stmdate package description

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v 20191103

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2019-11-03

These are the date definitions for `stmlatex`. It is build upon the datetime2 package.

Contents

1. Usage

1.1. Load the whole `stmdate` package

1.1.1. Description

This is an interface package which loads date styles and commands commonly required throughout document creation.

By default the package loads

- `stmdatestyles.sty`
- `stmdatecommands.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 date styles.

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

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

Option *commands*   This is a boolean option. Expected values are either `true` or `false`. It enables and disables the loading of specific date commands.

`\usepackage[commands=true|false]{stmdate}`

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

1.2. `stmdatestyles`

1.2.1. Description

This package contains styles for displaying dates in different formats. These can be used by commands from the underlying datetime2 package, e.g. with the style definitions from subsubsection 1.2.2

`\DTMsetdatestyle{$STYLENAME$}\DTMtoday`

   or use the convenience commands from subsection 1.3.

1.2.2. Styles

These are the date styles and the respective output.

<div align="center">

`versiondatestyle`   20191103

</div>

1.3. `stmdatecommands`

1.3.1. Description

These are commands to manipulate dates and their display.

1.3.2. Command `\formatdate`

Examples

```
\formatdate[versiondatestyle]{\DTMToday}            20191103
\formatdate{\today}                                 20191103
\formatdate[versiondatestyle]{\today}               20191103
\formatdate{2019}[2][3]                             20190203
\formatdate[versiondatestyle]{2019}[2][3]           20190203
\formatdate[versiondatestyle]{2019}[11][3]          20191103
\formatdate{2019}[2]                                20190201
\formatdate[versiondatestyle]{2019}[2]              20190201
\formatdate{2019}[2][]                              20190201
\formatdate[versiondatestyle]{2019}[2][]            20190201
\formatdate{2019}[][]                               20190101
\formatdate[versiondatestyle]{2019}[][]             20190101
```

A. The code

A.1. stmdate.sty

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%  Header                            %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
%  This file includes date definitions
%  Based upon the datetime2 package:
%    https://ctan.org/pkg/datetime2
%
%  Usage
%   -  Premble:
%     -  \usepackage{stmdate}
%
%  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{stmdate}[2019/10/27 STMs custom LaTeX date
   definitions]

% -------------------------
% Package
% -------------------------

\@ifpackageloaded{datetime2}{}{\RequirePackage[style=iso]{
   datetime2}}%
\@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%

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

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

% Styles
\DeclareBoolOption[true]{commands}

% Styles
\DeclareBoolOption[true]{styles}

% Process options
\ProcessKeyvalOptions{stmdate}

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

% Commands
```

```
\ifstmdate@commands
  \RequirePackage{stmdatecommands}
\fi

% Styles
\ifstmdate@styles
  \RequirePackage{stmdatestyles}
\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. stmdatecommands.sty

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Header                            %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
% This file includes date definitions
% Based upon the datetime2 package:
%   https://ctan.org/pkg/datetime2
%
% Usage
%  - Premble:
%    - \usepackage{stmdate}
%
% 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{stmdatecommands}[2019/10/27 STMs custom
   LaTeX date commands definitions]

% --------------------------
% Package
% --------------------------
```

```latex
\@ifpackageloaded{datetime2}{}{\RequirePackage[style=iso]{
   datetime2}}%
\@ifpackageloaded{stmdatestyles}{}{\RequirePackage{
   stmdatestyles}}%
\@ifpackageloaded{xparse}{}{\RequirePackage{xparse}}%
\@ifpackageloaded{ifmtarg}{}{\RequirePackage{ifmtarg}}%

% --------------------------
% Commands
% --------------------------

% https://tex.stackexchange.com/a/33753
\DeclareDocumentCommand{\formatdate}{%
  O{versiondatestyle}%style - optional, default in brackets
  m% date/year
  o% month - optional
  o% day - optional
}{%
  \DTMsetdatestyle{#1} % The first (optional) argument is the
     style
  \IfNoValueTF{#3}% There is just one argument defined after
    the style - the date
    {%
      \@ifmtarg{#2}{}{#2}%
    }%
    {%
      \DTMdate{%
        \@ifmtarg{#2}{1}{#2}
        -%
        \IfNoValueTF{#3}{1}{\@ifmtarg{#3}{1}{#3}}%
        -%
        \IfNoValueTF{#4}{1}{\@ifmtarg{#4}{1}{#4}}%
      }%
    }%
}

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% 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.3. stmdatestyles.sty

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Header                             %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
% This file includes date definitions
% Based upon the datetime2 package:
%   https://ctan.org/pkg/datetime2
%
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%    - \usepackage{stmdate}
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%             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{stmdatestyles}[2019/10/27 STMs custom LaTeX
   date style definitions]

% --------------------------
% Package
% --------------------------
```

```
\@ifpackageloaded{datetime2}{}{\RequirePackage[style=iso]{
    datetime2}}%

% -------------------------
% Styles
% -------------------------

\DTMnewdatestyle{versiondatestyle}{%
  %\renewcommand{\DTMdisplaydate}[4]{\number##1\number##2\
      number##3}%
  \renewcommand{\DTMdisplaydate}[4]{\number##1\DTMtwodigits
      ##2\DTMtwodigits##3}%
  \renewcommand{\DTMDisplaydate}{\DTMdisplaydate}%
}


%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% 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
```