

# The **catchfilebetween tags**\* package

catch file between delimiters or tags (FC)

<florent.chervet at free.fr>

2010/06/20 – version 1.0

## Abstract

**catchfilebetween tags** provides a macro `\CatchFileBetweenTags` to capture the content of a file between two docstrip tags, and a macro `\CatchFileBetweenDelims` to capture between two strings (delimiters):

### DOCSTRIP TAGS EXAMPLE

**`\CatchFileBetweenTags`**

```
%<*meta>
something
to
capture
%</meta>
```

### DELIMITERS EXAMPLE

**`\CatchFileBetweenDelims`**

```
<meta>
something
to
capture
</meta>
```

Alternatively, it is possible to execute the content of a captured-part with `\ExecuteMetaData`.

This packages requires  $\epsilon$ -TeX, and the `catchfile`<sup>1</sup> package.

This is the first version.

## Contents

<b>1</b>	<b>User interface</b>	<b>1</b>	<b>2.4</b>	<b>User macros</b>	<b>3</b>
1.1	<code>\CatchFileBetweenTags</code>	1	2.5	Implementation macros	4
1.2	<code>\ExecuteMetaData</code>	2			
1.3	<code>\CatchFileBetweenDelims</code>	2	<b>3</b>	<b>History</b>	<b>6</b>
<b>2</b>	<b>Implementation</b>	<b>3</b>		[2010/06/20 v1.0]	6
2.1	Identification	3	<b>4</b>	<b>References</b>	<b>6</b>
2.2	Requirements	3			
2.3	Some constants	3	<b>5</b>	<b>Index</b>	<b>6</b>

## 1 User interface

### 1.1 `\CatchFileBetweenTags`

`\CatchFileBetweenTags`  $\{\langle cs-name \rangle\}\{\langle file-name \rangle\}\{\langle tag \rangle\}$   
`\CatchFileBetweenTags*`  $\{\langle cs-name \rangle\}\{\langle file-name \rangle\}\{\langle tag \rangle\}$

This command will catch the file given its name  $\langle file-name \rangle$  and store the (first) part of this file found between the two tags:

`%<*\langle tag \rangle>` and `%</\langle tag \rangle>`

If there is no such tags, the result is empty.

The capture is made inside `\makeatletter ... \makeatother`. More precisely, the result is retokenized (under the current catcode regime) with `@` considered as a letter in all cases.

This documentation is produced with the DocStrip utility.

- To get the documentation, run (thrice): `pdflatex catchfilebetween tags.dtx`
- To get the index, run: `makeindex -s gind.ist catchfilebetween tags.idx`
- To get the package, run: `etex catchfilebetween tags.dtx`

The `.dtx` file is embedded into this pdf file thank to `embedfile` by H. Oberdiek.

1. `catchfile`: [CTAN:macros/latex/contrib/oberdiek/catchfile](http://CTAN:macros/latex/contrib/oberdiek/catchfile)

The result is stored into either:

- if  $\langle cs-name \rangle$  is a token register: into this register
- otherwise  $\langle cs-name \rangle$  will be defined or redefined as a parameterless macro containing the caught part.

**Comments inside the caught-part of the file are ignored** unless:

- 1) This is a *line-comment*: the first character on the line is %, not followed by %

**and**

- 2) `\CatchFileBetweenTags*` is used

In this case, *line-comments* are read as if they were not commented, *ie.* the first character % is removed.

Non line-comments are always ignored.

## 1.2 `\ExecuteMetaData`

```
\ExecuteMetaData[\langle filename \rangle]{\langle tag \rangle}
\ExecuteMetaData* [\langle filename \rangle]{\langle tag \rangle}
```

This macro will capture the contents of the current (main) file (*ie.* `\jobname`) between the two tags:

`%<*tag>`                      and                      `%</tag>`

Then the code found is immediately expanded. (You may say for example: `\AtBeginDocument\ExecuteMetaData`).

This is a wrapper for:

```
\CatchFileBetweenTags\temptoken{\jobname}{meta}
\the\temptoken
\global\temptoken{}
```

`\ExecuteMetaData*` will keep the lines that begin with one (not two) % character.

Alternatively, it is possible to execute meta datas from an external file with:

```
\ExecuteMetaData[\langle file \rangle]{\langle tag \rangle}
```

## 1.3 `\CatchFileBetweenDelims`

```
\CatchFileBetweenDelims{\langle cs-name \rangle}{\langle file-name \rangle}{\langle start-delimiter \rangle}{\langle stop-delimiter \rangle}[\langle setup \rangle]
```

This command will catch the file given its name  $\langle file-name \rangle$  and store the (first) part of this file found between the two string delimiters  $\langle start-delimiter \rangle$  and  $\langle stop-delimiter \rangle$  into either:

- if  $\langle cs-name \rangle$  is a token register: into this register
- otherwise  $\langle cs-name \rangle$  will be defined as a parameterless macro (a string) containing the caught part.

The optional parameter  $[\langle setup \rangle]$  may be used to change `\catcodes` or end-of-line characters before the `\input` of  $\langle file-name \rangle$ .

By default,  $[\langle setup \rangle]$  is `\makeatletter`.

## 2 Implementation

### 2.1 Identification

The package namespace is `CatchFBT@`.

```
1 \<package>
2 \NeedsTeXFormat{LaTeX2e}% LaTeX 2.09 can't be used (nor non-LaTeX)
3 [2005/12/01]% LaTeX must be 2005/12/01 or younger
4 \ProvidesPackage{catchfilebetween tags}
5 [2010/06/20 v1.0 - Catch file between tags (FC)]
```

### 2.2 Requirements

```
6 \RequirePackage{etex,etoolbox,ltxcmds}
7 \RequirePackage{catchfile}
```

### 2.3 Some constants

```
8 \global\def\CatchFBT@tok
```

### 2.4 User macros

`\CatchFileBetweenDelims`

```
  #1 = store-cs
  #2 = fname
  #3 = start
  #4 = end
  [#5] = setup

  9 \newrobustcmd*\CatchFileBetweenDelims[4]{%
10   \begingroup
11   \edef\CatchFileBetweenDelims{\endgroup
12     \noexpand\@testopt
13     {\CatchFBT@Work{\noexpand#1}{#2}{#3}{#4}}
14     {\noexpand\makeatletter}%
15   }\CatchFileBetweenDelims
16}% \CatchFileBetweenDelims
```

`\CatchFileBetweenTags`

```
  #1 = store-cs
  #2 = fname
  #3 = tag
  [#4] = setup (for \CatchFBT@Final)

17 \newcommand\CatchFileBetweenTags{}
18 \begingroup
19 \@makeother\<%
20 \@makeother\>%
21 \@makeother\*%
22 \catcode'\: 14%
23 \@makeother\%:
24 \gdef\CatchFileBetweenTags#1#2#3{
25   \CatchFileBetweenDelims\CatchFBT@tok{#2}{%<#3>}{%>#3}<#3>[\CatchFBT@sanitize]:
26   \CatchFBT@Final{#1}:
27 }:% \CatchFileBetweenTags
28 \endgroup
```

`\ExecuteMetaData`

```

29 \newrobustcmd*\ExecuteMetaData[2][\jobname]{%
30   \CatchFileBetweenTags\CatchFBT@tok{#1}{#2}%
31   \global\expandafter\CatchFBT@tok\expandafter{%
32     \expandafter}\the\CatchFBT@tok
33 }% \ExecuteMetaData

```

**2.5 Implementation macros**`\CatchFBT@Work`

**#1** = store-cs  
**#2** = fname  
**#3** = start  
**#4** = end  
**[#5]** = setup (optional)

```

34 \long\protected\def\CatchFBT@Work#1#2#3#4[#5]{%
35   \def\CatchFBT@setup{#5%
36     \long\def\CatchFile@Do####1#3{\CatchFBT@catchthepart}% discard before start-delim
37     \long\edef\CatchFBT@catchthepart####1#4{% capture until end-delim
38       \CatchFBT@tok{\endgroup
39         \CatchFBT@IsAToken#1
40         {\global\noexpand#1{####1}}
41         {\xdef\noexpand#1{\noexpand\unexpanded{####1}}}%
42         \noexpand\CatchFBT@discardtherest}%
43     \long\expandafter\def
44       \expandafter\CatchFBT@discardtherest
45       \expandafter####\expandafter1\CatchFile@EOF{}}%
46     \everyeof{#3#4}%
47     \everyeof\expandafter\expandafter\expandafter{%
48       \expandafter\the\expandafter\everyeof\CatchFile@EOF
49       \expandafter\the\expandafter\CatchFBT@tok\noexpand}}%
50   \CatchFileDef#1{#2}\CatchFBT@setup
51 }% \CatchFBT@Work

```

`\CatchFBT@sanitize` `catchfilebetweentags` special setup for `\CatchFileBetweenDelims`:

```

52 \def\CatchFBT@sanitize{%
53   \@sanitize
54   \@makeoother\{%
55   \@makeoother\}%
56   \endlinechar='^^J%
57 }% \CatchFBT@sanitize

```

`\CatchFBT@Final` retokenize under the current catcode regime (like standard `\input`):

```

58 \newrobustcmd*\CatchFBT@Final[1]{\@testopt
59   {\CatchFBT@Fin@1{#1}}}%
60 }% \CatchFBT@Final
61 \def\CatchFBT@Fin@1#1[#2]{%
62   \begingroup
63     \endlinechar\m@ne \makeatletter #2%
64     \scantokens\expandafter{%
65       \expandafter\CatchFBT@tok\expandafter{\the\CatchFBT@tok}}%
66     \CatchFBT@IsAToken{#1}
67     {\global#1\expandafter{\the\CatchFBT@tok}}
68     {\xdef#1{\the\CatchFBT@tok}}%
69   \ifx\CatchFBT@tok#1\else\global\CatchFBT@tok{}\fi
70   \endgroup
71 }% \CatchFBT@Final

```

`\CatchFBT@IsAToken` A helper macro to decide if the result should be stored as a token register or as a macro.

```

72 \def\CatchFBT@IsAToken#1{%
73   \expandafter\expandafter
74     \expandafter\CatchFBT@Is@Token
75       \expandafter\meaning\expandafter#1\string\toks
76       \\\{first}\{second}\\\}%
77 }% \CatchFBT@IsAToken
78 \expandafter\def\expandafter\CatchFBT@Is@Token
79   \expandafter#\expandafter1\string\toks#2#3\\#4#5#6\\\\{%
80   \csname ltx@%
81     \if\relax\detokenize{#1}\relax#5%
82     \else second\fi oftwo%
83   \endcsname
84 }% \CatchFBT@Is@Token

85 \endpackage

```

### 3 History

[2010/06/20 v1.0]

- First version.

### 4 References

[1] *The docstrip program*; 2009/09/25 v2.5d; [CTAN:macros/latex/base/](#).

### 5 Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; plain numbers refer to the code lines where the entry is used.

Symbols			
<code>\%</code>	23	<b>D</b>	
<code>\*</code>	21	<code>\detokenize</code>	81
<code>\&lt;</code>	19	<b>E</b>	
<code>\&gt;</code>	20	<code>\endlinechar</code>	56, 63
<code>\@makeother</code>	19, 20, 21, 23, 54, 55	<code>\everyeof</code>	46, 47, 48
<code>\@sanitize</code>	53	<code>\ExecuteMetaData</code>	2, <u>29</u>
<code>\{</code>	54	<b>G</b>	
<code>\}</code>	55	<code>\globtoks</code>	8
<code>\^</code>	56	<b>J</b>	
<b>C</b>		<code>\jobname</code>	29
<code>\CatchFBT@catchthepart</code>	36, 37	<b>M</b>	
<code>\CatchFBT@discardtherest</code>	42, 44	<code>\meaning</code>	75
<code>\CatchFBT@Fin@l</code>	59, 61	<b>P</b>	
<code>\CatchFBT@Final</code>	26, <u>58</u>	<code>\protected</code>	34
<code>\CatchFBT@Is@Token</code>	74, 78, 84	<b>S</b>	
<code>\CatchFBT@Is@Token</code>	39, 66, <u>72</u>	<code>\scantokens</code>	64
<code>\CatchFBT@sanitize</code>	25, <u>52</u>	<b>T</b>	
<code>\CatchFBT@setup</code>	35, 50	<code>\toks</code>	75, 79
<code>\CatchFBT@tok</code>	8, 25, 30, 31, 32, 38, 49, 65, 67, 68, 69	<b>U</b>	
<code>\CatchFBT@Work</code>	13, <u>34</u>	<code>\unexpanded</code>	41
<code>\CatchFile@Do</code>	36		
<code>\CatchFile@EOF</code>	45, 48		
<code>\CatchFileBetweenDelims</code>	2, <u>9</u> , 25		
<code>\CatchFileBetweenTags</code>	1, <u>17</u> , 30		
<code>\CatchFileDef</code>	50		
<code>\catcode</code>	22		