

The hypgotoe package

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Abstract

Experimental package for links to embedded files.

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1 Documentation

1.1 Introduction

This is a first experiment for links to embedded files. The package hypgotoe is named after the PDF action name /GoToE. Feedback is welcome, especially to the user interface.

- Currently only embedded files and named destinations are supported.

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

- Missing are support for destination arrays and attached files.
- Special characters aren't supported either.

In the future the package may be merged into package `hyperref`.

1.2 User interface

`\href` is extended to detect the prefix `'gotoe:'`. The part after the prefix is evaluated as key value list from left to right. For details, see “8.5.3 Action Types, Embedded Go-To Actions” [1].

dest: The destination name. The destination name can be set by `\hypertarget` in the target document. Or check the `.aux` file for destination names of `\label` commands. Also the target PDF file can be inspected, look for `/Dests` in the `/Names` entry of the catalog for named destinations. (Required.)

root: The file name of the root document. (Optional.)

parent: Go to the parent document. (No value, optional.)

embedded: Go to the embedded document. The value is the file name as it appears in `/EmbeddedFiles` of the current document.

The colors are controlled by `hyperref`'s options `gotoecolor` and `gotoebordercolor`. They can be set in `\hypersetup`, for example. Default is the color of file links.

1.3 Example

```

1 (*example)
2 \NeedsTeXFormat{LaTeX2e}
3 \begin{filecontents}{hypgotoe-child.tex}
4 \NeedsTeXFormat{LaTeX2e}
5 \documentclass{article}
6 \usepackage{hypgotoe}[2019/12/29]
7 \begin{document}
8 \section{This is the child document.}
9 \href{gotoe:%
10   dest={page.1},parent%
11 }{Go to first page of main document}\\
12 \href{gotoe:%
13   dest={page.2},parent%
14 }{Go to second page of main document}
15 \newpage
16 \section{This is the second page of the child document.}
17 \href{gotoe:%
18   dest={page.1},parent%
19 }{Go to first page of main document}\\
20 \href{gotoe:%
21   dest={page.2},parent%
22 }{Go to second page of main document}
23
24 \hypertarget{foobar}{}
25 Anchor foobar is here.
26 \end{document}
27 \end{filecontents}
28 \documentclass{article}
29 \usepackage{hypgotoe}[2019/12/29]
30 \usepackage{embedfile}
31 \IfFileExists{hypgotoe-child.pdf}{%
32   \embedfile{hypgotoe-child.pdf}%
33 }{%
34   \typeout{}%
```

```

35 \typeout{--> Run hypgotoe-child.tex through pdflatex}%
36 \typeout{}%
37 }
38 \begin{document}
39 \section{First page of main document}
40 \href{gotoe:%
41   dest=page.1,embedded=hypgotoe-child.pdf%
42 }{Go to first page of child document}\\
43 \href{gotoe:%
44   dest=page.2,embedded=hypgotoe-child.pdf%
45 }{Go to second page of child document}\\
46 \href{gotoe:%
47   dest=foobar,embedded=hypgotoe-child.pdf%
48 }{Go to foobar in child document}
49 \newpage
50 \section{Second page of main document}
51 \href{gotoe:%
52   dest=section.1,embedded=hypgotoe-child.pdf%
53 }{Go to first section of child document}\\
54 \href{gotoe:%
55   dest=section.2,embedded=hypgotoe-child.pdf%
56 }{Go to second section of child document}\\
57 \href{gotoe:%
58   dest=foobar,embedded=hypgotoe-child.pdf%
59 }{Go to foobar in child document}
60 \end{document}
61 \end{example}

```

2 Implementation

2.1 Identification

```

62 (*package)
63 \NeedsTeXFormat{LaTeX2e}
64 \ProvidesPackage{hypgotoe}%
65   [2019/12/29 v0.3 Links to embedded files (H0)]%

```

2.2 Load packages

```

66 \RequirePackage{iftex}[2019/11/07]
67 \ifpdf
68 \else
69   \PackageError{hypgotoe}{%
70     Other drivers than pdfTeX in PDF mode are not supported.%
71     \MessageBreak
72     Package loading is aborted%
73   }\@ehc
74   \expandafter\endinput
75 \fi
76 \RequirePackage{pdfescape}[2007/10/27]
77 \RequirePackage{hyperref}[2019/12/29]

```

2.3 Color support

```

78 \define@key{Hyp}{gotoebordercolor}{%
79   \HyColor@HyperrefBordercolor{#1}%
80   \@gotoebordercolor{hyperref}{gotoebordercolor}%
81 }
82 \providecommand*\@gotoecolor{\@filecolor}
83 \providecommand*\@gotoebordercolor{\@filebordercolor}

```

2.4 Extend \href

\@hyper@readexternallink

```

84 \def\@hyper@readexternallink#1#2#3#4:#5:#6\\#7{%

```

```

85 \ifx\\#6\\%
86   \expandafter\@hyper@linkfile file:#7\\{#3}{#2}%
87 \else
88   \ifx\\#4\\%
89     \expandafter\@hyper@linkfile file:#7\\{#3}{#2}%
90   \else
91     \def\@pdftempa{#4}%
92     \ifx\@pdftempa\@pdftempwordfile
93       \expandafter\@hyper@linkfile#7\\{#3}{#2}%
94     \else
95       \ifx\@pdftempa\@pdftempwordrun
96         \expandafter\@hyper@launch#7\\{#3}{#2}%
97       \else
98         \ifx\@pdftempa\@pdftempwordgotoe
99           \hyper@linkgotoe{#3}{#5}%
100        \else
101          \hyper@linkurl{#3}{#7\ifx\\#2\\%else\hyper@hash#2\fi}%
102        \fi
103      \fi
104    \fi
105  \fi
106 \fi
107 }

```

\@pdftempwordgotoe

```

108 \def\@pdftempwordgotoe{gotoe}

```

2.5 Implement gotoe action

\hyper@linkgotoe

```

109 \def\hyper@linkgotoe#1#2{%
110   \begingroup
111     \let\HyGoToE@Root\@empty
112     \let\HyGoToE@Dest\@empty
113     \let\HyGoToE@TBegin\@empty
114     \let\HyGoToE@TEnd\@empty
115     \setkeys{HyGoToE}{#2}%
116     \leavevmode
117     \pdfstartlink
118       attr{%
119         \Hy@setpdfborder
120         \ifx\@pdfhighlight\@empty
121           \else
122             /H\@pdfhighlight
123           \fi
124         \ifx\@urlbordercolor\relax
125           \else
126             /C[\@urlbordercolor]%
127           \fi
128       }%
129     user{%
130       /Subtype/Link%
131       /A<<%
132         /Type/Action%
133         /S/GoToE%
134         \Hy@SetNewWindow
135         \HyGoToE@Root
136         \HyGoToE@Dest
137         \HyGoToE@TBegin
138         \HyGoToE@TEnd
139       >>%
140     }%

```

```

141     \relax
142     \Hy@colorlink\@gotoecolor#1%
143     \close@pdflink
144 \endgroup
145 }

```

2.6 Keys for gotoe action

```

146 \define@key{HyGoToE}{root}{%
147   \EdefEscapeString\HyGoToE@temp{#1}%
148   \edef\HyGoToE@Root{%
149     /F<<%
150     /Type/Filespec%
151     /F(\HyGoToE@temp)%
152     >>%
153   }%
154 }
155 \define@key{HyGoToE}{dest}{%
156   \EdefEscapeString\HyGoToE@temp{#1}%
157   \edef\HyGoToE@Dest{%
158     /D(\HyGoToE@temp)%
159   }%
160 }
161 \define@key{HyGoToE}{parent}[]{%
162   \def\HyGoToE@temp{#1}%
163   \ifx\HyGoToE@temp\@empty
164   \else
165     \PackageWarning{hypgotoe}{Ignore value for ‘parent’}%
166   \fi
167   \edef\HyGoToE@TBegin{%
168     \HyGoToE@TBegin
169     /T<<%
170     /R/P%
171   }%
172   \edef\HyGoToE@TEnd{%
173     \HyGoToE@TEnd
174     >>%
175   }%
176 }
177 \define@key{HyGoToE}{embedded}{%
178   \EdefEscapeString\HyGoToE@temp{#1}%
179   \edef\HyGoToE@TBegin{%
180     \HyGoToE@TBegin
181     /T<<%
182     /R/C%
183     /N(\HyGoToE@temp)%
184   }%
185   \edef\HyGoToE@TEnd{%
186     \HyGoToE@TEnd
187     >>%
188   }%
189 }
190 </package>

```

3 Installation

3.1 Download

Package. This package is available on CTAN¹:

[CTAN:macros/latex/contrib/oberdiek/hypgotoe.dtx](https://ctan.org/ctan/packages/macros/latex/contrib/oberdiek/hypgotoe.dtx) The source file.

¹[CTAN:pkg/hypgotoe](https://ctan.org/ctan/packages/macros/latex/contrib/oberdiek/hypgotoe.dtx)

[CTAN:macros/latex/contrib/oberdiek/hypgotoe.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 T_EX 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 T_EX:

```
tex hypgotoe.dtx
```

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

<code>hypgotoe.sty</code>	→ <code>tex/latex/oberdiek/hypgotoe.sty</code>
<code>hypgotoe.pdf</code>	→ <code>doc/latex/oberdiek/hypgotoe.pdf</code>
<code>hypgotoe-example.tex</code>	→ <code>doc/latex/oberdiek/hypgotoe-example.tex</code>
<code>hypgotoe.dtx</code>	→ <code>source/latex/oberdiek/hypgotoe.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`.

3.4 Refresh file name databases

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

3.5 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{hypgotoe.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 hypgotoe.dtx
makeindex -s gind.ist hypgotoe.idx
pdflatex hypgotoe.dtx
makeindex -s gind.ist hypgotoe.idx
pdflatex hypgotoe.dtx
```

4 References

- [1] Adobe Systems Incorporated: *PDF Reference, Sixth Edition, Version 1.7*, Oktober 2006; http://www.adobe.com/devnet/pdf/pdf_reference.html.

5 History

[2007/10/30 v0.1]

- First experimental version.

[2016/05/16 v0.2]

- Documentation updates.

[2019/12/29 v0.3]

- iftex package

6 Index

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