

# Adobe<sup>SM</sup> Customer Services

## Placed Art Tips

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Adobe Illustrator™ lets you place images created in other applications within your artwork. Placed images must be in EPS format. In Adobe Illustrator, placed images act as filled objects. You can rotate, shear, and scale the images, or draw on them. You cannot, however, alter the artwork within a placed image itself. This technical note discusses considerations when using placed art in Adobe Illustrator.

### RESOLUTION GUIDELINES

If the placed image was created in a pixel-based (or bitmapped) application, such as Adobe Photoshop™, the resolution is set in the original application. You do not have the ability to change the image independent of the resolution, as you can with vector-based Adobe Illustrator images.

Here is an example of what happens when you edit a resolution-dependent image. When you scale up (enlarge) a pixel-based image, you spread existing pixels across a larger area and thus lower the resolution. For example, a 1-inch by 1-inch file at 100 pixels per inch (ppi) scaled up to 200-percent (to 2-inches by 2 inches) results in a 50-ppi image in Adobe Illustrator. The reverse is true if you scale down a pixel-based image: the resolution increases. It is a good idea to import your placed image into Adobe Illustrator at its final size and resolution. If necessary, use Adobe Illustrator to position, rotate, and skew the image.

To determine the best resolution to use in the original application, use the line screen frequency, specified as lines per inch (lpi), of your final output device. The image resolution in the original application should be approximately two times the lpi of the halftone screen you want to use. For example, a 300-dpi laser printer can produce a halftone screen of 53 lpi, so the resolution of the pixel-based image should be 106 ppi; a high-resolution imagesetter at 2540 dpi can produce a halftone screen at 150 lpi, so the resolution of the pixel-based image should be 300 ppi; and so on. Using higher resolutions than necessary does not improve the image quality and may slow printing.

*Note: Please consult your printer manufacturers documentation to determine what halftone screens your output device can achieve. If you are only printing a proof to the LaserWriter, and will later be printing to a higher lpi device, use the resolution appropriate for the higher device.*

### CONVERTING TO CMYK COLOR MODE

Before placing color Adobe Photoshop images in Adobe Illustrator, be sure to convert them to CMYK mode first if you plan to produce color separations (through Adobe Separator™, QuarkXPress®, Aldus PageMaker®, and so on). If you place a color image from Adobe Photoshop in Adobe Illustrator and cannot separate the image correctly, the image probably was saved in

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RGB mode and needs to be converted to CMYK in Adobe Photoshop.

### **USING DCS 5 FORMAT FOR IMAGES PLACED IN ADOBE ILLUSTRATOR**

The desktop color separation (DCS 5) format is used to produce color separations from applications that recognize the format, including high-end color applications such as Adobe Photoshop. An extension of the standard Encapsulated PostScript (EPS) format, the DCS 5 format provides five separate EPS documents. Four of the files contain the high-resolution color information; the fifth, or *master*, file contains a low-resolution preview of the image.

If you want to print directly from Adobe Illustrator or place your Adobe Illustrator file in another application such as QuarkXPress or Aldus PageMaker, first save the image in the original application in EPS format only. Do not use DCS 5 options.

If you will use Adobe Separator to color-separate the Adobe Illustrator file, you can use the DCS 5 format for images placed in Adobe Illustrator. In this case only, in Adobe Illustrator, choose Place Art from the File menu to place the DCS 5 master file in the Adobe Illustrator document. When you have finished working with the Adobe Illustrator document and are ready to color-separate it in Adobe Separator, save the file in Adobe Illustrator in the EPS format; specify either a 1-bit or 8-bit Macintosh preview and Illustrator 5 compatibility. Deselect the Include Placed Images check box; a dialog box will then warn you to select the Include Placed Images option. Disregard the warning, and select the Save Without Placed Images button. To separate the Adobe Illustrator file from Adobe Separator, you must store all five DCS 5 files, the source files for any other images that are placed in the Adobe Illustrator artwork, and the Adobe Illustrator file in the same folder.

### **SAVING ADOBE ILLUSTRATOR FILES CONTAINING PLACED IMAGES**

If you are working only in Adobe Illustrator (and not in Adobe Separator, Aldus PageMaker, QuarkXpress, etc.), save the file in the Illustrator 5 format. This is the most compact file format.

To open or print an Adobe Illustrator file with placed images in another application (including in Adobe Separator), save the file in Adobe Illustrator in the EPS format. Select the Include Placed Images option. (DCS 5 users must follow the instructions for the DCS 5 format in the previous section.) To be able to reopen a file with placed images in Adobe Illustrator (whether or not you select the Include Placed Images option), you must have the original source files for the placed images available.

### **TRAPPING PLACED IMAGES**

Adobe Illustrator 5.5 contains a new Trap filter, available in the Pathfinder submenu of the Filter menu. This filter does not work with placed images.

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When an image is placed within Adobe Illustrator, it acts as a filled object. Placed images will always knock out images or colors layered beneath them. You can create a choke trap against a placed image by creating a rectangle around the placed image. Paint the rectangle with a fill of none, and stroke with the color you want to trap. Mark the stroke to overprint. Make sure that the rectangle is in front of the placed image. If your placed image contains a photograph or blends, or is placed above a halftone or blend, consider using a keyline around the image instead of trapping it.

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