The chapterfolder package*

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Abstract

This file describe the chapterfolder package. This package is intended for LaTeX users who must deal with complex folder structure.

1 Usage

The first command that you need is the `\usepackage{chapterfolder}`. This command include the chapterfolder.

`\cfpart` The `\cfpart` command define a part, change the current folder and include a main file for the part. The syntaxe of this command is `\cfpart [`⟨*short name*⟩`] {`⟨*name*⟩`} {`⟨*folder name*⟩`} {`⟨*file name*⟩`}`.

`\cfpart*` This command does the same think as `\cfpart` except that it use a define a part*.

`\cfchapter` The `\cfchapter` command define a chapter, change the current folder and include a main file for the chapter. The syntaxe of this command is `\cfchapter [`⟨*short name*⟩`] {`⟨*name*⟩`} {`⟨*folder name*⟩`} {`⟨*file name*⟩`}`.

`\cfchapter*` This command does the same think as `\cfchapter` except that it use a define a chapter*.

`\cfsection` The `\cfsection` command define a section, change the current folder and include a main file for the section. The syntaxe of this command is `\cfsection [`⟨*short name*⟩`] {`⟨*name*⟩`} {`⟨*folder name*⟩`} {`⟨*file name*⟩`}`.

`\cfsection*` This command does the same think as `\cfsection` except that it use a define a section*.

`\cfsubsection` The `\cfsubsection` command define a subsection, change the current folder and include a main file for the subsection. The syntaxe of this command is `\cfsubsection [`⟨*short name*⟩`] {`⟨*name*⟩`} {`⟨*folder name*⟩`} {`⟨*file name*⟩`}`.

`\cfsubsection*` This command does the same think as `\cfsubsection` except that it use a define a subsection*.

`\cfinput` The command `\cfinput` include a file from within the current folder.

`\cfcurrentfolder` The command `\cfcurrentfolder` provide the path to the current folder.

`\cfinputfigure` The command `\cfinputfigure` include a file from within the folder `figure` within the current folder.

`\cfcurrentfolderfigure` The command `\cfcurrentfolderfigure` provide the path to the current figure folder.

`\cfinputlistings` The command `\cfinputlistings` include a file from within the folder

*This document corresponds to chapterfolder v2.0, dated 2005/11/24.

`listings` within the current folder.

`\cfcurrentfolderlistings` The command `\cfcurrentfolderlistings` provide the path to the current listings folder.

`\cfinputalgorithms` The command `\cfinputalgorithms` include a file from within the folder `algorithms` within the current folder.

`\cfcurrentfolderalgorithms` The command `\cfcurrentfolderalgorithms` provide the path to the current algorithms folder.

`\cffolderfigure` The command `\cffolderfigure` change the current folder and include a main file. The syntaxe of this command is `\cffolderfigure {`⟨*folder name*⟩`} {`⟨*file name*⟩`}`.

`\cfaddFolder` The command `\cfaddFolder` define two command to deal with default folder. The syntaxe of this command is `\cfaddFolder {`⟨*command extension*⟩`} {`⟨*folder name*⟩`}`.

2 Compatibility commands

The following commands are available for backward compatibility :

`\cfpartstar` The command `\cfpartstar` is a alias of `\cfpart*`.

`\cfchapterstar` The command `\cfchapterstar` is a alias of `\cfchapter*`.

`\cfsectionstar` The command `\cfsectionstar` is a alias of `\cfsection*`.

`\cfsubsectionstar` The command `\cfsubsectionstar` is a alias of `\cfsubsection*`.

3 Implementation

`@cf@currentpos` This counter define the top of the stack path

```
\newcounter{@cf@currentpos}
\setcounter{@cf@currentpos}{0}
```

`\stackFolder<X>` These macro contains, when needed the path for the stack

```
\expandafter\def\csname stackFolder0\endcsname{}
\expandafter\def\csname stackFolder1\endcsname{}
\expandafter\def\csname stackFolder2\endcsname{}
\expandafter\def\csname stackFolder3\endcsname{}
\expandafter\def\csname stackFolder4\endcsname{}
\expandafter\def\csname stackFolder5\endcsname{}
\expandafter\def\csname stackFolder6\endcsname{}
\expandafter\def\csname stackFolder7\endcsname{}
\expandafter\def\csname stackFolder8\endcsname{}
\expandafter\def\csname stackFolder9\endcsname{}
```

`\@cfpush` This macro push a path onto the stack path

```
\def\@cfpush#1{%
    \expandafter%
    \def\csname stackFolder\arabic{@cf@currentpos}\endcsname{#1/}%
    \addtocounter{@cf@currentpos}{1}%
}
```

`\@cfpop` This macro pop a path from the stack path

```
\def\@cfpop{%
    \addtocounter{@cf@currentpos}{-1}
```

```
    \expandafter%
    \def\csname stackFolder\arabic{@cf@currentpos}\endcsname{}%
}
```

`\cfcurrentfolder` This marco define the current path

```
\newcommand{\cfcurrentfolder}{%
\csname stackFolder0\endcsname%
\csname stackFolder1\endcsname%
\csname stackFolder2\endcsname%
\csname stackFolder3\endcsname%
\csname stackFolder4\endcsname%
\csname stackFolder5\endcsname%
\csname stackFolder6\endcsname%
\csname stackFolder7\endcsname%
\csname stackFolder8\endcsname%
\csname stackFolder9\endcsname%
}
```

`\cfinput` This macro define how to input a file from the current folder

```
\newcommand{\cfinput}[1]{\input{\cfcurrentfolder#1}}
```

`\cffolderinput` This macro go into a folder and input a file

```
\newcommand{\cffolderinput}[2]{%
    \@cfpush{#1}%
    \cfinput{#2}%
    \@cfpop%
}
```

`\cfaddFolder` This macro define a new default folder for some kind of data

```
\newcommand{\cfaddFolder}[2]{%
    \expandafter\def\csname cfcurrentfolder#1\endcsname{%
        \cfcurrentfolder/#2/%
    }%
    \expandafter\def\csname cfinput#1\endcsname##1{%
        \input{\csname cfcurrentfolder#1\endcsname##1}%
    }%
}
```

`\@chapterfolderfigure` This macro define the default name of the folder for the figures

```
\newcommand{\@chapterfolderfigure}{figure}
```

and then define three macros that access this folder

```
\cfaddFolder{figure}{\@chapterfolderfigure}
\newcommand{\cfincludegraphics}[2][]{%
    \includegraphics[#1]{\cfcurrentfolderfigure/#2}%
}
```

`\@chapterfolderlistings` This macro define the default name of the folder for the listings

```
\newcommand{\@chapterfolderlistings}{listings}
```

and then define two macros that access this folder

```
\cfaddFolder{listings}{\@chapterfolderlistings}
```

`\@chapterfolderalgorithms` This macro define the default name of the folder for the algorithms

```
\newcommand{\@chapterfolderalgorithms}{algorithms}
```

and then define two macros that access this folder

```
\cfaddFolder{algorithms}{\@chapterfolderalgorithms}
```

`\cfpart` This macro is the main macro to include a part from within a folder

```
\newcommand{\cfpart}{\@ifstar
  \cfpartstar%
  \cfpartstd%
}
```

`\cfchapter` This macro is the main macro to include a chapter from within a folder

```
\newcommand{\cfchapter}{\@ifstar
  \cfchapterstar%
  \cfchapterstd%
}
```

`\cfsection` This macro is the main macro to include a section from within a folder

```
\newcommand{\cfsection}{\@ifstar
  \cfsectionstar%
  \cfsectionstd%
}
```

`\cfsubsection` This macro is the main macro to include a subsection from within a folder

```
\newcommand{\cfsubsection}{\@ifstar
  \cfsubsectionstar%
  \cfsubsectionstd%
}
```

`\cfpartstd` This macro go in a folder, create a part, include the default file and go out of the folder

```
\newcommand{\cfpartstd}[4][]{%
\ifthenelse{\equal{#1}{}}{\part{#2}}{\part[#1]{#2}}%
\cffolderinput{#3}{#4}%
}
```

`\cfpartstar` This macro go in a folder, create a part*, include the default file and go out of the folder

```
\newcommand{\cfpartstar}[4][]{%
\ifthenelse{\equal{#1}{}}{\part*{#2}}{\part[#1]{#2}}%
\cffolderinput{#3}{#4}%
}
```

`\cfchapterstd` This macro go in a folder, create a chapter, include the default file and go out of the folder

```
\newcommand{\cfchapterstd}[4][]{%
\ifthenelse{\equal{#1}{}}{\chapter{#2}}{\chapter[#1]{#2}}%
\cffolderinput{#3}{#4}%
}
```

`\cfchapterstar` This macro go in a folder, create a chapter*, include the default file and go out of the folder

```
\newcommand{\cfchapterstar}[4][]{%
\ifthenelse{\equal{#1}{}}{\chapter*{#2}}{\chapter*[#1]{#2}}%
\cffolderinput{#3}{#4}%
}
```

`\cfsectionstd` This macro go in a folder, create a section, include the default file and go out of the folder

```
\newcommand{\cfsectionstd}[4][]{%
\ifthenelse{\equal{#1}{}}{\section{#2}}{\section[#1]{#2}}%
\cffolderinput{#3}{#4}%
}
```

`\cfsectionstart` This macro go in a folder, create a section*, include the default file and go out of the folder

```
\newcommand{\cfsectionstar}[4][]{%
\ifthenelse{\equal{#1}{}}{\section*{#2}}{\section*[#1]{#2}}%
\cffolderinput{#3}{#4}%
}
```

`\cfsubsectionstd` This macro go in a folder, create a subsection, include the default file and go out of the folder

```
\newcommand{\cfsubsectionstd}[4][]{%
\ifthenelse{\equal{#1}{}}{\subsection{#2}}{\subsection[#1]{#2}}%
%
}
```

`\cfsubsectionstar` This macro go in a folder, create a subsection*, include the default file and go out of the folder

```
\newcommand{\cfsubsectionstart}[4][]{%
\ifthenelse{\equal{#1}{}}{\subsection*{#2}}{\subsection*[#1]{#2}}%
\cffolderinput{#3}{#4}%
}
```