The csvsimple package

Manual for version 2.7.0 (2024/09/27)

Thomas F. Sturm[1]

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 2_ε 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 It is considered to be the *superseded* version identical to version 1.22 of csvsimple.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}
```

[1]Prof. Dr. Dr. Thomas F. Sturm, Institut für Mathematik und Informatik, University of the Bundeswehr Munich, D-85577 Neubiberg, Germany; email: thomas.sturm@unibw.de

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).