The `csvsimple` package

Manual for version 2.6.1 (2024/05/16)

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https://www.ctan.org/pkg/csvsimple

https://github.com/T-F-S/csvsimple

Abstract

csvsimple provides a simple LATEX interface for the processing of files with comma separated values (CSV). csvsimple relies heavily on a key value syntax which results in an easy way of usage. Filtering and table generation is especially supported. Since the package is considered as a lightweight tool, there is no support for data sorting or data base storage.

1 Package Options

csvsimple is a stub which merely selects to load exclusively one of the following packages:

- «The `csvsimple-l3` package»:
  This is the pure LATEX3 version of csvsimple. It is considered to be the *current* version. New documents are encouraged to use this package.

  csvsimple-l3 is loaded with *one* of the following alternatives inside the preamble:

  ```
  \usepackage[l3]{csvsimple}
     % or alternatively (not simultaneously!)
  \usepackage{csvsimple-l3}
  ```

- «The `csvsimple-legacy` package»:
  This is the LATEX 2ε version of csvsimple. It is considered to be the *superseded* version identical to version 1.22 of csvsimple. Documents based on that former version do *not have to be changed* and stay compilable in future.

  csvsimple-legacy is loaded with *one* of the following alternatives inside the preamble:

  ```
  \usepackage{csvsimple}
     % or alternatively (not simultaneously!)
  \usepackage[legacy]{csvsimple}
     % or alternatively (not simultaneously!)
  \usepackage{csvsimple-legacy}
  ```

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2 Differences between `csvsimple-l3` and `csvsimple-legacy`

This section is intended for users who know `csvsimple` before version 2.00.

`csvsimple-l3` is a *nearly* drop-in replacement for `csvsimple-legacy`. Although old documents have no *need* to be changed, adopting the new LaTeX3 version for existing documents should impose not too much effort. Actually, it depends on how intense `pgfkeys` specific styles were used.

That brings us to the differences between the two packages and a more precise understanding what *nearly* drop-in replacement means. The following enumeration does not list new features of `csvsimple-l3` (if any), but takes an upgrade point of view.

- Any patches or additions using undocumented internals of `csvsimple-legacy` will stop to function, because `csvsimple-l3` has a completely implementation.

- `csvsimple-l3` is programmed in `expl3` code using the LaTeX3 interfaces. No additional packages are loaded or needed with exception of several options which allow to access methods from `ifthen`, `etoolbox`, `longtable`, etc. On the other hand, `csvsimple-legacy` is programmed in LaTeX 2_ε with dirty tricks from here and there.

- The most significant change of the user interface is that the key value engine of `csvsimple-legacy` is `pgfkeys` (root **/csv/**) while `csvsimple-l3` uses `l3keys` (root **/csvsim/**). Names and usage of the keys are *unchanged*. But, if you made own `pgfkeys` *styles* using the `pgfkeys` style handler, these *styles* have to be adapted to `.meta` keys of `l3keys`. The good news is that styles made with **\csvstyle** become `.meta` keys automatically.

- The macro **\csvheadset** is removed. It is not supportable by the new implementation. I never used it and I forgot why I ever wrote it – I hope the same is true for you. If not, `csvsimple-legacy` can be used for documents which needs it.

- Option **/csv/filter** is removed. Instead, **/csvsim/filter ifthen** can be used (also true with **/csv/filter ifthen** for the old version).

- The deprecated options **/csv/nofilter** and **/csv/nohead** are removed. They were not documented any more since years. Obviously, use **/csvsim/no filter** and **/csvsim/no head** instead.

- Compilation problems are to be expected, if an `S` column of the `siunitx` package is used as first or last column. Documents neglecting this rule successfully for `csvsimple-legacy`, may fail to compile with `csvsimple-l3`.

- The LaTeX counters **csvinputline** and **csvrow** are replaced by LaTeX3 integers **g_csvsim_inputline_int** and **g_csvsim_row_int**, but accessors **\thecsvinputline** and **\thecsvrow** are still valid.

- The packages `pgfrcs`, `pgfkeys`, `ifthen`, `etoolbox`, and `shellesc` are not included anymore (include manually, if needed).

- **\csviffirstrow** and **\csvifoddrow** are deprecated and replaced by **\ifcsvfirstrow** **\ifcsvoddrow** which are more consistent in nomenclature.

- For `csvsimple-l3`, data lines are allowed to begin with an backslash.

- Assigned macros like `\myname` for e.g. the third column contain not `\csvcoliii` anymore, but are equal to the content of `\csvcoliii` now.

- Character code changes with **/csvsim/respect percent** etc. and the tabulator as separator should work for `csvsimple-l3` as expected in every situation (not always worked

for `csvsimple-legacy`).

- A drawback of `csvsimple-l3` against `csvsimple-legacy` is a higher compilation time. This may vary by used compiler. An example document of 5061 pages using a CSV file with 166 992 lines took about 28 seconds with `csvsimple-legacy` and about 51 seconds with `csvsimple-l3` on my machine (just a singular observation, no scientific analysis at all).