stmconditionallox package description

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v2019111

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2019-11-01

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

`\usepackage[noloadlistings]{stmglossaries}`

`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]{stmglossaries}`

`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.

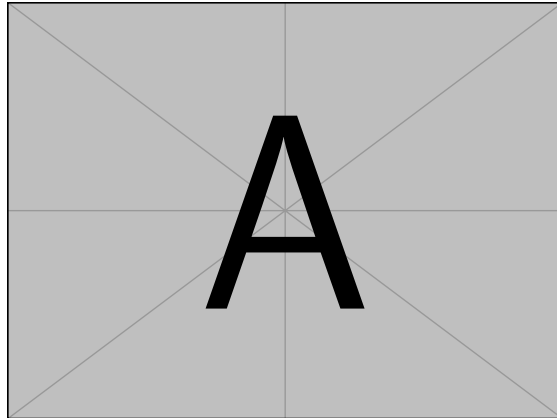### 2.1. Figures

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 creaton 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
```

```latex
\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
```