

# stmconditionallox package description

Copyright © 2023 DLR SY STM  
v20230816

Martin Rädcl

2023-08-16

These are definitions for conditional lists of float objects for `stm $\text{latex}$` . 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.

## Contents

<b>List of Figures</b>	<b>1</b>
<b>List of Tables</b>	<b>1</b>
<b>1. Usage</b>	<b>2</b>
1.1. Commands . . . . .	2
1.2. Options . . . . .	2
<b>2. Example</b>	<b>3</b>
2.1. Figures . . . . .	3
2.2. Table . . . . .	3
<b>A. The code</b>	<b>4</b>
A.1. <code>stmconditionallox.sty</code> . . . . .	4

## List of Figures

1. Example figure . . . . .	3
-----------------------------	---

## List of Tables

1. Example table . . . . .	3
----------------------------	---

# 1. Usage

## 1.1. Commands

There are standard L<sup>A</sup>T<sub>E</sub>X 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.

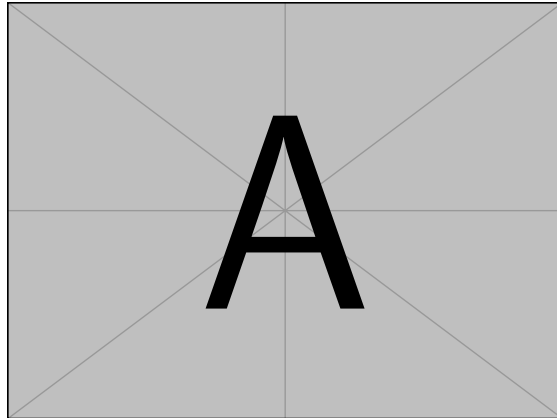


Figure 1: Example figure

### 2.2. Table

This is an example table.

Column 1	Column 2
----------	----------

Table 1: Example table

## A. The code

### A.1. stmconditionallox.sty

```
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 Lightweight Systems
22 %
23 %           _ _/|_ _
24 %           / _/_/_/_/
25 %           www.dlr.de/sy/en | / DLR
26 %
27 % Copyright (C) 2019-... DLR Lightweight 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
37 %   comment about what it's used for
38 \ProvidesPackage{stmconditionallox}[2023/02/12 STMs custom LaTeX
39   conditional list of definitions]
```

```

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
67   \@ifpackageloaded{listings}{\%
68     \RequirePackage{listings}
69   }
70 \fi
71
72 \@ifpackageloaded{listings}{\%
73   \RequirePackage[figure,table,lstlisting]{totalcount}%
74 }{\%
75   \RequirePackage[figure,table]{totalcount}%
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{%
85   \iftotalfigures\listoffigures\fi\ifstmconditionallox@newpage\newpage\fi
    %
86 }
87
88 \newcommand\conditionallistoftables{%
89   \iftotaltables\listoftables\fi\ifstmconditionallox@newpage\newpage\fi%
90 }
91
92 \@ifpackageloaded{listings}{%
93   \newcommand\conditionallistoflistings{%
94     \iftotalstlistings\lstlistoflistings\fi\ifstmconditionallox@newpage\
    newpage\fi%
95   }%
96 }{}
97
98 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
99 % That's it %
100 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
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

```