

The pdfescape package

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Abstract

This package implements pdfTeX's escape features (`\pdfescapehex`, `\pdfunescapehex`, `\pdfescapename`, `\pdfescapestring`) using TeX or ϵ -TeX.

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1 Documentation

<pre>\EdefEscapeHex {⟨cmd⟩} {⟨string⟩} \EdefUnescapeHex {⟨cmd⟩} {⟨string⟩} \EdefEscapeName {⟨cmd⟩} {⟨string⟩} \EdefEscapeString {⟨cmd⟩} {⟨string⟩}</pre>
--

These commands converts $\langle string \rangle$ and stores the result in macro $\langle cmd \rangle$. The conversion result is the same as the conversion of the corresponding pdfTeX's primitives. Note that the argument $\langle string \rangle$ is expanded before the conversion.

For example, if pdfTeX $\text{_} = 1.30$ is present, then `\EdefEscapeHex` becomes to:

```
\def\EdefEscapeHex#1#2{%  
  \edef#1{\pdfescapehex{#2}}%  
}
```

The package provides implementations for the case that pdfTeX is not present (or too old). Even $\varepsilon\text{-TeX}$ can be missing, however it is used if it is detected.

Babel. The input strings may contain shorthand characters of package `babel`.

2 Implementation

```
1 ⟨*package⟩
```

2.1 Reload check and package identification

Reload check, especially if the package is not used with L^AT_EX.

```
2 \begingroup  
3   \expandafter\let\expandafter\x\csname ver@pdfescape.sty\endcsname  
4   \ifcase 0%  
5     \ifx\x\relax % plain  
6     \else  
7       \ifx\x\empty % LaTeX  
8       \else  
9         1%  
10      \fi  
11     \fi  
12   \else  
13     \expandafter\ifx\csname PackageInfo\endcsname\relax  
14       \def\x#1#2{%  
15         \immediate\write-1{Package #1 Info: #2.}%  
16       }%  
17     \else  
18       \def\x#1#2{\PackageInfo{#1}{#2, stopped}}%  
19     \fi  
20     \x{pdfescape}{The package is already loaded}%  
21   \endgroup  
22   \expandafter\endinput  
23 \fi  
24 \endgroup
```

Package identification:

```
25 \begingroup  
26   \expandafter\ifx\csname ProvidesPackage\endcsname\relax  
27     \def\x#1#2#3[#4]{\endgroup  
28       \immediate\write-1{Package: #3 #4}%  
29       \xdef#1{#4}%  
30     }%  
31   \else  
32     \def\x#1#2[#3]{\endgroup
```

```

33      #2[#{#3}]%
34      \ifx#1\relax
35      \xdef#1{#3}%
36      \fi
37    }%
38  \fi
39 \expandafter\x\csname ver@pdfescape.sty\endcsname
40 \ProvidesPackage{pdfescape}%
41 [2006/02/25 v1.1 Provides hex, PDF name and string conversions (H0)]

```

2.2 Preparations

2.2.1 Catcodes

```

42 \expandafter\edef\csname PE@AtEnd\endcsname{%
43   \catcode64 \the\catcode64\relax
44 }
45 \catcode64 11 % @
46 \def\PE@EnsureCode#1#2#3{%
47   \edef\PE@AtEnd{%
48     \PE@AtEnd
49     #1#2 \the#1#2\relax
50   }%
51   #1#2 #3\relax
52 }
53 \PE@EnsureCode\catcode{0}{12}% ^^@
54 \PE@EnsureCode\catcode{34}{12}% "
55 \PE@EnsureCode\catcode{42}{12}% *
56 \PE@EnsureCode\catcode{45}{12}% -
57 \PE@EnsureCode\catcode{46}{12}% .
58 \PE@EnsureCode\catcode{60}{12}% <
59 \PE@EnsureCode\catcode{61}{12}% =
60 \PE@EnsureCode\catcode{62}{12}% >
61 \PE@EnsureCode\catcode{94}{7}% ^
62 \PE@EnsureCode\catcode{96}{12}% ‘
63 \PE@EnsureCode\uccode{34}{0}% "
64 \PE@EnsureCode\uccode{48}{0}% 0
65 \PE@EnsureCode\uccode{61}{0}% =

```

2.3 User macros

```

66 \begingroup\expandafter\expandafter\expandafter\endgroup
67 \expandafter\ifx\csname pdfescapehex\endcsname\relax

```

\EdefEscapeHex

```

68   \long\def\EdefEscapeHex#1#2{%
69     \PE@sanitize#1{#2}%
70     \edef#1{\expandafter\PE@SpaceToOther#1 \relax}%
71     \PE@EscapeHex#1%
72   }%

```

\EdefUnescapeHex

```

73   \def\EdefUnescapeHex#1#2{%
74     \PE@sanitize#1{#2}%
75     \PE@UnescapeHex#1%
76   }%

```

\EdefEscapeName

```

77   \long\def\EdefEscapeName#1#2{%
78     \PE@sanitize#1{#2}%
79     \edef#1{\expandafter\PE@SpaceToOther#1 \relax}%
80     \PE@EscapeName#1%
81   }%

```

```

\edefEscapeString
82 \long\def\edefEscapeString#1#2{%
83   \PE@sanitize#1{#2}%
84   \edef#1{\expandafter\PE@SpaceToOther#1 \relax}%
85   \PE@EscapeString#1%
86 }%

87 \else

\PE@edefbabel Help macro that adds support for babel's shorthand characters.
88 \long\def\PE@edefbabel#1#2#3{%
89   \begingroup
90     \csname @save@activetrue\endcsname
91     \edef#1{#2{#3}}%
92   \expandafter\endgroup
93   \expandafter\def\expandafter#1\expandafter{#1}%
94 }

\edefEscapeHex
95 \long\def\edefEscapeHex#1#2{%
96   \PE@edefbabel#1\pdfescapehex{#2}%
97 }%

\edefUnescapeHex
98 \def\edefUnescapeHex#1#2{%
99   \PE@edefbabel#1\pdfunescapehex{#2}%
100 }%

\edefEscapeName
101 \long\def\edefEscapeName#1#2{%
102   \PE@edefbabel#1\pdfescapename{#2}%
103 }%

\edefEscapeString
104 \long\def\edefEscapeString#1#2{%
105   \PE@edefbabel#1\pdfescapestring{#2}%
106 }%

107 \PE@AtEnd
108 \expandafter\endinput
109 \fi

```

2.4 Help macros

2.4.1 Characters

Special characters with catcode 12 (other) are created and stored in macros.

```

\PE@hash
110 \edef\PE@hash{\string#}

\PE@space@other
111 \begingroup
112   \catcode'\ =12\relax%
113 \def\x{\endgroup\def\PE@space@other{ }}\x\relax

\PE@space@space
114 \def\PE@space@space{ }

```

\PE@backslash

```

115 \begingroup
116   \long\def\@gobble#1{}%
117   \escapechar=92 %
118 \edef\x{\endgroup
119   \def\noexpand\PE@backslash{\expandafter\@gobble\string\\}%
120 }
121 \x

```

2.4.2 Switch for ε -TeX

```

122 \newif\ifPE@etex
123 \begingroup\expandafter\expandafter\expandafter\endgroup
124 \expandafter\ifx\csname numexpr\endcsname\relax
125 \else
126   \PE@etextrue
127 \fi

```

2.5 Sanitizing

\PE@sanitize Macro \PE@sanitize takes #2, entirely converts it to token with catcode 12 (other) and stores the result in macro #1.

```

128 \begingroup\expandafter\expandafter\expandafter\endgroup
129 \expandafter\ifx\csname detokenize\endcsname\relax
130   \long\def\PE@sanitize#1#2{%
131     \begingroup
132       \csname @safe@activetrue\endcsname
133       \edef#1{#2}%
134       \PE@onelevel@sanitize#1%
135     \expandafter\endgroup
136     \expandafter\def\expandafter#1\expandafter{#1}%
137   }%
138 \begingroup\expandafter\expandafter\expandafter\endgroup
139 \expandafter\ifx\csname @onelevel@sanitize\endcsname\relax
140   \def\PE@onelevel@sanitize#1{%
141     \edef#1{\expandafter\PE@strip@prefix\meaning#1}%
142   }%
143   \def\PE@strip@prefix#1>{}%
144 \else
145   \let\PE@onelevel@sanitize\@onelevel@sanitize
146 \fi
147 \else
148   \long\def\PE@sanitize#1#2{%
149     \begingroup
150       \csname @safe@activetrue\endcsname
151       \edef#1{#2}%
152       \edef#1{\detokenize\expandafter{#1}}%
153     \expandafter\endgroup
154     \expandafter\def\expandafter#1\expandafter{#1}%
155   }%
156 \fi

```

\PE@SpaceToOther

```

157 \def\PE@SpaceToOther#1 #2\relax{%
158   #1%
159   \ifx\\#2\\%
160   \else
161     \PE@space@other
162     \@ReturnAfterFi{%
163       \PE@SpaceToOther#2\relax
164     }%
165   \fi
166 }

```

\@ReturnAfterFi

```
167 \long\def\@ReturnAfterFi#1\fi{\fi#1}
```

2.6 Conversions

2.6.1 Conversion to hex string

\PE@EscapeHex

```
168 \ifPE@etex
169   \def\PE@EscapeHex#1{%
170     \edef#1{\expandafter\PE@ToHex#1\relax}%
171   }%
172 \else
173   \def\PE@EscapeHex#1{%
174     \def\PE@result{%
175       \expandafter\PE@ToHex#1\relax
176       \let#1\PE@result
177     }%
178 \fi
```

\PE@ToHex

```
179 \def\PE@ToHex#1{%
180   \ifx\relax#1%
181   \else
182     \PE@HexChar{#1}%
183     \expandafter\PE@ToHex
184   \fi
185 }%
```

\PE@HexChar

```
186 \ifPE@etex
187   \def\PE@HexChar#1{%
188     \PE@HexDigit{\numexpr\dimexpr.0625\dimexpr'#1sp\relax\relax\relax}%
189     \PE@HexDigit{%
190       \numexpr'#1-16*\dimexpr.0625\dimexpr'#1sp\relax\relax\relax
191     }%
192   }%
193 \else
194   \def\PE@HexChar#1{%
195     \dimen0='#1sp%
196     \dimen2=.0625\dimen0 %
197     \advance\dimen0-16\dimen2 %
198     \edef\PE@result{%
199       \PE@result
200       \PE@HexDigit{\dimen2 }%
201       \PE@HexDigit{\dimen0 }%
202     }%
203   }%
204 \fi
```

\PE@HexDigit

```
205 \def\PE@HexDigit#1{%
206   \expandafter\string
207   \ifcase#1%
208     0\or 1\or 2\or 3\or 4\or 5\or 6\or 7\or 8\or 9\or
209     A\or B\or C\or D\or E\or F%
210   \fi
211 }
```

2.6.2 Character code to octal number

\PE@OctChar

```
212 \ifPE@etex
213   \def\PE@OctChar#1{%
214     \expandafter\PE@OctChar
215       \the\numexpr\dimexpr.015625\dimexpr'#1sp\relax\relax
216       \expandafter\relax
217       \expandafter\relax
218       \the\numexpr\dimexpr.125\dimexpr'#1sp\relax\relax\relax
219       \relax
220       #1%
221   }%
222   \def\PE@@OctChar#1\relax#2\relax#3{%
223     \PE@backslash
224     #1%
225     \the\numexpr#2-8*#1\relax
226     \the\numexpr\dimexpr'#3sp\relax-8*#2\relax
227   }%
228 \else
229   \def\PE@OctChar#1{%
230     \dimen0='#1sp%
231     \dimen2=.125\dimen0 %
232     \dimen4=.125\dimen2 %
233     \advance\dimen0-8\dimen2 %
234     \advance\dimen2-8\dimen4 %
235     \edef\PE@result{%
236       \PE@result
237       \PE@backslash
238       \number\dimen4 %
239       \number\dimen2 %
240       \number\dimen0 %
241     }%
242   }%
243 \fi
```

2.6.3 Unpack hex string

\PE@UnescapeHex

```
244 \def\PE@UnescapeHex#1{%
245   \begingroup
246     \def\PE@result{}%
247     \expandafter\PE@DeHex#1\relax\relax
248   \expandafter\endgroup
249   \expandafter\def\expandafter#1\expandafter{\PE@result}%
250 }
```

\PE@DeHex

```
251 \def\PE@DeHex#1#2{%
252   \ifx#2\relax
253     \ifx#1\relax
254       \else
255         \PE@DeHex#10\relax\relax
256       \fi
257     \else
258       \uppercase{\lccode0="#1#2}\relax
259       \ifnum\lccode0=32 %
260         \edef\PE@result{\PE@result\PE@space@space}%
261       \else
262         \lowercase{\def\PE@temp{^^@}}%
263         \edef\PE@result{\PE@result\PE@temp}%
264       \fi
```

```

265     \expandafter\PE@DeHex
266     \fi
267 }

```

2.6.4 Conversion to PDF name

```
\PE@EscapeName
```

```

268 \ifPE@etex
269   \def\PE@EscapeName#1{%
270     \edef#1{\expandafter\PE@EscapeNameTokens#1\relax}%
271   }%
272 \else
273   \def\PE@EscapeName#1{%
274     \def\PE@result{}%
275     \expandafter\PE@EscapeNameTokens#1\relax
276     \let#1\PE@result
277   }%
278 \fi

```

```
\PE@EscapeNameTokens
```

```

279 \def\PE@EscapeNameTokens#1{%
280     \ifx\relax#1%
281     \else
282     \ifnum'#1<33 %
283     \ifcase'#1 %
284     % drop illegal zero
285     \else
286     \PE@EscapeNameAdd\PE@hash
287     \PE@HexChar#1%
288     \fi
289     \else
290     \ifnum'#1>126 %
291     \PE@EscapeNameAdd\PE@hash
292     \PE@HexChar#1%
293     \else \ifnum'#1=35 \PE@EscapeNameHashChar 23% #
294     \else\ifnum'#1=37 \PE@EscapeNameHashChar 25% %
295     \else\ifnum'#1=40 \PE@EscapeNameHashChar 28% (
296     \else\ifnum'#1=41 \PE@EscapeNameHashChar 29% )
297     \else\ifnum'#1=47 \PE@EscapeNameHashChar 2F% /
298     \else\ifnum'#1=60 \PE@EscapeNameHashChar 3C% <
299     \else\ifnum'#1=62 \PE@EscapeNameHashChar 3E% >
300     \else\ifnum'#1=91 \PE@EscapeNameHashChar 5B% [
301     \else\ifnum'#1=93 \PE@EscapeNameHashChar 5D% ]
302     \else\ifnum'#1=123 \PE@EscapeNameHashChar 7B% {
303     \else\ifnum'#1=125 \PE@EscapeNameHashChar 7D% }
304     \else
305     \PE@EscapeNameAdd{#1}%
306     \fi\fi\fi\fi\fi\fi\fi\fi\fi\fi\fi\fi
307     \fi
308     \fi
309     \expandafter\PE@EscapeNameTokens
310     \fi
311 }%
312 \def\PE@EscapeNameHashChar#1#2{%
313     \PE@EscapeNameAdd{\PE@hash\string#1\string#2}%
314 }%

```

```
\PE@EscapeNameAdd
```

```

315 \ifPE@etex
316   \def\PE@EscapeNameAdd#1{#1}%
317 \else
318   \def\PE@EscapeNameAdd#1{%

```



```

319 \edef\PE@result{%
320 \PE@result
321 #1%
322 }%
323 }%
324 \fi

```

2.6.5 Conversion to PDF string

\PE@EscapeString

```

325 \ifPE@etex
326 \def\PE@EscapeString#1{%
327 \edef#1{\expandafter\PE@EscapeStringTokens#1\relax}%
328 }%
329 \else
330 \def\PE@EscapeString#1{%
331 \begingroup
332 \def\PE@result{%
333 \expandafter\PE@EscapeStringTokens#1\relax
334 \expandafter\endgroup
335 \expandafter\def\expandafter#1\expandafter{\PE@result}%
336 }%
337 \fi

```

\PE@EscapeStringTokens

```

338 \def\PE@EscapeStringTokens#1{%
339 \ifx\relax#1%
340 \else
341 \ifnum'#1<33 %
342 \PE@OctChar#1%
343 \else
344 \ifnum'#1>126 %
345 \PE@OctChar#1%
346 \else \ifnum'#1=40 \PE@EscapeStringAdd{\string\}% (
347 \else\ifnum'#1=41 \PE@EscapeStringAdd{\string\)}% )
348 \else\ifnum'#1=92 \PE@EscapeStringAdd{\string\\}% \
349 \else
350 \PE@EscapeStringAdd{#1}%
351 \fi\fi\fi
352 \fi
353 \fi
354 \expandafter\PE@EscapeStringTokens
355 \fi
356 }%

```

\PE@EscapeStringAdd

```

357 \ifPE@etex
358 \def\PE@EscapeStringAdd#1{#1}%
359 \else
360 \def\PE@EscapeStringAdd#1{%
361 \edef\PE@result{%
362 \PE@result
363 #1%
364 }%
365 }%
366 \fi

367 \PE@AtEnd
368 \end{package}

```

3 Test

```
369 <*test1 | test2 | test3>
370 \NeedsTeXFormat{LaTeX2e}
371 \makeatletter
```

3.1 Test with \pdfescape... commands

```
372 <*test1>
373 \ProvidesFile{pdfescape-test1.tex}%
374 [2006/02/25 v1.1 Test with \string\pdfescape... commands]
375 </test1>
```

3.2 Test without \pdfescape..., with ε -TeX

```
376 <*test2>
377 \ProvidesFile{pdfescape-test2.tex}%
378 [2006/02/25 v1.1 Test without \string\pdfescape..., with e-TeX]
379 </test2>
```

3.3 Test without \pdfescape... and ε -TeX

```
380 <*test3>
381 \ProvidesFile{pdfescape-test3.tex}%
382 [2006/02/25 v1.1 Test without \string\pdfescape... and e-TeX]
383 </test3>
```

3.4 Check/ensure test preconditions

3.4.1 Check \pdfescape...

```
384 <*test1>
385 \@ifundefined{pdfescapehex}{%
386   \PackageError{pdfescape-test1}{%
387     Missing \string\pdfescape... commands%
388   }{Test aborted.}%
389   \stop
390 }{}
391 </test1>

392 <*test2 | test3>
393 \let\pdfescapehex\@undefined
394 \let\pdfunescapehex\@undefined
395 \let\pdfescapename\@undefined
396 \let\pdfescapestring\@undefined
397 </test2 | test3>
```

3.4.2 Check ε -TeX

```
398 <*test2>
399 \@ifundefined{numexpr}{%
400   \PackageError{pdfescape-test2}{%
401     Missing \eTeX
402   }{Test aborted.}%
403   \stop
404 }{}
405 </test2>
```

Package `qstest` uses ε -TeX, thus ε -TeX's features can only be disabled later during loading of package `pdfescape`.

3.5 Common part

The files for testing uses the framework, provided by the new package `qstest` of David Kastrup.

```
406 \RequirePackage{qstest}
407 \IncludeTests{*}
408 \LogTests{lgout}{*}{*}
```

```

409
410 \newcommand*{\ExpectVar}[2]{%
411   \Expect*{\ifx#1#2true\else false\fi}{true}%
412 }
413
414 \makeatletter
415
416
417 \begin{group}
418   \makeatletter
419   \gdef\AllBytes{}
420   \count@=0
421   \catcode0=12 %
422   \@whilenum\count@<256 \do{%
423     \lccode0=\count@
424     \ifnum\count@=32 %
425       \xdef\AllBytes{\AllBytes\space}%
426     \else
427       \lowercase{%
428         \xdef\AllBytes{\AllBytes^^@}%
429       }%
430     \fi
431     \advance\count@ by 1 %
432   }%
433 \end{group}
434 \newcommand*{\AllBytesHex}{%
435   000102030405060708090A0B0C0D0E0F%
436   101112131415161718191A1B1C1D1E1F%
437   202122232425262728292A2B2C2D2E2F%
438   303132333435363738393A3B3C3D3E3F%
439   404142434445464748494A4B4C4D4E4F%
440   505152535455565758595A5B5C5D5E5F%
441   606162636465666768696A6B6C6D6E6F%
442   707172737475767778797A7B7C7D7E7F%
443   808182838485868788898A8B8C8D8E8F%
444   909192939495969798999A9B9C9D9E9F%
445   A0A1A2A3A4A5A6A7A8A9AABACADA EAF%
446   B0B1B2B3B4B5B6B7B8B9BABBB CBDEBF%
447   C0C1C2C3C4C5C6C7C8C9CACBCCDCECF%
448   D0D1D2D3D4D5D6D7D8D9DADBDCDDDEDF%
449   E0E1E2E3E4E5E6E7E8E9EAEBECEDEEEF%
450   F0F1F2F3F4F5F6F7F8F9FABFBCFDFEFF%
451 }
452 \@onelevel@sanitize\AllBytesHex
453 \expandafter\lowercase\expandafter{%
454   \expandafter\newcommand\expandafter*\expandafter\AllBytesHexLC
455     \expandafter{\AllBytesHex}%
456 }
457 \newcommand*{\AllBytesName}{%
458 \begin{group}
459   \catcode'\# =12 %
460   \xdef\AllBytesName{%
461     #01#02#03#04#05#06#07#08#09#0A#0B#0C#0D#0E#0F%
462     #10#11#12#13#14#15#16#17#18#19#1A#1B#1C#1D#1E#1F%
463     #20!"#23$%25&'#28#29*+,-.#2F%
464     0123456789:;#3C=#3E?%
465     @ABCDEFGHIJKLMNO%
466     PQRSTUVWXYZ#5B\@backslashchar#5D^_%
467     'abcdefghijklmnopqrstuvwxyz%
468     pqrstuvwxyz7B|#7D\string~#7F%
469     #80#81#82#83#84#85#86#87#88#89#8A#8B#8C#8D#8E#8F%
470     #90#91#92#93#94#95#96#97#98#99#9A#9B#9C#9D#9E#9F%

```

```

471   #A0#A1#A2#A3#A4#A5#A6#A7#A8#A9#AA#AB#AC#AD#AE#AF%
472   #B0#B1#B2#B3#B4#B5#B6#B7#B8#B9#BA#BB#BC#BD#BE#BF%
473   #C0#C1#C2#C3#C4#C5#C6#C7#C8#C9#CA#CB#CC#CD#CE#CF%
474   #D0#D1#D2#D3#D4#D5#D6#D7#D8#D9#DA#DB#DC#DD#DE#DF%
475   #E0#E1#E2#E3#E4#E5#E6#E7#E8#E9#EA#EB#EC#ED#EE#EF%
476   #F0#F1#F2#F3#F4#F5#F6#F7#F8#F9#FA#FB#FC#FD#FE#FF%
477   }
478 \endgroup
479 \@onelevel@sanitize\AllBytesName
480
481 \newcommand*{\AllBytesString}{%
482 \begingroup
483   \def\|{|}
484   \edef%\{@percentchar}
485   \catcode'\|=0 %
486   \catcode'\#=12 %
487   \catcode'\~=12 %
488   \catcode'\|=12 %
489   \xdef\AllBytesString{%
490     \000\001\002\003\004\005\006\007\010\011\012\013\014\015\016\017%
491     \020\021\022\023\024\025\026\027\030\031\032\033\034\035\036\037%
492     \040!"#$%&'(\)*+,-./%
493     0123456789:;<=>?%
494     @ABCDEFGHIJKLMNO%
495     PQRSTUVWXYZ[\]^_ %
496     'abcdefghijklmnopqrstuvwxyz%
497     pqrstuvwxyz{|}~\177%
498     \200\201\202\203\204\205\206\207\210\211\212\213\214\215\216\217%
499     \220\221\222\223\224\225\226\227\230\231\232\233\234\235\236\237%
500     \240\241\242\243\244\245\246\247\250\251\252\253\254\255\256\257%
501     \260\261\262\263\264\265\266\267\270\271\272\273\274\275\276\277%
502     \300\301\302\303\304\305\306\307\310\311\312\313\314\315\316\317%
503     \320\321\322\323\324\325\326\327\330\331\332\333\334\335\336\337%
504     \340\341\342\343\344\345\346\347\350\351\352\353\354\355\356\357%
505     \360\361\362\363\364\365\366\367\370\371\372\373\374\375\376\377%
506   }
507 \endgroup
508 \@onelevel@sanitize\AllBytesString
509
510 <test3>
511 \let\org@detokenize\detokenize
512 \let\detokenize\@undefined
513 \let\org@numexpr\numexpr
514 \let\numexpr\@undefined
515 </test3>
516 \RequirePackage{pdfescape}
517 <test3>
518 \let\detokenize\org@detokenize
519 \let\numexpr\org@numexpr
520 </test3>
521
522 \begin{qstest}{all-hex}{\AllBytes, escapehex}
523   \EdefEscapeHex\x{\AllBytes}
524   \Expect*{\x}*{\AllBytesHex}%
525   \ExpectVar\x\AllBytesHex
526 \end{qstest}
527
528 \begin{qstest}{all-unhex}{\AllBytesHex, unescapehex}
529   \EdefUnescapeHex\x{\AllBytesHex}
530   \Expect*{\x}*{\AllBytes}
531   \ExpectVar\x\AllBytes
532 \end{qstest}

```

```

533
534 \begin{qstest}{all-unhex-lc}{\AllBytesHexLC, unescapehex, lowercase}
535   \EdefUnescapeHex\x{\AllBytesHexLC}
536   \Expect*{\x}*{\AllBytes}
537   \ExpectVar\x\AllBytes
538 \end{qstest}
539
540 \begin{qstest}{unhex-incomplete}{unescapehex, incomplete}
541   \EdefUnescapeHex\x{4}
542   \Expect*{\x}{0}
543 \end{qstest}
544
545 \begin{qstest}{unhex-space}{unescapehex, space}
546   \EdefUnescapeHex\x{20}
547   \Expect*{\x}{ }
548   \ExpectVar\x\space
549 \end{qstest}
550
551 \begin{qstest}{unhex-spaces}{unescapehex, spaces}
552   \EdefUnescapeHex\x{204020204120}
553   \def\y#1{%
554     \edef\z{#1\string @#1#1\string A#1}%
555     }\y{ }
556   \Expect*{\x}*{\z}
557   \ExpectVar\x\z
558 \end{qstest}
559
560 \begin{qstest}{all-name}{\AllBytes, escapename}
561   \EdefEscapeName\x{\AllBytes}
562   \Expect*{\x}*{\AllBytesName}
563   \ExpectVar\x\AllBytesName
564 \end{qstest}
565
566 \begin{qstest}{all-string}{\AllBytes, escapestring}
567   \EdefEscapeString\x{\AllBytes}
568   \Expect*{\x}*{\AllBytesString}
569   \ExpectVar\x\AllBytesString
570 \end{qstest}
571
572 \stop
573 </test1 | test2 | test3>

```

4 Installation

CTAN. This package is available on CTAN¹:

[CTAN:macros/latex/contrib/oberdiek/pdfescape.dtx](#) The source file.

[CTAN:macros/latex/contrib/oberdiek/pdfescape.pdf](#) Documentation.

Unpacking. The `.dtx` file is a self-extracting docstrip archive. The files are extracted by running the `.dtx` through plain- \TeX :

```
tex pdfescape.dtx
```

TDS. Now the different files must be moved into the different directories in your installation TDS tree (also known as `texmf` tree):

¹<http://ftp.ctan.org/tex-archive/>

<code>pdfescape.sty</code>	→	<code>tex/generic/oberdiek/pdfescape.sty</code>
<code>pdfescape.pdf</code>	→	<code>doc/latex/oberdiek/pdfescape.pdf</code>
<code>pdfescape-test1.tex</code>	→	<code>doc/latex/oberdiek/pdfescape-test1.tex</code>
<code>pdfescape-test2.tex</code>	→	<code>doc/latex/oberdiek/pdfescape-test2.tex</code>
<code>pdfescape-test3.tex</code>	→	<code>doc/latex/oberdiek/pdfescape-test3.tex</code>
<code>pdfescape.dtx</code>	→	<code>source/latex/oberdiek/pdfescape.dtx</code>

If you have a `docstrip.cfg` that configures and enables `docstrip`'s TDS installing feature, then some files can already be in the right place, see the documentation of `docstrip`.

Refresh file databases. If your \TeX distribution (`te \TeX` , `mik \TeX` , ...) rely on file databases, you must refresh these. For example, `te \TeX` users run `texhash` or `mktextlsr`.

4.1 Some details for the interested

Attached source. The PDF documentation on CTAN also includes the `.dtx` source file. It can be extracted by AcrobatReader 6 or higher. Another option is `pdftk`, e.g. unpack the file into the current directory:

```
pdftk pdfescape.pdf unpack_files output .
```

Unpacking with \LaTeX . The `.dtx` chooses its action depending on the format:

plain- \TeX : Run `docstrip` and extract the files.

\LaTeX : Generate the documentation.

If you insist on using \LaTeX for `docstrip` (really, `docstrip` does not need \LaTeX), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{pdfescape.dtx}
```

Do not forget to quote the argument according to the demands of your shell.

Generating the documentation. You can use both the `.dtx` or the `.drv` to generate the documentation. The process can be configured by the configuration file `ltxdoc.cfg`. For instance, put this line into this file, if you want to have A4 as paper format:

```
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with `pdf \LaTeX` :

```
pdflatex pdfescape.dtx
makeindex -s gind.ist pdfescape.idx
pdflatex pdfescape.dtx
makeindex -s gind.ist pdfescape.idx
pdflatex pdfescape.dtx
```

5 History

[2007/02/21 v1.0]

- First version.

[2007/02/25 v1.1]

- Test files added.
- `\EdefUnescapeHex` supports lowercase letters.
- Fix: `\EdefEscapeName{^^@}`
- Fix: `\EdefEscapeName{\string#}`
- Fix for `\EdefUnescapeHex` in case of incomplete hex string.
- Fix: `\EdefUnescapeHex` generates space tokens with catcode 10 (space) in all cases.
- Fix: `\EdefEscapeHex` and `\EdefEscapeName` now generate tokens with catcode 12 (other) only.

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