

Combining Illustrator Graphics and Photoshop Images



You can easily add a graphic created in a drawing program to an Adobe® Photoshop® file. This is an effective method for seeing how a line drawing looks applied to a photograph or for trying out Photoshop special effects on vector art. You can also export the resulting artwork for use in other graphics programs.

This lesson shows you how to do the following:

- Differentiate between bitmap and vector graphics.
- Place an Adobe Illustrator® graphic in an Adobe Photoshop file.
- Scale the placed graphic.
- Distort a graphic to match the perspective of a photograph.
- Apply different blending modes to a graphic.
- Use the Export Transparent Image wizard to prepare a Photoshop image for use in an Illustrator file.

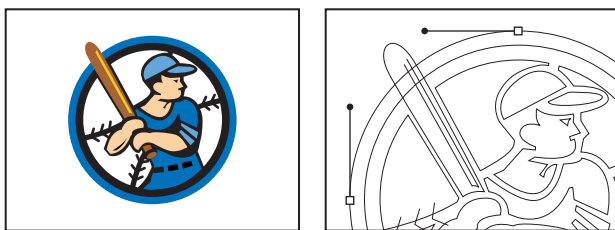
Combining artwork

You can combine Photoshop artwork with art from other graphics applications in a variety of ways for a wide range of creative results. Sharing artwork between applications allows you to combine line art with continuous-tone paintings and photographs. It also allows you to move between two types of computer graphics—bitmap images and vector graphics.

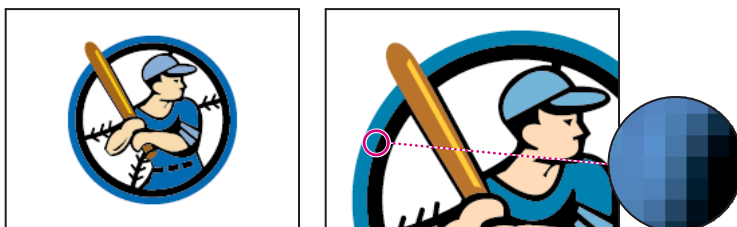
Bitmap vs. vector graphics

Adobe Photoshop uses *bitmap images*, also called raster images, which are based on a grid of pixels. In working with bitmap images, you edit groups of pixels rather than objects or shapes. Because bitmap graphics can represent subtle gradations of shade and color, they are appropriate for continuous-tone images such as photographs or artwork created in painting programs. A disadvantage of bitmap graphics is that they lose definition and appear “jagged” when scaled up.

Vector graphics, also called draw graphics, are made up of shapes based on mathematical expressions and are created in drawing applications. These graphics consist of clear, smooth lines that retain their crispness when scaled. They are appropriate for illustrations, type, and graphics such as logos that may be scaled to different sizes.



Logo drawn as vector art



Logo rasterized as bitmap art

In deciding whether to use Photoshop or a vector graphics program such as Illustrator for creating and combining graphics, consider both the elements of the image and how the image will be used. In general, use Photoshop for images that have the soft lines of painted or photographic art and for applying special effects to line art. Use Illustrator if you need to create art or type with clean lines that will look good at any magnification. In most cases, you will also want to use Illustrator for laying out a design, since Illustrator allows you more flexibility in working with type and with reselecting, moving, and altering images.

Project overview

To illustrate how you can combine vector art with bitmap images and work between applications, this lesson steps you through the process of creating a composite image. In this lesson, you will add a logo created in Adobe Illustrator to a photographic image in Adobe Photoshop and adjust the logo so that it blends with the photo. You will then save the resulting image so that it can be brought back into Illustrator for final layout as a print advertisement.



Logo drawn in Illustrator



Logo applied to image in Photoshop



Final layout in Illustrator

Getting started

Before beginning this lesson, delete the Adobe Photoshop Preferences file to restore the program's default settings. To delete the Preferences file in Windows®, exit Photoshop, and then delete the Adobe Photoshop 5 Prefs file in the Adobe Photoshop Settings subdirectory inside the Photoshop5 directory. To delete the Preferences file in Mac® OS, quit Photoshop, locate the Adobe Photoshop 5 Prefs file in the Adobe Photoshop Settings folder inside the Adobe Photoshop 5.0 folder, drag the file to the Trash, and choose Special > Empty Trash.

After you have deleted the Preferences file, restart the Photoshop program. Then open the final Photoshop image for this project to see how the adjustments you'll make affect the final artwork.

- 1 Choose File > Open. Locate and open the Training\Lesson04 folder in the Adobe Photoshop 5.0 application folder or on the tutorial CD. Then select end04.psd and click Open.
- 2 If you like, choose View > Zoom Out to make the image smaller, and leave it on your screen as you work. If you don't want to leave the image open, choose File > Close.

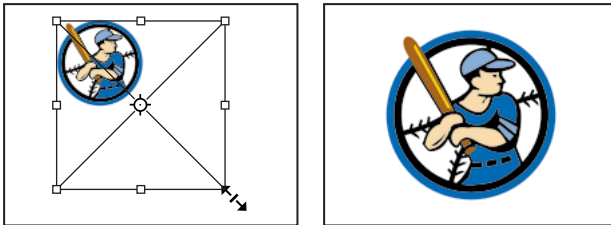
Now you'll open the start file, the photographic image to which you will add a logo.

- 3 Choose File > Open. Locate and open the Lesson04 folder, select Start04.psd, and click Open.
- 4 Choose File > Save As, type the name **Work04.psd**, and click Save.

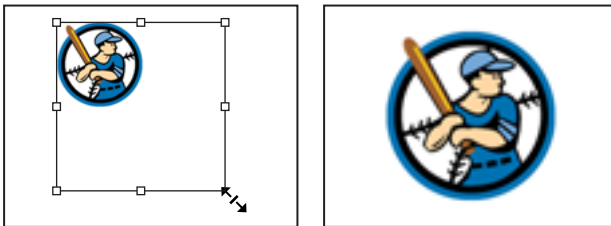
Placing an Adobe Illustrator file

You can open an Adobe Illustrator file as a new Adobe Photoshop file, or you can use the Place or Paste commands to add an Illustrator file into an existing Photoshop file. When you open, place, or paste an Illustrator image, Photoshop *rasterizes* it so that it becomes a bitmap, or raster, image.

In this lesson, you will be using the Place command to add an Illustrator file to an existing Photoshop image. The advantage of the Place command is that it allows you to scale the image while it is still vector art, so that the scaling does not sacrifice image quality. With the Place command, a graphic is not rasterized until you press Enter (Windows) or Return (Mac OS). Alternatively, if you were to cut and paste a graphic from Illustrator into Photoshop, the image would come in already rasterized at the size it was in the Illustrator file. If you then scaled the graphic, it would lose image quality.

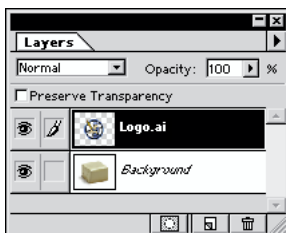


Scaling placed Illustrator graphic Result



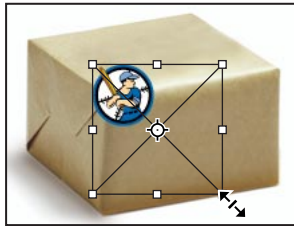
Scaling pasted Illustrator graphic Result

1 With the photo of the gift box open, choose File > Place. Select the file Logo.ai located in the Lesson04 folder, and click Place. Notice that the logo appears with a bounding box around it and that Photoshop automatically creates a new Logo.ai layer for the image in the Layers palette.



2 Hold down Shift, and drag a corner handle of the bounding box to scale the logo to fit the gift box. (Holding down Shift constrains the proportions of the logo.)

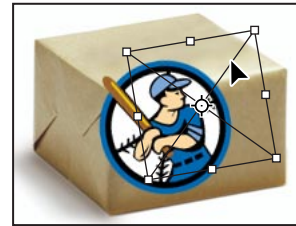
3 Position the pointer outside the bounding box (the pointer turns into a curved arrow), and drag to rotate the logo slightly counter-clockwise.



Scaling logo



Rotating logo



Repositioning logo

4 If necessary, position the pointer inside the bounding box so that you see a move pointer (▸), and drag to reposition the logo so that it fits within the borders of the box. Fine-tune with other rotation or scaling adjustments; then press Enter (Windows) or Return (Mac OS) to apply the changes and rasterize the logo.

Distorting the graphic to match the photograph

Your next step is to distort the logo so that it appears to wrap around the top and front of the box. To create this effect, you'll cut the logo in half, place each half on its own layer, and then apply the distortion to the logo's top half.

1 With the Logo.ai layer active, select the polygon lasso tool (⌘), and click the right front corner of the box top. Drag to the next corner, click, and then continue dragging around the box top, clicking at each corner. Complete the selection by crossing over the starting point.



Top half of box selected



Selection placed on new layer

2 Choose Layer > New > Layer Via Cut to cut the top half of the logo from the Logo.ai layer and place it on its own layer. Notice that a new layer, Layer 1, has appeared in the Layers palette. To see the artwork on the layer, turn off the other two layers by clicking the eye icon (👁) to the left of the layers in the Layers palette. Click again to turn all layers back on.

Now you're ready to distort the top of the logo.

3 Make sure that Layer 1 is active, and then choose Edit > Transform > Skew. A transformation bounding box appears around the top half of the logo.

4 Experiment by dragging the handles of the bounding box to distort the logo so that it matches the perspective of the box. In particular, try dragging the upper left handle in the direction of the back left corner of the box top.



Top half of logo distorted via Skew command



Result

💡 To undo the last handle adjustment, choose **Edit > Undo**. To cancel the transformation, press **Escape**.

5 When the logo appears to wrap around the top of the box, apply the transformation by pressing **Enter** (Windows) or **Return** (Mac OS).

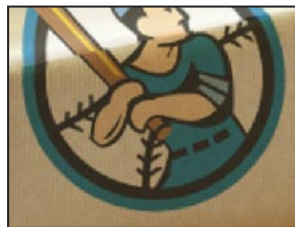
Using blending modes on the graphic

Now you'll make the logo appear more integrated with the box by using different blending modes on each half of the logo. First you'll lighten the top half of the logo so that it matches the box top.

1 With Layer 1 still active in the Layers palette, change the opacity of the layer to 60% and make sure that **Normal** is selected for the blending mode. Changing the opacity of the layer lightens the top of the logo and makes it blend better with the highlights on the top of the box.



Normal mode for top half of logo



Multiply mode for bottom half of logo



Result

Next you'll darken the bottom half of the logo so that it blends with the shadow on the box front.

2 Click the **Logo.ai** layer in the Layers palette to make it active, change the opacity to 70%, and select **Multiply** from the blending mode menu. Using the **Multiply** blending mode on the layer darkens the bottom of the logo and makes it appear to be in shadow.

3 Choose **File > Save**.

Exporting the image

You'll now prepare the new composite image so that it can be placed back into Illustrator for its final layout. By default, when you export an Adobe Photoshop file to another program such as Illustrator, the entire image becomes opaque, including the background. In this project, the gift box in the Photoshop file is targeted for an Illustrator file with a colored background. Therefore, if you were to export the file without any adjustment, the white background around the box would appear as an opaque white area against the colored Illustrator background.

With the help of a Photoshop wizard, you can export a Photoshop image to Illustrator and hide, or clip, the background. Wizards are assistants available through the Help menu that guide you through common tasks in Photoshop. To hide the background around the box image, you will use the Export Transparent Image wizard, which identifies the desired portion of the photograph and makes everything outside it appear transparent when the image is exported.



Placed Photoshop file, exported with background



Placed Photoshop file, exported via Export Transparent Image

Before running the Export Transparent Image wizard, you must select the part of the image you want to make transparent. In the Work04.psd file, you will select the white background around the box.

- 1 In the Layers palette, click Background to make it active.
- 2 Select the polygon lasso tool, and draw a selection around the box. Then choose Select > Inverse to select the background around the box.



Selecting box with polygon lasso tool



Box selected



Background selected via Select > Inverse

You're now ready to run the wizard, which uses dialog boxes to step you through the process of exporting the file.

3 Choose Help > Export Transparent Image.

4 In the first dialog box, choose the second option, indicating that you have already selected the area of the image you want to make transparent. Then click Next.

5 In the next dialog box, choose Print and click Next.

6 In the third dialog box, accept the Photoshop EPS default file format and the default file name, and click Save.

7 In the EPS Options dialog box, for Preview choose the option TIFF (8 bits/pixel) for Windows or the option Mac OS (8 bits/pixel) for Mac OS, and click OK.

***Note:** If you place an EPS file with a TIFF preview into Adobe Illustrator, the transparency created by the wizard won't display properly. This display affects the on-screen preview only; when the image prints to a PostScript® printer, the areas designated for transparency in the wizard will in fact be transparent.*

8 In the final dialog box, click Finish.

Note that you now have two files open on your desktop: Work04 and Export Wizard Work04 (Windows) or Export Assistant Work04 (Mac OS). Because you are finished with the Work04 file, you can close it. Be careful not to save the file, however, since the Export Transparent Image wizard flattened the file's layers as one of the steps in preparing the file for export. If you save this version of the file, you will lose the original file's separate layers.

9 With the Work04.psd file active, choose File > Close.

10 In the dialog box, click the Don't Save option.

The final step in preparing the Photoshop file for export to a print color publication is to change the image to CMYK color mode so that it will be printed correctly in four-color process inks. You can use the Mode command to change the image's color mode.

***Note:** For more information on color modes, see Chapter 4, "Choosing a Color Mode," in the Adobe Photoshop User Guide.*

11 With the Export Wizard Work04 (Windows) or Export Assistant Work04 (Mac OS) window active, choose Image > Mode > CMYK.

12 Choose File > Save.

The box-and-logo image is now fully composed and ready for placement in the Adobe Illustrator layout. If you have a copy of Illustrator, you can try placing the exported image in the Mailer.ai file located in the Lesson04 folder.

Exploring on your own

Now that you've learned the basic steps involved in combining an Illustrator graphic with a Photoshop image, you can try applying the logo to a new Photoshop image.

- 1 Locate and open the Lesson04 folder. Then select Cap.psd or Cup.psd, and click Open.



- 2 Choose File > Place. Select the Logo.ai file, and click Place.

Now try out techniques presented here to blend the graphic with the Photoshop image. For more information on combining graphics and Photoshop images, refer to the *Adobe Photoshop User Guide*.

This tutorial is excerpted from *Adobe Photoshop Classroom in a Book®*, part of the official training series for Adobe graphics and publishing software. Published by Adobe Press, the series is available in several languages. For purchasing information, contact Macmillan Publishing at <http://mcp.com> or 1-800-428-5331.



Adobe, the Adobe logo, Classroom in a Book, Illustrator, Photoshop, and PostScript are trademarks of Adobe Systems Incorporated which may be registered in certain jurisdictions. Windows is a registered trademark of Microsoft Corporation in the U.S. and other countries. Mac is a trademark of Apple Computer, Inc. registered in the U.S. and other countries. © 1998 Adobe Systems Incorporated. All rights reserved.