

## K-TOOLS: Qtella 0.2.2

# BARTERING

If you're on the hunt for MP3s then Qtella makes it happen. Stefanie Teufel dips her toe in the file sharing waters

**N**apster is dead – long live its successors! One of the best-known alternative peer-to-peer projects glories in the name of Gnutella. Although the name has a lot in common with a popular nutty spread, what lies behind it is something completely different – a whole network of linked computers (“peers”), which exchange and answer search queries between themselves. Hits are sent back via the same route as the search query, but the data exchange is always done directly.

A search query always contains a TTL specification (Time To Live), which is reduced by one at each intermediate station. This is to prevent the Net being swamped with a flood of endless search queries.

One thing you need to be clear about before telling the whole world about your musical tastes: anonymity is only guaranteed with Gnutella as long as no data is exchanged. If a data exchange does take place the **IP address** of the user is passed on.

### K-tools

In this column we present tools, month by month, which have proven to be especially useful when working under KDE, solve a problem which otherwise is deliberately ignored, or are just some of the nicer things in life, which – once discovered – you wouldn't want to do without.

### Tasty morsels

Believe it or not, Gnutella was originally developed in order to swap sumptuous recipes. Nowadays, **MP3s** appear to be Gnutella's greatest culinary delicacies. The legal situation with respect to downloading and passing on MP3 files has still not been completely clarified. At the moment, the prevailing opinion is that downloading MP3 files for private use is legal, at least so long as you own the original recording, but

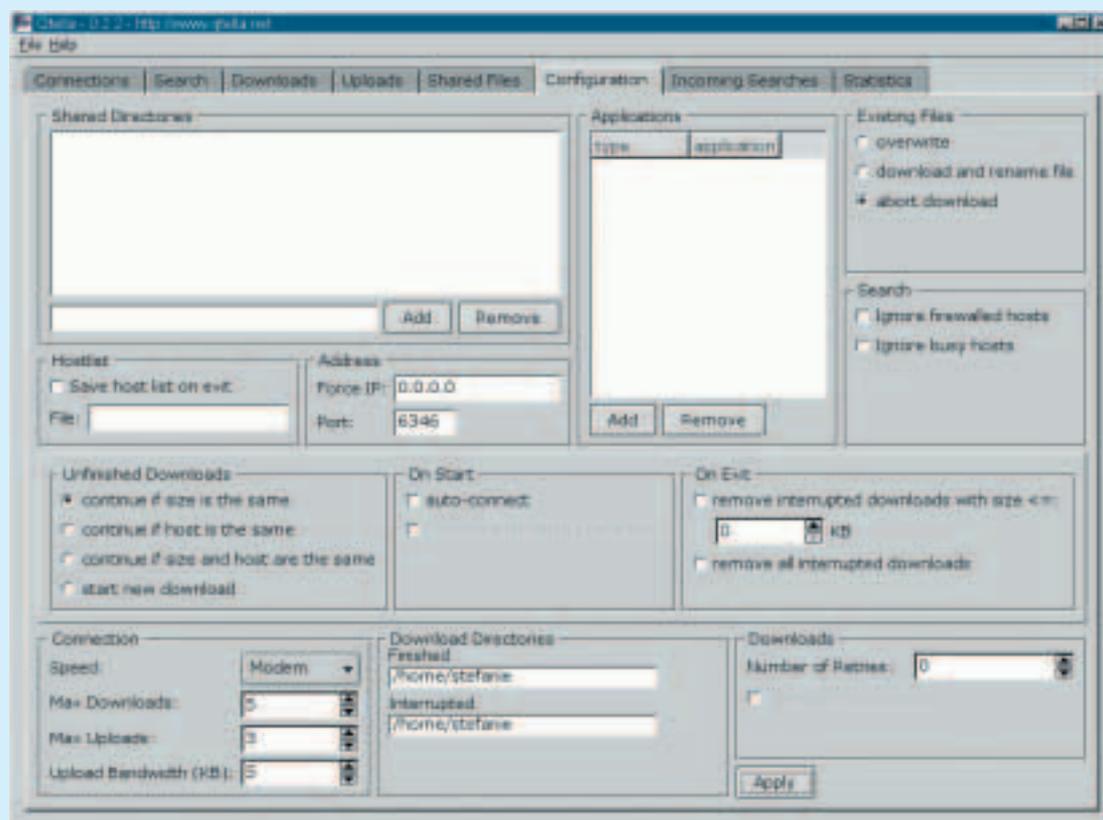


Figure 1: All options to hand

this does not apply to the provision of music in MP3 form for the unknown general public (unless one has a licence for this).

With Qtella we want to present a program that, as an extremely easy to use client for Gnutella, makes finding music files, images etc., twice as productive. If you want to plunge into complete download heaven, don't delay and download the latest version of the program from the project's homepage at <http://www.qtella.net/>.

As well as a tarball package, Mandrake and Red Hat users can also download the program as a suitable rpm packets. SuSE users and the rest of the gang will unfortunately need to compile the program themselves. All you need to do, though, is unpack the sources and install using the commands `./configure, make, su root make install`.

### Made to measure

Before venturing in to the configuration of the program, first start your new Gnutella client. To do this, simply enter `qtella &` in a terminal emulation. After going online, all you need do is select the menu item *File/ Connect*, and the search for your favourite file can begin. Qtella very kindly connects itself automatically to a server, which acts as host, where it snaffles a list of Gnutella addresses and uses this to connect to the Gnutella network.

Now take another look at the configuration menu, as this is where one or two useful features can be activated and undesirable properties can be switched off. To do this, click on the Configuration tab (Figure 1).

Since it has always been better to give than to receive, first enter the directories you would like to share with other users in the box marked Shared Directories. Any directories that you open up for sharing can be easily removed from this list by using the Remove button.

Under Download Directories you can specify – neatly divided according to completed and interrupted downloads – the directories on your home hard disk in which you want to hoard newly-won treasures from the Gnutella network. If you can't even be bothered with incomplete files, Qtella can also be configured, with the aid of the On Exit item, so that interrupted files up to any size you choose (remove interrupted downloads with size `<=:`) or all incompletely downloaded files are automatically deleted from the disk when you shut down the program.

Anyone who never gives up hope in such situations can of course attempt to resume the transfer at any time. In the Unfinished Downloads area you can define how your client should act in such cases; it's your choice whether you start a completely new download or to resume an old attempt. In the second case you define whether your criterion is based on

**IP address** An IP address currently consists of a code number of four sets of digits, each from 0 to 255 inclusive, separated by dots (192.148.0.195, for example). This means every individual Internet computer has its own unique address. So that you don't have to recall such blocks of numbers, these IP addresses are converted into alphanumeric designators such as `www.linux-magazine.co.uk`. Even a PC that's only connected to the Internet for some of the time needs an IP address. Some Internet providers assign their customers a fixed IP address. Big providers and online services, which give lots of customers access to the Net, often keep a whole pool of Internet addresses. Instead of assigning each participant a fixed address, when a customer dials in he is allocated any address which has become free from the pool, which means it is assigned dynamically.

**MP3** Actually MPEG 1 Audio Layer 3. A method which reduces the audio data in CD quality with negligible loss to about one eleventh of the original size.

**Firewall** Technology in the form of hardware and/or software, which controls the dataflow between a private and an unprotected network (such as a LAN and the Internet) or protects an internal network from attacks from the Internet. To do this a firewall compares, for example, the IP address of the computer from which a received datapacket originates with a list of permitted senders – and only their files are allowed to pass.

the size of the files, the download host or both.

It is also possible to specify how to deal with downloads which use file names already in use on your hard disk. Do you want to write over the existing files (overwrite), download and rename (download and rename file), or stop the download completely instead (abort download)? You can define this in the Existing Files box.

### Seek and you shall find

The configuration work is now done, the network connection has been made (Figure 2) – but where

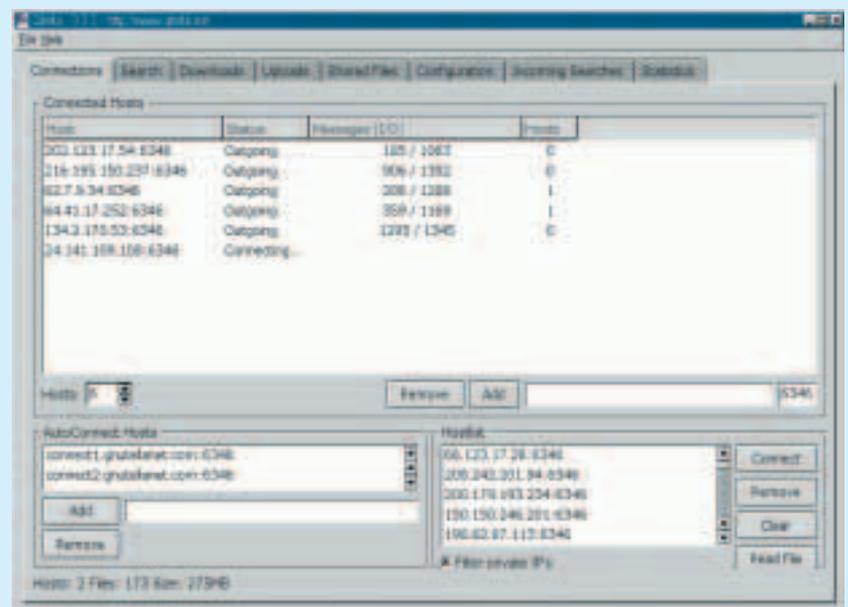
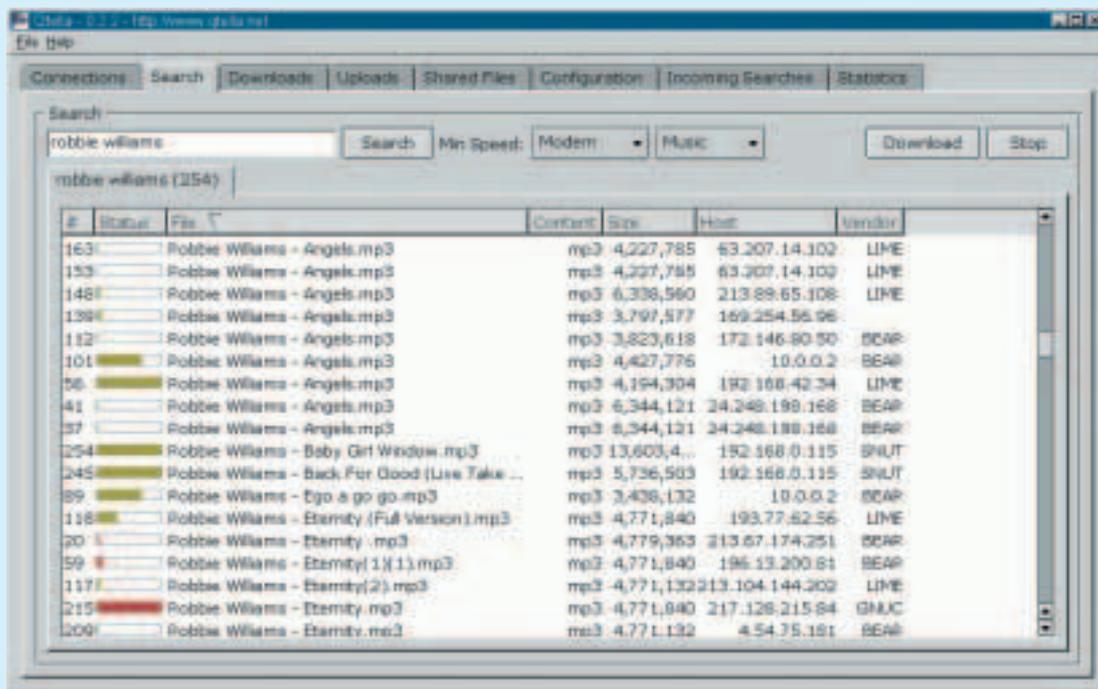


Figure 2: Only connect

Figure 3: Full match



are the files? On one of the connected computers, if you're lucky. In order to track down the files you're looking for, Qtella provides the helpfully titled Search box. Given the breadth of files being shared across the network, it can be helpful to restrict your search to a specific file type. In the second pull-down menu, instead of Any Type, select the desired file type – Music, Images or Video. You can also set the minimum speed, which you expect from your counterpart using the Min Speed pull-down menu.

### Red, yellow, green and grey

If your search query is successful, Qtella displays a window as in Figure 3. The length of the bars reflects the connection speed to the host and the colours, the status of the connection. Red stands for a host that is "closed", yellow signals that it is behind a firewall. Green means the host is open, and grey leaves you without any further information.

If you have found the file, together with a suitable host, select it using the mouse and then click on the Download button. You can find out whether you have been successful by clicking on the Downloads tab. Here you can monitor status, progress, download rate and time remaining live (Figure 4).

Anyone who subscribes to the Winston Churchill school of thought, and only trusts statistics which they themselves have falsified, will be duly disappointed by the Statistics tab, where Qtella lists everything important and unimportant to do with your Qtella sessions. See for yourself how long you have spent so far on the Net, which files you are sharing, how many downloads there have been and so on.

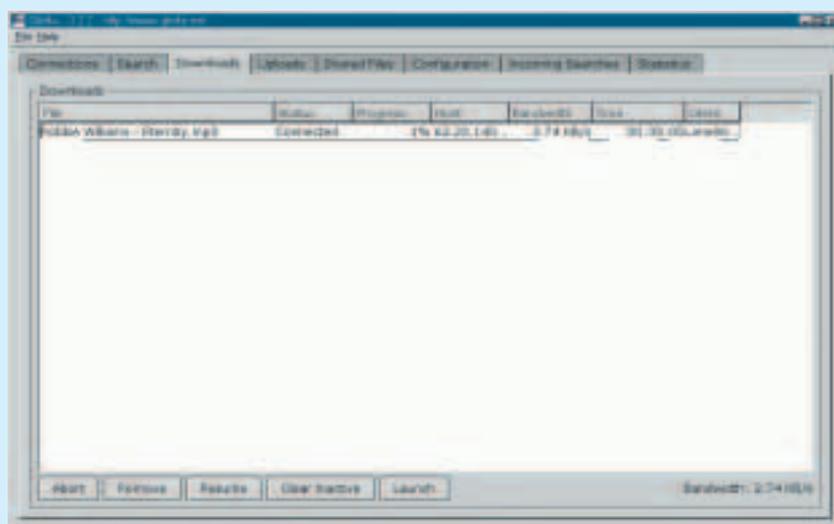


Figure 4: Are you making progress?

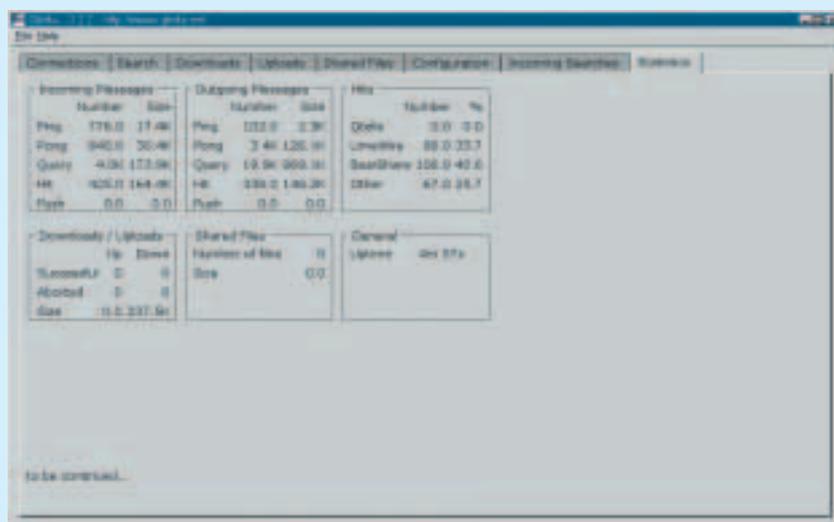


Figure 5: Bean counting, Qtella style