The filehook Package

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Abstract

This package provides hooks for input files. Document and package authors can use these hooks to execute code at begin or the end of specific or all input files.

1 Introduction

These package changes some internal LaTeX macros used to load input files so that they include 'hooks'. A hook is an (internal) macro executed at specific points. Normally it is initially empty, but can be extended using an user level macro. The most common hook in LaTeX is the 'At-Begin-Document' hook. Code can be added to this hook using `\AtBeginDocument{`⟨*TeX code*⟩`}`.

This package provides hooks for files read by the LaTeX macros `\input`, `\include` and `\InputIfFileExists` as well as (since v0.3 from 2010/12/20) for class and package files, i.e. macros `\documentclass`, `\LoadClassWithOptions` and `\LoadClass` as well as `\usepackage`, `\RequirePackageWithOptions` and `\RequirePackage`. Note that `\InputIfFileExists`, and therefore its hooks, is used by the aforementioned macros. In v0.4 from 2011/03/01 special hooks where added which are executed for every read file, but will not be executed a second time by the internal `\InputIfFileExists` inside `\input` and `\include`.

For all files a 'AtBegin' and a 'AtEnd' hook is installed. For `\include` files there is also a 'After' hook which it is executed *after* the page break (`\clearpage`) is inserted by the `\include` code. In contrast, the 'AtEnd' hook is executed before the trailing page break and the 'AtBegin' hook is executed after the *leading* page break. The 'AtBegin' hook can be used to set macros to file specific values. These macros can be reset in the 'AtEnd' hook to the parent file values. If these macros appear in the page header or footer they need to be reset 'After' hook to ensure that the correct values are used for the last page.

In addition to general hooks which are executed for all files of there type, file specific one can be defined which are only executed for the named file. The hooks for classes and packages are always specific to one file.

Older versions of this package provided the file name as argument #1 for the general hooks. This has been changed in v0.4 from 2011/01/03: the hook code is stored and executed without modifications, i.e. macro argument characters (#) are

now handled like normal and don't have to be doubled. See section 5 for information how to upgrade older documents.

2 Usage

The below macros can be used to add material (TEX code) to the related hooks. All 'AtBegin' macros will *append* the code to the hooks, but the 'AtEnd' and 'After' macros will *prefix* the code instead. This ensures that two different packages adding material in 'AtBegin'/'AtEnd' pairs do not overlap each other. Instead the later used package adds the code closer to the file content, 'inside' the material added by the first package. Therefore it is safely possible to surround the content of a file with multiple LaTeX environments using multiple 'AtBegin'/'AtEnd' macro calls. If required inside another package a different order can be enforced by using the internal hook macros shown in the implementation section.

Every File

```
\AtBeginOfEveryFile{⟨TEX code⟩}
\AtEndOfEveryFile{⟨TEX code⟩}
```

Sometime certain code should be executed at the begin and end of every read file, e.g. pushing and popping a file stack. The 'At...OfFiles' hooks already do a good job here. Unfortunately there is the issue with the `\clearpage` in `\include`. The `\AtEndOfFiles` is executed before it, which can cause issues with page headers and footers. A workaround, e.g. done by older versions of the `currfile` package, is to execute the code twice for include files: once in the `include` related hooks and once in the `OfFiles` hooks.

A better solution for this problem was added in v0.4 from 2011/01/03: the `EveryFile` hooks will be executed exactly once for every file, independent if it is read using `\input`, `\include` or `\InputIfFileExists`. Special care is taken to suppress them for the `\InputIfFileExists` inside `\input` and `\include`.

These hooks are located around the more specific hooks: For `\input` files the 'Begin' hook is executed before the `\AtBeginOfInputs` hook and the 'End' hook after the `\AtEndOfInputs`. Similarly, for `\include` files the 'Begin' hook is executed before the `\AtBeginOfIncludes` hook and the 'End' hook after the `\AfterIncludes` (!). For files read by `\InputIfFileExists` (e.g. also for `\usepackage`, etc.) they are executed before and after the `\AtBeginOfFiles` and `\AtEndOfFiles` hooks, respectively. Note that the `\AtBeginOfEveryFile` hook is executed before the `\AtBeginOfPackageFile`/`\AtBeginOfClassFile` hooks and that the `\AtEndOfEveryFile` hook is executed also before the hooks `\AtEndOfPackageFile`/`\AtEndOfClassFile`. Therefore the 'Every' and 'PackageFile'/'ClassFile' hooks do not nest correctly like all other hooks do.

All Files

```
\AtBeginOfFiles{⟨TEX code⟩}
\AtEndOfFiles{⟨TEX code⟩}
```

These macros add the given {⟨*code*⟩} to two hooks executed for all files read using the `\InputIfFileExists` macro. This macro is used internally by the `\input`,
`\include` and `\usepackage`/`\RequirePackage` macros. Packages and classes might
use it to include additional or auxiliary files. Authors can exclude those files from the
hooks by using the following code instead:

`\IfFileExists{`⟨*file name*⟩`}{`\@input\@filef@und`}{}`

```
\AtBeginOfFile{⟨file name⟩}{⟨TEX code⟩}
\AtEndOfFile{⟨file name⟩}{⟨TEX code⟩}
```

Like the `\...OfIncludeFile{`⟨*file name*⟩`}{`⟨*TEX code*⟩`}` macros above, just for 'all'
read files. If the ⟨*file name*⟩ does not include a file extension it will be set to '`.tex`'.

The 'all files' hooks are closer to the file content than the `\input` and `\include`
hook, i.e. the `\AtBeginOfFiles` comes *after* the `\AtBeginOfIncludes` and the
`\AtEndOfFiles` comes *before* the `\AtEndOfIncludes` hook.

The following figure shows the positions of the hooks inside the macro:

<div align="center">

`\InputIfFileExists`:

Hook: AtBeginOfEveryFile
Hook: AtBeginOfFile{⟨*file name*⟩}
Hook: AtBeginOfFiles
Content
Hook: AtEndOfFiles
Hook: AtEndOfFile{⟨*file name*⟩}
Hook: AtEndOfEveryFile

</div>
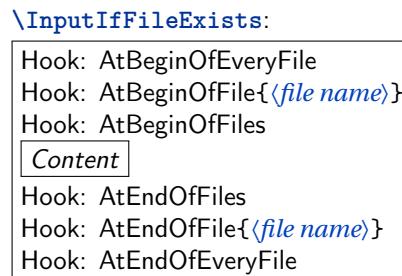
Include Files

```
\AtBeginOfIncludes{⟨TEX code⟩}
\AtEndOfIncludes{⟨TEX code⟩}
\AfterIncludes{⟨TEX code⟩}
```

As described above the 'AtEnd' hook is executed before and the 'After' hook is executed
after the trailing `\clearpage`. Note that material which appears in the page header
or footer should be updated in the 'After' hook, not the 'AtEnd' hook, to ensure that
the old values are still valid for the last page.

```
\AtBeginOfIncludeFile{⟨file name⟩}{⟨TEX code⟩}
\AtEndOfIncludeFile{⟨file name⟩}{⟨TEX code⟩}
\AfterIncludeFile{⟨file name⟩}{⟨TEX code⟩}
```

These file-specific macros take the two arguments. The ⟨*code*⟩ is only executed for
the file with the given ⟨*file name*⟩ and only if it is read using `\include`. The ⟨*file
name*⟩ should be identical to the name used for `\include` and not include the '`.tex`'
extension. Files with a different extension are neither supported by `\include` nor
this hooks.

The following figure shows the positions of the hooks inside the macro:

\include:

```
\clearpage  (implicit)
Hook: AtBeginOfEveryFile
Hook: AtBeginOfIncludeFile{⟨file name⟩}
Hook: AtBeginOfIncludes
```

> **\InputIfFileExists**:
>
> ```
> Hook: AtBeginOfFile{⟨file name⟩}
> Hook: AtBeginOfFiles
> ```
> ```
> Content
> ```
> ```
> Hook: AtEndOfFiles
> Hook: AtEndOfFile{⟨file name⟩}
> ```

```
Hook: AtEndOfIncludes
Hook: AtEndOfIncludeFile{⟨file name⟩}
\clearpage  (implicit)
Hook: AfterIncludes
Hook: AfterIncludeFile{⟨file name⟩}
Hook: AtEndOfEveryFile
```

Input Files

```
\AtBeginOfInputs{⟨TEX code⟩}
\AtEndOfInputs{⟨TEX code⟩}
```

Like the **\...OfIncludes**{code} macros above, just for file read using **\input**.

```
\AtBeginOfInputFile{⟨file name⟩}{⟨TEX code⟩}
\AtEndOfInputFile{⟨file name⟩}{⟨TEX code⟩}
```

Like the **\...OfIncludeFile**{⟨file name⟩}{code} macros above, just for file read using **\input**. If the ⟨file name⟩ does not include a file extension it will be set to '.tex'.

The following figure shows the positions of the hooks inside the macro:

```
\input:
┌─────────────────────────────────────────────┐
│ Hook: AtBeginOfEveryFile                     │
│ Hook: AtBeginOfInputFile{⟨file name⟩}        │
│ Hook: AtBeginOfInputs                        │
│  ┌─────────────────────────────────────────┐│
│  │ \InputIfFileExists:                      ││
│  │  ┌─────────────────────────────────────┐││
│  │  │ Hook: AtBeginOfFile{⟨file name⟩}    │││
│  │  │ Hook: AtBeginOfFiles                │││
│  │  │  ┌──────────┐                       │││
│  │  │  │ Content  │                       │││
│  │  │  └──────────┘                       │││
│  │  │ Hook: AtEndOfFiles                  │││
│  │  │ Hook: AtEndOfFile{⟨file name⟩}      │││
│  │  └─────────────────────────────────────┘││
│  └─────────────────────────────────────────┘│
│ Hook: AtEndOfInputs                          │
│ Hook: AtEndOfInputFile{⟨file name⟩}          │
│ Hook: AtEndOfEveryFile                       │
└─────────────────────────────────────────────┘
```

Package Files

```
\AtBeginOfPackageFile*{⟨package name⟩}{⟨TEX code⟩}
\AtEndOfPackageFile*{⟨package name⟩}{⟨TEX code⟩}
```

This macros install the given ⟨*TEX code*⟩ in the 'AtBegin' and 'AtEnd' hooks of the given package file. The **\AtBeginOfPackageFile** simply executes **\AtBeginOfFile**{⟨*package name*⟩.sty}{⟨*TEXcode*⟩}. Special care is taken to ensure that the 'AtEnd' code is executed *after* any code installed by the package itself using the LATEX macro **\AtEndOfPackage**. Note that it is therefore executed after the 'AtEndOfEveryFile' hook. If the starred version is used and the package is already loaded the code is executed right away.

The following figure shows the positions of the hooks inside the macros:

```
\usepackage/\RequirePackage/\RequirePackageWithOptions:
┌───────────────────────────────────────────────────────┐
│ \InputIfFileExists:                                    │
│  ┌───────────────────────────────────────────────────┐│
│  │ Hook: AtBeginOfEveryFile                           ││
│  │ Hook: AtBeginOfFile{⟨file name⟩}                   ││
│  │  (includes AtBeginOfPackageFile{⟨file name⟩})      ││
│  │ Hook: AtBeginOfFiles                               ││
│  │  ┌──────────┐                                      ││
│  │  │ Content  │                                      ││
│  │  └──────────┘                                      ││
│  │ Hook: AtEndOfFiles                                 ││
│  │ Hook: AtEndOfFile{⟨file name⟩}                     ││
│  │ Hook: AtEndOfEveryFile                             ││
│  └───────────────────────────────────────────────────┘│
│ Hook: AtEndOfPackage    (LATEX hook)                   │
│ Hook: AtEndOfPackageFile{⟨file name⟩}                  │
└───────────────────────────────────────────────────────┘
```

Class Files

> **\AtBeginOfClassFile**∗{⟨*class name*⟩}{⟨*T_EX code*⟩}
> **\AtEndOfClassFile**∗{⟨*class name*⟩}{⟨*T_EX code*⟩}

This macros install the given ⟨*T_EX code*⟩ in the 'AtBegin' and 'AtEnd' hooks of the given class file. They work with classes loaded using **\LoadClass**, **\LoadClassWithOptions** and also **\documentclass**. However, in the latter case filehook must be loaded using **\RequirePackage** beforehand. The macro **\AtBeginOfClassFile** simply executes **\AtBeginOfFile**{⟨*class name*⟩.cls}{...}. Special care is taken to ensure that the 'AtEnd' code is executed *after* any code installed by the class itself using the L^AT_EX macro **\AtEndOfClass**. Note that it is therefore executed after the 'AtEnd-OfEveryFile' hook. If the starred version is used and the class is already loaded the code is executed right away.

The following figure shows the positions of the hooks inside the macros:

\documentclass/**\LoadClass**/**\LoadClassWithOptions**:

> **\InputIfFileExists**:
>
> Hook: AtBeginOfEveryFile
> Hook: AtBeginOfFile{⟨*file name*⟩}
>   (includes AtBeginOfClassFile{⟨*file name*⟩})
> Hook: AtBeginOfFiles
> | *Content* |
> Hook: AtEndOfFiles
> Hook: AtEndOfFile{⟨*file name*⟩}
> Hook: AtEndOfEveryFile
>
> Hook: AtEndOfClass   (L^AT_EX hook)
> Hook: AtEndOfClassFile{⟨*file name*⟩}
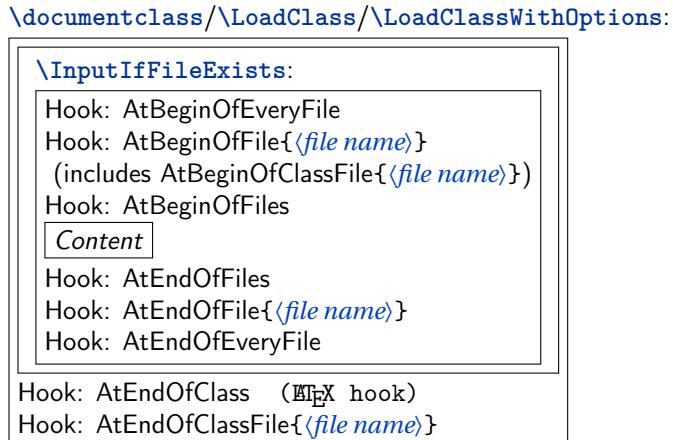
2.1 Clearing Hooks

> **\ClearHook\At...Of...**⟨*argument(s) of hook macro*⟩

New in v0.5
2011/01/09
Using this macro existing hooks can be globally cleared, i.e. set to empty. This should be used with care because it will also remove all (user level) hook code set by packages into this hook. Note that the special hook code installed by the packages currfile and svn-multi as well as the compatibility code described in section 4 is not affected. The syntax for this macro is the same as for the normal hook macros only with a leading **\ClearHook**, where the ⟨*code*⟩ argument is mandatory but its content is ignored. Examples:

> **\ClearHook\AtBeginOfInputFile**{⟨*file name*⟩}{⟨*ignored*⟩}
> **\ClearHook\AtBeginOfFiles**{⟨*ignored*⟩}

3   PGF Key Interface

An auxiliary package `pgf-filehook` is provided which adds support for the versatile `pgfkeys` interface. This interface is heavily used by `pgf` (portable graphics format) and its higher level format Ti*k*Z. It allows the definition and execution of styles and commands (macros) using a *⟨key⟩*=*⟨value⟩* format. Main benefits over similar formats is the support for a "directory structure" inside the key and the ability to call functions on the value before it gets processed by the key. The main way to define and execute keys is the macro **\pgfkeys**{*⟨key⟩*=*⟨value⟩*,...}. Ti*k*Z provides the similar macro **\tikzstyle** which defaults to the main path '/tikz'. More detailed information can be found in the official `pgfmanual`.

All `filehook` macros described in the previous section (**\AtXXXOfYYY**) can also be accessed using the pgf keys directory '/filehook', where all hook type have an own sub-directory (/filehook/YYY) in which the hooks for this type are located (/filehook/YYY/AtXXX). For example **\AtBeginOfInputs**{*⟨code⟩*} can also be accessed using

> **\pgfkeys**{/filehook/Inputs/AtBegin={*⟨code⟩*}}

or **\AfterIncludeFile**{*⟨file name⟩*}{*⟨code⟩*} as

> **\pgfkeys**{/filehook/IncludeFile/After={*⟨file name⟩*}{*⟨code⟩*}}

as well as **\AtEndOfClassFile**∗{*⟨file name⟩*}{*⟨code⟩*} as

> **\pgfkeys**{/filehook/ClassFile/AtEnd=∗{*⟨file name⟩*}{*⟨code⟩*}}.

> **\pgffilehook**{*⟨key⟩*=*⟨value⟩*,...}

This macro is like **\pgfkeys** but defaults to the '/filehook' directory, so that it can be dropped from the *⟨key⟩*. Note that pgfkeys also supports to "change the directory" using *⟨directory⟩*/.cd, so that it does not need to be included in further keys. All directories are defined as '*is family*' so that the /.cd is assumed if the directory is used on its own. For example

\pgfkeys{/filehook/Inputs/AtBegin={*⟨code⟩*},/filehook/Inputs/AtEnd={*⟨code⟩*}}

can be shorten as

> **\pgffilehook**{Inputs,AtBegin={*⟨code⟩*},AtEnd={*⟨code⟩*}}.

Some of the pgf key functions can become useful, e.g. if the hook code should be expanded before it is added to the hook:

> **\pgffilehook**{EveryFile/AtBegin/.expand once={**\headertext \currfilename**}}

will expand the first macro **\headertext** (actually the first token) in the hook code once (using **\expandafter**), but not any other tokens. In this example future changes of **\headertext** would not have any effect on the hook code, but **\currfilename** will be expanded for every file. Other useful functions are '.expand twice' (expand the first token twice) and '.expanded' (expand the whole hook code using **\edef**).

4 Compatibility Issues with Classes and other Packages

The filehook package might clash with other packages or classes which also redefine \InputIfFileExists or internal macros used by \include and \input (which are \@input@ and \@iinput). Special compatibility code is in place for the packages listed below (in their current implementation). If any other unknown definition of \InputIfFileExists is found an error will be raised. The package option 'force' can be used to prevent this and to force the redefinition of this macro. Then any previous modifications will be lost, which will most likely break the other package. Table 1 lists all packages and classes which where found do be incompatible. The packages auxhook, stampinclude, rerunfilecheck and excludeonly redefine one or more of the above macros but have been found compatible with filehook. Please do not hesitate to inform the author of filehook of any encountered problems with other packages.

4.1 Supported Classes and Packages

The following classes and packages are actively supported and should work as normal when used together with filehook. Please note that most of them are incompatible to each other, which filehook might not fix.

memoir

The memoir class redefines \InputIfFileExists to add own hooks identical to the 'At...OfFiles' hooks (there called \AtBeginFile and \AtEndFile). This hooks will be moved to the corresponding ones of filehook and will keep working as normal. Since v0.4 from 2011/01/03 this modification will be also applied when the filehook package is loaded (using \RequirePackage) *before* the memoir class. However, the hooks from filehook need to be temporally disabled while reading the memoir class. They will not be triggered for all files read directly by this class, like configuration and patch files. Note that the 'At...OfClassFile' hooks still work for the memoir class file itself. In fact they are used to restore the default definition of \InputIfFileExists at the begin and patch it at the end of the class file. The filehook package should be loaded either before the class (using \RequirePackage) or directly after it. Because the memoir hook code is moved to the filehook hooks this class should then be compatible with below packages if memoir and filehook are loaded before them.

scrlfile

The scrlfile package from the *koma-script* bundle redefines \InputIfFileExists to allow file name aliases and to also add hooks. If required it should be loaded before filehook, which will add its hooks correctly to the modified definition. Since v0.4 from 2011/01/03 this modification will be also applied when the scrlfile package is loaded after filehook.

fink

The filehook and currfile packages where written as replacements for the fink package, where filehook provides the necessary hooks for currfile. The fink package has now been deprecated in favour of currfile and should not be used anymore. The fink compatibility code has been removed from filehook and both

Table 1: Incompatible packages and classes

Name	Type	Note	Affected Hooks
paper	class	with journal option	All hocks for `\include`'d files
journal	class		All hocks for `\include`'d files
gmparts	package		`\include` hooks
newclude	package	formally includex	All hocks for `\include`'d files

cannot be used successfully together as both redefine the `\InputIfFileExists` macro.

listings

The listings package uses `\input` inside `\lstinputlisting`. Therefore the InputFile(s) and File(s) hooks are also triggered for these files. Please note that this hooks are executing inside a verbatim environment. While the code in the hook is not affected (because it was added outside the verbatim environment), any further code read using any input macro (`\input`, `\@input`, `\@@input` (TeX's `\input`), ...) will be processed verbatim and typeset as part of the listing. Since v0.4 this macro is automatically patched so `\@input` is used instead to avoid this issue.

4.2   Other Classes and Packages

jmlrbook

The jmlrbook class from the jmlr bundle temporary redefines `\InputIfFileExists` to import papers. The 'original' definition is saved away at load time of the package and is used internally by the new definition. This means that the hooks will not be active for this imported files because filehook is loaded after the class. This should not affect its normal usage. Note that, in theory, the package could be loaded before `\documentclass` using `\RequirePackage` to enable the file hooks also for these files.

LaTeX's \bibliography

The standard LaTeX macro `\bibliography` uses the same internal macro `\@input@` to read a file as `\include` does. The 'include' hooks will also be executed for this .bbl file if the macro is directly followed by `\clearpage`, because the filehook code will assume it is executed inside `\include`. This rare case can be easily avoided by placing a `\relax` after `\bibliography{...}`.

5   Upgrade Guide

This sections gives information for users of older versions of this package which unfortunately might not be 100% backwards compatible.

Upgrade to v0.4 - 2011/01/03

- The macro **\AfterIncludeFile** was misspelled as **\AfterOfIncludeFile** in the implementation of earlier versions, but not in the documentation. This has now be corrected. Please adjust your code to use the correct name and to require the `filehook` package from 2011/01/03.

- All general hooks (the one not taking a file argument) used to have an implicit argument #1 which was expanded to the file name (i.e. the argument of **\input** etc.). This has now be changed, so that macro arguments are not handled special in hook code, which e.g. simplifies macro definitions. Older hook code might need to change ## to # to compensate for this change. If the file name is required the macros (e.g. **\currfilename**) of the partner package `currfile` should be used. These macros are available everywhere including in all hocks.

6 Implementation

```
1  %<!COPYRIGHT>
2  \NeedsTeXFormat{LaTeX2e}[1999/12/01]
3  \ProvidesPackage{filehook}[%
4  %<!DATE>
5  %<!VERSION>
6  %<*DRIVER>
7      2099/01/01 develop
8  %</DRIVER>
9      Hooks for input files]
```

6.1 Options

```
10  \newif\iffilehook@force
11  \DeclareOption{force}{\filehook@forcetrue}
12  \ProcessOptions\relax
```

6.2 General stuff

```
\iffilehook@newfmt
```

```
13  \newif\iffilehook@newfmt
14  \@ifl@t@r\fmtversion{2019/10/01}{\filehook@newfmttrue⁄
       }{\filehook@newfmtfalse}
```

```
\filehook@let
```

  #1: <macro name 1>
  #2: <macro name 2>

```
15  \def\filehook@let#1#2{%
16    \expandafter\ifx\csname #2\space\endcsname\relax
17      \expandafter\let\csname #1\expandafter\endcsname\⁄
          csname #2\endcsname
18    \else
19      \expandafter\def\csname #1\expandafter\endcsname\⁄
          expandafter{\expandafter\protect\csname #1\⁄
          space\endcsname}%
20      \expandafter\let\csname #1\space\expandafter\⁄
          endcsname\csname #2\space\endcsname
21    \fi
22  }
```

<div style="border:1px solid #000; display:inline-block; padding:4px 10px;">**\filehook@glet**</div>

#1: <macro name 1>
#2: <macro name 2>

```
23  \def\filehook@glet#1#2{%
24    \expandafter\ifx\csname #2\space\endcsname\relax
25      \expandafter\global\expandafter\let\csname #1\
          expandafter\endcsname\csname #2\endcsname
26    \else
27      \expandafter\global\expandafter\def\csname #1\
          expandafter\endcsname\expandafter{\expandafter
          \protect\csname #1\space\endcsname}%
28      \expandafter\global\expandafter\let\csname #1\
          space\expandafter\endcsname\csname #2\space\
          endcsname
29    \fi
30  }
```

<div style="border:1px solid #000; display:inline-block; padding:4px 10px;">**\filehook@cmp**</div>

#1: <macro name 1>
#2: <macro name 2>

Compare two macros definition including its space form in case of robust macros.

```
31  \def\filehook@cmp#1#2{%
32    \expandafter\ifx\csname #2\space\endcsname\relax
33      \expandafter\ifx\csname #1\expandafter\endcsname\
          csname #2\endcsname
34        \expandafter\expandafter\expandafter\
            @firstoftwo
35      \else
36        \expandafter\expandafter\expandafter\
            @secondoftwo
37      \fi
38    \else
39      \expandafter\ifx\csname #1\space\expandafter\
          endcsname\csname #2\space\endcsname
40        \expandafter\expandafter\expandafter\
            @firstoftwo
41      \else
42        \expandafter\expandafter\expandafter\
            @secondoftwo
43      \fi
44    \fi
45  }
```

6.3 Initialisation of Hooks

The general hooks are initialised to call the file specific hooks.

`\filehook@csuse`

```
46 \begingroup
47 \gdef\filehook@csuse#1{\ifcsname #1\endcsname\csname
       #1\expandafter\endcsname\fi}
48 \expandafter\ifx\csname csuse\endcsname\relax
49     \expandafter\ifx\csname ifcsname\endcsname\relax
50         \gdef\filehook@csuse#1{\expandafter\ifx\
               csname #1\endcsname\relax\else\csname #1\
               expandafter\endcsname\fi}
51     \fi
52 \else
53     \global\let\filehook@csuse\csuse
54 \fi
55 \endgroup
```

`\filehook@include@atbegin`

```
56 \def\filehook@include@atbegin#1{%
57   \filehook@let{InputIfFileExists}{\
       filehook@@InputIfFileExists}%
58   \filehook@csuse{\filehook@include@atbegin@#1}%
59   \filehook@include@@atbegin
60 }
```

`\filehook@include@@atbegin`

```
61 \def\filehook@include@@atbegin{}
```

`\filehook@include@atend`

```
62 \def\filehook@include@atend#1{%
63   \filehook@include@@atend
64   \filehook@csuse{\filehook@include@atend@#1}%
65 }
```

`\filehook@include@@atend`

```
66 \def\filehook@include@@atend{}
```

13

```
    \filehook@include@after

67  \def\filehook@include@after#1{%
68    \filehook@include@@after
69    \filehook@csuse{\filehook@include@after@#1}%
70  }
```

```
    \filehook@include@@after

71  \def\filehook@include@@after{}
```

```
    \filehook@input@atbegin

72  \def\filehook@input@atbegin#1{%
73    \filehook@let{InputIfFileExists}{↙
        filehook@@InputIfFileExists}%
74    \filehook@csuse{\filehook@input@atbegin@↙
        filehook@ensureext{#1}}%
75    \filehook@input@@atbegin
76  }
```

```
    \filehook@input@@atbegin

77  \def\filehook@input@@atbegin{}
```

```
    \filehook@input@atend

78  \def\filehook@input@atend#1{%
79    \filehook@input@@atend
80    \filehook@csuse{\filehook@input@atend@↙
        filehook@ensureext{#1}}%
81  }
```

```
    \filehook@input@@atend

82  \def\filehook@input@@atend{}
```

14

```
    \filehook@atbegin

83  \def\filehook@atbegin#1{%
84    \filehook@csuse{\filehook@atbegin@\⁄
        filehook@ensureext{#1}}%
85    \filehook@@atbegin
86  }
```

```
    \filehook@@atbegin

87  \def\filehook@@atbegin{}
```

```
    \filehook@atend

88  \def\filehook@atend#1{%
89    \filehook@@atend
90    \filehook@csuse{\filehook@atend@\filehook@ensureext⁄
        {#1}}%
91  }
```

```
    \filehook@@atend

92  \def\filehook@@atend{}
```

```
    \filehook@every@atbegin

93  \def\filehook@every@atbegin#1{%
94      \filehook@every@@atbegin
95  }
```

```
    \filehook@every@@atbegin

96  \def\filehook@every@@atbegin{}
```

```
    \filehook@every@atend

97  \def\filehook@every@atend#1{%
98      \filehook@every@@atend
99  }
```

```
100  \def\filehook@every@@atend{}
```

6.4 Hook Modification Macros

The following macros are used to modify the hooks, i.e. to prefix or append code to them.

Internal Macros

The macro prefixes for the file specific hooks are stored in macros to reduce the number of tokens in the following macro definitions.

```
101  \def\filehook@include@atbegin@{
        filehook@include@atbegin@}
102  \def\filehook@include@atend@{filehook@include@atend@}
103  \def\filehook@include@after@{filehook@include@after@}
104  \def\filehook@input@atbegin@{filehook@input@atbegin@}
105  \def\filehook@input@atend@{filehook@input@atend@}
106  \def\filehook@input@after@{filehook@input@after@}
107  \def\filehook@atbegin@{filehook@atbegin@}
108  \def\filehook@atend@{filehook@atend@}
109  \def\filehook@after@{filehook@after@}
```

Uses default LATEX macro.

```
110  \def\filehook@append{\g@addto@macro}
```

Appends code with one macro argument. The `\@tempa` intermediate step is required because of the included `##1` which wouldn't correctly expand otherwise.

```
111  \long\def\filehook@appendwarg#1#2{%
112    \begingroup
113      \toks@\expandafter{#1{##1}#2}%
114      \edef\@tempa{\the\toks@}%
115      \expandafter\gdef\expandafter#1\expandafter##\
          expandafter1\expandafter{\@tempa}%
116    \endgroup
117  }
```

\filehook@prefix

Prefixes code to a hook.

```
118  \long\def\filehook@prefix#1#2{%
119    \begingroup
120      \@temptokena{#2}%
121      \toks@\expandafter{#1}%
122      \xdef#1{\the\@temptokena\the\toks@}%
123    \endgroup
124  }
```

\filehook@prefixwarg

Prefixes code with an argument to a hook.

```
125  \long\def\filehook@prefixwarg#1#2{%
126    \begingroup
127      \@temptokena{#2}%
128      \toks@\expandafter{#1{##1}}%
129      \edef\@tempa{\the\@temptokena\the\toks@}%
130      \expandafter\gdef\expandafter#1\expandafter##\⁄
              expandafter1\expandafter{\@tempa}%
131    \endgroup
132  }
```

\filehook@addtohook

> #1: Macro which should be used to add the material to the hook
> #2: Macro name prefix
> #3: End of macro name (file name)

The macro first expands the file name (#3) to flatten all included macros. An extension is added if missing, as well as the prefix. All modifications of \@tempa are made inside a group to keep them local.

```
133  \def\filehook@addtohook#1#2#3{%
134    \begingroup
135    \edef\@tempa{#3}%
136    \edef\@tempa{#2\filehook@ensureext{\@tempa}}%
137    \@ifundefined{\@tempa}{\global\@namedef{\@tempa⁄
        }{}}{}%
138    \expandafter\endgroup
139    \expandafter#1\csname\@tempa\endcsname
140  }
```

User Level Macros

The user level macros simple use the above defined macros on the appropriate hook.

`\AtBeginOfIncludes`

```
141  \newcommand*\AtBeginOfIncludes{%
142    \filehook@append\filehook@include@@atbegin
143  }
```

`\AtEndOfIncludes`

```
144  \newcommand*\AtEndOfIncludes{%
145    \filehook@prefix\filehook@include@@atend
146  }
```

`\AfterIncludes`

```
147  \newcommand*\AfterIncludes{%
148    \filehook@prefix\filehook@include@@after
149  }
```

`\AtBeginOfIncludeFile`

```
150  \newcommand*\AtBeginOfIncludeFile[1]{%
151    \filehook@addtohook\filehook@append\
         filehook@include@atbegin@{\filehook@ensuretex\
         {#1}}%
152  }
```

`\AtEndOfIncludeFile`

```
153  \newcommand*\AtEndOfIncludeFile[1]{%
154    \filehook@addtohook\filehook@prefix\
         filehook@include@atend@{\filehook@ensuretex{#1}}\
         %
155  }
```

`\AfterIncludeFile`

```
156  \newcommand*\AfterIncludeFile[1]{%
157    \filehook@addtohook\filehook@prefix\
         filehook@include@after@{\filehook@ensuretex{#1}}\
         %
158  }
```

```
    \AtBeginOfInputs

159  \newcommand*\AtBeginOfInputs{%
160     \filehook@append\filehook@input@@atbegin
161  }


    \AtEndOfInputs

162  \newcommand*\AtEndOfInputs{%
163     \filehook@prefix\filehook@input@@atend
164  }


    \AtBeginOfInputFile

165  \newcommand*\AtBeginOfInputFile{%
166     \filehook@addtohook\filehook@append\/
           filehook@input@atbegin@
167  }


    \AtEndOfInputFile

168  \newcommand*\AtEndOfInputFile{%
169     \filehook@addtohook\filehook@prefix\/
           filehook@input@atend@
170  }


    \AtBeginOfFiles

171  \newcommand*\AtBeginOfFiles{%
172     \filehook@append\filehook@@atbegin
173  }


    \AtEndOfFiles

174  \newcommand*\AtEndOfFiles{%
175     \filehook@prefix\filehook@@atend
176  }
```

```
    ┌─────────────────────┐
    │ \AtBeginOfEveryFile │
    └─────────────────────┘

177 \newcommand *\ AtBeginOfEveryFile {%
178    \filehook@append \filehook@every @@atbegin
179 }
```

```
    ┌───────────────────┐
    │ \AtEndOfEveryFile │
    └───────────────────┘

180 \newcommand *\ AtEndOfEveryFile {%
181    \filehook@prefix \filehook@every @@atend
182 }
```

```
    ┌──────────────┐
    │ \AtBeginOfFile │
    └──────────────┘

183 \newcommand *\ AtBeginOfFile {%
184    \filehook@addtohook \filehook@append \∕
          filehook@atbegin@
185 }
```

```
    ┌────────────┐
    │ \AtEndOfFile │
    └────────────┘

186 \newcommand *\ AtEndOfFile {%
187    \filehook@addtohook \filehook@prefix \filehook@atend@
188 }
```

```
    ┌───────────────────┐
    │ \AtBeginOfClassFile │
    └───────────────────┘

189 \newcommand *\ AtBeginOfClassFile {%
190    \@ifnextchar *
191        {\ AtBeginOfXFile@star \@clsextension }%
192        {\ AtBeginOfXFile@normal \@clsextension }%
193 }
```

```
    ┌─────────────────────┐
    │ \AtBeginOfPackageFile │
    └─────────────────────┘

194 \newcommand *\ AtBeginOfPackageFile {%
195    \@ifnextchar *
196        {\ AtBeginOfXFile@star \@pkgextension }%
197        {\ AtBeginOfXFile@normal \@pkgextension }%
198 }
```

\AtBeginOfXFile@star

#1: extension
#2: name

If the class or package is already loaded the code is executed right away. Otherwise it is installed normally.

```
199  \def\AtBeginOfXFile@star#1*#2{%
200      \@ifl@aded{#1}{#2}%
201          {\@firstofone}%
202          {\AtBeginOfXFile@normal{#1}{#2}}%
203  }
```

\AtBeginOfXFile@normal

#1: extension
#2: name

```
204  \def\AtBeginOfXFile@normal#1#2{%
205      \AtBeginOfFile{#2.#1}%
206  }
```

\AtEndOfClassFile

```
207  \newcommand*\AtEndOfClassFile{%
208      \@ifnextchar*
209          {\AtEndOfXFile@star\@clsextension}%
210          {\AtEndOfXFile@normal\@clsextension}%
211  }
```

\AtEndOfPackageFile

```
212  \newcommand*\AtEndOfPackageFile{%
213      \@ifnextchar*
214          {\AtEndOfXFile@star\@pkgextension}%
215          {\AtEndOfXFile@normal\@pkgextension}%
216  }
```

\AtEndOfXFile@star

#1: extension
#2: name

If the class or package is already loaded the code is executed right away. Otherwise it is installed normally.

```
217   \def\AtEndOfXFile@star#1*#2{%
218       \@ifl@aded{#1}{#2}%
219           {\@firstofone}%
220           {\AtEndOfXFile@normal{#1}{#2}}%
221   }
```

#1: extension
#2: name

Note that **\AtEndOfClass** is identical to **\AtEndOfPackage**, so no differentiation between classes and packages is needed here.

```
222   \long\def\AtEndOfXFile@normal#1#2#3{%
223       \AtEndOfFile{#2.#1}{\AtEndOfPackage{#3}}%
224   }
```

\ClearHook

Clears the hook by temporary redefining the prefix and append macros to do a simple definition to empty.

```
225   \newcommand*\ClearHook{%
226       \begingroup
227       \def\filehook@prefix##1##2{%
228           \gdef##1{}%
229           \endgroup
230       }%
231       \let\filehook@append\filehook@prefix
232   }
```

6.5   Installation of Hooks

The **\@input@** and **\@iinput** macros from `latex.ltx` are redefined to install the hooks.

First the original definitions are saved away.

\filehook@orig@@input@

```
233   \let\filehook@orig@@input@\@input@
```

\filehook@orig@@iinput

```
234   \let\filehook@orig@@iinput\@iinput
```

22

`\@input@`

This macro is redefined for the `\include` file hooks. Checks if the next command is `\clearpage` which indicates that we are inside `\@include`. If so the hooks are installed, otherwise the original macro is used unchanged. For the 'after' hook an own `\clearpage` is inserted and the original one is gobbled.

```
235  \def\@input@#1{%
236    \@ifnextchar\clearpage
237      {%
238        \filehook@every@atbegin{#1}%
239        \filehook@include@atbegin{#1}%
240        \filehook@orig@@input@{#1}%
241        \filehook@include@atend{#1}%
242        \clearpage
243        \filehook@include@after{#1}%
244        \filehook@every@atend{#1}%
245        \@gobble
246      }%
247      {\filehook@orig@@input@{#1}}%
248  }
```

`\@iinput`

This macro is redefined for the `\input` file hooks. it simply surrounds the original macro with the hooks.

```
249  \def\filehook@@iinput#1{%
250    \filehook@every@atbegin{#1}%
251    \filehook@input@atbegin{#1}%
252    \filehook@orig@@iinput{#1}%
253    \filehook@input@atend{#1}%
254    \filehook@every@atend{#1}%
255  }
256  \let\@iinput\filehook@@iinput
```

`\filehook@swap`

Auxiliary macro which swaps the two arguments. This is needed to expand `\@filef@und`, which is given as first argument but needed then as the second one.

```
257  \def\filehook@swap#1#2{#2#1}
```

`\filehook@ensureext`

This macro ensures the existence of a file name extension. If non is given '`.tex`' is added.

```
258  \def\filehook@ensureext#1{%
259      \expandafter\filehook@@ensureext#1\empty.tex\
             empty\empty
260  }
```

`\filehook@@ensureext`

```
261  \def\filehook@@ensureext#1.#2\empty#3\empty{#1.#2}
```

`\filehook@ensuretex`

Ensures a '`.tex`' extension, i.e. adds it if missing, even if there is a different one.

```
262  \def\filehook@ensuretex#1{%
263      \expandafter\filehook@@ensuretex#1\empty.tex\
             empty\empty
264  }
```

`\filehook@@ensuretex`

```
265  \def\filehook@@ensuretex#1.tex\empty#2\empty{#1.tex}
```

The `filehook` default definition of **`\InputIfFileExists`** is defined here together with alternatives definitions for comparison. There are stored first in a token register and later stored in a macro which is expanded if required. This is always done inside a group to keep them temporary only. The token register is used to avoid doubling of macro argument characters.

`\latex@InputIfFileExists`

Standard LATEX definition of **`\InputIfFileExists`**.

```
266  \iffilehook@newfmt
267  \expandafter\def\expandafter\latex@InputIfFileExists\
         expandafter{%
268    \expandafter\protect\csname InputIfFileExists\space\
           \endcsname
269  }
270  \expandafter\long\expandafter\def\csname
         latex@InputIfFileExists\space\endcsname#1#2{%
271    \IfFileExists{#1}%
272      {%
273    \expandafter\@swaptwoargs\expandafter
           {\@filef@und}{#2\@addtofilelist{#1}\@@input}}}}
275  \else
276  \long\def\latex@InputIfFileExists#1#2{%
```

24

```
277    \IfFileExists{#1}%
278      {#2\@addtofilelist{#1}%
279       \@@input\@filef@und
280      }%
281  }
282  \fi
```

```
283  \DeclareRobustCommand\⁄
       filehook@default@InputIfFileExists[2]{%
284    \IfFileExists{#1}%
285      {\expandafter\filehook@swap
286       \expandafter{\@filef@und}%
287       {#2\@addtofilelist{#1}%
288       \filehook@every@atbegin{#1}%
289       \filehook@atbegin{#1}%
290       \@@input}%
291       \filehook@atend{#1}%
292       \filehook@every@atend{#1}%
293      }%
294  }
```

Make sure definition is global:

```
295  \filehook@glet{filehook@default@InputIfFileExists}{⁄
       filehook@default@InputIfFileExists}%
```

```
296  \DeclareRobustCommand\⁄
       filehook@@default@InputIfFileExists[2]{%
297    \filehook@let{InputIfFileExists}{⁄
         filehook@InputIfFileExists}%
298    \IfFileExists{#1}%
299      {\expandafter\filehook@swap
300       \expandafter{\@filef@und}%
301       {#2\@addtofilelist{#1}%
302       \filehook@atbegin{#1}%
303       \@@input}%
304       \filehook@atend{#1}%
305      }%
306  }
```

Make sure definition is global:

```
307  \filehook@glet{filehook@@default@InputIfFileExists}{⁄
       filehook@@default@InputIfFileExists}%
```

First we test for the scrlfile package. The test macro adds the necessary patches if so. In order to also support it when it is loaded afterwards the two hooks below are used to revert the definition before the package and patch it afterwards.

```
308  \AtBeginOfPackageFile{scrlfile}{%
309      \filehook@glet{InputIfFileExists}{⁄
             latex@InputIfFileExists}%
310  }%
311  \AtEndOfPackageFile*{scrlfile}{%
312      \RequirePackage{filehook-scrlfile}%
313  }%
```

Fink:

```
314  \AtBeginOfPackageFile*{fink}{%
315      \RequirePackage{kvoptions}%
316      \begingroup
317      \filehook@let{InputIfFileExists}{⁄
             latex@InputIfFileExists}%
318  }%
319  \AtEndOfPackageFile*{fink}{%
320      \edef\@tempa{\noexpand\PassOptionsToPackage{⁄
             mainext=\fnk@mainext,maindir=\fnk@maindir}{⁄
             currfile}}%
321      \expandafter\endgroup\@tempa
322      \RequirePackage{filehook-fink}%
323  }%
```

If memoir is detected its hooks are added to the appropriate 'At...OfFiles' hooks. This works fine because its hooks have the exact same position. Please note that the case when memoir is used together with scrlfile is not explicitly covered. In this case the scrlfile package will overwrite memoirs definition.

```
324  \AtBeginOfClassFile{memoir}{%
325    \filehook@let{InputIfFileExists}{⁄
             latex@InputIfFileExists}%
326    \let\@iinput\filehook@orig@@iinput
327  }%
328  \AtEndOfClassFile*{memoir}{%
329    \let\@iinput\filehook@@iinput
330    \RequirePackage{filehook-memoir}%
331  }%
```

Finally, if no specific alternate definition is detected the original LaTeX definition is checked for and a error is given if any other unknown definition is detected. The force option will change the error into a warning and overwrite the macro with the default.

```
332  \filehook@cmp{InputIfFileExists}{⁄
             filehook@InputIfFileExists}%
333    {}% already set up
334    {%
```

```
335        \filehook@cmp{InputIfFileExists}{↙
             latex@InputIfFileExists}%
336          {%
337            \filehook@let{filehook@InputIfFileExists}{↙
                 filehook@default@InputIfFileExists}%
338            \filehook@let{filehook@@InputIfFileExists}{↙
                 filehook@@default@InputIfFileExists}%
339            \filehook@let{InputIfFileExists}{↙
                 filehook@InputIfFileExists}%
340          }%
341          {%
342            \iffilehook@force
343              \filehook@let{filehook@InputIfFileExists}{↙
                   filehook@default@InputIfFileExists}%
344              \filehook@let{filehook@@InputIfFileExists}{↙
                   filehook@@default@InputIfFileExists}%
345              \filehook@let{InputIfFileExists}{↙
                   filehook@InputIfFileExists}%
346              \PackageWarning{filehook}{Detected unknown ↙
                   definition of \string\InputIfFileExists↙
                   .^^J%
347                                        The 'force' ↙
                                             option of '↙
                                             filehook' is ↙
                                             in effect. ↙
                                             Macro is ↙
                                             overwritten ↙
                                             with default!}↙
                                             %
348            \else
349              \PackageError{filehook}{Detected unknown ↙
                   definition of \string\InputIfFileExists↙
                   .^^J%
350                                        Use the 'force' ↙
                                             option of '↙
                                             filehook' to ↙
                                             overwrite it.}{}↙
                                             %
351            \fi
352          }%
353      }%

354  \AtBeginDocument{%
355      % Check if definition got changed again. For the ↙
           new LaTeX format we check again \↙
           InputIfFileExists<space>,
356      % for the old format to \InputIfFileExists ↙
           directly.
357      \filehook@cmp{InputIfFileExists}{↙
           filehook@InputIfFileExists}{}{%
```

27

```
358        \PackageWarning{filehook}{Macro \string\⁄
              InputIfFileExists\space got redefined ⁄
              after 'filehook' was loaded.^^J%
359                                    Certain file hooks ⁄
                                          might now be ⁄
                                          dysfunctional!}%
360      }%
361  }

362  %<!COPYRIGHT>
363  \NeedsTeXFormat{LaTeX2e}[1999/12/01]
364  \ProvidesPackage{filehook-memoir}[2020/02/02 v0.2 ⁄
        filehook patch for memoir class]

365  \RequirePackage{filehook}
366  \begingroup
```

┌─────────────────────────────┐
│ **\memoir@InputIfFileExists** │
└─────────────────────────────┘

The definition taken from memoir.cls. Copyright see there.

```
367  \ifcsname InputIfFileExists\space\endcsname
368    \DeclareRobustCommand \memoir@InputIfFileExists[2]{⁄
          %
369      \IfFileExists{#1}%
370      {%
371        \expandafter\@swaptwoargs\expandafter
372        {\@filef@und\m@matendf{#1}\killm@matf{#1}}{%
373          #2\@addtofilelist{#1}\m@matbeginf{#1}\@@input⁄
              %
374        }%
375      }%
376    }
377  \else
378    % Old definition
379  \renewcommand{\memoir@InputIfFileExists}[2]{%
380    \IfFileExists{#1}%
381      {#2\@addtofilelist{#1}\m@matbeginf{#1}%
382      \@@input \@filef@und
383      \m@matendf{#1}%
384      \killm@matf{#1}}%
385  }
386  \fi

387  \@tempswafalse
388  \filehook@cmp{InputIfFileExists}{⁄
        filehook@InputIfFileExists}%
389    {\@tempswatrue}%
390    {%
```

```
391       \filehook@cmp{InputIfFileExists}{↙
             memoir@InputIfFileExists}%
392         {\@tempswatrue}%
393         {}%
394     }%

395

396   \if@tempswa
397     \filehook@glet{filehook@InputIfFileExists}{↙
             filehook@default@InputIfFileExists}%
398     \filehook@glet{filehook@@InputIfFileExists}{↙
             filehook@@default@InputIfFileExists}%
399     \filehook@glet{InputIfFileExists}{↙
             filehook@InputIfFileExists}%
400     \filehook@appendwarg\filehook@atbegin{\m@matbeginf↙
             {#1}}%
401     \filehook@prefixwarg\filehook@atend{\m@matendf{#1}\↙
             killm@matf{#1}}%
402     \PackageInfo{filehook}{Detected 'memoir' class: the↙
              memoir hooks will be moved to the 'At...OfFiles↙
             ' hooks}
403   \else
404     \iffilehook@force
405       \filehook@glet{filehook@InputIfFileExists}{↙
               filehook@default@InputIfFileExists}%
406       \filehook@glet{filehook@@InputIfFileExists}{↙
               filehook@@default@InputIfFileExists}%
407       \filehook@glet{InputIfFileExists}{↙
               filehook@InputIfFileExists}%
408       \PackageWarning{filehook}{Detected 'memoir' class↙
                with unknown definition of \string\↙
               InputIfFileExists.^^J%
409                                 The 'force' option of '↙
                                       filehook' is in ↙
                                       effect. Macro is ↙
                                       overwritten with ↙
                                       default!}%
410     \else
411       \PackageError{filehook}{Detected 'memoir' class ↙
               with unknown definition of \string\↙
               InputIfFileExists.^^J%
412                                 Use the 'force' option of↙
                                       'filehook' to ↙
                                       overwrite it.}{}%
413     \fi
414   \fi

415   \endgroup

416   %<!COPYRIGHT>
417   \NeedsTeXFormat{LaTeX2e}[1999/12/01]
```

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```latex
418 \ProvidesPackage{filehook-listings}[2011/01/02 v0.1 ⤸
        Patch for listings to avoid hooks for verbatim ⤸
        input files]

419 \begingroup
420
421 \long\def\patch#1\def\lst@next#2#3\endpatch{%
422     \toks@{#2}%
423     \edef\@tempa{\the\toks@}%
424     \def\@tempb{\input{####1}}%
425     \ifx\@tempa\@tempb
426         \gdef\lst@InputListing##1{#1\def\lst@next{\⤸
                @input{##1}}#3}%
427     \else
428         \PackageWarning{filehook-listings}{To-be-⤸
                patched code in macro \string\⤸
                lst@InputListing was not found!}%
429     \fi
430 }
431
432 \@ifundefined{lst@InputListing}{%
433     \PackageWarning{filehook-listings}{To-be-patched ⤸
            Macro \string\lst@InputListing not found!}%
434 }{}
435
436 \expandafter\patch\lst@InputListing{#1}\endpatch
437
438 \endgroup
439 %<!COPYRIGHT>
440 \NeedsTeXFormat{LaTeX2e}[1999/12/01]
441 \ProvidesPackage{filehook-scrlfile}[2020/02/02 v0.2 ⤸
        filehook patch for scrlfile package]
442 \RequirePackage{filehook}
443 \begingroup
```

┌─────────────────────────────┐
│ **\scrlfile@InputIfFileExists** │
└─────────────────────────────┘

```latex
444 \expandafter\def\expandafter\⤸
        sclrfile@InputIfFileExists\expandafter{%
445   \expandafter\protect\csname InputIfFileExists\space⤸
        \endcsname
446 }
447 \expandafter\long\expandafter\def\csname ⤸
        scrlfile@InputIfFileExists\space\endcsname#1#2{%
448   \begingroup\expandafter\expandafter\expandafter\⤸
            endgroup
449   \expandafter\ifx\csname #1-@alias\endcsname\relax
```

```
450       \expandafter\@secondoftwo
451    \else
452       \scr@replacefile@msg{\csname #1-@alias\endcsname⤸
             }{#1}%
453       \expandafter\@firstoftwo
454    \fi
455    {%
456       \expandafter\InputIfFileExists\expandafter{\⤸
             csname
457  #1-@alias\endcsname}{#2}%
458    }%
459    {\IfFileExists{#1}{%
460       \expandafter\scr@input@withhook\expandafter{\⤸
             @filef@und}{#1}{#2}}%
461    }%
462  }
```

```
463  \DeclareRobustCommand\⤸
        filehook@scrlfile@InputIfFileExists[2]{%
464    \begingroup\expandafter\expandafter\expandafter\⤸
          endgroup
465    \expandafter\ifx\csname #1-@alias\endcsname\relax
466       \expandafter\@secondoftwo
467    \else
468       \scr@replacefile@msg{\csname #1-@alias\endcsname⤸
             }{#1}%
469       \expandafter\@firstoftwo
470    \fi
471    {%
472       \expandafter\InputIfFileExists\expandafter{\⤸
             csname
473          #1-@alias\endcsname}{#2}%
474    }%
475    {\IfFileExists{#1}{%
476        \expandafter\filehook@swap
477        \expandafter{\@filef@und}%
478        {\scr@load@hook{before}{#1}%
479        #2\@addtofilelist{#1}%
480        \filehook@every@atbegin{#1}%
481        \filehook@atbegin{#1}%
482        \@@input}%
483        \filehook@atend{#1}%
484        \filehook@every@atend{#1}%
485        \scr@load@hook{after}{#1}%
486     }}%
487  }
```

```
488  \filehook@glet{filehook@scrlfile@InputIfFileExists}{↙
        filehook@scrlfile@InputIfFileExists}%
```

<code>\filehook@@scrlfile@InputIfFileExists</code>

```
489  \DeclareRobustCommand\↙
        filehook@@scrlfile@InputIfFileExists[2]{%
490    \filehook@let{InputIfFileExists}{↙
          filehook@InputIfFileExists}%
491    \begingroup\expandafter\expandafter\expandafter\↙
          endgroup
492    \expandafter\ifx\csname #1-@alias\endcsname\relax
493      \expandafter\@secondoftwo
494    \else
495      \scr@replacefile@msg{\csname #1-@alias\endcsname↙
            }{#1}%
496      \expandafter\@firstoftwo
497    \fi
498    {%
499      \expandafter\InputIfFileExists\expandafter{\↙
            csname
500        #1-@alias\endcsname}{#2}%
501    }%
502    {\IfFileExists{#1}{%
503        \expandafter\filehook@swap
504        \expandafter{\@filef@und}%
505        {\scr@load@hook{before}{#1}%
506        #2\@addtofilelist{#1}%
507        \filehook@atbegin{#1}%
508        \@@input}%
509        \filehook@atend{#1}%
510        \scr@load@hook{after}{#1}%
511      }}%
512  }
513  \filehook@glet{filehook@@scrlfile@InputIfFileExists}{↙
        filehook@@scrlfile@InputIfFileExists}%
```

If the scrlfile package definition is detected the filehooks are added to that
definition. Unfortunately the **\scr@load@hook**{before} hook is placed *before* not
after the #2\@addtofilelist{#1} code. Otherwise the filehooks could simply be
added to these hooks. Note that this will stop working if scrlfile ever changes its
definition of the **\InputIfFileExists** macro.

```
514  \@tempswafalse
515  \filehook@cmp{InputIfFileExists}{↙
        filehook@InputIfFileExists}%
516    {\@tempswatrue}%
517    {%
518      \filehook@cmp{InputIfFileExists}{↙
          scrlfile@InputIfFileExists}%
```

```
519        {\@tempswatrue}%
520        {}%
521    }%

523  \if@tempswa
524    \filehook@glet{filehook@InputIfFileExists}{↙
           filehook@scrlfile@InputIfFileExists}%
525    \filehook@glet{filehook@@InputIfFileExists}{↙
           filehook@@scrlfile@InputIfFileExists}%
526    \filehook@glet{InputIfFileExists}{↙
           filehook@InputIfFileExists}%
527    \PackageInfo{filehook}{Package 'scrlfile' detected ↙
           and compensated for}%
528  \else
529    \iffilehook@force
530      \filehook@glet{filehook@InputIfFileExists}{↙
             filehook@scrlfile@InputIfFileExists}%
531      \filehook@glet{filehook@@InputIfFileExists}{↙
             filehook@@scrlfile@InputIfFileExists}%
532      \filehook@glet{InputIfFileExists}{↙
             filehook@InputIfFileExists}%
533      \PackageWarning{filehook}{Detected 'scrlfile' ↙
             package with unknown definition of \string\↙
             InputIfFileExists.^^J%
534                          The 'force' option of '↙
                               filehook' is in ↙
                               effect. Macro is ↙
                               overwritten with ↙
                               default!}%
535    \else
536      \PackageError{filehook}{Detected 'scrlfile' ↙
             package with unknown definition of \string\↙
             InputIfFileExists.^^J%
537                          Use the 'force' option of↙
                               'filehook' to ↙
                               overwrite it.}{}%
538    \fi
539  \fi

540  \endgroup

541  %<!COPYRIGHT>
542  \NeedsTeXFormat{LaTeX2e}[1999/12/01]
543  \ProvidesPackage{filehook-fink}[011/01/03 v0.1 ↙
         filehook compatibility code for fink package]

544  \RequirePackage{filehook}
545  \RequirePackage{currfile}%

547  \begingroup
```

33

```latex
548
549   \long\def\fink@old@InputIfFileExists#1#2{%
550     \IfFileExists{#1}{%
551       #2\@addtofilelist{#1}%
552       \fink@prepare{#1}%
553       \expandafter\fink@input%
554       \expandafter\fink@restore\expandafter{\finkpath}}%
                %
555   }
556
557   \long\def\fink@new@InputIfFileExists#1#2{%
558     \IfFileExists{#1}{%
559       #2\@addtofilelist{#1}%
560       \edef\fink@before{\noexpand\fink@input{#1}}%
561       \edef\fink@after{\noexpand\fink@restore{\finkpath%
                }}%
562       \expandafter\fink@before\fink@after}%
563   }
564
565   \ifcase
566       \ifx\InputIfFileExists\filehook@InputIfFileExists%
                0\else
567       \ifx\InputIfFileExists\latex@InputIfFileExists %
                1\else
568       \ifx\InputIfFileExists\fink@new@InputIfFileExists%
                1\else
569       \ifx\InputIfFileExists\fink@old@InputIfFileExists%
                1\else
570       1%
571       \fi\fi\fi\fi
572   \relax
573   \or
574     \global\let\filehook@InputIfFileExists\%
          filehook@default@InputIfFileExists
575     \global\let\filehook@@InputIfFileExists\%
          filehook@@default@InputIfFileExists
576     \global\let\InputIfFileExists\%
          filehook@InputIfFileExists
577     \PackageInfo{filehook-fink}{Package 'fink' detected%
          and replaced by 'currfile'}%
578   \else
579     \iffilehook@force
580       \global\let\filehook@InputIfFileExists\%
            filehook@default@InputIfFileExists
581       \global\let\filehook@@InputIfFileExists\%
            filehook@@default@InputIfFileExists
582       \global\let\InputIfFileExists\%
            filehook@InputIfFileExists
583       \PackageWarning{filehook-fink}{Detected 'fink' %
            package with unknown definition of \string\%
```

```
                     InputIfFileExists.^^J%
584                                          The 'force' option of '/
                                             filehook' is in /
                                             effect. Macro is /
                                             overwritten with /
                                             default!}%
585    \else
586      \PackageError{filehook-fink}{Detected 'fink' /
            package with unknown definition of \string\/
            InputIfFileExists.^^J%
587                                          Use the 'force' /
                                             option of '/
                                             filehook' to /
                                             overwrite it.}{}%
588    \fi
589  \fi
590
591  \endgroup
```

6.6 Support for PGF Keys

```
592  \ProvidesPackage{pgf-filehook}[2010/01/07 v1.0 PGF /
        keys for the filehook package]
593  \RequirePackage{filehook}
594  \RequirePackage{pgfkeys}
595
596  \pgfkeys{%
597      /filehook/.is family,
598      /filehook,
599  %
600      EveryFile/.is family,
601      EveryFile/AtBegin/.code={\AtBeginOfEveryFile/
            {#1}},
602      EveryFile/AtBegin/.value required,
603      EveryFile/AtEnd/.code={\AtEndOfEveryFile{#1}},
604      EveryFile/AtEnd/.value required,
605  %
606      Files/.is family,
607      Files/AtBegin/.code={\AtBeginOfFiles{#1}},
608      Files/AtBegin/.value required,
609      Files/AtEnd/.code={\AtEndOfFiles{#1}},
610      Files/AtEnd/.value required,
611  %
612      File/.is family,
613      File/AtBegin/.code 2 args={\AtBeginOfFile/
            {#1}{#2}},
614      File/AtBegin/.value required,
615      File/AtEnd/.code 2 args={\AtEndOfFile{#1}{#2}},
616      File/AtEnd/.value required,
```

```
617    %
618        Inputs/.is family ,
619        Inputs/AtBegin/.code={\AtBeginOfInputs{#1}},
620        Inputs/AtBegin/.value required ,
621        Inputs/AtEnd/.code={\AtEndOfInputs{#1}},
622        Inputs/AtEnd/.value required ,
623    %
624        InputFile/.is family ,
625        InputFile/AtBegin/.code 2 args={\⁄
               AtBeginOfInputFile{#1}{#2}},
626        InputFile/AtBegin/.value required ,
627        InputFile/AtEnd/.code 2 args={\AtEndOfInputFile⁄
               {#1}{#2}},
628        InputFile/AtEnd/.value required ,
629    %
630        Includes/.is family ,
631        Includes/AtBegin/.code={\AtBeginOfIncludes{#1}},
632        Includes/AtBegin/.value required ,
633        Includes/AtEnd/.code={\AtEndOfIncludes{#1}},
634        Includes/AtEnd/.value required ,
635        Includes/After/.code={\AfterIncludes{#1}},
636        Includes/After/.value required ,
637    %
638        IncludeFile/.is family ,
639        IncludeFile/AtBegin/.code 2 args={\⁄
               AtBeginOfIncludeFile{#1}{#2}},
640        IncludeFile/AtBegin/.value required ,
641        IncludeFile/AtEnd/.code 2 args={\⁄
               AtEndOfIncludeFile{#1}{#2}},
642        IncludeFile/AtEnd/.value required ,
643        IncludeFile/After/.code 2 args={\AfterIncludeFile⁄
               {#1}{#2}},
644        IncludeFile/After/.value required ,
645    %
646        ClassFile/.is family ,
647        ClassFile/AtBegin/.code={\AtBeginOfClassFile#1},
648        ClassFile/AtBegin/.value required ,
649        ClassFile/AtEnd/.code={\AtEndOfClassFile#1},
650        ClassFile/AtEnd/.value required ,
651    %
652        PackageFile/.is family ,
653        PackageFile/AtBegin/.code={\AtBeginOfPackageFile⁄
               #1},
654        PackageFile/AtBegin/.value required ,
655        PackageFile/AtEnd/.code={\AtEndOfPackageFile#1},
656        PackageFile/AtEnd/.value required ,
657    }
658
659    \newcommand{\pgffilehook}{\pgfqkeys{/filehook}}
```