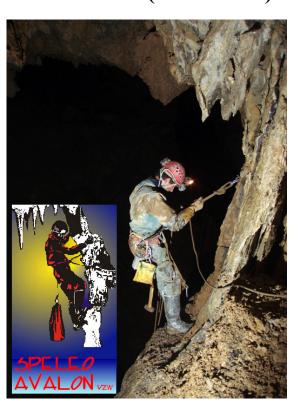
SPELEOBASE

USER GUIDE

V3.0.2 (Jan 2018)

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Introduction and Installation

Copyright

SpeleoBase was written by Paul De Bie (SC Avalon, Belgium) in Visual Objects (no, that's not from Micro\$oft!). You can use the software for free, but you may never commercialize, modify or decompile it.

Since I have invested a lot of my spare time into the development of this program, and because the software (development environment, Third-Party components etc.) are quite expensive, I ask you kindly to make a little donation of **25 Euro or 25 USD**. You can transfer this money by using Paypal (www.paypal.com), which is a very reliable system. Please make the transfer to paul.de.bie@skynet.be

This donation will encourage me to continue the development of Speleobase.

Which Windows version?

Minimum Windows 2000 Prof. or XP is recommended. It will work with Windows 98 or ME as well, but I cannot guarantee that there will be no compatibility problems or instability issues. Windows 95: belongs in the museum. Don't use it anymore!

VISTA/ Windows 7/8/10: It will work **if you install SpeleoBase outside of the Program Files folder**. So when using Vista/Windows 7/8/10: install it in c:\speleobase or any other directory under the root folder.

There will however be some minor problems:

- Windows 7 doesn't have Twain scanning support by default (but it is possible to install the drivers, and normally when installing a scanner, the drivers will be installed too, and everything will work).
- The PDF-writer that is built in into Speleobase will no longer work.

Installation

Run SETUP.EXE to install SpeleoBase. You can install it in any folder but it will propose you by default "C:\SpeleoBase".

You can even install it on a removable drive or a USB Flash drive.

You can, under the SpeleoBase folder, create subfolders, where you can put your own files (for instance cave survey files, images etc..).

E.g. c:\SpeleoBase\Pictures\Yorkshire Dales

Or, you can just as well leave your own image or surveyfiles where they are now on your computer, even on a CD. But please DO NOT put anything in the "SpeleoBase" program folder itself.

During install, or the first runs of SpeleoBase some subfolders will be created in the Speleobase folder. Leave them there please!

\SpeleoBase\DBFFiles: this is where the datafiles reside

\SpeleoBase\Temp: for all kinds of temporary files (you can empty the folder now and them)

\SpeleoBase\SBSave: when you use the "Backup option" of SpeleoBase, this is where your backup files will go to.

\SpeleoBase\SBExchange: when you export caves to SpeleoBase file format, the exportfiles will be created here.

\SpeleoBase\Demo: contains a few files for demonstration purposes only

System changes

SpeleoBase does not change your registry. It does not install anything into your Windows system folder.

Screen resolution

SpeleoBase is made for 1024x768 pixel resolutions or bigger.

As from version 2.9.1 it can be used on a Netbook (e.g. Asus EEE PC) with 1024x600 resolution.

Antivirus

For best performance, it is recommended that you configure your real-time antivirus scanning so that it EXCLUDES the next file types (extensions): FPT, DBF, CDX, IA.

These are the datafiles. These files are not executable and cannot be infected by a virus.

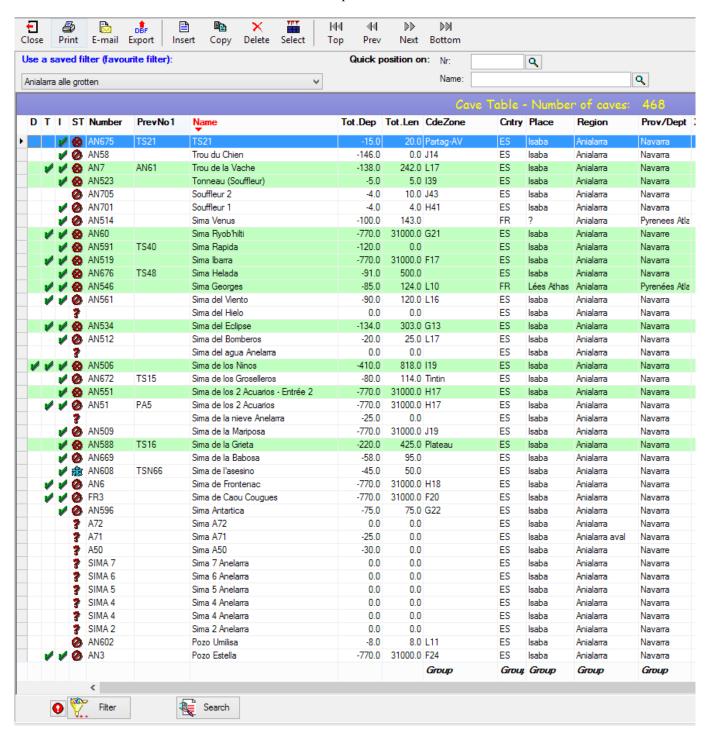
Running from a USB Flash drive

This is a nice possibility, especially when on an expedition, you just take the USB-key with you and you will be able to run SpeleoBase anywhere!

But a word of warning. USB flash drives are quite fast in reading, but slow in writing. So when creating/changing caves, it will take much longer. Always disconnect the USB-key safely before removing it from the computer. Otherwise, you might lose all of your data (and caves...)

The Cave table

The cave table shows the cave records with the most important fields.

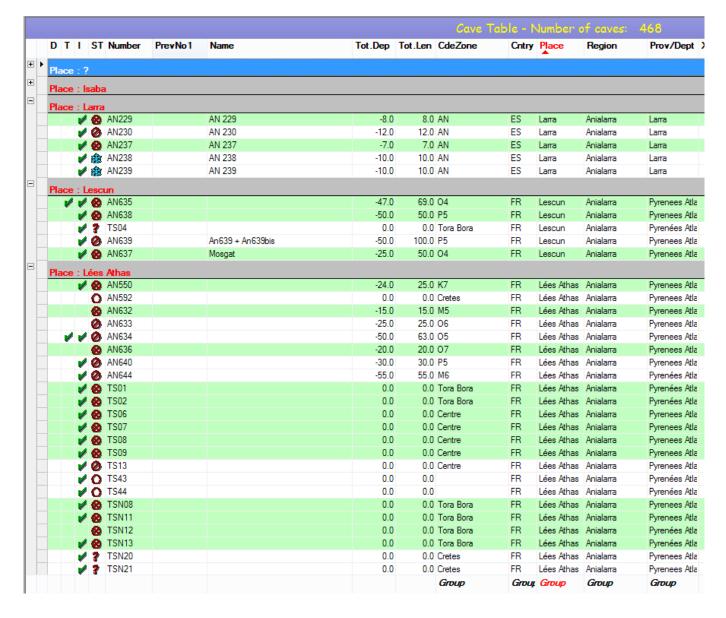


Sort

By clicking on the column captions, you can sort on nearly every column of the table. You can sort ascending or descending, just by clicking one more time on the caption. Small triangular "sort markers" indicate the sort direction.

Group

Some columns footers show the word "Group". By clicking on it, you can group the table on this column (see example below). It will also be sorted on that column, because grouping without sorting is not possible. The column footer will turn red to indicate that grouping is active. Do deactivate it: click on the footer again.



Colors

If a cave has the "terminated" exploration status ("X"), the whole row in the cave table will be colored in yellow (in *green* as from v2.9.4).

If a cave has been flagged as being "confidential", its name will be shown in red

Symbols

A green checkmark in the first column "D" indicates that "Document links" exist for this cave.

The second column "T" indicates the existence of "Topo (survey) links"

The third column "I" indicates the existence of "Image links""

The fourth column shows the exploration status symbol of the cave (O, /, X, *, ?).

Columns

They can be moved which means that you can rearrange the column order to one that suits your work. You do this by dragging their column caption with the left mouse button. You can also adjust their widths, by clicking in between two column captions and then dragging with the mouse. A quick double-click between two captions, will adjust their width automatically.

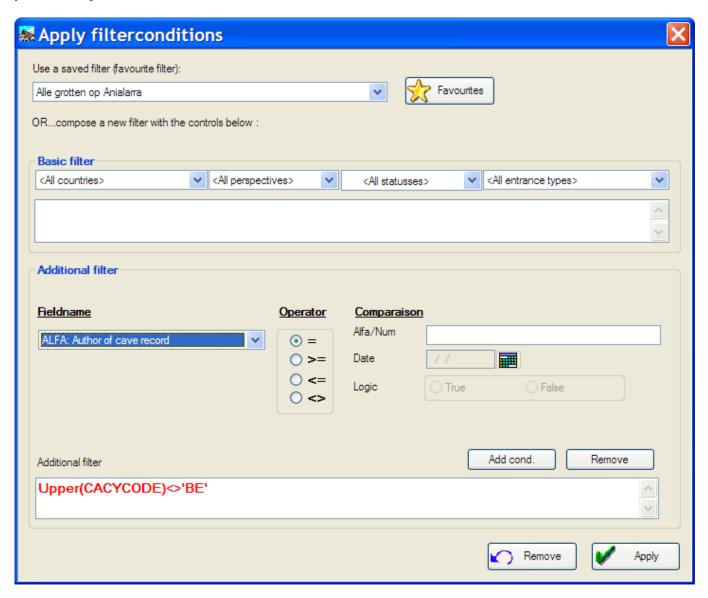
SpeleoBase will remember the column order and widths!

Filters

When you open the Cave Table, there are no filters applied. All caves will be shown. Just below the menu toolbar, you see a combobox with your "favorite filters" that allow you to filter on a certain conditions that you have saved previously as "favorites".



If you want to set a new filter or change a filter, click on the Filter pushbutton which opens a new window in which you can compose the filter.



The filter is split up in two parts:

- The **basic filter** that you can simply select with the 4 comboboxes (Cave Country, Cave Status, Perspectives, Type of entrance)
- The **additional filter** that you must build yourself by selecting a field from the database, choosing an operator, and a comparison value.

The total length of the filter condition (basic + additional) cannot exceed 255 characters.

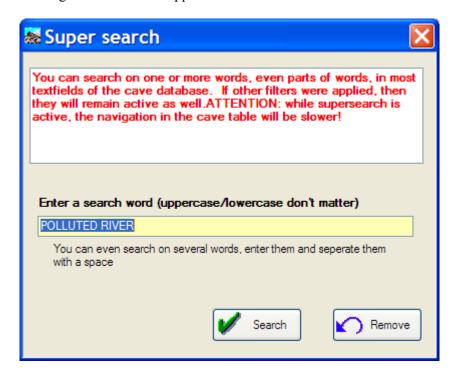
In the filter window, there is a button "Favorites" which opens another window in which you can save the filter as a favorite one, or update an existing favorite filter, or delete a favorite filter. Once the filter has been saved as a favorite one, it will show up in the combobox at the top of the cave table. You can then use it quickly, without having to recompose the filter each time again.

Super Search

Pressing the search button brings you into a search window, where you can enter one or more words, or even parts

of words. A powerful search engine is built in to SpeleoBase, it will continuously keep an index of all words in any text field (even the memo-fields) of the cave record.

Supersearch will automatically filter the cave table on the caves that match the search results, furthermore all other existing filters will be re-applied as well.



For example: you can filter on all caves situated in Spain, that are still in exploration, that are situated in the Cantabria area, and on top of that the search engine will allow you to pick just those caves out where the words "pollution" and "river" have been used anywhere in the cave record

► Remark: during the time that supersearch and/or filters are active, the program will work a bit slower, especially when scrolling in the cave table.

Quick positioning

Above the Cave Table there is a search box where you can search on the NUMBER of the cave, and one where you can search on the NAME.



Type in some characters and click on the search button besides the search entry field. The cursor will be positioned on the first cave that matches your search criterion (no wildcards allowed).

- for better searching, don't enter too many characters
- sort the table first on the cave number if you want to search on cave number, or on the name if you want to search on name. This way, identical /numbers names will be grouped together.

Navigation

The 4 buttons (<< <>>>) in the toolbar allow you to navigate quickly to the top or bottom of the file. But you can of course also use the scrollbars, or even better your mouse's scroll wheel (but make sure that you have focus on the cavebrowser, and not on one of the filterboxes!)!

Selection of caves

You MUST select caves first if you want to:

- delete them (multiple selection possible)
- print them (multiple selection possible)
- export them (multiple selection possible)
- e-mail them (only one cave at a time)

- copy them (only one cave at a time)

A selected cave (row) is colored in blue

You use the standard Windows way to select.

- click once on a row to select it.
- clicking while pressing the Ctrl key makes you select (or unselect) multiple non-consecutive rows.
- to select a series of consecutive rows, click on the first row, press and hold down the Shift-key, then click on the last row.

To select ALL rows: just use the button "Select All" in the toolbar



Deleting caves

You can delete selected caves with the delete toolbar button. LINKS (to images/topo/doc files) will also be deleted. You will see two confirmation windows after another. The first one gives you the possibility to cancel the delete operation. The second one asks you if want to delete the LINKED FILES as well. Normally you do NOT do this. Those files are independent of SpeleoBase, the only thing SpeleoBase does is create a link (pointer) to them and only that link will be deleted. But, of course, you CAN choose to delete those files as well. Be careful with the Delete function. There is no "Undelete"

NB: if you decide to delete the link files as well, then they will be deleted to the Windows trashcan. You can eventually recover them there. The cave record and its links however, are gone!

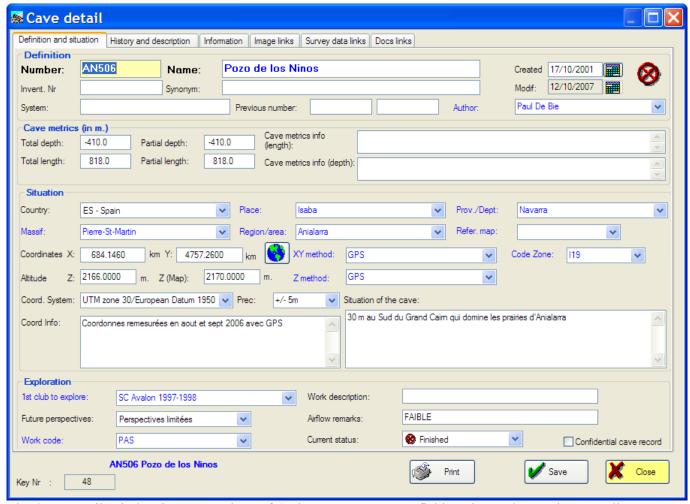
Note: the cave counter (top right) will not always be precise if you delete caves without perfoming a re-indexation afterwards.

Copy a cave

You can copy one selected cave at a time. Time being, only the main cave record will be duplicated, its links not (yet).

Detail of a cave

You open a cave in detail, by double-clicking on the row in the cave table. Alternatively, you can click the "Add cave" button in the toolbar (--> empty cave record) or "Copy cave" (--> duplicate cave record of the selected one)



The Cave Detail Window is composed out of 6 tabpages. Every entry field on those tabpages have a yellow "tooltip" that appears if you hold the mousecursor over it for a few seconds. The tooltip tells you what the entry field is meant for.

In the big entry boxes (e.g. "Bibliography") you can enter as much text as you like. Carriage returns will be inserted automatically. You can even "cut/copy/paste" in order to copy in text from another application, by clicking right. But, only plain text is supported.

The first 3 tabpages do not need a lot of explanation...

SpeleoBase does not impose you a lot.

- 1) Definition & Locality: only NAME or NUMBER are mandatory fields.
- 2) History & Description: only the exploration STATUS is mandatory.
- 3) Information: no fields are mandatory.

That's all!

Two caves can have the same name an/or number. SpeleoBase differentiates between caves by using an internal key, that you can see in the left bottom corner. You cannot change this key.

When you save a cave, SpeleoBase will memorize certain fields (repetitive) and propose them to you when you "Add a new cave". This way, if you enter a whole series of caves that are located in the same area, you will have less work! These fields are: Country code, place, massif, province (or departement, district, county - you name it), area, coordinate method & system, author, map, explorer's name. Of course, you are free to overwrite the values that Speleobase proposes you. And if you don't like this behaviour, you can switch it off in the Setup Window.

"Smart fields"

They are the ones that are shown in blue. These fields, remember each string that you have ever typed into them. The next time you add/change a cave, you can save yourself a lot of work because the "smart fields" will propose you a list of strings to choose from. There are two kinds of "smart fields":

a) Comboboxes

They show a list of values to choose from. But you can also type in a few characters and then press the "down" arrow. If a string is found that begins with the characters that you have typed, the combobox will automatically select it.

► Tip: type in 2 or 3 characters and press the down arrow!

b) Autocomplete edit controls

These have "autocomplete" functionality: as soon as you start typing, Speleobase will search if you have ever typed this string before and if so, automatically complete it for you. Of course, you can ignore the "suggestion" and continue typing.

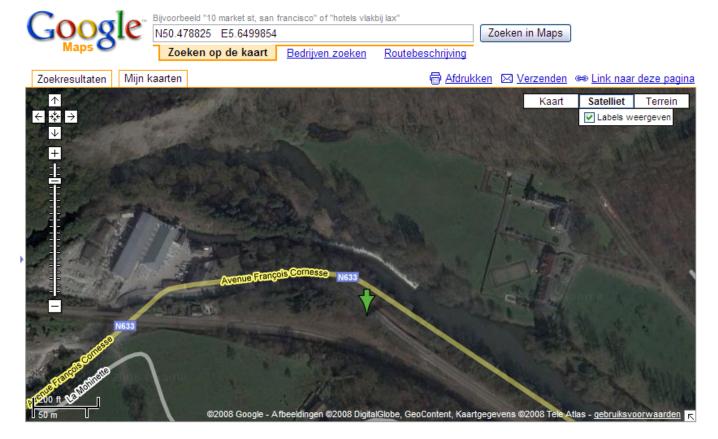
Localisation in « Google Maps »

Starting with v2.8, you will see besides the coordinates edit controls, a button with a globe pictogram. When you click it, Google Maps will open in your Internet browser and the position of the cave will be shown on the map.



Three conditions must be fulfilled, for this to work:

- the coordinates must have been entered
- the coordinate system must have been configured properly (see the "Maintenance" menu; Coordinate System
- you need an Internet connection



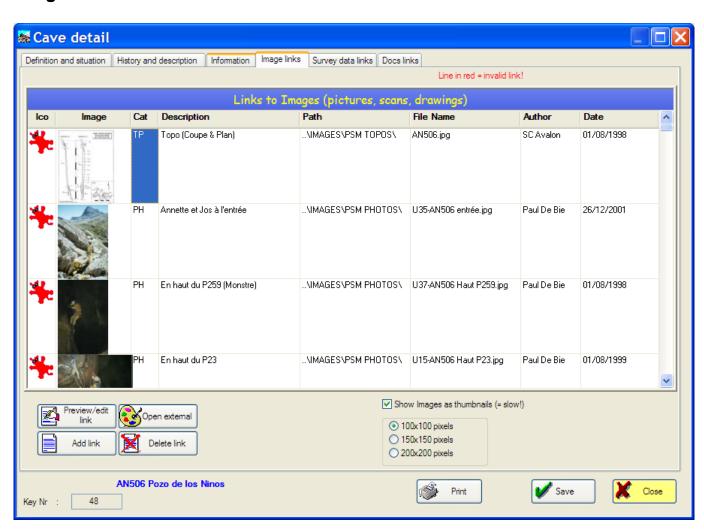
Saving

DO NOT FORGET TO SAVE! If you have made any changes to fields on the first 3 tabpages; you must click the save button or the changes will be lost when you close the cave. When updating an existing cave, save means "Save & Close". When adding a new cave, pressing save the first time will NOT close the window, so you will have the chance to enter image, survey data or documents links on the tabpages 4,5 and 6

Tab pages 4, 5 et 6 need some more explanations

- ➤ Image links
- Cave survey links
- Document links

Image links



Here, you can create a series of links to different kinds of graphics files. Together with the links, you also enter some useful information such as author, description, type (photo, survey, divers), etc.

The images can be anywhere on your PC or even on a CD. So, it is not necessary to put them in a folder below SpeleoBase, although I do recommend to work that way if you ever have plans to exchange your cave records with other people.

► Important: SpeleoBase keeps for every image file; the drive+path and name of the file. If the file does not reside in a folder below your SpeleoBase folder, it will be an "absolute" link like: "C:\My Pictures\Vercors\Gouffre Berger\Entrance.JPG".

If the file does reside in a folder below Speleobase, it will be a "relative" link like: "..\\Gouffre Berger\Entrance.JPG".

In this case the import/export functions of SpeleoBase will allow you to exchange image links with other users, without invalidating the links if the other users would have installed SpeleoBase in another folder (or drive) than you have!

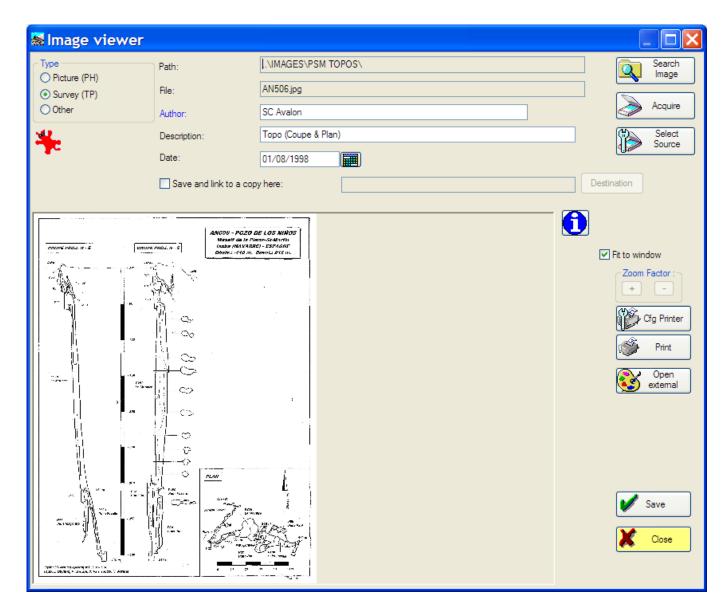
Anyway, if you ever change the name of a file or the location, after you have created a link, the link in SpeleoBase will become invalid. No big deal, you can correct it easily. Invalid links are shown in red in the image links table.

You can, choose to see **thumbnails** (minatures) of the images, and you can choose out of 3 different sizes. But: when your images are big, then decoding and showing them might take quite long!

<u>Changing a link</u> afterwards: doubleclick the record in the image table.

<u>Deleting links</u>: you can NOT select multiple records, so you'll have to delete them one at a time. A confirmation window will ask if you only want to delete the link (the default) or the file that the links points to as well. Be careful with this option!!!

You <u>add new links</u> with the button "Add link". An "open file" dialog will be shown that allows you to browse for the file on your PC. Only the next file formats are supported: BMP, JPG, TIF, PCX, TGA, PNG, PCT, DIB. As from version 2.5, Twain Scan support has been added so you can scan your images directly.



As from version 2.8, you can indicate if you want to copy the image to a specific folder:

Save and link to a copy here: ...\IMAGES\PSM TOPOS\

Destination

SpeleoBase will propose you a default folder (which you can specify in the Configuration Window) but you still can change it here.

This is an interesting option. As said earlier, it is recommended to keep your images in one or more <u>subfolders</u> of SpeleoBase. This will make it a lot easier to transfer Speleobase to an USB-stick, or to another PC, or to exchange your data with other users. So if you use this option, then you don't have to worry about this anymore: Speleobase will pick up the image where you indicate it, and duplicate it to a subfolder of Speleobase and make the link there.

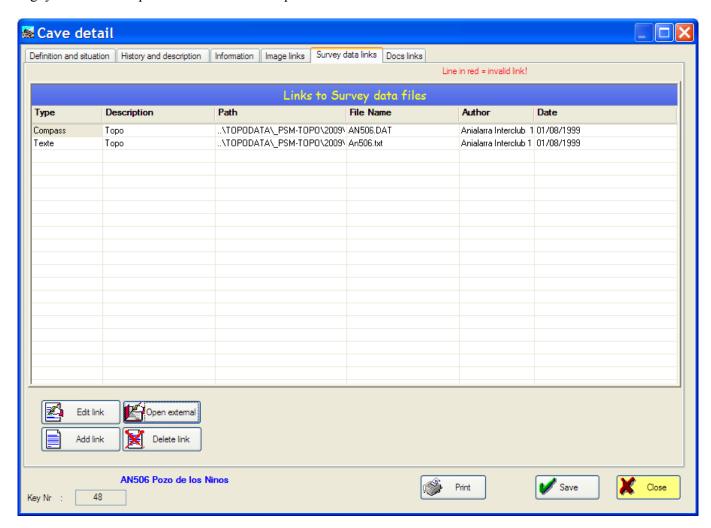
If you want to do more with the image, e.g. edit it, you can open it with an external program (use the button "Open externally"). But, you must have configured what program you want to use first, through the SpeleoBase configuration panel.

I do not recommend to configure a "heavy" program; because it will take a lot of time to load each time. For me, the perfect thing for the job is IrfanView: very fast, a lot of possibilities (excellent printing) and the possibility to fire up your real "heavy" image editor, like Photoshop. Irfanview can be downloaded for free here http://www.irfanview.com. Don't forget to download the plug-ins as well.

Survey data links

Here you can create links to your cave survey data files. Adding links, modifying or deleting them works in the same way as with image links.

You can also, and you should, indicate in the Speleobase Configuration Window, with which external program you want to open the data file. You can do this for 5 different types or better extensions of datafiles. This program can be a simple text editor such as Notepad, or a real Cave survey program such as Compass, Onstation or Winkarst... E.g. you'll want to open DAT files with Compass.

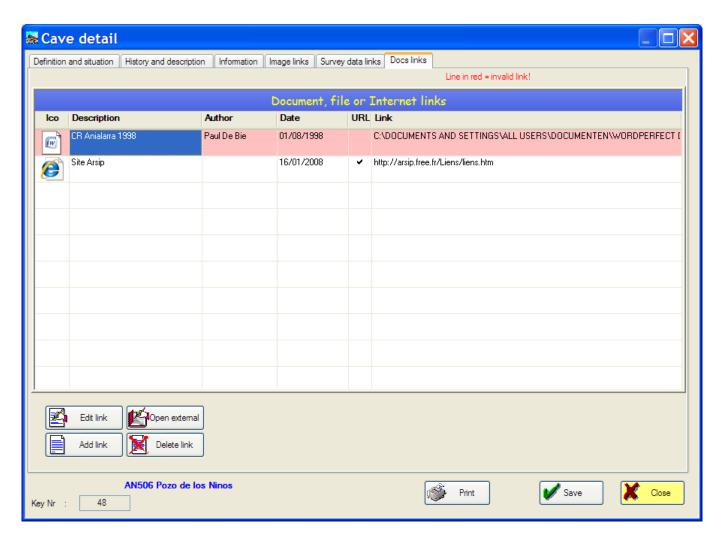


Document links

Here you can store links to any kind of file. It can be for instance Word, Excel, PDF's, even videoclips MPEG or AVI. Anything that is related to the cave in question. So here you build your documentation centre for the cave. If you want to open the files with an external program, then:

- you must have on your PC the correct program (e.g. to open PDF files you will need something like Adobe Acrobat Reader)
- this program must be registered in windows and associated with the type of file. The type of file is determined, most of the time, by its extension (e.g. "xls", "doc", "pdf")

Normally, when installing the program, it will make the correct associations in Windows.



► Tip: INTERNET LINKS

As from version 2.62 of SpeleoBase, you can add a link to an Internet URL! Besides the edit control there is a button which allows you to launch your webbrowser in order to test the link or see the website it points to.



Printing caves

So you want to print out caves? Good idea but...

FIRST put the cave table in the <u>desired order</u> (by clicking the column caption), and apply, if you want, a filter The caves will be printed in the order they are shown in the cave table

THEN select the caves that you want to print. Select all of them or only the ones you need.

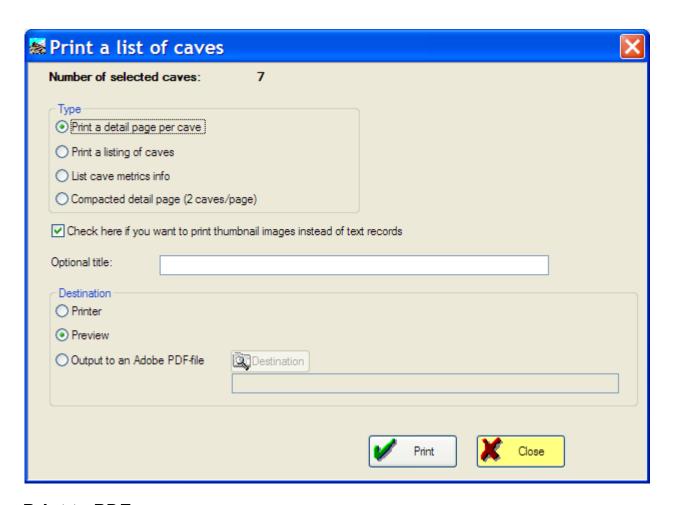
Then of course click the print button.

In the print window, make your choice between a "list of caves" or a "page per cave".

It is recommended to make a preview print first.

In case of a "page per cave" printout, you also can (un)check an option if you want to print the images of the imagelinks as thumbnails at the bottom of the page. But this uses a lot of paper so better make a preview print first.

NB: all printing is done by means of a report generator "R&R Report Writer" which is installed when you install SpeleoBase.

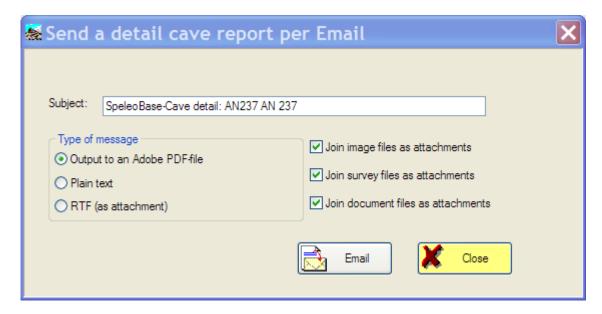


Print to PDF

Speleobase can directly print to a PDF format. But on some computers this doesn't always work and as from Windows 7 the option has been disable in SpeleoBase. This is no problem, since you can install a PDF printer and then you can choose this as your printer, and make PDF-documents of your printouts.

A suggestion for a totally free PDF printer, without any publicity or nag screens is PrimoPDF. Look it up with Google or so.

E-mail



This is a bit similar to printing caves, with the difference that the printout will be emailed instead of printed. You can only process one cave at a time. Multiple selection is not possible.

You can choose to make a "plain text mail", in which case the printout will be converted to plain text. All formatting will be lost, so only use it when really needed to.

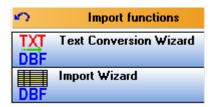
Or, you can choose to have the printout converted to PDF or RTF (Rich Text Format) and have it attached to the email. Most formatting will be preserved. The recipient can open RTF files with MS Word or most other textprocessors (like WordPerfect)

You can also choose to attach all the image files, cave survey data files or document files to the mail as well. Very practical if you want to send a friend the description of a cave, including pictures and survey. But take care: this might result in a very big mail, which your friend might not appreciate!

NB: the Email function uses "MAPI". So you will need a MAPI-compliant email program. Most recent email programs are O.K.: Outlook, Eudora, Outlook Express, AOL 7. Furthermore, the MAPI-configuration must be correct as well (the program must be your default mail client).

How to transfer you own files in SpeleoBase?

In the menu "Import functions" you'll see the two "wizards" that will help you to convert a non-SpeleoBase file to a SpeleoBase file. This can be very practical if you already have a cave database in Excel, Access, dBase etc... But this kind of operation is not something trivial. You need a good preparation, take the time and above all: read the instructions first! So please read on...



The procedure takes 2 steps; and there is a menu-option for each step:

- Text Conversion Wizard (to convert a delimited text file to an "Import" SpeleoBase file)
- Import Wizard (to import an "Importfile" into SpeleoBase).

If you start with the "Text Conversion Wizard" then the two windows follow one after another.

O.K. First realize that it is simply not possible to transfer YOUR files directly into SpeleoBase (and never try to write to the SpeleoBase files from within your own software or you might loose every cave that's in them. Not only are your tables different (Excel,Filemaker, dBase, Access, Paradox formats etc.), but their fields and field properties (length, datatype) are probably not identical neither. Nor is the order of the fields in your files the same as the order of the fields in SpeleoBase.

The solution is to first export your file(s) to a delimited textfile.

Preparing a delimited text file

What is a "delimited textfile"?

A textfile can be opened or written by a text editor such as Notepad. In a textfile no formatting is present, just plain text characters. There is little structure, so there are no fields, just lines of text ending with a carriage return. In our case, every line in the file will be considered as a cave record.

Each line will contain the same information in the same order, e.g. cavename, country code, cave length etc.. Each of these zones will be separated from the other by a special character, called the "delimiter".

Important: SpeleoBase will accept only these two delimiters (so it does not accept "tabs"!):

```
; (semi-colon)
| (pipe)
```

MS Excel can only create delimited text files that are delimited with semi-colons. They call it a "Comma Separated File" or "CSV". This is a bit confusing because they are not delimited with comma's, but semi-colons.

With MS Access you can choose the delimiter yourself. I recommend you choose the pipe symbol (|). This way you avoid that a semi-colon somewhere in the text itself, will make your textfile invalid.

(Sorry, I cannot explain here how you export to a textfile; it depends on your own software. But in Excel, you just "Save As" and choose CSV format. As always, RTFM of your software!)

NB: RTFM = Read The F^{**} ing Manual

Finally you should end up with something like this: Example of a delimited textfile

10693|110|HAN (grottes de)|ROCHEFORT|208,870|89,590|158,000 6350|134|ROCHEFORT (grotte de)|ROCHEFORT|0,000|0,000|225,000 6000|68|HOTTON (grotte de)|HOTTON|0,000|0,000|248,000 3283|102|REMOUCHAMPS (grotte de)||245,340|130,790|

This file contains 4 lines, so this means 4 caves. Each line has 7 zones. length, depth, name, place, X, Y and Z-coordinate.

In this stage SpeleoBase knows nothing about the meaning of these zones... we will tell him later.

Let's study this example a bit.

Lines 1, 2 and 3 are quite similar. Please note that there is no delimiter at the beginning or end of each line. Line 4 is a bit special. The fourth zone (Place) is empty! But, since there are two consecutive delimiters, SpeleoBase will know that there is in fact an empty zone here. The 7th zone is also not present, but again the delimiter (which would normally not be there at the end of the line, will tell SpeleoBase that there is a 7th zone.

So, it is very important that each line contains the same number of delimiters (SpeleoBase will check this!)

When you create the delimited textfile, you are free to choose the order of the zones, and the number of them (two is the minimum). Even the length of the zones has no importance (but of course if your zone is longer than the Speleobase field you want to map it to, it will be truncated).

You could even create a textfile with only 2 zones (e.g. cave name and cave place) and you would be capable of creating real Speleobase caves with this file (but of course who would want to do this?).

So you see, SpeleoBase is already making things a lot easier. There is no need to rearrange or restructure your own cave database first.

A few guidelines

- the textfile must contain at least two zones
- each zone must be mapped against a SpeleoBase field. So, do not put zones into the textfile for which there is no equivalent in Speleobase.
- before creating the textfile, verify your data with some "Search/replace" function to make sure that the delimiter symbol itself isn't being used somewhere in the text data.
- experts only: to make sure accents and international characters are converted correctly, create an ANSI and not a "DOS" or "OEM" file.

OK, so you now have made your textfile? Then we can launch the Text Conversion Wizard.

Text Conversion Wizard

With this "Wizard", SpeleoBase will convert your textfile into a database file called "IMPORTTMP.DBF". You do not risk anything, your original textfile is not touched, and neither are the real SpeleoBase files. Feel free to practise and start over as many times as you want.

(once the created Importfile seems OK to you, we'll go to the tricky part: load it into SpeleoBase. ..)

It is important to realize that until now, SpeleoBase has NO IDEA of the information in your textfile and how it is "structured". This is what we are going to tell Speleobase in the following dialog windows.

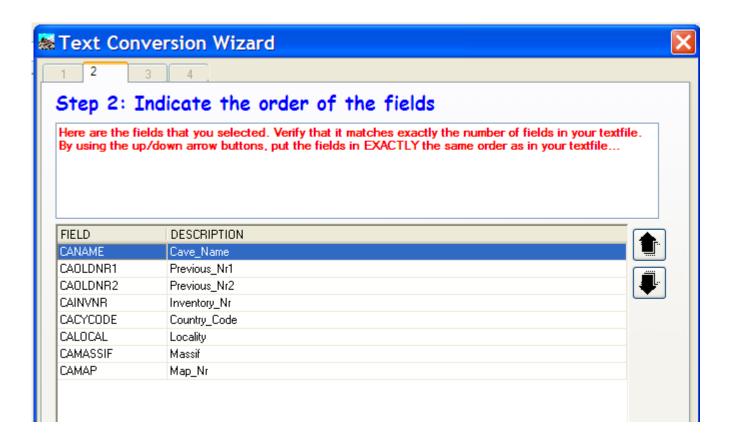
1) First SpeleoBase wants to know WHAT ZONES you have in your textfile. It will present you a list with all possible fields in the SpeleoBase database, and their properties (length, type, number of decimals). You must check here all the fields that are to be mapped against the zones in your textfile.

E.g. if you have 3 zones in your textfile (name, place, country), you must select here the three SpeleoBase fields that correspond the closest to them (in this case also name, place, country)

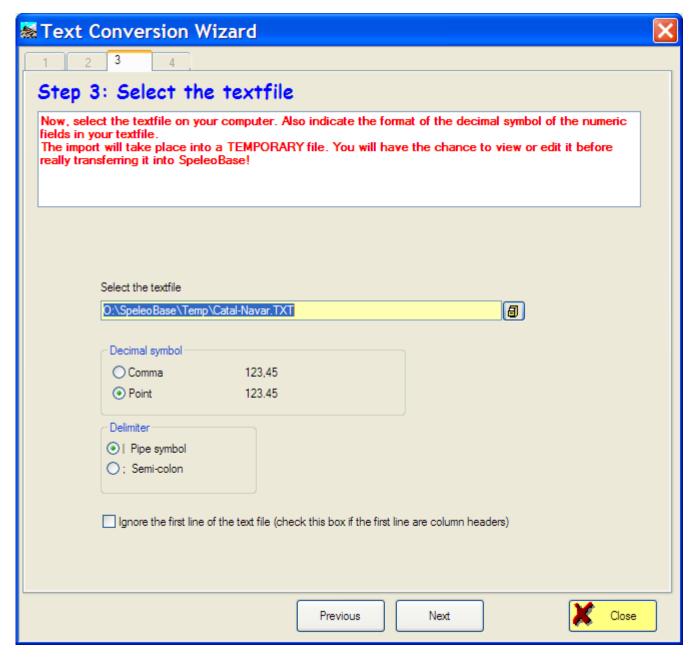
Now SpeleoBase knows what fields to expect... but in what order?



2) Then, SpeleoBase will show you a list with only the fields that you have chosen. You must put them in the EXACTLY the same order as they appear in your textfile. You do this by using the up/down arrow buttons.



3) Then a third window appears. Here, you must select your textfile. Also, and this is very important, you must tell what delimiter is used in the textfile, and if the decimal symbol is a point or a comma. Finally, you can check a box which will tell SpeleoBase that it should ignore the first line of your textfile (do this when the first lines contains column captions or names)



SpeleoBase does some integrity checks (and if something unusual is detected, the conversions stops...) If all is O.K., the conversion commences. You can follow it in the logging window.

After the conversion, you can look at the logging (a line with a warning is shown in red), you can even save it or open it with Notepad in order to print it out.

Errors will be preceded by their line number, the name of the field and the error description:

- TRUNCATED: your zone was longer than the corresponding field in SpeleoBase. Some characters have been truncated.
- WRONG COUNTRY : you used a countrycode that does not exist in your SpeleoBase file of countrycodes. It has been recorded but you should create/correct the code
- NUM. OVERFLOW: only for numeric fields. SpeleoBase must convert a string of pure text from your file (e.g. "1234,123") into a numeric value. If the value is greater than the maximal allowed value of the Speleobase field, you have a numeric overflow. SpeleoBase will IGNORE your value and initialize the field with ZERO!

In all cases, an Importfile has been created. You will find it in the "Temp" subfolder of SpeleoBase. You can immediately open and view it by clicking the button "Next: Open Importfile" or in a later stage, by choosing the menu-option View/Edit an Importfile

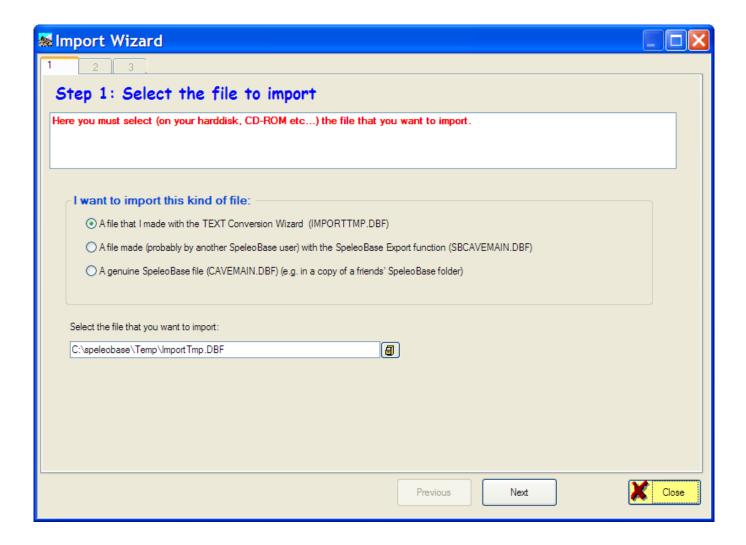
Import data into SpeleoBase

Always close the cave table first, before doing this!

Step 1

If you have arrived here, after having created an Importfile with the "Text Conversion Wizard", SpeleoBase will open the Importfile right away.

If you are coming from the Import Functions Menu, Import Wizard; then you must open the file yourself.



The importfile can be:

- a) a file created with the "Text Conversion Wizard". In this case, there will generally be only ONE file and normally this is located in the SpeleoBase\Temp folder and it is called "IMPORTTMP.DBF". It will contain at least two fields. This is the file you must select. Possibly, there will also be a file called "IMPORTTMP.FPT"; in case you have mapped your textdata to some of Speleobase's memofields (fields of variable length).
- b) a SET of files that has been created (possibly by another Speleobase user) with the function "Export to SpeleoBase files". In this case, you will have NINE files (the cave main files and the image, does and topo links files, and 4 files with codes). They are nearly identical to the normal Speleobase files. You must select the file "SBCAVEMAIN.DBF"; which is the main file.
- c) a COPY of the original SpeleoBase files (CAVEMAIN.DBF + eventually the image, docs and topo links files, and the codefiles) that you have on a CD or in another folder. You must select the file "CAVEMAIN.DBF"; which is the main file.

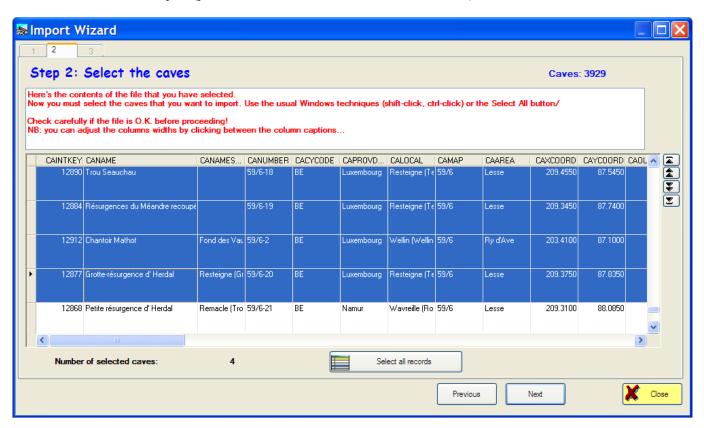
After selecting the desired file, click the Next button.

Step 2

SpeleoBase will show you the file in a table.

Use this function to verify that the Importfile is O.K. before actually loading it into the SpeleoBase main cave file!

If everything looks OK (check especially numeric fields, to see if the number of decimals is correct), SELECT the caves you want to import. Select them all with the appropriate buttyon, or select some individual caves with the standard Windows techniques (press down Ctrl and click on the desired caves)



After selecting the caves, click on the next button "Import a file in SpeleoBase"

Step 3

Here, SpeleoBase will transfer the data from the importfile into its own files

What action to take if a cave already exists in SpeleoBase?

You have 3 possible answers (and your choice will be used for all caves in the importfile!)

- 1) replace the cave in SpeleoBase with the cave in the importfile. This means: main cave data and its image, survey or docs links!
- 2) add the cave (which will create a double).
- 3) skip the cave (nothing changes)

How does SpeleoBase know that a cave already exists?

To be able to determine that two caves are the same, SpeleoBase must have in your importfile the next 3 fields: Cave Name, Number and Place. If they are not present, SpeleoBase will always ADD your caves!

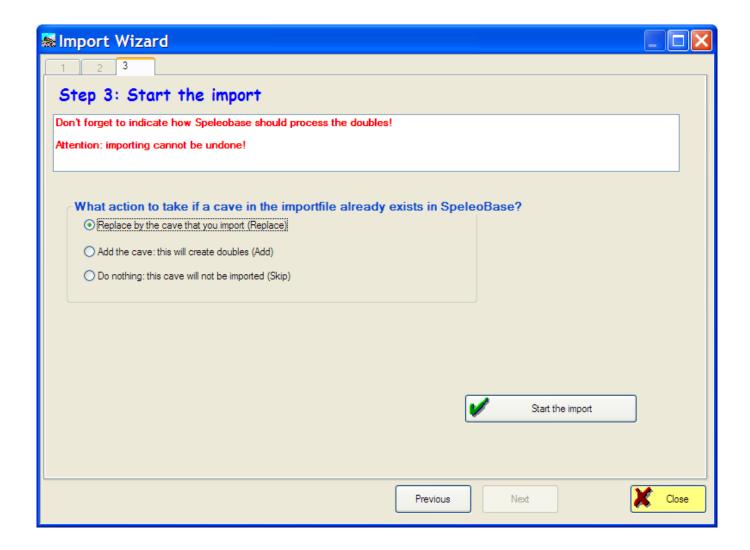
If, for a cave in your Importfile, a cave is found in SpeleoBase that has exactly the same values in these 3 key fields, then SpeleoBase will consider it to be the same cave (no matter what values the rest of the fields have!)

▶ Tip: Take care with the "replace" option. If a cave is replaced, the original data cannot be recovered (except by a total restore of the files).

If you choose the "Add" option, you will create doubles, but after the importation, you can inspect and compare these and delete one of them if you wish.

Before the import starts, SpeleoBase will remind you that it is safer to make a security copy of the files first.

A logging window will show you the progress of the importation and will show you possible errors.



Some remarks in case of importing a file made with the "Text Conversion Wizard"

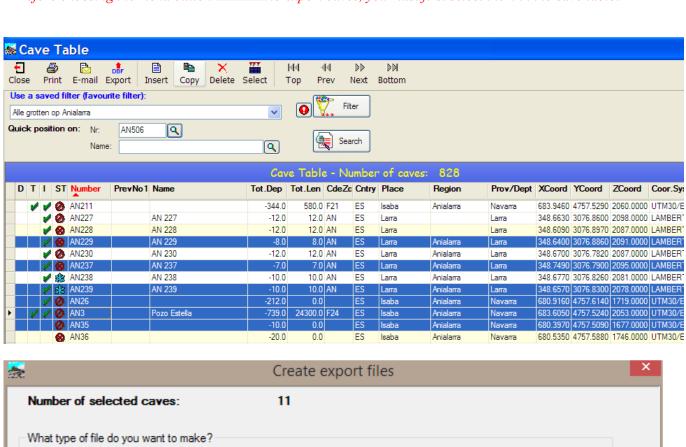
Because you have a big liberty when creating your textfiles (the only obligation being the fact that there must be two zones, but their length or even WHAT they stand for, is up to you), SpeleoBase will make some verifications and modifications. Imagine that in your file there is no field for the NAME of the cave. In the logging during the importation, SpeleoBase will tell you "Name of cave missing, replaced by 'UNKNOWN'". Afterwards you will find in the cave table a series of caves named "UNKNOWN". It is up to you to make the necessary corrections afterwards.

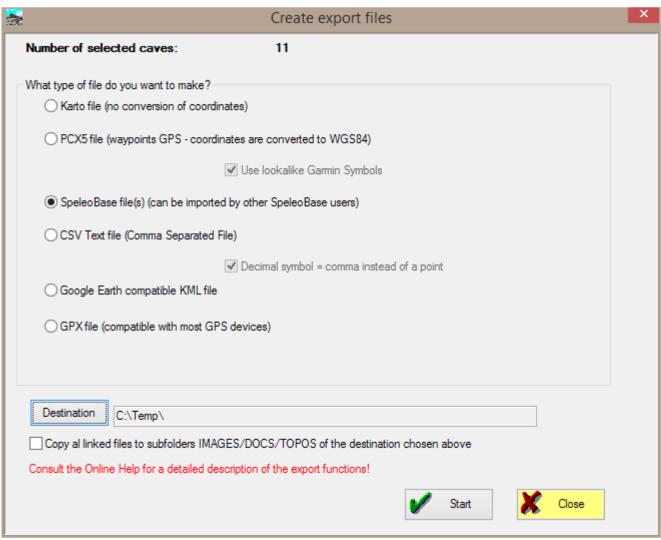
NB: SpeleoBase works in a "Temp" subfolder of SpeleoBase. After the importation, you can safely delete all files in that folder.

Exporting caves



► Before choosing the menu button Export to export caves, you must first select them in the cave table!





Right now there are 6 different kinds of exports

- 1) Create a plain text file, which is compatible with the cartography freeware program "KARTO"
- 2) Create a plain text file, in PCX5 format, which is compatible with GPS-software such as OziExplorer, CartoNav and GPSTrack (remark: this format is obsolete now, it has been replaced by GPX).
- 3) Create "SpeleoBase" files, that you can exchange with other users so they can import your caves.
- 4) Create a CSV (Comma Separated) text file, that you can easily import in other programs such as Excel.
- 5) Create a KML text file that you can easily open with Google Earth
- 6) Create a GPX file, which is the "new" universal format to exchange date with GPS-devices or navigating software such as OKMaps, Garmin Basecamp, Oziexplorer etc....

1. Export to « Karto »

Karto is a freeware program that lets you visualize and print out scanned maps or aerial photographs, after having calibrated them with known coordinates. Then you can load or enter a series of points and their coordinates (caves for instance) that will be shown on the exact position on the map. It was written by French cavers and can be downloaded here: http://karto.free.fr

The export procedure is quite simple:

- select the caves
- choose the Export function in the File menu
- choose "Karto file"
- Press "Destination", and choose the folder and filename where you want to export to (the file extension must be "TAB", e.g. "KARTOEXP.TAB"

NB: Feel free to use the "Temp" subfolder of SpeleoBase!

- Start

Remarks

Good to know: no conversion of coordinates is performed. It's up to you to select only caves within the same coordinate system.

If the cave has no name, Speleobase will name it "NO_NAME" in the export file If the cave has no number, SpeleoBase will give it a number prefixed with "SB". Example: "SB123"

Example Karto file:

A2	684.6920	4757.3320	2150.0000	NO_NAME	PTTOPO
A4	684.8410	4757.4320	2145.0000	NO_NAME	PTTOPO
A6	685.1000	4757.5700	2175.0000	Grotte Abri	PTTOPO
A60	681.7760	4758.2100	1880.0000	A60 Anialarra	PTTOPO
A8	684.3520	4757.4220	2120.0000	NO_NAME	PTTOPO
A9	684.3470	4757.4360	2115.0000	NO_NAME	PTTOPO
AN1	684.3070	4757.1810	2140.0000	NO_NAME	PTTOPO

2. Export to Garmin "PCX5"

The PCX5 format originates from Garmin. It is already old but has the advantage of being compatible with most GPS software that has import functionality (OziExplorer, CartoNay, GpsTrack 2001, MapSource, CartoExploreur).

SpeleoBase will, during export, CONVERT the coordinates of the selected caves, using a coordinate conversion program that was written by Eric Sibert (LIBCONV.DLL).

When SpeleoBase is well configured, you will be able to select caves, even with different types of coordinates (mixture of Lambert and UTM for instance). In the final export PCX5 file, all coordinates will be converted into WGS84.

The parametres of several popular coordinate systems and projections (UTM, Lambert, WGS84 etc..) can be found in a textfile "CONVCOORD.TXT", in the SpeleoBase program folder. Expert users can change directly this file with a text editor, or by using the "Convertisseur" software.

If you want to add or modify projections, then download "Convertisseur" by Eric Sibert: http://esibert.free.fr. Install it, start it, then go into "paramètres", push the "Ouvrir" button (= Open) and load the data from the file "CONVCOORD.TXT" that you will find in the SpeleoBase folder. After having made your modifications, you must save again into this file.

Please consult the documentation of "Convertisseur".

Also, and this is very important, SpeleoBase must be able to make the LINK between your own coordinate system code of the cave, and the corresponding code in the CONVCOORD.TXT file. This is because SpeleoBase has its own set of codes and you are even free to create codes yourselves. For instance, you can use in SpeleoBase a code "UTM30/ED50", but Convertisseur has its own set of codes and there it is called "UTM ED50".

These links are made in the maintenance program "Codes of Coordinate Systems" that you will find in the Maintenance menu.

Once all configuration is O.K., the export procedure is quite simple:

- select the caves
- choose the Export function in the File menu
- choose "PCX5 file"
- Press "Destination", and choose the folder and filename where you want to export to (the file extension must be "WPT", e.g. "EXPORT.WPT" (wpt means "waypoint)

NB: Feel free to use the "Temp" subfolder of SpeleoBase!

- Start

Remarks

A logging window will show you the progress and possible errors of the export process.

Caves without coordinates (X=0 AND Y=0) are not exported.

If the cave has no number, SpeleoBase will give it a number prefixed with "S". Example: "S123"

Example of a PCX5 file:

H SOFTWARE NAME & VERSION I PCX5 2.09 Created by SpeleoBase

H R DATUM IDX DA DF DX DY DZ

M G WGS 84 121 +0.000000e+00 +0.000000e+00 +0.000000e+00 +0.000000e+00 +0.000000e+00

H COORDINATE SYSTEM U LAT LON DEG

H IDNT LATITUDE LONGITUDE DATE TIME ALT DESCRIPTION PROXIMITY SYMBOL ;waypts W A2 N42.944392 W0.73742232 30-NOV-01 12:00:00 02150 NO_NAME 0.00000e+00 08243 W A4 N42.945255 W0.73556439 17-OCT-01 12:00:00 02145 NO_NAME 0.00000e+00 08243 W A6 N42.946434 W0.73234654 17-OCT-01 12:00:00 02175 Grotte Abri 0.00000e+00 08243

3. Export to "SpeleoBase" files

You will need this function if you want to exchange your caves with other users of SpeleoBase!

After having selected the wanted caves, you must first select the destination folder. You cannot enter a filename. SpeleoBase will use by default a folder "SBEXCHANGE" that is a subfolder of the SpeleoBase program folder. After having started the export process, SpeleoBase will create a set of files in the destination folder.

These files are: SBCaveMain.DBF et SBCaveMain.FPT SBCaveDocs.DBF SBCaveImag.DBF SBCaveTopo.DBF SBCORSYS.DBF SBCOUNTRIES.DBF SBTYPEENTR.DBF SBPERSPECT.DBF

Never change the names of these files! If you want to pass your caves to another user, you must pass him all 9 files. So email your colleague the entire contents of the SBEXCHANGE subfolder; or put it on a CD.

A detailed logging shows you what is going on during the export. You will see here all references (links) to external files. When logging has finished, it is recommended to SAVE (and optionally print out) the logging. You must do this BEFORE closing the loggingwindow!

This is important if you also want to pass your external files (images, survey data or docs) to your collegue. For a bunch of reasons (security issues, privacy issues, authority and technical issues and so on), Speleobase will NOT include external files in the export. It is your job to pass your colleague these files, and it is your colleagues job to put them in exactly the same folders as you had done (or the links will be invalid ones)

NOTE: As from version 3.0.2, there is a checkbox that makes it possible to make a copy of all of the linked files in 3 folders that are named EXPORTED_IMAGES, EXPORTED_DOCS and EXPORTED_TOPOS and that are made in the destination folder that you have chosen for the export operation. That way you can easily transfer them to your colleague.

Example of logging:

A cave is represented by its Number/Name/Place, followed by all links...

CAVE: 1 AN701/Trou Souffleur/Isaba

:....Imagelink: C:\SpeleoBase\Images\PSM\AN701.jpg

CAVE: 2 AN73/Gouffre des Grands Frissons/Isaba

:....Imagelink: C:\SpeleoBase\Images\PSM\AN73_ess.jpg

:....Topolink: C:\SpeleoBase\Topodata\Compass\PSM\AN73.DAT

:....Topolink: C:\SpeleoBase\Topodata\Text\Psm\An73.txt

CAVE: 3 FR1/Gouffre Vaille que Vaille/Isaba

:....Imagelink: C:\SpeleoBase\Images\PSM\FR501 Acces.jpg

:....Imagelink: C:\SpeleoBase\Images\PSM\FR1.jpg

:....Imagelink: C:\SpeleoBase\Images\PSM\FR1 Croquis Avalon.jpg

:....Imagelink: C:\SpeleoBase\Images\PSM Photos\U119-FR1.jpg

CAVE: 4 FR3/Gouffre de Caou Couges/Isaba

:....Imagelink: C:\SpeleoBase\Images\PSM\FR3 Coupe SSP.jpg

:....Imagelink: C:\SpeleoBase\Images\PSM\FR3 Plan SSP.jpg

:....Imagelink: C:\SpeleoBase\Images\PSM\FR3_Coupe_Gauche_SCF.jpg

:....Imagelink: C:\SpeleoBase\Images\PSM\FR3 Coupe Droite SCF.jpg

 $:.... Topolink: C:\SpeleoBase\Topodata\Text\Psm\fr3.txt$

:....Topolink: C:\SpeleoBase\Topodata\Text\Psm\fr3riv.txt

:....Topolink: C:\SpeleoBase\Topodata\Compass\PSM\FR3.DAT

Number of exported caves: 4

Attention: image, survey data or docs files are never exported, only their links!

Logging finished - Temps: 21:13:23 Date: 20020625

4. Export to « CSV »

This allows you to make CSV "Comma Separated File" that you can easily import into other programs, such as Excel.

5. Export to « Google Earth »

With this option you can create a special KML that can be read with the Google Earth "File Open" function. Google Earth will show all the caves with their names and most important fields on their correct locations (if you had entered the correct coordinates!).

SpeleoBase will, during export, CONVERT the coordinates of the selected caves. Please read the "Export to PCX5 section" for more information about coordinate conversion.

Once all of the configuration is O.K., the export procedure is quite simple

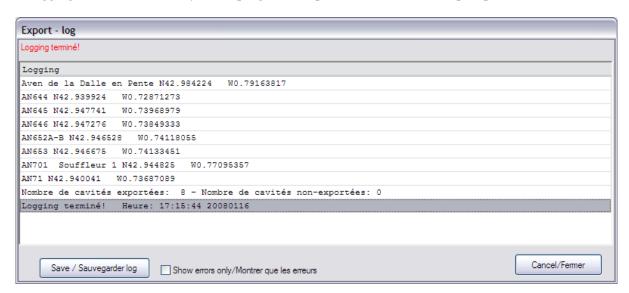
- select the caves
- choose the Export function in the File menu
- choose "Google earth file"
- Press "Destination", and choose the folder and filename where you want to export to.

NB: Feel free to use the "Temp" subfolder of SpeleoBase!

- Start

Remarks

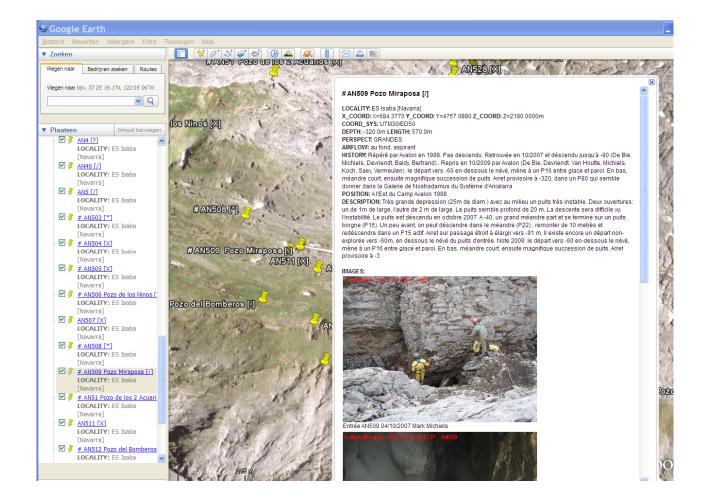
A logging window will show you the progress and possible errors of the export process.



Caves without coordinates (X=0 AND/OR Y=0) are not exported.

As from SpeleoBase version 2.9.0, the links to your images (photos, surveys etc) will also be exported to Google Earth. So, when clicking on a cave in Google Earth, you will see the images (see example below)!. But these are only <u>links</u>: the physical image stays where it was. That means that if you move, rename, delete etc.. the original image file, Google Earth will no longer be capable to show you the images.

Example screenshot of Google Earth:



6. Export to « GPX »

With this option you can create an xml GPX file. GPX has become the standard for exchanging data with a GPS. Most GPS software can handle GPX files.

SpeleoBase will, during export, CONVERT the coordinates of the selected caves. Please read the "Export to PCX5 section" for more information about coordinate conversion.

Remarks

A logging window will show you the progress and possible errors of the export process.

Caves without coordinates (X=0 AND Y=0) are not exported.

The <u>cave number</u> will be used as the waypoint name.

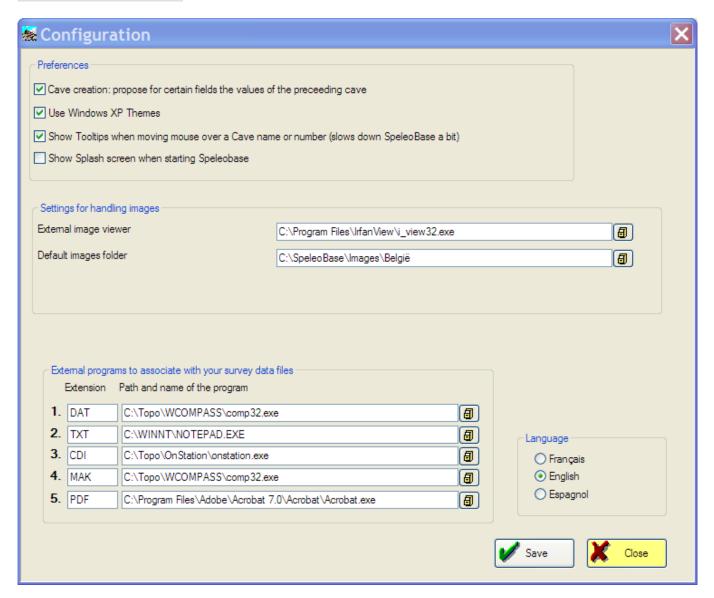
If the cave has no number, SpeleoBase will give it a number prefixed with "S". Example: "S123"

Important! in SpeleoBase the number of the cave has 10 positions, but many older or "cheap" GPS units will not support waypoints names of that length. E.g. Garmin Etrex H will support only 6 positions. When transferring the GPX file to your GPS, the waypoints names will be truncated. This could result in duplicate waypoint names. Most GPS's will then overwrite those waypoints...

The name, depth and length of the cave will be put in the "comment" tag, which is supported by some more expensive GPS-devices.

Configuration





In the configuration window you can change some preferences and settings that are important:

Here you can change the language of SpeleoBase (French, English, Spanish). Changing the language needs a restart of SpeleoBase. It will not only have an effect on the user interface, but also on all print output and help docs.

The external "image viewer": you must indicate where this program is located. It is recommended to search it by using the search button, this way the path or filename will be correct

example: C:\Program Files\IrfanView\i view32.exe

You can also set the default image folder that Speleobase will propose when you add Image links and you check the option to copy the image file to a folder.

The external editors for the survey data files: you must enter the file extension of the survey file and the program that is to be associated with it. examples:

DAT C:\Topo\WCOMPASS\comp32.exe (Compass)

TXT C:\WINNT\NOTEPAD.EXE (plain Text)

CDI C:\Program Files\On Station\onstation.exe (OnStation)

You can enter 5 different extensions and associated programs. Attention: not all programs are capable of opening a file when launched. Better do a test first.

Reindexing

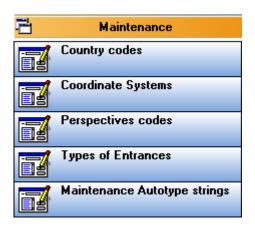


It is good practice to perform a reindexation from time to time, and you *must* do it when SpeleoBase has been terminated abnormally (the program will do this systematically in case of abnormal termination). There is no risk involved. Apart from rebuilding the index file, deleted records will be compressed out so you win some file space. Also Speleobase will check the files for corrupted data which can be the result of a power failure, for instance. Corrupted records will be repaired, but most of the time the data in the corrupted fields will be lost!

▶ the cave table must be closed before performing this action.

Maintenance of codes

Country codes, Type of entrances codes, Perspective codes, Coordinate System codes



Here you can maintain the codes that are used in the selection boxes in the Cave Table and Cave Detail windows.

Add: to add a new code

Change: when you doubleclick a record in the table, you get a detail window. Here you can change the description, not the code itself. You can of course create a new code, and delete the old one if you really need to change a code.

Delete: you can delete a code, at the condition that it is no longer being used in a cave record.

Deactivate: in the code table, you can click directly in the checkbox to (de)activate a code. This is very practical, because this way you can, without really deleting a code that you might need one day, make the code disappear from selection boxes. So you can avoid having to scroll down very long selection lists.

Converting Links



With this utility you can convert all links to images, docs or survey data files.

Two different types of conversions are possible:

1. Convert absolute links to relative

SpeleoBase keeps for every image file; the drive+path and name of the file. Old versions of SpeleoBase only stored "absolute" links like: "C:\My Pictures\Vercors\Gouffre Berger\Entrance.JPG".

New versions of Speleo Base, will, if the linked file resides in a folder below Speleo base, store "relative" links like: "..\Gouffre Berger\Entrance.JPG".

This function makes you convert all old, absolute links to relative ones.

2. Replace a part of the link path

Imagine you have a lot of links to files on your C: drive. One day you install a second drive and you move all the files to that new drive D:, maybe even in a folder with another name.

All your links will be invalid then. But with this function, you can do a "search/replace" operation on all links and replace all references to the old drive.

As from SpeleoBase version 2.9.0, there is a more powerful tool to change links: "Work with Links". See the next chapter of this manual.

Work with Links



As explained earlier in this manual, it is very much recommended that you keep all of your images or documents together in one folder (that may of course be structured with subfolders).

It is even more preferable that this is a folder that resides below the SpeleoBase program folder. This way, you will make it so much easier to exchange your data and images with other users, or to duplicate your entire Speleobase environment to another PC (a new PC, your second PC, an expedition laptop), or even to a USB-stick.

But maybe you didn't always pay attention to this rule and your images are distributed all over your PC. Sooner or later you'll regret it. Links in Speleobase will become invalid as you move these images to other locations, or even delete them because you think they are no longer needed. You want to fix this... you want to move all of these images to one folder, and adapt the links in SpeleoBase. In the past this was a very tedious (manual) job, nearly impossible to do if it involved many caves.

The "Work with links" window will be your friend. First of all it will make it easy to see what links are no longer valid, without having to go through every cave record individually.

Then you can select one or more (with Ctrl-Click, Shift-Click) links.

Then you choose the new destination folder for your images or documents.

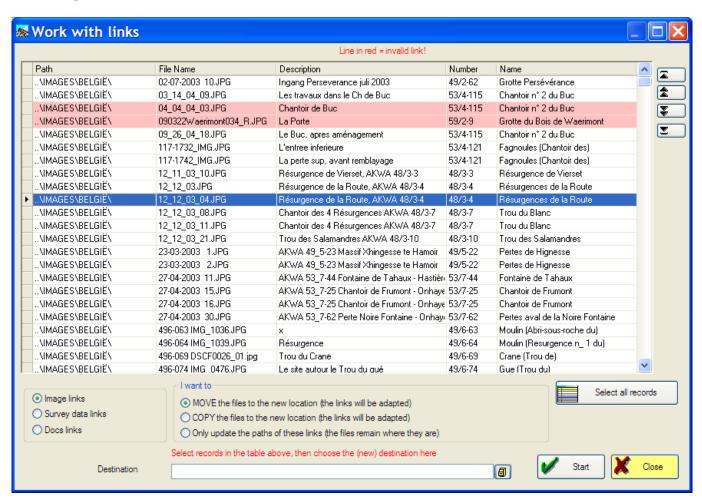
Then you tell SpeleoBase what to do:

move the files to the new destination and adapt the links

copy the files to the new destination and adapt the links

only adapt the links with the new path you have choose in the destination box.

That's it: SpeleoBase will take care of the rest.



Backup & Restore



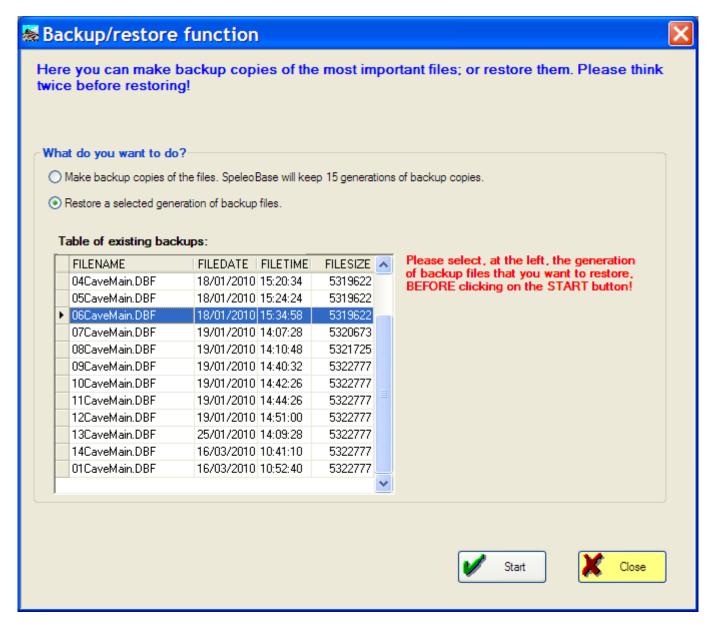
In the File menu you will find a "Backup/Restore" option. Use it from time to time... it might one day save you a lot of trouble!

▶ Tip: You must close the Cave Table to have access to this menu-option!

This option will let you make a backup copy of the most important files (caves and all links) in a subfolder of SpeleoBase called "SBSAVE".

SpeleoBase will make up to 15 different generations of backup files for you. When 15 sets have been made, the oldest one will be overwritten and so on.

SB will even automatically make a backup for you, each time you close the program and SB sees that you have changed one or more cave records!



With this same menu option, you can also restore a backup copy of your files (select the desired generation first). This means: the original files will be replaced by the files from your backup copy.

All changes that you have made after that backup operation, will be lost. So use this option with care, and only if things have gone really wrong.

During a restore operation, SpeleoBase will save your original files as well, just in case. They can be found in the SpeleoBase\Temp folder and their names end with "O". (e.g. CavemainO.DBF). There is no function provided to restore them, it will normally never be needed. But they are there... just in case....).

Support

In case of problems, I will try to help you: paul.de.bie@skynet.be
Describe the problem as good as possible, give me the error messages and if possible send screen-copies.
But please, read the HELP files first. The SpeleoBase FAQ (see the Avalon website) is also a good source of information.

However support is limited to SpeleoBase (I will not spend my time to solve your "Windows" problems), and even then, I cannot guarantee you that the problem will/can be fixed...

Suggestions are also welcome, of course.

Now and then, new versions or patches can be found in the SC Avalon website (follow the "Software" link) http://www.scavalon.be