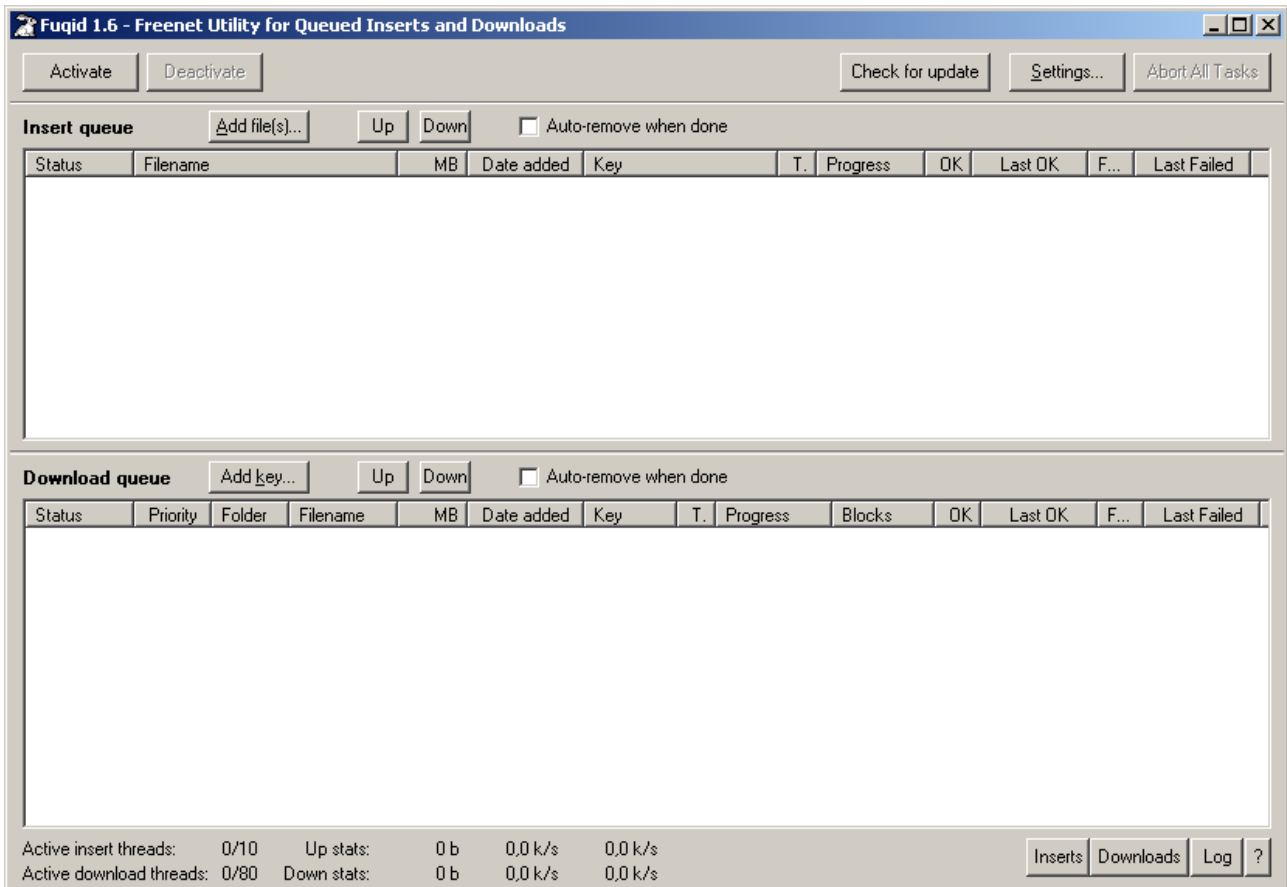# Fuqid 1.6 HELP (EN)

Introduction

Fuqid is the "Freenet Utility for Queued Inserts and Downloads" and it exactly does that. Freenet tools are often command line and not very handy. The solution with an easy GUI is Fuqid. If you are coming from another p2p network, you will see some differences, but you won't have any problems to use this nice download-tool.

Beside the nice visual appearance it is indeed also very useful. It downloads automatically files of any size. And at the moment (Freenet Build 5103) at a decent speed comparable with emule or Kazaa.

But Freenet is more than just file sharing, it is a philosophy, so surf on the Freesites and see what true freedom of speech means.

Fuqid was first published in early 2003: Version 0.5a. The main design remained up to the new Version 1.6, but there is much more to discover today. Some things are not so easy to find anymore, but Fuqid is very easy to use, and you don't want to be without it in the future.

New releases are announced on Frost, where you can meet *mxbee* the Author of the Program and also *Apophis* the Author of this help file. Meet us there:

Frost (get Frost @ http://jtcfrost.sourceforge.net/)
fuqid-announce
public   SSK@G6ayiFfHdGNMatFgeNm1Xk~gggQPAgM
fuqid-public
public   SSK@5o9nBkbkt9Hwsm0PJpKYJEa8cSMPAgM
private   SSK@ALbN9vLjIZ3PBS58ZHw6jY71mFhD

FUQID-1.6.zip
MD5:   unknown   *FUQID-1.6.zip*
SHA-1: unknown   *FUQID-1.6.zip*
SSK@CKesZYUJWn2GMvoif1R4SDbujlgPAgM/fuqid/13//FUQID-1.6.zip   *(Freenet-download)*

There are Webmirrors, if you download from there check SHA1 or MD5 Checksum

The Installation

The installation is very simple, you probably got a .zip file. Extract the .exe file from the .zip file to your favorite folder. Fuqid will only create files in that folder. It will create no other libraries, registry entries, or anything else outside of that folder.

If you want to use Fuqid, just double-click on the Fuqid.exe (yeah the white rabbit).

Fuqid will create a .ini file, some log files and a folder called Data. This folder will save your partly uploaded and downloaded files.

Update

If you want to update your Fuqid, just overwrite the Fuqid.exe you currently have. All settings, downloads and uploads will still be there after the update.

Running under Linux with WINE

This will be the only remark about Fuqid and Linux:

There is no Linux version of Fuqid, but there is a patch for Fuqid 1.3 floating around with which it was said you could compile with Open Kylix. It is not known if this works with Fuqid 1.4 - 1.6.

The executable runs with WINE. There are some problems and with some configurations it doesnt work. I recommend always the latest version of WINE.

It worked flawless here.

To avoid problems:

- Set the logging level to "No Logging at all"
- If you get error messages, normally you can ignore them.
- Deactivate all tray icon features.

The Main window

Activate

The Activate button starts Fuqid if it is not already running

Deactivate

The Deactivate button shuts down Fuqid. This can take a long time, since it waits till all Threads are finished. If you want to end Fuqid quickly: click on "Abort all tasks" which shuts down all threads and deactivate Fuqid. After that you can close the window.

Status

- The green *ACTIVE* indicates a running Fuqid

- The brown *ACTIVE* indicates a shutting down Fuqid

- The tan *NODE DOWN* indicates Fuqid is running but you haven't started Freenet yet, or your Freenet is starting but not yet completely running. If you have not started Freenet yet, do that now. Fuqid will start as soon the Freenet node is up.

Check for update

This button checks if there is a new version of Fuqid available in Freenet and downloads the newest version, if available. You can set an automatic interval in the Setting. (Settings section)

Settings

This will open the Settings dialog box. The standard settings should be tweaked a bit. Please refer to the Settings section of this document.

Abort all tasks

This shuts down all threads immediately so that you can close Fuqid cleanly.
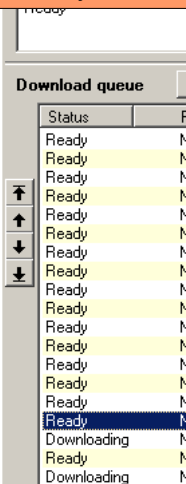
Upload / Download

Add Files

If you click on "Add Files" you get the normal file-dialog you know. There you can choose the Files you want to upload. Select the files you want to insert, and click on Open. The files you selected will be added to the Upload queue and will be inserted into Freenet.

The Up and Down Buttons [removed @ Fuqid 1.5.12]

There are two Buttons above the upload and the download table. If you select one or multiple rows you can change the position of these rows. If you want to upload in a specific order for example. If you miss a top and bottom Button. Yes, indeed, there is none. But you can sort after a specific column ascending or descending.

Left side Up/Down/Top/Bottom-Arrows [new @ Fuqid 1.5.12]

There are four buttons on the left side. You don't see them normally. If you go with your cursor over the left side of the Download or Upload queue. The four buttons will appear near your cursor. To move your files one up, one down, or directly to the top or the bottom.

The "Auto-remove when done"-check box

If you check this box all finished uploads or downloads get immediately removed from the tables. If you don't check it you can do it by hand or check the box any time you want, and all finished files in the list get removed.

Remark: Uploading heal blocks get removed whether you checked the box or not.

Add Key...

Probably your most essential feature if you want to download files.

If you have any key you want to download, Copy it in your Clipboard complete with the Filename normally appended to it (Shortcut Ctrl-C)

If there is a Freenet key in your clipboard an you click on the Add Key... button, it will automatically be pasted into the field. When you click OK there will be a File Select Dialog, just select where you want to save it. If you pasted a key with filename, the filename will be chosen, when you only pasted a key, you can chose the filename now.

Additionally to the key it is possible to add a Comment to the File. Maybe you want to know who has inserted the file after you downloaded it, or whatever Information you want to add to a file.

Accepted are all (modern) Freenet keys:

CHK@xxxxxxxxxxxxxxxx/filename.ext   (Content Hash Key, Files)

SSK@xxxxxxxxxxxxxxxx//subspaces/filename.ext   (Signed Subspace Key, Freesites)

KSK@filename.ext   (Key Signed Key, easy to remember)

Right-click on Add Key...

There are two options if you right click on the "Add Key..."-button.

Scan file(s) for keys...

This function can be very handy. If you downloaded a freesite with 24 pictures on it. You click on this select the freesite HTML page and you'll get a dialog like you were adding multiple files to Fuqid. The parser will try to find all keys with filenames in the selected file(s).

Scan clipboard for keys...

If the autodetection of keys doesnt work you can scan your Clipboard for Freenet keys.

Scan Frost messages for keys...

This tool works much like parsing files. But it is specially designed to help you with frost.(http://jtcfrost.sf.net/) In frost are many keys in the messages. This tool searches these keys and you can add the ones you like.

1. You search the Frost main folder

2. you chose the boards now from a tree view of the Frost boards. You can Search for keys and set a Range of Dates, and you can now also Search for a String (in the Subject, Poster name, Attached Files or the whole Message Body), which will make it much easier to find specific Content.
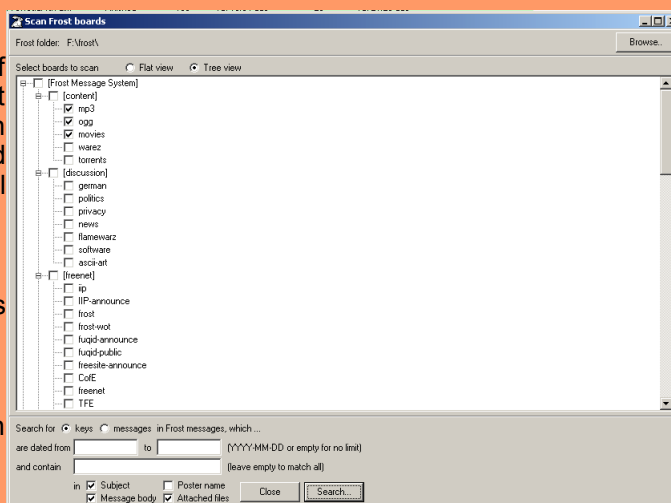
3. Wait during the search process which provides now a visual indicator.

4. you'll get a list of files posted files and can delete the ones you don't want.

Remark: the scanning may take a moment, if you selected many days and many boards. The Search is done it's in own thread, but there might be still some blocking when you make a search.
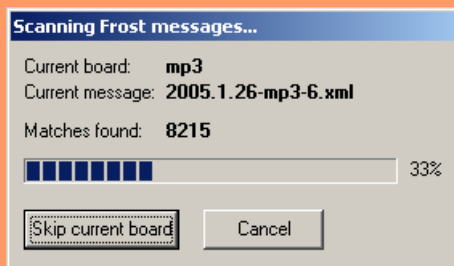
The Upload / Download Tables

The Columns

Status

The status of a file says what Fuqid is doing with it at the moment: possible states:

• Done (Already up or downloaded files)

• Ready (File is ready for upload, but the file has no thread)

• Waiting (File is ready for download, but the file has no thread)

• Downloading (Some threads are trying to download blocks)

• Uploading (Uploading the file)

• Decoding (FEC Decoding, the file be finished soon)

• Preparing (The file is being prepared, before it can be uploaded)

• Verifying (The file is complete, Fuqid checks if the file is correct)

Priority

If you use the priority system (Settings / General / Download), you can set for each file a priority.

• Priority - : you don't use the priority system

• Priority *HIGHEST*: All available threads are split over the files with Priority HIGHEST, if blocks are left

• Priority *HIGH*: these files use twice as many threads as normal

• Priority *NORMAL*: All files are initially set to this

• Priority *LOW*: these files use only the half amount of threads than normal threads

• Priority *LOWEST*: these files only get download threads if no other blocks are available

• [<Priority Level>]: The Parentheses indicates that this downloads priority is managed manually.

• [X]<Priority Level>: This download has Priority at least high with auto priority management.

• <Priority Level>[X]: This download has Priority never highest with auto priority management.

Folder

The destination folder, if a file is finished it will be saved there (you can change that with the right click menu)

Filename

The file you are downloading will have this filename

MB

When you have the header of the file you will see how many megabytes this file has.

Date added

The Date when you began the download (you can set it to relative, then it counts how much time it took till now)

Key

This is the Key of the file, if you insert a file, and you have not set precalculate key, you will see the key at the end of insertion.

T.

This is the abbreviation for „Threads". Here you can see how many threads are working on that file.

Progress

(i.e. 50% , 60) the first number is, how much of the file you already have downloaded. The second number is the number of blocks left you can download.

Blocks

This is a map of the file:

- black lines are working threads

- green lines are successfully finished blocks

- gray blocks are blocks Freenet already tried to download

- red blocks are failed blocks, they will retry later

- a lighter red indicates the limited interval Fuqid is downloading from. (for files not completely inserted)

- aqua blocks are blocks you don't have but you can calculate them with FEC. If you have aqua blocks you downloaded a complete Segment. Files are splitted into independent segments of 128MBytes, only the last segment is smaller.

OK

Number of successful blocks since the program was last started or the last time it was reset to zero.

Last OK

The date and time the last block of the file was successfully downloaded.

Failed

Number of failed blocks since the program was last started or the last time it was reset to zero. This number will normally be much higher than the number of OK blocks.

Last Failed

The date and time when the last block failed from that file.

Comment

An individual comment for the file (may be used in the clipboard).

The context menu (right click on a file)

The download and upload queues have similar menus, some functions have hotkeys, which are mentioned on the right side of the menu. The operation selected from that menu will be applied to all of the files currently selected.

To select multiple consecutive rows, press [Shift] while selecting. If you want to select multiple files individually, press [Ctrl] while you select with the mouse. To select all uploads or downloads, click in the table, and press Ctrl-A.

Add key (download only)

Its like the Button „add key...". If you have a key in your clipboard it will automatically use it.

Add file(s) (upload only)

Add files with the standard settings.

Add file(s) with additional options (upload only)

Add files and set additional options for them.

Remove selected

The selected files will be deleted. This works only if no thread is working on the file. Normally you have do abort the download and remove it after that.
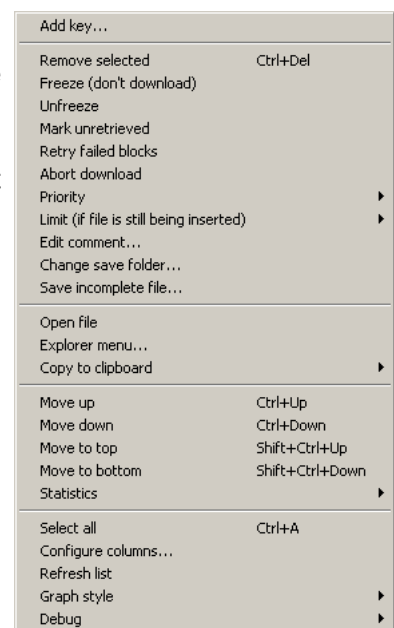
Freeze

Stops the file from getting any more threads assigned to it.

Unfreeze

Removes the file from the Frozen state so that threads can be assigned to the file again.

Unprepare (upload only)

The calculated FEC information will be recalculated and the file will be reinserted from scratch. This is useful if there is a problem calculating the FEC.

download context menu

Mark uninserted / Mark unretrieved.

The file will be reset to a state as if it had just been inserted into the queue.

Retry failed blocks (download only)

If a file is in an error state, and you don't want to start downloading the file from scratch, this will try to download more of the blocks that were previously unavailable and have not yet been downloaded. This option can also be used if a file is not in an error state.

Reinsert header block (upload only)

This reinserts the header block, which is the block that contains the keys for the blocks that make up the file to make it easier for others to download

Abort download / Abort insert

Kills all the threads currently assigned to the file and puts the file into the "frozen" state.

Priority (download only)

- Enable auto priority management
  Activate priority management for these file(s)

- Disable auto priority management
  Deactivate priority management for these file(s)

- Priorities (Lowest, Low, Normal, High, Highest)
  Set the priority by hand (makes only sense if management is deactivated for this file)

- At least high
  If managed, priority should be at least high

- Never Highest
  If managed, priority shouldn't be highest for this file.

- Reset
  Reset the priority flags to the defaults.

Limit (If still being inserted)

This option is mainly for files which are not yet completely inserted. Normally Fuqid tries to download a random block of the whole file. If you use the Limit setting, Fuqid selects only a random block from the next few Blocks. You can set how many Blocks in the future Fuqid should try. Small values are more reasonable to use only few threads for slow files. You can chose between All, 20, 50, 100 or an arbitrary number of blocks.

Edit Comment

This option will allow you to change the folder the selected file(s) is / are saved in. It is handy if you accidentally told Fuqid to save the file to the wrong folder when adding it to the queue.

Change save folder... (download only)

Here you can change the folder your file goes to after it is completely downloaded, in case you put it in the wrong place when you added the file.

Save Incomplete File

This allows you to make an incomplete preview of file before the download is complete.
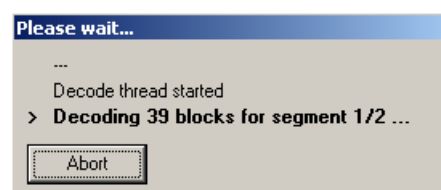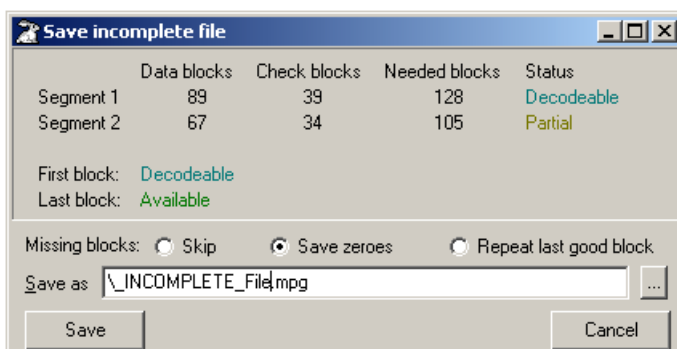
"Save incomplete file" dialog box will show a list of segments and whether they can be decoded or not. If a segment does not have enough blocks to be decoded, the missing portion of the file will be skipped, filled with zeros, or repeated with the last good block before the missing block.

If you want to preview mpg or similar files who need the first block of a file to get at least partly seen, the state of the first block has to be Decodable or Available.

For the preview of avi files or similar type who need the last block of a file to get at least partly seen, the state of the last block has to be Decodable or Available.

If you respect this, you know before you Save an incomplete file if you have a good chance to see anything.

hen you click on the Save button, the decode thread is invoked, if there are any decodable segments to decode, and the progress of the decoding process will be shown.

Open file

If a file is completely downloaded you can open it. You can also double click on the file to open it. This works on files in the insert and download queues.

Explorer Menu...

This will open the same context menu you would get if you were right clicking on a file or files in the Windows Explorer. You can use the middle mouse button to access this menu directly.ly.

Copy to clipboard

When you want to share in Frost or on your homepage what you have inserted into Freenet, you will need the key for the file. Fuqid has different formats the key can be represented as, which can include additional information (like the name and size of the file). You can also define your own custom formats in the settings.

Format descriptions:

- Copy keys with filename (CHK@key/filename.ext)

- Copy keys only (CHK@key)

- Copy Extended Information
  File: filename.ext
  Key: CHK@key
  Bytes: 4053368

- Copy as HTML Tag (<A HREF="CHK@key">filename.ext</A>)

Select all

Selects all files in the upload / download queue. Ctrl-A can also be used.

Move up

Moves all selected files one row upwards.

Move down

Moves all selected files one row downwards.

Move to top

Moves all selected files to the top

Move to bottom

Moves all selected files to the bottom

Graph Style (Download only)

You can chose between two styles. The new one is standard and looks like other p2p applications. The old one has for each block a single line, thats why the lines have no fixed size.

Statistics

You can clear the statistics or reset it to the overall values.

Configure columns

If you right click on the header of the columns you get also the „Configure Columns" - Option.

Allows you to customize the columns. Fuqid displays all columns which are checked, you can set another name for the rows if you want, and change the order. All this is done with a right click. To move the columns up and down there are buttons on the right side of the window.

Relative / absolute

You can chose between relative and absolute where a column displays a date. Absolute is really a date (DD.MM.YYYY hh:mm:ss). If you select relative, Fuqid will tell you how much time is gone since that event (00:03 ago = 3 minutes ago)

Refresh list

Updates the view of Fuqid.

Statistics

| Active insert threads: | 14/14 | Up stats: | 89,77 M | 2,8 k/s | 2,3 k/s |
| Active download threads: | 56/100 | Down stats: | 41,84 M | 2,8 k/s | 1,1 k/s |

Statistic panel

The Rows

The upper row displays the statistics for uploads

The lower row displays the statistics for downloads

The Numbers

XX / YY:

The first number is the number of threads in use. The second number is the maximum number of threads that can be used in that queue.

XX M

This is the total amount inserted or downloaded since Fuqid was last started.

XX k/s

This indicates the average speed of downloading. The first number is the speed in the last 3 minutes, the second number is the average speed over the whole session.

> **Right click in the XX k/s area**
>
> If you click with the right mouse button on the in the XX k/s area, you can see a menu:
>
> ***Clear speed and file statistics*:** reset all Fuqid statistics to zero
>
> ***Clear speed statistics****:* session speed, session amount of data reset
>
> ***Clear file statistics***: Set statistics for each file to zero (in the table)
>
> ***Reset files stats to overall stats***: Set the statistics for each file to the overall values.

Additional indicators

Preparing insert
FEC-decoding
The preparing insert indicator appears in the statistic panel if you are FEC encoding a file for insertion. The FEC-decoding indicator appears when enough of the file has been downloaded that Fuqid can calculate the missing blocks, and is in the process of doing so.

Calc.checksum
The file is finished and Fuqid is verifying that there are no errors in the file.

BUG detected! Check log.
The BUG detected! Check log. indicator appears when an unknown error occurred. You can look in the log to get clues as to what caused this condition. This indicator can be turned off by right clicking on it

Inserts

If you click on inserts you see a list of all your inserted files, if you activated insert logging in the settings.

Downloads

If you click on downloads you see a list of all your downloaded files, if you activated download logging in the settings.

Log

If you click on log you see the messages logged. (you can adjust the logging level in the settings)

?

This is a small about: about Fuqid.

Hovering over a file

If you hover the mouse over a file in the insert or download queue for more than half a second, the statistics of the insert / download progress will be shown in a popup window, like the following:

```
File: Dexy's Midnight Runners - Come On Eileen.mp3
Size: 3,87 M
Key: CHK@dmnL1zhNYInxUeI8IuA0GvdJ9jMMAwI,yP-kauev9ETyJsTZ-yEP-g/Dexy's Midnight Runners - Come On Eileen.mp3
Added on: 02.06.2005 17:55:20

Session stats:
427 blocks succeeded, last: 19.06.2005 14:43:10
360578 blocks failed, last: 19.06.2005 14:43:31
  418 Unknown errors
  84993 Data not found
  274823 Route not found
  343 Aborted by Freenet
  1 Key mismatch

Overall stats:
427 blocks succeeded, last: 19.06.2005 14:43:10
360578 blocks failed, last: 19.06.2005 14:43:31
  418 Unknown errors
  84993 Data not found
  274823 Route not found
  343 Aborted by Freenet
  1 Key mismatch
```

The files name, size, key, and the date it was added to the queue will be shown. Additionally, the Session stats and Overall stats will be shown, complete with the reason blocks are failing to be inserted / downloaded. Sometimes you can say something about the state of Freenet when you see what kind of errors are happening more frequently at a given moment.

Settings

General Tab

General Settings

FCP: IP address

Usually 127.0.0.1, if you connect to a Freenet node NOT on your PC, change that.

FCP:Port

Usually 8481, only change that if you played with the Freenet settings

Automatic update check ever XX hours

Check for an update of Fuqid, I recommend a long interval (168h = 1 week).

Transcript message log to Fuqid.log

The messages in the log can be saved to the file Fuqid.log in the Fuqid folder.

Log finished inserts to Fuqid-keys.log

Check this if you want to remember your files you've uploaded

Log finished downloads to Fuqid-Downloads.log

Check this if you want to remember your files you've downloaded

Logging Level

Debug logging:	Logs everything, not recommended
Normal logging:	Logs many messages, standard
Important messages only:	Logs the things you want to know, recommended
no logging at all:	No logs, for WINE User

Insertion

Threads

How many threads can be inserting blocks at the same time.

I recommend Modem (4 – 6 Threads) ADSL/cable (10 – 20 Threads) more than 1 mbit up-speed (40+)

HTL

Hops To Live. HTL=25 should work best. If you use fewer hops, the file has less of a chance of being retrievable by others.

Different HTL for Splitfile Header

Same as HTL, just for the header of a splitfile

Reinsert splitfile headers XX times

Splitfile headers are not saved redundant like the rest of the file, if you insert it more than once, the others might get better results in downloading your file.

Treat single blocks like splitfile headers

Single blocks are like splitfile headers, no redundancy, so it is a good idea to treat them the same

Include checksum in splitfile [removed @ Fuqid 1.5]

You can still insert without checksum, use the "add file with options" for that.

Download

Threads

How many threads Fuqid will assign to downloading blocks of files. The following settings are recommended:

Modem (10 – 20 Threads) ADSL/Cable (50 – 100) 10 Mbit+ (try 100+) Be careful, using too many threads can have a severe impact on your system resources.

Initial HTL

The HTL Fuqid will use initially to download blocks of a file. Choosing a lower number is better, as it will be incremented later, and if you start with a higher number, you will be left with fewer possible attempts to get blocks, as you will hit the maxHTL in the nodes you are going through and they will refuse the query outright. A good value is 12-15.

Retries

Retry often, this is a good rule of thumb with Freenet (good value: 5 +)

Increase HTL by

Use small steps (good value: 1 or 2)

Heal %

You can help others get files you downloaded if you reinsert some of the blocks you downloaded. (5-10% is OK, but a higher value will contribute more)

Heal HTL

use a small HTL, you just help, you don't reinsert. (good value: 5-10)

Use priority System (simultaneous download)

if you don't use the priority system, Fuqid goes top-down through your downloads. This option allows you to download files in parallel instead of serial.

Download max XX files at once

you can allow how many files in parallel, or use the priorities (Very Low – Very High)

Retry failed downloads after XX min

The number of minutes before another attempt will be made at downloading the file after the last failed attempt (10 – 30 min)

Advanced Tab

Advanced Insert Settings

Don't check local node when inserting

If you upload a file you already uploaded, you'll get collisions **in** your node, for reinserts always check this box, this will ignore the keys in your node.

Precalculate and insert metadata first

This option is very useful when inserting big files. If you set this option the final key of the file and all the metadata gets generated at the beginning of the insert. You'll get the key immediately after the encoding process is finished. Other users can begin downloading the file, even though it is not completely inserted.

Get data blocks from original file

This option will tell Fuqid to get the data directly from the file it is inserting. Because it is constantly accessing the file to be inserted, the file cannot be renamed or deleted until the insertion is complete, or an error will occur in Fuqid. The advantage of this option is that only one third of the inserted file size will be used in Fuqid's data folder (the FEC information), rather than a complete representation of the file plus the FEC information.

Advanced Download Settings

Don't check local node when downloading

Tell Fuqid to not check your node when downloading.

Verify each downloaded block

This does what it says, and it should always be selected.

Try to get all missing blocks, even if too many failed.

It does what it says. And you should use it. You won't get a file the first try normally...

Priority Management

Files that have downloaded a block recently have a better chance of downloading more blocks now. Priority management takes advantage of this fact by increasing the priority of these files, thereby increasing the number of threads assigned to downloading them, thereby decreasing the download times and using threads where they have a better chance of getting something useful done.

Enable automatic priority management for newly added downloads: When this option is enabled all new files get automatically managed. Priority management can be enabled or disabled at a later time by right-clicking on a file and selecting the appropriate menu selection.

Enable automatic priority management for newly added downloads

When this option is enabled all new files get automatically managed. But you can always change that for single files.

If a block comes in switch to highest

[x] immediately

If a block for a file gets downloaded the block gets assigned the highest priority immediatly.

if its the second during the last XX min

Rather than getting set to the highest priority immediately, Fuqid will wait until a second block is downloaded successfully before raising the priority.

Step down from highest if no block is received for XX min

If no new block gets downloaded for XX minutes it goes back to high priority. Set this value to a low number if you don't want to have only a few files get downloaded the same time.

Reset Priority boost if no block is received during XX min

The Priority will be set back to normal if no new blocks are downloaded within this interval of time.

to Lowest

If this is set, Fuqid will set the priority to lowest, instead of normal.

don't reset if completed XX%

When a file is almost completed (95%) you want to finish that file and don't want to lower the priority. This option allows you to set the threshold.

Max Threads Highest XX%

Only this percentage of threads should be spread over files with the priority highest.

Stricter

The stricter option will cause Fuqid to more strictly check that the number of threads assigned to files set to the highest priority are only using the percentage of threads selected in Max Threads Highest XX%.

Sync Factor

This option does only work if you use Vanessa's modified freenet node. It uses the data from the node to synchronize Fuqid with the node.

File (log)

The modified node output file.

Miscellaneous Tab

Startup

Start activated

Fuqid will start in active state, rather than waiting for you to manually activate it.

Start minimized

Minimize the window at Startup

Clear file statistics

If checked, the statistics for the files will be reset when Fuqid starts.

Process Priority

This is the Process Priority under Windows. Normal should be fine if you have special needs you might want other settings. (won't have an effect under Linux)

Finished Inserts / Downloads

Indicate Tray Icon

The rabbit blinks green if this option is selected.

Play Sound

You can select a sound to be played when these events occur.

Test

Test the sound you selected for the events.

Tray Icon

Animated Tray Icon

This will animate the rabbit when Fuqid is not active, nice sleeping rabbit

Minimize to System Tray

This will animate the bunny when Fuqid is not active as a nice sleeping rabbit.

Queue Colors

The queue indicates the status of the file with background colors. Here you can change the standard colors. To change a color click on the field of the color you want to change, if you want to change the text color you have to click with the right mouse button.

You can change the colors for the State *Normal*, *Frozen*, *Finished, Error* and also for the **Empty Space.** If you want the standard colors back click on the *„Default Colors"* button which sets back these pair of colors. To change the background color, right-click on it, select a color, and OK.

Clipboard Formats Tab

The help included in Fuqid should be sufficient, but I copied it into this document, it is much easier to read here, than in that small window.

written by mxbee

Format strings consist of a sequence of plain text and keywords.
Text has to be placed between double quotes ("), keywords between percent characters (%).
To get the actual characters " % and \ in text, prefix them with \ (like: \" \% \\).
(See below for a list of all allowed escape sequences).

Keywords:
General format: % ["leadtext"] [!] <token> ["trailtext"] %

<token> usually expands to a part of the key. (See below for a list of valid tokens)
If it is prefixed by a ! the raw key format is used, otherwise the key is URL-encoded.
For example: raw: CHK@.../my file #1.txt ; url-encoded: CHK@.../my+file+%231.txt

Leadtext and trailtext are plain text strings.
If the token evaluates to something other than an empty string,
these texts are placed before/after the token result.
Otherwise they are not used.

Some tokens need parameters. These follow the token, enclosed in parantheses.

```
Valid tokens:
 fulluri       complete uri (example: freenet:SSK@gdahsgh,sfhghs/blah//index.html)
 uri           same as %fulluri% but without the freenet: prefix
 key           for CHK-keys: key without document name (other keytypes: like %uri%)
 comment       optional comment
 keytype       CHK,SSK,KSK (without @)
 routingkey    routing key part
 cryptokey     crypto key part
 metainfo      metainfo part
 docname       document name
 metastring    metastring
 size[("format"[,"dec.places"[,"punctuation?"[,"separators"]]])]  filesize. formats: b,k,M,G
```

Interactive tokens:
```
askstring("title"[,"default"])%   ask the user for a string
askyesno("title"[,"default"])%    ask the user for a yes/no decision (default can be Y or N).
                                  If yes is chosen this expression evaluates to the leadtext,
                                  else to the trailtext.
```
If no default is specified, and multiple keys are formatted then the value entered for the previous key is used as default answer for the next key.

Special tokens for formatting multiple keys at once:
```
%nomulti%              if this token appears, attempts to format multiple keys are refused
%separator("text")%  defines the separator between formatted keys (default: newline)
```

Allowed escape sequences in text:
```
 \n     carriage return + linefeed (= newline)
 \r     carriage return
 \t     tab
 \\     the backslash character (\)
 \%     the percent charcter (%)
 \"     the quotes character (")  (only needed inside keywords, see below)
 \0x##  where ##  are two hex digits: the character code with hex representation ##
 \###   where ### are three octal digits: the character code with octal representation ###
```

Comma Separated Values: (List of selected files)

%!docname%%%separator(", ")%

List of files with file size, separated with „|":

%!docname" "% %"("!size("M","2")" MB)"% %separator(" | ")%

File Info XML-like:

"<file>" "\n" " \t" "<description>" %askstring("Enter Description", %comment%)% "</description>" "\n" " \t" "<key>" %uri% "</key>" "\n " "\t" "<size>" %size("b")% " Byte" "</size>" "\n" "</file>"

Register Troubleshooting

Normally you shouldn't change anything here.

Disable builtin CHK-key calculation

Don't use the Fuqid CHK-calculation, use the Freenet CHK-calculation. This can be slower or faster depending on if the Freenet node is using Java or native code to do the calculation, and the speed of the computer on which Freenet is running, the connection between the system running Fuqid and the system running Freenet, if they are not the same system.

Disable builtin FEC en/decoding

Don't use the Fuqid FEC, use the Freenet node FEC. This can be slower or faster depending on if the Freenet node is using Java or native code to do the calculation, the speed of the computer on which Freenet is running, and the connection between the system running Fuqid and the system running Freenet, if they are not the same system.

Do not show warning for bad setting

The use of some settings or setting combinations can generate warning. Select this option to turn off the warnings.

Timeout for Insert/Download Threads

Sometimes Freenet doesn't give feedback about certain key you upload/download. If a key seems to be stuck more than 30 minutes, or whatever you want the limit to be, the thread waiting for the data will be freed and recycled by Fuqid.

Reset splitter position in main window

The splitter between Download and Upload can be reset if you are in a situation where you can't reach it anymore.

Command Line Parameters

This are advanced option (be careful): you can start Fuqid in a certain state. At the moment there are two command line parameters for Fuqid 1.6.
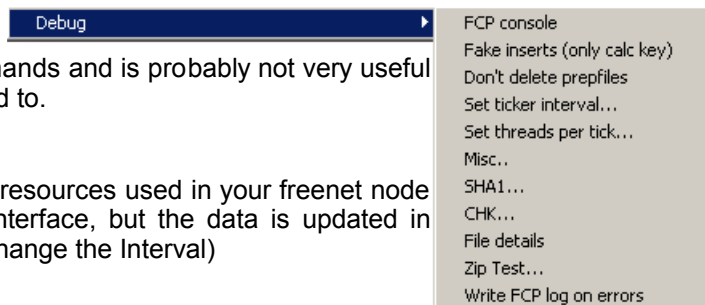
Debug Mode

`Fuqid.exe -debug`

If you start Fuqid in debug mode there are some additional options in your right click Menu:

and there are a few options also on the Download right click Menu:

INSERT

FCP console:

This option is for sending Low Level FCP Commands and is probably not very useful for and you should know how to use it if you need to.

Node Monitor (NEW to 1.5.12+)

This is a windows where you can look at all the resources used in your freenet node directly. It's the same you'll get over the webinterface, but the data is updated in realtime once per Tickerinterval. (see below to change the Interval)

Fake insert (only calc keys):

Again only a debug function, all files in the queue wont insert after set this flag.

Don't delete prepfiles:

This will hold your preparation files in the data folder, which can use a lot of space. This is only is useful if you want to insert the same file over and over again.

Set ticker interval...:

Normally the jobs gets done every 1000 milliseconds, like starting new threads, blinking, and so on. If you want to use fewer Resources you might set this value higher, if you want to have done those jobs more often you can use smaller values. Take care this can have a major impact to your system. This option will be forgotten after a restart of Fuqid.

Set thread per tick...:

Normally every tick (normally 1000ms) will start one new thread if there are not yet enough threads running. If you set this value higher, especially at the beginning there will more threads running in a shorter period of time time. Use caution, as your node might not be able to handle so many requests.

Misc...:

Who knows... its just an uri field...

SHA1...:

This option opens open file dialog box. If you chose a file the SHA1 hashsum will be calculated. You can copy the value to the clipboard.

CHK...:

This option opens a file-dialog. If you chose a file the CHK Fuqid would produce will be calculated. You can copy the value to the clipboard.

File details:

Here you can see the file split up into the corresponding blocks. For each block you see the block number if a thread is working on it, if it is done, how many times Fuqid tried to download the block, in which segment the block is and the individual key of the block.

Zip Test:

This if for Freenet sites which are uploaded as a zip manifest. (At least I think so, I only get a unzOpen failed Error message)

Write FCP log on errors:

I think that's obvious.

DOWNLOAD

File details:

Here you can see the file split up into the corresponding blocks. For each block you see the block number if a thread is working on it, if it is done, how many times Fuqid tried to download the block, in which segment the block is and the individual key of the block.

Verify downloaded blocks

Check again if all blocks downloaded are the correct ones (shouldn't be necessary)

No decode, download all blocks

If you don't want to finish after 2/3 of the downloaded blocks to decode a file you might use this option. Perhaps you try out how many blocks of the file are really reachable to see if a reinsert would be reasonable. For normal downloads this option doesn't make much sense.

Active

```
Fuqid.exe -active
```

If you want to start Fuqid in the active state, you can use this switch. This option maybe deprecated soon, as it is now possible to set this in the settings of Fuqid.

Running Multiple Instances of Fuqid

```
Fuqid.exe -nodupcheck
```

If you want to run at the same time multiple Fuqid instances for whatever reason, you can do that with this command line Parameter.

WARNING: If you run 2 or more Instances of Fuqid, make sure, you run them from different directories. If you start Fuqid twice from the same directory it is will corrupt your Fuqid.ini.

Behind the Scenes

Freenet Keys

There are 3 different Keys. Fuqid can just generate CHK@ keys. Why? Fuqid's intention is to upload big files, and not freesites. There are much better tools to generate freesites. FIW for example the most used utility for freesites.

The CHK is only dependent on the file content it is a hash of the content. Two files with the exactly same content will get the same key. The Filename part after the key can be arbitrary chosen, cause it doesn't get into the hash. It is only cosmetic.

SSK Keys are a bit different. You have to generate a Private/Public Keypair. The Public Key will be used to access the freesites later, and you have to insert with your Private Key. That way you are the only one who can write into your Subspace. But you can write different things in your Subspace. Edition Sites for Example. With SSK the Filename part is part of the Key, so it wont work without this part, or you get unexpected behavior. This is a difference to CHK Filenames.

KSK are like SSK but not secure. Everybody can write into this public key space.

The most popular KSK is KSK@gpl.txt it is most likely you won't get the gpl if you try to get this file. Cause everybody can insert KSK with this name and „overwrite" it. It is not possible to overwrite anything in Freenet. But you can insert this KSK to nodes which don't have the gpl block yet, and insert something different.

If you get porn instead of the gpl, don't be too surprised, thats a game ;)

Forward Error Correction (FEC)

Forward Error Correction introduces redundancy into the files. It means even you dont get all the parts of the file you are still able to reconstruct it. In Freenet it is done like that. Bigger files are split into blocks. The biggest blocks are 1 megabyte in size. If a file is lets say 100 MB, Fuqid splits it into 100 x 1 MB chunks (the blue part in the picture). Then 50 x 1MB additional FEC chunks are generated. The bad news is that you have to upload 150 MB. The good news is that you just need 100 out of these 150 blocks to reconstruct the whole file, so if some blocks are lost, the file can still be recontructed.

The FEC-encoding and decoding you see in Fuqid is the generation of these additional blocks or the calculation of the missing data block (at the end you have 100 Blue blocks again). FEC is CPU intensive, you'll agree if you insert really big files.

Freenet Client Protocol (FCP)

Fuqid communicates like all other tools for Freenet over the Freenet Client Protocol. FCP hides all the difficulties from Freenet behind a simple to use Interface. You can use FCP also over the network to a foreign node, but FCP is not encrypted.

FAQ

I have a „Bug Detected", what should I do?

If you can reproduce that error, send the error message in your log, and say what you have done right before the Bug Detected appeared. Send the information to the fuqid-public board. If you have an Error: EFCreateError. Try to avoid using the Explorer and browsing the data directory. The explorer sets locks even when you are only browsing files. (It's Microsoft... *shrug*) (probably obsolete after 1.3.7)

Fuqid is faster than XX, Fuqid is slower than XX, I can get Files with XX but not with XY. Why?

All tools use the Freenet Client Protocol to get the data from the node. The communication with the other nodes is only over your node. You can get any file with any tool. Fuqid has a good strategy, which is simply: retry retry retry ....

When I set HTL to 300 its much faster, why?

Because you believe it. This is only psychological. HTLs which are greater than the node's maxHTL limit has simply no effect. PERIOD.

Why is Fuqid not written in a Cool language like XX?

You speak only one language? US American?

I have so many failed blocks, is that normal?

Yes, you might have tens of thousands of failed blocks.

What are DNF/RNF

RNF are Route Not Founds and DNF are Data Not Founds. These are the most common errors while

downloading. RNF are the more evil ones, because they mean the request couldn't get routed somewhere, most probably because all nodes are crowded. This means the Number of RNF should be smaller than DNF. If that isn't the case, there might be a problem (too few known nodes, wrong configured NAT) it might be bad luck or maybe the network is really very crowded at moment (Freenet announced on Slashdot) or the current build has problems (FN5090+ had this problem).

I insert a file, but where is the key?

It will appear after your file is completely uploaded. If you want to have the key before you begin with downloading then you have to go to the Settings ans use the "Precalculate key and insert metadata first" option.

How to compile the source on my own?

You need at least Delphi 7.0.

I have lost my Fuqid.ini, what can I do???

Fuqid has a backup of your fuqid.ini, it is called fuqid.ini.bak. Just rename or copy the file from fuqid.ini.bak to fuqid.ini to recover it.

Decode Failed (FEC Error) of big files / Insert of big files (more than 1.33 GB / 2.0 GB)

This is a known Bug. The 32 Bit Arithmetic can't handle Files Bigger than 2.0 GB (1.33 GB + FEC) Files between 1.33 and 2.0 GB maybe not work with Fuqid upto 1.5.8, but should work with Fuqid 1.6. This Bug will be fixed in the future. If you Insert files Bigger than 1.33 GB you should consider splitting it.

Fuqid under Wine does leak Memory, what can I do? (Linux)

The Problem lies probably somewehere in WINE there is no real solution. EvilHunter wrote a Bash Script which avoids crashing by cleanly restarting the process:

written by EvilHunter

```bash
#!/bin/bash

MAXVMSIZE=2097152 # in kbytes
MAXTERMTRY=3

getvmsize() {
    grep "^VmSize:" /proc/$1/status | awk '{print $2}'
}

run=0
while truea
do
    run=$[$run+1]
    echo "run $run:`date`"
    wine Fuqid.exe&
    winepid=$!
    echo -n "Monitoring process $winepid (`cat /proc/$winepid/cmdline`) "
    echo "max size allowed: $MAXVMSIZE"
    while [[ `getvmsize $winepid` -lt $MAXVMSIZE ]]
    do
        sleep 60
    done
    echo "VmSize too great: "`getvmsize $winepid`
    TRY=1
    while [[ $TRY -le $MAXTERMTRY && -d /proc/$winepid ]]
    do
        echo "Sending SIGTERM to processus $winepid, TRY $TRY"
        TRY=$[$TRY+1]
        kill $winepid
        sleep 10
    done
    if [[ -d /proc/$winepid ]]
    then
        echo "Sending SIGKILL to processus $winepid"
        kill -9 $winepid
    fi
done
```

Frost Identities

Apophis	Apophis@pV_sL3yTJdq+PekdMq94J15jM+c
EvilHunter	EvilHunter@dNSkXaTgRV_0XfdsuiwC+6Gf8WQ
lgl	lgl@_rcVqMrHBSsR+OIsODFFXIDf000
mxbee	mxbee@vJShZ5FKxF+scgZP5mmHt12zmnQ
Vanessa	Vanessa@7CTAWaa0pjaurjf+HW803EcrQ4M

ABOUT

Fuqid-en-1.6/v1.01

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Corrected by a native English speaker: lgl on October 2005

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Based upon Fuqid 1.3.7 to 1.5.12 (1.6beta2) written by mxbee (FoS from Vanessa)