

# CSV DOCTOR



Version 1.5.1

# MANUAL

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MOUNTAIN UTILITIES



<https://mountainutilities.eu/>

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# 1. Overview

CSV Doctor is an editor for CSV files. It has powerful tools for correcting cell alignment after a bungled export operation in a database or spreadsheet application.

Backstory: CSV Doctor was developed for a scholar who had been denied direct access to a database at an archaeological institute, and therefore had to make do with ‘flat’ query results obtained via the institute’s web site. However, in these query results the fields were separated by commas, and not encapsulated. So a comma could represent either a field delimiter or an actual comma inside a text field. Hence, the table (containing about 17,000 records!) had to be cleaned up ‘manually’.

CSV Doctor is only available for Windows. (A private Linux edition exists and may be published one day. There are no plans for a macOS edition.)

CSV Doctor is free, although donations are very welcome.

## 2. Version history

### Version 1.5.1 (2020-11-17)

- The application has become more user-friendly concerning data errors in ‘.stp’ and ‘.mru’ configuration files:
  - On startup, when the application encounters a data error in a configuration file, the application now mentions the exact name of the offending file, and no longer refuses to start. Hence it is no longer necessary to delete corrupt configuration files manually.
  - On exit, the application reports any errors while saving configuration files.
- The update check mechanism works again on Windows versions supporting TLS 1.2 but not TLS 1.3, i.e. Windows 7, Windows 8 and pre-TLS 1.3 Windows 10. (Windows XP and Vista (which don’t even support TLS 1.2) were not hit by this problem, and still work too.)

### Version 1.5.0 (2020-09-14)

- New: this manual.
- The update check mechanism should now work again on any operating system capable of running the application, including Windows XP.
- The installer allows you to deselect non-essential files: the manual and the skin definitions.
- Increased the application’s running speed by disabling some debugging safeguards. (From now on, this will apply to all Release Candidate and Release versions.)
- Skins: 39 alternative user interfaces, mainly color schemes.
- Full support for the ‘Per Monitor v2’ DPI awareness protocol introduced in Windows 10 Creators Update 1703: at high DPI settings all text characters look razor-sharp instead of blurry, and the resolution of each window automatically adapts to the monitor on which it is (mainly) being shown.
- To always show the *full* application title on the main window’s title bar, the width of the main window now takes the minimize, maximize and close buttons into account. This is especially relevant to Windows 10: its huge buttons previously caused the application title to be truncated.
- The layout of the ‘General options’ dialog box has been changed: it now contains tabsheets instead of groupboxes.

### Version 1.4.0 Alpha 1 (2018-06-14)

- The installer automatically installs the edition of CSV Doctor matching the operating system: the 32-bit edition on 32-bit Windows, the 64-bit edition on 64-bit Windows. (Previously there was only a 32-bit edition, which was installed on 32- and 64-bit Windows alike.)
- The CSV Doctor update mechanism allows you to specify in which update types you are interested: alpha (development) versions, (‘public’) beta versions, release candidates and release versions.

### Version 1.3.0 (2016-03-26)

- If a previous version of the application has been installed, the installer skips the dialog box in which you can set the destination folder and the dialog box in which you can set the program group in the Windows menu. (So if you wish to install to a different folder or program group, you must uninstall the previous version first.)
- You can sanitize the lists of most-recently opened/saved files in the menus via two operations: ‘Remove absent files from list’ and ‘Clear list’.
- In the ‘Window list’ dialog box you can make all windows visible in one operation.
- CSV Doctor uses the new Mountain Utilities web site in links and its update mechanism.
- The Donate item in the main window’s Help pull-down menu no longer opens a dialog box, but

makes your web browser open the Donate page at the Mountain Utilities web site.

**Version 1.2.1 (2013-01-18)**

In this version the user interface has been improved in several ways.

**Version 1.2.0 (2011-01-12)**

**Version 1.0.0 (2010-09-23)**

**Version 0.1.3 (2010-02-27)**

First published version.

### 3. Computer requirements

To run CSV Doctor, your computer must comply with the following requirements:

- Processor: Any Intel 80486- or Pentium-compatible CPU. Processor speed is relatively unimportant. The number of cores is irrelevant, since CSV Doctor only uses one core.
- Operating system: Windows 2000 or later (XP, Vista, 7, 8, 10 etc.).
- An SVGA-compatible graphical card and monitor:
  - The screen size should be at least  $800 \times 600$  pixels. (However, some of the bigger windows and dialog boxes may be cut off if the screen is too narrow, so  $1024 \times 768$  is the *practical* minimum.)
  - For best results, the color depth should be at least 16 bits. (At a depth of only 256 colors, some colors aren't rendered as intended.)
- A mouse.
- Free hard disk space: about 10 MiB.
- RAM: when running, CSV Doctor normally occupies roughly 6 MiB.

## 4. Installation of CSV Doctor

Three editions of CSV Doctor are available: an installer, a 32-bit portable edition and a 64-bit portable edition:

Installer:

1. Download [csvdr-a.b.c-install.exe](#) (where *a.b.c* stands for the actual version number) to your computer from the CSV Doctor page at the Mountain Utilities web site (<https://mountainutilities.eu/csvdoctor>).
2. Run [csvdr-a.b.c-install.exe](#) and follow its instructions. The installer automatically installs the edition of the actual application ([CsvDr.exe](#)) that matches the operating system: the 32-bit edition on a 32-bit Windows system, the 64-bit edition on a 64-bit Windows system.

Note: the installation includes an uninstaller. It can be run from the Windows start menu via Programs → Mountain Utilities → CSV Doctor, or via Settings → Control Panel → ‘Add or Remove Programs’ (Windows XP) or ‘Programs and Features’ (Windows Vista and later).

Note that when you install a new version of CSV Doctor, you do *not* have to uninstall any previously installed version first: the old version will be replaced with the new version automatically.

Portable (32- or 64-bit):

1. Download [csvdr-a.b.c-xnn-portable.zip](#) (where *a.b.c* stands for the actual version number and *xnn* is ‘x64’ or ‘x86’) to your computer from the CSV Doctor page at the Mountain Utilities web site (<https://mountainutilities.eu/csvdoctor>). The ‘x64’ (64-bit) edition only runs on 64-bit Windows, the ‘x86’ (32-bit) edition on 32- and 64-bit Windows.
2. Unzip [csvdr-a.b.c-xnn-portable.zip](#) completely (maintaining the zip file’s tree structure) to any folder to which CSV Doctor itself ([CsvDr.exe](#)) will have write-access (which is necessary for its configuration files). Crucially, in Windows Vista and later you should *not* unzip to a subfolder of [C:\Program Files](#) or [C:\Program Files \(x86\)](#), since these folders are subject to Windows’ UAC (User Access Control), which means that CSV Doctor would *not* have write-access.

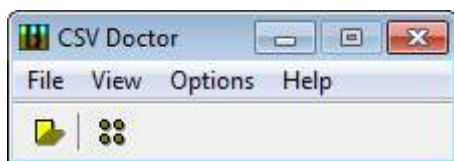
### Running CSV Doctor itself

After installation, you can start CSV Doctor ([CsvDr.exe](#)) itself, e.g. via the Windows start menu.

If you have never run CSV Doctor (in any version) from the installed operating system before, the program notifies you that it can’t find your configuration. This is normal: the program saves its configuration file ([CsvDr.ini](#)) whenever the program *terminates*, so obviously this configuration file doesn’t exist yet when you start the program for the very first time. The program also notifies you if the configuration file does exist but belongs to a previous version; all existing settings are retained.

## 5. The main window

CSV Doctor's main window only consists of a pull-down menu and a toolbar:



The toolbar merely contains two buttons, which duplicate the File → CSV file → Open and Options → General operations from the menu.

The menu provides the following operations:

File → CSV file → New:

Opens a new CSV table window. See §6 for more information.

File → CSV file → Open:

Opens a dialog box from which you can open any file containing a table in comma-separated format. By default the dialog box only offers actual 'CSV files' (i.e. with extension '.csv'), but you can also make it show text files (with extension '.txt') or even *all* files (with any extension). No matter which extension a file has, to open it successfully it must contain comma-separated data.

View → Messages:

Opens the Messages window. Certain operations in the CSV table windows (cf. §6) generate messages in this window.

View → Stay on top:

When this menu item is checked, CSV Doctor's main window stays on top of any other windows belonging to CSV Doctor. The main window also stays on top of other applications (except of course those that have the stay-on-top property too).

View → Skin:

Opens a window in which you can select the 'skin' of the application; apart from the default skin (called 'Windows'), there are 39 alternative skins. Most prominently, a skin defines the colors of all the visual elements of the application's windows, but a skin may also change the font type and/or size, or the shape or size of buttons etc.

Some tips:

- The default 'Windows' skin isn't really a skin: it's simply the current interface of the Windows version you are running. So for instance if your computer is using an Aero theme on Windows 7, that's what the 'Windows' skin will give you; but on Windows 10 it will amount to the standard Windows 10 look.
- The six 'Windows 10 ...' skins are available on any Windows version, so you can make your Windows XP or 7 look like Windows 10! (However, there are subtle differences between these skins and the *actual* Windows 10 interface.)

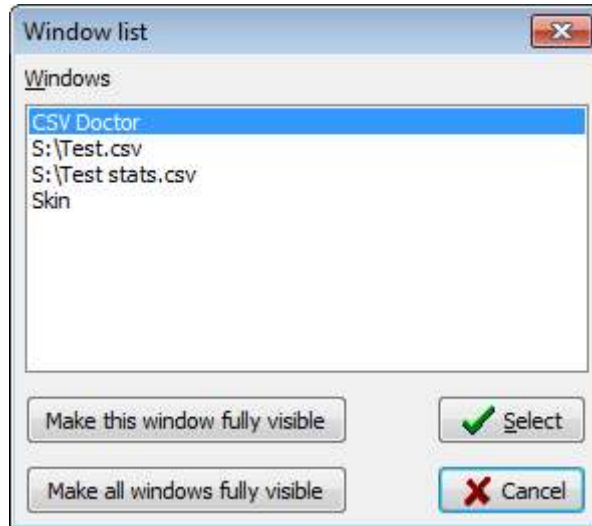
Disclaimer: The 39 alternative skins were not developed by Mountain Utilities, but are part of the Delphi programming environment on which this Mountain Utilities application is built. So these skins are offered on a take-it-or-leave-it basis. Some of these skins may cause undesired



visual effects, such as certain screen elements disappearing behind others. However, due to the sheer number of these skins it would be a huge task to fine-tune every window of every Mountain Utilities application for every skin. So be prepared for some unpleasant and perhaps confusing surprises. If you encounter a ‘really bad’ problem, feel free to report it in the application’s forum at the Mountain Utilities web site.

View → Window list:

Opens a dialog box that allows you to quickly navigate to any open window:



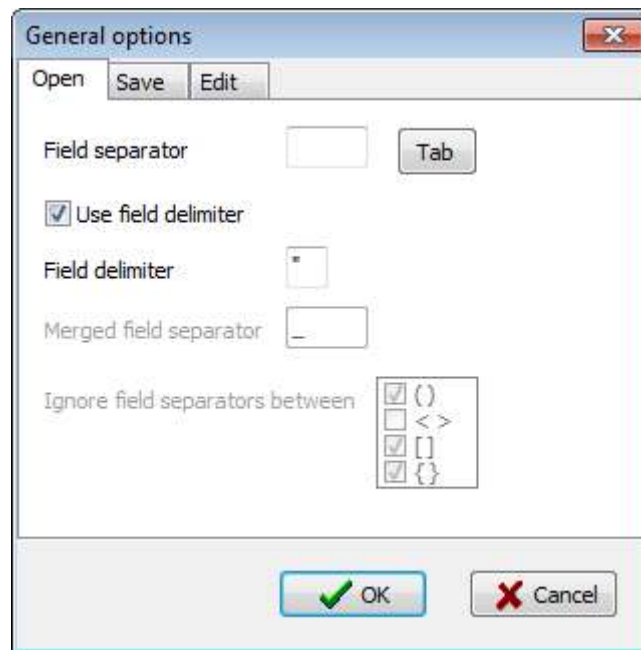
Note that the hotkey (Alt+0) for opening this dialog box works from almost *any* location in the program, not just the main window.

If the highlighted window is partially or completely outside the current monitor(s), you can move it into full view by pressing ‘Make this window fully visible’. ‘Make all windows fully visible’ performs this operation on *all* windows in the list.

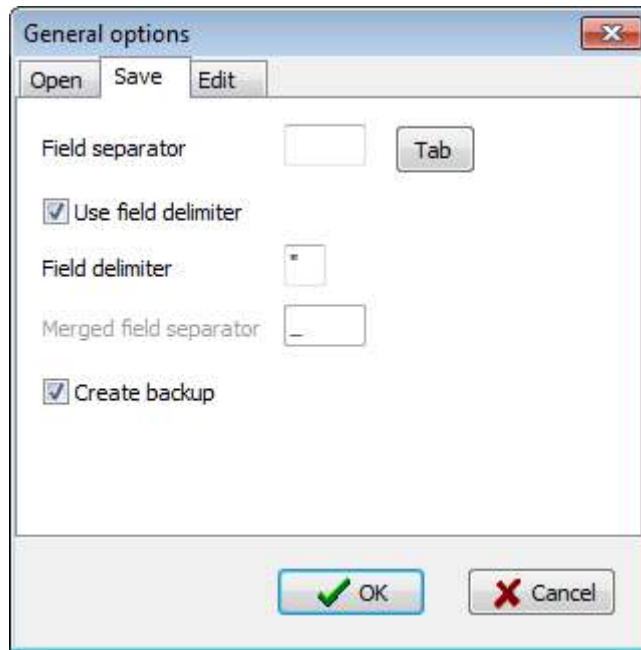
Options → General:

Opens a dialog box in which you can configure CSV Doctor:

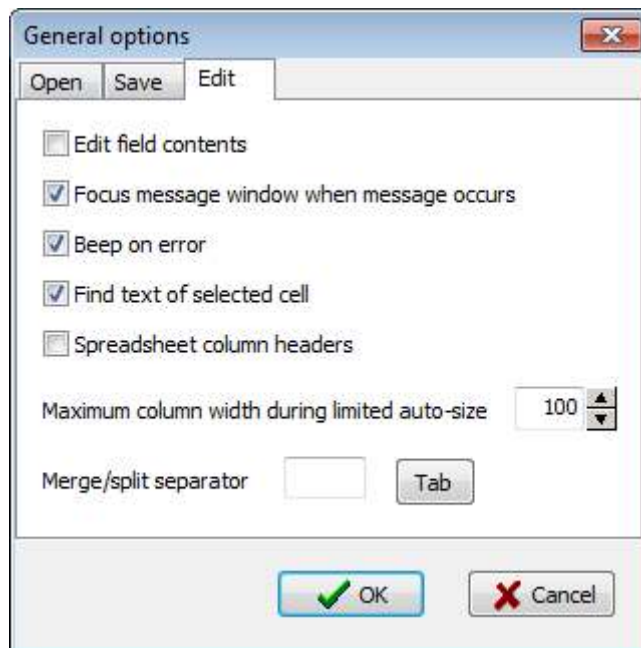
- Open tab:  
These settings affect the way in which CSV Doctor opens data files (‘.csv’ or ‘.txt’):



- **Field separator:**  
The character(s) in the CSV file separating two adjacent fields in the same record (i.e on the same line). Pressing the Tab button sets the Tab character as the field separator.
- **Use field delimiter:**  
Whether the content of each field is delimited (before and after) by the field delimiter.
- **Field delimiter:**  
The character before and after each field.
- **Merged field separator:**  
The character separating the original fields after a 'Merge cells' operation. (Maintaining the merged field separator makes it possible to undo a 'Merge cells' operation via 'Split cells'.)
- **Ignore field separators between:**  
Treat all instances of the field separator or the merged field separator between (), <>, [] and/or {} as literal characters.
- **Save tab:**  
These settings affect the way in which CSV Doctor saves data files ('.csv' or '.txt'):



- The field settings here have the same meaning as on the Open tab.
- Create backup:  
If this is enabled, the old file (if it exists) is renamed to ‘.~csv’ or ‘.~txt’.
- Edit tab:  
These settings affect various aspects of the CSV table windows:

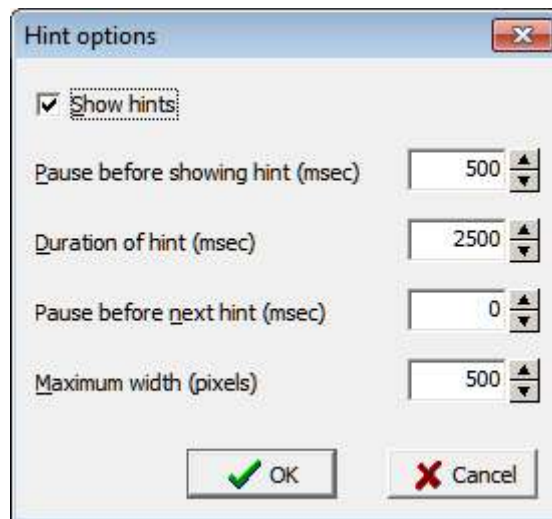


- Edit field contents:  
By default editing the text of fields directly is disabled; the idea of this is to guarantee that CSV Doctor never destroys any text.

- Focus message window when message occurs:  
If this setting is enabled, the Messages window gets focused whenever a table operation writes a message to the Messages window.
- Beep on error:  
The operating system's beep occurs whenever a table operation causes an error.
- Find text of selected cell:  
The Find operation also searches in the current cell.
- Spreadsheet column headers:  
If this is disabled, the column headers are indicated by numbers: 1, 2, 3 etc.  
If this is enabled, the column headers are indicated by letters: first A-Z, then AA-AZ, then BA-BZ etc.
- Maximum column width during limited auto-size:  
The maximum column width set by the 'Auto-size columns (limited)' operation.
- Merge/split separator:  
The separator used in the 'Merge cells' and 'Split cells' operations. Pressing the Tab button sets the Tab character as the separator.

Options → Hints:

Opens a dialog box in which you can set options affecting the hints that are displayed when you move the mouse cursor over buttons etc.:

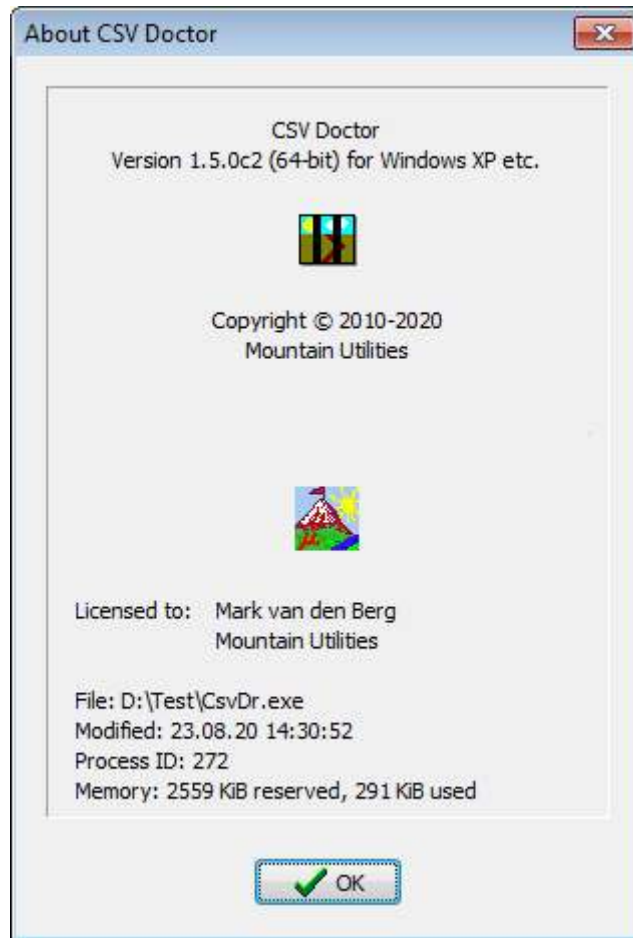


Help → Manual:

Opens this manual in the external application associated with the file extension 'pdf'.

Help → About CSV Doctor:

Opens a dialog box containing information on CSV Doctor, such as its version number and memory usage:

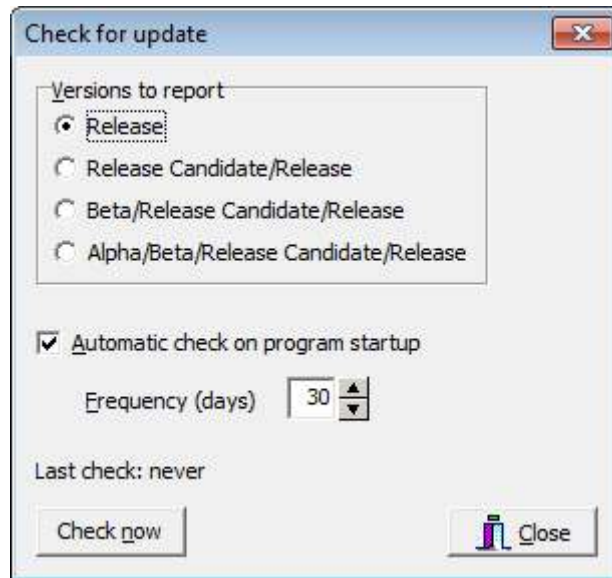


Help → Mountain Utilities web site:

Provided you're connected to the internet, your web browser opens the Mountain Utilities web site, where you can find up-to-date information about CSV Doctor.

Help → Check for update:

Opens a dialog box in which you can set the frequency at which CSV Doctor automatically searches for updates at the Mountain Utilities web site, and which types of updates you are interested in:



If you set 'Versions to report' to 'Release', you will only be notified about Release versions. 'Release Candidate/Release' will also notify you about Release Candidate versions, etcetera.

When an update is available, the program asks you whether you wish to open the pertinent web page at the Mountain Utilities site. You can also check for updates manually, by pressing the 'Check now' button.

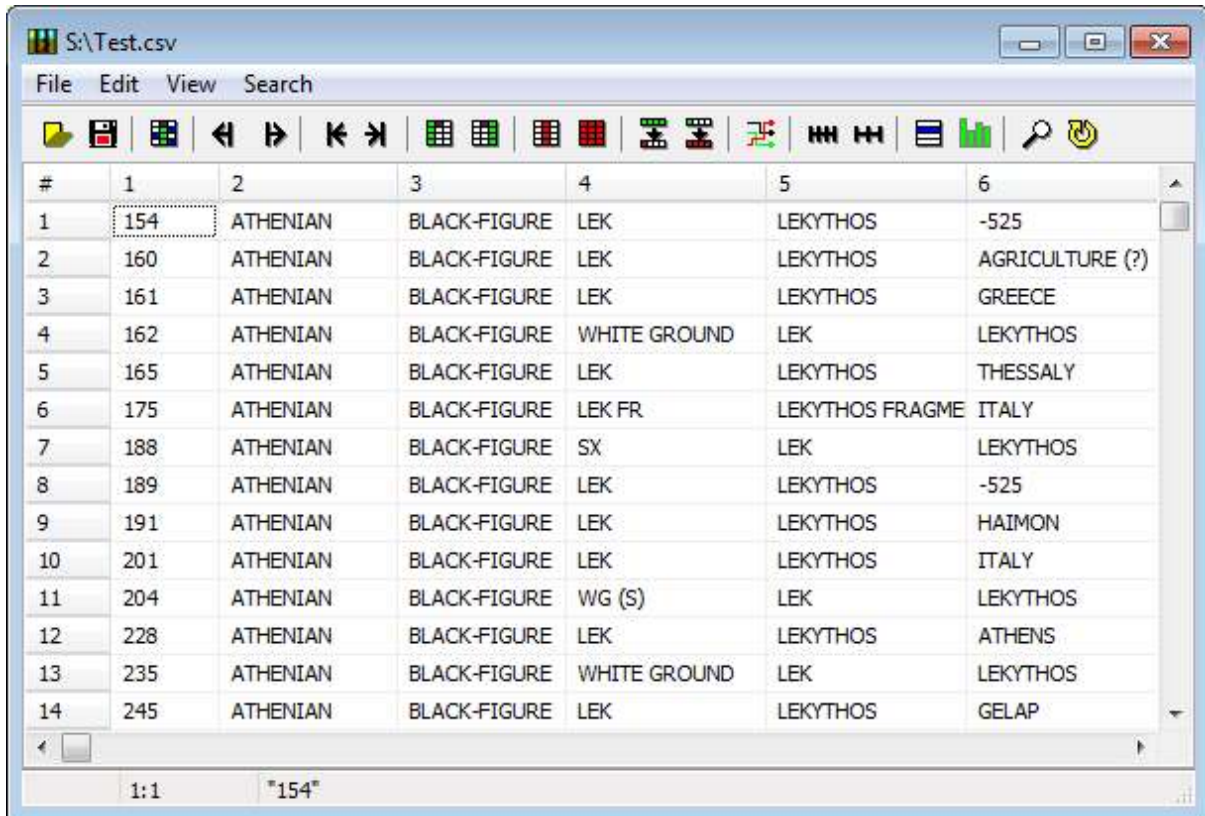
*Note: If your firewall catches the program's connection attempt and asks you whether you want to allow this, you can safely say yes: no information identifying you or your computer will be sent to the Mountain Utilities web site.*

#### Help → Donate:

Makes your web browser open the Donate page at the Mountain Utilities web site (<https://mountainutilities.eu/donate>), at which you can express your appreciation of CSV Doctor and support its further development by making a donation.

## 6. CSV table window

In a CSV table window you can edit a table:



#	1	2	3	4	5	6
1	154	ATHENIAN	BLACK-FIGURE	LEK	LEKYTHOS	-525
2	160	ATHENIAN	BLACK-FIGURE	LEK	LEKYTHOS	AGRICULTURE (?)
3	161	ATHENIAN	BLACK-FIGURE	LEK	LEKYTHOS	GREECE
4	162	ATHENIAN	BLACK-FIGURE	WHITE GROUND	LEK	LEKYTHOS
5	165	ATHENIAN	BLACK-FIGURE	LEK	LEKYTHOS	THESSALY
6	175	ATHENIAN	BLACK-FIGURE	LEK FR	LEKYTHOS FRAGME	ITALY
7	188	ATHENIAN	BLACK-FIGURE	SX	LEK	LEKYTHOS
8	189	ATHENIAN	BLACK-FIGURE	LEK	LEKYTHOS	-525
9	191	ATHENIAN	BLACK-FIGURE	LEK	LEKYTHOS	HAIMON
10	201	ATHENIAN	BLACK-FIGURE	LEK	LEKYTHOS	ITALY
11	204	ATHENIAN	BLACK-FIGURE	WG (S)	LEK	LEKYTHOS
12	228	ATHENIAN	BLACK-FIGURE	LEK	LEKYTHOS	ATHENS
13	235	ATHENIAN	BLACK-FIGURE	WHITE GROUND	LEK	LEKYTHOS
14	245	ATHENIAN	BLACK-FIGURE	LEK	LEKYTHOS	GELAP

The buttons on the toolbar duplicate many of the operations available from the menu.

The menu provides the following operations:

**File → Open:**

Opens a dialog box from which you can open a CSV table.

**File → Save:**

Saves the CSV table as the currently defined file.

**File → Save As:**

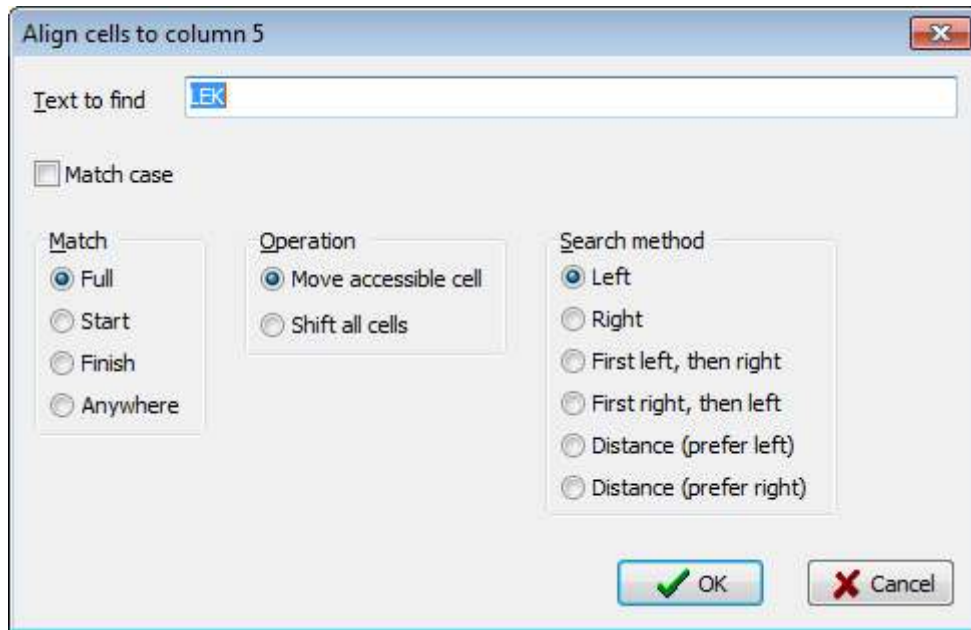
Opens a dialog box from which you can save the CSV table to a file.

**Edit → Align cells:**

Opens a dialog box from which you can align cells to the currently selected column.

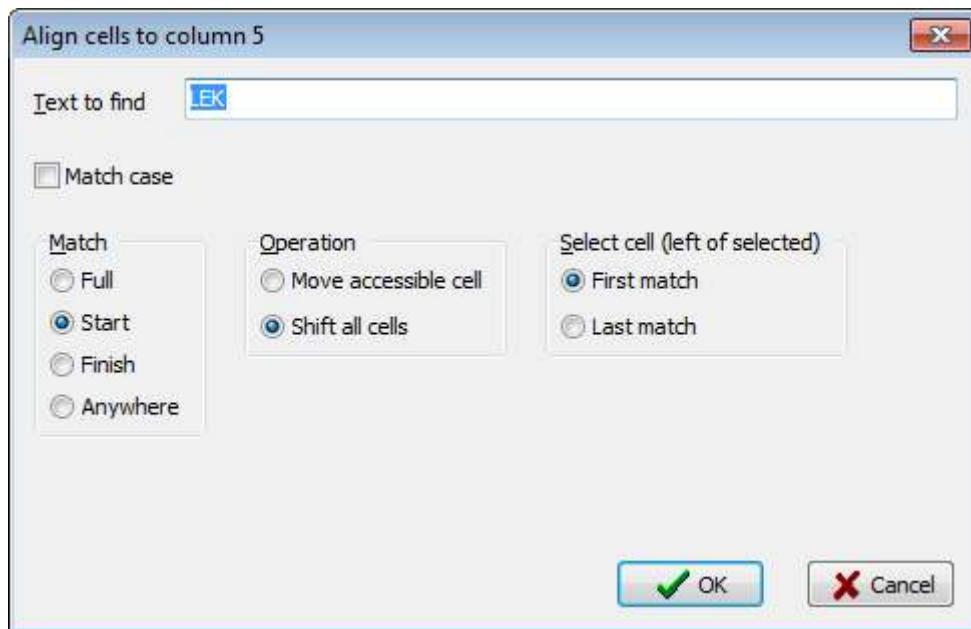
Two operations are possible:

1. Move accessible cell:



In this case one cell per row can be moved to the selected column. The text in the source cell must match the text specified in the 'Text to find' editbox (fully or partially, according to the 'Match' setting). The target cell (in the selected column) must be empty. 'Search method' determines the order in which the cells adjacent to the cell in the current column are searched.

2. Shift all cells:



In this case the 'Select cell (left of selected)' setting determines whether the first (leftmost) or last (rightmost) match to the left of the selected cell is moved to the selected cell. All cells to the right of the matching cell are moved accordingly.



Edit → Push cells left:

For each selected row, the text of the selected cell is moved to the cell immediately to the left, provided that this target cell is empty. If the target cell is *not* empty, an attempt is made to move that text to the left as well, and so on. So for each selected row the operation fails if there is no empty cell anywhere left of the selected cell.

Edit → Push cells right:

For each selected row, the text of the selected cell is moved to the cell immediately to the right, provided that this target cell is empty. If the target cell is *not* empty, an attempt is made to move that text to the right as well, and so on. So for each selected row the operation fails if there is no empty cell anywhere right of the selected cell.

Edit → Pull cells left:

For each selected row, the text of the selected cell and of each *filled* adjacent cell (left or right) is moved one cell to the left. So for each selected row the operation fails if there is no empty cell anywhere left of the selected cell.

Edit → Pull cells right:

For each selected row, the text of the selected cell and of each *filled* adjacent cell (left or right) is moved one cell to the right. So for each selected row the operation fails if there is no empty cell anywhere right of the selected cell.

Edit → Insert column before:

Inserts an empty column before (i.e. to the left of) the selected column.

Edit → Insert column after:

Inserts an empty column after (i.e. to the right of) the selected column.

Edit → Delete empty column:

Deletes the selected column, but only if none of its cells contains any text.

Edit → Delete all empty columns:

Deletes all empty columns from the table.

Edit → Merge cells:

For each of the selected rows, the text in the selected cells is moved to the leftmost of the selected cells. The resulting text in the leftmost selected cell is the concatenation of all texts, separated by the merge/split separator specified on the Edit tab of the 'General options' dialog box.

So for instance if columns 3, 4 and 5 are selected, any text in columns 4 and 5 is moved to column 3.

Edit → Split cells:

The reverse of 'Merge cells': for each of the selected rows, the text in the leftmost selected cell is distributed among the selected columns, according to the merge/split separator specified on the Edit tab of the 'General options' dialog box.

Edit → Sort rows:

Sorts the selected rows according to the texts in the selected column.

View → Auto-size columns (limited):

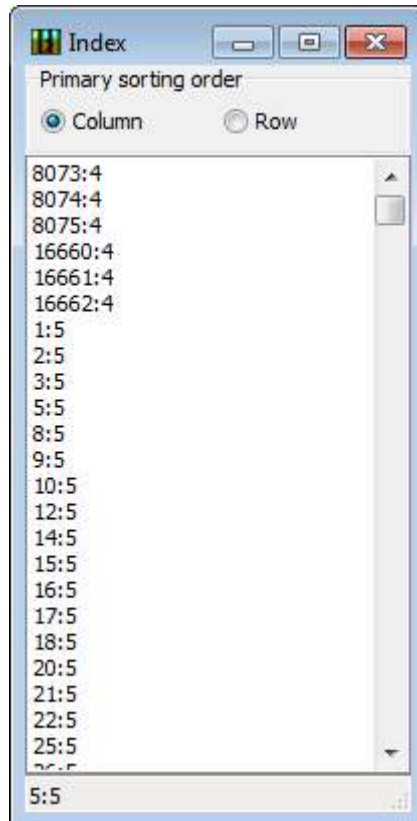
Every column becomes exactly as wide as necessary to fully show the widest text in any of its cells, except that no column can become wider than 'Maximum column width during limited auto-size' specified on the Edit tab of the 'General options' dialog box.

View → Auto-size columns (full):

Every column becomes exactly as wide as necessary to fully show the widest text in any cell in that column.

View → Index:

Opens the Index window, which lists all cells containing the same text as the selected cell:



By clicking on an item in this list, you can select the corresponding cell.

View → Statistics:

Creates a statistical analysis in the form of a table, and shows this table in a new CSV table window. The analysis specifies which texts occur in each column, and lists these texts and their frequency, sorted by frequency. (Since the analysis is displayed in its own CSV table, in principle you can manipulate the analysis like any 'normal' CSV table, but this probably isn't useful.)

Search → Find:

Opens a dialog box in which you can define the text you want to find and where to find it:



Search → Find next:

Repeats the last find operation from the current position.

## 7. Known problems

Encapsulated multi-line fields:

CSV Doctor currently doesn't support these.

Window widths:

If the screen dimensions are too small, big windows of *fixed* size can get cut off. Normally you're safe with a screen of  $1024 \times 768$  pixels, but you can run into problems when you decrease the screen size of a virtual machine running CSV Doctor.

## 8. Wish list

Turn CSV Doctor into a 'normal' CSV editor by adding the following facilities:

- Add columns and rows.
- Copy/cut/paste a range of cells to/from the operating system's standard clipboard.