(inofficial)
RetroShare User Manual

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starting in April 2012

Inhaltsverzeichnis

1 About this document

This document is an inofficial user manual for the program RetroShare.

We wrote this manual in LaTeX, because we are big fans of RetroShare and we think it has great potential. As we can't support the development by donating some money to the developers and/or coding, this is our way to support it. We got our knowledge about RetroShare mainly via try and error, reading the forums and looking in the code sometimes. We are NOT developers of RetroShare and some minor details here might be wrong or have changed over time.

If you notice an error in this document, we'd appreciate a short feedback. If you want to help improving this document and you know at least the basics of LaTeX, so contact us. Klaus's contact information can be found on his private blog at `http://yet-another-nerd-blog.de/legal-notice/`. A native english speaker would be appreciated for proof-reading :)

2 A short introduction to OpenPGP

Since RetroShare makes heavy use of OpenPGP, we want to make a (very) short introduction to asymmetric encryption here. If you know about OpenPGP already, you can proceed to the next chapter.

2.1 asymmetric encryption

OpenPGP uses asymmetric encryption.

This means, that every participant creates a *public* and a corresponding *private* key. The public key is spread to all friends and allows them to encrypt messages for you. If a message is encrypted with a public key, only persons with the private key can decrypt this message. But the only person, who has the private key belonging to your public key, is you and so only you can read the message. This is the idea behind asymmetric encryption.

You can use asymmetric Encryption to ensure the authenticity of messages, which is called *signing*. In fact, you can compare it to a signature in real life, as only you with your private key are able to create it. Everyone, who owns the public key, can check the signature then.

2.2 Web of Trust

A basic problem is the initial exchange of keys between two friends. If Alice and Bob want to use asymmetric encryption, they will have to know each other's public key first. A malicious third party could intercept this exchange - a so called "Man-in-the-middle attack".

To prevent such attacks, GnuPG allows persons to *sign keys*. If you transferred the key manually, or you checked it via a safe channel like telephone, you should sign your friends key. The more signatures a key has, the more you can be sure, that it's the actual key and not a key created by an attacker. This whole process of signing other keys is called the *Web of Trust*.

RetroShare doesn't differ between signed keys and not signed keys, all friends are treated equal.

That's all we need to know for using RetroShare. If you are interested in details, I'll suggest reading the wikipedia articles Public-Key Cryptography and Web of Trust.

3 Installation of RetroShare

First of all, have a look at the official download site[1]. But RetroShare is still in an active phase of development, so it can be that the downloadable versions on this website are very old and could contain already fixed bugs.

3.1 Windows

3.1.1 fixed installation

For an installation on Windows, just download from the official Site the file ending with *_setup.exe.

3.1.2 portable Installation (recommended)

To ease the use of RetroShare, or to leave less marks on the computer, we recommend to install the portable Version, which is also downloadable on the official Site. It is statically linked and therefor the executable contains all necessary libraries. After finishing the download, just put RetroShare.exe in a new Folder and you can start by doubleclicking it. The pros of the portable version are:

- easier backup (just copy the whole folder)
- easier to update (just replace the RetroShare.exe file)
- everything in one single folder
- no Registry entries necessary

3.2 Linux

3.2.1 (K,Edu,L,X)Ubuntu and Ubuntu-Derivates

The easiest and recommended method is adding the repository of Cyril Soler, one of the main developers of RetroShare. You will get the newest stable version automatically. Just open a Terminal (Ctrl+Alt+T) and type:

```
sudo add-apt-repository ppa:csoler-users/retroshare
```

If you want to use new features as soon as possible and are willing to accept maybe not stable versions, you can take the *snapshot repository* by typing:

```
sudo add-apt-repository ppa:csoler-users/retroshare-snapshots
```

After that, you have to update your software sources and install RetroShare:

```
sudo apt-get update
sudo apt-get install retroshare
```

Personally, I'm using the snapshots repository, as there are more updates and you get the new features and bugfixes faster.

A notice to all users, which use the new unity user interface of Ubuntu: If you're minimizing RetroShare to the task symbol, it will be hidden by default and you won't be able to make RetroShare visible again. To deactivate this behaviour, do the following stuff:

- Install the package "dconf-tools" by typing: "sudo apt-get install dconf-tools"
- Start the program"dconf-editor"
- Click into Desktop → Unity → Panel and add "RetroShare" to the variable "systray-whitelist"

[1] official Downloadpage: `http://retroshare.sourceforge.net/downloads.html`

3.2.2 other Linux distributions

Here things will get a little more complicated, but you'll probably have figured it out by yourself :)

Debian users can just install the official package[2].

OpenSuse / Fedora users can use the openSUSE Build Service[3], where a repository for openSUSE 11.3, 11.4, 12.1 and Fedora 15 & 16 exists. After adding the repository, you can install RetroShare using *YUM*.

For **Gentoo** exists at github.com[4] an overlay.

Arch Linux: A community member maintains in the Arch User Repository (AUR) a *PKGBUILD*[5]-Script, which you can use.

3.3 Unix derivates

3.3.1 MacOS X

On the official website you can find a downloadable dmg-Package[6] for MacOS X 10.5 and greater.

3.3.2 Free-/ Net-/ OpenBSD

For **FreeBSD** exists a porting at freshports.org[7]. The last version is from 20th Februar 2012.

3.4 Compiling from Source Code

If no paket exists for your operating system, or you just want to have the very newest version, you can always compile RetroShare by yourself. It will require a little bit of programming knowledge, a guideline can be found at RetroShare-Wiki. It's not recommended for unexperienced users.

[2] http://sf.net/projects/retroshare/files/RetroShare/0.5.3b/RetroShare_0.5.3b.5129_debian_i386.deb
[3] http://download.opensuse.org/repositories/home:/AsamK:/RetroShare/
[4] http://github.com/leander256/retroshare-overlay
[5] https://aur.archlinux.org/packages.php?ID=13161
[6] http://sf.net/projects/retroshare/files/RetroShare/0.5.3c/Retroshare-v0.5.3c-svn5232_OSX10.5u.dmg
[7] http://www.freshports.org/net-p2p/retroshare

4 Using RetroShare

4.1 The first start

On the first start, RetroShare will give you the possibility to create a new Public/Private Keypair. If you already have a PGP key (e.g. for email encryption), you can use this one by importing it. Unfortunately RetroShare can use only RSA keys at the moment, but not DSA keys.

When RetroShare creates a PGP-keypair, it'll need a (nick)name, a free chosen email (will not be checked and visible to all your friends), a passwort and finally a location. The email field has the attribute optional, but can't leave it empty, otherwise OpenPGP can't create a key. This email-adress will be visible to all persons having your public key, i.e your friends and eventually your friends of friends. In doubt, you can simply use invalid@example.com.

The location is useful for people with more computers, e.g a tower and a laptop. This is a convienient feature to give multiple locations meaningful names, instead of using the random SSLID like "2ddf5cefd2517fb41fd46b5bbb7ce36d".

```
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: GnuPG v1.4.11 (GNU/Linux)

mQENBE9aG9gBCADAA09oJZJzUSU7n1udB7o34L9orvp5ckZkB0I/yq4V9446mOio
rSfaVDQnFjETV0NbrM51RIvenUHP75Jzq4/QXcyFE5B+poMg3pVrVUXAm31HZd2S
tRxprxVFpPTplLutNv79WN+NSih8fBFjc8buAKquff6uue9tvX0mj47NNzp6iSR6
+Ae1vzEI0IIw+wKxsdsMcZdPjbJXYRD5eaYnxbhjdJcpr3Sx73XTbOONs7DoNyxr
gEURfV4PIVUWF/zmZmKgp5Gtko4k4k+LRKaTNHZ7rEvPvDqv8O2lXrAmdXG81kuC
XH6K4/ZrLQzltvhqWMzmxgD9OuJunRv2X2bjABEBAAG0M2tsYXVzIChnZW5lcmF0
ZWQgYnkgUmV0cm9zaGFyZSkgPGtsYXVzQGV4YW1wbGUuY29tPokBOAQTAQIAIgUC
T1ob2AIbLwYLCQgHAwIGFQgCCQoLBBYCAwECHgECF4AACgkQnDxC1maIY6nF8Qf/
ZZZPni5VYKWKaN+j5rIkjWoDtySeE3iCOCAJtyjiXVGsRWKaSFPZSiL+8VZl6OPY
N6oAJnWjyDDf2Ql/QUJKfKpcqpe0SowxMGuDiOHkwCp+Ac6g1tWAi+zRPwP93Af1
nI7dNa1TZGmjVJSIvU90JTUM7gCx7vpJf59UZqDatggLxzaeNo2ryXjD+/npRCqe
F/kKRPp3/Oac1IIsYU8JK37uzIQJv3Nv3yBkP73OoZhEq7+g2tw9xsFfZn8skbpR
eXutwvuVFJbGGJLCWikN/DgGl21RaobeiFt109T6LMbsBkIHq9paPVbu7yTgL2TU
iLka9sOAwIjZX0tM5DpzIg==
=7I5x
-----END PGP PUBLIC KEY BLOCK-----
--SSLID--2ddf5cefd2517fb41fd46b5bbb7ce36d;--LOCATION--laptop;
--LOCAL--192.168.2.103:23822;--EXT--93.61.21.14:7812;
--DYNDNS--<subdomain>.<domain>.com;
```

There is a new, more robust format for certificates, it looks like this:

```
Af8AZXVbxsBNBFBq+SABCADfBXgKPDeC4Q6gnOaywnx9XTRcdQQYGvbWAOcygGDx
P7UC9FJ2v8LxtXd6QOjxsexXjGCrey78pPxDgm+iRCG0FGBeLpGBTouamvwQ7uUz
hLY8IGyjy4oDxwXgvVF/0x0WBi1i/haYJi8qXk9/Ll9cDXTSBKfqH2ACFzWum4mt
7klubMhsL80QZVeAeaeI2r6zbgYqaw7Xc1kNhYQDbfUU2m1urzaJ9gOT+MzVi97h
ukjUrE9SuIfrEoqIyL67sflfQyBwYEJm+X2N7pW4CwcnJWsHPI+Fe4POLgrH17bM
dZkIFdN5EJ1/1MT3FYLj/zx5c4Fgocmhi3s1xUWz5mbJABEBAAHNJ3Rlc3QxICHH
ZW5lcmF0ZWQgYnkgUmV0cm9TaGFyZSkgPHRlc3QxPsLAXwQTAQIAEwUCUGr5IAkQ
4XzDoqr5prgCGQEAAJ7HCADeRHF2AIUpT0w9/W6+r3e8HiCHaXNsFMcUgrarWl7h
MS0HfmLgVtaku2q17zcj+yS6QbDBGP2j/3+/OpJyQ19ZTBnvhEE3pbUm8Aoe4ZjI
jZofcyGA8fR9ICsCVXGqZE7IiNLuklNcwzIbpWt4+tmgQDO5x9D27ch2QEYisbT9
WZHAxfgW4QPzdKTJiqLxW3xIJqI/tP/y6XByOX/NR57HTXSYcCwE2JTDfuaO2Ki8
RROqu8XXQj/0xPf8QI8osxl2rH3LRx/c2CooPIQIcX64vqaVaol4P7FnTC7czUq+
xdlS/d9gBPkqsbl0j16P56wBmu02NfEBQlxEgwAXiJHKAgZP0FxzBP4DBsCoAncE
/gQABgh0ZXN0MWxvYwUQCCw1pLwJuX1PTasINX94pQ==
```

Both Certificate-Formats are contain the same information, for example, the second format contains the IP, too.

The first part of the certificate (lines 1-19) is simply a PGP public key. The second part (lines 20-end) contains specific extra information needed by RetroShare. The certificate must contain the *SSLID* and the *LOCATION*, to be able to find and connect to your installation. The intern/extern IP resp. the (Dyn)DNS-adress is optional, RetroShare can exchange this information with your friend on your first connection. The extern IP is only helpful, if it is still valid. In most cases (home setup), the extern IP will change every 24h, but this doesn't matter, as RetroShare can figure this out by itself (see **??**). If you're exporting your key to a *.rsc file, you can mail it, put it on an USB-stick etc.

4.2 The first *own* network

Now you should add some friends, because a F2F-network without friends is pointless.

You and your friend need to exchange your certificates. If there's a message about "corrupt certificate", one of you did something wrong with the copying (like wrong encoding, unintended extra characters etc.). You can try the exchange with files, if the corrupt certificate message stays.

You both should adjust your speed settings to the optimal Up- and Downloadspeed. The default settings are 200KB/s down and 50KB/s up. If you set the upload limit too high, it will slow down browsing, if you set it too low, your friends have to wait unnecessarily long for downloads from you. The speed of your internet connection can be e.g. tested here: `http://speedtest.net/`

Personally, I've got according to a speed test an upload from 150KB/s, so I set RetroShare's upload limit to 120kB/s. This way, I have enough reserved bandwidth and am able to let RetroShare run continously. The download limit I've set to 1000KB/s, because I want to download as fast as possible.

In the next step, each of you both should configure his router. The easiest way is to enable UPnP and set RetroShare's server setting to use it. The best performance you'll get, if you manually forward a port in your router (e.g. the default port 7812). We can't give an instruction how port forwarding can be done, as it is different on each router. A search in the internet should help you. You have to forward both TCP and UDP. Use e.g. the site `http://canyouseeme.org` to verify, if your port is forwarded. The computer, on which RetroShare runs, must be turned on for that, of course.

After doing all this stuff, you and your first friend should connect after some time. Have fun using RetroShare!

4.3 Finding friends

Die mir bekannten Seiten dazu seien hier genannt:

- `http://retroshare.sourceforge.net/forum/`: The official Forum of RetroShare has a key-exchange thread. Unfortunately the forum doesn't allow posts from new users, all posts have to be checked first. Be patient, the admin isn't looking every day.
- `http://f2f-fr.net/w2c`: A french site, where you can put your key in a webform. A "Chat Server" is adding you automatically then, and will give you access to some lobbys. You can chat then with other people looking for friends and add some of them as friends, if you want.

How many such friends you want to add, is your decision.

4.4 other tips and tricks

The user interface of RetroShare should be quite self-explanatory, at least, if you have read this manual. Some options are a little hidden, though, and should get noted here:

- recommending friends: If you want to recommend RetroShare-intern one friend to another, you should use the "certificate link". A certificate link has the following format

  retroshare://certificate?sslid=aa61180732ee9051aa61180732ee9051&gpgid=A1047F82&gpgbase64=mQENBE9aG9
  locipp=192.168.0.199:39270;&extipp=123.142.101.16:39270;

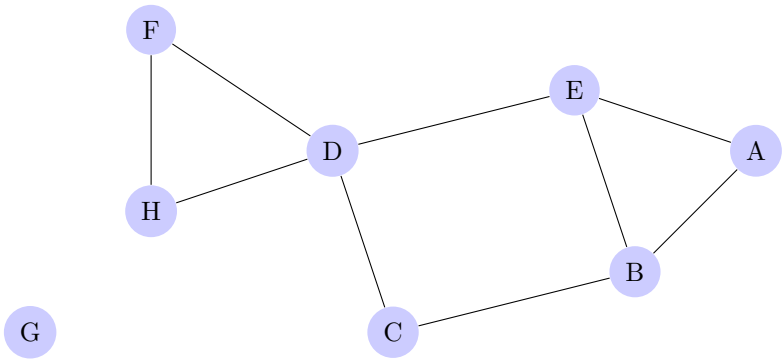
In this long single link, all information needed by RetroShare is stored: the certificate, current IP address. This makes exchanging friends to a simple mouse click.

- rscollection: A RetroShare collection is only a small XML file, which contains basically a list of folders and/or files. You can open a collection by clicking on the "Open Collection" in the transfer tab. You'll get a dialog, where you can select, which files of the collection you want to download. See also section 5.5.5.

more tips

5 How RetroShare works

This chapter should list and explain the various ways of communication in RetroShare and how they are working. We will assume the following fictive RetroShare-Network with 8 participants. A line between two nodes should indicate that those two users are friends with each other. For simplification purposes, we assume that all 8 users are online, too.



User G has installed RetroShare just this minute and not yet added friends. User E ist friends with A, B und D and so forth...

We shall call below "a friend" a person, which you have added as friend. A "friend second grade" shall be a friend of a friend of yours, with whom you are not friends. If f.e. you are person A, your friends would be E,B, your friends second grade would be C and D and the users F and H would be friends third grade to you.

RetroShare connects ONLY to your direct friends, but not to your friends second or higher grade. So if you're adding only thrustworthy persons, you can be 100% safe. The only (and small) exception to this rule is the DHT, see below for details.

So, a basic consequence is that G can't use RetroShare, because he has no friends. If user D goes offline, the above RetroShare-network will split in two subnetworks and no communication or file transfer is possible between H and A anymore.

5.1 Connection with friends

Most people don't have a static ip address at home, instead they have a so called dynamic IP, which changes every 24 hours. This is a problem, as RetroShare should be able to connect to your friend, if you and your friend are offline for more than 24 hours. To get the IP address of your friend, RetroShare uses three different methods, which should be explained in the following subsections.

Personally, I've always DHT and Discovery activated, because deactivating both will make connections more complicated and I don't need to hide I'm using RetroShare, because I live in a free country.

5.1.1 DHT

The "Distributed Hash Table" is the easiest and comfortablest method. RetroShare uses the "Bittorrent-DHT", the probably biggest world wide. You should know, that RetroShare will make connections to strangers here, but ONLY to look up the IP-adresses of your friends.

RetroShare will create an entry in this distributed network, which has the format (your SSLID, IP-adress). Everyone, who knows your SSL-ID (your friends and - if you have Discovery turned on - your friends of friends), can determine your IP-Adress then. People, who don't know your IP-adress, can only determine, that someone behind this IP is using RetroShare, but not the RetroShare nick, which friends he has or what he does.

If you don't want to make public, that your IP is using RetroShare, and you want to turn it off, you should setup Dynamic DNS, see section 5.1.3.

The DHT makes a bunch of connections at the same time, and some consumer routers don't like that. This results in connection losses every five minutes or so.

5.1.2 Discovery

With Discovery turned on, you allow your friends, to give your key and your IP to all of their friends, i.e. to your friends of second grade. Moreover, you send your friendlist to all of your friends. This implies two things:

- *It's easier to connect to you.* Imagine, you are F in the network above and you're currently connected to D, H is offline. Now H goes online, but knows only the IP of D and connects to him. If you have discovery on, D now will send your IP to H and H can connect to you.
- *It is easier, to become friends with you, if you want to.* Imagine, you're F again, and you and E want to be friends now. If you have Discovery turned on, E will already have your key (your common friend D has sent your key) and adding friends is only a mouseclick anymore. The annoying manual key exchange is no longer necessary.

5.1.3 DynDNS

The best method to increase your connectivity is the setup of "dynamic DNS". You need to go to a site like `http://no-ip.org` and register a dyndns like "something.no-ip.org". This DNS entry can be updated from your PC regularly or (even better) directly by your router.

The setup of dynamic DNS is beyond the scope of this document, just google it.

Your friends (resp. their RetroShare) can then make a simple DNS query and will get your current IP.

With a working DynDNS setup, you can disable DHT and Discovery.

5.2 Chat

RetroShare allows Instant Messaging with your direct friends. Just doubleclick in the friends list on a name and the chat window opens.

Beware: Messages, which your writing when your friend is offline, will be not be delivered until you and your friend are connected again! There is no central server, which could save the messages for you, as you might be used to.

5.3 Group Chat

Using the group chat allows you to send a message to all of your direct friends which are online. Offline friends won't get the message, even if they get online later.

This has the consequence, that you'll notice "ghost-chats" in the group chat window sometimes, i.e. you can read only the messages of one person. For example, if E and D are chatting using the group chat, only those two can read both parts of the conversation. A and B will get only the messages from E, and C,F,H will only get D's messages.

The group chat is probably not the most useful feature, I use it only for messages like "I'm offline the next week.".

5.4 Messages

The delivery of messages is similar to the delivery of chat messages. They will only be delivered, if you and your friend are connected, otherwise the messages will stay in the outbox. So, if A is writing a message to B, but A is online only from 8am to 12am, B instead only from 1pm to 6pm, the message will never be delivered.

5.5 File Transfer

Probably the most advanced feature of RetroShare is the exchange of files. Everyone can share one or more folders, and there are the following three options:

- networkwide
- browsable by friends
- browsable only by a group of friends

Of course, it is pointless to adding a folder, without at least one of those options enabled. What those options mean, will be explained in the next chapters.

5.5.1 browsable by friends

This option allows all your direct friends to see and browse this folder in their "Files" Tab. They can download then the complete folder or some parts of it.

As soon as your friend starts downloading some browsable shared files, you'll see his name and the file in the upload window.

Noteworthy is, that all your friends will know that these files are from you.

5.5.2 Anonymous shares

This option of sharing a folder allows you to share files, without your friends knowing it.

In this subsection, we'll assume that you are person A from the above graph, and you are sharing the folder "Test", which contains the file "Testfile". Nobody will see this folder in his "Files" tab then, it can only be found using the search function.

Let's assume, that F searches for "Testfile". F sends a search request to D, D forwards this request to E and C, and so on, and after a few hops, the search request arrives at you and you - having "Testfile" - send a hit back. Every node has a temporary cache, from who he forwarded which search request to whom (e.g. E remembers: I have forwarded the search request for "Testfile" with the ID 128931 from D to A). This way, it is possible, that your success message can be sent the same way back to F, without any node between knowing who searched and who had the hit.

This way, it is possible to establish "Anonymous F2F tunnels" up to a maximum of 6 hops and you can share files networkwide, without ever making a connection with other peers except your friends.

Let's look at the information, each participant of this "Anonymous F2F-Tunnel" knows, looking at the example tunnel A $\leftrightarrow$ E $\leftrightarrow$ D $\leftrightarrow$ F from above.

- A knows, that he is uploading the file "Testfile" to his friend E. (In the GUI, he'll see as Peer only "Anonymous F2F-Tunnel"). He doesn't know, if E requests this file, or E forwards this file.
- E knows, that he forwards a file from A to D. He could spy on what he is transferring, but he can't say, if A is uploading the file or E is downloading it. They could both forward this file from someone else.
- Analogue, D knows, he's forwarding a file from E to F and he could look at the file.
- F knows, that he is downloading the file "Testfile" from D, but he doesn't know, if D shares this file, or is just forwarding it.

Of course, the download speed of a long tunnel will most of the time be very slow, because it depends on the weakest link in the chain. If e.g. E has only a very slow internet connection, tunnels between F and A will be slow, too.

The downsides of anonymous shares are, that other people can find those only by using the search and that they don't allow sharing complete folders. If you want to share a complete folder with the whole network anyway, the best way is, to create a collection (see section 5.5.5) and then post the link to this collection file anonymously in a forum.

More about technical details can be read at the official documentation `http://retroshare.sourceforge.net/wiki/inde`

5.5.3 Swarming

RetroShare is capable of the so called "swarming", i.e. everyone, who downloads a file, can upload this at the same moment without having the complete file. The download from multiple sources is possible, too.

Every file is divided into chunks of 1MB and the file is only identified by the hash, i.e. if two users have the same file with different names, a third user can still download from both of them.

5.5.4 RetroShare-Links

There exists RetroShare-internal links to files. A example link is:

retroshare://file?name=RSCounterFile.txt&size=200&hash=d89f3b4f3fe842ac9164fb19b8d1ab6b2e238d61

You can see, that such a link consists only of the following components:

- the file name: This name is the name, RetroShare saves the file to. It can be modified arbitrarily and the link is still valid.
- file size: RetroShare needs to know, how big the file is.
- Hash: The SHA1 hash of the file is used, to identify which file should be downloaded. It's very very unlikely, that two files worldwide have the same hash.

5.5.5 RetroShare-Collections

With *.rscollection files, complete folders with subfolders and all contained files can easiliy be downloaded. A collection is simply a XML file, which contains the folder structure and all names/hashes of the files. An example collection looks like this:

```
1  <!DOCTYPE RsCollection>
2  <RsCollection>
3   <Directory name="Mainfolder">
4    <File size="100" sha1="23f744d9b68841f31e4fe24473066a794898a5bc" name="
         file1.txt"/>
5    <File size="100" sha1="5f695778740e9f7f63022083f62a09ecc07aaa35" name="
         file2.txt"/>
6    <Directory name="Subfolder">
7     <File size="200" sha1="2cc55a96942996e1cf870ee43bb269a5cd57d342" name="
          file3.txt"/>
8     <File size="200" sha1="e84e958c18b2fa3e2014c347f7e974e2b797523f" name="
          file4.txt"/>
9    </Directory>
10  </Directory>
11 </RsCollection>
```

These 4 files of this RSCollection can now be downloaded by using the button "Open Collection" in the Transfers-tab. If you do this, RetroShare will create the folder structure for you (in the example the folders "incoming/Mainfolder" and "incoming/Mainfolder/Subfolder") and then queue all 4 files in the download queue. After finishing the download of one of those 4 files, it'll be moved into the correct subfolder automatically.

5.6 Foren

With the current implementation, RetroShare discards forum messages after some more after a year.

5.6.1 AUTHenticated Forums

If a forum is Authenticated, a signature is required for each message. This ensures, that everybody knows, which person (more precisely which PGP key), created this message.

If the signature can't be verified by your RetroShare, because the PGP-key with the related ID is not known (e.g. a message from someone, which is a friend of third or more grade), this message won't be displayed. This has the consequence, that you can read only messages from friends or friends of second grade. You'll get the other messages, too, but the current implementation won't display it.

5.6.2 Anonymous Forums

In anonymous forums no signature is required and everyone can post anonymously. Thus, messages distribute infinitely far and can be read by everyone, who can read this forum.

You can - if you want to - still sign the messages, so everyone with your key knows, that the message is from you. This makes it even in anonymous forums possible to prove that a certain message is from a certain person.

5.7 Channels

A channels allows a person to spread new messages or files. I can see e.g. a channel with current RetroShare builds as well as a channel with IT-News.

5.8 Chatlobbies

5.8.1 private Chatlobbies

5.8.2 öffentliche Chatlobbies

5.9 Relays

6 Frequently asked questions

The official FAQs can be found at `http://retroshare.sourceforge.net/wiki/index.php/Frequently_Asked_Questic`
Some questions we'll answer here, too.

6.1 General

6.1.1 Windows: What's the difference between fixed and portable Installation?

write

6.1.2 How can I update RetroShare?

write

6.1.3 Windows: How can I move my current fixed RetroShare Installation to a portable one?

write

6.1.4 Is it possible, to run RetroShare on multiple devices with the same identity?

write

6.1.5 Is it possible to share files only with a certain group of friends?

write: yes, and soon even for anonymous shares

6.1.6 Why is RetroShare so slow, especially on startup?

write

6.1.7 How is RetroShare licenced?

- openSSL: BSD style
- KadC: GPL + exception (asked author for exception)
- threads: LGPL
- RetroShare Library: LGPL
- RetroShare GUI + QT: GPL + exception

improve

6.1.8 I have to reinstall my computer. What do I have to backup?

write

6.1.9 Why does RetroShare use so much bandwidth, although I'm not up- or downloading anything?

write F2F tunnel transfer

6.1.10 Is there a maximum number of friends I can add?

write

6.1.11 How many people are already using RetroShare?

write: impossible, but 1000 acc. to DHT

6.1.12 What are Cache-Transfers? What are the fc-own resp. grp-*.dist files in the Transfer-Tab?

write

6.1.13 Why are the connections to my friends so unstable (friend is going off- and online often)?

write: port forward, router DHT problem, too many friends

6.1.14 Why doesn't DHT work anymore? Why does the DHT icon stay red and the NAT icon stay yellow, although I forwarded my port?

write: port, firewall, empty bdboot.txt

6.1.15 Why is the download of files so slow?

f2f tunnel too long

7 Plugins and other useful stuff

7.1 LinksCloud Plugin

This section has no content yet.

7.2 VoIP Plugin

This section has no content yet.

7.3 rscGenerator

For bulk creation of RetroShare-Collections the internal dialog is not very smart. There are some third-party tools, which can do that for you:

- Java with GUI, platform independent: `https://github.com/Amarandus/rscGenerator`
- bash-script for CygWin/Linux: `http://yet-another-nerd-blog.de/create-retroshare-collections-with-a-`