

## Common Sense Social Server Specification

### Overview

The server and client communicate using SSL, implemented using OpenSSL. OpenSSL sockets provide a useful abstraction in which the transport layer is hidden, and the socket can be used as a normal C socket. Currently the server uses a self signed SSL certificate for the testing phase, pending a legitimate certificate from a CA.

The server stores a unique session ID for each client, which the server uses to identify the client's associated account information. Given that the client stores this ID, a login can be maintained while the client is disconnected. An invalid session ID associated with a command will result in an error, unless the ID is all zeros in which case a new valid session ID is passed.

### Specification

Commands:

GET\_SESSION\_ID 0x1001

CREATE\_ACCOUNT 0x1002

LOGIN 0x1003

GET 0x2001

Command flags:

TEXT\_RESOURCE 0x01

IMAGE\_RESOURCE 0x02

AUDIO\_RESOURCE 0x03

VIDEO\_RESOURCE 0x04

STREAM\_RESOURCE 0x05

AUDIO\_STREAM\_RESOURCE 0x06

Generic command structure:

Session ID	Command & flags	Command Attributes
[ 4 bytes ]	[ 2 bytes ]	[ Varying ]

### Session ID request

[ Session ID: 4 bytes ] [ Command: 2 bytes: 0x1001 ]

- Session ID should be all zeros.

Response:

[ Session ID: 4 bytes ] [ Command: 2 bytes: 0x1001 ]

- The session ID is newly generated and unique.

## Create account

[ Session ID: 4 bytes ] [ Command: 0x1002 ] [ Username: 65 bytes max ] [ E-mail: 65 bytes ]  
[ Password: 64 bytes ]

- Username, password, and e-mail are null terminated strings with a fixed buffer length of 65, maximum of 64 characters.

Response:

[ Session ID: 4 bytes ] [ Command: 0x1002 ] [ Error code: 2 bytes ]

- Error code is zero if successful, non-zero if failed

## Login

[ Session ID: 4 bytes ] [ Command: 0x1003 ] [ Username: 65 bytes ] [ Password: 65 bytes ]

- Username and password are null-terminated strings with a fixed buffer length of 65 bytes, maximum of 64 characters.

Response:

[ Session ID: 4 bytes ] [ Command: 0x1003 ] [ Error code: 2 bytes ]

- Error code is zero if successful, non-zero if failed.