stmconditionallox package description

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These are definitions for conditional lists of float objects for `stmlatex`. It creates commands that only create lists in case the float object type is really used in the document. It is build upon the totalcount package.

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1. Usage

1.1. Commands

There are standard LATEXcommands to create lists of float objects:

- \listoffigures

- \listoftables

Additionally it is possible to create a list of code listings with a macro from the listings package.

- \lstlistoflistings

With

\usepackage{stmconditionallox}

a set of new commands is created:

- \conditionallistoffigures

- \conditionallistoftables

- \conditionallistoflistings

If these are used, the lists are only created, in case the specified float environments are really used in your document. Thus, it allows the creation of a standard preamble.

To properly create the lists, three compilation runs are required.

1.2. Options

Option *loadlistings* Set whether to load the listings package.

\usepackage[loadlistings=true]{stmglossaries}

loadlistings=true is the default and loads the package. It is used in case loadlistings=false is not set explicitly.

In case loadlistings=false is set, the command \conditionallistoflistings is not defined.

Option *newpage* Set whether to create a new page after each list.

\usepackage[newpage=true]{stmglossaries}

newpage=true is the default and creates a new page. It is used in case newpage=false is not set explicitly.

2. Example

This section contains examples.

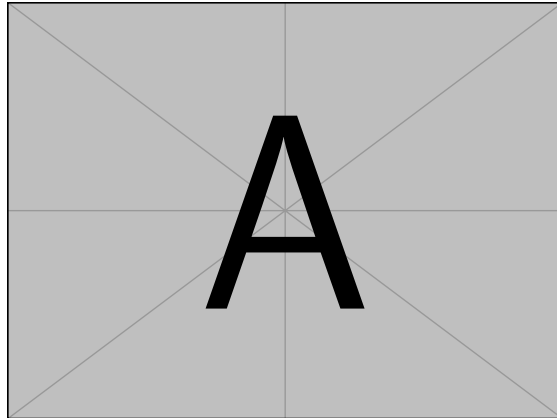### 2.1. Figures

This is an example figure.

Figure 1: Example figure

2.2. Table

This is an example table.

Column 1   Column 2

Table 1: Example table

A. The code

A.1. stmconditionallox.sty

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

```latex
37  \ProvidesPackage{stmconditionallox}[2019/10/27 STMs custom
       LaTeX conditional list of definitions]
38
39  % --------------------------
40  % Package
41  % --------------------------
42
43  \@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%
44
45  % --------------------------
46  % Options
47  % --------------------------
48
49  % \newif\ifstmconditionallox@loadlistings
50  % \DeclareOption{loadlistings}{\
       stmconditionallox@loadlistingstrue}
51  % \DeclareOption{noloadlistings}{\
       stmconditionallox@loadlistingsfalse}
52  % \ExecuteOptions{loadlistings} % default is to load listings
53
54  % \newif\ifstmconditionallox@newpage
55  % \DeclareOption{newpage}{\stmconditionallox@newpagetrue}
56  % \DeclareOption{nonewpage}{\stmconditionallox@newpagefalse}
57  % \ExecuteOptions{newpage} % default is to create new page
58
59  %\ProcessOptions\relax
60
61  \SetupKeyvalOptions{%
62    family=stmconditionallox,%
63    prefix=stmconditionallox@,%
64    setkeys=\kvsetkeys,%
65  }
66
67  % Load listing package for conditional list of listings
68  \DeclareBoolOption[true]{loadlistings}
69
70  % New page for LoX
71  \DeclareBoolOption[true]{newpage}
72
73  % Process options
74  \ProcessKeyvalOptions{stmconditionallox}
75
76  % --------------------------
77  % Package
```

```
78  % --------------------------

79

80  \ifstmconditionallox@loadlistings
81    \@ifpackageloaded{listings}{}{%
82      \RequirePackage{listings}
83    }
84  \fi

85

86  \@ifpackageloaded{listings}{%
87    \RequirePackage[figure,table,lstlisting]{totalcount}%
88  }{%
89    \RequirePackage[figure,table]{totalcount}%
90  }

91

92  % --------------------------
93  % Modules
94  % --------------------------

95

96  % http://tex.stackexchange.com/a/297655/44634
97  % Erzeugt aufgrund von longtabu in dlrsecondpage ein leeres
        Tabellenverzeichnis
98  \newcommand\conditionallistoffigures{%
99    \iftotalfigures\listoffigures\fi\
        ifstmconditionallox@newpage\newpage\fi%
100 }

101

102 \newcommand\conditionallistoftables{%
103   \iftotaltables\listoftables\fi\ifstmconditionallox@newpage\
        newpage\fi%
104 }

105

106 \@ifpackageloaded{listings}{%
107   \newcommand\conditionallistoflistings{%
108     \iftotallstlistings\lstlistoflistings\fi\
        ifstmconditionallox@newpage\newpage\fi%
109   }%
110 }{}

111

112 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
113 % That's it                        %
114 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

115

116 % Finally, we'll use \endinput to indicate that LaTeX can
        stop reading this file. LaTeX will ignore anything after
```

```
     this line.
117  \endinput
```