

L^AT_EX Support For Adobe Caslon Fonts

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Abstract

This package provides L^AT_EX support for the Adobe Caslon Fonts. It has everything you need to typeset in this font - except the fonts themselves.

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Table 1: PFB Files

File	Font
<code>awrg____.pfb</code>	Adobe Caslon Regular
<code>awi____.pfb</code>	Adobe Caslon Italic
<code>awsb____.pfb</code>	Adobe Caslon Semibold
<code>awsbi____.pfb</code>	Adobe Caslon Semibold Italic
<code>awb____.pfb</code>	Adobe Caslon Bold
<code>awbi____.pfb</code>	Adobe Caslon Bold Italic

1 Introduction

While such engines as `xetex` and `luatex` can use native system fonts, the installation base of `pdftex` is large enough to justify its continuing support with new fonts.

This package provides support files for the Adobe Caslon font family from Adobe. According to the Fontname scheme [1], this corresponds to the family `pac`. We provide the necessary font files—everything but the fonts.

2 Installation

First, you need to purchase the fonts themselves: the `pfb` files are *not* included in the package. If you got the fonts from Adobe, do not rename the `pfb` files. However, if there are uppercase letters in your file names, down-case them. If you obtained the files from another source, rename the fonts according to Table 1. If your \TeX system is TDS-compliant, install the files into `$TEXMF/fonts/type1/adobe/adobecaslon`. Download <http://ctan.tug.org/install/fonts/psfonts/adobe/adobecaslon.tds.zip> and unzip this file in `$TEXMF`. Add `+pac.map` to the configuration files of `dvips`, `pdftex` and your dvi previewer.

Install the files `*.fd` and `*.sty` in `$TEXMF/tex/latex/adobecaslon`. and documentation (`*.pdf` and `README`) in `$TEXMF/doc/latex/adobecaslon`.

Run `updmap` and `texhash` programs to update the configuration files and file names database.

The style `adobecaslon.sty` provides a number of commands for using the font family (see Section 3)

3 Using \LaTeX Style

To use the package, add to the preamble of your document the usual incantation `\usepackage[options]{adobecaslon}`.

The package supports several options. The option `rmdefault` makes Adobe Caslon your default Roman family. The option `normdefault` does not do this.

The options `scaled=...` scales Adobe fonts to the given scale.

The package provides Adobe fonts in two shapes: upright and italic, and in three weights: medium (`m`), semibold (`sb`) and bold (`b`). They can be selected in the usual way, for example

```
\fontfamily{pac}\fontshape{it}\fontseries{sb}\selectfont
```

<code>\adobecaslonfamily</code>	Alternatively you can use a declaration <code>\adobecaslonfamily</code> and a command
<code>\textadobecaslon</code>	<code>\textadobecaslon</code> to set the family.
<code>\sbseries</code>	You can use the standard L ^A T _E X commands to select the shape and weight of
<code>\textsb</code>	the font. The package also provides a new declaration <code>\sbseries</code> and a command
	<code>\textsb</code> modeled after the familiar commands <code>\bfseries</code> and <code>\textbf</code> , which
	select semi-bold weights.

4 Implementation

4.1 Identification

We start with the declaration who we are. Most `.dtx` files put driver code in a separate driver file `.drv`. We roll this code into the main file, and use the pseudo-guard `<gobble>` for it.

```
1 <style>\NeedsTeXFormat{LaTeX2e}
2 <*gobble>
3 \ProvidesFile{adobecaslon.dtx}
4 </gobble>
5 <style>\ProvidesClass{adobecaslon}
6 <pac-drv>\ProvidesFile{pac-drv.tex}
7 <pac-map>\ProvidesFile{pac-map.tex}
8 [2012/06/05 v1.0 Using Adobe Caslon Font in LaTeX]
```

And the driver code:

```
9 <*gobble>
10 \documentclass{ltxdoc}
11 \usepackage{booktabs}
12 \usepackage{url}
13 \usepackage[tableposition=top]{caption}
14 \usepackage{hypdoc}
15 \PageIndex
16 \CodelineIndex
17 \RecordChanges
18 \EnableCrossrefs
19 \begin{document}
20   \DocInput{adobecaslon.dtx}
21 \end{document}
22 </gobble>
```

4.2 Fontinst Driver

This follows [2].

First, the preamble

```
23 <*pac-drv>
24 \input fontinst.sty
25 \substitutesilent{bx}{b}
```

Starting recording transforms:

```
26 \recordtransforms{pac-rec.tex}
```

A bunch of fonts:

```
27 \transformfont{pacr8r}{\reencodefont{8r}{\fromafm{awrg_____}}}
28 \transformfont{pacri8r}{\reencodefont{8r}{\fromafm{awi_____}}}
29 \transformfont{pacs8r}{\reencodefont{8r}{\fromafm{awsb_____}}}
30 \transformfont{pacsi8r}{\reencodefont{8r}{\fromafm{awsbi_____}}}
31 \transformfont{pacb8r}{\reencodefont{8r}{\fromafm{awb_____}}}
32 \transformfont{pacbi8r}{\reencodefont{8r}{\fromafm{awbi_____}}}
```

There is no hook in `fontinst.sty` for writing our own preamble to `.fd` file. However, we need to add scaling commands to the preamble. OK, we will patch `fontinst`:

```

33 \fontinstcc
34 \def\fd_family#1#2#3{
35   \a_toks{#3}
36   \edef\lowercase_file{\lowercase{
37     \edef\noexpand\lowercase_file{#1#2.fd}}}
38   \lowercase_file
39   \open_out{\lowercase_file}
40   \out_line{\percent_char~Filename:~\lowercase_file}
41   \out_line{\percent_char~Created~by:~tex~\jobname}
42   \out_line{\percent_char~Created~using~fontinst~v\fontinstversion}
43   \out_line{}
44   \out_line{\percent_char~THIS~FILE~SHOULD~BE~PUT~IN~A~TEX~INPUTS~
45     DIRECTORY}
46   \out_line{}
47   \out_line{\string\ProvidesFile{\lowercase_file}}
48   \out_lline{[
49     \the\year/
50     \ifnum10>\month0\fi\the\month/
51     \ifnum10>\day0\fi\the\day\space
52     Fontinst~v\fontinstversion\space
53     font~definitions~for~#1/#2.
54   ]}
55   \out_line{}

```

Here is our patch:

```

56   \out_line{\string\expandafter\string\ifx\string\csname\space
57     PAC@scale\string\endcsname\string\relax}
58   \out_line{\space\string\let\string\PAC@@scale\string\@empty}
59   \out_line{\string\else}
60   \out_line{\space\string\edef\string\PAC@@scale\left_brace_char
61     s*[\string\csname\space PAC@scale\string\endcsname]
62     \right_brace_char\percent_char}
63   \out_line{\string\fi\percent_char}
64   \out_line{}

```

End of the patch.

```

65   \out_line{\string\DeclareFontFamily{#1}{#2}{\the\a_toks}}
66   {
67     \csname #1-#2\endcsname
68     \out_line{}
69     \let\do_shape=\substitute_shape
70     \csname #1-#2\endcsname
71     \let\do_shape=\remove_shape
72     \csname #1-#2\endcsname
73   }
74   \x_cs\g_let{#1-#2}\x_relax
75   \out_line{}

```

```

76 \out_line{\string\endinput}
77 \close_out{Font~definitions}
78 }
79 \normalcc

Now we install the fonts. First T1

80 \installfonts
81 \installfamily{T1}{pac}{\}
82 \installfont{pacr8t}{pacr8r,newlatin}{t1}{T1}{pac}{m}{n}{\}
83 <->\string\PAC@@scale}
84 \installfont{pacri8t}{pacri8r,newlatin}{t1}{T1}{pac}{m}{it}{\}
85 <->\string\PAC@@scale}
86 \installfont{pacs8t}{pacs8r,newlatin}{t1}{T1}{pac}{sb}{n}{\}
87 <->\string\PAC@@scale}
88 \installfont{pacs8t}{pacs8r,newlatin}{t1}{T1}{pac}{sb}{it}{\}
89 <->\string\PAC@@scale}
90 \installfont{pacb8t}{pacb8r,newlatin}{t1}{T1}{pac}{b}{n}{\}
91 <->\string\PAC@@scale}
92 \installfont{pacbi8t}{pacbi8r,newlatin}{t1}{T1}{pac}{b}{it}{\}
93 <->\string\PAC@@scale}
94 \endinstallfonts

Then TS1

95 \installfonts
96 \installfamily{TS1}{pac}{\}
97 \installfont{pacr8c}{pacr8r,textcomp}{ts1}{TS1}{pac}{m}{n}{\}
98 <->\string\PAC@@scale}
99 \installfont{pacri8c}{pacri8r,textcomp}{ts1}{TS1}{pac}{m}{it}{\}
100 <->\string\PAC@@scale}
101 \installfont{pacs8c}{pacs8r,textcomp}{ts1}{TS1}{pac}{sb}{n}{\}
102 <->\string\PAC@@scale}
103 \installfont{pacs8c}{pacs8r,textcomp}{ts1}{TS1}{pac}{sb}{it}{\}
104 <->\string\PAC@@scale}
105 \installfont{pacb8c}{pacb8r,textcomp}{ts1}{TS1}{pac}{b}{n}{\}
106 <->\string\PAC@@scale}
107 \installfont{pacbi8c}{pacbi8r,textcomp}{ts1}{TS1}{pac}{b}{it}{\}
108 <->\string\PAC@@scale}
109 \endinstallfonts

And OT1

110 \installfonts
111 \installfamily{OT1}{pac}{\}
112 \installfont{pacr7t}{pacr8r,newlatin}{ot1}{OT1}{pac}{m}{n}{\}
113 <->\string\PAC@@scale}
114 \installfont{pacri7t}{pacri8r,newlatin}{ot1}{OT1}{pac}{m}{it}{\}
115 <->\string\PAC@@scale}
116 \installfont{pacs7t}{pacs8r,newlatin}{ot1}{OT1}{pac}{sb}{n}{\}
117 <->\string\PAC@@scale}
118 \installfont{pacs7t}{pacs8r,newlatin}{ot1}{OT1}{pac}{sb}{it}{\}
119 <->\string\PAC@@scale}
120 \installfont{pacb7t}{pacb8r,newlatin}{ot1}{OT1}{pac}{b}{n}{\}

```

```

121 <->\string\PAC@@scale}
122 \installfont{pacbi7t}{pacbi8r,newlatin}{ot1}{OT1}{pac}{b}{it}{
123 <->\string\PAC@@scale}
124 \endinstallfonts

And the end:

125 \endrecordtransforms
126 \bye
127 </pac-drv>

```

4.3 Fontmap Generation

This is a standard procedure [\[2\]](#)

```

128 <*pac-map>
129 \input finstmsc.sty
130 \resetstr{PSfontsuffix}{.pfb}
131 \adddriver{dvips}{pac.map}
132 \input pac-rec.tex
133 \donedrivers
134 \bye
135 </pac-map>

```

4.4 Style File

The scaling code is from the `helvet` package:

```

136 <*style>
137 \newif\ifPAC@default
138 \PAC@defaultfalse
139 \RequirePackage{keyval}
140 \define@key{PAC}{scaled}[1.00]{%
141   \def\PAC@scale{#1}}
142 \define@key{PAC}{rmdefault}[1]{\PAC@defaulttrue}
143 \define@key{PAC}{normdefault}[1]{\PAC@defaultfalse}
144 \def\ProcessOptionsWithKV#1{%
145   \let\@tempc\relax
146   \let\PAC@tempa\@empty
147   \ifx\@classoptionslist\relax\else
148     \@for\CurrentOption:=\@classoptionslist\do{%
149       \ifundefined{KV@#1\CurrentOption}%
150         {}%
151         {%
152           \edef\PAC@tempa{\PAC@tempa,\CurrentOption,}%
153           \@expandtwoargs\@removeelement\CurrentOption
154             \@unusedoptionlist\@unusedoptionlist
155         }%
156       }%
157     \fi
158     \edef\PAC@tempa{%
159       \noexpand\setkeys{#1}{%

```

```

160     \PAC@tempa\@optionlist{\@currname.\@current}%
161   }%
162 }%
163 \PAC@tempa
164 \let\CurrentOption\@empty
165 }
166 \ProcessOptionsWithKV{PAC}
167 \AtEndOfPackage{%
168   \let\@unprocessedoptions\relax
169 }
170 \ifPAC@default
171   \renewcommand{\rmdefault}{\pac}
172 \fi

Some new commands:
173 \DeclareRobustCommand\adobecaslonfamily{\fontfamily{\pac}\selectfont}
174 \DeclareTextFontCommand{\textadobecaslon}{\adobecaslonfamily}
175 \DeclareRobustCommand\sbseries{\fontseries{sb}\selectfont}
176 \DeclareTextFontCommand{\textsb}{\sbseries}
177 </style>

```


References

- [1] Karl Berry. *Fontname. Filenames For T_EX Fonts*, September 2005. <http://mirrors.ctan.org/info/fontname>.
- [2] Philipp Lehman. *The Font Installation Guide*, December 2004. <http://mirrors.ctan.org/info/Type1fonts/fontinstallationguide>.

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