

Introduction:

This document will prove the reader with real time thought process and also provide additional methods for code authenticity. It also serves as a reviewing platform past ideas and implementation. Each section is labeled with a problem that was attempting to be solved. This also gives me a good opportunity to aggregate some of the random thoughts in the Java docs to this document.

Problem – Seeding clients never respond to valid requests.

So we've noticed when downloading torrent from the wide many seeding clients will get valid requests and respond for the first few but then after that they respond to none. At first I assumed that perhaps we had too many outstanding requests at a time. But after limiting the number of active requests we still found this to be the case. Now it was always my intention to put a timer on how long a request can go unanswered, and perhaps that's all that is needed. But it seems that there may in fact be something else occurring....

Problem – Reducing complexity of peering logic.

While I think I've made good progress on separating connection logic (writing/reading/socket maintenance) from peer logic I think we either need to add more to the management layer or create a new in-between layer. Currently our "basic" Peer logic is 300 lines of code utilizing over 8 data structures. Furthermore it has been seen that we are clearly lacking utility like knowing how much time has passed on a particular request. The primary problem is that dissemination of and maintenance of requests is complex.

To solve this (@author wiselion) I added the following basic utilities from the managed connection layer:

- Time Stamped All Requests (received and sent)
- Added ability to add call backs (<333) to connection
- Moved all the dissemination of pieces into a disseminator class.