

# 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.

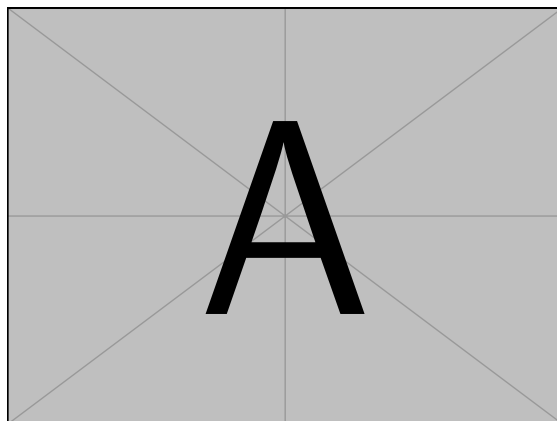


Figure 1: Example figure

## 2.1. Figures

This is an 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 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 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
29 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
30 % Content %
31 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
32
33 % Declare that this style file requires at least LaTeX
34 %   version 2e.
35 \NeedsTeXFormat{LaTeX2e}
36
37 % Provide the name of your page, the date it was last updated
38 %   , and a comment about what it's used for
```

```

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{newpage}{\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
98 % Tabellenverzeichnis
99 \newcommand\conditionallistoffigures{%
100   \iftotalfigures\listoffigures\fi\
101     ifstmconditionallox@newpage\newpage\fi%
102 }
103
104 \newcommand\conditionallistoftables{%
105   \iftotaltables\listoftables\fi\ifstmconditionallox@newpage\
106     newpage\fi%
107 }
108
109 \@ifpackageloaded{listings}{%
110   \newcommand\conditionallistoflistings{%
111     \iftotalstlistings\lstlistoflistings\fi\
112       ifstmconditionallox@newpage\newpage\fi%
113   }%
114 }{}
115
116 % -----
117 % That's it
118 % -----
119
120 % Finally, we'll use \endinput to indicate that LaTeX can
121 % stop reading this file. LaTeX will ignore anything after

```

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