# Network Communication

I’m proposing that we use JSON for the network communication. Using TCP sockets, we will transmit strings formatted as JSON objects which are an industry recognized standard, and which should be easy to parse using a library (System.Runtime.Serialization.Json).

## Initial Connection

|  |  |
| --- | --- |
| **Client** | **Server** |
|  | Waiting for connections |
| (Connect to socket) |  |
|  | {“WELCOME”:  *“server\_version”*} |

## Identification

### Existing User

|  |  |
| --- | --- |
| **Client** | **Server** |
| {“CONNECT”: {“USERNAME: “*username*”, “PASSWORD”: “*password*”} } |  |
|  | {“JOINED”: “*num\_connected\_users*” } |
| Waiting for pairing |  |

### New User

|  |  |
| --- | --- |
| **Client** | **Server** |
| {“NEWUSER”: {“USERNAME*”*: “*username”*, “PASSWORD”: “*password*”, “CLASS”: “*class\_name*”, “QUALIFIER1”: “*qualifier1*”, etc } } |  |
|  | {“JOINED”: “*num\_connected\_users*” } |
| Waiting for pairing |  |

## Begin Game

|  |  |
| --- | --- |
| **Client** | **Server** |
|  | {“STARTGAME”: {“OPPONENT”: {“USERNAME”: “*username*”, “LEVEL”: “*level*”, etc. }, “PORT”: “*game\_port*” } } |
| {“ACCEPT”: “”} |  |
|  |  |

To be continued…