

Lesson 7

Recreational catalog



You complete the annual “Best Of” catalog for Utah Gear, a fictional company specializing in recreational equipment. Type, colors, and graphics are designed both to draw customers to the products and to print successfully on press. Adobe Systems extends its thanks to Recreational Equipment Inc., which supplied all text and props for this project. Some product information has been modified slightly for these training materials.

In this project you will complete a catalog that will be printed by a commercial printer. You work with a variety of imported graphics, including scanned photographs, and Kodak Photo CD images, as well as colors, links, inline graphics, and various file formats. You also learn how to set up color separations to print to an imagesetter, and explore issues that affect color reproduction.

In this project you learn how to do the following:

- Insert inline graphics.
- Create custom rules.
- Edit a spot color.
- Work with color in the context of commercial color printing.
- Manage linked graphics.
- Import a Kodak Photo CD® image.
- Prepare files for a prepress service provider.

This project should take you about 2 hours to complete.

Before you begin

As before, you delete the existing PageMaker preferences or configuration file to return all settings to their defaults and make sure that the fonts for this project are installed. Then you open and inspect a final version of the document that you create in this project.

1 Before launching PageMaker, return all settings to their defaults. See “Restoring default settings” in Lesson 1.

2 Make sure that the fonts are installed on your system. On Windows, you need Minion; Minion, Bold; Minion, Bold Italic; and the Myriad Multiple Master family of fonts. On the Macintosh, you need Minion, Minion Semibold, Minion Semibold Italic, and the Myriad Multiple Master family of fonts.

3 Start the Adobe PageMaker application, then open the 07Final.p65 file in the 07Project folder. If the publication window does not already fill the screen, click the Maximize button.



4 To see a self-running “slide show” presentation of the catalog, hold down the Shift key and choose Layout > Go to Page. When you use the slide show features, PageMaker automatically hides the palettes, and each page in the publication displays in sequence.

5 Click the mouse button to stop turning the pages.

6 Leave the final file open so you can use it as a visual reference as you work through the project.

This publication contains the first five pages of the catalog, including the cover, contents page, and several partially completed pages where you will add product photographs to the layout.

The document master consists of a simple three-column grid with a one-half-inch gutter. The partially empty pages have the major graphic elements already in place. The template has text styles defined in the Styles palette, and custom colors defined in the Colors palette.

You will now open and save the copy of the publication in which you will work.

1 Open the 07Begin.t65 file in the 07Project folder.

Next you will make sure that a certain printer description file (PPD) is installed. You will choose it later in the lesson.

2 Choose File > Print and make sure Agfa 9800 appears in the PPD pop-up menu, and then click Cancel. If it is not present, you must install it from the original PageMaker CD-ROM; simply follow the same installation instructions provided in the *Adobe PageMaker 6.5 Getting Started* guide, but instead of installing the entire package, use the Custom option and select only the

PPDs you want. You do not need to restart the system after installing a PPD. It will be available the next time you choose File > Print for a PostScript printer in PageMaker.

3 Save the untitled document in the 07Project folder as 07Work.p65. If the publication window does not already fill the screen, click the Maximize button.

Placing a Kodak Photo CD image

You start working on the catalog by placing a Kodak Photo CD photograph on the cover. A Photo CD stores an image in several standard resolutions for popular uses, such as computer display or reproduction on a printing press. PageMaker chooses a high-resolution version by default, but you can specify a new size and resolution as you import the image into PageMaker. You can apply your changes to the original Kodak Photo CD file, or you can save the settings with the image in CIE Lab TIFF format. The CIE Lab color model contains device-independent color information that can reproduce color accurately on a PostScript Level 2 printer.

1 On page 1, the cover of the catalog, choose File > Place, open the 07Project folder, and double-click 07Img14.PCD.

Note: In Windows, if the file doesn't appear in the list, choose All Files for Files of Type.

Because you selected a Kodak Photo CD image, PageMaker displays the Kodak Photo CD Import Filter dialog box, which contains a preview of the selected image. Photo CD images are scanned directly from slide or negative film, so they always appear in landscape (wide) orientation before you import them.

2 Select Save to CIELAB TIFF File.



Selecting this option will save a TIFF version of the image with your settings on your hard disk, letting you use the image the same way as other imported graphics. If you don't select this option, the original Photo CD must be in the CD-ROM drive for the image to stay linked with the publication.

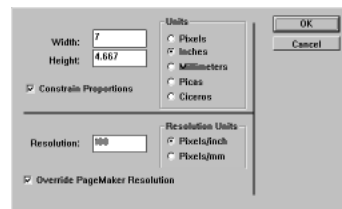
3 In the Image Enhancement section, select Medium for Sharpen Output, and then select Auto-Color Balance. Click OK when a warning message appears.

Note: *Auto-Color Balance is useful only when the lightest point in a picture should be pure white. Otherwise, Auto-Color Balance may introduce an unwanted color cast.*

Although the default resolution would be adequate for a commercially printed publication, a file at that resolution would be unnecessarily large for this lesson, so you'll specify a lower resolution.

4 Click Change. Select Constrain Proportions, and make sure Units is set to Inches.

5 Enter 7 for the width. Select Override PageMaker Resolution, and set the Resolution to 100 pixels per inch.



For real-world production, a general guideline is to specify a resolution of twice the screen ruling—lines per inch (lpi)—that will be used to print the image. For this project, a resolution of 100 is sufficient and uses less disk space and memory.

6 Click OK, and click OK again to close the Kodak Photo CD Import Filter dialog box.

Because you selected the Save to CIELAB TIFF file option, a dialog box appears where you can name the file.

7 Name the file 07Photo.tif in the 07Project folder, and click Save. When a window appears asking if you want to include the graphic inside the publication, click No. This creates a link to the external file instead of copying the file into the publication.

Note (Macintosh only): If PageMaker displays an alert telling you that there is not enough memory to place the image, increase the memory size for PageMaker. For more information, see the documentation that came with your Macintosh.

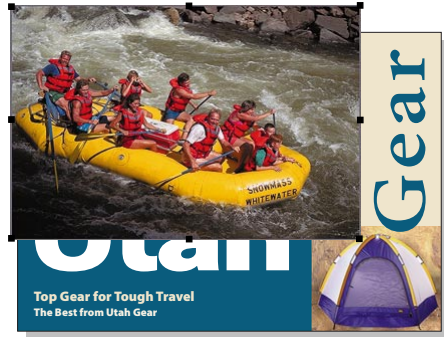
PageMaker creates the new TIFF file and displays the loaded graphic icon. As you move the icon, the horizontal and vertical rulers display indicator lines to show the position of the top left corner of the graphic. You can also check the position using the X and Y values in the Control palette. On the rulers and in the Control palette, negative values are to the left of or below the zero point of the rulers.

8 To place the TIFF image, position the loaded icon so that X is -1p6 (left of the page) and Y is -4p6 (above the top of the page).



If you want to reposition the page without losing the loaded graphic icon, select the hand tool (⌘) and hold down Alt (Windows) or Option (Macintosh) to drag the page.

9 Click to place the image.



10 While the image is still selected, choose Element > Arrange > Send to Back.

If the image draws too slowly on your screen, you can speed redraw by lowering the display resolution of images in the publication. This does not change the resolution at which images will print.

11 Choose File > Preferences > General. Select Standard for Graphics Display, and then click OK.

Remember to turn high-resolution graphics display back on when positioning elements precisely over images, or when checking the publication closely before printing.

12 Save 07Work.p65.



If high-resolution graphics display is off, you can temporarily view graphics at high resolution without turning it on in the Preferences dialog box. Hold down Ctrl+Shift (Windows) or Control (Macintosh) as you redraw the screen (for example, when changing the view).

Cropping an image

The part of the image that hangs out over the edge is called a *bleed* and is necessary for printing images that come all the way to the edge of the paper. To evaluate the composition of the page, however, you will want to crop the bleed temporarily. Before you print separations, you'll pull the bleed back out again.

Note: *If this publication was really going to press, elements currently touching the page edges would extend past them so that they can bleed properly. For simplicity of viewing, bleeding elements have been cropped to the edge in this publication.*

1 To crop the bleed, select the cropping tool (⌘) from the toolbox. Position it over the upper left corner handle of the image, and drag inward until the edges of the image are even with the edges of the page. Remember that you can use the rulers or the Control Palette to help you position; the top left corner of this page is 0,0 on the rulers.



2 Save 07Work.p65.

Working with color

Many print jobs are printed using either spot or process color printing methods. *Spot color* uses a separate ink to print each color in the publication, which can allow accurate color reproduction. However, spot color cannot easily reproduce the thousands of colors in a photograph, because it would require too many separate inks. *Process color* reproduces a wide range of colors using just four standard inks, by combining the inks in varying proportions on a page. When you want to reproduce photographs or other art with many colors, process color is more economically feasible than spot color, but not all colors can be reproduced accurately.



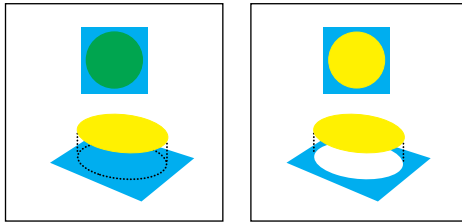
The *Print Publishing Guide*, a book included with Adobe PageMaker, is an excellent source of information on printing processes.

Printing overlapping colors on press

Most color printing inks are partially transparent, so printing one ink on top of another usually alters the color of both inks. For spot colors, PageMaker attempts to avoid this effect by using the standard printing industry practice of *knocking out*, or removing, inks where they print below the topmost ink, keeping the color pure.

In the following example, the spot ink of the shape knocks out the background ink. On the black separation, the shape appears as negative space in a black background.

If the spot ink were to *overprint* the black, the two inks would mix and the result would be darkened by the black. To produce the results you expect, PageMaker creates knockouts by default when you specify color, though you can choose to overprint.



Shape overprints

Shape knocks out

Note: In general, process inks do not knock each other out because they reproduce a color by being combined. However, process inks can be knocked out by a spot color.

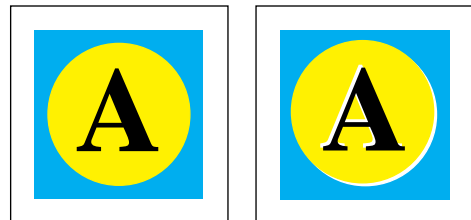
Misregistration and trapping

When you prepare a publication for commercial printing, you must take printing requirements into account in advance of printing. Failure to do so often results in unexpected costs and delays. As you work through this publication, you will specify and adjust colors with press requirements in mind.

When you print separations, you create a separate set of paper or film images for each ink used in the publication. A commercial printer uses these separations to create the plates used to print the job—one plate for

each ink. This publication will use five inks—cyan, magenta, yellow, black, and PANTONE 5405 CVC.

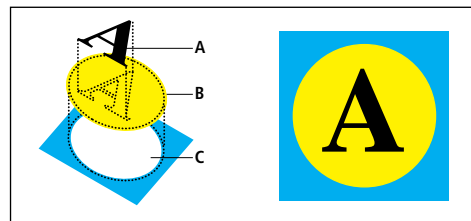
When a file is printed by a commercial printer using printing plates, the paper passes between rollers for each ink used in the publication. Each time the paper passes a roller, there is the possibility of misalignment or *misregistration*, if the paper is stretched or compressed by the printing press. Misregistration can cause thin gaps of white (often called *light leaks*) or color shifts between adjacent objects on the page.



Registration

Misregistration

To compensate for this misregistration, you can use a technique called *trapping*, which overlaps adjoining color areas slightly, preventing gaps between colors.



A. Character overprinted **B.** Circle trapped by spreading its edges **C.** Circle knocked out of underlying object

The trapping process has many variables. Light objects on dark backgrounds are trapped differently from dark objects on light backgrounds. There are special considerations for text, black objects, and imported files. The amount of trap varies, depending on the paper, print quality, and printing press.

Trapping can be daunting for even the most experienced designer. It is essential that you work closely with your printer or prepress service provider to avoid costly complications when you print.

Trapping cannot make a publication completely perfect—the way trapping affects the edges of type and graphics can actually make them look less polished. When you use trapping, your goal is to minimize the negative effects of misregistration while keeping the detrimental effects of trapping under control. In some cases it is actually better not to trap. Your commercial printer can help you decide.

This full-color catalog is currently designed to be printed using the four process ink plates: cyan, magenta, yellow, and black. Discussions with the commercial printer revealed several potential problems with the current design. For example, on pages 3 through 5, product price text is currently specified as a red process color, which is likely to lose legibility if misregistered.

To solve this problem, the printer has recommended converting one of the process colors to a spot ink. This will create a fifth plate which will use a dark blue-green spot color from the PANTONE color library. In this project you will replace the current blue process color with a PANTONE spot color.

For this catalog publication, you will set up the Colors palette by deleting unused colors and then redefining the blue process color as a PANTONE spot color.

Redefining a color

In the next steps, you redefine the blue process color as the PANTONE 5405 spot color. You can edit colors from either the Define Colors command or the Colors palette menu. For this project, you'll use the Colors palette menu.

1 In the Colors palette, double-click the color Blue.

2 Select Spot for Type, then choose PANTONE® Coated for Libraries.

The pop-up menu contains a selection of electronic color swatch books that are included with PageMaker 6.5. Most of the choices are electronic versions of standard swatch books traditionally used by commercial printers.

3 Enter **5405** to select PANTONE 5405 CVC.

4 Click OK to close the Color Picker. Select Overprint.

You selected Overprint because the PANTONE 5405 spot color will often be printed on top of process colors. If PANTONE 5405 is set to knock out the colors underneath it, normal misregistration may introduce undesirable registration gaps between the PANTONE 5405 ink and the underlying process inks when the catalog is printed on press. If you are not sure whether a color should be set to overprint, consult your printer or prepress service provider.

5 Click OK to close the Color Options dialog box.

The icon to the far right of the color name (■) indicates that the color you just added is a spot color.

In the publication, all objects that used the original process color now use the PANTONE 5405 spot color.

6 Save 07Work.p65.

Using a process version of a spot color

On page 1, the solid rectangle behind the Utah text currently uses the PANTONE® spot color. However, there is too much potential for the spot plate to cause a visible break in the type where it straddles the photograph and the rectangle. It's been decided that it would be slightly better to use the process color equivalent of the PANTONE® spot color. For example, the common process inks used by the photo and the rectangle

will make it unnecessary to trap their common edge. You will find the process equivalent of PANTONE 5405 and apply it.



A possible effect of spot ink misregistration

1 In the Colors palette, select PANTONE 5405 CVC. Choose New Color from the Colors palette menu.

2 In the Color Options dialog box, choose PANTONE® ProSim from the Libraries pop-up menu. Make sure **PANTONE® 5405 CVP** is selected by default. Click OK.

***Note:** The PANTONE ProSim library is specifically designed to provide approximations of PANTONE spot inks. However, the process equivalent may not be exact in all cases.*

3 Choose Process for Type, make sure CMYK is chosen for Model, and click OK.

4 Save 07Work.p65.

Applying a color

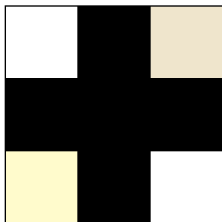
Now you will apply the new process color to the rectangle.

- 1 With the pointer tool, select the solid rectangle under the word Utah.
- 2 In the Colors palette, click the Fill button (☒), and then click PANTONE 5405 CVP.

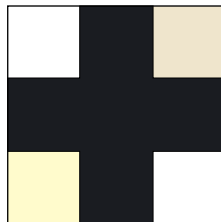
Creating rich black rules

Pages 2 through 5 use wide black rules that abut photographs and areas of solid color. Misregistration on press may cause gaps between the rules and the other areas of the page that they touch. To avoid trapping problems, the thick rules have been drawn as thin rectangles. As rectangles, the colors of their fills and strokes can be specified independently.

Also, process black is designed to be partially transparent so that it mixes well with other process inks. However, this makes process black appear “thin” or weak when it covers an area wider than a narrow rule. Therefore, you will fill the rectangles with a deeper black color called a *rich black*, which includes cyan to make it look more solid.

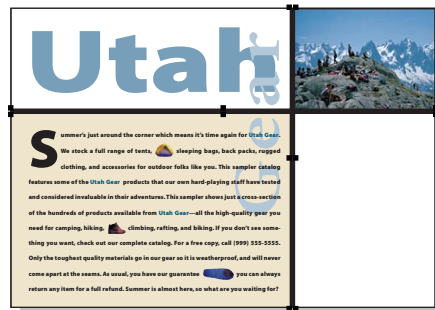


Process black rules
set to overprint



Rich black rules

- 1 In the Colors palette, choose New Color from the Colors palette menu.
- 2 Type **Rich Black** for the name.
- 3 Select Process for Type, and make sure CMYK is selected for Model. Type 10 for Cyan, 0 for Magenta, 0 for Yellow, and 100 for Black. Click OK.
- 4 Go to page 2. With the pointer tool, select the two black rectangles on the page.



- 5 Choose Element > Fill and Stroke. For Fill, choose Rich Black for Color. For Stroke, make sure [Black] is selected for Color, select Overprint, and click OK.

The stroke is a custom width of .3 points to manually trap the edge of the rectangle. Now apply the rich black color to the same objects on the other pages.

- 6 Go to page 3. Repeat steps 4 and 5. Go to pages 4 and 5 and repeat steps 4 and 5 for those pages as well.

Making an overprinting version of a color

Now finish making changes to page 2. By default, PageMaker overprints black type smaller than 24 points, but the S drop cap is 78 points. You will trap it by overprinting. An Overprint option is not available for selected text, but you can create and apply a version of the default black that overprints.

1 Choose Edit > Deselect All to make sure no objects are selected. In the Colors palette, select New Color from the Colors palette menu. Type **Black Overprint** for Name, choose Tint for Type, choose Black for Base Color, and select Overprint. Make sure **100** is the Tint %, and click OK.

In this case it is possible to duplicate the color and overprint it but, with a spot color, that would generate an unwanted additional color separation. The black ink functions as both a spot and process ink, so using a 100% tint ensures that Black Overprint objects print on the same default black separation.

2 Go to page 2. Select the text tool (T), select the S drop cap by highlighting the top of the S in the first line of the paragraph, and in the Colors palette, select Black Overprint.

Note: If you highlight the middle or bottom of the S, you will only be selecting a tab space that exists to make room for the S drop cap.

3 Save 07Work.p65.

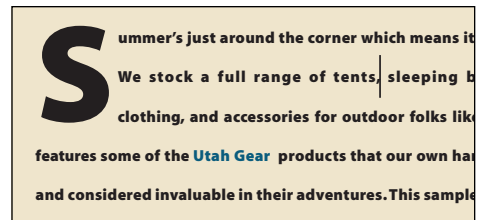
Working with inline graphics

The introductory paragraph on page 2 of the catalog will contain several inline graphics that break up the monotony of the large text block. *Inline graphics* are images that are inserted into a text block so that they stay with the text as it is moved or edited. In the following steps, you will learn how to add inline graphics.

Placing an inline graphic

When you want to add an inline graphic that isn't in the publication yet, you can import it directly into the story.

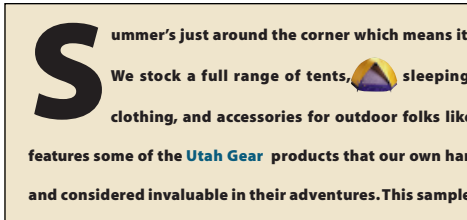
1 Zoom in so that the text in the bottom left corner of page 2 fills the publication window. Select the text tool (T) and click an insertion point right after the comma after the word **tents** in the second line.



2 Choose File > Place and select 07TentIc.tif in the 07Projects folder.

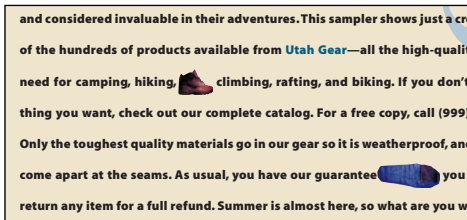
Because you have an insertion point, the As Inline Graphic option is selected. This is what you want, so leave the option selected.

3 Click Open (Windows) or OK (Macintosh).



PageMaker places the image at the insertion point. The graphic is now attached to the text. If you move or edit the text, the inline graphic will follow along with the text. The spacing may not look right, but you will fix it later.

4 With the text tool still selected, click an insertion point after the comma after the word **hiking** in the seventh line. Choose File > Place once more and double-click 07Boot.tif.



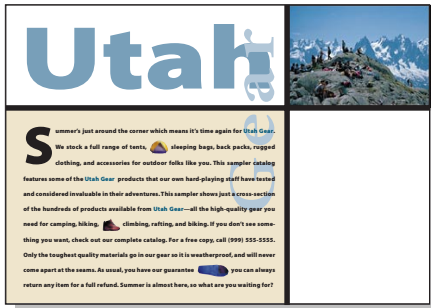
When the graphic is already in the publication, you can make it an inline graphic using the Clipboard. Select the graphic with the pointer tool, choose Edit > Copy (or Edit > Cut), click an insertion point in the text with the text tool, and then choose Edit > Paste.

Adding fixed spaces

You now want to add some space around each inline graphic. You placed each graphic immediately after a phrase, so each one currently has a word space after it, but not before it. One option is to make sure that a regular space character exists before and after the graphic, but if you try this, you may find that there is not enough space around the graphic. High-end publishing programs like PageMaker can vary the width of a regular space character in the course of maintaining the letter spacing, word spacing, and hyphenation settings specified for the publication. When you want to specify an exact amount of space between characters, you can use *fixed* spaces, which cannot be made wider or narrower. Two commonly used fixed spaces are the *em* and *en* spaces. An em space is generally equal to the point size of the font, and an en space is usually 3/4 the point size of the font. On this page, you want to have an en space before and after each inline graphic.

1 With the text tool selected, click to the left of the first inline graphic, and type Ctrl+Shift+N (Windows) or Command+Shift+N (Macintosh) to insert an en space. Click to the right of the graphic, delete the existing space character, and type another en space.

2 Add an en space before and after each of the other two inline graphics, being sure to remove or replace any existing word space that follows each one.



3 Save 07Work.p65.

Attaching rules to text

In addition to attaching graphic images to text, you can attach lines or rules to text to create a variety of effects. Take a look at page 2 of the final file. The table of contents is in front of a striped background. The orange stripes are not graphic elements, but rules, defined as part of the paragraph styles applied to the table of contents text.

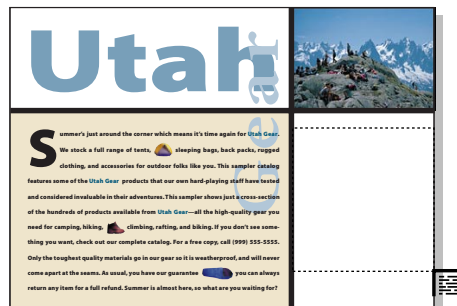
To format the table of contents, you will first place the contents text. Then you define a paragraph style that positions wide rules behind alternate lines of text.

1 Pan the window so that you can see all of the empty space in the lower right corner of the page.

2 Select the pointer tool, and then choose File > Place. Select 07TextA.doc in the 07Projects folder, be sure that As New Story is selected, and deselect Retain Format. Then click Open (Windows) or OK (Macintosh).

You make sure As New Story is selected because you want this story to be separate from any other story in the publication, unlike the inline graphics you just placed, which you intended to be part of the story on the left side of the page.

3 Position the loaded text icon so that the X value in the Control palette is approximately 34p and the Y value is approximately 15p. Place the text on the lower right quarter of page 2 by dragging between the black vertical line and the right edge of the page, then down about 2 inches, as shown below.



4 Select the text tool (T) and select all of the newly placed text. In character view in the Control palette, set the font to **MyriadMM 830 Black 600 No**, the font size (iT) to 17 points, and the leading (iA) to 36 points.

5 Click the Paragraph-view button (¶) in the Control palette. Enter 1p6 for the left indent (↶), and click the Apply button (Apply).

6 If necessary, choose Window > Show Colors to display the Colors palette, and with the text still selected, apply the color PANTONE 5405 CVC.

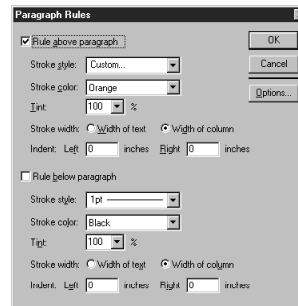
7 Double-click the word **Introduction**. Notice that the selection highlight extends above and below the word. The highlight indicates the height of the leading slug, which is 36 points, as you entered in the Control palette.



8 Choose Type > Paragraph, and then click Rules.

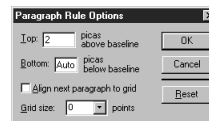
9 Select Rule Above Paragraph. Choose Custom for Stroke Style and enter 36 points (the size of the leading slug) for Stroke Weight. Click OK.

10 Select Orange for Stroke Color, make sure Tint is set to 100%, and make sure Width of Column is selected.

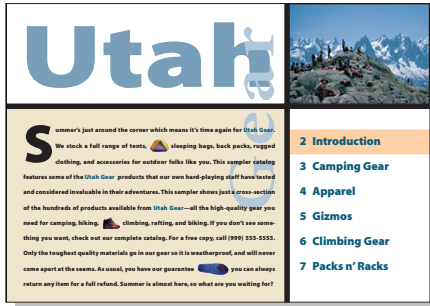


In the next step you will set the vertical placement of the rule. Rules can be positioned relative to either the top or the bottom of the leading slug. The thickness (Stroke Weight) of the rule always starts at the top of the rule and grows downward.

11 Click Options. Type 2 for Top. To close all dialog boxes, hold down Shift (Windows), or Option (Macintosh) as you click OK.



An orange 36-point rule is now attached to the text. The rule starts 2 picas above the baseline and hangs down, allowing the text to appear in the middle of the rule. Now you will define a style based on the text that you just formatted.



One advantage to using paragraph rules is that you can quickly make all rules bleed just by extending the right side of the text block past the edge of the page.

Creating a style based on formatted text

Because you want to apply the rule to several lines of text, it will be more efficient to define a style that includes the rule attributes so you can apply a rule with just one click. You will define a style by example, using text already formatted the way you want it.

1 Make sure the word **Introduction** is still selected. In the Styles palette, press Ctrl (Windows) or Command (Macintosh) as you click [No Style].

2 Name the new style **TOC Rule**. For Based On, make sure No Style is selected. For Next Style, choose Same Style. Click OK.



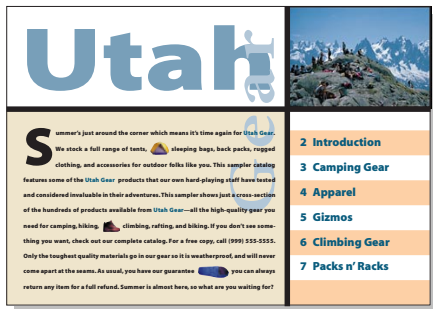
When entering text, you can automatically apply rules to alternating paragraphs as you type by taking advantage of the Next Style option. Define a style named No Rule without the rule attributes. In TOC Style, specify No Rule as the Next Style. In No Rule, specify TOC Rule as the Next Style.

3 Use the Styles palette to apply the TOC Rule style to every other line, creating a set of stripes.

4 Select the pointer tool, click the text block, and make sure that the bottom of the text block windowshade is dragged all the way down to the bottom margin of the page. Select the text tool (T) and click in the empty line below Packs n' Racks, and apply the TOC Rule style to this blank paragraph.

5 Select the pointer tool, select the table of contents text block and examine it. If necessary, adjust the position of the text block so that it exactly fills the width between the

heavy vertical line and the edge of the page. Position the text block so that the last orange rule touches the bottom of the page.



6 With the text block still selected, choose Element > Arrange > Send to Back.

7 Save 07Work.p65.

Editing the color of a style

On pages 3 through 5, product prices currently appear in serif type colored in process red. However, on most printing presses, combining serifs, process color type, and process color backgrounds causes legibility problems whenever misregistration occurs on press, and the type is too small to trap as a process color. The type will hold together much more nicely if it is printed using a spot color. You will edit the style used for prices, replacing the red process color with the PANTONE 5405 spot color you created earlier.

1 Go to page 3, select the text tool (T), and select any of the red prices in the text. In the Colors palette, you see that the applied color is Red.

2 Click the Styles palette tab. In the Styles palette, you see that prices in this catalog use the Price style.

3 Double-click the Price style. Click Char, and choose PANTONE 5405 CVC for Color. To close all dialog boxes, hold down Shift (Windows) or Option (Macintosh) as you click OK.

All of the price text in the publication updates to use the spot color, and the price text will overprint.

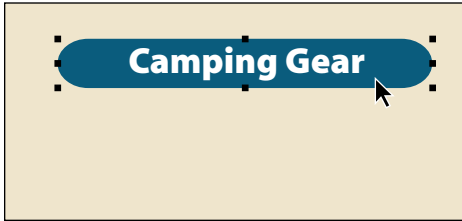
4 Save 07Work.p65.

Making a version of a color that knocks out

At the top of page 4, you find a white heading inside a long shape with round ends. The fill is currently PANTONE 5405, which is set to overprint. However, on the colored background, this heading will print better if its fill knocks out. You will create and apply a version of the color that knocks out.

1 Choose Edit > Deselect All to make sure no objects are selected. In the Colors palette, select New Color from the Colors palette menu. Type **Spot Knockout** for Name, choose Tint for Type, choose PANTONE 5405 CVC for Base Color, and select Overprint. Make sure **100** is the Tint %. Click OK.

2 Go to page 3. With the pointer tool, select the heading graphic and, in the Colors palette, select Spot Knockout.



If you select the text block by mistake, hold down Ctrl (Windows) or Command (Macintosh) as you click with the pointer tool to bypass the text and select the shape under it.

3 Save 07Work.p65.

About graphic file formats

In the next set of topics you will place more graphics into the catalog. PageMaker supports many graphic file formats. The two graphic file formats most often used for high-end color work are EPS (Encapsulated PostScript) and TIFF.

TIFF is the best file format for scanned images or digital paintings because it preserves image quality and reproduces color accurately. TIFF files are bitmap images that consist of a grid of pixels with a specific resolution (in pixels per inch). TIFF and other bitmap formats are created by scanners and

by image-editing and painting programs such as Adobe Photoshop. Although you can change the size and orientation of a TIFF or other bitmap image in PageMaker, the image will display and print faster if you save it at its final size and orientation from your image-editing application.

Most EPS graphics are vector-based files created in drawing programs such as Adobe Illustrator. This kind of EPS file always prints at full resolution and quality even if you resize or rotate it. The high-quality printing of EPS graphics is made possible using methods which can't be displayed on screen on most systems, so an EPS file must include a preview image to display. These low-resolution preview images may not be viewable on all platforms. If a readable preview image does not exist, PageMaker can generate one automatically.

An EPS file can contain a mix of bitmap images and vector graphics, such as an Adobe Illustrator file that includes a TIFF image, or Photoshop EPS file that contains a clipping path. When any kind of file contains a bitmap graphic, you will get best results if you prepare a bitmap image at its optimum size and orientation for your publication before you import it.

Other popular graphics formats, such as GIF and JPEG, are less capable of handling the color information required for high-quality commercial printing.

Using clipping paths for transparent backgrounds

Many images in this publication are photographs that were scanned and then saved from Adobe Photoshop as TIFF files. Notice that most of the product images are obviously not rectangular, but if you select them, their handles indicate that they are actually rectangular images with transparent backgrounds. This is because each image includes a *clipping path* that was applied in Photoshop. A clipping path masks out a portion of an image, usually a background. Without a clipping path, a TIFF image would appear on a colored area with an undesirable white rectangular background.

Using Adobe Photoshop 3.0 or later, you can include a clipping path with an image saved as an EPS or TIFF file. On Windows 95, a clipping path displays more accurately if it is saved with a file in the TIFF format.

Placing and linking a graphic

When you place a graphic, PageMaker creates a screen-resolution preview image so that you can position, resize, rotate, and crop the graphic quickly. The changes you make to the low-resolution preview are applied to the full-resolution original when you print the publication.

PageMaker also creates a link that associates the graphic inside the publication with its original version on disk, so that you can track updates to the original. PageMaker creates links for text files as well, but text files are always included in the publication so that you can edit the text.

When placing a graphic, you have the option of copying the graphic completely into the publication, or including only a screen-resolution preview of it. As a rule, it's better to leave a large graphic outside the publication, particularly if you use the large graphic more than once. Copying entire graphics into a publication means you duplicate them each time you place them, consuming disk space unnecessarily. When you place just a screen preview of a graphic and its link, PageMaker can still print it at high resolution by following the link to the original graphics file.

In the following steps, you place several graphic images and explore linking options. As you place the following images, refer to 07Final.p65 or to the illustrations in this chapter as a guide.

- 1 Choose Edit > Deselect All, and go to page 3. Choose File > Place, and double-click 07Tent1.tif to place it as an independent graphic. If a dialog box appears asking you if you want to include a complete copy of the graphic in the publication, click No.

2 Click the loaded graphic icon under the Camping Gear heading. Click the top left reference point of the Proxy icon in the Control palette, and drag or nudge the tent graphic, or type values in the Control palette, so that the X value is approximately 33 and the Y value is approximately 4p5. There is extra space to the left of the graphic because you will be placing another graphic next to it later.



Managing links

As you work on a PageMaker file, you may occasionally move, rename, or update a file you have placed. When this happens, the link to that file is no longer current.

You can use the Links dialog box to see the status of all the linked files in a document and to update the links.

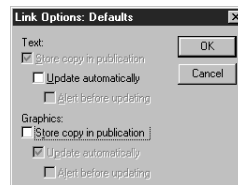
Setting link option defaults

When you placed the tent image, PageMaker interrupted the place procedure to ask whether you wanted to import the full-resolution version or not. This can become tedious if you will be importing many images. If you always want PageMaker to import just the link to the original and create a screen-resolution preview for the layout, you can change the link option defaults.

1 Choose Edit > Deselect All to be sure no graphic is selected.


If a graphic is selected, the next step will set the option for only that one graphic, rather than set a new default.

2 Choose Element > Link Options. In the Graphics section, deselect the option for Store Copy in Publication, then click OK.



The Link Options: Defaults dialog box controls how placed objects are stored and updated. The Store Copy in Publication option to store a file outside the publication is only available for graphics. Text files are always copied into a publication so that you can edit the text in PageMaker.

Now all placed images will automatically remain outside the PageMaker document. If you are taking your file to a service provider, you need to bring all the linked graphic files with you. Without them, the file will be printed using the screen-resolution preview images, which do not include enough information for high-quality printing.

 When you take your publication to a service provider, you can use the Save for Service Provider plug-in (included with PageMaker 6.5) to automate the process of gathering all the files your publication needs to print properly, such as fonts and linked graphics. For more information, see “Verifying and packaging a publication for commercial printing” on page 234.

3 Choose File > Place and double-click 07Tent2.tif in the 07Projects folder. The file-size alert doesn’t appear because you changed the link option default. Click to place the image to the left of and below the first tent. In the Control palette, fine-tune the position of the tent by clicking the top

left reference point in the Proxy icon and making sure that 24 picas is entered for X and 12 is entered for Y.



Blue Kazoo
The backpacker's choice, Blue Kazoo has continuous channel construction to let you stuff the 550-oz goose down where it's needed. Custom storage sack. Royal. Imported. Specify right or left zipper.
UG 4981 C18
\$199.99

REI Trail Dome
One has nothing on, the Trail Dome is freestanding, easy to set up and offers a generous 32' of headroom. High quality features include 700 aluminum alloy poles, 1.55-oz. nylon taffeta with double tear-resistant coatings and seam-sealed flaps for unbeatable waterproofing protection.
2-person tent
UG 5883 C118
\$136.00
4-person tent
UG 5883 C118
\$290.00

Camping Gear

Z-Rest and Therm-a-Rest®
These sleeping pads offer a soft, supportive sleep. Come in Regular or Long sizes.
Therm-a-Rest® UG 5228
\$65.00
Z-Rest UG 5229
\$25.00

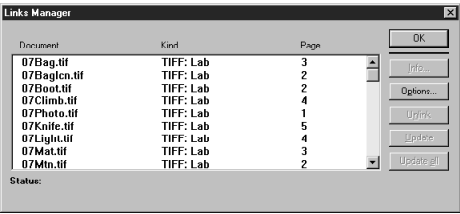
Kelty Trekker
The Kelty Trekker is a backpacking classic available from Unib Gear in comfortable models for both men and women. A newly indestructible 10.5-denier and plenty of gear pockets make this a great pack for short or intermediate hikes. Side stabilizer straps help balance your load, and an adjustable suspension system, covered shoulder straps and a full-wrap waistband add comfort.
Available in regular, medium and large sizes for men, small sizes for women.
UG 6931 C4E
\$110.00

4 Save 07Work.p65.

Viewing the status of publication links

The Links Manager dialog box is specifically designed to help you monitor link status and resolve linking problems.

1 Switch to the 07Final.p65 publication, and choose File > Links Manager.



Document	Kind	Page
07Bag.tif	TIFF: Lab	3
07BagIcon.tif	TIFF: Lab	2
07Boot.tif	TIFF: Lab	2
07Climb.tif	TIFF: Lab	4
07Photo.tif	TIFF: Lab	1
07Knife.tif	TIFF: Lab	5
07Light.tif	TIFF: Lab	4
07Mat.tif	TIFF: Lab	3
07Mtn.tif	TIFF: Lab	2

Status:

The Links Manager dialog box displays a list of imported text and graphic files in your publication, along with file format information and page locations. When files are not up to date, a symbol appears to the left of the filename. If no symbol appears next to the document name, the document is up to date. As you select each item, a message below the list indicates its current status.

2 Click OK.

Simulating link status changes

In the following steps, you will move one graphic file and simulate updating another file by replacing it with a copy that has a newer date. Then you will look at the Links Manager dialog box to see the results.

1 Do one of the following:

Macintosh Go to the Application menu in the top right corner of your screen and choose Finder. Open the 07Project folder, and display the Save folder and the Links folder in separate windows. This makes it easier to move files around.

Windows Choose Start > Programs > Windows Explorer. Navigate to the 07Project folder.

2 Drag 07Tent2.tif from 07Project into the Links folder.

You have moved the file, so the file location recorded in PageMaker is no longer true.

In the following simulation, the file does not change location, but you replace it with a more recent version, to simulate a file that is updated.

3 Drag 07Pants.tif from the 07Project folder into the Save folder. Then drag the copy of 07Pants.tif from the Links folder to the 07Project folder. Be sure to begin by dragging the copy in the 07Project folder, not the one in the Links folder.

By moving 07Pants.tif into the Save folder instead of in the Recycle Bin (Windows) or Trash (Macintosh), you can easily return the project to its original state when you have finished.

Because the copy you moved into 07Project has a more recent date than the one that you moved from 07Project, you have simulated updating the 07Pants.tif file in another application, such as Adobe Photoshop.

4 Return to 07Final.p65 in Adobe PageMaker and choose File > Links Manager.

Notice that there is a diamond symbol (Macintosh) or an x (Windows) next to 07Pants.tif. The diamond or x indicates that the file is stored outside the publication and that the external copy has been modified. This is because you replaced the file with a file with a different modification date.

In a production setting, this would happen if you updated the image and then saved it.

There is also a question mark next to 07Tent.tif. This indicates that the file is no longer being stored at the location recorded when the file was placed. In a production setting, this would happen if the original image was moved or renamed.

To the far right of both files is an upside-down question mark. This lets you know that the file won't print in high resolution, either because the graphic is no longer stored where the link says it is, or it has been updated and no longer matches the low-resolution preview you currently see in the publication.



There are many other symbols that can appear in this Links Manager dialog box. If you aren't sure what symbols mean, select an item and read the Status area at the bottom of the dialog box, or see page 371 in the *Adobe PageMaker 6.5 User Guide*.

If you tried to print the publication now, the graphics with broken links would not print properly. To resolve this, you'll update the links.

Relinking a file

The tent graphic was moved, so you need to create a link to the file in its new location.

1 In the Links Manager dialog box, select 07Tent2.tif.

A message appears at the bottom of the dialog box, indicating that the file is missing; moving the file broke the link.

2 To create a link to the file in its new location, click Info. Then open the Links folder, select 07Tent2.tif, and click Open (Windows) or Link (Macintosh).

PageMaker updates the link to the new location of the file. The question mark disappears from the item in the link list.

Updating a link

The pants graphic still has the same name and location, but you have simulated editing the file in another application. If the graphic were stored outside PageMaker, you wouldn't have to do anything; PageMaker would automatically read the current version of the file. This graphic is stored inside the publication, however, so you need to tell PageMaker to update its internal copy of the file so that it is storing the latest version.

1 In the Links Manager dialog box, select 07Pants.tif.

2 Click Update to update the link to the file and the preview image in the publication. Click OK.

You simulated file linking changes by moving files around and checking links from the 07Final.p65 publication. Now you'll put the files back in their original places so that you can continue to work from 07Work.p65.

3 In Explorer (Windows) or the Finder (Macintosh), drag 07Pants.tif from the Project folder to the Links folder, then drag the other copy of 07Pants.tif from the Save folder to the Projects folder.

4 Drag 07Tent2.tif from the Links folder to the 07Project folder.

Preparing for commercial printing

In this section, you will prepare the publication and its associated files for the stage of publishing known as prepress. At the beginning of the prepress stage, publication pages are completely designed and laid out, but are not yet prepared for the combination of imagesetter, press, paper, and inks that will be used.

The success of your print job depends on communication with your commercial printer.

Specifying a PPD

PageMaker creates separations based on the characteristics of the selected printer, so in a real-world situation, you would select and install a PPD (PostScript Printer Description) that is appropriate for the printer on which the separations will be output. The PPD that you choose

determines the default settings in the Print dialog box. PageMaker's installer lets you install additional PPDs at any time. Separations from this publication will be printed on an Agfa 9800 imagesetter, so that is the PPD you will choose.

For PPDs to be available, the publication must be composed for the printer (Windows) or a PostScript printer must be selected in the Chooser (Macintosh).

1 In 07Work.p65, choose File > Print.

2 Choose the Agfa 9800 PPD from the PPD pop-up menu.

3 To save your change without printing, hold down Shift as you click Done.

You must choose a PPD that is appropriate for the imagesetter you will use. The printer for that PPD does not have to be attached to your system.

Turning on color management

At the beginning of this project, you placed a Photo CD image into the catalog. Before you can separate it and the other Photo CD images in the catalog, you must turn on a color-management system so that the CIE Lab colors can be converted accurately to the CMYK color model in which the images will be printed.

1 In 07Work.p65, choose File > Preferences > General, and click CMS Setup.

2 Choose On for Color Management, click the Kodak ICC icon on the left, and choose Kodak ICC from the New Items Use pop-up menu.

***Note:** For color management to provide optimal viewing and printing results, you must set the Kodak ICC settings to match the RGB source, monitor, and proof printer you use for the project. For more information about color management, see Chapter 9 in the Adobe PageMaker 6.5 User Guide.*

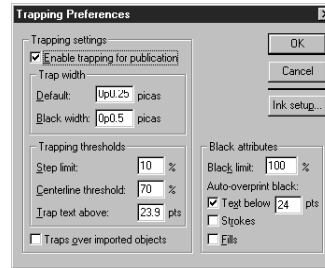
3 Click OK to close the Color Management System preferences dialog box, and then click OK.

Specifying automatic trapping values

You can specify trapping values for objects created in PageMaker. Always consult with your commercial printer to determine the correct values for your project. Trapping values depend directly upon many factors, such as kind of paper and inks being used and the kind of press. In the following steps, you set trapping values for the catalog.

1 Choose File > Preferences > Trapping.

2 Click to select Enable Trapping for Publication.



3 In the Trap Width area, leave the Default set to 0p0.25 (1/4 point).

This is a common trapping value.

The Default option specifies the trap (amount of overlap) for all colors except black. PageMaker applies traps based on a set of internal rules. Usually, lighter colors will expand or spread into adjacent darker colors. Trapping isn't visible on the screen, nor accurately represented by color composite proofs.

4 Leave Black Width set to 0p0.5 (1/2 point).

The Black Width option specifies trap for colors next to or under black. Usually, black width is 1.5 to 2 times the default trap. Again, get this number from your printer or prepress service provider.

5 Leave the three Trapping Thresholds options set to their default values.

The Step Limit sets the threshold at which a trap will be applied. The higher the number, the more extreme the color difference needs to be before PageMaker applies an automatic trap.

Centerline trapping, where a trap grows outward from the center of an edge, is used when colors have similar *neutral densities*, meaning neither color is much darker or lighter than the other. The Centerline Threshold value determines when PageMaker uses centerline trapping placement. Higher numbers use centerline trapping only for very similar colors. Lower numbers use it for a greater relative range of colors.

PageMaker traps only text above the point size indicated in the Trap Text Above option. Smaller point sizes typically overprint if specified to do so in the Black Attributes options.

6 Select Traps Over Imported Objects.

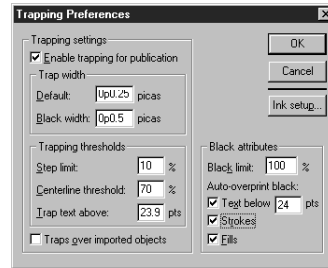
This option enables one or more objects drawn in PageMaker to trap to one another when an imported graphic is between them in the stacking order.

7 Leave Black Limit set to 100%.

The 100% value for Black Limit tells PageMaker that only colors containing 100% black should be counted as black. The Black Limit option is useful when compensating for extreme *dot gain*, in which the porous surface of the paper causes the halftone ink

dots to spread. This most often occurs when printing on newsprint or other low-grade paper stock.

8 In Black Attributes, select the Strokes and Fills options.



This causes the lines and fills of objects that you draw with the PageMaker tools to overprint if they are black. Black objects are usually overprinted.

9 Click Ink Setup.

The Ink Setup button lets you change the neutral density of specific inks. The default values are based on industry standards. A commercial printer would use a densitometer to measure a particular ink's density percentage, and then change the number in this dialog box to reflect the findings. Changing this number will change the way PageMaker traps colors.

10 Click Cancel.

Again, for more information on any of these options, see the *Adobe PageMaker 6.5 User Guide* or the *Adobe Print Publishing Guide*.

11 Click OK, and save 07Work.p65.

Trapping Options affect only elements created in Adobe PageMaker—strokes, fills, rules, and text. You cannot specify traps within imported photographs or illustrations. Any trapping for imported files must be applied within the application that created the image.

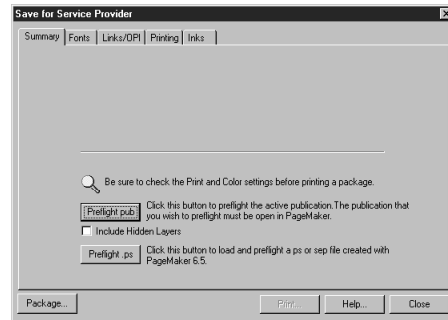
Your commercial printer may be taking advantage of other trapping methods that work with PageMaker, such as the fast in-RIP trapping available through PostScript level 3 imagesetters, or a specialized and comprehensive trapping program such as Luminous TrapWise. If your printer is using another trapping solution, you should not use PageMaker's trapping options. Talk with your printer or prepress service provider to determine who will be responsible for applying traps to your publication.

Verifying and packaging a publication for commercial printing

The success of a remote print job (a job where you must transport the publication files to another location) depends on the presence of elements used in the file, such as fonts, colors, imported graphics, and the tracking values file. Many of these elements are stored outside the publication in various folders or even across a network. You must provide those external elements along with the publication, but tracking them down

can be time-consuming. To automate this task, PageMaker includes the Save for Service Provider plug-in. This plug-in can determine whether all necessary elements are present, gather the files in one place, and create a detailed report of verification results and publication information. This plug-in is a valuable tool even if you print the final separations at your own location.

1 Choose Utilities > Plug-ins > Save for Service Provider.



2 Make sure the Summary tab is selected, and click Preflight Pub. If an alert appears telling you that the publication has not been saved, click Continue to save the publication.

Preflight, a term used by many prepress service providers, means avoiding costly mistakes by verifying that all required elements are present for high-resolution output. The term is taken from the preflight checklists used by airplane pilots.

Some service providers prefer to receive PostScript files from clients, so the Preflight PS button lets you check PostScript files that have already been created by PageMaker.

3 When PageMaker has completed checking the publication, click each of the report tabs.

If there are any problems that would prevent a successful print job, PageMaker will indicate them here. If there aren't any missing fonts or files, you are ready to package the publication and all its elements.

4 Click Package at the bottom of the window. If prompted, click Continue. For Save In, specify the folder Package in the 07Project folder.

When you are preparing a removable cartridge drive to bring to a prepress service provider, the most reliable way is to create the package in a folder on a hard disk first, and then copy the contents of the folder to the cartridge.

Note: *You cannot specify a filename here, as you usually can in a Save As dialog box, because PageMaker is saving all the publication files under their original names.*

5 In the Include section, select Copy Fonts. This ensures that your prepress service provider will have the fonts you used in the publication.

6 Click Notes, and type your name, contact information, and output information. At the bottom, you can type additional instructions or notes for the printer. Click OK.

The next set of options let you open the report automatically in PageMaker, check the links one last time, and specify the report format.

7 Select Auto Open Package Report, Update Links in Source Pub Before Packaging, and make sure Formatted (.p65) is selected for the Report Type.

Note: *For the next step, you will need approximately 12MB of free disk space.*

8 Click Save. Processing may take a few minutes. When PageMaker finishes processing, click Close. You can examine the report. When you finish, close Report.p65.

9 Open the folder Package and take a look at the package you just created.

The folder Package now contains all the files required for prepress output.

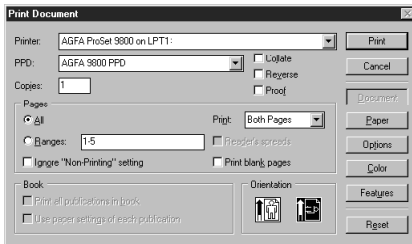


If you want to gather all the necessary files for remote printing (such as at a prepress service provider) but you don't need the level of detail provided by the Save for Service Provider plug-in, you can use PageMaker's Copy Files for Remote Printing option.

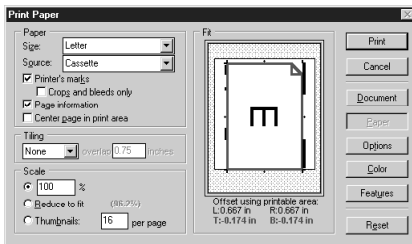
Printing color separations

Before you create color separations, you must tell PageMaker which colors to print, and select other options such as crop marks and registration marks. If you are taking the publication to a prepress service provider, you will not normally be performing the following tasks. If you are a prepress service provider, this topic is recommended.

1 Choose File > Print, and make sure the Agfa 9800 PPD is selected in the PPD pop-up menu.



2 Click Paper. Select Letter for Size, and then select Printer's Marks and Page Information.



These options place crop marks, registration marks, density control bars, and color control bars on the output. All of these help your commercial printer and prepress service provider align separations and check color accuracy. The Printer's Marks option adds 3/4-inch to the size of the paper that is required. The Page Information option prints the filename, page number, current date, and color separation name in the lower left corner of each separation.

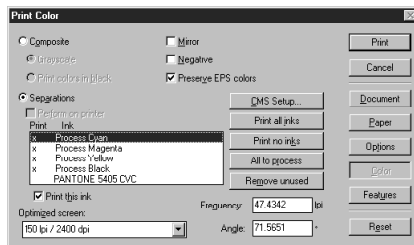
3 Examine the Fit section of the dialog box.

It shows the relationship between the page size of your document and the paper size you selected. Use this dialog box to check whether crop marks, registration marks, and other page information such as color and density, will fit on the paper. These items are all printed outside of the document page, so the physical paper must be larger than the document size to allow for these. If the publication and selected marks are too large for the printable area of the paper, the values appear in red in the Fit area.

4 Click Color, and then select Separations.



If the imagesetter is a PostScript Level 2 device, you may be able to print faster by selecting the Perform on Printer option; ask your prepress service provider if you are not familiar with the equipment.



The Ink column lists the names of each spot and process color ink needed to print the colors in your publication. These inks are the spot and process colors that have been defined in the Colors palette or imported with your placed EPS files.

5 Scroll through the list to examine the inks that are available. Notice that the four process inks have a check mark next to them, indicating that they will be output as separations.

Notice that the PANTONE spot color is currently not set up to be printed. You will turn on this ink.

6 Select PANTONE 5405 CVC in the list, and select Print This Ink.

At this point in a real-world scenario, you would click Print to output the five sets of pages—one set for each ink that you have specified to print.

7 If you have a printer attached to your system, and you'd like to see the separations, choose a PPD appropriate for your local printer, specify settings, and click Print. If you are not going to print, but you want to save the settings you made, hold down Shift as you click Done. If you want to close without printing or saving print settings, click Cancel.



If you are proofing separations to a desktop printer, the page size plus printer marks may be larger than the paper in your desktop printer. You can scale the page to your paper size by clicking Options in the Print dialog box and then selecting Reduce to Fit for Size.

8 Save 07Work.p65.

You've completed this lesson. Congratulations!

Review questions

- 1 How is an inline graphic different from an independent graphic?
- 2 What is a quick way to draw rules behind many lines of text?
- 3 How do you import a graphic with a shape other than a rectangle?
- 4 What is the difference between spot and process color?
- 5 What is the difference between knocking out and overprinting?

Answers

1 An inline graphic is inserted into the flow of text so that it moves whenever the surrounding text moves. An independent graphic is not connected to any other objects on the page (unless you use the Group command).

2 Create one or more styles in which a paragraph has a rule as part of its formatting. To format a paragraph with a rule, click in the paragraph, choose Type > Paragraph, and then click Rules. Select the desired settings and click OK for each dialog box. Then apply this style to as many paragraphs as need rules behind them.

3 You must create a clipping path for the graphic in an application like Adobe Photoshop. The clipping path can be any (even irregular) shape. After you place the graphic in PageMaker, the area outside the clipping path does not print.

4 *Spot color* uses a separate ink to print each color in the publication. *Process color* reproduces a wide range of colors by combining varying proportions of four standard inks (cyan, magenta, yellow, and black) on the page.

5 With overprinting, a second ink is applied on top of the first ink on the page. With knocking out, the first ink is not applied to the area (called the knockout) where the second ink will appear.