# The `apptools` package

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**Abstract**

The `apptools` package provides tools to customize appendices. It provides an `\AtAppendix` command to add code to a hook that is executed when `\appendix` is called by the user. Additionally, a TeX conditional `\ifappendix` and a LaTeX-style conditional `\IfAppendix` are provided to check if `\appendix` has already been called.

## Contents

# 1 Introduction

Sometimes it is useful to execute some code at the start of the appendix in an automated way. KOMA-Script[1] classes provide a hook for this purpose. Relatedly, the `apa`[2] and `apa6`[3] classes provide a TeX conditional `\ifappendix` to check if `\appendix` has been called already. This package provides an interface to both these features that is independent of the document class.

## 1.1 License

Copyright © 2012 Sebastian Kuhnert. Permission is granted to copy, distribute and/or modify this software under the terms of the LaTeX Project Public Licence, version 1.3c or later.[4] This package is maintained, the Current Maintainer is Sebastian Kuhnert.

# 2 User Interface

`\AtAppendix{`⟨*code*⟩`}`

Add ⟨*code*⟩ to the hook that is executed when `\appendix` is given.

`\IfAppendix{`⟨*then*⟩`}{`⟨*else*⟩`}`

Expands to ⟨*else*⟩ before `\appendix` is executed, and to ⟨*then*⟩ afterwards.

`\ifappendix`

Calling `\ifappendix` ⟨*then*⟩`\else` ⟨*else*⟩`\fi` expands to ⟨*else*⟩ before `\appendix` is executed, and to ⟨*then*⟩ afterwards.

# 3 Implementation

```
⟨*package⟩
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{apptools}
  [2012/11/28 v1.0 Tools for customizing appendices]%
```

`\apptools@hook` The hook that will be called when `\appendix` is executed. By default it just calls `\appendixtrue` to make `\ifappendix` and `\IfAppendix` work correctly.

```
\def\apptools@hook{\appendixtrue}
```

`\AtAppendix` Extend `\apptools@hook`.

```
\newcommand{\AtAppendix}{%
  \g@addto@macro\apptools@hook
}
```

---

[1] CTAN:macros/latex/contrib/koma-script/

[2] CTAN:macros/latex/contrib/apa/

[3] CTAN:macros/latex/contrib/apa6/

[4] The latest version of this license is available at http://www.latex-project.org/lppl/lppl.txt; it should also be included in your TeX distribution, usually at TDS:doc/latex/base/lppl.pdf

`\apptools@origappendix` Call the hook `\apptools@hook` in `\appendix`.

`\appendix`

```
\let\apptools@origappendix\appendix
\def\appendix{%
  \apptools@hook \apptools@origappendix
}
```

`\ifappendix` The TeX conditional behind `\IfAppendix`. The classes `apa` and `apa6` already define `\ifappendix` as TeX conditional, so the LaTeX version has to be called differently. A second `\newif` call for the same conditional only has the effect of setting it to false, which is unproblematic in this case.

```
\newif\ifappendix
```

`\IfAppendix` The LaTeX style conditional provided by this package.

```
\newcommand*{\IfAppendix}{%
  \ifappendix
    \expandafter\@firstoftwo
  \else
    \expandafter\@secondoftwo
  \fi
}
```

```
⟨/package⟩
```

## 4 Test

The file apptools-test.tex performs some simple tests that the commands provided by this package actually work.

```
⟨*test⟩
\NeedsTeXFormat{LaTeX2e}
\nofiles
\documentclass{article}
\usepackage{apptools}[2012/11/28]
\usepackage{qstest}
\IncludeTests{*}
\LogTests{log}{*}{*}

\begin{document}
\makeatletter

\begin{qstest}{AtAppendix}{AtAppendix}
  \def\defaulthook{\appendixtrue}
  \Expect*{\meaning\defaulthook}*{\meaning\apptools@hook}
  \g@addto@macro\defaulthook{\def\fooafterappendix{foo}}
  \AtAppendix{\def\fooafterappendix{foo}}
  \Expect*{\meaning\defaulthook}*{\meaning\apptools@hook}
  \Expect*{\meaning\fooafterappendix}{undefined}
\end{qstest}
```

```

\begin{qstest}{ifbefore}{ifbefore}
  \Expect{else}*{\ifappendix then\else else\fi}
  \Expect{else}*{\IfAppendix{then}{else}}
\end{qstest}

\appendix

\begin{qstest}{ifafter}{ifafter}
  \Expect{then}*{\ifappendix then\else else\fi}
  \Expect{then}*{\IfAppendix{then}{else}}
\end{qstest}

\begin{qstest}{hook}{hook}
  \def\expected{foo}
  \Expect*{\meaning\fooafterappendix}*{\meaning\expected}
\end{qstest}

\end{document}
\@@end
⟨/test⟩
```

# 5 Installation

## 5.1 Obtaining the package

The package source is attached to this PDF file and can be extracted with many recent PDF viewers. Alternatively, it can be obtained from CTAN:macros/latex/contrib/apptools/apptools.dtx.

## 5.2 Unpacking the package

The .dtx file is a self-extracting `docstrip` archive. The files are extracted by running the .dtx through plain TeX:

```
tex apptools.dtx
```

If the .ins file is already present, you can run TeX alternatively on the .ins file.

## 5.3 Generating the package documentation

Running the .dtx file through pdfLaTeX generates the package documentation:

```
pdflatex apptools.dtx
```

Multiple passes will be necessary to get the cross references right. The index will be generated automatically if `makeindex` is allowed for `\write18`; otherwise the following command is needed before the last pdfLaTeX pass:

```
makeindex -s gind.ist apptools.idx
```

## 5.4 Moving the files

To finish the installation, the generated files need to be moved to an appropriate place in your local TEX Directory Structure (TDS) tree, also known as `texmf` tree. The suggested locations are:

| | | |
|---|---|---|
| apptools.sty | ↦ | TDS:tex/latex/apptools/apptools.sty |
| apptools.pdf | ↦ | TDS:doc/latex/apptools/apptools.pdf |
| apptools-test.tex | ↦ | TDS:doc/latex/apptools/apptools-test.tex |
| apptools.dtx | ↦ | TDS:source/latex/apptools/apptools.dtx |

# Revision History

## v1.0 2012-11-28

Initial release.

# Index

Most index entries refer to code line numbers; the definition of a command is marked by underlining this number. Numbers in italics are an exception: They give the page on which the command is described.