stmhyperref package description

v20230211

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This package takes care of handling cross-referencing in LaTeX 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

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 subsubsection 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

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Header                              %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
% This file includes hyperref setup
% Based upon the hyperref package:
%   https://ctan.org/pkg/hyperref
%
% Usage
%  - Premble:
%    - \usepackage{stmhyperref}
%
% Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
%                       Initial draft
%
% Contact:   Martin Raedel,  martin.raedel@dlr.de
%            DLR Composite Structures and Adaptive Systems
%
%                                 __/|__
%                                /_/_/_/
%            www.dlr.de/fa/en      |/ DLR
%
% Copyright (C) 2019-... DLR Composite Structures and Adaptive Systems
%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Content                             %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

% Declare that this style file requires at least LaTeX version 2e.
\NeedsTeXFormat{LaTeX2e}

% Provide the name of your page, the date it was last updated, and a
    comment about what it's used for
\ProvidesPackage{stmhyperref}[2019/10/27 STMs hyperref setup definitions]

% ---------------------------
% Options
% ---------------------------

% For options
```

```
\@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%

% Option group
\SetupKeyvalOptions{%
  family=stmhyperref,%
  prefix=stmhyperref@,%
  setkeys=\kvsetkeys,%
}

% Load styles
\DeclareBoolOption[true]{styles}

% Apply style name
\DeclareStringOption[stmdefault]{style}

% Load styles
\DeclareBoolOption[true]{pdfopts}

% Apply style name
\DeclareStringOption[stmdefault]{pdfopt}

% Process options
\ProcessKeyvalOptions{stmhyperref}

% ----------------------------
% Modules
% ----------------------------

% Load the base package
\@ifpackageloaded{hyperref}{}{%
  \RequirePackage{stmhyperrefbase}
}%

% Load the styles
\ifstmhyperref@styles
  \@ifpackageloaded{stmhyperrefstyles}{}{%
    \RequirePackage[
      style=\stmhyperref@style
    ]{stmhyperrefstyles}%
  }%
\fi

% Load the styles
\ifstmhyperref@pdfopts
```

```
  \@ifpackageloaded{stmhyperrefpdfopts}{}{%
    \RequirePackage[
      style=\stmhyperref@pdfopt
    ]{stmhyperrefpdfopts}%
  }%
\fi

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% That's it                          %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

% Finally, we'll use \endinput to indicate that LaTeX can stop reading
    this file. LaTeX will ignore anything after this line.
\endinput
```

A.2. stmhyperrefbase.sty

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Header                             %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
% This file includes hyperref setup
% Based upon the hyperref package:
%   https://ctan.org/pkg/hyperref
%
% Usage
%  - Premble:
%    - \usepackage{stmhyperrefbase}
%
% Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
%                       Initial draft
%
% Contact:   Martin Raedel,  martin.raedel@dlr.de
%            DLR Composite Structures and Adaptive Systems
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%                                  __/|__
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%            www.dlr.de/fa/en       |/ DLR
%
% Copyright (C) 2019-... DLR Composite Structures and Adaptive Systems
%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Content                            %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

```
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
```

```
%  - Premble:
%    - \usepackage{hyperrefpdfopts}
%
% Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
%                       Initial draft
%
% Contact:   Martin Raedel,  martin.raedel@dlr.de
%            DLR Composite Structures and Adaptive Systems
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%            www.dlr.de/fa/en       |/ DLR
%
% Copyright (C) 2019-... DLR Composite Structures and Adaptive Systems
%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Content                            %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

% Declare that this style file requires at least LaTeX version 2e.
\NeedsTeXFormat{LaTeX2e}

% Provide the name of your page, the date it was last updated, and a
    comment about what it's used for
\ProvidesPackage{stmhyperrefpdfopts}[2019/10/27 STMs hyperref setup
    definitions]

% ---------------------------
% Options
% ---------------------------

% For options
\@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%

\SetupKeyvalOptions{%
  family=stmhyperrefpdfopts,%
  prefix=stmhyperrefpdfopts@,%
  setkeys=\kvsetkeys,%
}

% Style name
\DeclareStringOption[stmdefault]{style}

% Process options
```

```
\ProcessKeyvalOptions{stmhyperrefpdfopts}

% ---------------------------
% Style
% ---------------------------

\@namedef{stmhyperrefpdfopts@style@default}{%
  % This here is empty to load the standard hyperref setup
}

\@namedef{stmhyperrefpdfopts@style@stmdefault}{%
  \hypersetup{%
    pdfstartview  = Fit,%
    pdfmenubar    = true,%
    pdftoolbar    = true,%
    bookmarksopen = false,%
  }%
}

\@namedef{stmhyperrefpdfopts@style@viewfitwmenuwtoolbarwobookmarksopen}{%
  \hypersetup{%
    pdfstartview  = Fit,%
    pdfmenubar    = true,%
    pdftoolbar    = true,%
    bookmarksopen = false,%
  }%
}

% Evaluate option settings
% https://tex.stackexchange.com/a/249102
\newcommand*{\stmhyperrefpdfopts@evaluate}[1]{%
  % Check, if option value in \<prefix>@<option> exists
  \@ifundefined{stmhyperrefpdfopts@#1}{%
    % Should not happen
    \PackageError{stmhyperrefpdfopts}{Evaluating unknown option `#1'}\
    @ehc
  }{%
    % Check, if there is an implementation for the value of the option
    % in macro \<prefix>@<option>@<value>
    \@ifundefined{stmhyperrefpdfopts@#1@\csname stmhyperrefpdfopts@#1\
    endcsname}{%
      \PackageError{stmhyperrefpdfopts}{%
        Unknown option setting: #1=%
        \csname stmhyperrefpdfopts@#1\endcsname
```

```
      }\@ehc
    }{%
      % Call the implementation for the value
      \csname stmhyperrefpdfopts@#1@%
              \csname stmhyperrefpdfopts@#1\endcsname
      \endcsname
      \relax
    }%
  }%
}

\stmhyperrefpdfopts@evaluate{style}

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% That's it                          %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

% Finally, we'll use \endinput to indicate that LaTeX can stop reading
    this file. LaTeX will ignore anything after this line.
\endinput
```

A.4. stmhyperrefstyles.sty

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Header                             %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
% This file includes hyperref setup
% Based upon the hyperref package:
%   https://ctan.org/pkg/hyperref
%
% Usage
%  - Premble:
%    - \usepackage{stmindexstyles}
%
% Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
%                       Initial draft
%
% Contact:   Martin Raedel,  martin.raedel@dlr.de
%            DLR Composite Structures and Adaptive Systems
%
%                                 __/|__
%                                /_/_/_/
%            www.dlr.de/fa/en      |/ DLR
```

```
%
% Copyright (C) 2019-... DLR Composite Structures and Adaptive Systems
%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Content                            %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

% Declare that this style file requires at least LaTeX version 2e.
\NeedsTeXFormat{LaTeX2e}

% Provide the name of your page, the date it was last updated, and a
    comment about what it's used for
\ProvidesPackage{stmhyperrefstyles}[2019/10/27 STMs hyperref style
    definitions]

% ---------------------------
% Options
% ---------------------------

% For options
\@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%

\SetupKeyvalOptions{%
  family=stmhyperrefstyles,%
  prefix=stmhyperrefstyles@,%
  setkeys=\kvsetkeys,%
}

% Style name
\DeclareStringOption[stmdefault]{style}

% Process options
\ProcessKeyvalOptions{stmhyperrefstyles}

% ---------------------------
% Style
% ---------------------------

\@namedef{stmhyperrefstyles@style@default}{%
  % This here is empty to load the standard hyperref setup
}

\@namedef{stmhyperrefstyles@style@colorlinkexternalblueinternalblack}{%
  \hypersetup{%
```

```
    colorlinks    = true,%  Color text instead of boxes
    linkcolor     = black,% Color of internal links
    citecolor     = black,% Color of citations
    urlcolor      = blue,%  Color of external urls
  }%
}

\@namedef{stmhyperrefstyles@style@stmdefault}{%
  \@ifpackageloaded{stmcolor}{}{\RequirePackage{stmcolors}}%
  \hypersetup{%
    colorlinks    = true,%  Color text instead of boxes
    linkcolor     = hyperrefstmtylelinkcolor,% Color of internal links
    citecolor     = hyperrefstmtylecitecolor,% Color of citations
    urlcolor      = hyperrefstmtyleurlcolor,%  Color of external urls
  }%
}

\@namedef{stmhyperrefstyles@style@colorlinkallblack}{%
  \hypersetup{%
    colorlinks    = true,% Color text instead of boxes
    linkcolor     = black,% Color of internal links
    citecolor     = black,% Color of citations
    urlcolor      = black,% Color of external urls
  }
}

\@namedef{stmhyperrefstyles@style@colorlinkallblue}{%
  \hypersetup{%
    colorlinks    = true,% Color text instead of boxes
    linkcolor     = blue,% Color of internal links
    citecolor     = blue,% Color of citations
    urlcolor      = blue,% Color of external urls
  }
}

% Evaluate option settings
% https://tex.stackexchange.com/a/249102
\newcommand*{\stmhyperrefstyles@evaluate}[1]{%
  % Check, if option value in \<prefix>@<option> exists
  \@ifundefined{stmhyperrefstyles@#1}{%
    % Should not happen
    \PackageError{stmhyperrefstyles}{Evaluating unknown option `#1'}\@ehc
  }{%
    % Check, if there is an implementation for the value of the option
```

```
    % in macro \<prefix>@<option>@<value>
    \@ifundefined{stmhyperrefstyles@#1@\csname stmhyperrefstyles@#1\
    endcsname}{%
      \PackageError{stmhyperrefstyles}{%
        Unknown option setting: #1=%
        \csname stmhyperrefstyles@#1\endcsname
      }\@ehc
    }{%
      % Call the implementation for the value
      \csname stmhyperrefstyles@#1@%
              \csname stmhyperrefstyles@#1\endcsname
      \endcsname
      \relax
    }%
  }%
}

\stmhyperrefstyles@evaluate{style}

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% That's it                         %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

% Finally, we'll use \endinput to indicate that LaTeX can stop reading
    this file. LaTeX will ignore anything after this line.
\endinput
```