# **Protocol**

King of Jawa

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## 1 Protocol Definitions

Our protocol is used as a part of a two dimensional package. The package contains header information (our protocol) and data contents. The header is defined as following:

header	meaning	
type	This field describes the package type. A type can be regis-	
	tered inside the Client/Server initialiser and must be bound	
	to a specified manager, which is an singleton instance.	
name	The name describes the specific execution, which should	
	done. it will be registered inside the manager which is bound	
	to the type and bound to an PackageExecutable - implemen-	
	ting class.	
id	package id	

Example for a chatPackage which changes the user's name:

 $'head'|\{'name'|'setName','type'|'USER','id'|'33'\},'body'|\{'oldName'|'hidin','newName'|'LANLord'\},'body'|\{'oldName','typ$ 

# 2 Protocol Types

- Server
  - connection
  - chat
  - ping
  - player
  - lobby
  - highscore
  - game
- $\bullet$  Client
  - connection
  - chat
  - ping
  - player
  - lobby
  - high score
  - game

# 3 Type Executions (Server)

### $\bullet$ connection

name	call-reason	arguments
requestHandshake	a client wants to connect to	name : userName
	the server	
onClientQuit	a client closed the game	none

## $\bullet$ chat

name	call-reason	arguments
sendMessage	a client wants to send a mes-	id : the senders userId
	sage	room : the chat-room the message
		has to be send to
		message: the message content

## $\bullet$ ping

name	call-reason	arguments
ping	a client wants to know his ping	none
pong	the answer of a server ping	none

## $\bullet$ player

name	call-reason	arguments
none	none	none

## $\bullet$ lobby

name	call-reason	arguments
requestLobbies	a new client connects to the	none
	game and requests all existing	
	lobbies	
openLobbies	a client wants to open a new	none
	lobby	
removeLobby	a client closed his lobby or	lobbyId: the id of the lobby which
	disconnected while the game	has to be removed
	didn't run	

#### $\bullet$ high score

name	call-reason	arguments
requestHighscore	a newly connected client	none
	wants to receive the highscore	

## $\bullet$ game

name	call-reason	arguments
requestBuild	requests a building	BuildingType: type of the building
		tile: the tile the building should be
		placed
mapLoaded	tells the server that the map	lobby: the game lobby
	on the client is loaded	

# 4 Type Executions (Client)

## $\bullet$ connection

name	call-reason			arguments
validateHandshake	the server	processed	the	outcome : ok   if it's okay
	handshake			outcome : failed   if not

### • chat

name	call-reason	arguments
sendMessage	a client wants to send a mes-	id : the senders userId
	sage	room : the chat-room the message
		has to be send to
		message: the message content
directMessage	there is a direct message for	id : should be none
	this specific client	message: the direct message
		room : should be none
roomMessage	a message was sent to a chat-	id : should be none
	room in which the client is re-	message: the message
	gistered	room : the chat-room the message
		has to be send to
privateMessage	a private message was sent to	id : should be none
	the client	rId : the receipants id
		message : the message content
		room: none

## $\bullet$ ping

name	call-reason	arguments
ping	the server wants to know the	none
	ping	
pong	the answer of client ping	none

## • player

name	call-reason	arguments
setName	the player has a new name	oldName : the player's old name
		newName : the player's new name
addPlayer	a new player has to be added	newName : the player's name
	to the local player list	isLocal : a boolean whether the
		player is the local client
		id : the players id
removePlayer	a player has to be remved off	id : the player's id
	the local player list	

## $\bullet$ lobby

name	call-reason	arguments
sendLobbies	this lobby has to be added to	lobby: the lobby to be added
	the local lobby list	
updateLobbies	a lobby has been changed e.g.	lobby: the lobby to be updated
	the game is now running or	
	can't join because it's full	
removeLobby	a lobby closed and has to be	lobbyId: the id of the lobby to be
	removed off the local lobby list	removed

#### $\bullet$ high score

name	call-reason	arguments
sendHighscore	at first connection the server	none
	sends the highscore	
refreshHighscore	the higscore has to be updated	none

## $\bullet$ game

name	call-reason	arguments
loadMap	the server tells the client to	mapName : the name of the map
	load the map	lobbyId: the id of the lobby
broadcastBuilding	sends to all users in the lobby	BuildingType: type of building
	the built building	owner: the owner of the building
		lobbyId : the id of the lobby
broadcastIsland	updates the minimap and the	islandId: the id of the island
Update	possibility to build on the cor-	lobbyId : the id of the lobby
	responding Island	
updateResource	updates the resource panel	resourceType : the type of the re-
		source
		resourceAmount : the amount of
		the corresponding resourse
		lobbyId : the id o the lobby