

The file `slifonts.fdd` for use with $\text{\LaTeX} 2_{\epsilon}$.^{*}

Frank Mittelbach Rainer Schöpf

2023/12/02

This file is maintained by the \LaTeX Project team.
Bug reports can be opened (category `latex`) at
<https://latex-project.org/bugs.html>.

1 Introduction

This file contains the external font information for special variants of the Computer Modern fonts to be used for overhead slides. They allow to produce slides in a similar fashion as it was originally done by \SLTeX .

With $\text{\LaTeX} 2_{\epsilon}$ it is now no longer necessary to maintain a special format. Instead the standard format may be used and internally only different font definition files come into play.

Note that you therefore can easily produce slides in different fonts just by calling an appropriate package (like `times`) in your `\usepackage` command. This works, for example, with all fonts that are defined to be scalable (eg PostScript fonts) since they can be scaled to any size.

However, minor styles like `pandora` won't work because the standard `.fd` files shipped with $\text{\LaTeX} 2_{\epsilon}$ only contain small sizes. You can, of course, produce additional sizes and change the `.fd` files accordingly, but in this case it might be better to distinguish `.fd` files for normal text and for slides by prefixing the family name with an `1` (see below).

All the standard family names for \SLTeX fonts start out with with an `1` as the first character. This will distinguish them from text font families with similar names.

In addition, we introduce an additional convention for shapes: if x is a shape, then `Ix` represents the invisible form of the shape. This is used by the color separation macros and the `\invisible` command of the slides style file.

2 A driver for this document

The next bit of code contains the documentation driver file for \TeX , i.e., the file that will produce the documentation you are currently reading. It will be extracted from this file by the `DOCSTRIP` program.

```
1 <(*driver)
```

^{*}This file has version number v2.2f, dated 2023/12/02.

```

2 \documentclass{ltxdoc}
3 %\DisableCrossrefs % Say \DisableCrossrefs if index is ready
4 \RecordChanges % Gather update information
5 %\OnlyDescription % comment out for implementation details
6 %\OldMakeindex % use if your MakeIndex is pre-v2.9
7 \begin{document}
8 \DocInput{slifonts.fdd}
9 \end{document}
10 \</driver>

```

3 The DOCSTRIP modules

The following modules are used to direct DOCSTRIP in generating external files:

driver	produce a documentation driver file
main	generate <code>sfonts.def</code>
fd	produce a font definition file
ec	Use the extended EC font set rather than cm
lccr	Concrete Roman slide sizes
lcmss	Computer Modern Sans slide sizes
lcmtt	Computer Modern Typewriter slide sizes
lcmi	Computer Modern Math italic slide sizes
lcm	Computer Modern Math symbols slide sizes
lcmex	Computer Modern Math extension symbols slide sizes
llasy	L ^A T _E X symbols slide sizes

A typical DOCSTRIP command file would then have entries like:

```
\generateFile{OMSlcmssy.fd}{t}{\from{slifonts.fdd}{lcmssy,fd}}
```

4 The font definition files

4.1 Concrete Roman

```

11 \lccr
12 \DeclareFontFamily{OT1}{lccr}{\hyphenchar\font45 }
13 \DeclareFontShape{OT1}{lccr}{m}{sc}{%
14 <7><8><10><12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>ccsc10%
15 }{}
16 \DeclareFontShape{OT1}{lccr}{m}{sl}{%
17 <7><8><10><12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>ccslc9%
18 }{}
19 \DeclareFontShape{OT1}{lccr}{m}{n}{%
20 <7><8><10><12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>ccr8%
21 }{}
22 \DeclareFontShape{OT1}{lccr}{m}{In}{%
23 <7><8><10><12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>iccr8%
24 }{}
25 \</lccr>

```

4.2 Computer Modern Sans

```
26 \lcmss
```

```

27 (!ec) \DeclareFontFamily{OT1}{lcmss}{\hyphenchar\font45 }
28 (ec) \DeclareFontFamily{T1}{lcmss}{}

29 (!ec) \DeclareFontShape{OT1}{lcmss}{m}{n}{%
30 (ec) \DeclareFontShape{T1}{lcmss}{m}{n}{%
31 <7><8><10><12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
32 (!ec) lcmss8%
33 (ec) eclq8%
34 }{}

35 (!ec) \DeclareFontShape{OT1}{lcmss}{m}{In}{%
36 (ec) \DeclareFontShape{T1}{lcmss}{m}{In}{%
37 <7><8><10><12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
38 (!ec) ilcmss8%
39 (ec) ieclq8%
40 }{}

41 (!ec) \DeclareFontShape{OT1}{lcmss}{m}{sl}{%
42 (ec) \DeclareFontShape{T1}{lcmss}{m}{sl}{%
43 <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
44 (!ec) lcmssi8%
45 (ec) eclis8%
46 }{}

47 (!ec) \DeclareFontShape{OT1}{lcmss}{m}{Isl}{%
48 (ec) \DeclareFontShape{T1}{lcmss}{m}{Isl}{%
49 <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
50 (!ec) ilcmssi8%
51 (ec) iecli8%
52 }{}

53 (!ec) \DeclareFontShape{OT1}{lcmss}{m}{it}{%
54 (ec) \DeclareFontShape{T1}{lcmss}{m}{it}{%
55 <->sub*lcmss/m/sl}{%
56 (!ec) \DeclareFontShape{OT1}{lcmss}{m}{Iit}{%
57 (ec) \DeclareFontShape{T1}{lcmss}{m}{Iit}{%
58 <->sub*lcmss/m/IsI}{%
59 (!ec) \DeclareFontShape{OT1}{lcmss}{bx}{n}{%
60 (ec) \DeclareFontShape{T1}{lcmss}{bx}{n}{%
61 <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
62 (!ec) lcmssb8%
63 (ec) eclb8%
64 }{}

65 (!ec) \DeclareFontShape{OT1}{lcmss}{bx}{In}{%
66 (ec) \DeclareFontShape{T1}{lcmss}{bx}{In}{%
67 <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
68 (!ec) ilcmssb8%
69 (ec) ieclb8%
70 }{}

    EC fonts have a bold slanted font for the slides class.
71 (*ec)
72 \DeclareFontShape{T1}{lcmss}{bx}{sl}{%
73 <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
74 ecl08%
75 }{}

```

```

76 \DeclareFontShape{T1}{lcmss}{bx}{Is1}{%
77     <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
78     ieclo8%
79     }{}

80 \DeclareFontShape{T1}{lcmss}{bx}{it}{%
81     <->sub*lcmss/bx/sl}{}

82 \DeclareFontShape{T1}{lcmss}{bx}{Iit}{%
83     <->sub*lcmss/bx/Is1}{}

84 \ec)

```

There are extra substitutions for the shape ui which are needed for `\pounds` to not come out as a \$ sign (mostly).

```

85 (*!ec)
86 \DeclareFontShape{OT1}{lcmss}{m}{ui}{%
87     <->sub*cmr/m/ui}{}
88 \DeclareFontShape{OT1}{lcmss}{bx}{ui}{%
89     <->sub*cmr/m/ui}{}
90 \ec)
91 \lcmss)

```

4.3 Computer Modern Typewriter

```

92 (*!cmtt)
93 (!ec) \DeclareFontFamily{OT1}{lcmtt}{\hyphenchar\font@m@ne}
94 (ec) \DeclareFontFamily{T1}{lcmtt}{\hyphenchar\font@m@ne}

95 (!ec) \DeclareFontShape{OT1}{lcmtt}{m}{n}{%
96 (ec) \DeclareFontShape{T1}{lcmtt}{m}{n}{%
97     <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
98 (!ec) cmtt8%
99 (ec) ecltt8%
100     }{}

101 (!ec) \DeclareFontShape{OT1}{lcmtt}{m}{In}{%
102 (ec) \DeclareFontShape{T1}{lcmtt}{m}{In}{%
103     <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
104 (!ec) icmtt8%
105 (ec) iec1tt8%
106     }{}

107 (!ec) \DeclareFontShape{OT1}{lcmtt}{m}{it}{%
108 (ec) \DeclareFontShape{T1}{lcmtt}{m}{it}{%
109     <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
110 (!ec) cmitt10%
111 (ec) ecit1000%
112     }{}

```

There are extra substitutions for the shape ui which are needed for `\pounds` to not come out as a \$ sign (mostly).

```

113 (*!ec)
114 \DeclareFontShape{OT1}{lcmtt}{m}{ui}{%
115     <->sub*cmtt/m/it}{}
116 \DeclareFontShape{OT1}{lcmtt}{bx}{ui}{%
117     <->sub*cmtt/m/it}{}
118 \ec)
119 \lcmtt)

```

4.4 Computer Modern Math

```
120 (*lcm)
121 \DeclareFontFamily{OML}{lcm}{\skewchar\font'177}
122 \DeclareFontShape{OML}{lcm}{m}{it}{%
123   <7><8><10><12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>cmmi8%
124   }{}
125 \DeclareFontShape{OML}{lcm}{m}{Iit}{%
126   <7><8><10><12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>icmmi8%
127   }{}
128 </lcm
```

4.5 Computer Modern Symbol

```
129 (*lcsy)
130 \DeclareFontFamily{OMS}{lcsy}{\skewchar\font'60}
131 \DeclareFontShape{OMS}{lcsy}{m}{n}{%
132   <7><8><10><12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>cmsy8%
133   }{}
134 \DeclareFontShape{OMS}{lcsy}{m}{In}{%
135   <7><8><10><12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>icmsy8%
136   }{}
137 </lcsy
```

4.6 Computer Modern large symbols

```
138 (*lcmx)
139 \DeclareFontFamily{OMX}{lcmx}{}
140 \DeclareFontShape{OMX}{lcmx}{m}{n}{%
141   <->sfixed*[17.28]cmx10%
142   }{}
143 \DeclareFontShape{OMX}{lcmx}{m}{In}{%
144   <->sfixed*[17.28]icmx10%
145   }{}
146 </lcmx
```

4.7 L^AT_EX symbols

```
147 (*llasy)
148 \DeclareFontFamily{U}{llasy}{}
149 \DeclareFontShape{U}{llasy}{m}{n}{%
150   <12><13.82><16.59><19.907><23.89><28.66><34.4><41.28>lasy8%
151   }{}
152 \DeclareFontShape{U}{llasy}{m}{In}{%
153   <13.82><16.59><19.907><23.89><28.66><34.4><41.28>ilasy8%
154   }{}
155 </llasy
```

5 Setting defaults

The following statements go into the file `sfonts.def` which plays a rôle similar to `fontdef.ltx`. Thus, you may want to produce your own local variant of it if you intend to use different fonts in your slides.

```
156 (*main)
157 \DeclareErrorFont{OT1}{lcmss}{m}{n}{19.907}
158 \DeclareFontSubstitution{OT1}{lcmss}{m}{n}
159 \input ot1lcmss.fd
```

Ensure some suitable starting values but don't load any font yet. In the past this was implicitly done as part of `\DeclareErrorFont` but not any longer.

```
160 \fontencoding{OT1}
161 \fontfamily{lcmss}
162 \fontseries{m}
163 \fontshape{n}
164 \fontsize{19.907}{19.907}
165 \endinput
```

The next line goes into all files and in addition prevents `DOCSTRIP` from adding any further code from the main source file (such as a character table).

```
166 \endinput
```