

Print Four Pages Per Sheet
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Our society is obsessed with information. We read, collect, print, photocopy and store information as if our survival depended on it, which of course it does. For many businesses, storing printed information can be a real problem. With filing cabinets bulging, many offices are exploring alternatives.

Before you invest in a microfilming lab, add another gigabyte to your network drive or buy another filing cabinet, let me show you an inexpensive solution. All you need is a printer with scalable fonts and the included 4PERPAGE.WPM macro, which takes a WordPerfect document and prints four pages in a condensed scalable font on one sheet of paper (see Figure 1 below). Although small, the printed output is quite readable. These miniaturized printouts of your documents serve several purposes.

- Since your documents are printed on fewer sheets, they'll take up less space in the filing cabinet. If you ever need a larger copy later, you can use the enlarge option on your copy machine to restore the document to its original size.
- You can browse through long documents more quickly, because you don't have to flip through as many pages. This is especially helpful for business meetings and for lawyers who take long documents into the courtroom.
- The compressed format is more portable for business travelers who like to read or edit en route. Double (or triple) space the file before running the macro, and the miniaturized pages will have sufficient space between lines for your notations as long as you write small.
- You can save money by reducing paper and toner costs.

The macro inserts the path and file name on the top line of the first miniaturized page, numbers all pages and retains the original page and line breaks.

Limitations

This macro has a few limitations that you should be aware of. Since the macro has to reformat the text on each page using a smaller (5.8-point) font, it's only useful with printers that have scalable fonts.

As long as your documents contain straight text without formatting, 4PERPAGE.WPM should render a fairly accurate reproduction of each page. If, however, your document contains graphics, tables, headers or footers, footnotes or endnotes, columns, font attributes, styles, margins or new page number codes, they'll be completely removed from the document in the final reproduction.

Since these items can affect the amount of text on each page, it's best (but not always necessary) to remove these codes from your document before running the macro. Turn on Reveal Codes (Alt-F3), delete any unwanted formatting codes and turn off Reveal Codes (Alt-F3).

You'll also need to make sure that the base font in your original document is no smaller than 10cpi or 12 point.

If your document contains tabular columns, they may not be perfectly aligned after you run the macro. This is because the macro strips most WordPerfect codes, including tab, indent, center and flush right codes, from the document and reformats the page using spaces. Since most scalable fonts use proportional spacing, the font may cause your columns of text to be misaligned.

Using the Macro

Before running the macro, be sure that your document is saved. Begin with the document on your screen, press Macro (Alt-F10), type "4perpage" and press (Enter). The macro may take a moment to run, but you'll see several messages to keep you informed of the macro's progress. The first message you'll see is a "Preparing Page #" message to tell you which page it's working on. The macro pauses on the last page number for a moment as it continues formatting the document.

The next message you may see is "Creating Paper Size," followed by "Error: Label margins increased due to printer's minimum default margins." Disregard this error message. The macro needs to use a special paper size called (you guessed it) 4PERPAGE.

Rather than have you create this paper size manually, the macro does it for you the first time you run it. This saves you some work and eliminates the need to do this repeatedly if you ever want to use this macro on a different computer or with a different printer. When you use the macro on subsequent occasions, you probably won't see these messages.

The error message appears because the macro initially sets your page margins to zero and allows WordPerfect to increase the margins slightly to match your particular printer. This ensures that the page margins will all be as small as possible.

After the macro creates the paper size, it takes you into the Base Font menu to select a font. Highlight a scalable font and press (Enter). If you choose any font other than a scalable font, the text may be too large for the page. I recommend selecting a scalable CG Times or Helvetica font. Also, don't use bold or italics fonts; they often take up more space on the page and are more difficult to read in small point sizes. You don't need to select a point size. The macro does this for you.

After selecting the font, the macro displays the message "Numbering page #" as it moves through your document, numbering each page. As soon as it's finished, the miniature four-per-page document is displayed on your document screen. The new file is saved with the filename ---FILE.DOS and is replaced each time you run the macro.

You can view the file by pressing Print (Shift-F7), (V) View Document. Press Exit (F7) to return to the document screen. When you're ready to print, press Print (Shift-F7), (F) Full Document. You now have four miniature pages on each sheet.

One Step Further

Want to conserve even more space? The back side of each sheet of paper is blank, so use it. If you have a duplex printer like the HP LaserJet IIID, select the double sided printing option before you print. This gives you eight pages per sheet (four front, four back) as your document rolls out the printer.

To select this option on the HP IIID, first run the macro, then press Format (Shift-F8), (P) Page, (S) Paper Size. Highlight 4PERPAGE and press (E) Edit. Select (D) Double Sided Printing, (Y) Yes, and press Exit (F7) three times to return to the document screen.

If you don't have a duplex printer, just copy your document front and back on the copy machine. Duplex copying doesn't necessarily conserve paper, but it does save space in the filing cabinet.

You're probably wondering why you can't just use WordPerfect's Multiple Pages option and run the paper through twice on the laser printer. You could, but Hewlett-Packard advises against it. When you print, the toner is fused to the paper with intense heat that can cause the paper to curl slightly. If the same sheet of paper is sent through the printer a second time, it may not pass through the paper path as smoothly as a fresh, flat sheet of paper. This can create wrinkles in the paper and even paper jams. The HP LaserJet IIID has a special duplexing unit and uses a different paper path to avoid this problem.

Explanation of the Macro

The first two lines of the macro turn the display off and move your cursor to the top of the document. Lines 3-6 check your line spacing by moving down 15 lines into your document and taking a sample of the row height. The row height is assigned to {VARIABLE}LineSpacing~ for use later in the macro (line 22).

Lines 7-9 move to the bottom of the document, assign the page number to {VARIABLE}LastPage~, then return to the top of the document.

Lines 10-13 insert a hard page break between each page of the document to keep all text on its original page after the document is reformatted. The prompt on line 11 displays the message Preparing page # to keep you informed of the macro's progress.

Line 14 returns to the top of the document and line 15 inserts the path and filename at the top of your document.

Lines 16-19 save the document as an ASCII text file, then retrieve the file back to the document screen. This strips any formatting codes for the document so it can be more easily formatted.

Lines 20-22 return to the top of the document and set the line height and line spacing. Lines 23-24 set the page margins.

Skip over line 25 for a moment and look at line 26. Line 26 enters the Paper Size menu and searches for the paper size called 4PERPAGE. If the macro doesn't find this paper size (and it won't the first time you run the macro) we need to tell the macro what to do or it will get confused and quit.

Now look back at line 25. This line instructs the macro to go to {LABEL}Create~ (line 44) if a "Not Found" condition occurs during a search. Lines 44-53 create this 4PERPAGE paper size for you. Line 54 then returns execution to line 27. We'll talk about this later.

Lines 28-33 enter the Font menu and pause for you to select a font, lines 31-33 scale the font to 5.8 points.

Line 34 moves you to the top of the document. Lines 35-40 number each page in the document and create a horizontal graphics line. After the pages are numbered, lines 41-43 move the cursor to the top of the document and terminate the macro.

Lines 44-54, as noted earlier, create the 4PERPAGE labels paper size, using four labels on an 8.5" x 11" sheet of paper.

Lines 51-52 are kind of tricky. Line 52 sets the label margins to 0" all the way around. Most printers require that these margins be increased slightly, so WordPerfect readjusts your margins for you, then displays the message Error: Label margins increased due to printer's minimum default margins. Since WordPerfect considers this an error, it will terminate the macro unless we tell the macro what to do if it encounters an error.

Line 51 uses the {ON ERROR} command to call {LABEL}Error~ (line 55) if it encounters this error. All we really need here is an extra {Exit}, so line 56 exits, then returns to line 53.

Line 53 exits twice more, selects the paper size, exits to the document screen and returns to {LABEL}Contin~ on line 27 to continue the macro.

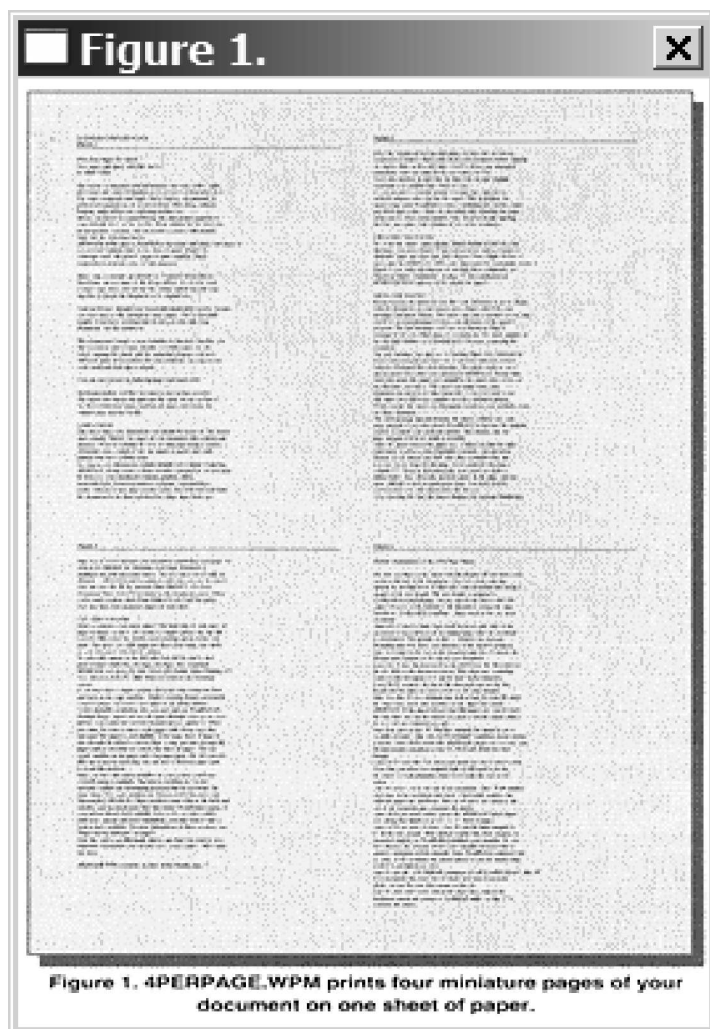


Figure 1. 4PERPAGE.WPM prints four miniature pages of your document on one sheet of paper.