Documentation for csvtolatex version 1.3

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Contents

1 foreword

1.1 What is csvtolatex

csvtolatex is a program that links spreadsheet-program like MS Excel, Libre Office Calc or Open Office Calc with LaTeX. You might have the problem, that there is steadily a change in your table. Perhaps you measurment-table where your calculations may change. For this this program is designed.

1.2 What is csvtolatex not

This program is not for learning how to create tables in LaTeX nor it is a shortcut to create tables in LaTeX . You will need the knowledge how to create a table in LaTeX to write properly the commands in the spreadsheetprogram and to set the enviroment for the table right.

1.3 license

This program is under GPLv3, if you are using it, you accept the licence. The full text you can read in Licence.txt.

1.4 updates

For updates please visit ctan or sourceforge. Please read section 4 at page 4.

Since version 1.1b the srcipt is no longer supported nor there will be updates.

2 how to use

To make sure, that no LaTeX commands interfere with this script I decided to use a slash / for commands, not the backslash \ like LaTeX uses it.

Since version 1.1 there is also an windows-installer that allows you to use configuration files with the extension .ctl but you can also use the script file.

2.1 script or program?

Since version 1.1b there is no support for the script, please use the program.

If you are using just one system for you LaTeX project, there is no difference in weather using the script or the program.
But if you are using multiple systems there will be different project-paths so I recommend to use the program, because you can use relative-paths for your input-file and your output-files this makes life easier.

information: A configuration-file is nothing other than a normal text-file with .ctl as extension. *.ctl-files are associated with the program.

2.2 the table

First of all you have to create your table. And there are some reglementations if you want to use csvtolatex. Also there are additional commands. Please be aware that this script is tested for `longtable` enviroment.

2.2.1 Basic commands

- Every table that should be converted for the usage in LATEX begins with /begin{. This command defines the output-filename of the table. Attention: this script will not check weather a filename is already used or not. Here is an example /begin{outfile1.csv}.

- Every line of a table ends with //

- Every table ends with /end

2.2.2 Additional commands

- You can use /multicolumn{ like you use \multicolumn{ in LATEX . But this command has to be written in the cell of the row, where the \multicolumn{ starts. Please be aware, that there is no support for math- or textmode when using /multicolumn{. The syntax stays the same as in LATEX exept the slash.

- Like /multicolumn{ you can use /multirow{ with the same rules. There is no math- or textmode support as well.

- Since tables may have some special shapes you can use /cline{ or \cline{ after the double slash. There is also the possibility to have more than one /cline{ or \cline{ in one line, but all commands have to be in the same cell as the double slash for linebreak. Example: // \cline{2-3} /cline{5-7}

- You can write /hline in the same cell as the double-backslash (//) to make a double \hline after this row, this may be useful to separate the head from the rest of the table.

- There may be some problems when using /multirow{ or /multicolumn{. If there is a cell too much use /blank to remove the cell.

- Since a csv-table uses semicola ; as cell seperator you cannot use a simple semicolon in your text. Use /., to have a semicolon in your text.

- Since this script is supports the `longtable`-enviroment (other enviroments are also supported) you can define the head of the table with /endhead. /endhead has to be written in the same cell as the linebreak (//) after it. Example: // /endhead

2.3 the configuration-file

If you decided to use the program life will be easier.
There are just four keywords! The order of these keywords does not matter at all.

input= defines the input-path and the input-csv

output= defines the output-path if necessary

mode= defines weather it should be the mathmode or textmode

options= defines options

A configuration-file is a text-file with the extension .ctl which is associated with csvtolatex. You can also use configcreator-ctl.vbs to create a configuration file.

2.3.1 input

`input=` is necessary for conversion but you have two options:

1. You can use the full path. Example: `input=C:\Users\documents\input.csv`

2. You use a relative path to the configuration-file: Example: `input=\tables\input.csv`
   This is the best version since it will be properly read on every PC you are using.

2.3.2 output

`output=` is optional You have three options:

1. If the converted files should be in the same folder as the input-file (input.csv) you can leave this out.

2. If the converted files should be in an other folder as the input-file (input.csv) you can use a relative path
   a) to your input-file folder using `output=`. Example: `output=\outtables\`
   b) to your config-file folder using `output=config=`. Example: `output=config=\outtables\`

3. You can also use the full path.

2.3.3 mode

`mode=` is optional. You have three options:

1. leave it out for mathmode

2. write `mode=math` for mathmode

3. or write `mode=text` for textmode

2.3.4 options

`options=` is optional. There is two options possible for now:

1. leave it out, to have at the end of every line an `\hline`

2. write `options=nolines` to have no lines between rows and columns

2.4 comma/point replacement

With csvtolatex you can easily replace the decimal dividers. You can choose:

1. leave it out: there will be no replacement

2. write `commatopoint` and the program will replace all commas to points

3. write `pointtocomma` and the program will replace all points to commas

2.5 the LaTeX input

There is a simplified LaTeX input since Version 1.0.

To have LaTeX display your table converted by csvtolatex use the following LaTeX-Code:

```
\begin{longtable}{|c|c|c|c|c|c|c|c|c|c|c|}
\input{tables/output1.csv}
\end{longtable}
```

Of course you have to customize
`\input{tables/output1.csv}`
to your own projectpath and projectoutputfilename. And
`\begin{longtable}{|c|c|c|c|c|c|c|c|c|c|c|}`
to the number of the columns used in your table. Since version 1.2 you can see a suggetion and the number of columns in the outpufile.

3 configcreator-ctl

This script is written for simple creation of configuration files.

Just start this script (using the link in the startmenu) follow the instructions given in this script and the rules given in section 2.3 on page (2.3).

4 information

Since I know the limits of using csv-tables for conversion I am working on tabs4latex, that uses html-files as inputfiles. This program will be written in C# and there will be a linux version too. There is another project of mine, called htmltabstolatex, which will do the same as tabs4latex but is written in java. If you are interested in working with me on this project, send an e-mail to tabs4latex@t-online.de.

So I do not have the time to work for both projects I will not force new features for csvtolatex, some minor stuff will be added. If there are bugs or incompabilities send me an e-mail to csvtolatex@t-online.de and I will try to make it better. Maybe someone is interested in updating this script/program. If you want this please tell me.

4.1 the script-file

The script is no longer supported (since version 1.1) so please use the program.

If you are using the program you can leave this section out.

In this section you learn how to adapt the script for your project. You can use every texteditor (e.g. notepad++) for adaption.

Please read also the comments given in the script file.

4.1.1 Inputfile

First of all you define the inputfile. For that you customize the following line:

```
9 Const iPath = "C:\users\documents\inpufile.csv"
```

This is line 9 and here you have to write your own path to the inputfile including the inputfile name, like the example shows. It is important, that all " remain where they are and that there are no unnecessary blank spaces.

4.1.2 Outputpath

At line 10 you define your output*path*.

```
13 Const ePfad = "C:\users\documents\tables\"
```

4.1.3 outputfiles

Since Version 1.1 there is no output*file* definition in the script-file necessary.

4.1.4 math- or textmode

You have the opportunity to choose between text- or mathmode. That means weather all cells are in mathmode (e.g. $ 1 - 3 = 4 $) or textmode (e.g. text). To do this write "$" for mathmode or "" for textmode at line 19:

```
19 Const mode = "$"
```

5 used program

Notepad++ Editing the script, my configuration File, the README

LaTeX writing the documentation, and testing the script/program

Microsoft Visual Studio 2010 writing and compiling the program

Venis IX Creation of the NSIS script

NSIS creation of the installer

7-zip creation and updating the .zip-files

6 README

```
 1 This is the README for csvtolatex Version 1.3 for everything that referes to this program send an e-
       mail to csvtolatex@t-online.de.
 2
 3 Every one who uses this program agrees with the License you find in License.txt.
 4
 5 csvtolatex converts csv-tables created by program like MS Excel or Libre Office Calc to LaTeX code.
 6
 7 This program is simple but stable. It is a fast way to link spreadsheet-program with LaTeX.
 8
 9 See the documentation for further information.
10
11 INFORMATION:
```

```
12  I am supporting this program, but since I want to create a program to do this job much better I am
        searching for someone who wants to keep this program going. If there are Bugs send an e-mail to
        csvtolatex@t-online.de.
13
14  Changelog:
15
16  Version 1.3:    2013-04-22
17      - now the replacement of comma to point and point to comma is implemented
18      Bugfix: If there was /blank in the first column of the input, it was still in the outputfile
19
20  Version 1.2b:   2013-04-18
21      - gives the option >nolines< to have no lines between the rows and columns
22
23  Version 1.2:    2012-11-22
24      - writes the number of columns in outputfile
25      - gives a suggestion for the columns of the table
26
27  Version 1.1b:   2012-08-30
28      - no more features but now the uninstaller removes all registry keys
29
30  Version 1.1:    2012-07-05
31      - now there is a program you can use (the installer) with configuration-files (text-files with
            the extension .ctl)
32      - I have added '/.,' to set a semicolon (';')
33      - improved mutlifileoutput, now the outputfilenames are defined in the csv-file
34      - last version of the script
35
36
37  Version 1.0:    2012-06-21
38      - no need for catcode! direct input to a LaTeX-file using '\input' in a 'longtable'-enviroment
39      - switching between math- and textmode
40      - with '/endhead' you can define the head of a table
41      - multicolumn support
42      - multirow support
43      - cline support
44      - '/blank' for blank cells
45
46
47  Version 0.3:    first public release    2012-06-09
48  I have recreated this scipt and made some things much simpler
49      - easier defining of input and outputfiles
50      - special replacements removed
51      - improved multifileoutput
52      - support for tables with a different number of columns
53
54
55  Version 0.2:    improved for personal usage
56      - added special replacements
57      - support of multifileoutput
58
59
60  Version 0.1:    first personal usage
61  I have found a really simple Version of this scipt after some research. Unfortunatly I have not
        found the source again, so thanks to the one who showed me this way.
```