Start Adobe Illustrator CC.

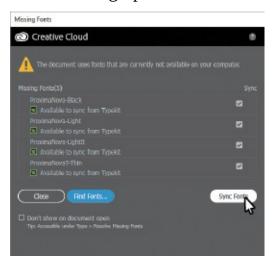


- **3.** Choose File > Open. Locate the file named L14_end.ai in the Lessons > Lesson14 folder that you copied onto your hard disk.
 - This is a small poster for a vacation destination.
- **4.** Choose View > Fit Artboard In Window and leave it open for reference, or choose File > Close.
 - **Note:** The fonts in the L14_end.ai file have been converted to outlines (Type > Create Outlines) to avoid having missing fonts, and the images have been embedded.



5. Choose File > Open. In the Open dialog box, navigate to the Lessons > Lesson14 folder, and select the L14_start.ai file on your hard disk. Click Open to open the file.

This is an unfinished version of the poster for a travel company. You will add and edit graphics to it in this lesson.



Note: You need an Internet connection to sync the fonts. The syncing process may take a few minutes.

6. The Missing Fonts dialog box will most likely appear. Click Sync Fonts to sync all the missing fonts to your computer. After they are synced and you see the message stating that there are no more missing fonts, click Close.

If you can't get the fonts to sync (a "Syncing Typekit fonts..." message doesn't go away), you can go to the Creative Cloud desktop application and choose Assets > Fonts to see what the issue may be (refer to the section "Changing font family and font style" in Lesson 8, "Adding Type to a Poster," for more information on how to resolve it). You can also just click Close in the Missing Fonts dialog box and ignore the missing fonts as you proceed. A third method is to click the Find Fonts button in the Missing Fonts dialog box and replace the fonts with a local font on your machine.

Note: You can also go to Help (Help > Illustrator Help) and search for "Find missing fonts.

- 7. Choose File > Save As. In the Save As dialog box, navigate to the Lesson14 folder, and open it. Name the file **GreenIsle.ai**. Leave the Format option set to Adobe Illustrator (ai) (macOS) or the Save As Type option set to Adobe Illustrator (*.AI) (Windows) and then click Save. In the Illustrator Options dialog box, leave the Illustrator options at their default settings. Click OK.
- **8.** Choose View > Fit Artboard In Window.

9. Choose Window > Workspace > Reset Essentials to reset the Essentials workspace.

Working with Adobe Bridge

Adobe Bridge CC is an application available with your Adobe Creative Cloud subscription. Bridge provides you with centralized access to all the media assets you need for your creative projects.



Bridge simplifies your workflow and keeps you organized. You can batch edit with ease, add watermarks, and even set centralized color preferences. You can access Adobe Bridge from within Illustrator by choosing File > Browse In Bridge.

Combining artwork

You can combine Illustrator artwork with images from other graphics applications in a variety of ways for a wide range of creative results. Sharing artwork among applications lets you combine continuous-tone paintings and photographs with vector art. Illustrator lets you create certain types of raster images, and Adobe Photoshop excels at many additional image-editing tasks. The images edited or created in Photoshop can then be inserted into Illustrator.

Note: To learn more about working with vector and raster images, see the "Introducing Adobe Illustrator" section in <u>Lesson 1</u>, "<u>Getting to Know</u> the Work Area."

This lesson steps you through the process of creating a composite image, including combining bitmap images with vector art and working between applications. You will add photographic images created in Photoshop to a small poster created in Illustrator. Then you'll mask an image, update a placed image and then package the file.

Placing image files

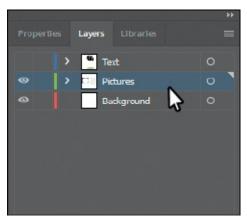
You can bring raster artwork from Photoshop or other applications into Illustrator using the Open command, the Place command, the Paste command, drag-and-drop operations, and the Libraries panel. Illustrator supports most Adobe Photoshop data, including layer comps, layers, editable text, and paths. This means that you can transfer files between Photoshop and Illustrator without losing the ability to edit the artwork.

Note: Illustrator includes support for DeviceN rasters. For instance, if you create a Duotone image in Photoshop and place it in Illustrator, it separates properly and prints the spot colors.

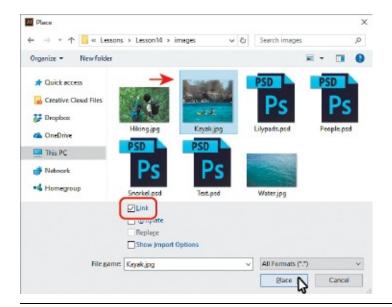
When placing files using the File > Place command, no matter what type of image file it is (JPG, GIF, PSD, AI, etc.), it can be either embedded or linked. *Embedding* files stores a copy of the image in the Illustrator file, and the Illustrator file size increases to reflect the addition of the placed file. *Linked* files remain separate external files, and a link to the external file is placed in the Illustrator file. A linked file does not add significantly to the size of the Illustrator file. Linking to files can be a great way to ensure that image updates are reflected in the Illustrator file. The linked file must always accompany the Illustrator file, or the link will break and the placed file will not appear in the Illustrator artwork.

Placing an image

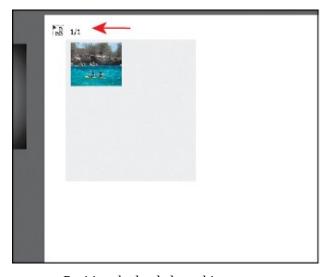
First, you will place a JPEG (.jpg) image into your document.



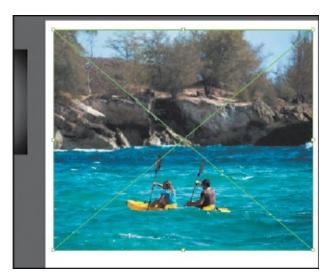
- **1.** Click the Layers panel tab to open the Layers panel. In the Layers panel, select the layer named "Pictures."
 - When you place an image, it is added to the selected layer. The layer already includes several shapes in the document.
- **2.** Choose File > Place.



- **Note:** You may need to click the Options button in the Place dialog box to reveal the Link option.
- **3.** Navigate to the Lessons > Lesson14 > images folder, and select the Kayak.jpg file. Make sure that Link is selected in the Place dialog box. Click Place.
 - The pointer should now show the loaded graphics cursor. You can see "1/1" next to the pointer, indicating how many images are being placed (1 of 1), and a thumbnail so you can see what image you are placing.
- **4.** Position the loaded graphics cursor near the upper-left corner of the artboard, and click to place the image. Leave the image selected.
 - **Tip:** The X on a selected image indicates that the image is linked (with edges showing, View > Show Edges).



Position the loaded graphics cursor.



Click to place the image.

The image appears on the artboard, with the upper-left corner of the image placed where you clicked. The image is 100% of its original size. You could also have dragged with the loaded graphics cursor to size the image as you placed it.

Notice in the Properties panel that, with the image selected, you see the words "Linked File," indicating that the image is linked to its source file, together with other information about the image. By default, placed image files are linked to their source file. So, if the source file is edited (outside of Illustrator), the placed image in Illustrator is updated. Deselecting the Link option while placing embeds the image file in the Illustrator file.

Transforming a placed image

You can duplicate and transform placed images just as you do other objects in an Illustrator file. Unlike vector artwork, you need to consider the resolution of the raster image content in your document since raster images without enough resolution may look pixelated when printed. Working in Illustrator, if you make an image smaller, the resolution of the image increases. If you make an image larger, the resolution decreases. Next, you will transform the Kayak.jpg image.

• **Note:** Transformations performed on a linked image in Illustrator, and any resulting resolution changes, do not change the original image. The changes apply only to the image within Illustrator.

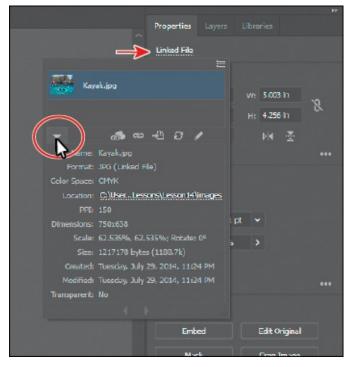
▶ **Tip:** To transform a placed image, you can also open the Properties panel or Transform panel (Window > Transform) and change settings in either.



1. Holding down the Shift key, use the Selection tool () to drag the lower-right bounding point toward the center of the image until the measurement label shows a width of approximately 5 in. Release the mouse button and then release the key.

Tip: Much like other artwork, you can also Option+Shift-drag (macOS) or Alt+Shift-drag (Windows) a bounding point around an image to resize from the center, while maintaining the image proportions.

2. Click the Properties panel tab to show that panel.



3. Click the text "Linked File" at the top of the Properties panel to see the Links panel. With the Kayak.jpg file selected in the Links panel, click the Show Link Info arrow in the lower-left corner of the panel to see

information about the image.

You can see the scale percentage as well as rotation information, size, and much more. Specifically, notice the PPI (Pixels Per Inch) value is approximately 150. PPI refers to the resolution of the image. Other transformations like rotation can also be applied to images using the various methods you learned in <u>Lesson 5</u>, "<u>Transforming Artwork</u>."

- **4.** Press the Escape key to hide the panel.
- **5.** Click the Flip Along Horizontal Axis option () in the Properties panel to flip the image horizontally, across the center.



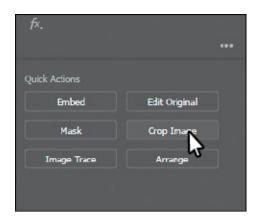
6. Leave the image selected, and choose File > Save.

Cropping an image

In Illustrator, you can mask or hide part of an image, as you'll learn about in this lesson, but you can also crop images to permanently remove part of an image. While cropping an image, you can define the resolution, which can be a useful way to reduce file size and improve performance. Next, you'll crop part of the image of the kayakers.

▶ **Tip:** To crop a selected image, you can also choose Object > Crop Image or choose Crop Image from the context menu (right-click or Ctrl-click on the image).

1. With the image still selected, click the Crop Image button in the Properties panel. Click OK in the warning dialog box that appears.

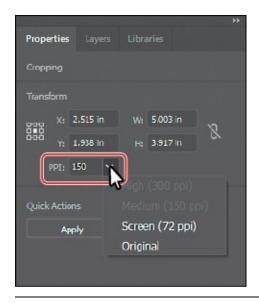


Linked images, like the kayak image, become embedded after you crop them. That means that if you update the original image, Kayak.jpg, outside of Illustrator, say in Photoshop, the image in Illustrator will not be affected. You should now see a dotted box with eight handles around the selected image. The rest of the artwork is dimmed, and you cannot select it until you are finished cropping.



2. Drag the top crop handle down to cut off a bit of the trees at the top of the image.

You can drag the handles that appear around the image to crop different parts of the image. You can also define a size in the Properties panel (width and height) to crop to.



• **Note:** A lower PPI may result in an image that is not suitable for printing.

• **Note:** Depending on the size of your kayak image, the "Medium (150 ppi)" option may not be dimmed and that's okay.

3. Click the PPI (resolution) menu in the Properties panel.

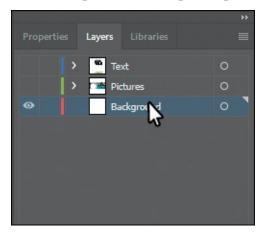
The PPI is the resolution of the image. Any options in the PPI menu that are higher than the original resolution of the image you are cropping are disabled. The maximum value that you can enter equals the resolution of the original image or 300 PPI for linked artwork. Choosing a lower resolution than the original can be useful if you want to save file size.



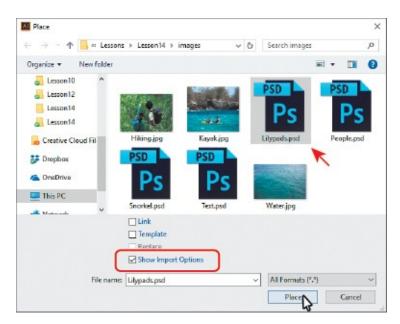
- **4.** Move the pointer over the image, and drag the crop area to make it more centered, vertically on the image.
- 5. Click Apply in the Properties panel to permanently crop the image.
- **6.** Choose Select > Deselect and then choose File > Save.

Placing a Photoshop image with Show Import Options

When you place image files in Illustrator, you have the ability to change image options when the file is imported (when available). For instance, if you place a Photoshop file (.psd), you can choose to flatten the image or even to preserve the original Photoshop layers in the file. Next, you'll place a Photoshop file, set import options, and embed it in the Illustrator file.

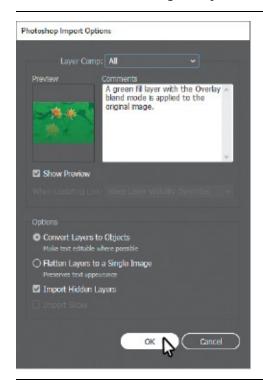


- 1. In the Layers panel, click the eye icon (**○**) for the Pictures layer to hide the content, and then select the Background layer.
- **2.** Choose File > Place.
- **3.** In the Place dialog box, navigate to the Lessons > Lesson14 > images folder, and select the Lilypads.psd file. In the Place dialog box, set the following options (if you don't see the options, click the Options button):
 - Link: **Deselected** (Deselecting the Link option embeds an image file in the Illustrator file. Embedding the Photoshop file allows for more options when it is placed, as you'll see.)
 - Show Import Options: **Selected** (Selecting this option will open an import options dialog box where you can set import options before placing.)
- 4. Click Place.



The Photoshop Import Options dialog box appears because you selected Show Import Options in the Place dialog box.

• **Note:** Even though you select Show Import Options in the Place dialog box, the Import Options dialog box will not appear if the image doesn't have multiple layers.



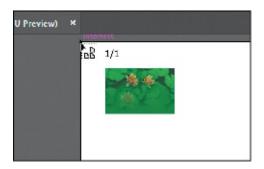
▶ **Tip:** To learn more about layer comps, see "Importing artwork from Photoshop" in Illustrator Help (Help > Illustrator Help).

ONote: A color mode warning may appear in the Photoshop Import

Options dialog box. This indicates that the image you are placing may not be the same color mode as the Illustrator document. For this image (and going forward), if a color warning dialog box appears, click OK to dismiss it.

- **5.** In the Photoshop Import Options dialog box, set the following options:
 - Layer Comp: **All** (A layer comp is a snapshot of a state of the Layers panel that you create in Photoshop. In Photoshop, you can create, manage, and view multiple versions of a layout in a single Photoshop file. Any comments associated with the layer comp in Photoshop will appear in the Comments area.)
 - Show Preview: **Selected** (Preview displays a preview of the selected layer comp.)
 - Convert Layers To Objects: **Selected** (This option and the next one are available only because you deselected the Link option and chose to embed the Photoshop image.)
 - Import Hidden Layers: **Selected** (to import layers hidden in Photoshop)

6. Click OK.



• **Note:** When the pointer snaps to the upper-left corner of the artboard, the word "intersect" may appear. It may also be hidden by the top edge of the Document window.

7. Position the loaded graphics cursor in the upper-left corner of the artboard, and click to place the image.

Rather than flatten the file, you have converted the Lilypads.psd Photoshop layers to layers that you can show and hide in Illustrator. When placing a Photoshop file in particular, if you had left the Link option selected (to link to the original PSD file), the only option in the Options section of the Photoshop Import Options dialog box would have been to flatten the content.



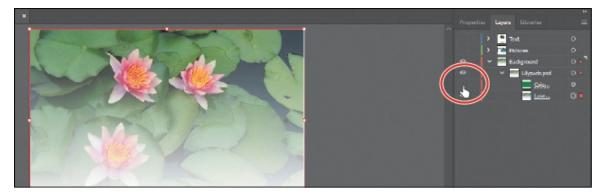
8. In the Layers panel, click the Locate Object button () to reveal the image content in the Layers panel.

Notice the sublayers of Lilypads.psd. These sublayers were layers in Photoshop and appear in the Layers panel in Illustrator because you chose not to flatten the image when you placed it. Also notice that, with the image still selected on the page, the Properties panel shows the word "Group" at the top.

When you place a Photoshop file with layers and you choose to convert the layers to objects in the Photoshop Import Options dialog box, Illustrator treats the layers as separate sublayers in a group. This particular image had a layer mask in Photoshop applied to Layer 0, which is why the image appears to fade.

• **Note:** The Color Fill 1 sublayer was a layer in Photoshop that was filled with a green color and blended via Blend Mode into the lily pad image beneath it.

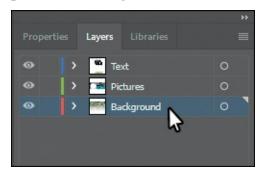
9. In the Layers panel, click the eye icon () to the left of the Color Fill 1 sublayer to hide it. You may want to drag the left edge of the Layers panel to see more of the layer names.



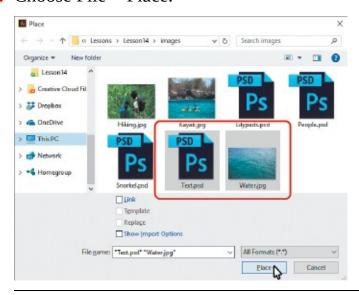
0. Choose Select > Deselect and then choose File > Save.

Placing multiple images

In Illustrator you can also place multiple files in a single action. Next, you'll place two images at once and then position them.



- **1.** In the Layers panel, click the disclosure triangle (■) to the left of the Background layer to collapse the layer contents. Click the visibility column of the layers named "Pictures" and "Text" to show the contents for each and then ensure that the Background layer is selected.
- **2.** Choose File > Place.



▶ **Tip:** You could also select a range of files in the Place dialog box by

- **3.** In the Place dialog box, select the Water.jpg file in the Lessons > Lesson14 > images folder. Command-click (macOS) or Ctrl-click (Windows) the image named Text.psd to select both image files. On macOS, click the Options button, if necessary, to reveal other options. Deselect Show Import Options, and make sure that the Link option is *not* selected. Click Place.
 - **Note:** The Place dialog box you see in Illustrator may show the images in a different view, like a List view, and that's okay.

Tip: To discard an asset that is loaded and ready to be placed, use the arrow keys to navigate to the asset, and then press the Escape key.

4. Position the loaded graphics cursor on the left side of the artboard. Press the Right or Left Arrow key (or Up and Down Arrow keys) a few times to see that you can cycle between the image thumbnails. Make sure that you see the water image thumbnail, and click the left edge of the artboard, about halfway down, to place the image.



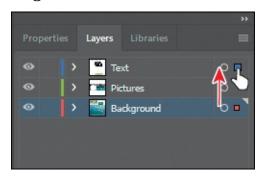


Whichever thumbnail is showing in the loaded graphics cursor when you click in the Document window is placed.

- **5.** Press and hold the spacebar and drag to the left so that you see the area off the right side of the artboard. Release the spacebar.
- **6.** Move the loaded graphics cursor off the right side of the artboard. Click and drag down and to the right, stopping when the image is roughly as big as you see in the figure. Leave the image selected.



You can either click to place an image at 100% or click and drag to place an image and size it as you place it in the Document window. By dragging when you place an image, you are resizing the image. Resizing an image in Illustrator will most likely result in a different resolution than the original.

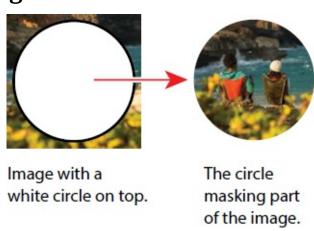


7. With the Text.psd image (the image of the green leaf) still selected, drag the selected art indicator (the colored box) in the Layers panel up from the Background layer to the Text layer to move the image to the Text layer.

Later, you will mask the image with text on the Text layer.

8. Choose View > Fit Artboard In Window.

Masking images



● **Note:** You will hear people use the phrases "clipping mask," "clipping path," and "mask." The way most of us refer to them, they mean the same thing.

To achieve certain design effects, you can apply a clipping mask (clipping path) to content. A *clipping mask* is an object whose shape masks other artwork so that only areas that lie within the shape are visible. In the first part of the figure to the right is an image with a white circle on top. In the second part of the figure, the white circle was used to mask or hide part of the image.

Only vector objects can be clipping paths; however, any artwork can be masked. You can also import masks created in Photoshop files. The clipping path and the masked object are referred to as the *clipping set*.

Applying a simple mask to an image

In this section, you'll see how to let Illustrator create a simple mask for you on the Kayak.jpg image so that you can hide part of the image.

1. With the Selection tool (▶) selected, click the Kayak.jpg image to select it (the first image you placed).

• Tip: You can also apply a clipping mask by choosing Object > Clipping Mask > Make.

2. Click the Properties panel tab to show that panel. Click the Mask button in the Properties panel.





Clicking the Mask button applies a clipping mask to the image in the shape and size of the image. In this case, the image itself does not look any different.



Note: You may need to drag the left edge of the Layers panel to the left to see more of the names, like I did for the figure.

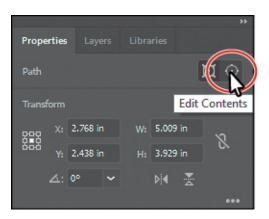
3. In the Layers panel, click the Locate Object button () at the bottom of the panel.

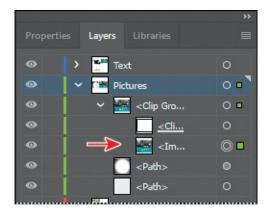
Notice the <Clipping Path> and <Image> sublayers that are contained within the <Clip Group> sublayer. The <Clipping Path> object is the clipping path (mask) that was created, and the <Clip Group> is a set that contains the mask and the object that is masked (the cropped, embedded image).

Editing a clipping path (mask)

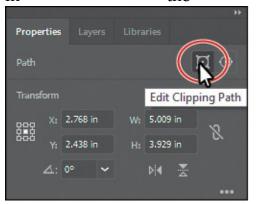
In order to edit a clipping path, you need to be able to select it. Illustrator offers several ways to do this. Next, you'll edit the mask you just created.

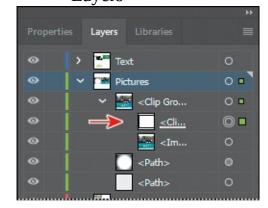
- **1. Tip:** You can also double-click a clip group (object masked with a clipping path) to enter Isolation mode. You can then either click the masked object (the image in this case) to select it or click the edge of the clipping path to select the clipping path. After you are finished editing, you can then exit Isolation mode using a variety of methods as discussed in previous lessons (like pressing the Escape key). Click the Properties panel tab to show the panel. With the kayak image still selected on the artboard, click the Edit Contents button () at the top of the Properties panel.
- **2.** Click the Layers panel tab, and notice that the <Image> sublayer (in the <Clip Group>) is showing the selected-art indicator (small color box) to the far right of the sublayer name.





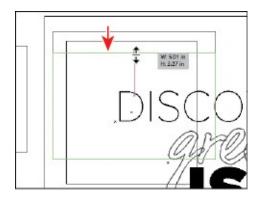
3. Back in the Properties panel, click the Edit Clipping Path button () at the top of the Properties panel, and <Clipping Path> will now be selected in the Layers panel.





When an object is masked, you can edit the mask, the object that is masked, or both. Use these two buttons to select which to edit. When you first click to select an object that is masked, you will edit both the mask and the masked object.

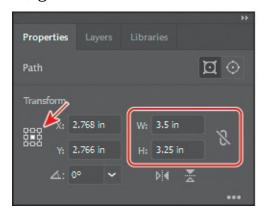
4. Choose View > Outline.



- **5. Tip:** You can also edit a clipping path with transformation options, like rotate, skew, etc., or by using the Direct Selection tool (▶). With the Selection tool (▶) selected, drag the top-middle bounding point of the selected mask down until the measurement label shows a height of approximately 3.25 in.
- **6.** Choose View > GPU Preview (or Preview On CPU if that is all that is

available).

7. Make sure that the center of the reference point is selected () in the Properties panel. Make sure that Constrain Width And Height Proportions is off (), and change Width to 3.5 in. If you see that Height is not 3.25 in, go ahead and make it so.





8. Click the Edit Contents button () at the top of the Properties panel to edit the Kayak.jpg image, *not* the mask.

▶ **Tip:** You can also press the arrow keys on the keyboard to reposition the image.

9. With the Selection tool (), be careful to drag from within the bounds of the mask down a little bit and release the mouse button. Notice that you are moving the image and not the mask.





With the Edit Contents button () selected, you can apply many transformations to the image, including scaling, moving, rotating, and more.



- **0.** Choose Select > Deselect and then click the image again to select the entire clip group. Drag the image onto the light gray rectangle, and position it like you see in the figure.
- **1.** Choose Select > Deselect and then choose File > Save.

Masking an object with text

In this section, you'll use text as a mask for an image you placed. To create a mask from text, the text needs to be on top of the image, as you'll see.

- **1.** With the Selection tool (▶) selected, drag the green leaf image (Text.psd) from off the right side of the artboard on top of the "ISLE" text.
 - Note: If the image Text.psd is not as wide as the "ISLE" text, make sure you resize the image, holding down the Shift key to constrain the proportions. Don't worry if it's larger than you see in the figure.
- **2.** Choose Object > Arrange > Send To Back. You should see the "ISLE" text now. Make sure that the image is positioned roughly like you see in the figure.
- **3.** With the image still selected, Shift-click the "ISLE" text to select them both.
- **4.** Click the Make Clipping Mask button in the Properties panel.



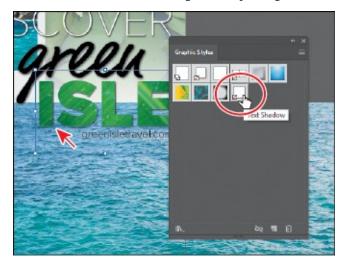




Tip: You can also right-click over the selected content and choose Make Clipping Mask from the context menu or choose Object >

You can edit the Text.psd image and the clipping mask separately, just as you did previously with the masked Kayak.jpg image.

5. With the text still selected, choose Window > Graphic Styles to open the Graphic Styles panel. Select the Text Shadow graphic style to apply a drop shadow. Close the Graphic Styles panel.



6. Choose Select > Deselect and then choose File > Save.

Masking an object with multiple shapes

You can easily create a mask from either a single shape or multiple shapes. In order to create a clipping mask with multiple shapes, the shapes first need to be converted to a compound path. This can be done by selecting the shapes that will be used as the mask and choosing Object > Compound Path > Make. Ensure that the compound path is on top of the content to be masked and both are selected. Choose Object > Clipping Mask > Make.

Creating an opacity mask

An *opacity mask* is different from a *clipping mask* because it allows you to mask an object and also alter the transparency of artwork. You can make and edit an opacity mask using the Transparency panel. In this section, you'll create an opacity mask for the Water.jpg image so that it fades into the water lilies image.

1. In the Layers panel, click the disclosure triangles for all layers (☑) to hide the content for each layer, if necessary. Click the eye icon (☑) to the left of the Text and Pictures layers to hide their contents.