PCL 5 General Printing FAQs - LaserJet

Q: What is the logical page?
A: The logical page is the area of the physical page in which you can position the PCL cursor and print. Anything printed outside of the logical page will be clipped.

Its default boundaries are always the top and bottom of the physical page, and generally 1/4" from the left and right edges of the physical page for letter and custom size paper.

Left and right logical page boundaries for different sizes/orientations of paper can be found in the PCL5 Technical Reference Manual, pp 2-9 to 2-10.

Q: What is the Text Area?
A: The Text Area is the area within the Logical Page in where text printing may be restricted. It's boundaries are defined by the Top, Left and Right Margins and Text Length (aka Bottom Margin) commands (5-15 - 5-20, PCL5 Technical Reference).). If you send text in a PCL stream without positioning the cursor, it will begin printing in the upper-left hand corner of the text area. If your text reaches the right margin it will be clipped by default. If your text goes beyond the bottom margin, a page will eject and printing will resume at the top of the Text Area on the following page by default.

Q: How can I prevent text from ejecting a page when printing beyond the bottom margin of the Text Area?
A: You can do this by disabling the Perforation Skip ([ESC]&l0L&p5-21, PCL5 Technical Reference). When you disable the Perforation Skip, text will continue to print below the bottom margin of the Text Area (up to the unprintable area of the physical page), instead of printing at the top of the Text Area on the following page.

Q: Why should I issue a printer reset command (E) at the start and end of every job?
A: There are 3 good reasons to issue a printer reset at the beginning and ending of your job:

-set the printer back to its User Default Print Environment. A good print job should not use unknown Modified Print Environment settings, nor should it leave behind a Modified Print Environment settings for subsequent jobs.

-free up memory from temporary fonts, macros, user-defined symbol sets and patterns.

-eject the page.

Q: How can I eject the current page without issuing a printer reset command?
A: You can eject the current page with a form feed character (= 0x0C) or by issuing a Paper Source command with parameter 0 (&l0H).

Q: How can I set my printer back to the User Default Print Environment?
A: The printer reset (E) command restores the Print Environment from the Modified Print Environment back to the User Default Print Environment, and deletes anything temporary (fonts, macros, user-defined symbol sets and patterns).

You can also set your printer back to the User Default Print Environment with the PJL RESET command.

Q: How can I widen the logical page?
A: There is no way to widen the logical page in pcl5. You can only shift it left and right or up and down with the left and top offset registration commands (p4-10 - 4-11, PCL5 Technical Reference).

Q: Where is the origin in PCL5?
A: The (0,0) cursor position sits at the intersection of the Top Margin and the left edge of the Logical Page for all cursor positioning commands (PCL Unit, Decipoint, and Row/Column).

Q: Can text be printed outside of the Text Area?
A: Yes, cursor positioning commands can be used to position text outside of the Text Area. Once text falls within the boundaries of the Text Area it will obey those boundaries, regardless of where it started.

Q: Can I wrap text in the Text Area instead of having it clipped by the Right Margin?
A: Yes, you can do this by enabling the End-of-line-wrap ([ESC]&s0C&p24-13, PCL5 Technical Reference).

Q: How can I set my printer back to the Factory Default Print Environment?
A: You can set your printer back to the Factory Default Print Environment by performing a "Cold Reset." A "Cold Reset" can be performed by holding down the "Online" key while turning on the printer.

You can also set your printer back to the Factory Default Print Environment with the PJL INITIALIZE command.

Q: What is a Print Environment?
A: The Factory Default Environment - refers to the original, default variable settings of an "out of the box" printer.

The User Default Environment - refers to the default variable settings as set through the printer's Control Panel or with the PJL DEFAULT command.

The Modified Print Environment - refers to variable settings changed through a PCL print job.