

# The `askinclude` package

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## Abstract

This package replaces `\includeonly` by an interactive user interface.

## Contents

|          |   |          |
|----------|---|----------|
| <b>1</b> | <b>Documentation</b>  | <b>2</b> |
| 1.1      | User interface . . . . .  | 2        |
| 1.2      | Single asking mode . . . . .                                      | 4        |
| 1.3      | Regular expressions . . . . .                                     | 4        |
| 1.3.1    | Method <code>makematch</code> . . . . .                           | 4        |
| 1.3.2    | Method <code>pdfmatch</code> . . . . .                            | 5        |
| 1.4      | History . . . . .   | 6        |
| 1.5      | New features of version 2 . . . . .                               | 6        |
| 1.6      | Compatibility to version 1 . . . . .                              | 7        |
| <b>2</b> | <b>Implementation</b>   | <b>7</b> |
| 2.1      | Header and catcodes . . . . .                                     | 7        |
| 2.2      | Delay action after preamble . . . . .                             | 8        |
| 2.3      | Write entry in <code>.aux</code> file . . . . .                   | 8        |
| 2.4      | Remember <code>\include</code> files . . . . .                    | 8        |
| 2.5      | Redefine <code>\include</code> . . . . .                          | 10       |
| 2.6      | Store answer and match method in <code>.aux</code> file . . . . . | 10       |
| 2.7      | Support for <code>\@includeonly</code> . . . . .                  | 10       |
| 2.8      | Stop if <code>\includeonly</code> is active . . . . .             | 10       |
| 2.9      | <code>\includeonly</code> . . . . .                               | 11       |
| 2.10     | Options . . . . .   | 11       |
| 2.11     | Strings . . . . .   | 12       |
| 2.12     | Set defaults . . . . .  | 12       |
| 2.13     | Questions . . . . .   | 13       |
| 2.13.1   | Generic question header . . . . .                                 | 13       |
| 2.13.2   | Display files . . . . .   | 14       |
| 2.13.3   | Previous answer . . . . .   | 14       |
| 2.13.4   | Current regular expression support . . . . .                      | 15       |
| 2.13.5   | Main question text . . . . .                                      | 15       |
| 2.13.6   | Main question . . . . .   | 15       |
| 2.14     | Evaluate answer of main question . . . . .                        | 16       |
| 2.15     | Ask for each file . . . . .                                       | 19       |

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\*Please report any issues at <https://github.com/ho-tex/askinclude/issues>

|          |                                 |           |
|----------|---------------------------------|-----------|
| <b>3</b> | <b>Installation</b>             | <b>21</b> |
| 3.1      | Download                        | 21        |
| 3.2      | Bundle installation             | 22        |
| 3.3      | Package installation            | 22        |
| 3.4      | Refresh file name databases     | 22        |
| 3.5      | Some details for the interested | 22        |
| <b>4</b> | <b>Acknowledgement</b>          | <b>23</b> |
| <b>5</b> | <b>References</b>               | <b>23</b> |
| <b>6</b> | <b>History</b>                  | <b>23</b> |
|          | [1991/11/05 v0.95]              | 23        |
|          | [1991/11/05 v0.99]              | 23        |
|          | [1991/11/07 v1.0]               | 23        |
|          | [1991/12/13 v1.1]               | 23        |
|          | [1994/11/02 v1.2e]              | 24        |
|          | [2007/10/15 v1.0 (askinc)]      | 24        |
|          | [2007/10/23 v2.0]               | 24        |
|          | [2008/08/11 v2.1]               | 24        |
|          | [2011/12/02 v2.2]               | 24        |
|          | [2016/05/14 v2.3]               | 24        |
|          | [2018/11/01 v2.4]               | 24        |
|          | [2019/12/09 v2.5]               | 24        |
| <b>7</b> | <b>Index</b>                    | <b>25</b> |

# 1 Documentation

## 1.1 User interface

The `\include` feature of L<sup>A</sup>T<sub>E</sub>X allows the division of the text body in separate compilation units. It is page based and stores counter settings in additional auxiliary files. `\includeonly` limits the actually included files to the ones, listed in its argument.

Example:

```

\documentclass{report}

\usepackage{askinclude}

% Don't use \include in the preamble.
% Instead \input can be used or make a package

\begin{document}
\include{title}
\include{introduction}
\include{summary}
\include{index}
\end{document}

```

Package `askinclude` adds an interactive user interface. The user is asked which files he want to include and sets `\includeonly` accordingly.

The first time the package is used the question looks like:

```
*****
*** Package askinclude Question ***
*****
```

```
Previous answer (noregexp):
  [*]
```

```
Regular expressions:
--> [noregexp] disabled
    [makematch] enabled, using package 'makematch'
    [pdfmatch] enabled, using pdfTeX's \pdfmatch
```

```
Which files do you want to include?
[foo,bar] comma separated file or pattern list
[*]      all files
[-]      no files
[?]      ask for each file
[]       use the previous answer
```

```
\answer=chapter2,summary
```

Square brackets are used as quotation symbols, they are not part of the answer. The answer by the user follows in the last line after `\answer=`.

**[foo,bar]:** A comma separated file list (also one file only) is passed to macro `\includeonly` directly. If regular expression support is enabled, the entries in the list are interpreted as file name patterns that will be matched against the file names in `\include`, see [section 1.3](#).

**[\*]:** This is a shortcut for specifying *all* files.

**[-]:** This means *none* of the files is included.

**[?]:** The switches in single asking mode. The user will be asked at each `\include`. See [section 1.2](#).

**[]:** Just pressing return (empty string) uses the default answer, that was stored in the auxiliary file (`.aux`) of the previous `LATEX`run with package `askinclude`. Without previous runs the default is `[*]` for all files.

**[noregexp]:** Turns regular expression support off.

**[makematch]:** Enables regular expression support package `makematch` provides.

**[pdfmatch]:** It is shown, if pdf<sub>T</sub>E<sub>X</sub> 1.30 or later is used. It relies on an undocumented feature `\pdfmatch` that may change in future versions of pdf<sub>T</sub>E<sub>X</sub>.

Package `askinclude` remembers the files of `\include` in the auxiliary file and the given answer. they are presented at the next run at the start of the question:

```
*****
*** Package askinclude Question ***
*****
```

```
Files, found by previous run in \include:
(-) title
(-) introduction
(-) chapter1
(+) chapter2
(-) chapter3
```

(+) summary

```
Previous answer (noregexp):  
[chapter2,summary]  
...
```

(+) and (-) marks files that were and were not included in the previous run. The file list and marks are not always correct. For example, if `\include` statements are added or removed. If the method of regular expression support is different, then the marks only reflects the mode of the previous answer.

## 1.2 Single asking mode

The special answer '?' trigger single asking mode, at the next `\include` the user is asked again:

```
*****  
*** Package askinclude Question ***  
*****  
  
Include 'title'? [y]es, [n]o, [A]ll, [N]one, [D]efault (n):  
  
\answer=
```

Use the letter inside the square brackets as answer. An empty string uses the default answer, the letter in parentheses. The answers are:

[y]: The file is included.

[n]: The file is excluded.

[A]: This file and all following files are included.

[N]: This file and all following files are excluded.

[D]: Use the default answer for this and all following files.

If the file is known from the previous run, then the default is 'y' or 'n' corresponding to the mark '(+)' or '(-)' in the list of previous files. Otherwise 'y' is used as default.

## 1.3 Regular expressions

Three methods are available that can also set by package options:

**noregexp:** Regular expression support is disabled.

**makematch:** Use package `makematch`.

**pdfmatch:** Use pdfTeX's `\pdfmatch` if available.

Without options the value remembered in the auxiliary file is used, otherwise the default is `noregexp`.

### 1.3.1 Method `makematch`

Package `makematch` (part of `qstest`), written by David Kastrup provides pattern matching based on wildcards:

[\*]: The star matches zero or more characters. Thus a lonely star matches anything.

[!]: The exclamation mark at the begin of a pattern negates it, thus the matching files are excluded.

The pattern list is evaluated for a file name from left to right. Always a file name must match the whole pattern. The file is included if it is matched by a pattern and not excluded afterwards. Examples:

| Pattern list            | File names                     | Result                   |
|-------------------------|--------------------------------|--------------------------|
| <code>foobar</code>     | <code>foobar,dummy</code>      | <code>foobar</code>      |
| <code>foo*</code>       | <code>foobar,xfoobar</code>    | <code>foobar</code>      |
| <code>*foo*</code>      | <code>xfoobar</code>           | <code>xfoobar</code>     |
| <code>f*b*r</code>      | <code>foobar</code>            | <code>foobar</code>      |
| <code>*</code>          | <code>any</code>               | <code>any</code>         |
| <code>!foobar</code>    | <code>foobar,other</code>      | <code>other</code>       |
| <code>!foo*</code>      | <code>xfoobar</code>           | <code>xfoobar</code>     |
| <code>in*,!*dex</code>  | <code>intro,index</code>       | <code>intro</code>       |
| <code>!index,in*</code> | <code>intro,index</code>       | <code>intro,index</code> |
| <code>*,!chap2</code>   | <code>chap1,chap2,chap3</code> | <code>chap1,chap3</code> |

The example in the last line shows, how the behaviour of package `excludeonly` [2] can be simulated.

The documentation of package `makematch` tells the the empty pattern does not match anything. But if you answer the question with an empty string the answer of the previous run is used. Also curly braces are not reliable because they can get stripped during the processing of the answer. Using a pair of empty curly braces or the comma for two empty patterns currently works, but this is specific for the current implementation and may change in future. But the special answer ‘-’ is available.

### 1.3.2 Method `pdfmatch`

In `pdfTeX` 1.30 the new primitive `\pdfmatch` was introduced. It is not documented yet, because it was not decided if it remains and which implementation of regular expressions should be used. Thus the situation may change in later versions of `pdfTeX`. Currently (1.30 until 1.40) it uses a library for POSIX 1003.2 regular expressions, see manual page “`regex(7)`”.

If a pattern in the pattern list is invalid, the package prints a warning and removes the pattern from the list. Actually there are two warnings, the other warning is generated by `pdfTeX` itself.

In opposite to `makematch` the pattern only needs to match the specified part of the file name. For matching the whole name, the symbols ‘^’ and ‘\$’ for begin and end of string must be included.

Additionally an initial exclamation mark ‘!’ implements the same logic as method `makematch`. The match result is inverted, the matched file excluded.

Examples:

| Pattern list | File names           | Result               |
|--------------|----------------------|----------------------|
| foobar       | foobar,dummy         | foobar               |
| foo.*        | foobar,xfoobar       | foobar,xfoobar       |
| ^foo.*       | foobar,xfoobar       | foobar               |
| foo\$        | foo,foobar           | foo                  |
| fo?bar       | fbar,fobar,foobar    | fbar,fobar           |
| fo+bar       | fbar,fobar,foobar    | fobar,foobar         |
| fo*bar       | fbar,fobar,foobar    | fbar,fobar,foobar    |
| chap3        | chap3, chap32        | chap1, chap3, chap32 |
| chap[13]     | chap1, chap2, chap3  | chap1, chap3         |
| chap(1 3)\$  | chap1, chap3, chap33 | chap1, chap3         |
| .*           | any                  | any                  |
| !foobar      | foobar, other        | other                |
| in.*,!dex    | intro, index         | intro                |
| !index, in.* | intro, index         | intro, index         |
| .*,!chap2    | chap1, chap2, chap3  | chap1, chap3         |
| .*,!bla      | foo, bla, blabla     | foo                  |
| .*,!^bla\$   | foo, bla, blabla     | foo, blabla          |

The example in the last line shows, how the behaviour of package `excludeonly` [2] can be simulated. As the third last line shows, that sometimes ‘^’ and ‘\$’ can be omitted, but this will not work always, shown in the second last line.

## 1.4 History

Package `askinclude` was invented by Pablo A. Straub in 1991 and maintained until 1994.

In October 2007 it was removed from “TeX Live” because of the no-commercial license [1]. Herbert Voß initiated a search for the author in the newsgroup `comp.text.tex` [3] to ask him to change the license.

It seems that the author could not be reached any more. Joseph Wright suggested a reimplementaion that I (HO) have done as package `askinc`. Soon it was enhanced by feature requests.

Then Ulrike Fischer found email addresses of the original author and Jim Hefferon succeeded in contacting him. He allowed a change of the license to LPPL and the transfer of the maintainership to someone else.

Thus I merged both packages as `askinclude` in a new major version 2. The license is LPPL.

## 1.5 New features of version 2

- License is now LPPL.
- A list of `\include` files that are detected by the previous run is printed before the question.
- If the special answer ‘?’ is given, then the user is asked at each `\include`.
- Support for regular expressions.
- The remaining stuff in the `.aux` file does not cause errors, if the package is removed.
- The use of `\includeonly` before the package loading time is detected and respected by taking precedence. After the package is loaded, `\includeonly` is disabled and prints a warning.

## 1.6 Compatibility to version 1

- The user interface of version 1 with its special answers ‘\*’, ‘-’, and ‘’ remain unchanged, but it is extended by version 2 with the special answer ‘?’ and support for regular expressions can be enabled.
- As reimplementing the internal macros have changed of course.
- .aux files that are written by version 1.x will work with version 2.x because \@includeonly is recognized.
- L<sup>A</sup>T<sub>E</sub>X 2.09: The package works as \documentstyle option in compatibility mode of L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>. It is possible that it will not work in pure L<sup>A</sup>T<sub>E</sub>X 2.09.

## 2 Implementation

### 2.1 Header and catcodes

```
1 (*package)
2 \NeedsTeXFormat{LaTeX2e}
3 \begingroup\catcode61\catcode48\catcode32=10\relax%
4 \catcode13=5 % ^^M
5 \endlinechar=13 %
6 \catcode123=1 % {
7 \catcode125=2 % }
8 \catcode64=11 % @
9 \def\x{\endgroup
10 \expandafter\edef\csname AskInc@AtEnd\endcsname{%
11 \endlinechar=\the\endlinechar\relax
12 \catcode13=\the\catcode13\relax
13 \catcode32=\the\catcode32\relax
14 \catcode35=\the\catcode35\relax
15 \catcode61=\the\catcode61\relax
16 \catcode64=\the\catcode64\relax
17 \catcode123=\the\catcode123\relax
18 \catcode125=\the\catcode125\relax
19 }%
20 }%
21 \x\catcode61\catcode48\catcode32=10\relax%
22 \catcode13=5 % ^^M
23 \endlinechar=13 %
24 \catcode35=6 % #
25 \catcode64=11 % @
26 \catcode123=1 % {
27 \catcode125=2 % }
28 \def\TMP@EnsureCode#1#2{%
29 \edef\AskInc@AtEnd{%
30 \AskInc@AtEnd
31 \catcode#1=\the\catcode#1\relax
32 }%
33 \catcode#1=#2\relax
34 }
35 \TMP@EnsureCode{33}{12}% !
36 \TMP@EnsureCode{39}{12}% '
37 \TMP@EnsureCode{40}{12}% (
38 \TMP@EnsureCode{41}{12}% )
39 \TMP@EnsureCode{42}{12}% *
40 \TMP@EnsureCode{43}{12}% +
```

```

41 \TMP@EnsureCode{44}{12}% ,
42 \TMP@EnsureCode{45}{12}% -
43 \TMP@EnsureCode{46}{12}% .
44 \TMP@EnsureCode{47}{12}% /
45 \TMP@EnsureCode{58}{12}% :
46 \TMP@EnsureCode{62}{12}% >
47 \TMP@EnsureCode{63}{12}% ?
48 \TMP@EnsureCode{91}{12}% [
49 \TMP@EnsureCode{93}{12}% ]
50 \TMP@EnsureCode{96}{12}% ‘
51 \edef\AskInc@AtEnd{\AskInc@AtEnd\noexpand\endinput}
52 \ProvidesPackage{askinclude}%
53 [2019/12/09 v2.5 Interactive asking of included files]%

    Luatex compat
54 \ifx\pdfextension\@undefined\else
55   \protected\def\pdflastobj {\numexpr\pdffeedback lastobj\relax}
56   \protected\def\pdfnames   {\pdfextension names }
57   \protected\def\pdfobj     {\pdfextension obj }
58   \let\pdfoutput            \outputmode
59 \fi

```

## 2.2 Delay action after preamble

`\AskInc@AtBeginDocument` Some actions such as `.aux` file writing cannot be performed in the preamble. `\AtBeginDocument` delays such action until `\begin{document}`. However `\AtBeginDocument` must not be used after that time (`\@onlypreamble`). Thus `\AskInc@AtBeginDocument` uses `\AtBeginDocument` in the preamble and afterwards executes the code immediately.

```

60 \AtBeginDocument{%
61   \let\AskInc@AtBeginDocument\@firstofone
62 }
63 \providecommand*\AskInc@AtBeginDocument{\AtBeginDocument}

```

## 2.3 Write entry in .aux file

`\AskInc@WriteAux` The first argument is written to the main `.aux` file and the second argument is executed if writing was possible. Remember `\nofiles` prevents writing to auxiliary files.

```

64 \def\AskInc@WriteAux#1#2{%
65   \AskInc@AtBeginDocument{%
66     \if@files
67       \immediate\write\@mainaux{#1}%
68       #2%
69     }
70 }%
71 }

```

## 2.4 Remember \include files

`\AskInc@CharHash`

```

72 \edef\AskInc@CharHash{\string#}

```

`\AskInc@WriteDefAddList`

```

73 \def\AskInc@WriteDefAddList{%
74   \AskInc@WriteAux{%

```



```

\AskInc@AddList
75     \string\providecommand*\string\AskInc@AddList[2]{%
76         \string\ifcase\string\ifx\AskInc@CharHash1\string\@undefined
77             \string\else
78                 \string\ifx\AskInc@CharHash1\string\relax
79                 \string\else
80                     \string\ifx\AskInc@CharHash1\string\@empty
81                     \string\else
82                         1%
83                     \string\fi
84                 \string\fi
85             \string\fi
86         0 %
87         \string\gdef\AskInc@CharHash1{\AskInc@CharHash2}%
88     \string\else
89         \string\g@addto@macro\AskInc@CharHash1{,\AskInc@CharHash2}%
90     \string\fi
91 }%

92 }{%
93     \global\let\AskInc@WriteDefAddList\relax
94 }%
95 }

\AskInc@WriteDefAddFile
96 \def\AskInc@WriteDefAddFile{%
97     \AskInc@WriteDefAddList
98     \AskInc@WriteAux{%

\AskInc@AddFile
99     \string\providecommand\string\AskInc@AddFile{%
100         \string\AskInc@AddList\string\AskInc@Files
101     }%

102 }{%
103     \global\let\AskInc@WriteDefAddFile\relax
104 }%
105 }

\AskInc@AddFile
106 \AtBeginDocument{%
107     \global\let\AskInc@AddFile\@gobble
108 }

\AskInc@WriteAddFile
109 \def\AskInc@WriteAddFile#1{%
110     \AskInc@WriteDefAddFile
111     \AskInc@WriteAux{%
112         \string\AskInc@AddFile{#1}%
113     }{}%
114 }

\AskInc@Files
115 \providecommand*\AskInc@Files{}

```

**Summary:** Now `\AskInc@Files` is always defined and either empty or contains a comma separated list of `\include` files of previous run.

The `\include` files are remembered by using `\AskInc@WriteAddFile` at each `\include`.

## 2.5 Redefine \include

```
\AskInc@OrgInclude
116 \newcommand{\AskInc@OrgInclude}{}
117 \let\AskInc@OrgInclude\include

\AskInc@AskFile
118 \let\AskInc@AskFile\@gobble

\AskInc@MatchFile
119 \let\AskInc@MatchFile\@gobble

\include
120 \renewcommand*{\include}[1]{%
121   \AskInc@WriteAddFile{#1}%
122   \AskInc@AskFile{#1}%
123   \AskInc@MatchFile{#1}%
124   \AskInc@OrgInclude{#1}%
125 }
```

## 2.6 Store answer and match method in .aux file

```
126 \AtEndOfPackage{%
127   \AtBeginDocument{%
128     \@ifundefined{AskInc@Answer}{}{%
129       \AskInc@WriteAux{%
130         \string\gdef\string\AskInc@Answer{\AskInc@Answer}%
131       }{}%
132     }%
133     \@ifundefined{AskInc@MatchMethod}{}{%
134       \AskInc@WriteAux{%
135         \string\gdef\string\AskInc@MatchMethod{\AskInc@MatchMethod}%
136       }{}%
137     }%
138   }%
139 }
```

## 2.7 Support for \@includeonly

`\@includeonly` Macro `\@includeonly` is defined for compatibility reasons only, if the .aux file was written by versions before 2 of package askinclude.

```
140 \providecommand*\@includeonly[1]{%
141   \gdef\AskInc@Answer{#1}%
142   \ifx\AskInc@Answer\@empty
143     \gdef\AskInc@Answer{-}%
144   \fi
145   \global\let\AskInc@MatchMethod\@empty
146 }
```

## 2.8 Stop if \includeonly is active

If `\includeonly` is used before, the questions are skipped and the data in the main auxiliary file is preserved.

```
147 \if@partsw
148   \PackageWarningNoLine{askinclude}{%
149     Previous \string\includeonly\space detected,\MessageBreak
150     therefore asking for files is suppressed%
151   }%
```

Dummy options.

```
152 \DeclareOption{makematch}{}%
153 \DeclareOption{pdfmatch}{}%
154 \DeclareOption{noregexp}{}%
155 \ProcessOptions%
```

Preserve \AskInc@MatchFiles.

```
156 \@ifundefined{AskInc@MatchFiles}{%
157 }{%
158   \ifx\AskInc@MatchMethod\@empty
159   \else
160     \AskInc@WriteAux{%
161       \string\gdef\string\AskInc@MatchFiles{\AskInc@MatchFiles}%
162     }{%}%
163   \fi
164 }%
165 \expandafter\AskInc@AtEnd
166 \fi%
```

## 2.9 \includeonly

\AskInc@OrgIncludeOnly

```
167 \newcommand{\AskInc@OrgIncludeOnly}{}%
168 \let\AskInc@OrgIncludeOnly\includeonly
```

\includeonly

```
169 \renewcommand*{\includeonly}[1]{%
170   \PackageWarning{askinclude}{%
171     \string\includeonly\space is managed by package 'askinclude',%
172     \MessageBreak
173     therefore it is ignored%
174   }%
175 }
```

## 2.10 Options

\AskInc@StringNoRegExp

```
176 \def\AskInc@StringNoRegExp{noregexp}
```

\AskInc@StringMakeMatch

```
177 \def\AskInc@StringMakeMatch{makematch}
```

\AskInc@StringPdfMatch

```
178 \def\AskInc@StringPdfMatch{pdfmatch}
```

\ifAskInc@PdfMatchAvailable

```
179 \newif\ifAskInc@PdfMatchAvailable
180 \begingroup\expandafter\expandafter\expandafter\endgroup
181 \expandafter\ifx\csname pdfmatch\endcsname\relax
182 \else
183   \AskInc@PdfMatchAvailabletrue
184 \fi

185 \DeclareOption{makematch}{%
186   \let\AskInc@MatchOption\AskInc@StringMakeMatch
187 }
188 \ifAskInc@PdfMatchAvailable
```

```

189 \DeclareOption{pdfmatch}{%
190   \let\AskInc@MatchOption\AskInc@StringPdfMatch
191 }%
192 \else
193 \DeclareOption{pdfmatch}{%
194   \PackageWarningNoLine{askinclude}{%
195     Option ‘pdfmatch’ is not available because\MessageBreak
196     your pdfTeX does not provide \string\pdfmatch
197   }%
198 }%
199 \fi
200 \DeclareOption{noregexp}{%
201   \let\AskInc@MatchOption\@empty
202 }
203 \ProcessOptions*

```

## 2.11 Strings

\AskInc@CharAsterisk

```
204 \def\AskInc@CharAsterisk{*}
```

\AskInc@CharMinus

```
205 \def\AskInc@CharMinus{-}
```

\AskInc@CharPlus

```
206 \def\AskInc@CharPlus{+}
```

\AskInc@CharQuestion

```
207 \def\AskInc@CharQuestion{?}
```

\AskInc@CharExclam

```
208 \def\AskInc@CharExclam{!}
```

\AskInc@CharYes

```
209 \def\AskInc@CharYes{y}
```

\AskInc@CharNo

```
210 \def\AskInc@CharNo{n}
```

\AskInc@CharAll

```
211 \def\AskInc@CharAll{A}
```

\AskInc@CharNone

```
212 \def\AskInc@CharNone{N}
```

\AskInc@CharDefault

```
213 \def\AskInc@CharDefault{D}
```

## 2.12 Set defaults

\AskInc@SanitizeAnswer

```

214 \def\AskInc@SanitizeAnswer#1#2{%
215   \begingroup
216   \escapechar=‘\%
217   \edef\[\{\string\[%
218   \edef\]\{\string\}%

```

```

219 \edef\({\string\}%
220 \edef\){\string\}%
221 \edef\*{\string\*}%
222 \edef\+{\string\+}%
223 \edef\?{\string\?}%
224 \edef\|{\string\|}%
225 \edef\~{\string\~}%
226 \edef\${\string\$}%
227 \edef\{{\string\{}%
228 \edef\}\{\string\}%
229 \edef\.{\string\.}%
230 \xdef#1{%
231     \expandafter\expandafter\expandafter\zap@space
232     \expandafter#2\space\@empty
233 }%
234 \endgroup
235 }

236 \AtBeginDocument{%
237 \@ifundefined{AskInc@Answer}{%
238     \global\let\AskInc@Answer\AskInc@CharAsterisk
239 }{%
240     \AskInc@SanitizeAnswer\AskInc@Answer\AskInc@Answer
241 }%
242 \global\let\AskInc@PreviousAnswer\AskInc@Answer
243 \@ifundefined{AskInc@MatchMethod}{%
244     \global\let\AskInc@MatchMethod\@empty
245 }{%
246     \global\let\AskInc@PreviousMatchMethod\AskInc@MatchMethod
247 \@ifundefined{AskInc@MatchOption}{%
248     \let\AskInc@MatchOption\AskInc@MatchMethod
249 }{%
250 \ifx\AskInc@MatchOption\AskInc@StringPdfMatch
251     \ifAskInc@PdfMatchAvailable
252     \else
253         \let\AskInc@MatchOption\@empty
254     \fi
255 \fi
256 \@ifundefined{AskInc@MatchFiles}{%
257     \let\AskInc@MatchFiles\@empty
258 }{%
259 }

```

## 2.13 Questions

### 2.13.1 Generic question header

\AskInc@QuestionHeader

```

260 \def\AskInc@QuestionHeader{%
261     \typeout{}%
262     \typeout{*****}%
263     \typeout{*** Package askinclude Question ***}%
264     \typeout{*****}%
265     \typeout{}%
266 }

```

### 2.13.2 Display files

\AskInc@TypeoutFiles

```
267 \def\AskInc@TypeoutFiles{%
268   \global\let\AskInc@PreviousMatches\@empty
269   \ifx\AskInc@Files\@empty
270   \else
271     \typeout{Files, found by previous run in \string\include:}%
272     \@for\AskInc@File:=\AskInc@Files\do{%
273       \ifx\AskInc@Answer\AskInc@CharAsterisk
274         \let\AskInc@Mark\AskInc@CharPlus
275       \else
276         \let\AskInc@Mark\AskInc@CharMinus
277         \ifx\AskInc@Answer\AskInc@CharMinus
278         \else
279           \ifx\AskInc@MatchMethod\@empty
280             \expandafter\@firstoftwo
281           \else
282             \expandafter\@secondoftwo
283           \fi
284           {\@for\AskInc@Temp:=\AskInc@Answer}%
285           {\@for\AskInc@Temp:=\AskInc@MatchFiles}%
286           \do{%
287             \ifx\AskInc@File\AskInc@Temp
288               \let\AskInc@Mark\AskInc@CharPlus
289             \fi
290           }%
291         \fi
292       \fi
293       \typeout{ \@spaces(\AskInc@Mark) \AskInc@File}%
294       \ifx\AskInc@Mark\AskInc@CharPlus
295         \ifx\AskInc@PreviousMatches\@empty
296           \global\let\AskInc@PreviousMatches\AskInc@File
297         \else
298           \expandafter\g@addto@macro
299           \expandafter\AskInc@PreviousMatches{%
300             \expandafter,\AskInc@File
301           }%
302         \fi
303       \fi
304     }%
305   \typeout{}%
306 \fi
307 }
```

### 2.13.3 Previous answer

\AskInc@TypeoutPreviousAnswer

```
308 \def\AskInc@TypeoutPreviousAnswer{%
309   \typeout{%
310     Previous answer (
311     \ifx\AskInc@MatchMethod\@empty
312       noregexp%
313     \else
314       \AskInc@MatchMethod
315     \fi
316   ):
317 }
```

```

318 \typeout{ \@spaces[\AskInc@Answer]}%
319 \typeout{}%
320 }

```

### 2.13.4 Current regular expression support

\AskInc@TypeoutMatchMethod

```

321 \def\AskInc@TypeoutMatchMethod{%
322 \typeout{Regular expressions:}%
323 \AskInc@TypeoutMethod\@empty{noregexp}{%
324 \space disabled%
325 }%
326 \AskInc@TypeoutMethod\AskInc@StringMakeMatch{makematch}{%
327 enabled, using package 'makematch'%
328 }%
329 \ifAskInc@PdfMatchAvailable
330 \AskInc@TypeoutMethod\AskInc@StringPdfMatch{pdfmatch}{%
331 \space enabled, using pdfTeX's \string\pdfmatch
332 }%
333 \fi
334 \typeout{}%
335 }

```

\AskInc@TypeoutMethod

```

336 \def\AskInc@TypeoutMethod#1#2#3{%
337 \typeout{%
338 \ifx#1\AskInc@MatchOption \space--> \else\@spaces\space\fi
339 [#2] #3% hash-ok
340 }%
341 }

```

### 2.13.5 Main question text

\AskInc@TypeoutMainQuestion

```

342 \def\AskInc@TypeoutMainQuestion{%
343 \typeout{Which files do you want to include?}%
344 \typeout{ \@spaces[foo,bar] \space\space
345 comma separated file or pattern list}%
346 \typeout{ \@spaces[*] \@spaces\@spaces all files}%
347 \typeout{ \@spaces[-] \@spaces\@spaces no files}%
348 \typeout{ \@spaces[?] \@spaces\@spaces ask for each file}%
349 }

```

### 2.13.6 Main question

\AskInc@MainQuestion

```

350 \def\AskInc@MainQuestion{%
351 \AskInc@QuestionHeader
352 \AskInc@TypeoutFiles
353 \AskInc@TypeoutPreviousAnswer
354 \AskInc@TypeoutMatchMethod
355 \AskInc@TypeoutMainQuestion
356 \begingroup
357 \@makeother\*%
358 \@makeother\-%
359 \@makeother\?%
360 \@makeother\,%

```

```

361 \@makeother\!%
362 \@makeother\^%
363 \@makeother\$%
364 \@makeother\<%
365 \@makeother\)%
366 \@makeother\+%
367 \@makeother\[%
368 \@makeother\]%
369 \@makeother\\%
370 \@makeother\|%
371 \@makeother\:%
372 \@makeother\.%
373 \typein[\answer]%
374 { \@spaces[] \space\@spaces\@spaces use the previous answer}%
375 \typeout{}%
376 \AskInc@SanitizeAnswer\AskInc@@Answer\answer
377 \endgroup
378 \let\AskInc@Next\AskInc@MainQuestion
379 \ifx\AskInc@@Answer\AskInc@StringNoRegExp
380 \let\AskInc@MatchOption\@empty
381 \else
382 \ifx\AskInc@@Answer\AskInc@StringMakeMatch
383 \let\AskInc@MatchOption\AskInc@StringMakeMatch
384 \else
385 \ifx\AskInc@@Answer\AskInc@StringPdfMatch
386 \ifAskInc@PdfMatchAvailable
387 \let\AskInc@MatchOption\AskInc@StringPdfMatch
388 \else
389 \PackageWarning{askinclude}{%
390 Method 'pdfmatch' is not available because\MessageBreak
391 your pdfTeX does not provide \string\pdfmatch
392 }%
393 \let\AskInc@MatchOption\@empty
394 \fi
395 \else
396 \ifx\AskInc@@Answer\@empty
397 \global\let\AskInc@@Answer\AskInc@Answer
398 \fi
399 \let\AskInc@Next\AskInc@MainAnswer
400 \fi
401 \fi
402 \fi
403 \AskInc@Next
404 }

```

## 2.14 Evaluate answer of main question

\AskInc@MainAnswer

```

405 \def\AskInc@MainAnswer{%
406 \ifx\AskInc@@Answer\AskInc@CharQuestion
407 \global\let\AskInc@Answer\@empty
408 \global\let\AskInc@MatchMethod\@empty
409 \global\let\AskInc@AskFile\AskInc@DoAskFile
410 \AskInc@OrgIncludeOnly{}%
411 \else
412 \global\let\AskInc@Answer\AskInc@@Answer
413 \ifx\AskInc@@Answer\AskInc@CharAsterisk
414 \global\let\AskInc@MatchMethod\@empty

```



```

415 \else
416 \ifx\AskInc@@Answer\AskInc@CharMinus
417 \global\let\AskInc@MatchMethod\@empty
418 \AskInc@OrgIncludeOnly{}%
419 \else
420 \global\let\AskInc@MatchMethod\AskInc@MatchOption
421 \ifx\AskInc@MatchOption\@empty
422 \expandafter\AskInc@OrgIncludeOnly\expandafter{%
423 \AskInc@Answer
424 }%
425 \else
426 \AskInc@MatchInit
427 \AskInc@OrgIncludeOnly{}%
428 \fi
429 \fi
430 \fi
431 \fi
432 \let\AskInc@Include\AskInc@DoInclude
433 }

```

\AskInc@MatchInit

```

434 \def\AskInc@MatchInit{%
435 \RequirePackage{kvsetkeys}[2007/09/29]%
436 \expandafter\comma@normalize\expandafter{\AskInc@Answer}%
437 \global\let\AskInc@MatchList\comma@list

```

\AskInc@MatchFile

```

438 \def\AskInc@MatchFile##1{%
439 \AskInc@DoMatch{##1}{%
440 \AskInc@WriteAddMatch{##1}%
441 \ifx\@partlist\@empty
442 \gdef\@partlist{##1}%
443 \else
444 \g@addto@macro\@partlist{,##1}%
445 \fi
446 }%
447 }%

448 \ifx\AskInc@MatchMethod\AskInc@StringMakeMatch
449 \AskInc@MakeMatchInit
450 \else
451 \AskInc@PdfMatchInit
452 \fi
453 \let\AskInc@MatchInit\@undefined
454 }

```

\AskInc@MakeMatchInit

```

455 \def\AskInc@MakeMatchInit{%
456 \RequirePackage{makematch}%

```

\AskInc@DoMatch

```

457 \def\AskInc@DoMatch##1{%
458 \def\AskInc@Temp{%
459 \MakeMatcher[,]\AskInc@Temp
460 }%
461 \expandafter\AskInc@Temp\expandafter{\AskInc@MatchList}%
462 \AskInc@Temp{##1}}\@firstofone\@gobble
463 }%

```

```

464 \let\AskInc@MakeMatchInit\@undefined
465 }

\AskInc@PdfMatchInit
466 \def\AskInc@PdfMatchInit{%

\ifAskInc@Found
467 \newif\ifAskInc@Found

\AskInc@DoMatch
468 \def\AskInc@DoMatch##1{%
469 \AskInc@Foundfalse
470 \expandafter\comma@parse@normalized\expandafter
471 {\AskInc@MatchList}{\AskInc@CheckMatch{##1}}%
472 \ifAskInc@Found
473 \expandafter\@firstofone
474 \else
475 \expandafter\@gobble
476 \fi
477 }%

\AskInc@CheckMatch
478 \def\AskInc@CheckMatch##1##2{%
479 \AskInc@@CheckMatch##2\@empty\@nil{##1}%
480 }%

\AskInc@@CheckMatch
481 \def\AskInc@@CheckMatch##1##2\@nil##3{%
482 \def\AskInc@Temp{##1}%
483 \ifx\AskInc@Temp\AskInc@CharExclam
484 \ifcase\pdfmatch{##2}{##3}=1 %
485 \or
486 \AskInc@Foundfalse
487 \else
488 \AskInc@InvalidPattern{##2}{##1##2}%
489 \fi
490 \else
491 \ifcase\pdfmatch{##1##2}{##3} %
492 \or
493 \AskInc@Foundtrue
494 \else
495 \AskInc@InvalidPattern{##1##2}{##1##2}%
496 \fi
497 \fi
498 }%

\AskInc@InvalidPattern Prints a warning with the regular expression and removes it from the list to prevent
further warnings for the same expression.
499 \def\AskInc@InvalidPattern##1##2{%
500 \edef\AskInc@Temp{##1}%
501 \PackageWarningNoLine{askinclude}{%
502 Invalid pattern ‘\AskInc@Temp’ for \string\pdfmatch
503 }%
504 \edef\AskInc@Temp{##2}%
505 \global\expandafter\let\expandafter\AskInc@MatchList
506 \expandafter\@empty
507 \expandafter\comma@parse@normalized\expandafter
508 {\AskInc@MatchList}\AskInc@FilterPattern
509 }%

```

```

\AskInc@FilterPattern
510 \def\AskInc@FilterPattern##1{%
511 \edef\AskInc@Pattern{##1}%
512 \ifx\AskInc@Temp\AskInc@Pattern
513 \else
514 \ifx\AskInc@MatchList\@empty
515 \global\let\AskInc@MatchList\AskInc@Pattern
516 \else
517 \expandafter\g@addto@macro\expandafter\AskInc@MatchList{%
518 \expandafter,\AskInc@Pattern
519 }%
520 \fi
521 \fi
522 }%

523 \let\AskInc@PdfMatchInit\@undefined
524 }

\AskInc@WriteDefAddMatch
525 \def\AskInc@WriteDefAddMatch{%
526 \AskInc@WriteDefAddList
527 \AskInc@WriteAux{%

\AskInc@AddMatch
528 \string\providecommand\string\AskInc@AddMatch{%
529 \string\AskInc@AddList\string\AskInc@MatchFiles
530 }%

531 }{%
532 \global\let\AskInc@WriteDefAddMatch\relax
533 }%
534 }

\AskInc@AddMatch
535 \AtBeginDocument{%
536 \global\let\AskInc@AddMatch\@gobble
537 }

\AskInc@WriteAddMatch
538 \def\AskInc@WriteAddMatch#1{%
539 \AskInc@WriteDefAddMatch
540 \AskInc@WriteAux{%
541 \string\AskInc@AddMatch{#1}%
542 }{}%
543 }

\AskInc@SaveAnswer
544 \def\AskInc@SaveAnswer{%
545 \AskInc@WriteAux{%
546 \string\gdef\string\AskInc@Answer{\AskInc@Answer}%
547 }{}%
548 }

```

## 2.15 Ask for each file

```

\AskInc@PreviousAnswer
549 \@ifundefined{AskInc@PreviousAnswer}{%
550 \let\AskInc@PreviousAnswer\AskInc@CharAsterisk
551 }{}

```

\AskInc@PreviousMatchMethod

```
552 \@ifundefined{AskInc@PreviousMatchMethod}{%
553   \let\AskInc@PreviousMatchMethod\@empty
554 }{}
```

\AskInc@DoAskFile

```
555 \def\AskInc@DoAskFile#1{%
556   \edef\AskInc@File{#1}%
557   \ifx\AskInc@PreviousAnswer\AskInc@CharAsterisk
558     \let\AskInc@Default\AskInc@CharYes
559   \else
560     \let\AskInc@Default\AskInc@CharNo
561     \ifx\AskInc@PreviousAnswer\AskInc@CharMinus
562       \else
563         \ifx\AskInc@PreviousMatchMethod\@empty
564           \expandafter\@firstoftwo
565         \else
566           \expandafter\@secondoftwo
567         \fi
568         {\@for\AskInc@Temp:=\AskInc@PreviousAnswer}%
569         {\@for\AskInc@Temp:=\AskInc@MatchFiles}%
570         \do{%
571           \ifx\AskInc@Temp\AskInc@File
572             \let\AskInc@Default\AskInc@CharYes
573           \fi
574         }%
575       \fi
576     \ifx\AskInc@Default\AskInc@CharNo
577       \let\AskInc@Default\AskInc@CharYes
578       \@for\AskInc@Temp:=\AskInc@Files\do{%
579         \ifx\AskInc@Temp\AskInc@File
580           \let\AskInc@Default\AskInc@CharNo
581         \fi
582       }%
583     \fi
584   \fi
585   \let\AskInc@@QuestionHeader\AskInc@QuestionHeader
586   \AskInc@AskQuestion
587   \ifx\AskInc@AskResult\AskInc@CharYes
588     \ifx\AskInc@Answer\@empty
589       \gdef\AskInc@Answer{#1}%
590     \else
591       \g@addto@macro\AskInc@Answer{, #1}%
592     \fi
593     \AskInc@SaveAnswer
594     \let\@partlist\AskInc@Answer
595   \fi
596 }
```

\AskInc@AskQuestion

```
597 \def\AskInc@AskQuestion{%
598   \let\AskInc@Temp\answer
599   \AskInc@@QuestionHeader
600   \let\AskInc@@QuestionHeader\relax
601   \typein[\answer]{%
602     Include '\AskInc@File'? [y]es, [n]o, [A]ll, [N]one, [D]efault %
603     (\AskInc@Default):%
604   }%
```



**Bundle.** All the packages of the bundle ‘askinclude’ are also available in a TDS compliant ZIP archive. There the packages are already unpacked and the documentation files are generated. The files and directories obey the TDS standard.

**CTAN:**[install/macros/latex/contrib/askinclude.tds.zip](#)

*TDS* refers to the standard “A Directory Structure for T<sub>E</sub>X Files” (**CTAN:**[pkg/tds](#)). Directories with `texmf` in their name are usually organized this way.

## 3.2 Bundle installation

**Unpacking.** Unpack the `askinclude.tds.zip` in the TDS tree (also known as `texmf` tree) of your choice. Example (linux):

```
unzip askinclude.tds.zip -d ~/texmf
```

## 3.3 Package installation

**Unpacking.** The `.dtx` file is a self-extracting `docstrip` archive. The files are extracted by running the `.dtx` through plain T<sub>E</sub>X:

```
tex askinclude.dtx
```

**TDS.** Now the different files must be moved into the different directories in your installation TDS tree (also known as `texmf` tree):

```
askinclude.sty → tex/latex/askinclude/askinclude.sty
askinclude.pdf → doc/latex/askinclude/askinclude.pdf
askinclude.dtx → source/latex/askinclude/askinclude.dtx
```

If you have a `docstrip.cfg` that configures and enables `docstrip`’s TDS installing feature, then some files can already be in the right place, see the documentation of `docstrip`.

## 3.4 Refresh file name databases

If your T<sub>E</sub>X distribution (T<sub>E</sub>X Live, mikT<sub>E</sub>X, ...) relies on file name databases, you must refresh these. For example, T<sub>E</sub>X Live users run `texhash` or `mktextlsr`.

## 3.5 Some details for the interested

**Unpacking with L<sup>A</sup>T<sub>E</sub>X.** The `.dtx` chooses its action depending on the format:

**plain T<sub>E</sub>X:** Run `docstrip` and extract the files.

**L<sup>A</sup>T<sub>E</sub>X:** Generate the documentation.

If you insist on using L<sup>A</sup>T<sub>E</sub>X for `docstrip` (really, `docstrip` does not need L<sup>A</sup>T<sub>E</sub>X), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{askinclude.dtx}
```

Do not forget to quote the argument according to the demands of your shell.

**Generating the documentation.** You can use both the `.dtx` or the `.drv` to generate the documentation. The process can be configured by the configuration file `ltxdoc.cfg`. For instance, put this line into this file, if you want to have A4 as paper format:

```
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with pdfL<sup>A</sup>T<sub>E</sub>X:

```
pdflatex askinclude.dtx
bibtex askinclude.aux
makeindex -s gind.ist askinclude.idx
pdflatex askinclude.dtx
makeindex -s gind.ist askinclude.idx
pdflatex askinclude.dtx
```

## 4 Acknowledgement

**Tom Scavo** suggested saving the include file list from the previous run and a simplified user interface.

**Joseph Wright** suggested questions for each `\include`.

## 5 References

- [1] Robin Fairbairns. *[tex-live] licence on includeonly.sty*. 2007-10-13. URL: <https://www.tug.org/pipermail/tex-live/2007-October/014928.html> (visited on 2011-12-02).
- [2] Daniel H. Luecking and Donald Arseneau. *The excludeonly package*. 2003-03-14. URL: <https://ctan.org/pkg/excludeonly> (visited on 2011-12-02).
- [3] Herbert Voß. *askinclude.sty*. Thread in newsgroup `comp.text.tex`; Message-ID: `fev72m$b35$02$2@news.t-online.com`. 2007-10-15. URL: [https://groups.google.com/group/comp.text.tex/browse\\_thread/thread/728a3e73c04c6789/349e31865c40d00c](https://groups.google.com/group/comp.text.tex/browse_thread/thread/728a3e73c04c6789/349e31865c40d00c) (visited on 2011-12-02).

## 6 History

[1991/11/05 v0.95]

- First beta-test version (asked two questions).

[1991/11/05 v0.99]

- Second beta-test version (asks one question; uses ‘\*’ and ‘-’).

[1991/11/07 v1.0]

- Changed prompts (sent to `comp.text.tex`): “Interactive inclusion of files in L<sup>A</sup>T<sub>E</sub>X”<sup>2</sup>

[1991/12/13 v1.1]

- *Unknown*.

---

<sup>2</sup>Url: <https://groups.google.com/group/comp.text.tex/msg/34b770a7c277e79c>

[1994/11/02 v1.2e]

- Two small changes to run under LaTeX2e [RF].
- Additional documentation [TRS].

[2007/10/15 v1.0 (askinc)]

- Reimplementation, published as `askinc` in newsgroup `comp.text.tex`:  
“[Re: askinclude.sty](#)”<sup>3</sup>
- Listing of included files, collected from the previous run before the question.
- No error message by `.aux` file if package is removed.

[2007/10/23 v2.0]

- The next version of `askinc` becomes version 2.0 of `askinclude`.
- ‘?’ added for questioning each file.
- `\includeonly` has precedence until package loading. Then it is disabled by a warning.
- Documentation rewritten/added.
- Tests added.

[2008/08/11 v2.1]

- Code is not changed.
- URLs updated.

[2011/12/02 v2.2]

- Bibliography rewritten for biblatex.

[2016/05/14 v2.3]

- LuaTeX compatibility

[2018/11/01 v2.4]

- Remove `luatex85` package dependency

[2019/12/09 v2.5]

- Documentation updates.

---

<sup>3</sup>Url: <https://groups.google.com/group/comp.text.tex/msg/2d638b84a858fdc8>



## 7 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                 |  |  |
|-------------------------|--|--|
| \!                      | 361  | \AskInc@Answer . . . . . 130, 141, 142, 143, 238, 240, 242, 273, 277, 284, 318, 397, 407, 412, 423, 436, 546, 588, 589, 591, 594 |
| \\$                     | 226, 363   | \AskInc@AskFile . . . . . <u>118</u> , 122, 409  |
| \(                      | 219, 364   | \AskInc@AskQuestion . . . . . 586, <u>597</u>  |
| \)                      | 220, 365   | \AskInc@AskResult . . . . . 587, 606, 608, 609, 612, 615, 618, 620, 623, 625, 628, 630, 634                                      |
| \*                      | 221, 357   | \AskInc@AtBeginDocument . . . . . <u>60</u> , 65   |
| \+                      | 222, 366   | \AskInc@AtEnd . . . . . 29, 30, 51, 165, 647   |
| \,                      | 360  | \AskInc@CharAll . . . . . <u>211</u> , 618   |
| \-                      | 358  | \AskInc@CharAsterisk . . . . . 204, 238, 273, 413, 550, 557  |
| \.                      | 229, 372   | \AskInc@CharDefault . . . . . <u>213</u> , 628   |
| \:                      | 371  | \AskInc@CharExclam . . . . . 208, 483  |
| \?                      | 223, 359   | \AskInc@CharHash <u>72</u> , 76, 78, 80, 87, 89  |
| \@empty                 | 80, 142, 145, 158, 201, 232, 244, 253, 257, 268, 269, 279, 295, 311, 323, 380, 393, 396, 407, 408, 414, 417, 421, 441, 479, 506, 514, 553, 563, 588, 608 | \AskInc@CharMinus . . . . . 205, 276, 277, 416, 561  |
| \@firstofone            | 61, 462, 473   | \AskInc@CharNo . . . . . <u>210</u> , 560, 576, 580, 615, 625  |
| \@firstoftwo            | 280, 564   | \AskInc@CharNone . . . . . <u>212</u> , 623  |
| \@for                   | 272, 284, 285, 568, 569, 578   | \AskInc@CharPlus . . . . . <u>206</u> , 274, 288, 294  |
| \@gobble                | 107, 118, 119, 462, 475, 536   | \AskInc@CharQuestion . . . . . <u>207</u> , 406  |
| \@ifundefined           | 128, 133, 156, 237, 243, 247, 256, 549, 552  | \AskInc@CharYes . . . . . 209, 558, 572, 577, 587, 612, 620  |
| \@includeonly           | <u>140</u>   | \AskInc@CheckMatch . . . . . 471, <u>478</u>   |
| \@mainaux               | 67   | \AskInc@Default . . . . . 558, 560, 572, 576, 577, 580, 603, 609, 630  |
| \@makeother             | 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372   | \AskInc@DoAskFile . . . . . 409, <u>555</u>  |
| \@nil                   | 479, 481   | \AskInc@DoInclude . . . . . 432  |
| \@partlist              | 441, 442, 444, 594   | \AskInc@DoMatch . . . . . 439, <u>457</u> , <u>468</u>   |
| \@secondoftwo           | 282, 566   | \AskInc@File . . . . . 272, 287, 293, 296, 300, 556, 571, 579, 602   |
| \@spaces                | 293, 318, 338, 344, 346, 347, 348, 374   | \AskInc@Files . . . . . 100, <u>115</u> , 269, 272, 578  |
| \@undefined             | 54, 76, 453, 464, 523  | \AskInc@FilterPattern . . . . . 508, <u>510</u>  |
| \[                      | 217, 367   | \AskInc@Foundfalse . . . . . 469, 486  |
| \\                      | 216, 369   | \AskInc@Foundtrue . . . . . 493  |
| \{                      | 227  | \AskInc@Include . . . . . 432  |
| \}                      | 228  | \AskInc@InvalidPattern . . . . . 488, 495, <u>499</u>  |
| \]                      | 218, 368   | \AskInc@MainAnswer . . . . . 399, <u>405</u>   |
| \^                      | 225, 362   | \AskInc@MainQuestion . . . . . <u>350</u> , 646  |
| \                       | 224, 370   | \AskInc@MakeMatchInit . . . . . 449, <u>455</u>  |
| A                       |  | \AskInc@Mark . . . . . 274, 276, 288, 293, 294   |
| \answer                 | 373, 376, 598, 601, 606, 607   | \AskInc@MatchFile . . . . . <u>119</u> , 123, <u>438</u>   |
| \AskInc@@Answer         | 376, 379, 382, 385, 396, 397, 406, 412, 413, 416   | \AskInc@MatchFiles . . . . . 161, 257, 285, 529, 569   |
| \AskInc@@CheckMatch     | 479, <u>481</u>  | \AskInc@MatchInit . . . . . 426, <u>434</u>  |
| \AskInc@@QuestionHeader | 585, 599, 600  | \AskInc@MatchList . . . . . 437, 461, 471, 505, 508, 514, 515, 517   |
| \AskInc@AddFile         | <u>99</u> , <u>106</u> , 112   |  |
| \AskInc@AddList         | <u>75</u> , 100, 529   |  |
| \AskInc@AddMatch        | <u>528</u> , <u>535</u> , 541  |  |

|                               |  |
|-------------------------------|--|
| \AskInc@MatchMethod           | 135,<br>145, 158, 244, 246, 248, 279,<br>311, 314, 408, 414, 417, 420, 448   |
| \AskInc@MatchOption           | 186, 190, 201, 248, 250, 253,<br>338, 380, 383, 387, 393, 420, 421   |
| \AskInc@Next                  | 378,<br>399, 403, 610, 613, 616, 640, 644  |
| \AskInc@OrgInclude            | 116, 124   |
| \AskInc@OrgIncludeOnly        | 167, 410, 418, 422, 427  |
| \AskInc@Pattern               | 511, 512, 515, 518   |
| \AskInc@PdfMatchAvailabletrue | 183  |
| \AskInc@PdfMatchInit          | 451, 466   |
| \AskInc@PreviousAnswer        | 242, 549, 557, 561, 568  |
| \AskInc@PreviousMatches       | 268, 295, 296, 299   |
| \AskInc@PreviousMatchMethod   | 246, 552, 563  |
| \AskInc@QuestionHeader        | 260, 351, 585  |
| \AskInc@SanitizeAnswer        | 214, 240, 376  |
| \AskInc@SaveAnswer            | 544, 593   |
| \AskInc@StringMakeMatch       | 177, 186, 326, 382, 383, 448   |
| \AskInc@StringNoRegExp        | 176, 379   |
| \AskInc@StringPdfMatch        | 178, 190, 250, 330, 385, 387   |
| \AskInc@Temp                  | 284,<br>285, 287, 458, 459, 461, 462,<br>482, 483, 500, 502, 504, 512,<br>568, 569, 571, 578, 579, 598, 607  |
| \AskInc@TimeoutFiles          | 267, 352   |
| \AskInc@TimeoutMainQuestion   | 342, 355   |
| \AskInc@TimeoutMatchMethod    | 321, 354   |
| \AskInc@TimeoutMethod         | 323, 326, 330, 336   |
| \AskInc@TimeoutPreviousAnswer | 308, 353   |
| \AskInc@WriteAddFile          | 109, 121   |
| \AskInc@WriteAddMatch         | 440, 538   |
| \AskInc@WriteAux              | 64, 74,<br>98, 111, 129, 134, 160, 527, 540, 545   |
| \AskInc@WriteDefAddFile       | 96, 110  |
| \AskInc@WriteDefAddList       | 73, 97, 526  |
| \AskInc@WriteDefAddMatch      | 525, 539   |
| \AtBeginDocument              | 60, 63, 106, 127, 236, 535, 646  |
| \AtEndOfPackage               | 126  |
| <b>C</b>                      |  |
| \catcode                      | 3,<br>4, 6, 7, 8, 12, 13, 14, 15, 16, 17,<br>18, 21, 22, 24, 25, 26, 27, 31, 33  |
| \comma@list                   | 437  |
| \comma@normalize              | 436  |
| \comma@parse@normalized       | 470, 507   |
| \csname                       | 10, 181  |
| <b>D</b>                      |  |
| \DeclareOption                | 152, 153, 154, 185, 189, 193, 200  |
| \do                           | 272, 286, 570, 578   |
| <b>E</b>                      |  |
| \endcsname                    | 10, 181  |
| \endinput                     | 51   |
| \endlinechar                  | 5, 11, 23  |
| \escapechar                   | 216  |
| <b>G</b>                      |  |
| \g@addto@macro                | 89, 298, 444, 517, 591   |
| \gdef                         | 87, 130, 135, 141, 143,<br>161, 442, 546, 589, 619, 624, 629   |
| <b>I</b>                      |  |
| \if@filesw                    | 66   |
| \if@partsw                    | 147  |
| \ifAskInc@Found               | 467, 472   |
| \ifAskInc@PdfMatchAvailable   | 179, 188, 251, 329, 386  |
| \ifcase                       | 76, 484, 491   |
| \ifx                          | 54, 76, 78, 80, 142, 158, 181,<br>250, 269, 273, 277, 279, 287,<br>294, 295, 311, 338, 379, 382,<br>385, 396, 406, 413, 416, 421,<br>441, 448, 483, 512, 514, 557,<br>561, 563, 571, 576, 579, 587,<br>588, 608, 612, 615, 618, 623, 628 |
| \immediate                    | 67   |
| \include                      | 117, 120, 271  |
| \includeonly                  | 149, 168, 169  |
| <b>M</b>                      |  |
| \MakeMatcher                  | 459  |
| \MessageBreak                 | 149, 172, 195, 390, 634  |
| <b>N</b>                      |  |
| \NeedsTeXFormat               | 2  |
| \newcommand                   | 116, 167   |
| \newif                        | 179, 467   |
| \numexpr                      | 55   |
| <b>O</b>                      |  |
| \outputmode                   | 58   |
| <b>P</b>                      |  |
| \PackageWarning               | 170, 389   |
| \PackageWarningNoLine         | 148, 194, 501, 633   |
| \pdfextension                 | 54, 56, 57   |
| \pdffeedback                  | 55   |
| \pdflastobj                   | 55   |
| \pdfmatch                     | 196, 331, 391, 484, 491, 502   |
| \pdfnames                     | 56   |
| \pdfobj                       | 57   |
| \pdfoutput                    | 58   |
| \ProcessOptions               | 155, 203   |
| \protected                    | 55, 56, 57   |
| \providecommand               | 63, 75, 99, 115, 140, 528  |

|                                     |  |                               |                                   |
|-------------------------------------|--|-------------------------------|-----------------------------------|
| <code>\ProvidesPackage</code> ..... | 52                                     | <code>\typein</code> .....    | 373, 601                          |
| <b>R</b>                            |  | <code>\typeout</code> .....   | 261, 262,                         |
| <code>\renewcommand</code> .....    | 120, 169                               |                               | 263, 264, 265, 271, 293, 305,     |
| <code>\RequirePackage</code> .....  | 435, 456                               |                               | 309, 318, 319, 322, 334, 337,     |
|                                     |  |                               | 343, 344, 346, 347, 348, 375, 605 |
| <b>S</b>                            |  | <b>W</b>                      |                                   |
| <code>\space</code> .....           | 149,                                   | <code>\write</code> .....     | 67                                |
|                                     | 171, 232, 324, 331, 338, 344, 374      |                               |                                   |
| <b>T</b>                            |  | <b>X</b>                      |                                   |
| <code>\the</code> ...               | 11, 12, 13, 14, 15, 16, 17, 18, 31     | <code>\x</code> .....         | 9, 21                             |
| <code>\TMP@EnsureCode</code> .....  |  |                               |                                   |
|                                     | 28, 35, 36, 37, 38, 39, 40,            | <b>Z</b>                      |                                   |
|                                     | 41, 42, 43, 44, 45, 46, 47, 48, 49, 50 | <code>\zap@space</code> ..... | 231                               |