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Common Sense Social
Revision 0

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 length: 2 bytes] [Username] [E-mail length: 2 bytes] [E-mail] [Password length: 2 bytes] [Password]
- 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 length: 2 bytes] [Username]
[Password length: 2 bytes] [Password]
- 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.