

# The hypdestopt package

Heiko Oberdiek\*

2020-09-02 v2.7

## Abstract

Package `hypdestopt` supports `hyperref`'s `pdftex` and `luatex` driver. It removes unnecessary destinations and shortens the destination names or uses numbered destinations to get smaller PDF files.

## Contents

<b>1</b>	<b>User interface</b>	<b>2</b>
1.1	Introduction . . . . .	2
1.2	Requirements . . . . .	2
1.3	Use . . . . .	2
1.4	Limitations . . . . .	3
1.5	Future . . . . .	3
<b>2</b>	<b>Implementation</b>	<b>3</b>
2.1	Identification . . . . .	3
2.2	Options . . . . .	3
	2.2.1 Option <code>verbose</code> . . . . .	3
	2.2.2 Options <code>num</code> and <code>name</code> . . . . .	4
2.3	Check requirements . . . . .	4
2.4	Preamble for auxiliary file . . . . .	5
2.5	Generation of destination names . . . . .	5
2.6	Assign destination names . . . . .	6
2.7	Redefinition of <code>hyperref</code> 's hooks . . . . .	7
	2.7.1 Destination setting . . . . .	7
	2.7.2 Links . . . . .	8
	2.7.3 Outlines of package <code>hyperref</code> . . . . .	9
	2.7.4 Outlines of package <code>bookmark</code> . . . . .	9
<b>3</b>	<b>Installation</b>	<b>10</b>
3.1	Download . . . . .	10
3.2	Bundle installation . . . . .	10
3.3	Package installation . . . . .	10
3.4	Refresh file name databases . . . . .	10
3.5	Some details for the interested . . . . .	11
<b>4</b>	<b>References</b>	<b>11</b>

---

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

<b>5</b>	<b>History</b>	<b>11</b>
	[2006/06/01 v1.0]	11
	[2006/06/01 v2.0]	11
	[2007/11/11 v2.1]	11
	[2008/08/08 v2.2]	11
	[2011/05/13 v2.3]	12
	[2016/05/16 v2.4]	12
	[2016/05/21 v2.5]	12
	[2019/12/29 v2.6]	12
	[2020-09-02 v2.7]	12
<b>6</b>	<b>Index</b>	<b>12</b>

# 1 User interface

## 1.1 Introduction

Before PDF-1.5 annotations and destinations cannot be compressed. If the destination names are not needed for external use, the file size can be decreased by the following means:

- Unused destinations are removed.
- The destination names are shortened (option `name`).
- Using numbered destinations (option `num`).

## 1.2 Requirements

- Package `hyperref` 2006/06/01 v6.75a or newer ([2]).
- Package `alphalph` 2006/05/30 v1.4 or newer ([1]), if option `name` is used.
- Package `iftex`.
- `pdfTeX` 1.30.0 or newer.
- `pdfTeX` or `luaTeX` in PDF mode.
- $\varepsilon$ -`TeX` extensions enabled.
- Probably an additional compile run of `pdfLaTeX` or `luaLaTeX` is necessary.

In the first compile runs you can get warnings such as:

```
! pdfTeX warning (dest): name{...} has been referenced ...
```

These warnings should vanish in later compile runs. However these warnings also can occur without this package. The package does not cure them, thus these warnings will remain, but the destination name can be different. In such cases test without the package, too.

### 1.3 Use

If the requirements are met, load the package:

```
\usepackage{hypdestopt}
```

The following options are supported:

**verbose:** Verbose debug output is enabled and written in the protocol file.

**num:** Numbered destinations are used. The file size is smaller, because names are no longer used. This is the default.

**name:** Destinations are identified by names.

### 1.4 Limitations

- Forget this package, if you need preserved destination names.
- Destination name strings use all bytes (0..255) except the carriage return (13), left parenthesis (40), right parenthesis (41), and backslash (92), because they must be quoted in general and therefore occupy two bytes instead of one.

Further the zero byte (0) is avoided for programs that implement strings using zero terminated C strings. And 255 (0xFF) is avoided to get rid of a possible unicode marker at the begin.

So far I have not seen problems with:

- AcrobatReader 5.08/Linux
- AcrobatReader 7.0/Linux
- xpdf 3.00
- Ghostscript 8.50
- gv 3.5.8
- GSview 4.6

But I have not tested all and all possible PDF viewers.

- Use of named destinations (`\pdfdest`, `\pdfoutline`, `\pdfstartlink`, ...) that are not supported by this package.
- Currently only hyperref with pdfTEX and luaTEX in PDF mode is supported.

### 1.5 Future

A more general approach is a PDF postprocessor that takes a PDF file, performs some transformations and writes the result in a more optimized PDF file. Then it does not depend, how the original PDF file was generated and further improvements are easier to apply. For example, the destination names could be sorted: often used destination names would then be shorter than seldom used ones.

## 2 Implementation

### 2.1 Identification

```
1 (*package)
2 \NeedsTeXFormat{LaTeX2e}
3 \ProvidesPackage{hypdestopt}%
4 [2020-09-02 v2.7 Hyperref destination optimizer (HO)]%
```

### 2.2 Options

#### 2.2.1 Option verbose

```
5 \newif\ifHypDest@Verbose
6 \DeclareOption{verbose}{\HypDest@Verbosetrue}
```

`\HypDest@VerboseInfo` Wrapper for verbose messages.

```
7 \def\HypDest@VerboseInfo#1{%
8   \ifHypDest@Verbose
9     \PackageInfo{hypdestopt}{#1}%
10  \fi
11 }
```

#### 2.2.2 Options num and name

The options `num` or `name` specify the method, how destinations are referenced (by name or number). Default is option `num`.

```
12 \newif\ifHypDest@name
13 \DeclareOption{num}{\HypDest@namefalse}
14 \DeclareOption{name}{\HypDest@nametrue}
15 \ProcessOptions*\relax
```

### 2.3 Check requirements

First pdfTeX must running in PDF mode.

```
16 \RequirePackage{iftex}[2019/11/07]
17 \RequirePackage{pdftexcmds}[2007/11/11]
18 \ifpdf
19 \else
20   \PackageError{hypdestopt}{%
21     This package requires pdfTeX or luaTeX in PDF mode%
22   }\@ehc
23   \expandafter\endinput
24 \fi
```

The version of pdfTeX must not be too old, because `\pdfescapehex` and `\pdfunescapehex` are used.

```
25 \begingroup\expandafter\expandafter\expandafter\endgroup
26 \expandafter\ifx\csname pdf@escapehex\endcsname\relax
27   \PackageError{hypdestopt}{%
28     This pdfTeX is too old, at least 1.30.0 is required%
29   }\@ehc
30   \expandafter\endinput
31 \fi
```

Features of  $\epsilon$ -TeX are used, e.g. `\numexpr`.

```
32 \begingroup\expandafter\expandafter\expandafter\endgroup
33 \expandafter\ifx\csname numexpr\endcsname\relax
34   \PackageError{hypdestopt}{%
```

```

35     e-TeX features are missing%
36   }\@ehc
37   \expandafter\endinput
38 \fi

```

Package `alphalph` provides `\newalphalph` since version 2006/05/30 v1.4.

```

39 \ifHypDest@name
40   \RequirePackage{alphalph}[2006/05/30]%
41 \fi

42 \RequirePackage{auxhook}[2009/12/14]
43 \RequirePackage{pdfescape}[2007/04/21]

```

## 2.4 Preamble for auxiliary file

Provide dummy definitions for the macros that are used in the auxiliary files. If the package is used no longer, then these commands will not generate errors.

`\HypDest@PrependDocument` We add our stuff in front of the `\AtBeginDocument` hook to ensure that we are before `hyperref`'s stuff. Starting with LaTeX 2020/10/01 we use the hook and a rule.

```

44 \providecommand\IfFormatAtLeastTF{\@ifl@t@r\fmtversion}
45 \IfFormatAtLeastTF{2020/10/01}
46 {
47   \long\def\HypDest@PrependDocument#1{%
48     \AddToHook{begindocument}{#1}}%
49   \DeclareHookRule{begindocument}{.}{before}{hyperref}
50 }
51 {
52   \long\def\HypDest@PrependDocument#1{%
53     \begingroup
54     \toks\z@{#1}%
55     \toks\tw@\expandafter{\@begindocumenthook}%
56     \xdef\@begindocumenthook{\the\toks\z@\the\toks\tw@}%
57     \endgroup
58   }
59 }

60 \AddLineBeginAux{%
61   \string\providecommand{\string\HypDest@Use}[1]{}%
62 }

```

## 2.5 Generation of destination names

Counter `HypDest` is used for identifying destinations.

```

63 \newcounter{HypDest}
64 \ifHypDest@name

```

`\HypDest@HexChar` Destination names are generated by automatically numbering with the help of package `alphalph`. `\HypDest@HexChar` converts a number of the range 1 until 252 into the hexadecimal representation of the string character.

```

65   \def\HypDest@HexChar#1{%
66     \ifcase#1\or

```

Avoid zero byte because of C strings in PDF viewer applications.

```

67     01\or 02\or 03\or 04\or 05\or 06\or 07\or

```

Omit carriage return (13/^^0d). It needs quoting, otherwise it would be converted to line feed (10/^^0a).

```
68      08\or 09\or 0A\or 0B\or 0C\or 0E\or 0F\or
69      10\or 11\or 12\or 13\or 14\or 15\or 16\or 17\or
70      18\or 19\or 1A\or 1B\or 1C\or 1D\or 1E\or 1F\or
71      20\or 21\or 22\or 23\or 24\or 25\or 26\or 27\or
```

Omit left and right parentheses (40/^^28, 41/^^39), they need quoting in general.

```
72      2A\or 2B\or 2C\or 2D\or 2E\or 2F\or
73      30\or 31\or 32\or 33\or 34\or 35\or 36\or 37\or
74      38\or 39\or 3A\or 3B\or 3C\or 3D\or 3E\or 3F\or
75      40\or 41\or 42\or 43\or 44\or 45\or 46\or 47\or
76      48\or 49\or 4A\or 4B\or 4C\or 4D\or 4E\or 4F\or
77      50\or 51\or 52\or 53\or 54\or 55\or 56\or 57\or
```

Omit backslash (92/^^5C), it needs quoting.

```
78      58\or 59\or 5A\or 5B\or 5D\or 5E\or 5F\or
79      60\or 61\or 62\or 63\or 64\or 65\or 66\or 67\or
80      68\or 69\or 6A\or 6B\or 6C\or 6D\or 6E\or 6F\or
81      70\or 71\or 72\or 73\or 74\or 75\or 76\or 77\or
82      78\or 79\or 7A\or 7B\or 7C\or 7D\or 7E\or 7F\or
83      80\or 81\or 82\or 83\or 84\or 85\or 86\or 87\or
84      88\or 89\or 8A\or 8B\or 8C\or 8D\or 8E\or 8F\or
85      90\or 91\or 92\or 93\or 94\or 95\or 96\or 97\or
86      98\or 99\or 9A\or 9B\or 9C\or 9D\or 9E\or 9F\or
87      A0\or A1\or A2\or A3\or A4\or A5\or A6\or A7\or
88      A8\or A9\or AA\or AB\or AC\or AD\or AE\or AF\or
89      B0\or B1\or B2\or B3\or B4\or B5\or B6\or B7\or
90      B8\or B9\or BA\or BB\or BC\or BD\or BE\or BF\or
91      C0\or C1\or C2\or C3\or C4\or C5\or C6\or C7\or
92      C8\or C9\or CA\or CB\or CC\or CD\or CE\or CF\or
93      D0\or D1\or D2\or D3\or D4\or D5\or D6\or D7\or
94      D8\or D9\or DA\or DB\or DC\or DD\or DE\or DF\or
95      E0\or E1\or E2\or E3\or E4\or E5\or E6\or E7\or
96      E8\or E9\or EA\or EB\or EC\or ED\or EE\or EF\or
97      F0\or F1\or F2\or F3\or F4\or F5\or F6\or F7\or
```

Avoid 255 (0xFF) to get rid of a possible unicode marker at the begin of the string.

```
98      F8\or F9\or FA\or FB\or FC\or FD\or FE%
99      \fi
100     }%
```

**HypDest@HexString** Now package `alphalph` comes into play. `\HypDest@HexString` is defined and converts a positive number into a string, given in hexadecimal representation.

```
101     \newalphalph\HypDest@HexString\HypDest@HexChar{250}%
```

`\theHypDest` For use, the hexadecimal string is converted back.

```
102     \renewcommand*{\theHypDest}{%
103     \pdf@unescapehex{\HypDest@HexString{\value{HypDest}}}%
104     }%
```

With option `num` we use the number directly.

```
105 \else
106     \renewcommand*{\theHypDest}{%
107     \number\value{HypDest}%
108     }%
109 \fi
```

## 2.6 Assign destination names

`\HypDest@Prefix` The new destination names are remembered in macros whose names start with prefix `\HypDest@Prefix`.

```
110 \edef\HypDest@Prefix{HypDest\string:}
```

`\HypDest@Use` During the first read of the auxiliary files, the used destinations get fresh generated short destination names. Also for the old destination names we use the hexadecimal representation. That avoid problems with arbitrary names.

```
111 \def\HypDest@Use#1{%
112   \begingroup
113   \edef\x{%
114     \expandafter\noexpand
115     \csname\HypDest@Prefix\pdf@unescapehex{#1}\endcsname
116   }%
117   \expandafter\ifx\x\relax
118     \stepcounter{HypDest}%
119     \expandafter\xdef\x{\theHypDest}%
120     \let\on@line\@empty
121     \ifHypDest@name
122       \HypDest@VerboseInfo{%
123         Use: (\pdf@unescapehex{#1}) -\string> %
124         0x\pdf@escapehex{x} (\number\value{HypDest})%
125       }%
126     \else
127       \HypDest@VerboseInfo{%
128         Use: (\pdf@unescapehex{#1}) -\string> num \x
129       }%
130     \fi
131   \fi
132 \endgroup
133 }
```

After the first `.aux` file processing the destination names are assigned and we can disable `\HypDest@Use`.

```
134 \AtBeginDocument{%
135   \let\HypDest@Use\@gobble
136 }
```

`\HypDest@MarkUsed` Destinations that are actually used are marked by `\HypDest@MarkUsed`. `\nofiles` is respected.

```
137 \def\HypDest@MarkUsed#1{%
138   \HypDest@VerboseInfo{%
139     MarkUsed: (#1)%
140   }%
141   \if@filesw
142     \immediate\write\@auxout{%
143       \string\HypDest@Use{\pdf@escapehex{#1}}%
144     }%
145   \fi
146 }
```

## 2.7 Redefinition of `hyperref`'s hooks

Package `hyperref` can be loaded later, therefore we redefine `hyperref`'s macros at `\begin{document}`.

```
147 \HypDest@PrependDocument{%
```

## 2.7.1 Destination setting

luatex compatibility

```
148 \ifx\pdfextension\@undefined\else
149   \protected\def\pdfdest{\pdfextension dest }
150 \fi

151 \ifHypDest@name
152   \let\HypDest@Org@DestName\Hy@DestName
153   \renewcommand*{\Hy@DestName}[2]{%
154     \EdefUnescapeString\HypDest@temp{#1}%
155     \@ifundefined{\HypDest@Prefix\HypDest@temp}{%
156       \HypDest@VerboseInfo{%
157         DestName: (\HypDest@temp) unused%
158       }%
159     }{%
160       \HypDest@Org@DestName{%
161         \csname\HypDest@Prefix\HypDest@temp\endcsname
162       }{#2}%
163       \HypDest@VerboseInfo{%
164         DestName: (\HypDest@temp) %
165         Ox\pdf@escapehex{%
166           \csname\HypDest@Prefix\HypDest@temp\endcsname
167         }%
168       }%
169     }%
170   }%
171 \else
172   \renewcommand*{\Hy@DestName}[2]{%
173     \EdefUnescapeString\HypDest@temp{#1}%
174     \@ifundefined{\HypDest@Prefix\HypDest@temp}{%
175       \HypDest@VerboseInfo{%
176         DestName: (\HypDest@temp) unused%
177       }%
178     }{%
179       \pdfdest num%
180       \csname\HypDest@Prefix\HypDest@temp\endcsname#2\relax
181       \HypDest@VerboseInfo{%
182         DestName: (\HypDest@temp) %
183         num \csname\HypDest@Prefix\HypDest@temp\endcsname
184       }%
185     }%
186   }%
187 \fi
```

## 2.7.2 Links

```
188 \let\HypDest@Org@StartlinkName\Hy@StartlinkName
189 \ifHypDest@name
190   \renewcommand*{\Hy@StartlinkName}[2]{%
191     \HypDest@MarkUsed{#2}%
192     \HypDest@Org@StartlinkName{#1}{%
193       \@ifundefined{\HypDest@Prefix#2}{%
194         #2%
195       }{%
196         \csname\HypDest@Prefix#2\endcsname
197       }%
198     }%
199   }%
```



```

200 \else
201   \renewcommand*{\Hy@StartlinkName}[2]{%
202     \HypDest@MarkUsed{#2}%
203     \@ifundefined{\HypDest@Prefix#2}{%
204       \HypDest@Org@StartlinkName{#1}{#2}%
205     }{%
206       \pdfstartlink attr{#1}%
207         goto num\csname\HypDest@Prefix#2\endcsname
208     }
209   }%
210 }%
211 \fi

```

### 2.7.3 Outlines of package hyperref

```

212 \let\HypDest@Org@OutlineName\Hy@OutlineName
213 \ifHypDest@name
214   \renewcommand*{\Hy@OutlineName}[4]{%
215     \HypDest@Org@OutlineName{#1}{%
216       \@ifundefined{\HypDest@Prefix#2}{%
217         #2%
218       }{%
219         \csname\HypDest@Prefix#2\endcsname
220       }%
221     }{#3}{#4}%
222   }%
223 \else
224   \renewcommand*{\Hy@OutlineName}[4]{%
225     \@ifundefined{\HypDest@Prefix#2}{%
226       \HypDest@Org@OutlineName{#1}{#2}{#3}{#4}%
227     }{%
228       \pdfoutline goto num\csname\HypDest@Prefix#2\endcsname
229         count#3{#4}%
230     }%
231   }%
232 \fi

```

Because \Hy@OutlineName is called after the .out file is written in the previous run. Therefore we mark the destination earlier in \@@writetorep.

```

233 \let\HypDest@Org@@writetorep@@writetorep
234 \renewcommand*{\@@writetorep}[5]{%
235   \begingroup
236     \edef\Hy@tempa{#5}%
237     \ifx\Hy@tempa\Hy@bookmarkstype
238       \HypDest@MarkUsed{#3}%
239     \fi
240   \endgroup
241   \HypDest@Org@@writetorep{#1}{#2}{#3}{#4}{#5}%
242 }%

```

### 2.7.4 Outlines of package bookmark

```

243 \@ifpackageloaded{bookmark}{%
244   \renewcommand*{\BKM@DefGotoNameAction}[2]{%
245     \@ifundefined{\HypDest@Prefix#2}{%
246       \edef#1{goto name{hypdestopt\string :unknown}}%
247     }{%
248       \ifHypDest@name
249         \edef#1{goto name{\csname\HypDest@Prefix#2\endcsname}}%
250       \else
251         \edef#1{goto num\csname\HypDest@Prefix#2\endcsname}%

```

```

252         \fi
253     }%
254 }%
255 \def\BKM@HypDestOptHook{%
256     \ifx\BKM@dest\@empty
257     \else
258         \ifx\BKM@gotor\@empty
259             \HypDest@MarkUsed\BKM@dest
260         \fi
261     \fi
262 }%
263 }{}%
264 }
265 \end{package}

```

## 3 Installation

### 3.1 Download

**Package.** This package is available on CTAN<sup>1</sup>:

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

[CTAN:macros/latex/contrib/oberdiek/hypdestopt.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](#)

*TDS* refers to the standard “A Directory Structure for  $\TeX$  Files” ([CTAN:pkg/tds](#)). Directories with `texmf` in their name are usually organized this way.

### 3.2 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
```

### 3.3 Package installation

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

```
tex hypdestopt.dtx
```

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

```

hypdestopt.sty → tex/latex/oberdiek/hypdestopt.sty
hypdestopt.pdf → doc/latex/oberdiek/hypdestopt.pdf
hypdestopt.dtx → source/latex/oberdiek/hypdestopt.dtx

```

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`.

---

<sup>1</sup>[CTAN:pkg/hypdestopt](#)

### 3.4 Refresh file name databases

If your T<sub>E</sub>X distribution (T<sub>E</sub>X Live, MiK<sub>T</sub>E<sub>X</sub>, ...) relies on file name databases, you must refresh these. For example, T<sub>E</sub>X Live users run `texhash` or `mktextlsr`.

### 3.5 Some details for the interested

**Unpacking with L<sup>A</sup>T<sub>E</sub>X.** The `.dtx` chooses its action depending on the format:

**plain T<sub>E</sub>X:** Run `docstrip` and extract the files.

**L<sup>A</sup>T<sub>E</sub>X:** Generate the documentation.

If you insist on using L<sup>A</sup>T<sub>E</sub>X for `docstrip` (really, `docstrip` does not need L<sup>A</sup>T<sub>E</sub>X), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{hypdestopt.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<sup>A</sup>T<sub>E</sub>X:

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

## 4 References

- [1] Heiko Oberdiek: *The `alphalph` package*; 2006/05/30 v1.4; [CTAN:pkg/alphalph](#).
- [2] Sebastian Raetz, Heiko Oberdiek: *The `hyperref` package*; 2006/06/01 v6.75a; [CTAN:pkg/hyperref](#).

## 5 History

[2006/06/01 v1.0]

- First version.

[2006/06/01 v2.0]

- New method for referencing destinations by number; an idea proposed by Lars Hellström in the mailing list L<sup>A</sup>T<sub>E</sub>X-L.
- Options name and num added.

[2007/11/11 v2.1]

- Use of package `pdftexcmds` for Lua<sub>T</sub>E<sub>X</sub> support.

[2008/08/08 v2.2]

- Support for package bookmark added.

[2011/05/13 v2.3]

- Fix for `\Hy@DestName` if the destination name contains special characters.
- Fix for option name and package bookmark.

[2016/05/16 v2.4]

- Documentation updates.

[2016/05/21 v2.5]

- LuaTeX compatibility

[2019/12/29 v2.6]

- use iftex package.

[2020-09-02 v2.7]

- Adapted to the new hook management of LaTeX (github issue 1)

## 6 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		C	
<code>\@@writetorep</code> .....	233, 234	<code>\csname</code> .	26, 33, 115, 161, 166, 180, 183, 196, 207, 219, 228, 249, 251
<code>\@auxout</code> .....	142	<b>D</b>	
<code>\@begindocumenthook</code> .....	55, 56	<code>\DeclareHookRule</code> .....	49
<code>\@ehc</code> .....	22, 29, 36	<code>\DeclareOption</code> .....	6, 13, 14
<code>\@empty</code> .....	120, 256, 258	<b>E</b>	
<code>\@gobble</code> .....	135	<code>\EdefUnescapeString</code> .....	154, 173
<code>\@ifl@t@r</code> .....	44	<code>\endcsname</code> 26, 33, 115, 161, 166, 180, 183, 196, 207, 219, 228, 249, 251	
<code>\@ifpackageloaded</code> .....	243	<code>\endinput</code> .....	23, 30, 37
<code>\@ifundefined</code> .....	155, 174, 193, 203, 216, 225, 245	<b>F</b>	
<code>\@undefined</code> .....	148	<code>\fmtversion</code> .....	44
<b>A</b>		<b>H</b>	
<code>\AddLineBeginAux</code> .....	60	<code>\Hy@bookmarkstype</code> .....	237
<code>\AddToHook</code> .....	48	<code>\Hy@DestName</code> .....	152, 153, 172
<code>\AtBeginDocument</code> .....	134	<code>\Hy@OutlineName</code> .....	212, 214, 224
<b>B</b>		<code>\Hy@StartlinkName</code> .....	188, 190, 201
<code>\BKM@DefGotoNameAction</code> .....	244	<code>\Hy@tempa</code> .....	236, 237
<code>\BKM@dest</code> .....	256, 259	<code>\HypDest@HexChar</code> .....	<u>65</u> , 101
<code>\BKM@gotor</code> .....	258	<code>\HypDest@HexString</code> .....	<u>101</u> , 101, 103
<code>\BKM@HypDestOptHook</code> .....	255		

\HypDest@MarkUsed	.....		
	.....	137, 191, 202, 238, 259	
\HypDest@namefalse	.....	13	
\HypDest@nametrue	.....	14	
\HypDest@Org@@writetorep	...	233, 241	
\HypDest@Org@DestName	.....	152, 160	
\HypDest@Org@OutlineName	.....	212, 215, 226	
\HypDest@Org@StartlinkName	.....		
	.....	188, 192, 204	
\HypDest@Prefix	.....		
	.....	110, 115, 155, 161, 166, 174,	
	.....	180, 183, 193, 196, 203, 207,	
	.....	216, 219, 225, 228, 245, 249, 251	
\HypDest@PrependDocument	.....	44, 147	
\HypDest@temp	.....	154, 155, 157, 161, 164,	
	.....	166, 173, 174, 176, 180, 182, 183	
\HypDest@Use	.....	61, 111, 135, 143	
\HypDest@VerboseInfo	.....	7,	
	.....	122, 127, 138, 156, 163, 175, 181	
\HypDest@Verbosetrue	.....	6	
<b>I</b>			
\if@filesw	.....	141	
\ifcase	.....	66	
\IfFormatAtLeastTF	.....	44, 45	
\ifHypDest@name	.....		
	.....	12, 39, 64, 121, 151, 189, 213, 248	
\ifHypDest@Verbose	.....	5, 8	
\ifpdf	.....	18	
\ifx	....	26, 33, 117, 148, 237, 256, 258	
\immediate	.....	142	
<b>N</b>			
\NeedsTeXFormat	.....	2	
\newalphalph	.....	101	
\newcounter	.....	63	
\newif	.....	5, 12	
\number	.....	107, 124	
<b>O</b>			
\on@line	.....	120	
<b>P</b>			
\PackageError	.....	20, 27, 34	
\PackageInfo	.....	9	
\pdf@escapehex	.....	124, 143, 165	
\pdf@unescapehex	..	103, 115, 123, 128	
\pdfdest	.....	149, 179	
\pdfextension	.....	148, 149	
\pdfoutline	.....	228	
\pdfstartlink	.....	206	
\ProcessOptions	.....	15	
\protected	.....	149	
\providecommand	.....	44, 61	
\ProvidesPackage	.....	3	
<b>R</b>			
\renewcommand	.....	102, 106, 153,	
	.....	172, 190, 201, 214, 224, 234, 244	
\RequirePackage	....	16, 17, 40, 42, 43	
<b>S</b>			
\stepcounter	.....	118	
<b>T</b>			
\the	.....	56	
\theHypDest	.....	102, 106, 119	
\toks	.....	54, 55, 56	
\tw@	.....	55, 56	
<b>V</b>			
\value	.....	103, 107, 124	
<b>W</b>			
\write	.....	142	
<b>X</b>			
\x	.....	113, 117, 119, 124, 128	
<b>Z</b>			
\z@	.....	54, 56	