

INSA Lyon, TC, ELP

TCChat Protocol Specification

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TC Chat protocol overview

TCChat is a TCP based client-server application providing basic chat functionality.

A TCChat server listens on a predefined tcp port for incoming connections. A TCChat client connects to a TCChat server, registers the nickname of the user, sends messages to the server, and optionally sends a disconnection control message to the server before disconnecting.

The TCChat server application broadcasts the messages received from clients to all currently connected clients. The TC server notifies clients of newly arrived clients and disconnected clients.

All protocol messages are encoded as strings terminated by a '\n' character. The fields of all protocol messages are separated by a '\t' character.

TC Chat protocol messages

Client Originated Messages

1. TCCHAT_REGISTER

```
TCCHAT_REGISTER\t<Nickname>\n
```

A client which just connected to a Server MUST [RFC2119] send a TCCHAT_REGISTER message to the server. The second field of the message is the nickname of the user connecting to the server. The Nickname field MUST NOT [RFC2119] be empty. The Nickname field MUST NOT contain '\n'. A TCCHAT_REGISTER message can only be sent once by a client. A server which receives a second TCCHAT_REGISTER message from a given client MUST terminate the connection.

2. TCCHAT_MESSAGE

```
TCCHAT_MESSAGE\t<Message_payload>\n
```