

L^AT_EX Support For Linotype Sabon

Boris Veytsman*

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Abstract

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

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*borisv@lk.net, boris@varphi.com

Table 1: PFB Files

File	Font
SabonLTRom.pfb	Sabon Regular
SabonLTIta.pfb	Sabon Italic
SabonLTBol.pfb	Sabon Bold
SabonLTBolIta.pfb	Sabon 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 Linotype Sabon font family. According to the Fontname scheme [1], this corresponds to the family `lsb`. 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. Check that the names of the fonts are those listed in Table 1. If your \TeX system is TDS-compliant, install the files into `$TEXMF/fonts/type1/linotype/lsabon`. Download <http://ctan.tug.org/install/fonts/psfonts/lsabon.tds.zip> and unzip this file in `$TEXMF`. Add `+lsb.map` to the configuration files of `dvips`, `pdftex` and your dvi previewer. Run `updmap` and `texhash` programs to update the configuration files and file names database.

The style `lsabon.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]{lsabon}`.

The package supports several options. The option `rmdefault` makes Sabon your default Roman family. The option `normdefault` does not do this. The options `scaled=...` scales Sabon fonts to the given scale.

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

```
\fontfamily{lsb}\fontshape{it}\fontseries{b}\selectfont
```

`\sabonfamily` Alternatively you can use a declaration `\sabonfamily` and a command
`\textsabon` `\textsabon` to set the family.

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{lsabon.dtx}
4 </gobble>
5 (style)\ProvidesClass{lsabon}
6 (lsb-drv)\ProvidesFile{lsb-drv.tex}
7 (lsb-map)\ProvidesFile{lsb-map.tex}
8 [2012/08/26 v1.1 Using Linotype Sabon Fonta 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{lsabon.dtx}
21 \end{document}
22 </gobble>
```

4.2 Fontinst Driver

This follows [2].

First, the preamble

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

Starting recording transforms:

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

A bunch of fonts:

```
27 \transformfont{lsbr8r}{\reencodefont{8r}{\fromafm{SabonLTRom}}}
28 \transformfont{lsbri8r}{\reencodefont{8r}{\fromafm{SabonLTIIta}}}
29 \transformfont{lsbb8r}{\reencodefont{8r}{\fromafm{SabonLTBo1}}}
30 \transformfont{lsbbi8r}{\reencodefont{8r}{\fromafm{SabonLTBo1Ita}}}
```

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`:

```

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

```

Here is our patch:

```

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

```

End of the patch.

```

63   \out_line{\string\DeclareFontFamily{#1}{#2}{\the\a_toks}}
64   {
65     \csname #1-#2\endcsname
66     \out_line{}
67     \let\do_shape=\substitute_shape
68     \csname #1-#2\endcsname
69     \let\do_shape=\remove_shape
70     \csname #1-#2\endcsname
71   }
72   \x_cs\g_let{#1-#2}\x_relax
73   \out_line{}

```

```

74 \out_line{\string\endinput}
75 \close_out{Font~definitions}
76 }
77 \normalcc

Now we install the fonts. First T1

78 \installfonts
79 \installfamily{T1}{lsb}{-}
80 \installfont{lsbr8t}{lsbr8r,newlatin}{t1}{T1}{lsb}{m}{n}{-}
81 <->\string\LSB@scale}
82 \installfont{lsbri8t}{lsbri8r,newlatin}{t1}{T1}{lsb}{m}{it}{-}
83 <->\string\LSB@scale}
84 \installfont{lsbb8t}{lsbb8r,newlatin}{t1}{T1}{lsb}{b}{n}{-}
85 <->\string\LSB@scale}
86 \installfont{lsbbi8t}{lsbbi8r,newlatin}{t1}{T1}{lsb}{b}{it}{-}
87 <->\string\LSB@scale}
88 \installfont{lsbrc8t}{lsbr8r,newlatin}{t1c}{T1}{lsb}{m}{sc}{-}
89 <->\string\LSB@scale}
90 \installfont{lsbbc8t}{lsbb8r,newlatin}{t1c}{T1}{lsb}{b}{sc}{-}
91 <->\string\LSB@scale}
92 \endinstallfonts

Then TS1

93 \installfonts
94 \installfamily{TS1}{lsb}{-}
95 \installfont{lsbr8c}{lsbr8r,textcomp}{ts1}{TS1}{lsb}{m}{n}{-}
96 <->\string\LSB@scale}
97 \installfont{lsbri8c}{lsbri8r,textcomp}{ts1}{TS1}{lsb}{m}{it}{-}
98 <->\string\LSB@scale}
99 \installfont{lsbb8c}{lsbb8r,textcomp}{ts1}{TS1}{lsb}{b}{n}{-}
100 <->\string\LSB@scale}
101 \installfont{lsbbi8c}{lsbbi8r,textcomp}{ts1}{TS1}{lsb}{b}{it}{-}
102 <->\string\LSB@scale}
103 \installfontas{lsbrc8c}{TS1}{lsb}{m}{sc}{-}
104 \installfontas{lsbbc8c}{TS1}{lsb}{b}{sc}{-}
105 \endinstallfonts

And OT1

106 \installfonts
107 \installfamily{OT1}{lsb}{-}
108 \installfont{lsbr7t}{lsbr8r,newlatin}{ot1}{OT1}{lsb}{m}{n}{-}
109 <->\string\LSB@scale}
110 \installfont{lsbri7t}{lsbri8r,newlatin}{ot1}{OT1}{lsb}{m}{it}{-}
111 <->\string\LSB@scale}
112 \installfont{lsbb7t}{lsbb8r,newlatin}{ot1}{OT1}{lsb}{b}{n}{-}
113 <->\string\LSB@scale}
114 \installfont{lsbbi7t}{lsbbi8r,newlatin}{ot1}{OT1}{lsb}{b}{it}{-}
115 <->\string\LSB@scale}
116 \installfont{lsbrc7t}{lsbr8r,newlatin}{ot1c}{OT1}{lsb}{m}{sc}{-}
117 <->\string\LSB@scale}
118 \installfont{lsbbc7t}{lsbb8r,newlatin}{ot1c}{OT1}{lsb}{b}{sc}{-}

```

```

119 <->\string\LSB@@scale}
120 \endinstallfonts
    And the end:
121 \endrecordtransforms
122 \bye
123 </lsb-drv>

```

4.3 Fontmap Generation

This is a standard procedure [2]

```

124 <*lsb-map>
125 \input finstmsc.sty
126 \resetstr{PSfontsuffix}{.pfb}
127 \adddriver{dvips}{lsb.map}
128 \input lsb-rec.tex
129 \donedrivers
130 \bye
131 </lsb-map>

```

4.4 Style File

The scaling code is from the `helvet` package:

```

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

```

```
158 }%
159 \LSB@tempa
160 \let\CurrentOption\@empty
161 }
162 \ProcessOptionsWithKV{LSB}
163 \AtEndOfPackage{%
164   \let\@unprocessedoptions\relax
165 }
166 \ifLSB@default
167   \renewcommand{\rmdefault}{lsb}
168 \fi

Some new commands:
169 \DeclareRobustCommand\sabonfamily{\fontfamily{lsb}\selectfont}
170 \DeclareTextFontCommand{\textsabon}{\sabonfamily}
171 </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>.

Change History

v1.1

General: Added Small Caps 1

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