Eryantis Protocol Documentation

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1 Messages

1.1 nickname

The client sends to his socket his nickname

Arguments

- nickname: the client's nickname

Possible responses

This message has no responses

1.2 registerNickname

The client's socket sends to the server the client's nickname

Arguments

- nickname: the client's nickname

Possible responses

- ack: if the nickname is legit
- nack: if the nickname is not legit, because it's already in use

1.3 ack

This message is sent from the server to the client when a generic message has been acknowledged

Arguments

This message has no arguments

Possible responses

This message has no responses

1.4 nack

This message is sent from the server to the client when it occurs an error in the acknowledgement of a generic message

Arguments

This message has no arguments

Possible responses

This message has no responses

1.5 renderView

The server updates the player's view after something has changed

Arguments

- ID: the player's ID who has to do the next move
- newView: the new view updated after the last moves

Possible responses

This message has no responses

1.6 addToLobby

The client's socket is added to the server

Arguments

- IDConnection: the client's socket

Possible responses

- ack
- nack

1.7 askNumPlayer

The server asks the first player who connects to the server how many players does he want to play with

Arguments

This message has no arguments

Possible responses

- numPlayers: the number of players

1.8 askExpertsVariant

The server asks the first player who connects to the server whether he wants to activate the experts' variant or not

Arguments

This message has no arguments

Possible responses

- expertsVariant: a boolean that indicates if the experts' variant is chosen or less

1.9 askAssistantSeed

The server asks a player which deck of assistant cards he wants to pick

Arguments

This message has no arguments

Possible responses

- seed: the chosen assistant seed

1.10 askAssistantCard

The server asks a player which assistant card he wants to play

Arguments

This message has no arguments

Possible responses

- assistantCard: the chosen assistant card

1.11 askDiningRoomMovement

The server asks if the current player wants to move some students in the Dining Room

Arguments

This message has no arguments

Possible responses

- Yes: if the player intends to move some students in the Dining Room
- No: if the player doesn't intend to move students in the Dining Room

1.12 playerAnswer

Player's response to a server's question

Arguments

This message has no arguments

Possible responses

- ack: if the answer is legit
- nack: if the answer is not legit because forbidden

1.13 chooseStudent

Player's response to a server's question

Arguments

The student chosen

Possible responses

- ack: if the chosen student is legit
- nack: if the chosen student is forbidden

1.14 chooseIsland

The current player chooses the island where he intends to move the student on

Arguments

- index: indicates a specific island

Possible responses

- ack: if the chosen island is legit
- nack: if the chosen island is forbidden

1.15 askMotherNatureMovement

Server asks to move Mother Nature to the current player

Arguments

This message has no arguments

Possible responses

- index: the island where to move Mother Nature

1.16 chooseStepsNumber

The current player chooses the island where he intends to move Mother Nature on if it's possible

Arguments

- index: indicates a specific island

Possible responses

- ack: if the chosen number is legit
- nack: if the chosen number is forbidden

1.17 notifyInfluenceResult

The server notifies the result of the influence calculation on the island

Arguments

This message has no arguments

Possible responses

This message has no responses

1.18 askCloudTile

Message sent by the server asking the player to pick a cloud tile, sent after the action phase, move 2

Arguments

This message has no arguments

Possible responses

- index: the chosen cloud tile

1.19 pickCloudTile

the picked cloud tile by a certain player

Arguments

- index: the chosen cloud tile's index

Possible responses

- ack: if the chosen cloud tile is legit
- nack: if the chosen cloud tile is forbidden

1.20 announceResult

Server announces to each player the result of the current match and ends it

Arguments

- Winner: indicates if the player won the match
- Loser: indicates if the player didn't win the match

Possible responses

This message has no responses

1.21 closeSocket

Each player's client asks to close the connection with the match server once the game is finished

Arguments

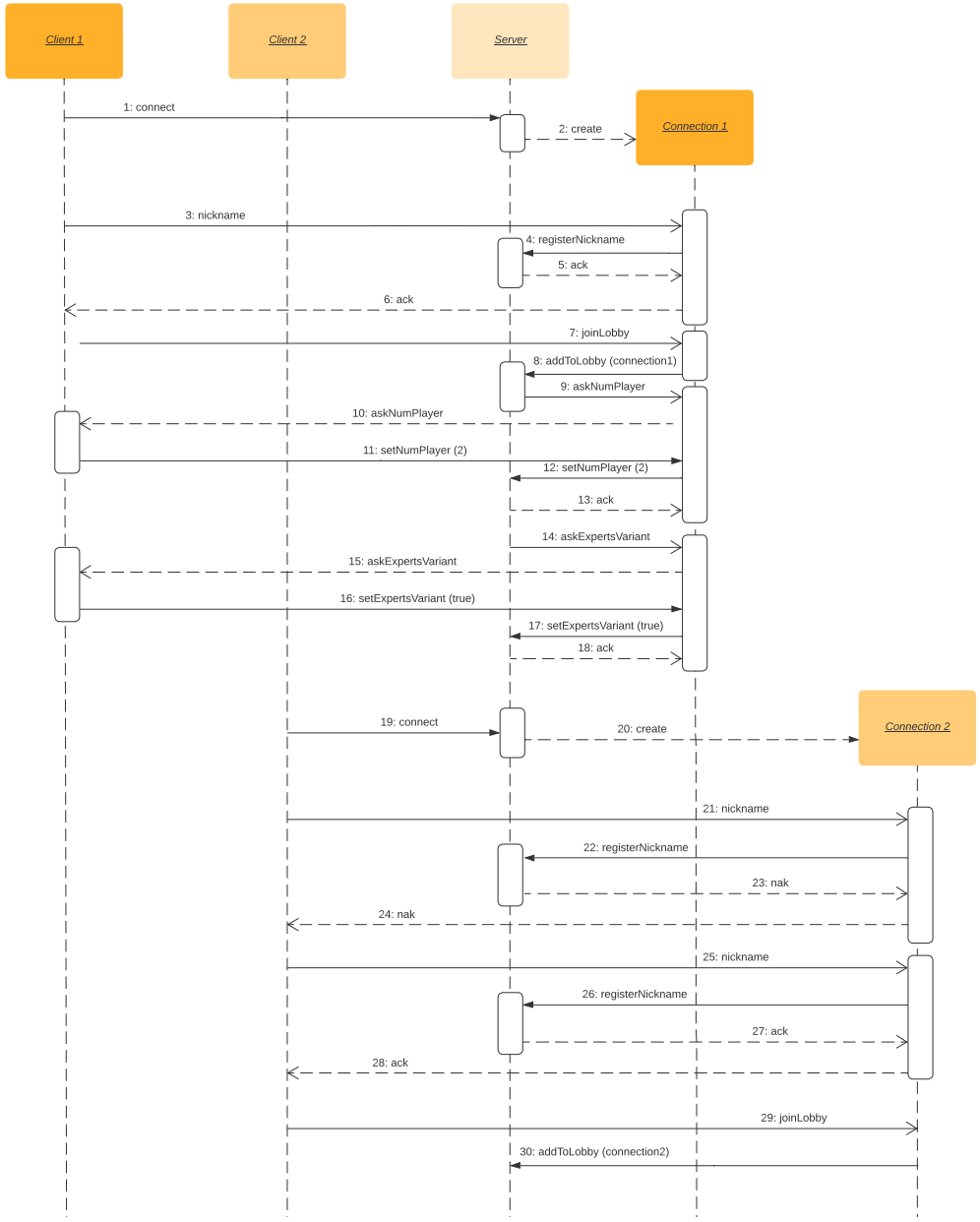
This message has no arguments

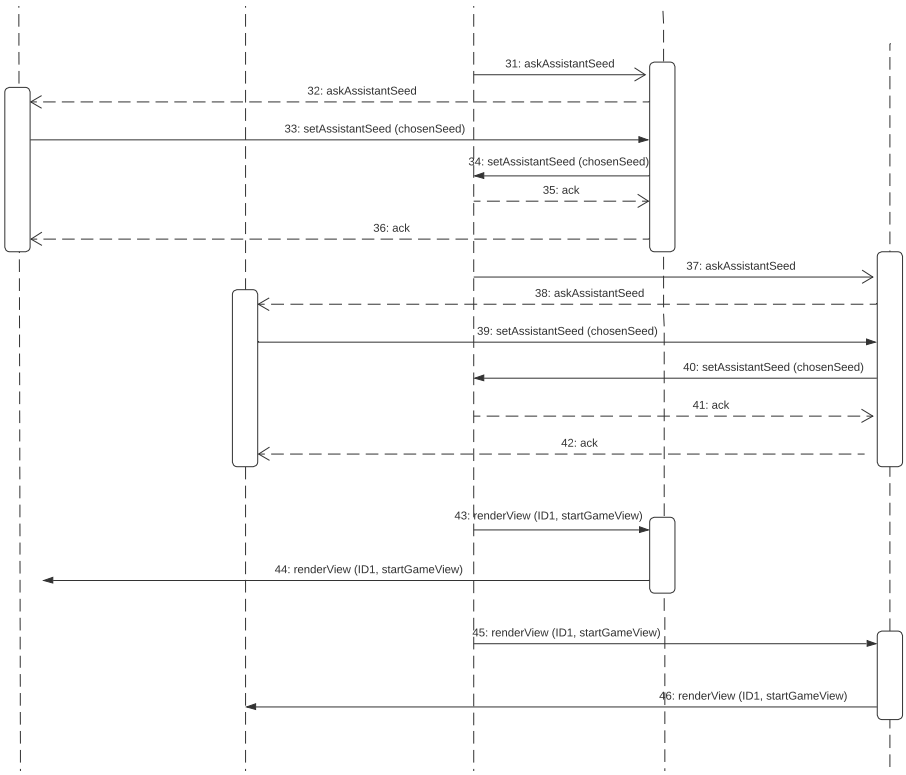
Possible responses

- ack
- nack

2 Scenarios

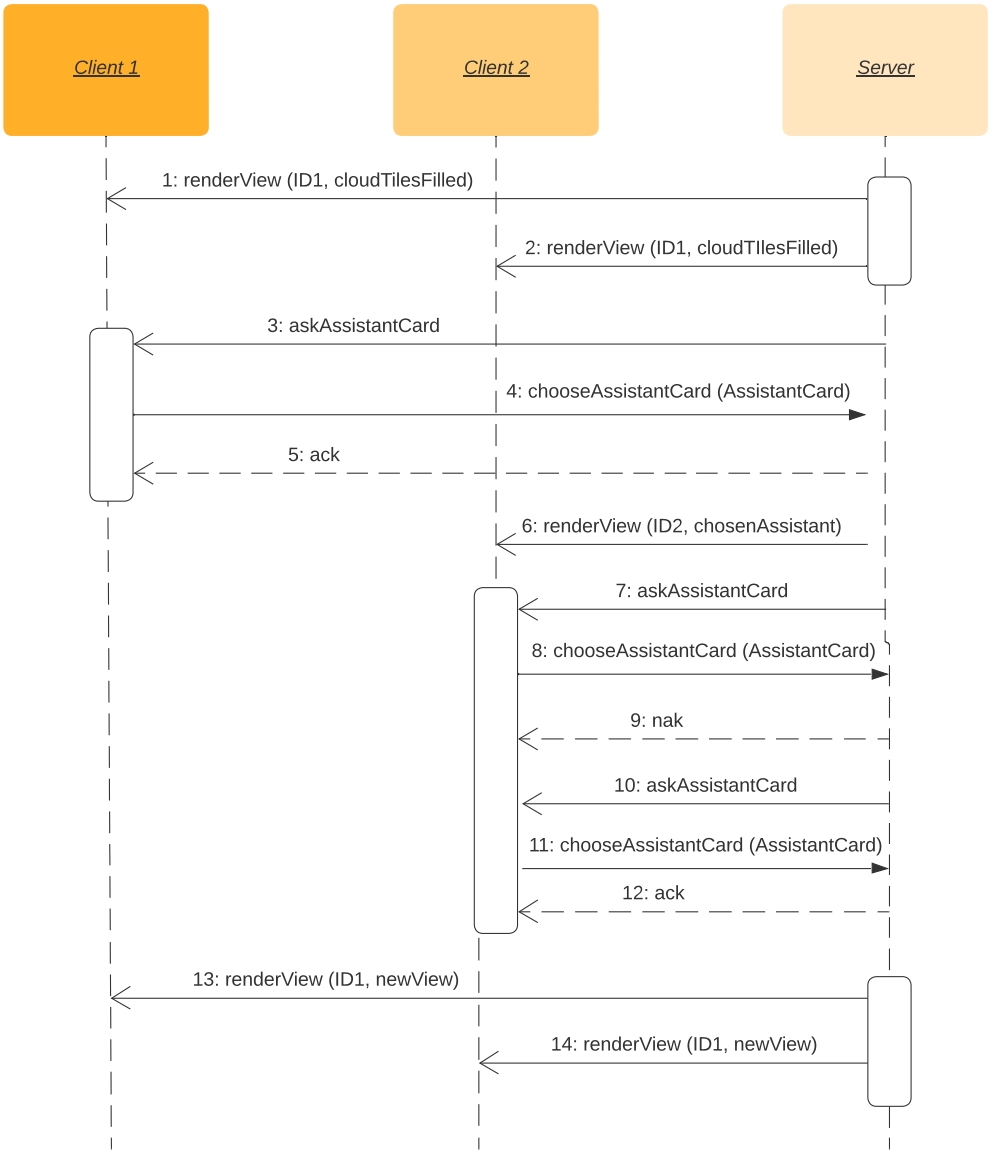
2.1 Login to the game





The first player connects to the server and creates a socket, then he is asked to enter his nickname, if the nickname is valid he is added to the lobby. Being the first player he is also asked with how many players does he want to play with (in this example above he chooses a total of 2 players). After that he is also asked if he wants to play with the experts variant activated or not (in this example he chooses to activate it). Now the server waits till another player connects and creates his socket. As the first player he has to enter his nickname which is not valid at the first try, because it's the same as the first one, so he has to retry. As soon as he enters a valid nickname he is added too to the lobby. Since the number of players chosen by the first player (2) is reached, the game can start. The server asks each player to choose his deck of assistant cards (the wizard) and as soon as the choices are both valid all the players' views are updated with the initial screen. We have chosen that at the first round the first player to play is supposed to be the one who first has connected to the server, by default (in the example the "Client 1").

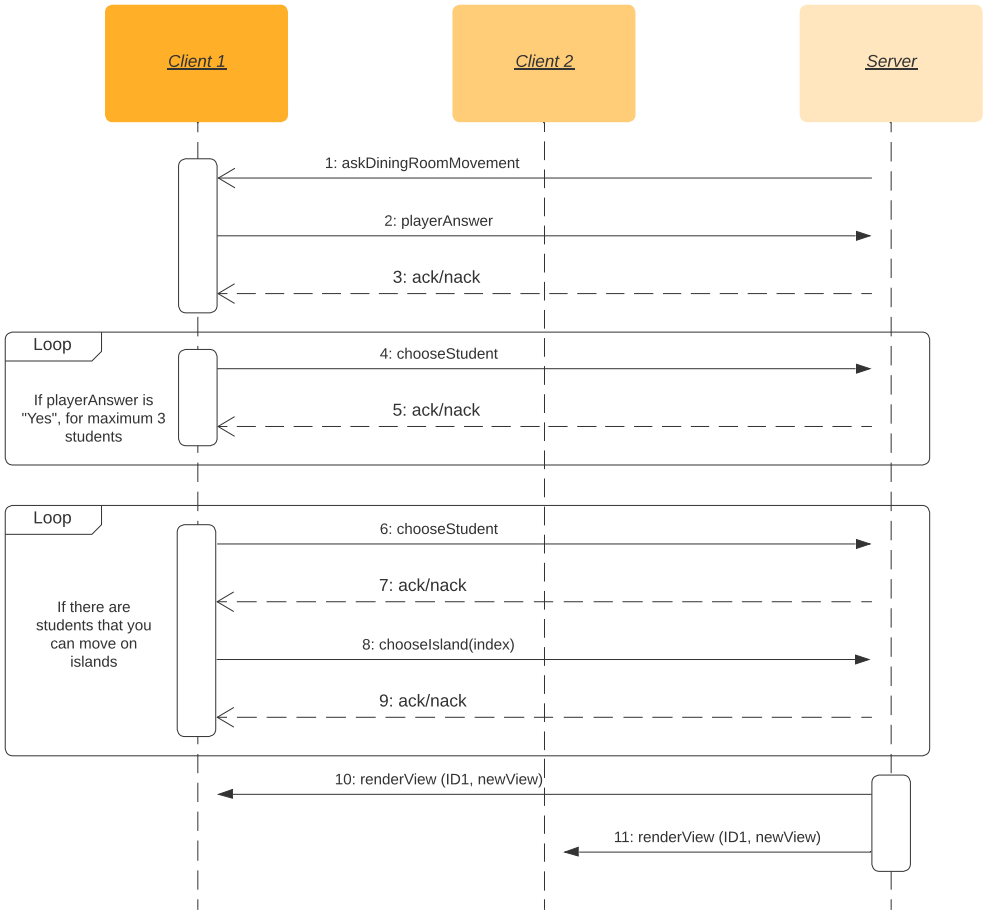
2.2 Planning phase



Firstly, in the planning phase all the cloud tiles are filled and showed to the players. Then each player needs to pick an assistant card, starting from the one who played the lowest at the round before. An assistant card is valid only if it isn't already played by other players, so if this case occurs a "nack"

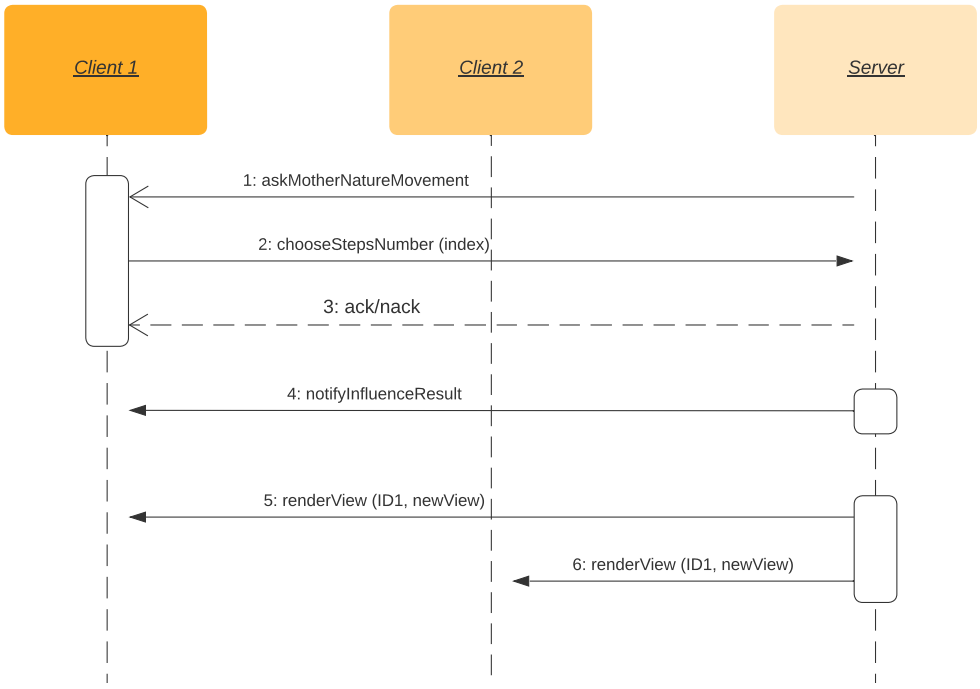
message is returned to the player, and he must choose another assistant card. After all the players have picked their (valid) assistant cards there will be methods invoked in the server to determine who is the first player (in this example the first player with "ID1") and he will start his action phase.

2.3 Action phase, move 1



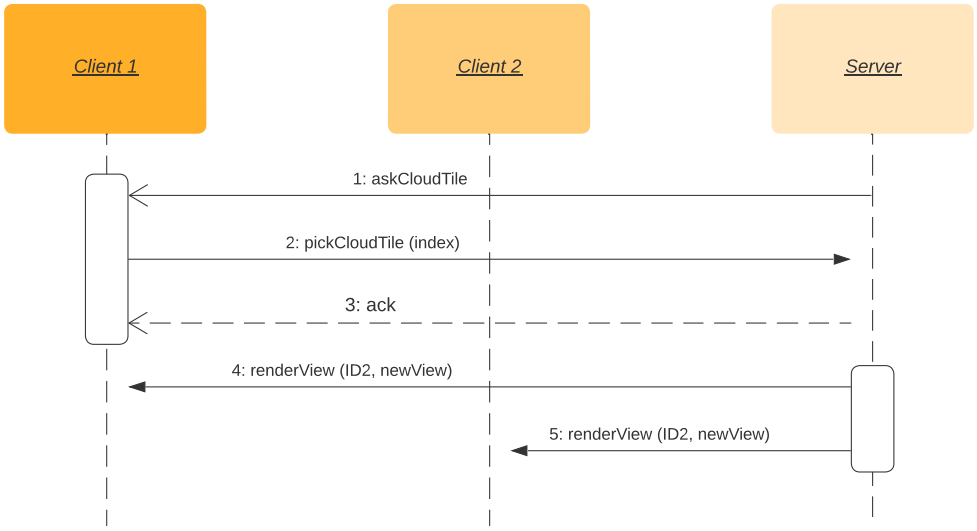
In this phase the server asks to a client if he wants to move some students to his dining room, if the answer is yes the player is asked which students wants to move (max 3). Then he asks to the same player if he wants to move other students to a certain island (checking that the total moved students are exactly 3). At the end the server renders all the players' views.

2.4 Action phase, move 2



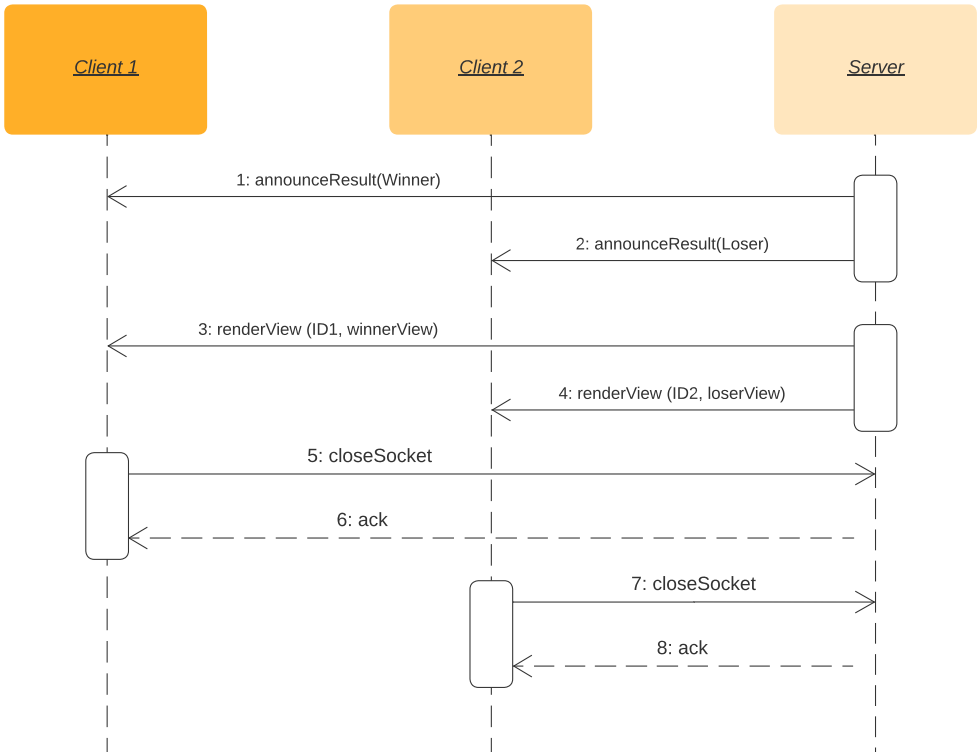
In this phase the server asks a player to indicate where does he want to move mother nature, if the choice is valid (number of steps more than 0 and less than the maximum steps indicated in the assistant card in use) we compute the influence on the island where mother nature arrives, we notify with a message what is the result of the computation (the player with the most influence) and so all the players' views are updated.

2.5 Action phase, move 3



In this phase the server asks a player to choose a cloud tile, if the player's choice is valid (the cloud tile's tile exists and it wasn't already picked by other players) his school board is filled, the chosen cloud tile is emptied and all the players' views are updated.

2.6 End of the game



Where the game ends the server notifies the players with a message and so a new view (a final screen indicating who is the winner). After this there is also the ending to the connection to the server.