

# stmconditionallox package description

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v 20191103

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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.

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# 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`

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* and *noloadlistings*** Set whether to load the listings package.

```
\usepackage[noloadlistings]{stm glossaries}
```

`loadlistings` is the default and loads the package. It is used in case `noloadlistings` is not set explicitly.

In case `noloadlistings` is set, the command `\conditionallistoflistings` is not defined.

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

```
\usepackage[nonewpage]{stm glossaries}
```

`newpage` is the default and creates a new page. It is used in case `nonewpage` is not set explicitly.

## 2. Example

This section contains examples.

### 2.1. Figures

This is an example figure.

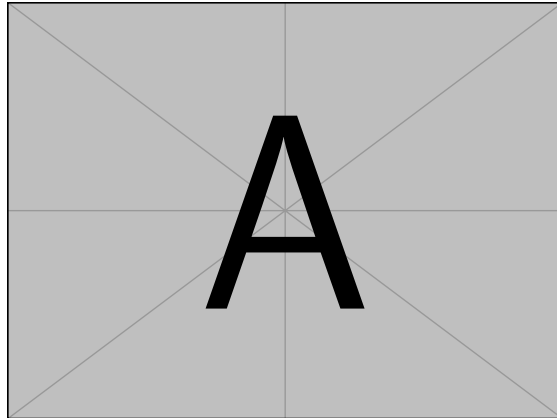


Figure 1: Example figure

### 2.2. Table

This is an example table.

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

Table 1: Example table

## A. The code

### A.1. stmconditionallox.sty

```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Header %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%
% These are definitions for the
% conditional creation of lists of
% - Figures
% - Tables
% - Listings
% Based upon the totalcount package:
%   https://ctan.org/pkg/totalcount
%
% Usage
% - Premble:
%   - \usepackage{stmconditionallox}
%
% Revisions: 2019-10-27 Martin Raedel <martin.raedel@dlr.de>
%               Initial draft
%
% Contact:      Martin Raedel, martin.raedel@dlr.de
%               DLR Composite Structures and Adaptive Systems
%
%               _ _ / | _ _
%               / _ / _ / _ /
%               www.dlr.de/fa/en      | / DLR
%
% Copyright (C) 2019-... DLR Composite Structures and
% Adaptive Systems
%
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% Content %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

% 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{stmconditionallox}[2019/10/27 STMs custom
  LaTeX conditional list of definitions]

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

\newif\ifstmconditionallox@loadlistings
\DeclareOption{loadlistings}{\
  stmconditionallox@loadlistingstrue}
\DeclareOption{noloadlistings}{\
  stmconditionallox@loadlistingsfalse}
\ExecuteOptions{loadlistings} % default is to load listings

\newif\ifstmconditionallox@newpage
\DeclareOption{newpage}{\stmconditionallox@newpagetrue}
\DeclareOption{nonewpage}{\stmconditionallox@newpagefalse}
\ExecuteOptions{newpage} % default is to create new page

\ProcessOptions\relax

% -----
% Package
% -----

\ifstmconditionallox@loadlistings
  \@ifpackageloaded{listings}{\%
    \RequirePackage{listings}
  }
\fi

\@ifpackageloaded{listings}{\%
  \RequirePackage[figure,table,lstlisting]{totalcount}%
}{\%
  \RequirePackage[figure,table]{totalcount}%
}

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

% http://tex.stackexchange.com/a/297655/44634
% Erzeugt aufgrund von longtabu in dlrsecondpage ein leeres
% Tabellenverzeichnis

```

```

\newcommand\conditionallistoffigures{%
  \iftotalfigures\listoffigures\fi\
    ifstmconditionallox@newpage\newpage\fi%
}

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

\@ifpackageloaded{listings}{%
  \newcommand\conditionallistoflistings{%
    \iftotallstlistings\lstlistoflistings\fi\
      ifstmconditionallox@newpage\newpage\fi%
  }%
}{}

%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% That's it %
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%

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

```