

# Protocol

Gruppe 7 - Key H(a)unt

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## Encoding of network traffic

The Structure of any message traversing the network is identical: First the short form of the command to be followed/executed is sent, then, after the delimiter "~", optional parameters are sent, each separated by another delimiter. Finally, after the last delimiter any messages will be sent in plain text. For example, a valid message would be: "CHAT~Hello World!". Generally, it would look like "CMD~param1~param2~...~msg".

Table 1: Protocol code with short description

Command	Short Command	Description
GLOBALCHAT	CHAT	Client to Server: The client sends a message to the server for the global chat Example: CHAT~msg
BROADCAST	BCST	Server sends message to every player/client (can also be sent from client-side) Example: BCST~msg
ERROR	ERRR	Server sends error to client Example: ERRR~msg
NOTFOUND		gets returned in case no command matches
CHANGENICKNAME	CNGN	command sent by the client to change his nickname Example: CNGN~nickname
PING	PING	sends a ping message (is used for both client-side and server-side ping) Example: PING
PONG	PONG	Used to send a Pong back (optional, also for Ping: manual as an argument, used to display and measure latency) Example: PONG[~manual]
DISCONNECT	DSCN	is used to force disconnects, effectively closing the socket Example: DSCN
LOGOUT	LOGO 2	Client can logout and disconnect himself Example: LOGO
DISPLAY	DSPL	The client prints the message it receives in the GUI Info-Box Example: DSPL~msg

Table 2: Protocol code with short description

Command	Short Command	Description
CREATELOBBY	CLOB	Client to Server: The client gives the server a new Lobby Name and the server creates a new lobby and puts the client in it. Example: CLOB~lobbyname
JOINLOBBY	JLOB	Client to Server: Client gives the name of the lobby he wants to join and the server puts him in it. Example: JLOB~lobbyname
LOBBYCHAT	LCHT	Client sends a chat message to the server for the lobby Example: LCHT~message
CLOSELOBBY	QLOB	closes the lobby and removes all players from the lobby Example: QLOB
LEAVELOBBY	LLOB	Client to Server: Client leaves the lobby Example: LLOB
GAMEACTION	GMAC	Client to Server: Every Action related to game gets send as a parameter of this command. Example: GAMEACTION~ MOVE~NORTH  Note that the command "MOVE" gets further decoded in the Game package on the server side.

Table 3: Protocol code with short description

Command	Short Command	Description
TOGGLEREADY	TRDY	Toggles the ready status of the player Example: TRDY
REQUESTACTION	REQA	Server to Client: Server requests the Client to make an Action related to the game. Example: REQA
ROOMINFO	RINF	Server to Client: Provides the informations about the room the player is in. Example: RINF~EAST,SOUTH,
WHISPER	WHIP	Client to Server: Client sends the other Clients name and his message for the other Client to the server. Example: WHIP~ clientName~message
PLAYERLIST	PLST	used, if the client wants to get a list of all connected players in his lobby, or in the server as a whole; takes "server" or "lobby" as an argument to differentiate the two cases. Example: PLST ~server
GAMELIST	GLST	displays all past and current games of all open lobbies Example (Server to client): GLST~Games in lob1: [WAITING]

Table 4: Protocol code with short description

Command	Short Command	Description
DISPLAYLOBBY	DLOB	The client sends this message if it wants to receive a list of possible lobbies to join from the server. This list gets printed into the lobbyList in the lounge Example: DLOB~[lob1]
GAMEINFO	GINF	used to send information while the game is running; gets printed into gameInfo Label Example: GINF~Your Turn!
PLAYERINFO	PINF	used to send player information to the client, f.ex. role ghost Example: PINF~Ghost
HIGHSCORES	HSCR	used to request/communicate the server's highscores Example: HSCR~3 Max Ghost
STARTGAME	STGM	starts the game, gets sent from server to client Example: STGM
ENDGAME	ENDG	ends the game; used for GUI synchronization Example: ENDG
ROOMPLAYER	RPLR	used when other players are in the same room, gets sent if it contains a ghost and the number of players Example: RPLR~true~2

Table 5: Protocol code with short description

Command	Short Command	Description
WHISPERLIST	WLST	Used for sending suggestions for names to the client, for the whisper method Example: WLST~user1~user2
TARGETDIRECTION	TDIR	used to send directions towards exit or next player to haunt Example: TDIR~NORTH WEST