# 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 LATEX commands 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

The latter is currently only tested for the stmlistings package, which is based on listings. Please check the functionality carefully in case another package, e.g. minted is used.

By using this package 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.

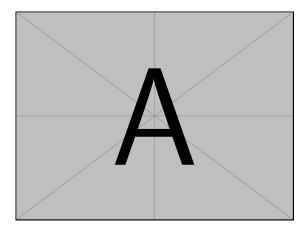


Figure 1: Example figure

## 2.2. Table

This is an example table.

Column 1 Column 2

Table 1: Example table

#### A. The code

#### A.1. stmconditionallox.sty

```
2 % Header
4 %
5 % These are definitions for the
6 % conditional creation 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 % - Preamble:
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 Lightweight Systems
22 %
23 %
                               __/|__
24 %
                              /_/_/_/
25 %
             www.dlr.de/sy/en
                               / DLR
26 %
27 % Copyright (C) 2019-... DLR Lightweight Systems
28 %
30 % Content
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
37 \ProvidesPackage{stmconditionallox}[2023/02/12 STMs custom LaTeX
      conditional list of definitions]
38
```

```
39 % -----
40 % Options
41 % -----
42
43 % Options package
44 \@ifpackageloaded{kvoptions}{}{\RequirePackage{kvoptions}}%
45
46 % Option group
47 \SetupKeyvalOptions{%
48
    family=stmconditionallox,%
49
    prefix=stmconditionallox@, %
50
    setkeys=\kvsetkeys,%
51 }
52
53 % Load listing package for conditional list of listings
54 \DeclareBoolOption[true] {loadlistings}
55
56 % New page for LoX
57 \DeclareBoolOption[true] {newpage}
58
59 % Process options
60 \ProcessKeyvalOptions{stmconditionallox}
61
62 % -----
63 % Package
64 % -----
65
66 \ifstmconditionallox@loadlistings
    \@ifpackageloaded{listings}{}{%
67
      \RequirePackage{listings}
68
69
    }
70 \fi
71
72 \@ifpackageloaded{listings}{%
  \RequirePackage[figure,table,lstlisting]{totalcount}%
73
74 }{%
  \RequirePackage[figure,table]{totalcount}%
75
76 }
77
78 % -----
79 % Modules
80 % -----
81
82 % http://tex.stackexchange.com/a/297655/44634
```

```
83 % Erzeugt aufgrund von longtabu in dlrsecondpage ein leeres
       Tabellenverzeichnis
84 \newcommand\conditionallistoffigures{%
     \iftotalfigures\listoffigures\fi\ifstmconditionallox@newpage\newpage\fi
85
86 }
87
88 \newcommand\conditionallistoftables{%
     \iftotaltables\listoftables\fi\ifstmconditionallox@newpage\newpage\fi\%
89
90 }
91
92 \quad \texttt{\@lifpackageloaded{listings}{\%}}
     \newcommand\conditionallistoflistings{%
93
94
       \iftotallstlistings\lstlistoflistings\fi\ifstmconditionallox@newpage\
       newpage\fi%
95
     }%
96 }{}
97
99 % That's it
101
102 % Finally, we'll use \endinput to indicate that LaTeX can stop reading
       this file. LaTeX will ignore anything after this line.
103 \endinput
```