



Frequently asked questions

- [Is it really effective?](#)
- [I don't see properly some characters.](#)
- [Is it safe to copy Fullrecall database from/to Windows version to/from Linux version or other operating systems?](#)
- [When is the ANN trained?](#)
- [What are these files: weights.bin, user_cases.bin?](#)
- [Is it possible to start Fullrecall with a specific \(other that recently used\) database?](#)
- [Exec tags don't work for me with a program that is in "Program Files".](#)
- [I sometimes get message "This item is difficult and probably should be rewritten \(Ctrl-E\)", what's wrong?](#)
- [user_data.bin file got a bit smaller, is this OK?](#)
- [How to do global search&replace?](#)
- [What are the program limits \(size of database\)?](#)
- [Can I upgrade Fullrecall? Will new version read old database?](#)
- [Is it possible to use Fullrecall from USB based flash drive?](#)
- [How to start Fullrecall 1.2.x \(or newer\) on Windows 98/Me?](#)
- [Is it possible to make Fullrecall store relative paths for images and sounds?](#)
- [Is it possible to use find-feature with wildcard \(*\)?](#)
- [Is it possible to use own server \(for network import/export\)?](#)
- [How Fullrecall decide if an item is "difficult and perhaps should be rewritten"?](#)
- [Does Forced review skew ANN?](#)
- [How can I import data from Excel?](#)
- [How to keep images and sound files cross-platform?](#)
- [How to print elements on printer?](#)
- [What is items sticking?](#)
- [How does the soft-limit work?](#)
- [How to limit reviews to specific category?](#)
- [Is it good to keep more than one database when material differs in difficulty?](#)
- [How to copy database from PC to Android?](#)

screenshots

download

articles:

creating questions

improve memory

support:

faq

manual

hints & tips

community:

databases

scripts

wishlist

other programs

Is it really effective?

Yes! Although it's difficult to make a reliable research to compare it with "common learning", once you know how it works (and know basics about human memory), it

will be obvious for you that this is not a black magic — just an optimization, that just works.

However, don't expect Fullrecall to be a panacea for learning troubles. Firstly, it helps only with remembering knowledge, not understanding. Secondly, when you have a frequent contact with the material you learn (i.e., you have many natural repetitions beside these in Fullrecall) then Fullrecall won't help you so much with this material (but still can be helpful).

Last, but not least. Fullrecall **optimizes your time spend on memorizing**, allows you to focus your effort in the right way, in the optimal time. But it's your effort that is the crucial factor influencing the learning rate — if you won't make the serious effort trying to really remember every item then Fullrecall will slow down the learning rate for you trying to match your "lazy forgetting curve". On the other hand, if you'll commit yourself to learning and won't skim through reviews: I'm pretty sure you'll remember much more than you would remember in the same time, making the same effort, but learning without the software.

Technical questions

I don't see properly some characters.

Please choose a font (menu [Options](#) → [Fonts](#) → [Questions/Answers fonts](#)) that covers the encoding you use. If another application correctly displays affected text: please try to find out what font the other application is using and set the same font in Fullrecall. On MS Windows you'll find [Lucida Sans Unicode](#), it supports most commonly used characters and looks good; other universal fonts (not available by default on MS Windows) are: [Code2000](#) (shareware), [Cyberbit](#), [Arial Unicode MS](#) (supplied with MS Office 2002 (XP) and MS Office 2003). **See also: [List of Unicode Fonts](#)**. On Windows you can drag&drop *.ttf fonts files in "Control Panel" → [Fonts](#). On Unix/Linux since XFree86-4.3 you can just copy the *.ttf fonts to `~/.fonts/`, and they should be now visible in Fullrecall (after Fullrecall restart), in [Options](#) → [Preferences](#) → [Fonts](#).

Is it safe to copy Fullrecall database from/to Windows version to/from Linux version or other operating systems?

Yes! Format of all files is fully compatible between Windows/Linux/FreeBSD/Pocket-PC/Maemo versions.

When is the ANN trained?

On repetitions, in the background, using about 200ms of CPU time just after an answer or question is presented. The faster your CPU is, the faster ANN can grip your memory model. But don't worry even if you use a very slow CPU — it still should work okay, as it's well optimized.

What are these files: `weights.bin`, `user_cases.bin`?

weights.bin — contains internal ANN weights, so they don't have to be recomputed again from ANN learning data every time Fullrecall starts; *weights.bin* file is saved from scratch everytime Fullrecall quits;

user_cases.bin — contains data collected from the user to train ANN.

Is it possible to start Fullrecall with a specific (other than recently used) database?

Yes, using `-d` parameter (and path after `-d`, with space between) from command line (e.g. `fullrecall.exe -d c:\path-to-database\`).

Exec tags don't work for me with a program that is in "Program Files".

The space between *Program* and *Files* is the problem. A way around it:

add "C:\Program Files\The-Program" to the system path (right click on "My computer", Properties, Advanced, Environment Variables, System variables, edit "Path" variable: add to it: `;C:\Program Files\The-Program`).

Now, provided 'exec tags' are turned on in Fullrecall settings, this should work:

```
<exec>the_program.exe c:\a_folder\image.jpg</exec>
```

I sometimes get message "This item is difficult and probably should be rewritten (Ctrl-E)", what's wrong?

The warning says that the item has been repeated many times and interval is still low. In other words: the item is very difficult and you spend much time on it. Some items are just difficult and we can do nothing about it, so in such cases it's safe to ignore the warning. But in most cases: we can reformulate question and answer to make answer easier to remember: question should be specific; answer should be short, ideally just one word; question should never force you to enumerate many items (such questions can be often split into more items, every item that demands short, specific answer); sometimes you can also add an image or sound, or even a more explicit hint for the difficult item. After any substantial changes to the item, please use "Move to queue" feature from "Edit" menu, so item will be reintroduced to the learning process from scratch (as it may have a different difficulty after the changes).

user_data.bin file got a bit smaller, is this OK?

Yes. An internal user_cases.bin file optimizer (which is called when Fullrecall decides that the file needs optimization) optimizes the file structure (so Fullrecall can start faster), merges data, and throws away redundant data, which may result in a smaller file.

How to do global search&replace?

Close Fullrecall, make a backup of database directory, open elements.xml, do a global search&replace in your editor of choice, save changed elements.xml and start Fullrecall.

What are the program limits (size of database)?

8192 bytes per question, 8192 bytes per answer. 128 bytes per category name. No limits whatsoever as to number of items in the database nor size of the database.

Can I upgrade Fullrecall? Will new version read old database?

Yes. New versions are designed to read fully databases of older versions. If you use Windows version, an easy way to upgrade is to just download the version with

installer and install it (without uninstalling previous version, which would delete your settings): it will upgrade Fullrecall files (fullrecall.exe) and your data will not be affected.

Is it possible to use Fullrecall from USB based flash drive?

Yes. Copy the executable, and folder with database along with its contents, to the USB drive (a sub-directory is fine).

If you don't know where is the folder with database is: path to it is always visible in running Fullrecall in [title bar](#).

You can create, on the flash drive, a batch file (e.g. "start.bat") that will start Fullrecall from specific (relative) directory (using "-d" parameter), e.g.:
`fullrecall.exe -d fullrecalldb\`

Also, you probably will want to store settings in a settings-file stored on the USB flash drive too (instead of registry which is used by default): it's possible to store settings in a file by using "-s" parameter, so your batch file can look like this:
`fullrecall.exe -d fullrecalldb\ -s settings.ini`

If you use images and/or sounds, try to keep them in a sub-directory of the database-directory if possible (also [see this FAQ entry](#)).

How to start Fullrecall 1.2.x (or newer) on Windows 98/Me?

Fullrecall-1.2.x (or newer) on Windows 98/ME needs **unicows.dll** file from MSLU (Microsoft Layer for Unicode); you can [download MSLU here](#). After download, unpack and place the **unicows.dll** file in "C:\Windows\System\" and Fullrecall now should be able to start. (NOTE: it won't help Windows 95, Windows 95 is not supported at all by Fullrecall-1.2.x and newer versions).

Is it possible to make Fullrecall store relative (not absolute) paths for images and sounds?

Yes, images and sound stored inside the database directory (or a sub-directory of it) have paths automatically converted to relative. So, for example, if your database directory is "C:\fullrecalldb\" and you keep images in "C:\fullrecalldb\images\" and sounds in "C:\fullrecalldb\sounds\", the paths (to images and sounds) in Fullrecall database will be stored as relative.

Relative paths takes less space in the database and are portable from one computer to another.

Is it possible to use find-feature with wildcard (*)?

Fullrecall allows you to use *regular expressions*; regular expressions offer more than just the wildcard, but have rather beginner-unfriendly syntax. For the simple problem of the wildcard, you can use "." instead of "*" (i.e., ctrl+f, make sure "Use regular expressions" is turned on, in place of your "*" use "."). For more details (and the full syntax) about regular expressions, see [external sources](#).

Is it possible to use own server (for network import/export)?

No, but you achieve the same with a "start script" that would be called instead of real Fullrecall binary: the start script can download your current database from your own server, the start Fullrecall, and (after Fullrecall quit) upload the database to your own server (by ftp, scp, or whatever protocol you like). E.g.

```
#!/bin/bash
#script called before Fullrecall start:
/home/dca/scripts/download-my-current-frdatabase.sh

#start Fullrecall
/usr/bin/fullrecall-linux.bin

#upload the database to my server:
/home/dca/scripts/upload-my-current-frdatabase.sh
```

A similar solution with a .bat file for MS Windows is possible. The files that the "start script" needs to transfer are all files in current Fullrecall database (path to current database directory is always visible, in running Fullrecall, in [title bar](#)). If you need/want to extract the current database directory in the upload/download scripts: Linux/FreeBSD versions: ``grep pathtodatadir ~/.foxrc/Fullrecall``, MS Windows version: `HKEY_CURRENT_USER/Software/Fullrecall/SETTINGS/pathtodatadir`

How Fullrecall decide if an item is "difficult and perhaps should be rewritten"?

By default, when item has been repeated at least 16 times (not counting any "forced" reviews or multiple reviews done on one day) and interval-scheduled-by-ann is still below 16 days. The threshold is configurable.

Does Forced review skew ANN?

No, it doesn't skew ANN in any way. Forced reviews are usually suboptimal investing of one's time (unless one wants to increase retention disregarding optimal time/results ratio, e.g. before an exam), but are not bad in any way from ANN point of view (at the worst, ANN just doesn't learn anything from such review).

How can I import data from Excel?

Fullrecall can import data from MS Excel (and possibly from other, non-Microsoft, spreadsheet applications) provided data is exported from Excel in tab-delimited format. So all you need to do is to pick (in Excel) "Save as..." from "File" menu and set "Save as type" option (at the bottom of "Save as" dialog) to **"Text, Tab delimited"**.

Then, in Fullrecall pick "Import Questions&Answers From File to Queue..." available under [File](#) → [Import/Export](#) menu and choose the file exported from Excel.

How to keep images and sound files cross-platform?

Please keep your images and sounds under Fullrecall's learning database directory. If your learning database directory is "C:\frdb\", then keeping images (and sounds) in "C:\frdb\", or any subdirectory (like "C:\frdb\images\") will result in images (and sounds) stored in Fullrecall database as relative paths, and that will be portable. [See also](#).

How to print elements on printer?

There is no support for printing cards in Fullrecall itself, but you can export some (or all) cards by using "Export questions&answers to File..." feature that is available in menu "File" / "Import/Export" and choosing (at the bottom of the dialog when you are asked for a filename) "File Format" = "SuperMemo-7 questions-answers". Resulting txt file can be opened in a Notepad (or any other text editor) and printed from the Notepad. Also, there are two [user-submitted scripts](#) that enable to print main elements (not from queue).

What is items sticking?

Items can be stucked in Knowledge Manager by dragging item A over item B. Hard sticking item A to item B (i.e., dragging item A over item B and choosing "Hard stick items" option) means that every time item A shows up for a review (normal or forced), item B will follow it. Soft sticking item A to item B means that every time item A shows up for a review (normal or forced), item B will follow it only if item B is scheduled for review for now or in next 10 days. Only normal (i.e., non-queue) items could be stucked together.

How does the soft-limit work?

Soft-limit tries to reschedule items that are for review for today in order to meet the limit. It's a short-sighted feature that only works for "today" and it only reschedules reviews of items that neural-network judged that can be postponed (i.e., risk of forgetting the item, if it's review is postponed, is low). It doesn't reschedule items that are not due to review for today. The feature can be abused and can be harmful, esp. for novices who sometimes add too many difficult new items to the learning database daily (they don't yet have the daily burden of reviews), only to be surprised by very high number of reviews several days later: then moving the reviews for days latter (by the Soft-limit) only postpones the problem, accumulating even higher number of reviews that no longer will be rescheduled further, because neural network will eventually assess the risk of forgetting the items (from further rescheduling) as too high. A way out from the problem, if created, is to turn of the Soft-limit and either bite the bullet and do the high number of reviews (if it's possible), or reset ("Move to the Queue") some of the items, and introduce them some several days latter (when the problem with high number of reviews a day is under control) at a slower rate.

The feature, if used in a controlled manner, can be helpful though. Typical good use scenarios: back from vacation; bad days (being temporarily sick or temporarily not having time to go through all scheduled reviews). Note that you can also just not do all the reviews for today, and they will be automatically shifted to tomorrow. The Soft-limit have a two small advantages:

- positive psychological effect (for some users) from not leaving reviews for today
- it shifts the items that you will likely remember still days latter, while be just leaving some items for today (not using Soft-limit) you could leave items that neural-network considers important for review for today.

How to limit reviews to specific category?

Press "Learn" with **right** mouse button (in mobile version: press&hold "Learn" till a dialog pops up, ca. 1 second): a dialog with category selection will pop-up and you will be able to select (one or more) category that will be active: only reviews from these selected categories will be presented. If you would like to select more than one category, press and hold "Alt" on your hardware keyboard and then select categories.

Is it good to keep more than one database when material differs in difficulty?

Neural network in Fullrecall handles material with different difficulty just fine, so keeping the knowledge in one database (in different subcategories) is a good idea.

How to copy database from PC to Android?

Find directory of the learning database on PC; the directory is usually called "fullrecalldb" and has file named "elements.bin" inside (and some others). You have to somehow copy the directory (e.g. by USB connection or by SD card) somewhere onto Android device. After copying the database directory, in FullRecall options on Android you have to select the copied directory as learning database directory.

©2003-2022 DC.