

## PCL vs. Post Script Drivers

PCL (Printer Control Language) is a printing language developed by HP and PCL drivers is a language (a set of command codes) that enable application programs to control Hewlett-Packard DeskJet (some models), LaserJet (all models), and other HP printers. Many personal computer users find themselves in need of PCL drivers after purchasing a new HP or HP-compatible printer and attaching it to their existing PC and operating system. PCL5 allows you to download macros, fonts and forms to the printer memory (RAM or HD), so you can store unvariable data in the printer and minimize the size of the file you'll print. The fonts, macros and forms are "called" and merged into the printout via PCL commands embedded in the file body.

PostScript is a programming language developed by Adobe and transformed into a printing language. It describes the appearance of a printed page, maintaining its formatting, color and print quality settings. Because of that, print files generated with PS drivers can be portable among different printers without the file that will be printed lose quality, color definitions or formatting. The printer must have a PS module that translates the PostScript commands. Macintosh computers and applications working inside an Windows network environment uses PS drivers (PostScript has born in Mac world - Windows world used PS later).

Both driver types groups the print commands and settings into the whole page, so if there's an error when processing the file, the whole page will be lost and you have to reprint the page you lost, or all the file, depending on the error. They're different of the PCL3 (print language for most DeskJet printers), which separates the file in swaths - this is the reason why DeskJet printer don't need much memory; it has only the necessary to store the swath it's printing now. Resulting: PCL3 always prints. The tradeoff is that PCL3 generates much more data than PCL5,6 or PS files (the PC process all the job and the print file size is large, so PCL3 is most used in parallel connections).

Unlike PCL3 (DeskJet) printers, Laser printers that make use of PCL5, PCL6 or PS must have powerful processors and much more built memory because they have to process the whole page (or the whole print job). By this reason, PCL and PostScript drivers transfers all the processing charge to the printer and the PC doesn't suffer with performance issues - the "Return to application" time is smaller. The PC "closes" the file and send to the printer, so the print file size is much smaller. By this reason, PCL5,6 and PS are most used in network environments.

Choosing PCL or PS drivers depends on the applications you're using. For example, if you're using graphic applications like PhotoShop or Corel, the best choice is the PS driver. By other hand, if you're using desktop applications (Excel, Word, PowerPoint and so on), the best choice is the PCL drivers. If you want to make use of downloading forms and fonts to the printer, you must use PCL drivers because PS drivers doesn't do that.