HOW-TO

Understand and USE VECTOR FILES

Last month's "How-to" article addressed bitmap files (TIFF, JPEG and GIF). Now let's turn to vector files, which include WMF and EPS formats.

With vector files, you edit objects within a picture, rather than editing the pixels that form the picture. Vector files consist of groups of objects formed by a series of points connected by straight or curved lines. Behind the scenes, mathematical equations define each object in the image.

You can change each object without disturbing the other elements. You can even combine two or more vector files into one new image.

The primary advantage of vector files is that you can freely reduce or enlarge images without distorting them and without making them look stair-stepped or ragged (as happens with bitmapped images when they're enlarged). With any resizing, vector images retain their clarity and detail. That makes WMFs ideal for enlarging a picture for banners, posters and other large items.

Another advantage of vector files is that they're typically smaller than bitmap files, so they require less storage space and print more quickly.

One disadvantage of vector images is that WMFs are only for PCs, while EPS files are only for Macs. Plus, not all images work as vector files; for example, very detailed pictures would require the creation of too many objects, subtle shading, tones, textures and so on.

For *Newsletter Newsletter* subscribers, vector images can't be altered with the online Caption Editor, which is a tool for bitmap art. But it's still possible for you to insert the perfect caption onto a WMF image or to edit the picture itself.

Programs you can use to create or edit vector art include Adobe Illustrator, CorelDRAW, Macromedia FreeHand, Microsoft Draw (available within most Microsoft Office programs, including Word and Publisher), Serif DrawPlus and SmartDraw.

This article provides steps for editing WMF files in Microsoft Word, Publisher and PowerPoint. Note that the steps may differ slightly, depending on the version you're using. Refer to your program's Help menu for answers to any questions.

Microsoft Word

1. Insert the WMF image into your document.
2. Select the WMF image.
3. Use the cursor to resize the entire piece, if desired.
4. Right-click on the picture and select "Edit Picture" from the small pop-up menu.
5. Hover the cursor over any object or text character in the image. When a small, crossed-arrow icon appears with the cursor, left-click to select the object. (Hold down the Shift key to select more than one object at a time.)
6. Delete, move, resize or copy and paste individual objects or letters.
7. Change an object's color by selecting the object and then using the "Shape Fill" tool (paint bucket) found on the Format menu.
8. Change any individual object's shape by right-clicking on the shape and selecting "Edit Points" from the small pop-up menu. Drag individual points to reshape the object.
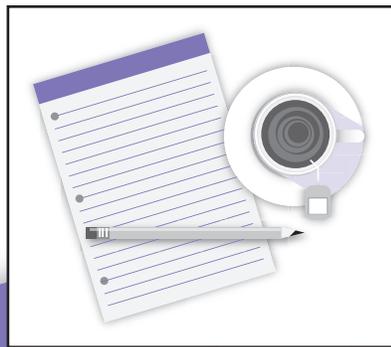
▲ The above EPS has been reduced to 33%.

▼ The image below is enlarged 120%.

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9. When you've finished editing the objects, regroup them by selecting all the objects (hold down the Shift key while selecting). Right-click and then choose Group.

Word's WMF editor doesn't have its own fonts, so you have to type into a text box to add a new caption. Click "Text Box" (from the "Insert" menu). Then type the new caption and set its font, size and other properties the same way you would in any Word document.

If you want to use the finished art in another program, you can edit it using Word and then copy and paste it into the target program.

Microsoft Publisher

1. Insert the WMF image into your document.
2. Select the image.
3. Click the "Arrange" menu, and then "Ungroup."
4. Click "Yes" when asked if you want to convert the image to a Microsoft Office drawing object.
5. Click "Arrange" and "Ungroup" (again).
6. Delete, move, resize or copy and paste individual objects or letters.
7. Change colors and other properties
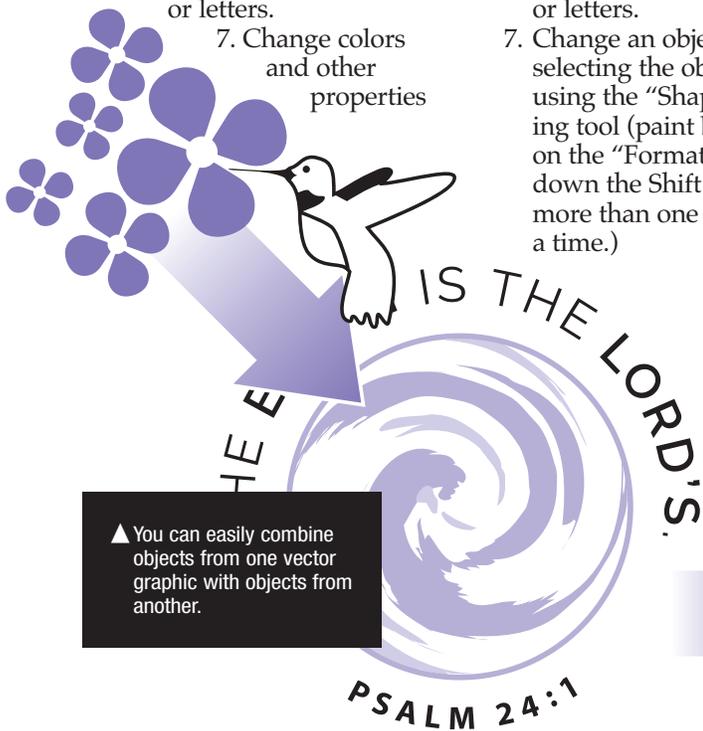
by double-clicking on each object (opens the "Format Auto-Shape" window). Note: If a white outline appears around an object, change the line color to match the fill color, or mark the line color as "No Line."
8. Change any object's shape by selecting "Edit Points" from the "Arrange" menu. Drag individual points to reshape the object.
9. When you've finished editing the objects, regroup them by selecting all the objects and then choosing "Arrange" and then "Group" or "Regroup."

Microsoft PowerPoint

1. Insert the WMF image into your presentation.
2. Select the WMF image.
3. Right-click on the picture and select "Group" and then "Ungroup" from the small pop-up menu.
4. Click "Yes" when asked if you want to convert the image to a Microsoft Office drawing object.
5. Repeat step 3 ("Ungroup" again).
6. Delete, move, resize or copy and paste individual objects or letters.
7. Change an object's color by selecting the object and then using the "Shape Fill" drawing tool (paint bucket) found on the "Format" menu. (Hold down the Shift key to select more than one object at a time.)

▲ Removing or adding text and changing colors in a vector graphic is a snap.

8. Change any object's shape by right-clicking on the object and selecting "Edit Points" from the small pop-up menu. Drag individual points to reshape the object.
9. When you've finished editing the objects, regroup them by right-clicking on any object and then choosing "Group" and then "Regroup" from the small pop-up menu.

No matter what program you use, editing WMFs is a great way to customize images for your publications. *N*

▲ You can easily combine objects from one vector graphic with objects from another.