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[13]{csvsimple}
  % or alternatively (not simultaneously!)
  \usepackage{csvsimple-13}

- «The csvsimple-legacy package»:
  This is the LATEX2ε 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 It is considered to be the superseded version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}
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 \texttt{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 \texttt{ifthen}, \texttt{etoolbox}, \texttt{longtable}, etc. On the other hand, csvsimple-legacy is programmed in \LaTeX2ε 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 \texttt{pgfkeys} (root \texttt{/csv/}) while csvsimple-l3 uses \texttt{l3keys} (root \texttt{/csvsim/}). Names and usage of the keys are unchanged. But, if you made own \texttt{pgfkeys} styles using the \texttt{pgfkeys} style handler, these styles have to be adapted to \texttt{.meta} keys of \texttt{l3keys}. The good news is that styles made with \texttt{\csvstyle} become \texttt{.meta} keys automatically.
- The macro \texttt{\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 \texttt{/csv/filter} is removed. Instead, \texttt{/csvsim/filter ifthen} can be used (also true with \texttt{/csv/filter ifthen} for the old version).
- The deprecated options \texttt{/csv/nofilter} and \texttt{/csv/nohead} are removed. They were not documented any more since years. Obviously, use \texttt{/csvsim/no filter} and \texttt{/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 \texttt{csvinputline} and \texttt{csvrow} are replaced by \LaTeX3 integers \texttt{g_csvsim_inputline_int} and \texttt{g_csvsim_row_int}, but accessors \texttt{\thescsvinputline} and \texttt{\thescsvrow} are still valid.
- The packages \texttt{pgfrcs}, \texttt{pgfkeys}, \texttt{ifthen}, \texttt{etoolbox}, and \texttt{shellesc} are not included anymore (include manually, if needed).
- \texttt{\csviffirstrow} and \texttt{\csvifoddrow} are deprecated and replaced by \texttt{\ifcsvfirstrow} \texttt{\ifcsvoddrow} which are more consistent in nomenclature.
- For csvsimple-l3, data lines are allowed to begin with an backslash.
- Assigned macros like \texttt{\myname} for e.g. the third column contain not \texttt{\csvcoliii} anymore, but are equal to the content of \texttt{\csvcoliii} now.
- Character code changes with \texttt{/csvsim/respect percent} etc. and the tabulator as separator should work for csvsimple-l3 as expected in every situation (not always worked
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).