

The hypgotoe package

Heiko Oberdiek*
<heiko.oberdiek at gmail.com>

2016/05/16 v0.2

Abstract

Experimental package for links to embedded files.

Contents

1	Documentation	1
1.1	Introduction	1
1.2	User interface	2
1.3	Example	2
2	Implementation	3
2.1	Identification	3
2.2	Load packages	3
2.3	Color support	3
2.4	Extend \href	3
2.5	Implement gotoe action	4
2.6	Keys for gotoe action	5
3	Installation	5
3.1	Download	5
3.2	Bundle installation	6
3.3	Package installation	6
3.4	Refresh file name databases	6
3.5	Some details for the interested	6
4	Catalogue	7
5	References	7
6	History	7
	[2007/10/30 v0.1]	7
	[2016/05/16 v0.2]	7

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 \RequirePackage{filecontents}
4 \begin{filecontents}{hypgotoe-child.tex}
5 \NeedsTeXFormat{LaTeX2e}
6 \documentclass{article}
7 \usepackage{hypgotoe}[2016/05/16]
8 \begin{document}
9 \section{This is the child document.}
10 \href{gotoe:%
11   dest={page.1},parent%
12 }{Go to first page of main document}\\
13 \href{gotoe:%
14   dest={page.2},parent%
15 }{Go to second page of main document}
16 \newpage
17 \section{This is the second page of the child document.}
18 \href{gotoe:%
19   dest={page.1},parent%
20 }{Go to first page of main document}\\
21 \href{gotoe:%
22   dest={page.2},parent%
23 }{Go to second page of main document}
24
25 \hypertarget{foobar}{}
26 Anker foobar is here.
27 \end{document}
28 \end{filecontents}
29 \documentclass{article}
30 \usepackage{hypgotoe}[2016/05/16]
31 \usepackage{embedfile}
32 \IfFileExists{hypgotoe-child.pdf}{%
33   \embedfile{hypgotoe-child.pdf}%
34 }{%

```

```

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

```

2 Implementation

2.1 Identification

```

63 (*package)
64 \NeedsTeXFormat{LaTeX2e}
65 \ProvidesPackage{hypgotoe}%
66 [2016/05/16 v0.2 Links to embedded files (HO)]%

```

2.2 Load packages

```

67 \RequirePackage{ifpdf}[2007/09/09]
68 \ifpdf
69 \else
70   \PackageError{hypgotoe}{%
71     Other drivers than pdfTeX in PDF mode are not supported.%
72   }{
73     \MessageBreak
74     Package loading is aborted%
75   }\@ehc
76 \fi
77 \RequirePackage{pdfescape}[2007/10/27]
78 \RequirePackage{hyperref}[2016/05/16]

```

2.3 Color support

```

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

```

2.4 Extend \href

\@hyper@readexternallink

```

85 \def\@hyper@readexternallink#1#2#3#4:#5:#6\\#7{%
86   \ifx\\#6\\%
87     \expandafter\@hyper@linkfile file:#7\\{#3}{#2}%
88   \else
89     \ifx\\#4\\%
90       \expandafter\@hyper@linkfile file:#7\\{#3}{#2}%
91     \else
92       \def\@pdftempa{#4}%
93       \ifx\@pdftempa\@pdftempwordfile
94         \expandafter\@hyper@linkfile#7\\{#3}{#2}%
95       \else
96         \ifx\@pdftempa\@pdftempwordrun
97           \expandafter\@hyper@launch#7\\{#3}{#2}%
98         \else
99           \ifx\@pdftempa\@pdftempwordgotoe
100             \hyper@linkgotoe{#3}{#5}%
101           \else
102             \hyper@linkurl{#3}{#7\ifx\\#2\\else\hyper@hash#2\fi}%
103           \fi
104         \fi
105       \fi
106     \fi
107   \fi
108 }

```

\@pdftempwordgotoe

```

109 \def\@pdftempwordgotoe{gotoe}

```

2.5 Implement gotoe action

\hyper@linkgotoe

```

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

```

```

141 }%
142 \relax
143 \Hy@colorlink\@gotoecolor#1%
144 \close@pdfink
145 \endgroup
146 }

```

2.6 Keys for gotoe action

```

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

```

3 Installation

3.1 Download

Package. This package is available on CTAN¹:

¹<http://ctan.org/pkg/hypgotoe>

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

[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 \TeX Files” ([CTAN:tds/tds.pdf](#)). 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
```

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/
```

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 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>	\rightarrow <code>tex/latex/oberdiek/hypgotoe.sty</code>
<code>hypgotoe.pdf</code>	\rightarrow <code>doc/latex/oberdiek/hypgotoe.pdf</code>
<code>hypgotoe-example.tex</code>	\rightarrow <code>doc/latex/oberdiek/hypgotoe-example.tex</code>
<code>hypgotoe.dtx</code>	\rightarrow <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 \TeX distribution (`te \TeX` , `mik \TeX` , ...) relies on file name databases, you must refresh these. For example, `te \TeX` users run `texhash` or `mktextlsr`.

3.5 Some details for the interested

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{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 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 `hypgotoe.xml`.

```
192 (*catalogue)
193 <?xml version='1.0' encoding='us-ascii'?>
194 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
195 <entry datestamp='$Date$' modifier='$Author$' id='hypgotoe'>
196   <name>hypgotoe</name>
197   <caption>Links to embedded files.</caption>
198   <authorref id='auth:oberdiek'>
199     <copyright owner='Heiko Oberdiek' year='2007'>
200       <license type='lppl1.3'>
201         <version number='0.2'>
202           <description>
203             This experimental package is a first experiment for links to embedded
204             files. It is named after the PDF action name <tt>/GoToE</tt>.
205           <p/>
206             The package is part of the <xref refid='oberdiek'>oberdiek</xref>
207             bundle.
208           </description>
209           <documentation details='Package documentation'
210             href='ctan:/macros/latex/contrib/oberdiek/hypgotoe.pdf'>
211             <ctan file='true' path='/macros/latex/contrib/oberdiek/hypgotoe.dtx'>
212             <miktex location='oberdiek'>
213             <texlive location='oberdiek'>
214             <install path='/macros/latex/contrib/oberdiek/oberdiek.tds.zip'>
215           </entry>
216 </catalogue>
```

5 References

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

6 History

[2007/10/30 v0.1]

- First experimental version.

[2016/05/16 v0.2]

- Documentation updates.

7 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	
\@ehc	74
\@empty	112, 113, 114, 115, 121, 164
\@filebordercolor	84
\@filecolor	83
\@gotoebordercolor	81, 84
\@gotoecolor	83, 143
\@hyper@launch	97
\@hyper@linkfile	87, 90, 94
\@hyper@readexternallink	85
\@pdfhighlight	123
\@pdfhighlightlight	121
\@pdftempa	92, 93, 96, 99
\@pdftempwordfile	93
\@pdftempwordgotoe	99, 109
\@pdftempwordrun	96
\@urlbordercolor	125, 127
\\	12, 20, 43, 46, 54, 57, 85, 86, 87, 89, 90, 94, 97, 102
B	
\begin	4, 8, 39
C	
\close@pdflink	144
D	
\define@key	79, 147, 156, 162, 178
\documentclass	6, 29
E	
\EdefEscapeString	148, 157, 179
\embedfile	33
\end	27, 28, 61
\endinput	75
H	
\href	10, 13, 18, 21, 41, 44, 47, 52, 55, 58
\Hy@colorlink	143
\Hy@SetNewWindow	135
\Hy@setpdfborder	120
\HyColor@HyperrefBordercolor	80
\HyGoToE@Dest	113, 137, 158
\HyGoToE@Root	112, 136, 149
\HyGoToE@TBegin	114, 138, 168, 169, 180, 181
\HyGoToE@temp	148, 152, 157, 159, 163, 164, 179, 184
\HyGoToE@TEnd	115, 139, 173, 174, 186, 187
\hyper@hash	102
\hyper@linkgotoe	100, 110
\hyper@linkurl	102
\hypertarget	25
I	
\IfFileExists	32
\ifpdf	68
\ifx	86, 89, 93, 96, 99, 102, 121, 125, 164
L	
\leavevmode	117
M	
\MessageBreak	72
N	
\NeedsTeXFormat	2, 5, 64
\newpage	16, 50
P	
\PackageError	70
\PackageWarning	166
\pdfstartlink	118
\providecommand	83, 84
\ProvidesPackage	65
R	
\RequirePackage	3, 67, 77, 78
S	
\section	9, 17, 40, 51
\setkeys	116
T	
\typeout	35, 36, 37
U	
\usepackage	7, 30, 31