

DC++ : Using DC++ : What is TTH (Tiger Tree Hashing)?

Question:

Answer:

Tiger Tree Hashing or TTH is used to verify the integrity of large chunks of data. The data is split into small pieces which are individually hashed, then hashed together until one, root hash is formed. A TTH has looks something like: `4NIABZVGR4HOTNRPOMH2IRIJQSJYKFHEEIQUJWY`. Detailed information can be found [here](#). DC++ 0.400 introduced mandatory TTH. Once DC++ hashes all of your share (yes this **will** take a while) it will only hash new files. The hashing thread in DC++ is set to low priority, so it shouldn't interfere too badly.

There are several benefits of file hashing:

1. No longer does one need to pay attention to the name of the file when looking for alternative sources. If the files are the same, they will have the same hash and thusly be chosen as an alternative source.
2. Mutli-source downloading. While it is currently not implemented, now there is a safe way to implement downloading files from multiple sources. All clients at this point have been implementing multi-source downloading in cowboy fashion. They do **not** verify the files are the same (except for the size and partial name) which does result in corrupt files. A file hash ensures the files are identical.
3. [Magnet Links](#). Once again, it is currently not implemented but it will allow users to initiate downloads from a link on a website similar to other direct download links like an ed2kfile.