stmdate package description

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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

- `stmdatebase.sty`
- `stmdatecommands.sty`
- `stmdatestyles.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.

versiondatestyle   20240116

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}          20240116
\formatdate{\today}                               20240116
\formatdate[versiondatestyle]{\today}             20240116
\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

```
1  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2  % Header                          %
3  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4  %
5  % This file includes date definitions
6  % Based upon the datetime2 package:
7  %   https://ctan.org/pkg/datetime2
8  %
9  % Usage
10 %  - Preamble:
11 %    - \usepackage{stmdate}
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 Lightweight Systems
18 %
19 %                            __/|__
20 %                           /_/_/_/
21 %            www.dlr.de/sy/en      |/ DLR
22 %
23 % Copyright (C) 2019-... DLR Lightweight Systems
24 %
25 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
26 % Content                         %
```

```latex
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

% 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}[2023/02/12 STMs custom LaTeX date definitions]

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

% Options package
\@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%

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

% Styles
\DeclareBoolOption[true]{commands}

% Styles
\DeclareBoolOption[true]{styles}

% Process options
\ProcessKeyvalOptions{stmdate}

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

% Load the base package
\@ifpackageloaded{stmdatebase}{}{%
  \RequirePackage{stmdatebase}%
}%

% Commands
\ifstmdate@commands
  \RequirePackage{stmdatecommands}
```

```
70  \fi
71
72  % Styles
73  \ifstmdate@styles
74    \RequirePackage{stmdatestyles}
75  \fi
76
77  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
78  % That's it                        %
79  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
80
81  % Finally, we'll use \endinput to indicate that LaTeX can stop reading
        this file. LaTeX will ignore anything after this line.
82  \endinput
```

A.2. `stmdatebase.sty`

```
 1  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
 2  % Header                           %
 3  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
 4  %
 5  % This file includes date definitions
 6  % Based upon the datetime2 package:
 7  %   https://ctan.org/pkg/datetime2
 8  %
 9  % Usage
10  %  - Preamble:
11  %    - \usepackage{stmdatebase}
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 Lightweight Systems
18  %
19  %                               __/|__
20  %                              /_/_/_/
21  %            www.dlr.de/sy/en       |/ DLR
22  %
23  % Copyright (C) 2019-... DLR Lightweight 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{stmdatebase}[2023/02/12 STMs custom LaTeX date
        definitions]
34
35  % -------------------------
36  % Package
37  % -------------------------
38
39  \@ifpackageloaded{datetime2}{}{\RequirePackage[style=iso]{datetime2}}%
40
41  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
42  % That's it                    %
43  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
44
45  % Finally, we'll use \endinput to indicate that LaTeX can stop reading
        this file. LaTeX will ignore anything after this line.
46  \endinput
```

A.3. `stmdatecommands.sty`

```
1  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2  % Header                           %
3  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4  %
5  % This file includes date definitions
6  % Based upon the datetime2 package:
7  %    https://ctan.org/pkg/datetime2
8  %
9  % Usage
10 %  - Preamble:
11 %     - \usepackage{stmdate}
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 Lightweight Systems
18 %
19 %                                __/|__
20 %                               /_/_/_/
21 %            www.dlr.de/sy/en      |/ DLR
22 %
23 % Copyright (C) 2019-... DLR Lightweight 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{stmdatecommands}[2023/02/12 STMs custom LaTeX date
      commands definitions]
34
35 % -------------------------
36 % Package
37 % -------------------------
38
39 \@ifpackageloaded{datetime2}{}{\RequirePackage[style=iso]{datetime2}}%
40 \@ifpackageloaded{stmdatestyles}{}{\RequirePackage{stmdatestyles}}%
```

```
41  \@ifpackageloaded{xparse}{}{\RequirePackage{xparse}}%
42  \@ifpackageloaded{ifmtarg}{}{\RequirePackage{ifmtarg}}%
43
44  % -------------------------
45  % Commands
46  % -------------------------
47
48  % https://tex.stackexchange.com/a/33753
49  \DeclareDocumentCommand{\formatdate}{%
50    O{versiondatestyle}%style - optional, default in brackets
51    m% date/year
52    o% month - optional
53    o% day - optional
54  }{%
55    \DTMsetdatestyle{#1}% The first (optional) argument is the style
56    \IfNoValueTF{#3}% There is just one argument defined after the style -
        the date
57      {%
58        \@ifmtarg{#2}{}{#2}%
59      }%
60      {%
61        \DTMdate{%
62          \@ifmtarg{#2}{1}{#2}
63          -%
64          \IfNoValueTF{#3}{1}{\@ifmtarg{#3}{1}{#3}}%
65          -%
66          \IfNoValueTF{#4}{1}{\@ifmtarg{#4}{1}{#4}}%
67        }%
68      }%
69  }
70
71  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
72  % That's it                     %
73  %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
74
75  % Finally, we'll use \endinput to indicate that LaTeX can stop reading
        this file. LaTeX will ignore anything after this line.
76  \endinput
```

A.4. stmdatestyles.sty

```
1   %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2   % Header                          %
3   %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
4   %
5   % This file includes date definitions
6   % Based upon the datetime2 package:
7   %   https://ctan.org/pkg/datetime2
8   %
9   % Usage
10  %   - Preamble:
11  %     - \usepackage{stmdate}
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 Lightweight Systems
18  %
19  %                              __/|__
20  %                             /_/_/_/
21  %            www.dlr.de/sy/en     |/ DLR
22  %
23  % Copyright (C) 2019-... DLR Lightweight 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{stmdatestyles}[2023/02/12 STMs custom LaTeX date style
        definitions]
34
35  % -------------------------
36  % Package
37  % -------------------------
38
39  \@ifpackageloaded{datetime2}{}{\RequirePackage[style=iso]{datetime2}}%
40
```

```
41  % --------------------------
42  % Styles
43  % --------------------------
44
45  \DTMnewdatestyle{versiondatestyle}{%
46    %\renewcommand{\DTMdisplaydate}[4]{\number##1\number##2\number##3}%
47    \renewcommand{\DTMdisplaydate}[4]{\number##1\DTMtwodigits##2\
        DTMtwodigits##3}%
48    \renewcommand{\DTMDisplaydate}{\DTMdisplaydate}%
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
```