

Peer-to-Peer Encrypted Chat

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Purpose of the Application

Allow people to connect securely over the internet in a distributed fashion. This is very important nowadays given that privacy violations are ubiquitous. For instance: government agencies spying, mining of text for profit, identity theft, censorship, hacking, etc.

Features

- Targets a Wide-area Network
- Security
 - Encryption of all files used by the application, stored for instance on ~/.chat
 - Asymmetric cryptography for safe message transmission and reception
- DHT
 - Implementation of Mainline DHT so that each node shares the responsibility for maintaining the mapping from keys to values. (Identification of each peer via a string, the id of the peer)
- File transmissions
- Communication
 - Guarantee message and file receptions

Target Platforms

- Java standalone application for PC, Mac and Linux.

Additional Features

- Possible integration with gnupg for automatic identity verification.
- Group conversations
- Emoticons