

LIBERTINE HOLOGO PATCH

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Patching the logos provided by the hologo package when used together with the libertine package and pdf \LaTeX .

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English documentation

From (L) \TeX to (L) \TeX

| | | | |
|-----------------------------------|----------|-------------------------|-----------|
| Contents | 3 | Usage | 2 |
| 1 License and Requirements | 1 | 4 Implementation | 3 |
| 2 Options | 1 | Index | 11 |

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_{ε} , `\LaTeXTeX` (\LaTeX) , `\pdfTeX` \pdfTeX , `\pdfLaTeX` $\pdf\LaTeX$, `\XeTeX` $X_{\varepsilon}\TeX$, `\XeLaTeX` $X_{\varepsilon}\LaTeX$, `\LuaTeX` $\text{Lua}\TeX$, `\LuaLaTeX` $\text{Lua}\LaTeX$. 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 | <code>\restorelogos\huge</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |
| 2 | <code>\LaTeX, \XeLaTeX, \LaTeXTeX \par</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |
| 3 | <code>\textit{\LaTeX, \XeLaTeX, \LaTeXTeX}</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |
| 4 | | |
| 5 | <code>\sffamily</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |
| 6 | <code>\LaTeX, \XeLaTeX, \LaTeXTeX \par</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |
| 7 | <code>\textit{\LaTeX, \XeLaTeX, \LaTeXTeX}</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |

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

| | | |
|---|---|---|
| 1 | <code>\huge</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |
| 2 | <code>\LaTeX, \XeLaTeX, \LaTeXTeX \par</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |
| 3 | <code>\textit{\LaTeX, \XeLaTeX, \LaTeXTeX}</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |
| 4 | | |
| 5 | <code>\sffamily</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |
| 6 | <code>\LaTeX, \XeLaTeX, \LaTeXTeX \par</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |
| 7 | <code>\textit{\LaTeX, \XeLaTeX, \LaTeXTeX}</code> | \LaTeX , $X_{\varepsilon}\LaTeX$, (\LaTeX) |

All you have to do is load the package in the usual \LaTeX_{ε} way:

| | |
|---|--|
| 1 | <code>\usepackage{libertinehologopatch}</code> |
|---|--|

and all the logos will be patched appropriately. Please note that `LIBERTINEHOLOGOPATCH` is not (yet?) fully working with \TeX and \LuaTeX .

`LIBERTINEHOLOGOPATCH` defines two additional user macros:

`\restorelogos`

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

`\originallogo{<logo>}`

This command takes the same argument as `\hologo` and outputs the unpatched version of the respective logo. It uses `\restorelogos` internally.

`\Originallogo{<logo>}`

This command takes the same argument as `\Hologo` and outputs the unpatched version of the respective uppercased logo. It uses `\restorelogos` internally.

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{2013/03/19}
34 \def\lbthlpt@version{v0.2c}
35 \def\lbthlpt@description{%
36   patch kerning of logos provided by 'hologo' for use with 'libertine' (CN)}
37
38 \ProvidesPackage{libertinehologopatch}%
39   [\lbthlpt@date\space\lbthlpt@version\space\lbthlpt@description]
40 \RequirePackage{etoolbox}
41 \RequirePackage{hologo}[2012/04/26]
42 \RequirePackage{libertine}[2013/01/25]
43
44 % pdfLaTeX:
45 \def\lbthlpt@family@biolinum{LinuxBiolinumT}
46 \def\lbthlpt@family@biolinumOsF{LinuxBiolinumT-0sF}
47 \def\lbthlpt@family@biolinumLF{LinuxBiolinumT-LF}
48 \def\lbthlpt@family@biolinumT0sF{LinuxBiolinumT-T0sF}
49 \def\lbthlpt@family@biolinumTLF{LinuxBiolinumT-TLF}
50
51 \def\lbthlpt@family@libertine{LinuxLibertineT}
52 \def\lbthlpt@family@libertineOsF{LinuxLibertineT-0sF}
53 \def\lbthlpt@family@libertineLF{LinuxLibertineT-LF}
54 \def\lbthlpt@family@libertineT0sF{LinuxLibertineT-T0sF}
55 \def\lbthlpt@family@libertineTLF{LinuxLibertineT-TLF}
56
57 \def\lbthlpt@family@libertineDisplayTLF{LinuxLibertineDisplayT-TLF}
58 \def\lbthlpt@family@libertineDisplayT0sF{LinuxLibertineDisplayT-T0sF}
59
60 % XeLaTeX/LuaLaTeX:
61 \def\lbthlpt@libertine@base{LinLibertine}%\libertine@base
62 \def\lbthlpt@biolinum@base{LinBiolinum}%\biolinum@base
63
64 % -----
65 % package options:
66 \newbool{lbthlpt@silent}
67 \newbool{lbthlpt@verbose}
68 \newbool{lbthlpt@errors}
69 \newbool{lbthlpt@shortcuts}
70
71 % default behaviour:
72 \booltrue{lbthlpt@verbose}
73 \booltrue{lbthlpt@shortcuts}
74
75 \DeclareOption{silent}{%
76   \booltrue{lbthlpt@silent}%
77   \boolfalse{lbthlpt@verbose}%
78   \boolfalse{lbthlpt@errors}%
79 }

```

```

80 \DeclareOption{verbose}{%
81   \boolfalse{lbthlpt@silent}%
82   \booltrue{lbthlpt@verbose}%
83   \boolfalse{lbthlpt@errors}%
84 }
85 \DeclareOption{errors}{%
86   \boolfalse{lbthlpt@silent}%
87   \boolfalse{lbthlpt@errors}%
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@biolinum0sF} or
133     test {\lbthlpt@ifx\f@family\lbthlpt@family@biolinumLF} or
134     test {\lbthlpt@ifx\f@family\lbthlpt@family@biolinumT0sF} or
135     test {\lbthlpt@ifx\f@family\lbthlpt@family@biolinumTLF} or
136     test {\lbthlpt@ifx\lbthlpt@biolinum@base\biolinum@base}
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@libertine0sF} or
145     test {\lbthlpt@ifx\f@family\lbthlpt@family@libertineLF} or
146     test {\lbthlpt@ifx\f@family\lbthlpt@family@libertineT0sF} or
147     test {\lbthlpt@ifx\f@family\lbthlpt@family@libertineTLF} or
148     test {\lbthlpt@ifx\f@family\lbthlpt@family@libertineDisplayT0sF} 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 \def\lbthlpt@samed@logos{}
177 \newcommand*\lbthlpt@save[1]{%

```

```

178 \csletcs{lbthlpt@unpatched@#1}{HoLogo@#1}%
179 \listadd\lbthlpt@saved@logos{#1}}
180
181 % restore unpatched versions:
182 \newcommand*\lbthlpt@restore[1]{%
183 \csletcs{HoLogo@#1}{lbthlpt@unpatched@#1}}
184
185 % restore originals
186 \def\lbthlpt@restore@originals{%
187 \forlistloop\lbthlpt@restore\lbthlpt@saved@logos}
188 \newrobustcmd\restorelogos{%
189 \lbthlpt@restore@originals}
190
191 % get unpatched logo:
192 \newcommand*\lbthlpt@get@unpatched[2]{%
193 \begingroup
194 \lbthlpt@restore@originals
195 #1{#2}%
196 \endgroup}
197 \newrobustcmd*\originallogo[1]{%
198 \lbthlpt@get@unpatched\hologo{#1}}
199 \newrobustcmd*\Originallogo[1]{%
200 \lbthlpt@get@unpatched\Hologo{#1}}
201
202 % -----
203 % the patching
204 % enable consecutive patching by inserting a leading 0 -- this prevents
205 % wrong patching if a new value happens to be one of the old ones
206 %
207 %%% La: between L and A
208 \lbthlpt@save{La}
209 \patchcmd\HoLogo@La
210 {\kern-.36em}
211 {%
212 \lbthlpt@fonttest
213 {\lbthlpt@ifit{\kern-0.23em}{\kern-0.28em}}
214 {\lbthlpt@ifit{\kern-0.26em}{\kern-0.31em}}
215 {\kern-0.36em}%
216 }
217 {\lbthlpt@success{La}{\HoLogo@La}}
218 {\lbthlpt@failure{La}{\HoLogo@La}}
219
220 %%% TeX
221 % between T and eX
222 \lbthlpt@save{TeX}
223 \patchcmd\HoLogo@TeX
224 {\kern-.1667em}
225 {%
226 \lbthlpt@fonttest

```

```

227      {\lbthlpt@ifit{\kern-0.2000em}{\kern-0.1667em}}
228      {\lbthlpt@ifit{\kern-0.1667em}{\kern-0.1667em}}
229      {\kern-0.1667em}%
230  }
231  {\lbthlpt@success{TeX}{\HoLogo@TeX}}
232  {\lbthlpt@failure{TeX}{\HoLogo@TeX}}
233  % between Te and X
234  \patchcmd\HoLogo@TeX
235    {\kern-.125em}
236    {%
237      \lbthlpt@fonttest
238      {\lbthlpt@ifit{\kern-0.065em}{\kern-0.105em}}
239      {\lbthlpt@ifit{\kern-0.085em}{\kern-0.120em}}
240      {\kern-0.125em}%
241    }
242    {\lbthlpt@success{TeX}{\HoLogo@TeX}}
243    {\lbthlpt@failure{TeX}{\HoLogo@TeX}}
244
245  %%% LaTeX: between La and TeX
246  \lbthlpt@save{LaTeX}
247  \patchcmd\HoLogo@LaTeX
248    {\kern-.15em}
249    {%
250      \lbthlpt@fonttest
251      {\lbthlpt@ifit{\kern-0.13em}{\kern-0.085em}}
252      {\lbthlpt@ifit{\kern-0.13em}{\kern-0.10em}}
253      {\kern-0.15em}%
254    }
255    {\lbthlpt@success{LaTeX}{\HoLogo@LaTeX}}
256    {\lbthlpt@failure{LaTeX}{\HoLogo@LaTeX}}
257
258  %%% Xe: between X and e
259  \lbthlpt@save{Xe}
260  \patchcmd\HoLogo@Xe
261    {\kern-.1em}
262    {%
263      \lbthlpt@fonttest
264      {\lbthlpt@ifit{\kern-0.05em}{\kern-0.1em}}
265      {\lbthlpt@ifit{\kern-0.05em}{\kern-0.1em}}
266      {\kern-0.1em}%
267    }
268    {\lbthlpt@success{Xe}{\HoLogo@Xe}}
269    {\lbthlpt@failure{Xe}{\HoLogo@Xe}}
270
271  %%% XeTeX: between Xe and TeX
272  \lbthlpt@save{XeTeX}
273  \patchcmd\HoLogo@XeTeX
274    {\kern-.15em}
275    {%

```



```

276     \lbthlpt@fonttest
277         {\lbthlpt@ifit{\kern-0.24em}{\kern-0.15em}}
278         {\lbthlpt@ifit{\kern-0.235em}{\kern-0.15em}}
279         {\kern-0.15em}%
280     }
281     {\lbthlpt@success{XeTeX}{\HoLogo@XeTeX}}
282     {\lbthlpt@failure{XeTeX}{\HoLogo@XeTeX}}
283
284     %%% XeLaTeX: between Xe an LaTeX
285     \lbthlpt@save{XeLaTeX}
286     \patchcmd\HoLogo@XeLaTeX
287         {\kern-.13em}
288         {%
289             \lbthlpt@fonttest
290             {\lbthlpt@ifit{\kern-0.15em}{\kern-0.09em}}
291             {\lbthlpt@ifit{\kern-0.09em}{\kern-0.025em}}
292             {\kern-0.13em}%
293         }
294         {\lbthlpt@success{XeLaTeX}{\HoLogo@XeLaTeX}}
295         {\lbthlpt@failure{XeLaTeX}{\HoLogo@XeLaTeX}}
296
297     %%% LaTeXTeX
298     \lbthlpt@save{LaTeXTeX}
299     % between ( and La
300     \patchcmd\HoLogo@LaTeXTeX
301         {\kern-.15em}
302         {%
303             \lbthlpt@fonttest
304             {\lbthlpt@ifit{\kern-0.09em}{\kern-0.09em}}
305             {\lbthlpt@ifit{\kern-0.06em}{\kern-0.06em}}
306             {\kern-0.15em}%
307         }%
308         {\lbthlpt@success{(La)TeX}{\HoLogo@LaTeXTeX}}
309         {\lbthlpt@failure{(La)TeX}{\HoLogo@LaTeXTeX}}
310     % between La and )
311     \patchcmd\HoLogo@LaTeXTeX
312         {\kern-.2em}
313         {%
314             \lbthlpt@fonttest
315             {\lbthlpt@ifit{\kern-0.16em}{\kern-0.13em}}
316             {\lbthlpt@ifit{\kern-0.14em}{\kern-0.12em}}
317             {\kern-0.2em}%
318         }
319         {\lbthlpt@success{(La)TeX}{\HoLogo@LaTeXTeX}}
320         {\lbthlpt@failure{(La)TeX}{\HoLogo@LaTeXTeX}}
321     % between ) and TeX
322     \patchcmd\HoLogo@LaTeXTeX
323         {\kern-.15em}
324         {%

```

```

325 \lbthlpt@fonttest
326 {\lbthlpt@ifit{\kern-0.11em}{\kern-0.11em}}
327 {\lbthlpt@ifit{\kern-0.09em}{\kern-0.07em}}
328 {\kern-0.15em}%
329 }
330 {\lbthlpt@success{(La)TeX}{\HoLogo@LaTeXTeX}}
331 {\lbthlpt@failure{(La)TeX}{\HoLogo@LaTeXTeX}}
332
333 %%% (La)TeX
334 \lbthlpt@save{(La)TeX}
335 \cslet{\HoLogo@LaTeXTeX}\HoLogo@LaTeXTeX
336
337 % -----
338 % shortcuts (with pdf bookmark support via hyperref)
339 \ifbool{lbthlpt@shortcuts}
340 {
341   \ifboolexpe{ bool {lbthlpt@verbose} or bool {lbthlpt@errors} }
342   {\PackageInfo{libertinehologopatch}{Defining shortcuts}}{}
343   \AtBeginDocument{
344     \renewrobustcmd\TeX{\hologo{TeX}}
345     \renewrobustcmd\LaTeX{\hologo{LaTeX}}
346     \renewrobustcmd\LaTeXe{\hologo{LaTeX2e}}
347     \ifdef\LaTeXTeX
348       {\renewrobustcmd\LaTeXTeX{\hologo{LaTeXTeX}}}
349       {\newrobustcmd\LaTeXTeX{\hologo{LaTeXTeX}}}
350     \ifdef\pdfTeX
351       {\renewrobustcmd\pdfTeX{\hologo{pdfTeX}}}
352       {\newrobustcmd\pdfTeX{\hologo{pdfTeX}}}
353     \ifdef\pdfLaTeX
354       {\renewrobustcmd\pdfLaTeX{\hologo{pdfLaTeX}}}
355       {\newrobustcmd\pdfLaTeX{\hologo{pdfLaTeX}}}
356     \ifdef\XeTeX
357       {\renewrobustcmd\XeTeX{\hologo{XeTeX}}}
358       {\newrobustcmd\XeTeX{\hologo{XeTeX}}}
359     \ifdef\XeLaTeX
360       {\renewrobustcmd\XeLaTeX{\hologo{XeLaTeX}}}
361       {\newrobustcmd\XeLaTeX{\hologo{XeLaTeX}}}
362     \ifdef\LuaTeX
363       {\renewrobustcmd\LuaTeX{\hologo{LuaTeX}}}
364       {\newrobustcmd\LuaTeX{\hologo{LuaTeX}}}
365     \ifdef\LuaLaTeX
366       {\renewrobustcmd\LuaLaTeX{\hologo{LuaLaTeX}}}
367       {\newrobustcmd\LuaLaTeX{\hologo{LuaLaTeX}}}
368     \@ifpackageloaded{hyperref}
369     {
370       \pdfstringdefDisableCommands
371       {
372         \def\TeX{TeX}
373         \def\LaTeX{LaTeX}

```

```

374         \def\LaTeXe{LaTeX 2e}
375         \def\LaTeXTeX{(La)TeX}
376         \def\pdfTeX{pdfTeX}
377         \def\pdfLaTeX{pdfLaTeX}
378         \def\XeTeX{XeTeX}
379         \def\XeLaTeX{XeLaTeX}
380         \def\LuaTeX{LuaTeX}
381         \def\LuaLaTeX{LuaLaTeX}
382     }
383 }{}
384 }
385 }{}
386
387 \endinput
388 % VERSION HISTORY
389 2013/01/?? v0.1 - first draft
390 2013/01/28 v0.2 - included package options, provided the necessary and
391                  previously missing default value if neither Libertine nor
392                  Biolinum are used
393 2013/01/30 v0.2a - adapted to changes in 'libertine' and added missing tests
394 2013/02/01 v0.2b - added documentation
395 2013/03/19 v0.2c - internal changes to the saving and restoring
396                  - new: \originallogo and \Originallogo
397
398
399 % TODO:
400 - \LuaTeX : Libertine sc : zu große Lücke zwischen Lua und TeX
401 - test for it : adapt for use with XeLaTeX or LuaLaTeX
402 => figure out how 'fontspec' sets the font shape

```

Index

| | | |
|------------------|------------------------|------------------|
| E | \LuaTeX 2 | S |
| errors..... 2 | | shortcuts..... 2 |
| etoolbox..... 1 | N | silent..... 2 |
| | noshortcuts..... 2 | |
| H | O | T |
| \Hologo..... 3 | Options..... 1f. | \TeX..... 2 |
| hologo..... 1f. | \Originallogo..... 3 | U |
| \hologo..... 3 | \originallogo..... 3 | Usage..... 2f. |
| L | P | V |
| \LaTeX..... 2 | \pdfLaTeX..... 2 | verbose..... 1 |
| \LaTeXe..... 2 | \pdfTeX..... 2 | |
| \LaTeXTeX..... 2 | | X |
| libertine..... 1 | R | \XeLaTeX..... 2 |
| License..... 1 | \restorelogos..... 3 | \XeTeX..... 2 |
| \LuaLaTeX..... 2 | | |