

BUILDPRD: Build Microsoft WORD PRinter Driver

version 2.0

BUILDPRD generates a WORD 4.0 PRinter Driver (.PRD) based on the HP Laserjet soft fonts you have on your system. The (HP-format) soft fonts can be from Hewlett-Packard, Bitstream, public domain, etc. and can be in various directories on your disk(s).

This program is shareware by Gary Pardun Consulting. Try it, share it, upload it, download it. If you find it useful to you, register your copy by sending a check for \$25 to:

Gary Pardun Consulting
2389 Sagamore Hills Drive
Decatur, GA 30033-1216

Use the registration form included with this software, called REGISTER.DOC. Be sure to include your name, address, phone number, and the name and version of the software.

Benefits of registration: software upgrades for price of floppy and postage, notice of additional software availability, and new shoes for my kids.

If you have any difficulty with the program, or suggestions for improvement, mail your comments to the above address or call (404)634-6800.

Running BUILDPRD

To run the BUILDPRD program, I suggest you use the batch file supplied with it called WORDPRD.BAT, which will not only run the BUILDPRD program but also run the MAKEPRD utility that comes with the MS WORD software. It looks like this:

```
echo off
if '%1' == '' goto NoParam
BUILDPRD %1
echo.
echo on
MAKEPRD /P %1.PRD %1.DOC
goto End
```

```
:NoParam
echo
echo
echo
echo
echo
echo
echo
echo
:End
```

*** Missing Printer Driver name ***
Syntax: WORDPRD { Printer Driver name (no extension) }
Example: WORDPRD \WORD\HPLASER

Notice that when you run the WORDPRD batch file you give it a parameter, which is the name of the Printer Driver you want to create. I suggest you specify the directory where your other Printer Drivers are. Usually this is also where the WORD program itself is.

WORD 4.0 (and later?) really needs 2 files: the .PRD file and the .DAT file. The .PRD file has the list of soft fonts and all of the width tables. The .DAT file contains the actual file titles of the various soft font files.

The BUILDPRD program creates a .DOC file, which is the clear text equivalent of the .PRD file, and the .DAT file. In the example above, BUILDPRD would create \WORD\HPLASER.DOC and \WORD\HPLASER.DAT. You need to run the MAKEPRD utility that Microsoft supplies with WORD to convert the .DOC file to the equivalent .PRD file. The batch file mentioned above does that for you.

If you have the Microsoft MAKEPRD utility in a "non-visible" directory, i.e. not the current directory and not in your PATH statement, then you need to modify the batch file accordingly. For example, if you keep the MAKEPRD program in the \UTIL directory on your hard disk, then change the sixth line of the batch file shown above to:

```
\UTIL\MAKEPRD /P %1.PRD %1.DOC
```

Note: do not put an extension on the Printer Driver name when you run the batch file. Wrong: WORDPRD HPLASER.PRD
BUILDPRD will strip off the extension ok, but the Microsoft MAKEPRD program will get upset.

The first question the BUILDPRD program will ask is whether you want to generate a Portrait or Landscape printer driver. Press P or L. BUILDPRD will ensure that any soft font files it finds have the corresponding orientation.

The next question it asks is where to find the soft font files. The default is highlighted. If the default is correct, just hit Enter. Otherwise type in the correct file spec and hit Enter. You can use the backspace key when the window first pops up to start erasing from the end of the default name rather than retyping the whole name.

Be sure to use wildcards (* and ?) for the soft font file spec. The BUILDPRD program will process all of the files it finds using that file spec AND THEN WILL ASK YOU FOR ANOTHER FILE SPEC. This allows you to have your soft font files in various directories. Unlike the .DAT files that Microsoft provides, the .DAT files that BUILDPRD generates specify the complete path for each soft font file. So you don't have to put all of your soft fonts in the same directory as the printer driver.

For each soft font file BUILDPRD finds, it will display the file name, typeface, size, and stroke (regular, bold, italic). It will display an error message if the file is not a valid soft font file or has the wrong orientation (portrait vs. landscape).

You will also get an error message if it encounters a duplicate, i.e. same typeface, size, and stroke. Sometimes there actually is a difference between "duplicate" soft fonts, such as in the weight or special effects, but MS Word can't distinguish between them so duplicates are discarded. You may need to move some of the duplicates to other directories in order to have BUILDPRD pick up the ones you want.

BUILDPRD builds the width tables for the Printer Driver by reading the character descriptors in each soft font file.

When you have told BUILDPRD where all of your soft fonts are, just hit Esc. It will then write out the printer driver .DOC and .DAT files. Then, as described above, run the MAKEPRD program to convert the .DOC file to a .PRD file.

The last step is to run WORD and use Print Options to select your new printer driver.

Other Enhancements

BUILDPRD puts a few other enhancements in the PRinter Driver:

1. When you run WORD and use Print Options to set "feed:" to "Bin1," the laser printer will require a manual paper feed (not from the tray). If you set the "feed:" to "Bin2," the printer will request a manual feed of 8 1/2 x 14 paper.

2. A © (hold Alt, type 135 on numeric pad, release Alt) formatted as Courier will print as the copyright symbol.

3. WORD will send a printer reset (Esc E) at the beginning of a print out so that if you have made any changes using the HP Laserjet control panel directly they will automatically take effect without having to do a manual reset. (I probably put in some other changes and fixed some problems that would be in Microsoft's standard drivers but I forgot what all they were.)

Problems

Here are some potential problems you may encounter.

1. Duplicate font files. (Described above.)

2. Font files with bad font descriptors. Some public domain soft font files have badly formatted font descriptors. If you have any of these that BUILDPRD cannot read, contact Gary Pardun Consulting for a utility to fix them up.

3. Font files with unknown typeface codes. The typeface code indicates the typeface, e.g. Helvetica, TimesRoman, etc. Some soft font files have a more or less arbitrary typeface code that is meaningless to BUILDPRD. (There doesn't seem to be any "standard" for typeface code assignment.) Sometimes a soft font for a normal typeface has a weird code. For example, a Helvetica clone may have a typeface code of something like 200 rather than 4. Again, if you have this problem, contact Gary Pardun Consulting for a utility to fix them up.

Supported Typefaces

BUILDPKD supports the following typefaces. Gary Pardun Consulting will add others upon request.

The first column is the default value for the first 2 characters of a soft font file name containing the particular typeface.

The second column is the typeface code that should be in the font descriptor in the soft font file. Most of these values come from the HP Laserjet documentation. If the column entry has {?}0 then the value is unknown and if you have such a typeface please let GPC know what the correct typeface code is.

The third column is the Microsoft Word font number, which you see indirectly on a stylesheet. Many of these are documented in the Microsoft Word Printer Information manual. The rest are educated guesses.

The last column is the name of the typeface, which you will see and use within Word.

	HP	Word	Typeface name
--	---	--	-----
AB	119	54	Abbey
AG	122	9	AvantGarde
AT	123	12	AmericanType
BC	73	11	Broadway
BG	120	48	Benguiat
BK	{?}0	16	ITCBookman
BO	22	30	Bodini
BR	{?}0	32	BrushScript
BS	124	17	Baskerville
CH	72	50	Chancelor
CO	20	38	Coronet
CP	118	55	Cooper
CR	3	2	CourierSF
CS	23	25	CenturySchool
DB	{?}0	60	ZapfDingbats
GK	75	40	Greek
GL	125	49	Gillies
GR	18	28	Garamond
GT	6	4	LetterGothic
GX	127	5	Galaxy
HN	{?}0	10	HelvNarrow
HU	{?}0	19	ZapfHumanist
HV	4	8	Helvetica
LG	100	57	Logo
LP	0	7	LinePrinter

OE	200	52	OldEnglish
OL	126	6	Olivia
OP	17	23	Optima
OR	121	53	Orna
PA	{?}0	37	ParkAvenue
PL	15	26	Palatino
PR	8	3	Prestige
RC	230	13	Rockland
SC	7	35	Script
SV	{?}0	27	ITCSouvenir
SY	103	56	Symbol
TR	5	24	TimesRoman
UN	24	31	UniversityRoman

(End of BUILDPRD documentation)