Apple LaserWriter: Setting PCL Print Resolution (10/95)

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TOPIC ---

Which resolution does the PCL emulator use by default on the LaserWriter Select 360, 300 dpi or 600 dpi? Is there any method of setting it to 600x600 dpi?

Can the LaserWriter 16/600 PS print PCL at 600 dpi, and if it can, what is needed to do this? Also which LaserWriters support PCL at 600 dpi and what is needed to get this capability?

DISCUSSION ---

The PCL emulator in the LaserWriter Select 360 uses the current dpi (dot per inch) setting in the printer. Therefore, if the LaserWriter Select 360 is currently set for 300 dpi, then all PostScript and PCL jobs will be printed at 300 dpi. In other words, when printing in PCL, the dpi mode currently set on the printer will be used for PCL as well. This also holds true for the LaserWriter 16/600 PS, however, since the 16/600 cannot be set at anything other than 600 dpi, all PCL jobs by default will be printed at 600 dpi.

The easiest way to change the dpi on the printer is to use the Apple Printer Utility or the LaserWriter Utility from a Macintosh on the network. There is an "Imaging Options" item under the "Utilities" menu which allows you to change dpi, and enable FinePrint at the 300 dpi setting.

As to which LaserWriters support PCL at 600dpi. If the printer supports 600 dpi and PCL, then PCL jobs will print at 600 dpi as long as the printer is already in that mode.

PostScript Code to Change Resolution and FinePrint

If you do not have a Macintosh on the network, you can download the PostScript commands below to the printer to change dpi.

NOTE:
This PostScript code is being provided if you do not have access to a Macintosh in order to run the Apple Printer Utility or LaserWriter Utility. This code DOES NOT have to be downloaded to the printer if it is already in the mode desired.

NOTE:

Most LaserWriter printers are limited in the number of NVRAM writes that can be performed, so it is a good idea to check the resolution settings before downloading the PostScript code.

Caution:

If you choose to use the PostScript code provided in this article, you assume all risks involved in making these changes. PostScript code, if not entered correctly, can place the LaserWriter into a condition requiring service.

For 300 dpi mode:

```
%=========================================================
% Begin PostScript Code
%
serverdict begin 0 exitserver
1 dict dup /HWResolution [300 300] put setpagedevice
%
% end PostScript Code
%=========================================================
```

For 600 dpi mode:

```
%=========================================================
% Begin PostScript Code
%
serverdict begin 0 exitserver
1 dict dup /HWResolution [600 600] put setpagedevice
%
% end PostScript Code
%=========================================================
```

Enable FinePrint:

```
%=========================================================
% Begin PostScript Code
%
currentpagedevice /PostRenderingEnhance get
  { (FinePrint is already enabled on this LaserWriter.) = }
  { serverdict begin 0 exitserver }
  ifelse
  vmstatus pop pop 0 eq
  { (Enabling FinePrint.) =
    <</PostRenderingEnhance true>> setpagedevice
  } if
%
% end PostScript Code
%=========================================================
```

Turn Off FinePrint:

```
%============================================================
% Begin PostScript Code
%
currentpagedevice /PostRenderingEnhance get not
  { (FinePrint is already disabled on this LaserWriter.) = }
  { serverdict begin 0 exitserver }
  ifelse
  vmstatus pop pop 0 eq
  { (Disabling FinePrint.) =
    <</PostRenderingEnhance false>> setpagedevice
  } if
%
% end PostScript Code
%============================================================
```

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10 Oct 1995 - Added LaserWriter 16/600 PS information.
23 Feb 1995 - Rewrite of discussion.

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