

stmhyperref package description

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This package takes care of handling cross-referencing in L^AT_EX documents with hypertext links. It loads the underlying base package and offers a modular collection of styles for the representation of hyperlinks. It is build upon the [hyperref](#) package.

Contents

1. Usage	2
1.1. Load the whole <code>stmhyperref</code> package	2
1.1.1. Description	2
1.1.2. Options	2
1.2. <code>stmhyperrefbase</code>	2
1.3. <code>stmhyperrefstyles</code>	3
1.3.1. Description	3
1.3.2. Options	3
1.4. <code>stmhyperrefpdfopts</code>	3
1.4.1. Description	3
1.4.2. Options	3
2. Styles	3
2.1. <code>default</code>	3
2.2. <code>stmdefault</code>	3
2.3. <code>colorlinkexternalblueinternalblack</code>	4
2.4. <code>colorlinkallblack</code>	4
2.5. <code>colorlinkallblue</code>	4
3. pdfopt sets	4
3.1. <code>default</code>	4
3.2. <code>stmdefault</code>	4
3.3. <code>viewfitwmenuwtoolbarwobookmarksopen</code>	4

A. The code	5
A.1. stmhyperref.sty	5
A.2. stmhyperrefbase.sty	7
A.3. stmhyperrefpdfopts.sty	9
A.4. stmhyperrefstyles.sty	11

1. Usage

1.1. Load the whole stmhyperref package

1.1.1. Description

This is an interface package which loads the base package and the style choice.

By default the package loads

- `stmhyperrefbase.sty`
- `stmhyperrefpdfopts.sty`
- `stmhyperrefstyles.sty`

See subsection 1.1.2 for options to change the default package behavior.

1.1.2. Options

Option *styles* This is a boolean option. Expected values are either `true` or `false`. It controls whether to load the predefined styles.

`\usepackage[styles=true|false]{stmhyperref}`

`styles=true` is the default. It is used in case `styles=false` is not set explicitly.

Option *style* This option value is the equivalent to section 1.3.2 and is passed through to the underlying package.

Option *pdfopts* This is a boolean option. Expected values are either `true` or `false`. It controls whether to load the predefined pdf view option sets.

`\usepackage[pdfopts=true|false]{stmhyperref}`

`pdfopts=true` is the default. It is used in case `pdfopts=false` is not set explicitly.

Option *pdfopt* This option value is the equivalent to section 1.4.2 and is passed through to the underlying package.

1.2. stmhyperrefbase

This package loads the underlying base package with some default options that can only be set during initialization.

1.3. stmhyperrefstyles

1.3.1. Description

This package contains styles for the optical behaviour of internal and external links. Internal links are those inside the document, e.g. references and citations. External links are those to URL's.

1.3.2. Options

Option *style* This is a string option. A list of possible values is shown in section 2.

```
\usepackage[style=stmdefault]{stmhyperrefstyles}
```

`style=stmdefault` is the default. It is used in case no other style is set explicitly.

1.4. stmhyperrefpdfopts

1.4.1. Description

This package contains definitions how to display the resulting document at opening in the viewer.

1.4.2. Options

This is a string option. A list of possible values is listed in section 3.

```
\usepackage[pdfopt=stmdefault]{stmhyperrefpdfopts}
```

`style=stmdefault` is the default. It is used in case no other style is set explicitly. A list of possible values is shown in section 3.

2. Styles

There are different predefined styles available to format your hypertext.

2.1. default

This loads the default style from the underlying base package and does not apply individual styles.

2.2. stmdefault

This loads the color definitions for links, citations and URL's from the `stmcolor` package and applies them.

2.3. colorlinkexternalblueinternalblack

Please take the style information directly from appendix A.4.

2.4. colorlinkallblack

Please take the style information directly from appendix A.4.

2.5. colorlinkallblue

Please take the style information directly from appendix A.4.

3. pdfopt sets

There are different predefined options sets available to configure the pdf view settings.

3.1. default

Please take the style information directly from appendix A.3.

3.2. stmdefault

Please take the style information directly from appendix A.3.

3.3. viewfitwmenuwtoolbarwobookmarksopen

Please take the style information directly from appendix A.3.

A. The code

A.1. stmhyperref.sty

```
1 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2 % Header %
3 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4 %
5 % This file includes hyperref setup
6 % Based upon the hyperref package:
7 %   https://ctan.org/pkg/hyperref
8 %
9 % Usage
10 % - Premble:
11 %   - \usepackage{hyperref}
12 %
13 % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14 %               Initial draft
15 %
16 % Contact:   Martin Raedel, martin.raedel@dlr.de
17 %               DLR Composite Structures and Adaptive Systems
18 %
19 %               __/|__
20 %               /_/_/_/_/
21 %               www.dlr.de/fa/en      || DLR
22 %
23 % Copyright (C) 2019-... DLR Composite Structures and
24 %               Adaptive Systems
25 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26 % Content %
27 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29 % Declare that this style file requires at least LaTeX
30 %   version 2e.
31 \NeedsTeXFormat{LaTeX2e}
32
33 % Provide the name of your page, the date it was last updated
34 %   , and a comment about what it's used for
35 \ProvidesPackage{stmhyperref}[2019/10/27 STMs hyperref setup
36 %   definitions]
37
38 % -----
39 % Options
```

```

37 % -----
38
39 % For options
40 \@ifpackageloaded{kvoptions}{\RequirePackage{kvoptions}}%
41
42 \SetupKeyvalOptions{%
43   family=stmhyperref,%
44   prefix=stmhyperref@,%
45   setkeys=\kvsetkeys,%
46 }
47
48 % Load styles
49 \DeclareBoolOption[true]{styles}
50
51 % Apply style name
52 \DeclareStringOption[stmdefault]{style}
53
54 % Load styles
55 \DeclareBoolOption[true]{pdfopts}
56
57 % Apply style name
58 \DeclareStringOption[stmdefault]{pdfopt}
59
60 % Process options
61 \ProcessKeyvalOptions{stmhyperref}
62
63 % -----
64 % Base
65 % -----
66
67 \@ifpackageloaded{hyperref}{\%
68   \RequirePackage{stmhyperrefbase}
69 }%
70
71 % -----
72 % Modules
73 % -----
74
75 % Load the styles
76 \ifstmhyperref@styles
77   \@ifpackageloaded{stmhyperrefstyles}{\%
78     \RequirePackage[
79       style=\stmhyperref@style
80     ]{stmhyperrefstyles}%

```

```

81 }%
82 \fi
83
84 % Load the styles
85 \ifstmhyperref@pdfopts
86   \@ifpackageloaded{stmhyperrefpdfopts}{%
87     \RequirePackage[
88       style=\stmhyperref@pdfopt
89     ]{stmhyperrefpdfopts}%
90   }%
91 \fi
92
93 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
94 % That's it %
95 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
96
97 % Finally, we'll use \endinput to indicate that LaTeX can
98 % stop reading this file. LaTeX will ignore anything after
99 % this line.
100 \endinput

```

A.2. stmhyperrefbase.sty

```

1 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2 % Header %
3 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4 %
5 % This file includes hyperref setup
6 % Based upon the hyperref package:
7 %   https://ctan.org/pkg/hyperref
8 %
9 % Usage
10 % - Premble:
11 %   - \usepackage{stmhyperrefbase}
12 %
13 % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14 %               Initial draft
15 %
16 % Contact:   Martin Raedel, martin.raedel@dlr.de
17 %             DLR Composite Structures and Adaptive Systems
18 %
19 %
20 %               _ _/_/_
21 %               / _/_/_/_
22 %               www.dlr.de/fa/en   // DLR

```

```

22 %
23 % Copyright (C) 2019-... DLR Composite Structures and
    Adaptive Systems
24 %
25 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26 % Content %
27 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29 % Declare that this style file requires at least LaTeX
    version 2e.
30 \NeedsTeXFormat{LaTeX2e}
31
32 % Provide the name of your page, the date it was last updated
    , and a comment about what it's used for
33 \ProvidesPackage{stmhyperrefbase}[2019/10/27 STMs base
    hyperref package]
34
35 % -----
36 % Package
37 % -----
38
39 \@ifpackageloaded{hyperref}{
40   %\PackageWarning{stmhyperrefbase}{Hyperref package was
    already loaded!}
41 }{%
42   % These options must be set at the time of \usepackage and
    can not be set using \hypersetup
43   \PassOptionsToPackage{
44     bookmarks = true,
45     pdfusetitle,%
46   }{hyperref}
47   %
48   \RequirePackage{hyperref}
49 }%
50
51 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
52 % That's it %
53 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
54
55 % Finally, we'll use \endinput to indicate that LaTeX can
    stop reading this file. LaTeX will ignore anything after
    this line.
56 \endinput

```


A.3. stmhyperrefpdfopts.sty

```
1 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2 % Header %
3 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4 %
5 % This file includes hyperref setup
6 % Based upon the hyperref package:
7 %   https://ctan.org/pkg/hyperref
8 %
9 % Usage
10 % - Premble:
11 %   - \usepackage{stmhyperrefpdfopts}
12 %
13 % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14 %               Initial draft
15 %
16 % Contact:   Martin Raedel, martin.raedel@dlr.de
17 %               DLR Composite Structures and Adaptive Systems
18 %
19 %               --/|--
20 %               /_/_/_/_/
21 %               www.dlr.de/fa/en      || DLR
22 %
23 % Copyright (C) 2019-... DLR Composite Structures and
24 %               Adaptive Systems
25 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26 % Content %
27 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28
29 % Declare that this style file requires at least LaTeX
30 %   version 2e.
31 \NeedsTeXFormat{LaTeX2e}
32
33 % Provide the name of your page, the date it was last updated
34 %   , and a comment about what it's used for
35 \ProvidesPackage{stmhyperrefpdfopts}[2019/10/27 STMs hyperref
36 %   setup definitions]
37
38 % -----
39 % Options
40 % -----
```

```

39 % For options
40 \@ifpackageloaded{kvoptions}{\RequirePackage{kvoptions}}%
41
42 \SetupKeyvalOptions{%
43   family=stmhyperrefpdfopts,%
44   prefix=stmhyperrefpdfopts@,%
45   setkeys=\kvsetkeys,%
46 }
47
48 % Style name
49 \DeclareStringOption[stmdefault]{style}
50
51 % Process options
52 \ProcessKeyvalOptions{stmhyperrefpdfopts}
53
54 % -----
55 % Style
56 % -----
57
58 \@namedef{stmhyperrefpdfopts@style@default}{%
59   % This here is empty to load the standard hyperref setup
60 }
61
62 \@namedef{stmhyperrefpdfopts@style@stmdefault}{%
63   \hypersetup{%
64     pdfstartview = Fit,%
65     pdfmenubar   = true,%
66     pdftoolbar   = true,%
67     bookmarksopen = false,%
68   }%
69 }
70
71 \@namedef{
72   stmhyperrefpdfopts@style@viewfitwmenuwtoolbarwobookmarksopen
73 }{%
74   \hypersetup{%
75     pdfstartview = Fit,%
76     pdfmenubar   = true,%
77     pdftoolbar   = true,%
78     bookmarksopen = false,%
79   }%
80 }
81
82 % Evaluate option settings

```

```

81 % https://tex.stackexchange.com/a/249102
82 \newcommand*{\stmhyperrefpdfopts@evaluate}[1]{%
83   % Check, if option value in \<prefix>@<option> exists
84   \@ifundefined{stmhyperrefpdfopts@#1}{%
85     % Should not happen
86     \PackageError{stmhyperrefpdfopts}{Evaluating unknown
      option '#1'}\@ehc
87   }{%
88     % Check, if there is an implementation for the value of
      the option
89     % in macro \<prefix>@<option>@<value>
90     \@ifundefined{stmhyperrefpdfopts@#1@\csname
      stmhyperrefpdfopts@#1\endcsname}{%
91       \PackageError{stmhyperrefpdfopts}{%
92         Unknown option setting: #1=%
93         \csname stmhyperrefpdfopts@#1\endcsname
94       }\@ehc
95     }{%
96       % Call the implementation for the value
97       \csname stmhyperrefpdfopts@#1@%
98         \csname stmhyperrefpdfopts@#1\endcsname
99       \endcsname
100     \relax
101   }%
102 }%
103 }
104
105 \stmhyperrefpdfopts@evaluate{style}
106
107 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
108 % That's it %
109 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
110
111 % Finally, we'll use \endinput to indicate that LaTeX can
      stop reading this file. LaTeX will ignore anything after
      this line.
112 \endinput

```

A.4. stmhyperrefstyles.sty

```

1 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2 % Header %
3 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4 %

```

```

5 % This file includes hyperref setup
6 % Based upon the hyperref package:
7 %   https://ctan.org/pkg/hyperref
8 %
9 % Usage
10 % - Premble:
11 %   - \usepackage{hyperrefstyles}
12 %
13 % Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
14 %               Initial draft
15 %
16 % Contact:   Martin Raedel, martin.raedel@dlr.de
17 %               DLR Composite Structures and Adaptive Systems
18 %
19 %               __/|__
20 %               /_/_/_/_/
21 %               www.dlr.de/fa/en      | / DLR
22 %
23 % Copyright (C) 2019-... DLR Composite Structures and
24 %               Adaptive Systems
25 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26 % Content %
27 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
28 %
29 % Declare that this style file requires at least LaTeX
30 %   version 2e.
31 \NeedsTeXFormat{LaTeX2e}
32 %
33 % Provide the name of your page, the date it was last updated
34 %   , and a comment about what it's used for
35 \ProvidesPackage{stmhyperrefstyles}[2019/10/27 STMs hyperref
36 %   setup definitions]
37 %
38 % -----
39 % Options
40 % -----
41 %
42 % For options
43 \@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%
44 \SetupKeyvalOptions{%
45   family=stmhyperrefstyles,%
46   prefix=stmhyperrefstyles@,%

```

```

45   setkeys=\kvsetkeys,%
46 }
47
48 % Style name
49 \DeclareStringOption[stmdefault]{style}
50
51 % Process options
52 \ProcessKeyvalOptions{stmhyperrefstyles}
53
54 % -----
55 % Style
56 % -----
57
58 \@namedef{stmhyperrefstyles@style@default}{%
59   % This here is empty to load the standard hyperref setup
60 }
61
62 \@namedef{
63   stmhyperrefstyles@style@colorlinkexternalblueinternalblack
64 }{%
65   \hypersetup{%
66     colorlinks      = true,%   Color text instead of boxes
67     linkcolor       = black,%  Color of internal links
68     citecolor       = black,%  Color of citations
69     urlcolor        = blue,%   Color of external urls
70   }%
71 }
72
73 \@namedef{stmhyperrefstyles@style@stmdefault}{%
74   \@ifpackageloaded{stmcolor}{%}{\RequirePackage{stmcolors}}}%
75   \hypersetup{%
76     colorlinks      = true,%   Color text instead of boxes
77     linkcolor       = hyperrefstmytlelinkcolor,% Color of
78       internal links
79     citecolor       = hyperrefstmytlecitecolor,% Color of
80       citations
81     urlcolor        = hyperrefstmytleurlcolor,% Color of
82       external urls
83   }%
84 }
85
86 \@namedef{stmhyperrefstyles@style@colorlinkallblack}{%
87   \hypersetup{%
88     colorlinks      = true,%   Color text instead of boxes

```

```

84     linkcolor      = black,% Color of internal links
85     citecolor      = black,% Color of citations
86     urlcolor       = black,% Color of external urls
87   }
88 }
89
90 \@namedef{stmhyperrefstyles@style@colorlinkallblue}{%
91   \hypersetup{%
92     colorlinks      = true,% Color text instead of boxes
93     linkcolor       = blue,% Color of internal links
94     citecolor       = blue,% Color of citations
95     urlcolor        = blue,% Color of external urls
96   }
97 }
98
99 % Evaluate option settings
100 % https://tex.stackexchange.com/a/249102
101 \newcommand*{\stmhyperrefstyles@evaluate}[1]{%
102   % Check, if option value in \<prefix>@<option> exists
103   \@ifundefined{stmhyperrefstyles@#1}{%
104     % Should not happen
105     \PackageError{stmhyperrefstyles}{Evaluating unknown
106       option '#1'}\@ehc
107   }{%
108     % Check, if there is an implementation for the value of
109     % the option
110     % in macro \<prefix>@<option>@<value>
111     \@ifundefined{stmhyperrefstyles@#1\csname
112       stmhyperrefstyles@#1\endcsname}{%
113       \PackageError{stmhyperrefstyles}{%
114         Unknown option setting: #1=%
115         \csname stmhyperrefstyles@#1\endcsname
116       }\@ehc
117     }{%
118       % Call the implementation for the value
119       \csname stmhyperrefstyles@#1@%
120         \csname stmhyperrefstyles@#1\endcsname
121       \endcsname
122       \relax
123     }%
124   }%
125 }
126
127 \stmhyperrefstyles@evaluate{style}

```

```

125
126 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
127 % That's it %
128 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
129
130 % Finally, we'll use \endinput to indicate that LaTeX can
131 % stop reading this file. LaTeX will ignore anything after
132 % this line.
133 \endinput

```