

The `accsupp` package

Heiko Oberdiek*

<heiko.oberdiek at gmail.com>

2016/05/16 v0.4

Abstract

Since PDF 1.5 portions of a page can be marked for better accessibility support. For example, replacement texts or expansions of abbreviations can be provided. Package `accsupp` starts with providing a minimal low-level interface for programmers. Status is experimental.

Contents

1	Documentation	2
1.1	Macros	2
1.1.1	Feature options	2
1.1.2	Input methods	2
1.2	Workaround, option <code>space</code>	3
1.3	Driver options	3
1.3.1	Option <code>pdftex</code>	3
1.3.2	Option <code>dvipdfm</code>	4
1.3.3	Option <code>dvips</code>	4
1.3.4	Turning off page stream compression	4
2	Example	4
2.1	Example <code>\notparallel</code>	4
2.2	Example with <code>pdfstringdef</code>	4
3	Implementation	5
3.1	Package	5
3.2	Space setup	6
3.3	Driver detection and setup	6
3.4	Main macro	7
3.4.1	Input methods	9
3.5	Drivers	10
3.5.1	Driver <code>pdftex</code>	10
3.5.2	Driver <code>dvipdfm</code>	10
3.5.3	Driver <code>dvips</code>	10
4	Test	10
4.1	Catcode checks for loading	10
5	Installation	11
5.1	Download	11
5.2	Bundle installation	12
5.3	Package installation	12
5.4	Refresh file name databases	12
5.5	Some details for the interested	12

*Please report any issues at <https://github.com/ho-tex/oberdiek/issues>

6 Catalogue	13
7 References	13
8 History	13
[2007/03/21 v0.1]	13
[2007/11/14 v0.2]	14
[2010/01/16 v0.3]	14
[2016/05/16 v0.4]	14
9 Index	14

1 Documentation

1.1 Macros

Section “10.8 Accessibility Support” of the PDF reference [1] lists some features that can be added by operators for marked content.

`\BeginAccSupp {<options>}`

It puts the operator BDC in the page stream:

```

/Span
<<...>>    % property dictionary
BDC

```

The contents of the dictionary is controlled by *<options>*. See sections 1.1.1 and 1.1.2.

`\EndAccSupp {<options>}`

It puts the operator EMC in the page stream. The only option is `pdfliteral`, see section 1.3.1.

Note: The caller is responsible for the placement of `\BeginAccSupp` and `\EndAccSupp` pairs. Especially page breaks are not allowed in between.

1.1.1 Feature options

The PDF reference [1] describes and explains the different features. The names of the feature options are the same as the key names for the property dictionary for operator BDC, see `\BeginAccSupp`.

ActualText: Provides a replacement text, see examples in section 2.

Alt: Provides an alternate description.

E: Provides the expansion of an abbreviation or an acronym.

Lang: Specifies the language.

1.1.2 Input methods

Except for `Lang` option `method` controls how the argument for `ActualText`, `Alt`, and `E` are interpreted.

method=plain: The string is only expanded and written without further treatment. Special characters are not protected, thus this method may result in an invalid PDF file.

method=escape: The string is expanded and special characters are escaped. The result is a valid PDF string.

method=hex: The string is given in hexadecimal notation. Section 2.1 shows an example.

method=pdfstringdef: If package `hyperref` is loaded, then its `\pdfstringdef` is used. This method is slow, but useful if the string contains arbitrary \TeX code.

unicode: This option is needed, if the string is given as Unicode string (16 bit). Internally it adds the string prefix for Unicode. In case of `method=pdfstringdef` it passes the option to `\hypersetup`.

1.2 Workaround, option space

PDF specification says in “10.8.3 Replacement Text”

Just as alternative descriptions can be provided for images and other items that do not translate naturally into text (...), replacement text can be specified for content that does translate into text but that is represented in a nonstandard way. These nonstandard representations might include, for example, glyphs for ligatures or custom characters, or inline graphics corresponding to letters in an illuminated manuscript or to dropped capitals.

However, the `ActualText` is ignored in Acrobat Reader (until version 9 at least), if the content does not contain glyphs. Option `space` adds such an invisible glyph, a space character. The font name can be configured by option `spacefont`, the default font is `phvr8r`. The character slot is given by option `spacechar`, default is 32, the usual position of the space character.

These options can also be given as package options or in macro `\AccSuppSetup` that takes a key value list as argument. Usually only option `space` is necessary, if the contents does not contain glyphs otherwise. Option `space` is enabled by `space` or `space=true` and disabled by `space=false`. It is disabled as default. The option is evaluated by `\BeginAccSupp` and ignored by `\EndAccSupp`.

Note: Even with option `space` I get sometimes wrong texts when cut & paste from AR7/Linux or AR8/Linux, e.g.

Hello → Helo, Helol, Hell, ...
Hello World → Helo WorldW, Helo World, ...

I do not know what Acrobat Reader is doing here, thus feedback and insights are welcome.

1.3 Driver options

Driver options are package options only. The special \TeX compilers `pdf \TeX` and `X \TeX` are detected automatically. The default for unrecognized drivers can be set by defining `\ActualTextDriverDefault`. This can be done in the configuration file `accsupp.cfg`.

1.3.1 Option pdftex

Package option `pdftex` is used for `pdf \TeX` in PDF mode. Additionally `\BeginAccSupp` and `\EndAccSupp` understand option `pdfliteral`. It controls the modifier keyword for `\pdfliteral`:

`pdfliteral=direct` ⇒ `\pdfliteral direct{...}`

1.3.2 Option dvipdfm

Package option dvipdfm and its aliases dvipdfmx xetex are used for drivers that support dvipdfm specials.

1.3.3 Option dvips

Package option dvips and its alias dvipsone write pdfmark specials in the output. Unhappily these pdfmark operators are ignored by `ghostscript` (latest tested version is 8.54). Perhaps they are recognized by commercial distiller applications.

1.3.4 Turning off page stream compression

For debugging it is useful to have uncompressed page stream objects. This can be done afterwards via `pdftk`:

```
pdftk file.pdf output file-uncompressed.pdf uncompress
```

Or the PDF file is generated uncompressed:

```
pdfTeX: \pdfcompresslevel=0
```

```
dvipdfm: dvipdfm -z0 ...
```

```
dvipdfmx: dvipdfmx -z0 ...
```

```
ghostscript/ps2pdf: ps2pdf -dCompressPages=false input.ps output.pdf
```

2 Example

2.1 Example \notparallel

```
1 (*example1)
2 %<<END
3 \documentclass{article}
4 \usepackage{accsupp}[2007/11/14]
5 \usepackage{centernot}
6 % U+2226 NOT PARALLEL
7 % \mathrel{...} prevents page break in between
8 \newcommand*{\notparallel}{%
9   \ensuremath{%
10     \mathrel{%
11       \BeginAccSupp{method=hex,unicode,ActualText=2226}%
12       \centernot{\parallel}%
13       \EndAccSupp{}}%
14     }%
15   }%
16 }
17 \begin{document}
18 \begin{equation}
19 A\notparallel B
20 \end{equation}
21 \end{document}
22 %END
23 </example1>
```

2.2 Example with pdfstringdef

```
24 (*example2)
25 %<<END
26 \documentclass{article}
27 \usepackage{unicode}{hyperref}
```

```

28 \usepackage{accsupp}[2007/11/14]
29 \begin{document}
30 \begin{equation}
31 \begin{AccSupp}
32 method=pdfstringdef,
33 unicode,
34 ActualText={%
35 a\texttt{two}^superior +b\texttt{two}^superior
36 =c\texttt{two}^superior
37 }
38 }
39 a^2 + b^2 = c^2
40 \EndAccSupp{}
41 \end{equation}
42 \end{document}
43 %END
44 \end{example2}

```

3 Implementation

3.1 Package

```

45 (*package)
46 \begingroup\catcode61\catcode48\catcode32=10\relax%
47 \catcode13=5 % ^^M
48 \endlinechar=13 %
49 \catcode123=1 % {
50 \catcode125=2 % }
51 \catcode64=11 % @
52 \def\x{\endgroup
53 \expandafter\edef\csname ACCSUPP@AtEnd\endcsname{%
54 \endlinechar=\the\endlinechar\relax
55 \catcode13=\the\catcode13\relax
56 \catcode32=\the\catcode32\relax
57 \catcode35=\the\catcode35\relax
58 \catcode61=\the\catcode61\relax
59 \catcode64=\the\catcode64\relax
60 \catcode123=\the\catcode123\relax
61 \catcode125=\the\catcode125\relax
62 }%
63 }%
64 \x\catcode61\catcode48\catcode32=10\relax%
65 \catcode13=5 % ^^M
66 \endlinechar=13 %
67 \catcode35=6 % #
68 \catcode64=11 % @
69 \catcode123=1 % {
70 \catcode125=2 % }
71 \def\TMP@EnsureCode#1#2{%
72 \edef\ACCSUPP@AtEnd{%
73 \ACCSUPP@AtEnd
74 \catcode#1=\the\catcode#1\relax
75 }%
76 \catcode#1=#2\relax
77 }
78 \TMP@EnsureCode{10}{12}% ^^J
79 \TMP@EnsureCode{33}{12}% !
80 \TMP@EnsureCode{39}{12}% '
81 \TMP@EnsureCode{40}{12}% (
82 \TMP@EnsureCode{41}{12}% )
83 \TMP@EnsureCode{42}{12}% *
84 \TMP@EnsureCode{44}{12}% ,

```

```

85 \TMP@EnsureCode{45}{12}% -
86 \TMP@EnsureCode{46}{12}% .
87 \TMP@EnsureCode{47}{12}% /
88 \TMP@EnsureCode{58}{12}% :
89 \TMP@EnsureCode{60}{12}% <
90 \TMP@EnsureCode{62}{12}% >
91 \TMP@EnsureCode{94}{7}% ^ (superscript)
92 \TMP@EnsureCode{96}{12}% '
93 \TMP@EnsureCode{254}{12}% ^^fe
94 \TMP@EnsureCode{255}{12}% ^^ff
95 \edef\ACCSUPP@AtEnd{\ACCSUPP@AtEnd\noexpand\endinput}

Package identification.
96 \NeedsTeXFormat{LaTeX2e}
97 \ProvidesPackage{accsupp}%
98 [2016/05/16 v0.4 Accessibility support by marked content (HO)]
99 \RequirePackage{pdfescape}[2007/02/25]
100 \RequirePackage{ifpdf}
101 \RequirePackage{ifxetex}
102 \RequirePackage{kvoptions}

103 \SetupKeyvalOptions{%
104   family=ACCSUPP,%
105   prefix=ACCSUPP%
106 }

```

3.2 Space setup

```

107 \DeclareBoolOption{space}
108 \DeclareStringOption[phvr8r]{spacefont}
109 \DeclareStringOption[32]{spacechar}

```

3.3 Driver detection and setup

Driver declarations.

```

110 \def\ACCSUPP@DefineDriverKey{%
111   \@dblarg\ACCSUPP@@DefineDriverKey
112 }
113 \def\ACCSUPP@@DefineDriverKey[#1]#2{%
114   \define@key{ACCSUPP}{#2}[]{%
115     \def\ACCSUPP@driver{#1}%
116   }%
117   \g@addto@macro\ACCSUPP@DisableOptions{%
118     \DisableKeyvalOption{ACCSUPP}{#2}%
119   }%
120 }
121 \let\ACCSUPP@DisableOptions\@empty
122 \ACCSUPP@DefineDriverKey{pdftex}
123 \ACCSUPP@DefineDriverKey{dvips}
124 \ACCSUPP@DefineDriverKey[dvips]{dvipsone}
125 \ACCSUPP@DefineDriverKey{dvipdfm}
126 \ACCSUPP@DefineDriverKey[dvipdfm]{dvipdfmx}
127 \ACCSUPP@DefineDriverKey[dvipdfm]{xetex}
128 \let\ACCSUPP@driver\relax
129 \InputIfFileExists{accsupp.cfg}{-}{}
130 \providecommand*{\ActualTextDriverDefault}{dvips}
131 \ifpdf
132   \def\ACCSUPP@driver{pdftex}%
133 \else
134   \ifxetex
135     \def\ACCSUPP@driver{dvipdfm}%
136   \else
137     \ifx\ACCSUPP@driver\relax
138       \let\ACCSUPP@driver\ActualTextDriverDefault
139     \fi

```

```

140 \fi
141 \fi

```

Process options.

```

142 \ProcessKeyvalOptions*
143 \ACCSUPP@DisableOptions

```

Driver validation and loading.

```

144 \def\ACCSUPP@temp{pdftex}%
145 \ifpdf
146 \ifx\ACCSUPP@temp\ACCSUPP@driver
147 \else
148 \PackageWarningNoLine{accsupp}{%
149   Wrong driver '\ACCSUPP@driver', using 'pdftex' instead%
150 }%
151 \let\ACCSUPP@driver\ACCSUPP@temp
152 \fi
153 \else
154 \ifx\ACCSUPP@temp\ACCSUPP@driver
155 \PackageError{accsupp}{%
156   Wrong driver, pdfTeX is not running in PDF mode.\MessageBreak
157   Package loading is aborted%
158 }\@ehc
159 \expandafter\expandafter\expandafter\ACCSUPP@AtEnd
160 \fi
161 \def\ACCSUPP@temp{dvipdfm}%
162 \ifxetex
163 \ifx\ACCSUPP@temp\ACCSUPP@driver
164 \else
165 \PackageWarningNoLine{accsupp}{%
166   Wrong driver '\ACCSUPP@driver',\MessageBreak
167   using 'dvipdfm' for XeTeX instead%
168 }%
169 \let\ACCSUPP@driver\ACCSUPP@temp
170 \fi
171 \fi
172 \fi%
173 \ifx\ACCSUPP@driver\relax
174 \PackageError{accsupp}{%
175   Missing driver option.\MessageBreak
176   Package loading is aborted%
177 }\@ehc
178 \expandafter\ACCSUPP@AtEnd
179 \fi%
180 \InputIfFileExists{accsupp-\ACCSUPP@driver.def}{-}{-}%
181 \PackageError{accsupp}{%
182   Unsupported driver '\ACCSUPP@driver'.\MessageBreak
183   Package loading is aborted%
184 }\@ehc
185 \ACCSUPP@AtEnd
186 }%

```

3.4 Main macro

```

187 \DeclareBoolOption{unicode}
188 \DeclareStringOption[page]{pdfliteral}
189 \DeclareStringOption{Lang}
190 \def\ACCSUPP@method{escape}
191 \define@key{ACCSUPP}{method}{%
192 \@ifundefined{ACCSUPP@method@#1}{%
193 \PackageError{accsupp}{%

```

```

194     Ignoring unknown method '#1'%
195   }\@ehc
196 }{%
197   \edef\ACCSUPP@method{#1}%
198 }%
199 }
200 \let\ACCSUPP@Lang\relax
201 \def\ACCSUPP@temp#1{%
202   \expandafter\ACCSUPP@@temp\csname ACCSUPP@#1\endcsname{#1}%
203 }
204 \def\ACCSUPP@@temp#1#2{%
205   \let#1\relax
206   \define@key{ACCSUPP}{#2}{%
207     \def#1{##1}%
208     \ifx#1\@empty
209       \def#1{()}%
210     \else
211       \csname ACCSUPP@method@\ACCSUPP@method\endcsname#1%
212     \fi
213   }%
214 }
215 \ACCSUPP@temp{Alt}
216 \ACCSUPP@temp{ActualText}
217 \ACCSUPP@temp{E}
218 \newcommand*\BeginAccSupp[1]{%
219   \begingroup
220   \setkeys{ACCSUPP}{#1}%
221   \edef\ACCSUPP@span{%
222     /Span<<%
223     \ifx\ACCSUPP@Lang\relax
224     \else
225       /Lang\ACCSUPP@Lang
226     \fi
227     \ifx\ACCSUPP@Alt\relax
228     \else
229       /Alt\ACCSUPP@Alt
230     \fi
231     \ifx\ACCSUPP@ActualText\relax
232     \else
233       /ActualText\ACCSUPP@ActualText
234     \fi
235     \ifx\ACCSUPP@E\relax
236     \else
237       /E\ACCSUPP@E
238     \fi
239     >>%
240   }%
241   \ACCSUPP@bdc
242   \ACCSUPP@space
243   \endgroup
244 }
245 \newcommand*\EndAccSupp[1]{%
246   \begingroup
247   \setkeys{ACCSUPP}{#1}%
248   \ACCSUPP@emc
249   \endgroup
250 }
251 \def\ACCSUPP@space{%
252   \ifACCSUPP@space
253     \begingroup
254     \@ifundefined{ACCSUPP@Font}{%
255       \global\font\ACCSUPP@Font=\ACCSUPP@spacefont\relax

```



```

256   }{}%
257   \leavevmode
258   \setbox\z@\hbox{\ACCSUPP@Font\char\ACCSUPP@spacechar}%
259   \wd\z@\z@
260   \ht\z@\z@
261   \dp\z@\z@
262   \copy\z@
263   \endgroup
264   \fi
265 }
266 \newcommand*{\AccSuppSetup}{%
267   \setkeys{ACCSUPP}%
268 }

```

3.4.1 Input methods

```

269 \def\ACCSUPP@method@plain#1{%
270   \csname @safe@activetrue\endcsname
271   \edef#1{%
272     (%
273     \ifACCSUPP@unicode
274       \string\376\string\377%
275     \fi
276     #1%
277     )%
278   }%
279   \@onelevel@sanitize#1%
280 }

281 \def\ACCSUPP@method@escape#1{%
282   \EdefEscapeString#1{%
283     \ifACCSUPP@unicode
284       ^^fe^^ff%
285     \fi
286     #1%
287   }%
288   \edef#1{(#1)}%
289 }%

290 \def\ACCSUPP@method@hex#1{%
291   \edef#1{%
292     <%
293     \ifACCSUPP@unicode
294       FFFF%
295     \fi
296     #1%
297     >%
298   }%
299 }

300 \def\ACCSUPP@method@pdfstringdef#1{%
301   \ifACCSUPP@unicode
302     \@ifundefined{hypersetup}{-}{%
303       \hypersetup{unicode}%
304     }%
305   \fi
306   \@ifundefined{pdfstringdef}{-}{%
307     \PackageError{accsupp}{%
308       Method 'pdfstringdef' requires package 'hyperref'%
309     }\@ehc
310     \let\ACCSUPP@temp\@empty
311   }{%
312     \begingroup
313     \setbox0=\hbox{%
314       \pdfstringdef\ACCSUPP@temp#1%

```

```

315     \global\let\ACCSUPP@temp\ACCSUPP@temp
316   }%
317   \endgroup
318 }%
319 \edef#1{(\ACCSUPP@temp)}%
320 }

321 \ACCSUPP@AtEnd%
322 \</package>

```

3.5 Drivers

3.5.1 Driver pdftex

```

323 (*pdftex)
324 \NeedsTeXFormat{LaTeX2e}
325 \ProvidesFile{accsupp-pdftex.def}%
326 [2016/05/16 v0.4 accsupp driver for pdfTeX (HO)]%

327 \def\ACCSUPP@bdc{%
328   \pdfliteral\ACCSUPP@pdfliteral{\ACCSUPP@span BDC}%
329 }
330 \def\ACCSUPP@emc{%
331   \pdfliteral\ACCSUPP@pdfliteral{EMC}%
332 }

333 \</pdftex>

```

3.5.2 Driver dvipdfm

```

334 (*dvipdfm)
335 \NeedsTeXFormat{LaTeX2e}
336 \ProvidesFile{accsupp-dvipdfm.def}%
337 [2016/05/16 v0.4 accsupp driver for dvipdfm (HO)]%

338 \def\ACCSUPP@bdc{%
339   \special{pdf:content \ACCSUPP@span BDC}%
340 }
341 \def\ACCSUPP@emc{%
342   \special{pdf:content EMC}%
343 }

344 \</dvipdfm>

```

3.5.3 Driver dvips

```

345 (*dvips)
346 \NeedsTeXFormat{LaTeX2e}
347 \ProvidesFile{accsupp-dvips.def}%
348 [2016/05/16 v0.4 accsupp driver for dvips (HO)]%

349 \def\ACCSUPP@bdc{%
350   \special{ps:\ACCSUPP@span/BDC pdfmark}%
351 }
352 \def\ACCSUPP@emc{%
353   \special{ps:/EMC pdfmark}%
354 }

355 \</dvips>

```

4 Test

4.1 Catcode checks for loading

```

356 (*test1)
357 \NeedsTeXFormat{LaTeX2e}
358 \documentclass{minimal}
359 \makeatletter
360 \def\RestoreCatcodes{}

```

```

361 \count@=0 %
362 \loop
363   \edef\RestoreCatcodes{%
364     \RestoreCatcodes
365     \catcode\the\count@=\the\catcode\count@\relax
366   }%
367 \ifnum\count@<255 %
368   \advance\count@\@ne
369 \repeat
370
371 \def\RangeCatcodeInvalid#1#2{%
372   \count@=#1\relax
373   \loop
374     \catcode\count@=15 %
375     \ifnum\count@<#2\relax
376       \advance\count@\@ne
377     \repeat
378 }
379 \def\Test{%
380   \RangeCatcodeInvalid{0}{47}%
381   \RangeCatcodeInvalid{58}{64}%
382   \RangeCatcodeInvalid{91}{96}%
383   \RangeCatcodeInvalid{123}{127}%
384   \catcode'\@=12 %
385   \catcode'\=0 %
386   \catcode'\{=1 %
387   \catcode'\}=2 %
388   \catcode'\#=6 %
389   \catcode'\[=12 %
390   \catcode'\]=12 %
391   \catcode'\%=14 %
392   \catcode'\ =10 %
393   \catcode13=5 %
394   \RequirePackage{accsupp}[2016/05/16]\relax
395   \RestoreCatcodes
396 }
397 \Test
398 \csname @@end\endcsname
399 \end
400 </test1>

```

5 Installation

5.1 Download

Package. This package is available on CTAN¹:

[CTAN:macros/latex/contrib/oberdiek/accsupp.dtx](http://ctan.org/macros/latex/contrib/oberdiek/accsupp.dtx) The source file.

[CTAN:macros/latex/contrib/oberdiek/accsupp.pdf](http://ctan.org/macros/latex/contrib/oberdiek/accsupp.pdf) Documentation.

Bundle. All the packages of the bundle ‘oberdiek’ are also available in a TDS compliant ZIP archive. There the packages are already unpacked and the documentation files are generated. The files and directories obey the TDS standard.

[CTAN:install/macros/latex/contrib/oberdiek.tds.zip](http://ctan.org/install/macros/latex/contrib/oberdiek.tds.zip)

TDS refers to the standard “A Directory Structure for T_EX Files” ([CTAN:tds/tds.pdf](http://ctan.org/tds/tds.pdf)). Directories with `texmf` in their name are usually organized this way.

¹<http://ctan.org/pkg/accsupp>

5.2 Bundle installation

Unpacking. Unpack the oberdiek.tds.zip in the TDS tree (also known as `texmf` tree) of your choice. Example (linux):

```
unzip oberdiek.tds.zip -d ~/texmf
```

Script installation. Check the directory `TDS:scripts/oberdiek/` for scripts that need further installation steps. Package `attachfile2` comes with the Perl script `pdfatfi.pl` that should be installed in such a way that it can be called as `pdfatfi`. Example (linux):

```
chmod +x scripts/oberdiek/pdfatfi.pl
cp scripts/oberdiek/pdfatfi.pl /usr/local/bin/
```

5.3 Package installation

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

```
tex accsupp.dtx
```

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

<code>accsupp.sty</code>	→ <code>tex/latex/oberdiek/accsupp.sty</code>
<code>accsupp-pdftex.def</code>	→ <code>tex/latex/oberdiek/accsupp-pdftex.def</code>
<code>accsupp-dvipdfm.def</code>	→ <code>tex/latex/oberdiek/accsupp-dvipdfm.def</code>
<code>accsupp-dvips.def</code>	→ <code>tex/latex/oberdiek/accsupp-dvips.def</code>
<code>accsupp.pdf</code>	→ <code>doc/latex/oberdiek/accsupp.pdf</code>
<code>accsupp-example1.tex</code>	→ <code>doc/latex/oberdiek/accsupp-example1.tex</code>
<code>accsupp-example2.tex</code>	→ <code>doc/latex/oberdiek/accsupp-example2.tex</code>
<code>test/accsupp-test1.tex</code>	→ <code>doc/latex/oberdiek/test/accsupp-test1.tex</code>
<code>accsupp.dtx</code>	→ <code>source/latex/oberdiek/accsupp.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`.

5.4 Refresh file name databases

If your `TEX` distribution (te`TEX`, mik`TEX`, ...) relies on file name databases, you must refresh these. For example, te`TEX` users run `texhash` or `mktextlsr`.

5.5 Some details for the interested

Unpacking with L^AT_EX. The `.dtx` chooses its action depending on the format:

plain T_EX: Run `docstrip` and extract the files.

L^AT_EX: Generate the documentation.

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

```
latex \let\install=y\input{accsupp.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 pdfL^AT_EX:

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

6 Catalogue

The following XML file can be used as source for the [T_EX Catalogue](#). The elements `caption` and `description` are imported from the original XML file from the Catalogue. The name of the XML file in the Catalogue is `accsupp.xml`.

```
401 (*catalogue)
402 <?xml version='1.0' encoding='us-ascii'?>
403 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
404 <entry datestamp='$Date$' modifier='$Author$' id='accsupp'>
405   <name>accsupp</name>
406   <caption>Better accessibility support for PDF files.</caption>
407   <authorref id='auth:oberdiek'>/>
408   <copyright owner='Heiko Oberdiek' year='2007,2010'>/>
409   <license type='lppl1.3'>/>
410   <version number='0.4'>/>
411   <description>
412     Since PDF 1.5 portions of a page can be marked for better accessibility
413     support. For example, replacement texts or expansions of abbreviations can
414     be provided. This package starts with providing a minimal low-level
415     interface for programmers; its status is experimental.
416   </p>
417   The package is part of the <xref refid='oberdiek'>oberdiek</xref> bundle.
418 </description>
419 <documentation details='Package documentation'
420   href='ctan:/macros/latex/contrib/oberdiek/accsupp.pdf'>/>
421 <ctan file='true' path='/macros/latex/contrib/oberdiek/accsupp.dtx'>/>
422 <miktex location='oberdiek'>/>
423 <texlive location='oberdiek'>/>
424 <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'>/>
425 </entry>
426 </catalogue>
```

7 References

- [1] Adobe Systems Incorporated, *PDF Reference*, 6th edition, 2006. http://www.adobe.com/devnet/acrobat/pdfs/pdf_reference.pdf

8 History

[2007/03/21 v0.1]

- First version.

[2007/11/14 v0.2]

- Various bug fixes.
- Catcode section rewritten, test added.

[2010/01/16 v0.3]

- \AccSuppSetup added.
- Options space, spacefont, spacechar added.

[2016/05/16 v0.4]

- Documentation updates.

9 Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; plain numbers refer to the code lines where the entry is used.

Symbols			
\#	388	\ACCSUPP@Lang	200, 223, 225
\%	391	\ACCSUPP@method	190, 197, 211
\@	384	\ACCSUPP@method@escape	281
\@dblarg	111	\ACCSUPP@method@hex	290
\@ehc	158, 177, 184, 195, 309	\ACCSUPP@method@pdfstringdef	300
\@empty	121, 208, 310	\ACCSUPP@method@plain	269
\@ifundefined	192, 254, 302, 306	\ACCSUPP@pdfliteral	328, 331
\@ne	368, 376	\ACCSUPP@space	242, 251
\@onelevel@sanitize	279	\ACCSUPP@spacechar	258
\[389	\ACCSUPP@spacefont	255
\]	385	\ACCSUPP@span	221, 328, 339, 350
\{	386	\ACCSUPP@temp	144, 146,
\}	387		151, 154, 161, 163, 169, 201,
\]	390		215, 216, 217, 310, 314, 315, 319
Numbers		\AccSuppSetup	266
\3	274	\ActualTextDriverDefault	130, 138
		\advance	368, 376
		B	
_	392	\begin	17, 18, 29, 30
		\BeginAccSupp	2, 11, 31, 218
A		C	
\ACCSUPP@@DefineDriverKey	111, 113	\catcode	46, 47,
\ACCSUPP@@temp	202, 204		49, 50, 51, 55, 56, 57, 58, 59,
\ACCSUPP@ActualText	231, 233		60, 61, 64, 65, 67, 68, 69, 70,
\ACCSUPP@Alt	227, 229		74, 76, 365, 374, 384, 385, 386,
\ACCSUPP@AtEnd			387, 388, 389, 390, 391, 392, 393
	72, 73, 95, 159, 178, 185, 321	\centernot	12
\ACCSUPP@bdc	241, 327, 338, 349	\char	258
\ACCSUPP@DefineDriverKey		\copy	262
	110, 122, 123, 124, 125, 126, 127	\count@	361,
\ACCSUPP@DisableOptions			365, 367, 368, 372, 374, 375, 376
	117, 121, 143	\csname	53, 202, 211, 270, 398
\ACCSUPP@driver	115, 128, 132,	D	
	135, 137, 138, 146, 149, 151,	\DeclareBoolOption	107, 187
	154, 163, 166, 169, 173, 180, 182	\DeclareStringOption	108, 109, 188, 189
\ACCSUPP@E	235, 237	\define@key	114, 191, 206
\ACCSUPP@emc	248, 330, 341, 352	\DisableKeyvalOption	118
\ACCSUPP@Font	255, 258		

<code>\documentclass</code>	3, 26, 358	<code>\notparallel</code>	8, 19
<code>\dp</code>	261		
E			
<code>\EdefEscapeString</code>	282	<code>\PackageError</code>	155, 174, 181, 193, 307
<code>\end</code>	20, 21, 41, 42, 399	<code>\PackageWarningNoLine</code>	148, 165
<code>\EndAccSupp</code>	2, 13, 40, 245	<code>\parallel</code>	12
<code>\endcsname</code>	53, 202, 211, 270, 398	<code>\pdfliteral</code>	328, 331
<code>\endinput</code>	95	<code>\pdfstringdef</code>	314
<code>\endlinechar</code>	48, 54, 66	<code>\ProcessKeyvalOptions</code>	142
<code>\ensuremath</code>	9	<code>\providecommand</code>	130
F			
<code>\font</code>	255	<code>\ProvidesFile</code>	325, 336, 347
G			
<code>\g@addto@macro</code>	117	<code>\ProvidesPackage</code>	97
H			
<code>\hbox</code>	258, 313	R	
<code>\ht</code>	260	<code>\RangeCatcodeInvalid</code>	371, 380, 381, 382, 383
<code>\hypersetup</code>	303	<code>\repeat</code>	369, 377
I			
<code>\ifACCSUPP@space</code>	252	<code>\RequirePackage</code>	99, 100, 101, 102, 394
<code>\ifACCSUPP@unicode</code>	273, 283, 293, 301	<code>\RestoreCatcodes</code>	360, 363, 364, 395
<code>\ifnum</code>	367, 375	S	
<code>\ifpdf</code>	131, 145	<code>\setbox</code>	258, 313
<code>\ifx</code>	137, 146, 154, 163, 173, 208, 223, 227, 231, 235	<code>\setkeys</code>	220, 247, 267
<code>\ifxetex</code>	134, 162	<code>\SetupKeyvalOptions</code>	103
<code>\InputIfFileExists</code>	129, 180	<code>\special</code>	339, 342, 350, 353
L			
<code>\leavevmode</code>	257	T	
<code>\loop</code>	362, 373	<code>\Test</code>	379, 397
M			
<code>\makeatletter</code>	359	<code>\texttwosuperior</code>	35, 36
<code>\mathrel</code>	7, 10	<code>\the</code>	54, 55, 56, 57, 58, 59, 60, 61, 74, 365
<code>\MessageBreak</code>	156, 166, 175, 182	<code>\TMP@EnsureCode</code>	71, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94
N			
<code>\NeedsTeXFormat</code>	96, 324, 335, 346, 357	U	
<code>\newcommand</code>	8, 218, 245, 266	<code>\usepackage</code>	4, 5, 27, 28
P			
R			
S			
T			
U			
W			
X			
Z			
<code>\x</code>	52, 64	<code>\z@</code>	258, 259, 260, 261, 262