Libertine Hologo Patch

v0.2b   2013/02/01

Patching the logos provided by the hologo package when used together with the libertine package and pdfLATEX.

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English documentation

From (LA)TEX to (LA)TEX

Contents

1 License and Requirements

LIBERTINEHOLOGOPATCH is placed under the terms of the LATEX Project Public License, version 1.3 or later (http://www.latex-project.org/lppl.txt). It has the status "maintained."

LIBERTINEHOLOGOPATCH loads and needs the packages etoolbox[1], hologo[2] and libertine[3].

2 Options

There are a few package options:

`verbose`

Inform when patching is successful and warn if it fails. This is the default behaviour.

---

[1] CTAN: etoolbox   [2] CTAN: hologo   [3] CTAN: libertine

silent

Neither inform nor warn if patching succeeds or fails.

errors

Issue an error instead of a warning if patching fails.

shortcuts

(Re-) Define shortcuts for common logos to use the newly patched hologo logos: `\TeX` TEX, `\LaTeX` LATEX, `\LaTeXe` LATEX 2$_\varepsilon$, `\LaTeXTeX` (LA)TEX, `\pdfTeX` pdfTEX, `\pdfLaTeX` pdfLATEX, `\XeTeX` XƎTEX, `\XeLaTeX` XƎLATEX, `\LuaTeX` LuaTEX, `\LuaLaTeX` LuaLATEX. This is default behaviour.

noshortcuts

Don't (re-) define above mentioned logos.

3 Usage

The hologo package by Heiko Oberdiek provides a comprehensive list of and access to the most common TEX-related logos. However, the kerning values it uses are optimized for use with TEX's standard font, Computer Modern. I happen to like the Linux Libertine O and Linux Biolinum O fonts very much. They are used in this documentation as well. Unfortunately many of the logos look bad with these fonts to say the least:

```
1  \restorelogos\huge
2  \LaTeX, \XeLaTeX, \LaTeXTeX \par
3  \textit{\LaTeX, \XeLaTeX, \LaTeXTeX}
4
5  \sffamily
6  \LaTeX, \XeLaTeX, \LaTeXTeX \par
7  \textit{\LaTeX, \XeLaTeX, \LaTeXTeX}
```

What LIBERTINEHOLOGOPATCH does is check if one of these fonts is used and changes the kerning then:

```
1  \huge
2  \LaTeX, \XeLaTeX, \LaTeXTeX \par
3  \textit{\LaTeX, \XeLaTeX, \LaTeXTeX}
4
5  \sffamily
6  \LaTeX, \XeLaTeX, \LaTeXTeX \par
7  \textit{\LaTeX, \XeLaTeX, \LaTeXTeX}
```

All you have to do is load the package in the usual LATEX 2$_\varepsilon$ way:

```
1  \usepackage{libertinehologopatch}
```

and all the logos will be patched appropriately. Please note that LIBERTINEHOLOGOPATCH is not (yet?) fully working with X͟ǝLᴬTᴇX and LuaLᴬTᴇX.

LIBERTINEHOLOGOPATCH defines one additional user macro:

`\restorelogos`

Restores the original definitions of the logo commands, the scope is local.

4 Implementation

```
1   % -------------------------------------------------------------------------------
2   % the LIBERTINEHOLOGOPATCH package
3   %
4   %   patch kerning of hologo's logos for usage with the 'libertine' package
5   %
6   % -------------------------------------------------------------------------------
7   % Clemens Niederberger
8   % Web:    https://bitbucket.org/cgnieder/libertinehologopatch/
9   % E-Mail: contact@mychemistry.eu
10  % -------------------------------------------------------------------------------
11  % Copyright 2013 Clemens Niederberger
12  %
13  % This work may be distributed and/or modified under the
14  % conditions of the LaTeX Project Public License, either version 1.3
15  % of this license or (at your option) any later version.
16  % The latest version of this license is in
17  %   http://www.latex-project.org/lppl.txt
18  % and version 1.3 or later is part of all distributions of LaTeX
19  % version 2005/12/01 or later.
20  %
21  % This work has the LPPL maintenance status 'maintained'.
22  %
23  % The Current Maintainer of this work is Clemens Niederberger.
24  % -------------------------------------------------------------------------------
25  % The libertinehologopatch package consists of the files
26  %  - libertinehologopatch.sty
27  %  - libertinehologopatch_en.tex, libertinehologopatch_en.pdf
28  %  - README
29  % -------------------------------------------------------------------------------
30  % If you have any ideas, questions, suggestions or bugs to report, please
31  % feel free to contact me.
32  % -------------------------------------------------------------------------------
33  \def\lbthlpt@date{2013/02/01}
34  \def\lbthlpt@version{v0.2b}
35  \def\lbthlpt@description{%
36    patch kerning of logos provided by 'hologo' for use with 'libertine' (CN)}
37
38  \ProvidesPackage{libertinehologopatch}%
```

3

```latex
      [\lbthlpt@date\space\lbthlpt@version\space\lbthlpt@description]
\RequirePackage{etoolbox}
\RequirePackage{hologo}[2012/04/26]
\RequirePackage{libertine}[2013/01/25]

% pdfLaTeX:
\def\lbthlpt@family@biolinum{LinuxBiolinumT}
\def\lbthlpt@family@biolinumOsF{LinuxBiolinumT-OsF}
\def\lbthlpt@family@biolinumLF{LinuxBiolinumT-LF}
\def\lbthlpt@family@biolinumTOsF{LinuxBiolinumT-TOsF}
\def\lbthlpt@family@biolinumTLF{LinuxBiolinumT-TLF}

\def\lbthlpt@family@libertine{LinuxLibertineT}
\def\lbthlpt@family@libertineOsF{LinuxLibertineT-OsF}
\def\lbthlpt@family@libertineLF{LinuxLibertineT-LF}
\def\lbthlpt@family@libertineTOsF{LinuxLibertineT-TOsF}
\def\lbthlpt@family@libertineTLF{LinuxLibertineT-TLF}

\def\lbthlpt@family@libertineDisplayTLF{LinuxLibertineDisplayT-TLF}
\def\lbthlpt@family@libertineDisplayTOsF{LinuxLibertineDisplayT-TOsF}

% XeLaTeX/LuaLaTeX:
\def\lbthlpt@libertine@base{LinLibertine}%\libertine@base
\def\lbthlpt@biolinum@base{LinBiolinum}%\biolinum@base

% -------------------------------------------------------------------------
% package options:
\newbool{lbthlpt@silent}
\newbool{lbthlpt@verbose}
\newbool{lbthlpt@errors}
\newbool{lbthlpt@shortcuts}

% default behaviour:
\booltrue{lbthlpt@verbose}
\booltrue{lbthlpt@shortcuts}

\DeclareOption{silent}{%
  \booltrue{lbthlpt@silent}%
  \boolfalse{lbthlpt@verbose}%
  \boolfalse{lbthlpt@errors}%
}
\DeclareOption{verbose}{%
  \boolfalse{lbthlpt@silent}%
  \booltrue{lbthlpt@verbose}%
  \boolfalse{lbthlpt@errors}%
}
\DeclareOption{errors}{%
  \boolfalse{lbthlpt@silent}%
  \boolfalse{lbthlpt@errors}%
```

```latex
88      \booltrue{lbthlpt@errors}%
89    }
90    \DeclareOption{shortcuts}
91      {\booltrue{lbthlpt@shortcuts}}
92    \DeclareOption{noshortcuts}
93      {\boolfalse{lbthlpt@shortcuts}}
94
95    \ProcessOptions*\relax
96
97    \def\lbthlpt@failure#1#2{%
98      \ifbool{lbthlpt@verbose}
99        {%
100         \PackageWarning{libertinehologopatch}
101           {Patching of logo '#1' (\string#2) failed.}%
102       }{}%
103      \ifbool{lbthlpt@errors}
104        {%
105         \PackageError{libertinehologopatch}
106           {Patching of logo '#1' (\string#2) failed.}
107           {Patching of logo '#1' (\string#2) failed.}%
108       }{}%
109    }
110    \def\lbthlpt@success#1#2{%
111      \ifboolexpe{ bool {lbthlpt@verbose} or bool {lbthlpt@errors} }
112        {%
113         \PackageInfo{libertinehologopatch}
114           {Patching of logo '#1' (\string#2) successful.}%
115       }{}
116    }
117
118    % --------------------------------------------------------------------------------
119    % wrap \ifx:
120    \def\lbthlpt@ifx#1#2{%
121      \ifx#1#2%
122        \expandafter\@firstoftwo
123      \else
124        \expandafter\@secondoftwo
125      \fi
126    }
127
128    % test for biolinum:
129    \def\lbthlpt@ifbiolinum{%
130      \ifboolexpe{
131        test {\lbthlpt@ifx\f@family\lbthlpt@family@biolinum} or
132        test {\lbthlpt@ifx\f@family\lbthlpt@family@biolinumOsF} or
133        test {\lbthlpt@ifx\f@family\lbthlpt@family@biolinumLF} or
134        test {\lbthlpt@ifx\f@family\lbthlpt@family@biolinumTOsF} or
135        test {\lbthlpt@ifx\f@family\lbthlpt@family@biolinumTLF} or
136        test {\lbthlpt@ifx\lbthlpt@biolinum@base\biolinum@base}
```

```latex
137        }
138    }
139
140    % test for libertine:
141    \def\lbthlpt@iflibertine{%
142      \ifboolexpe{
143        test {\lbthlpt@ifx\f@family\lbthlpt@family@libertine} or
144        test {\lbthlpt@ifx\f@family\lbthlpt@family@libertineOsF} or
145        test {\lbthlpt@ifx\f@family\lbthlpt@family@libertineLF} or
146        test {\lbthlpt@ifx\f@family\lbthlpt@family@libertineTOsF} or
147        test {\lbthlpt@ifx\f@family\lbthlpt@family@libertineTLF} or
148        test {\lbthlpt@ifx\f@family\lbthlpt@family@libertineDisplayTOsF} or
149        test {\lbthlpt@ifx\f@family\lbthlpt@family@libertineDisplayTLF} or
150        test {\lbthlpt@ifx\lbthlpt@libertine@base\libertine@base}
151      }
152    }
153
154    % TODO: adapt for XeLaTeX and LuaLaTeX
155    % test for italics:
156    \def\lbthlpt@ifit{%
157      \lbthlpt@ifx\f@shape\lbthlpt@itshape
158    }
159    \def\lbthlpt@itshape{it}
160
161    % test for small caps:
162    \def\lbthlpt@ifsc{%
163      \lbthlpt@ifx\f@shape\lbthlpt@scshape
164    }
165    \def\lbthlpt@scshape{sc}
166
167    % test: biolinum or libertine or none
168    \def\lbthlpt@fonttest#1#2#3{%
169      \lbthlpt@ifbiolinum
170        {#1}
171        {\lbthlpt@iflibertine{#2}{#3}}%
172    }
173
174    % -------------------------------------------------------------------------------
175    % save unpatched versions:
176    \newcommand*\lbthlpt@save[1]{%
177      \csletcs{lbthlpt@unpatched@#1}{HoLogo@#1}}
178    \newcommand*\lbthlpt@get@unpatched[1]{%
179      \csuse{lbthlpt@unpatched@#1}}
180
181    % restore unpatched versions:
182    \newcommand*\lbthlpt@restore[1]{%
183      \csletcs{HoLogo@#1}{lbthlpt@unpatched@#1}}
184
185    % -------------------------------------------------------------------------------
```

```latex
186  % the patching
187  % enable consecutive patching by inserting a leading 0 -- this prevents
188  % wrong patching if a new value happens to be one of the old ones
189  %
190  %%% La: between L and A
191  \lbthlpt@save{La}
192  \patchcmd\HoLogo@La
193    {\kern-.36em}
194    {%
195      \lbthlpt@fonttest
196        {\lbthlpt@ifit{\kern-0.23em}{\kern-0.28em}}
197        {\lbthlpt@ifit{\kern-0.26em}{\kern-0.31em}}
198        {\kern-0.36em}%
199    }
200    {\lbthlpt@success{La}{\HoLogo@La}}
201    {\lbthlpt@failure{La}{\HoLogo@La}}
202
203  %%% TeX
204  % between T and eX
205  \lbthlpt@save{TeX}
206  \patchcmd\HoLogo@TeX
207    {\kern-.1667em}
208    {%
209      \lbthlpt@fonttest
210        {\lbthlpt@ifit{\kern-0.2000em}{\kern-0.1667em}}
211        {\lbthlpt@ifit{\kern-0.1667em}{\kern-0.1667em}}
212        {\kern-0.1667em}%
213    }
214    {\lbthlpt@success{TeX}{\HoLogo@TeX}}
215    {\lbthlpt@failure{TeX}{\HoLogo@TeX}}
216  % between Te and X
217  \patchcmd\HoLogo@TeX
218    {\kern-.125em}
219    {%
220      \lbthlpt@fonttest
221        {\lbthlpt@ifit{\kern-0.065em}{\kern-0.105em}}
222        {\lbthlpt@ifit{\kern-0.085em}{\kern-0.120em}}
223        {\kern-0.125em}%
224    }
225    {\lbthlpt@success{TeX}{\HoLogo@TeX}}
226    {\lbthlpt@failure{TeX}{\HoLogo@TeX}}
227
228  %%% LaTeX: between La and TeX
229  \lbthlpt@save{LaTeX}
230  \patchcmd\HoLogo@LaTeX
231    {\kern-.15em}
232    {%
233      \lbthlpt@fonttest
234        {\lbthlpt@ifit{\kern-0.13em}{\kern-0.085em}}
```

```latex
235          {\lbthlpt@ifit{\kern-0.13em}{\kern-0.10em}}
236          {\kern-0.15em}%
237       }
238       {\lbthlpt@success{LaTeX}{\HoLogo@LaTeX}}
239       {\lbthlpt@failure{LaTeX}{\HoLogo@LaTeX}}
240
241  %%% Xe: between X and e
242  \lbthlpt@save{Xe}
243  \patchcmd\HoLogo@Xe
244     {\kern-.1em}
245     {%
246        \lbthlpt@fonttest
247          {\lbthlpt@ifit{\kern-0.05em}{\kern-0.1em}}
248          {\lbthlpt@ifit{\kern-0.05em}{\kern-0.1em}}
249          {\kern-0.1em}%
250     }
251     {\lbthlpt@success{Xe}{\HoLogo@Xe}}
252     {\lbthlpt@failure{Xe}{\HoLogo@Xe}}
253
254  %%% XeTeX: between Xe and TeX
255  \lbthlpt@save{XeTeX}
256  \patchcmd\HoLogo@XeTeX
257     {\kern-.15em}
258     {%
259        \lbthlpt@fonttest
260          {\lbthlpt@ifit{\kern-0.24em}{\kern-0.15em}}
261          {\lbthlpt@ifit{\kern-0.235em}{\kern-0.15em}}
262          {\kern-0.15em}%
263     }
264     {\lbthlpt@success{XeTeX}{\HoLogo@XeTeX}}
265     {\lbthlpt@failure{XeTeX}{\HoLogo@XeTeX}}
266
267  %%% XeLaTeX: between Xe an LaTeX
268  \lbthlpt@save{XeLaTeX}
269  \patchcmd\HoLogo@XeLaTeX
270     {\kern-.13em}
271     {%
272        \lbthlpt@fonttest
273          {\lbthlpt@ifit{\kern-0.15em}{\kern-0.09em}}
274          {\lbthlpt@ifit{\kern-0.09em}{\kern-0.025em}}
275          {\kern-0.13em}%
276     }
277     {\lbthlpt@success{XeLaTeX}{\HoLogo@XeLaTeX}}
278     {\lbthlpt@failure{XeLaTeX}{\HoLogo@XeLaTeX}}
279
280  %%% LaTeXTeX
281  \lbthlpt@save{LaTeXTeX}
282  % between ( and La
283  \patchcmd\HoLogo@LaTeXTeX
```

```
284    {\kern-.15em}
285    {%
286      \lbthlpt@fonttest
287        {\lbthlpt@ifit{\kern-0.09em}{\kern-0.09em}}
288        {\lbthlpt@ifit{\kern-0.06em}{\kern-0.06em}}
289        {\kern-0.15em}%
290    }%
291    {\lbthlpt@success{(La)TeX}{\HoLogo@LaTeXTeX}}
292    {\lbthlpt@failure{(La)TeX}{\HoLogo@LaTeXTeX}}
293  % between La and )
294  \patchcmd\HoLogo@LaTeXTeX
295    {\kern-.2em}
296    {%
297      \lbthlpt@fonttest
298        {\lbthlpt@ifit{\kern-0.16em}{\kern-0.13em}}
299        {\lbthlpt@ifit{\kern-0.14em}{\kern-0.12em}}
300        {\kern-0.2em}%
301    }
302    {\lbthlpt@success{(La)TeX}{\HoLogo@LaTeXTeX}}
303    {\lbthlpt@failure{(La)TeX}{\HoLogo@LaTeXTeX}}
304  % between ) and TeX
305  \patchcmd\HoLogo@LaTeXTeX
306    {\kern-.15em}
307    {%
308      \lbthlpt@fonttest
309        {\lbthlpt@ifit{\kern-0.11em}{\kern-0.11em}}
310        {\lbthlpt@ifit{\kern-0.09em}{\kern-0.07em}}
311        {\kern-0.15em}%
312    }
313    {\lbthlpt@success{(La)TeX}{\HoLogo@LaTeXTeX}}
314    {\lbthlpt@failure{(La)TeX}{\HoLogo@LaTeXTeX}}
315
316  %%% (La)TeX
317  \lbthlpt@save{(La)TeX}
318  \cslet{HoLogo@(La)TeX}\HoLogo@LaTeXTeX
319
320  % -------------------------------------------------------------------------
321  % restore originals
322  \def\lbthlpt@restore@originals{%
323    \lbthlpt@restore{La}%
324    \lbthlpt@restore{TeX}%
325    \lbthlpt@restore{LaTeX}%
326    \lbthlpt@restore{Xe}%
327    \lbthlpt@restore{XeTeX}%
328    \lbthlpt@restore{XeLaTeX}%
329    \lbthlpt@restore{LaTeXTeX}%
330    \lbthlpt@restore{(La)TeX}%
331  }
332  \newrobustcmd\restorelogos{%
```

9

```
333    \lbthlpt@restore@originals}

334

335  % --------------------------------------------------------------------------
336  % shortcuts (with pdf bookmark support via hyperref)
337  \ifbool{lbthlpt@shortcuts}
338    {
339      \ifboolexpe{ bool {lbthlpt@verbose} or bool {lbthlpt@errors} }
340        {\PackageInfo{libertinehologopatch}{Defining shortcuts}}{}
341      \AtBeginDocument{
342        \renewrobustcmd\TeX{\hologo{TeX}}
343        \renewrobustcmd\LaTeX{\hologo{LaTeX}}
344        \renewrobustcmd\LaTeXe{\hologo{LaTeX2e}}
345        \ifdef\LaTeXTeX
346          {\renewrobustcmd\LaTeXTeX{\hologo{LaTeXTeX}}}
347          {\newrobustcmd\LaTeXTeX{\hologo{LaTeXTeX}}}
348        \ifdef\pdfTeX
349          {\renewrobustcmd\pdfTeX{\hologo{pdfTeX}}}
350          {\newrobustcmd\pdfTeX{\hologo{pdfTeX}}}
351        \ifdef\pdfLaTeX
352          {\renewrobustcmd\pdfLaTeX{\hologo{pdfLaTeX}}}
353          {\newrobustcmd\pdfLaTeX{\hologo{pdfLaTeX}}}
354        \ifdef\XeTeX
355          {\renewrobustcmd\XeTeX{\hologo{XeTeX}}}
356          {\newrobustcmd\XeTeX{\hologo{XeTeX}}}
357        \ifdef\XeLaTeX
358          {\renewrobustcmd\XeLaTeX{\hologo{XeLaTeX}}}
359          {\newrobustcmd\XeLaTeX{\hologo{XeLaTeX}}}
360        \ifdef\LuaTeX
361          {\renewrobustcmd\LuaTeX{\hologo{LuaTeX}}}
362          {\newrobustcmd\LuaTeX{\hologo{LuaTeX}}}
363        \ifdef\LuaLaTeX
364          {\renewrobustcmd\LuaLaTeX{\hologo{LuaLaTeX}}}
365          {\newrobustcmd\LuaLaTeX{\hologo{LuaLaTeX}}}
366        \@ifpackageloaded{hyperref}
367          {
368            \pdfstringdefDisableCommands
369              {
370                \def\TeX{TeX}
371                \def\LaTeX{LaTeX}
372                \def\LaTeXe{LaTeX 2e}
373                \def\LaTeXTeX{(La)TeX}
374                \def\pdfTeX{pdfTeX}
375                \def\pdfLaTeX{pdfLaTeX}
376                \def\XeTeX{XeTeX}
377                \def\XeLaTeX{XeLaTeX}
378                \def\LuaTeX{LuaTeX}
379                \def\LuaLaTeX{LuaLaTeX}
380              }
381          }{}
```

```
    }
  }{}

\endinput
% VERSION HISTORY
2013/01/?? v0.1  - first draft
2013/01/28 v0.2  - included package options, provided the necessary and
                   previously missing default value if neither Libertine nor
                   Biolinum are used
2013/01/30 v0.2a - adapted to changes in 'libertine' and added missing tests
2013/02/01 v0.2b - added documentation


% TODO:
- \LuaTeX : Libertine sc : zu große Lücke zwischen Lua und TeX
- test for it : adapt for use with XeLaTeX or LuaLaTeX
  => figure out how 'fontspec' sets the font shape
```

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