Chat Program Documentation

# Login Procedure Sequence Diagram

The login procedure has grown significantly since the start of development. Whereas before the client would send a LoginRequest and assume it was connected without any verification from the server. Now there are a handful of protocol messages related to the client login procedure.

Firstly the client sends a login request and the server responds by creating a User object with the client’s username and a unique ID created by the server’s UserFactory. The server then sends a new UserNotification to all currently connected clients with the user, adds the new user to the server’s list of connected clients and a LoginResponse to the newly connected user with the unique User ID. Once completed, the newly connected client sends a UserSnapshotRequest message to the server and the server will then give a list of connected Users back to the new client.

The purpose of these processes is to get the new client, the server and the existing clients all synchronised with the same user data.

The sequence diagram below shows this process.

