

# Hero Two

## Creating Logos with Vector Graphics

### **In this chapter**

You've already learned that Paint Shop Pro is a capable vector graphics program, as well as a paint and photo editor. This sets it apart from most consumer computer graphics software on the market today and makes it possible for users to create high-quality, scalable computer illustrations that can be used in a variety of ways. In this chapter we'll cover the following topics:

- ★ Combining vector shapes with text by creating a vector logo
- ★ Using vectors to create and print business cards
- ★ Printing multiple images using the Print Layout utility and templates
- ★ Exporting vector graphics as clip art to use with other applications

Vector graphics were the first type of computer graphics to be widely used by graphic artists and are still the tool of choice for most. Most of the nonphotographic images you see in magazines, newspapers, and books began life as vector illustrations. Although Paint Shop Pro isn't quite as powerful as dedicated vector drawing programs such as Adobe Illustrator and CoreDRAW, you can still create professional vector illustrations using it.

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### Creating a vector logo

1. Begin by opening a new 700x400 image with a white raster background. Set the foreground/stroke to null and make the background/fill a solid color of your choice. This will be the color for the logo but, because of the nature of vector graphics, you get to change your mind about this at any point along the way.

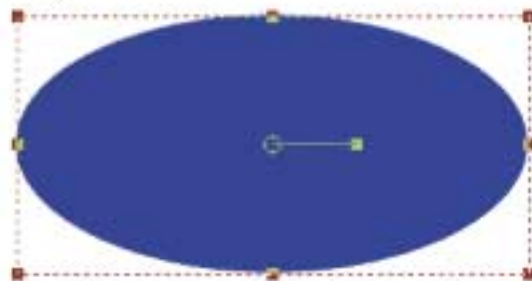
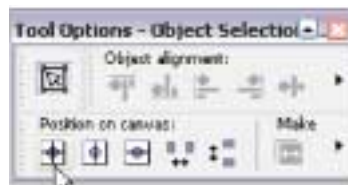
*Although transparency is a useful tool, the checkerboard can be distracting. It's often a good idea to start with a white background to give a cleaner view of your work. You can turn off or delete the background at any time during the project.*

2. Activate the Preset Shape tool, uncheck Retain style so your color of choice will be applied, and check Create as vector and Anti-alias. As you have a null stroke, the Line options don't matter.

3. Select the Ellipse shape from the Shape list and drag out an ellipse approximately 300x150 pixels. An easy way to do this is to keep an eye on the cursor coordinates at the bottom-right of the task bar. Start your drag at about x:200, y:100, and drag downward and to the right to x:500, y:250. Absolute accuracy isn't necessary, so don't be too fiddly about this.

4. After you've laid down the ellipse, switch to the Object Selection tool and click the Center on canvas button in the Position on canvas area of the Tool Options palette.

This may be a good time to make sure you've checked the All tools box in the Materials palette. This ensures that your color choice is maintained, whatever tool you use.



5. Deselect the ellipse by clicking an empty part of the canvas with the Object Selection tool.
6. Activate the Text tool. Because different fonts can require different settings to make this project work, start off using the same font and settings we use and later, once you get the method down, experiment with more personalized choices to exercise your own creativity. In the Create as field, choose Vector; set Size to 32, Stroke width to 0, Font to Arial, and Font Style to bold; and center the alignment. Leave Kerning at 0 and set Leading to -350.

*The term “leading” (pronounced ledding) refers to metal lead and comes from the practice of using lead strips of varying widths to separate lines of text in the days of metal type.*



7. Place the cursor over the top center of the ellipse (approximately x:350, y:125). The cursor changes from the regular text cursor to the “rocking A” text on a path cursor. Click the mouse when you’re there to bring up the Text Entry dialog box.
8. Type in a few words made up of 10 to 12 characters. The text is centered on the top and follows the path of the ellipse, but it’s sunk about halfway down into it because of the leading value you used. If you chose a different font, you may have to adjust the leading value and/or the font size to get the same effect. By highlighting the text in the Text Entry dialog box, you can adjust these settings if needed and the canvas will update to let you know if you have it right. Click Apply in the Text Entry dialog box when you’re satisfied.



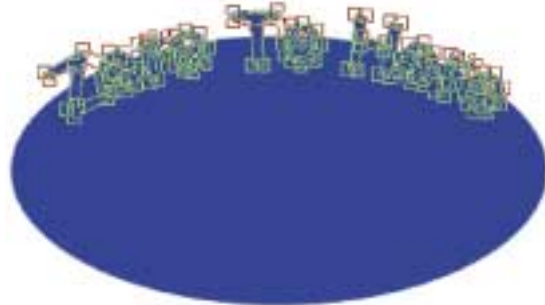
When you apply the text, it should be selected. If it isn't, activate the Object Selection tool and select it.



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Now you want to make the text a vector path. This will change it to nodes and segments independent of the font file and allow you to combine it with other contours in a single vector object.

9. Go to **Objects > Convert Text to Curves > As Single Shape** to combine all the characters into one vector object.
10. Now you want to combine your text with the ellipse to create a single object. Ensure the text is still selected and activate the Pen tool in Edit mode. You should now see the text with its nodes.
11. Select all the nodes in the text, either by drag-selecting or choosing **Edit > Select All** from the right-click context menu. Right-click again and choose **Edit > Cut**. This copies the nodes to the clipboard and removes them from the canvas.



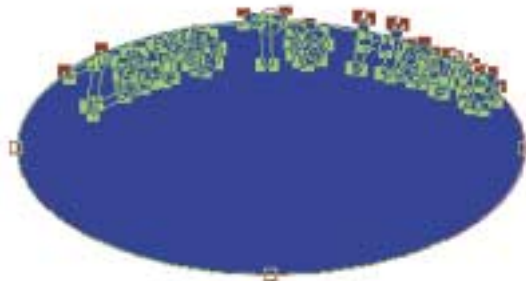
12. Although there's nothing visible, the object still exists in the Layer palette so, for the sake of neatness, you may want to delete it by expanding the Vector 1 layer, right-clicking the layer containing the text, and selecting **Clear**.



Now you'll combine the copied text with the ellipse.

13. Click the ellipse using the Object Selection tool and then activate the Pen tool, again in Edit mode. Right-click the ellipse and choose **Edit > Paste**. Your text reappears, but this time as part of the same object as the ellipse.

Unfortunately, when you paste nodes into an object in Paint Shop Pro, it offsets them 10 pixels to the right and below the original position, so you have to nudge them back to where they should be. This is easily accomplished by using the arrow keys while holding down the **CTRL** key. This combination nudges the selected nodes 10 pixels in the direction of the arrow key used.



Nodes Pasted out of Position

14. Press CTRL+up arrow key and CTRL+left arrow key to relocate the text to its original position. (Pressing the arrow keys *without* holding down the CTRL key will nudge the selected node by 1 pixel at a time.)

Though that's all fine and dandy, it doesn't appear to be any different from what you had a couple of steps ago. You may recall from Chapter Five that when contours going in opposite directions overlap, the overlapping fill area is canceled out. As you can see, the overlapping area in your object isn't canceled out, so the ellipse contour must be going in the same direction as all the text contours.

15. To remedy this, simply select any node in the ellipse contour, right-click, and choose Edit > Reverse Contour. Deselect the ellipse and now your overlapping text area is canceled out.

## Adding extra detail

Perhaps you now want to add some more text to your logo, such as a company name and address.

1. Go back to the Text tool and change the font size to 12 and Leading back to 0. In the Materials palette, change the fill color to something that will contrast against the ellipse color. While holding down the ALT key to prevent text on a path, click somewhere just above and left of center and enter two or three lines of text. Go to the Object Selection tool and move the text to a better position if necessary.
2. With the text selected, right-click and choose Convert Text to Curves > As Single Shape.
3. With the Pen tool selected, right-click and choose Edit > Select All.
4. Now right-click the text and choose Edit > Cut.
5. Use the Object Selection tool to select the ellipse.
6. With the Pen tool, right-click and choose Edit > Paste.
7. Use CTRL+up arrow key and CTRL+left arrow key to nudge it back into position.



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You have some empty space over on the lower-right side that you can add a graphic to.

8. Activate the Preset Shape tool and select a suitable single object shape. These are all black in Paint Shop Pro—the multicolor shapes are made up of object groups and aren't suitable for this procedure.



Single Object Shapes

9. Choose a suitable shape and lay it down where you want it. You'll have to start the drag outside the ellipse, as the Preset Shape tool won't start an object inside another. If you can't locate it just where you want it, switch to the Object Selection tool and move it as needed.



Now you need to go through the cut, copy, and paste procedure again. It may or may not be necessary to reverse the contour depending on the shape you used. When you paste the nodes into the ellipse, if it's already cut out, don't reverse the contour. As a reminder, here's the process again:

- ★ Select the shape with the Object Selection tool.
- ★ Activate the Pen tool. Right-click the shape and choose Edit > Select All.
- ★ Right-click again and choose Edit > Cut.
- ★ Select the ellipse with the Object Selection tool.
- ★ Activate the Pen tool, right-click, and choose Edit > Paste.
- ★ Nudge the shape back with the CTRL+up and left arrow keys.
- ★ Reverse the contour if necessary.



10. Finally, you can add some additional text, such as a name and a web page URL.

With a little imagination, but not necessarily any great drawing ability, you can use these methods combined with the Pen tool to come up with all sorts of imaginative vector graphics:



### Printing with templates

So, after you've made all these interesting vector shapes, you're probably wondering what to do with them. Vector graphics are great for print projects. They can be scaled without loss of quality, so a single graphic can be put to a variety of uses in print. If you've ever used clip art in a newsletter or poster, chances are it was vector.

Let's take the vector logo, use it as a business card, and print it right here in Paint Shop Pro.

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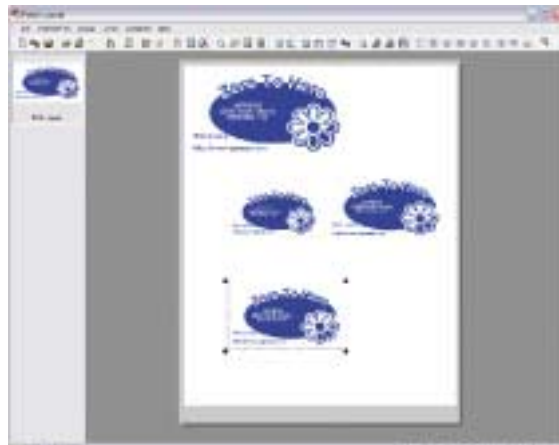
1. Select the logo and added text with the Object Selection tool, right-click, and select Group.
2. Right-click and drag (to maintain the aspect ratio) one of the corner handles, so the object completely fills up the workspace. Once it's resized, click the Center on canvas button in the Position on canvas area of the Object Selection tool options.

We started with a 700x400 image for a reason: Avery and other companies make perforated business card stock at 2 x 3 1/2 inches, which is the size of our graphic at 200 ppi. This stock includes Avery product numbers 8371, 8372, 8374, 8379, and 8376, among other specialty stock, and Paint Shop Pro has print templates for many Avery products, including the business card stock.

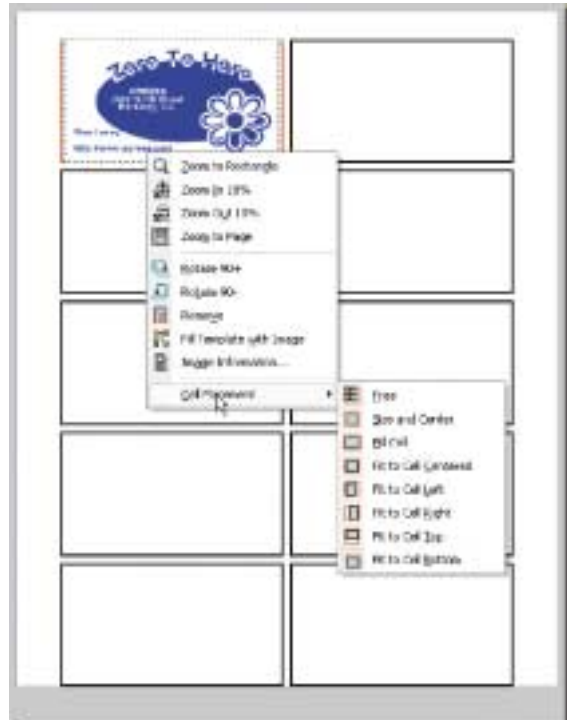
3. Go to File > Print Layout to open the Print Layout utility. There's a blank white representation of your print paper in the work area and any open images on the left sidebar. If you want, you can drag any open image from the sidebar to the blank paper and drop it in position. You can also drag and drop any number of the same image.

Any image you drag over will be selected, as indicated by the bounding box, and dragging any corner in or out will resize the image while maintaining the aspect ratio. Pressing the DELETE key or right-clicking within a bounding box and choosing Remove from the context menu removes a selected image. The context menu also gives you zoom options and allows you to rotate, remove, and position the selected image on the page.

4. Because your logo is already the correct size, you can call up the print layout template for the Avery business card stock. Go to File > Open Template to see the Templates palette.
5. Highlight Avery in the category field and locate template 8374 in the preview pane. Double-click the preview thumb to load the template onto the workspace.



6. You can now drag your image from the sidebar into a cell on the template. In our case, the image will fit the cell exactly but, if the image were larger than the cell, only the portion within the cell would appear or be printed. In cases where the image is larger or smaller than a given cell, you can use the Cell Placement options from the context menu to locate it within the cell. The Cell Placement menu replaces the Image Placement menu when you use a template rather than a blank page.



7. You can drag the image from the sidebar to each individual cell, or you can fill all cells in one fell swoop by right-clicking in a cell and choosing Fill Template with Image.
8. Once done, you can check your printer options with File > Print Setup and then use File > Print to commit your creation to paper.

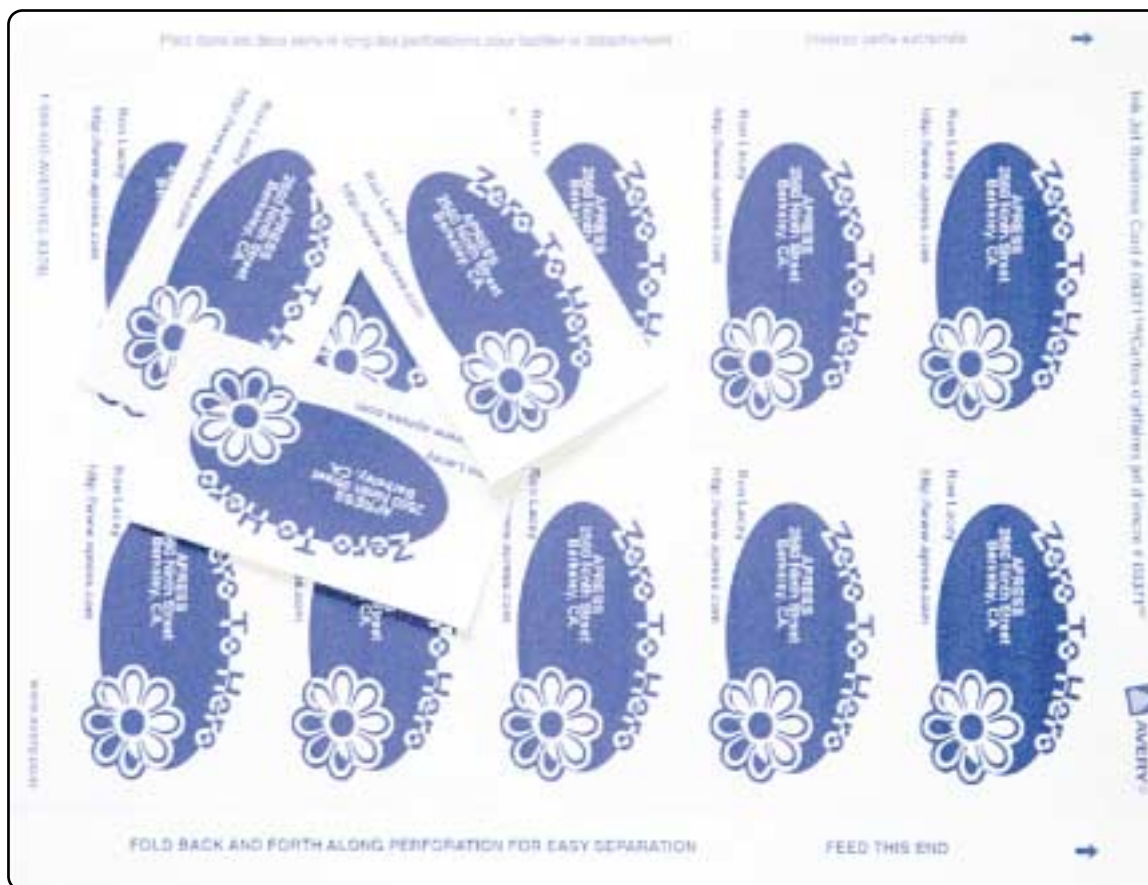
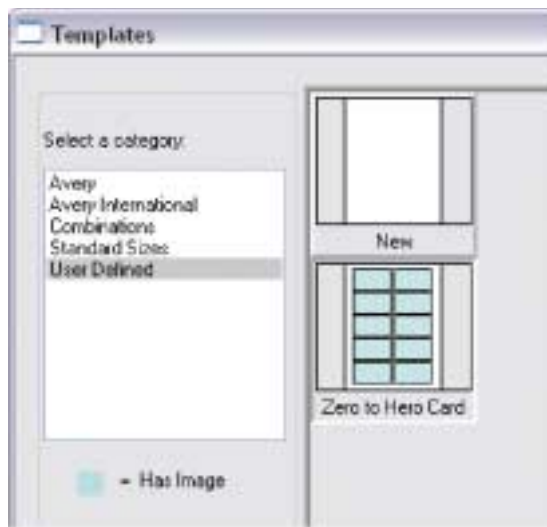
If you don't want to print right away or you think you may need to make more copies at some time in the future, you can save the template compete with images.

9. Choose File > Save Template to bring up the Save dialog box, where you're prompted to give the template a name. To save the images with the template, simply check the Save with images box.



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10. When you want to reload the template, you'll find it listed in the Select a category area of the Templates dialog box, filed under User Defined. Templates with cells containing images have those cells highlighted in cyan in the Templates dialog box. You can also remove templates from this dialog box by clicking them and pressing DELETE.



## Exporting vectors as clip art

If you've ever produced a newsletter, poster, or birthday card using desktop publishing software such as MS Publisher, or if you've ever composed a letter in your word processor using clip art, it's likely that the graphics you imported were vector clip art. Most clip art collections sold are made of vector graphics, usually in Windows Metafile Format (.wmf) or Extended Metafile Format (.emf). The reason for this is the **scalability** of vector graphics. Because this art is often used for enhancing printed documents, the creators have no idea how big an image the user will need: a tiny postage stamp-sized image to use in a letterhead or a large graphic for a banner or poster?

Because neither the .emf nor the .wmf file format supports gradients, patterns, or textures, it's best to use solid color objects for exporting. Anything else can yield unexpected results.

You can export your vector art to .wmf or .emf format in Paint Shop Pro from the Save or Save As dialog box. If your publishing software supports .emf, this is the preferred format.

1. Crop your image tight to the drawing and delete any raster layer, including the background layer if you have one.
2. Go to File > Save As and choose the appropriate format (either .emf or .wmf).
3. Click the Options button in the Save As dialog box and select Save bitmap and vector data (after you set this option once, the save options will default to it whenever you save to this format again).
4. Choose a file name and a location to save the file to.

Now you can use your favorite desktop publisher to create personalized newsletters and other print projects.

