MQP Meeting minutes

Date and Time	Saturday 19 November 2013 at 2:00 pm
Venue	Craig's Office
Participants	Curtis, Craig, Krishna, Dan

Item	Notes and Discussion
Recap	• Craig splurged on wireless antennas -¿ can do actual implementation on linux boxes (less worry about memory) • Demo of current set up for next week on VMs. Demo will be able to cooperatively download content from a supplied URL given by a python client. Static HTML pages, while small, work best for visualizing success (or if chunks are missing).
More on Trust	• Store transaction records (from each session with a peer) that summarizes the interaction. Average these with an included weight (older transactions matter less) to compute Trust factor for each peer. Inspired by this paper (`http://www.cc.gatech.edu/projects/disl/PeerTrust/pub/xiong03reputation.pdf` • Still unsure of how to compute Trust from an interaction. Look for the lowest level calculations in bit torrent and other similar interaction based systems.
Peer Selection	• Trust, reliability, Performance. • How do we keep track of reliability other then clients dropping? • Use trust metric do decide how often we verify their data. • Right now, we can only estimate bandwidth, or keep track of premature disconnects. • What about TCP specifics? Not available through pythons TCP library, would have to re implement the socket library through raw sockets in order to get transport layer statistics (is it worth the time?) • What level of abstraction is this project focused around? Right now Application layer.
Verifying and a central key authority	• Will our end users want to go out of their way to acquire a certificate. Are free cert-authorities legitimate enough? • Could we be the central authority. Set up a website for users to register under, generate and vouche for their certificates ourselves. • We could encrypt and store logs from each router on our central server. • Establishing our own central authority can alleviate liability issues for the user. •
Choosing where to go from here	• A lot of "you could dos" being thrown around. Choices need to be made and Dan needs to stick to one path. • Present a time line at next meeting for scoping out the rest of the project, with justification and rationale for each decision. • Pick priorities (trust, liability, connection recovery)