

# Spreadsheet Server Protocol Specifications Memo

To: Matthias^2.

From: Jack Ryan.

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Subject: specification on Spreadsheet server protocol

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This project will be developed with Java 8.0. The server should be a TCP-based server, and it should be able to communicate with multiple clients.

Message Types:

1. Request: a client sends a request call to the server in form of JSON values, the format of which was specified in the previous memo.
2. Response: Upon receipt of a successful request, the server will reply with a well-formed JSON value if the method returns one, otherwise it will have no reply. The server will also send a response if a request was unable to be completed.
3. Notifications: Sent to the client to notify it that it was successfully connected to the server. Also sent to the server to notify it that a client has disconnected.

The server should know which operation to perform according the first JSON value sent from the client. The JSON values will be entered by a user running the client. The connection to the server is ended when the client's input Stream is closed by the user, to which the server is notified.

The server and the client could be on the same or different machines communicating via TCP network sockets. The server should have a way of creating a Spreadsheet, storing Spreadsheets (keeping a hashmap of Spreadsheet names to Spreadsheet), modifying Spreadsheets and sending Spreadsheets values in well formed JSON to the clients upon request.

