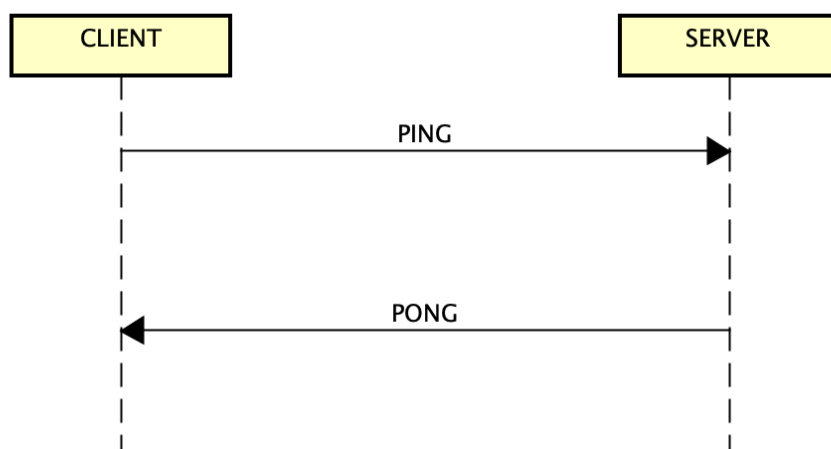


PING

After the setup of the connection between a client and the server, the up mentioned send each other a ping message periodically to check if the other host is available and to verify the connection with that. Every message is stand-alone.



```
{
  "Header": "PING",
  "Channel": "CONNECTION_STATUS",
  "Body": {}
}
```

LOGIN PLAYERS

The first player sends a login request to the server, if the login is accepted, he has to choose the number of players. If this number is less than 2 or bigger than 4, the server sends a "Invalid-N-Player" message. The first player has to insert this number until it's in the correct range. The other players only have to do the login request. At the message of "Login Request" both the first player and the other player could receive a "Login Refused" message, in this case the players have to do the login request again.

-----LOGIN FIRST PLAYER-----

```
{
  "Header": "LOGINREQUEST",
  "Channel": "PLAYER-ACTION",
  "Body": {
    "Message": "Paolo"
  }
}
```

```
-----{
  "Header": "LOGINREFUSED"
  "Channel": "PLAYER-ACTION"
  "Body": {
    "Message": "Login refused"
  }
}-----
```

```
{
  "Header": "LOGIN ACCEPTED/N-PLAYER?",
  "Channel": "PLAYER-ACTION",
  "Body": {
    "Message": "You are the first player logged. Number of players?"
  }
}

{
  "Header": "N-PLAYER",
  "Channel": "PLAYER-ACTION",
  "Body": {
    "Message": "2"
  }
}
```

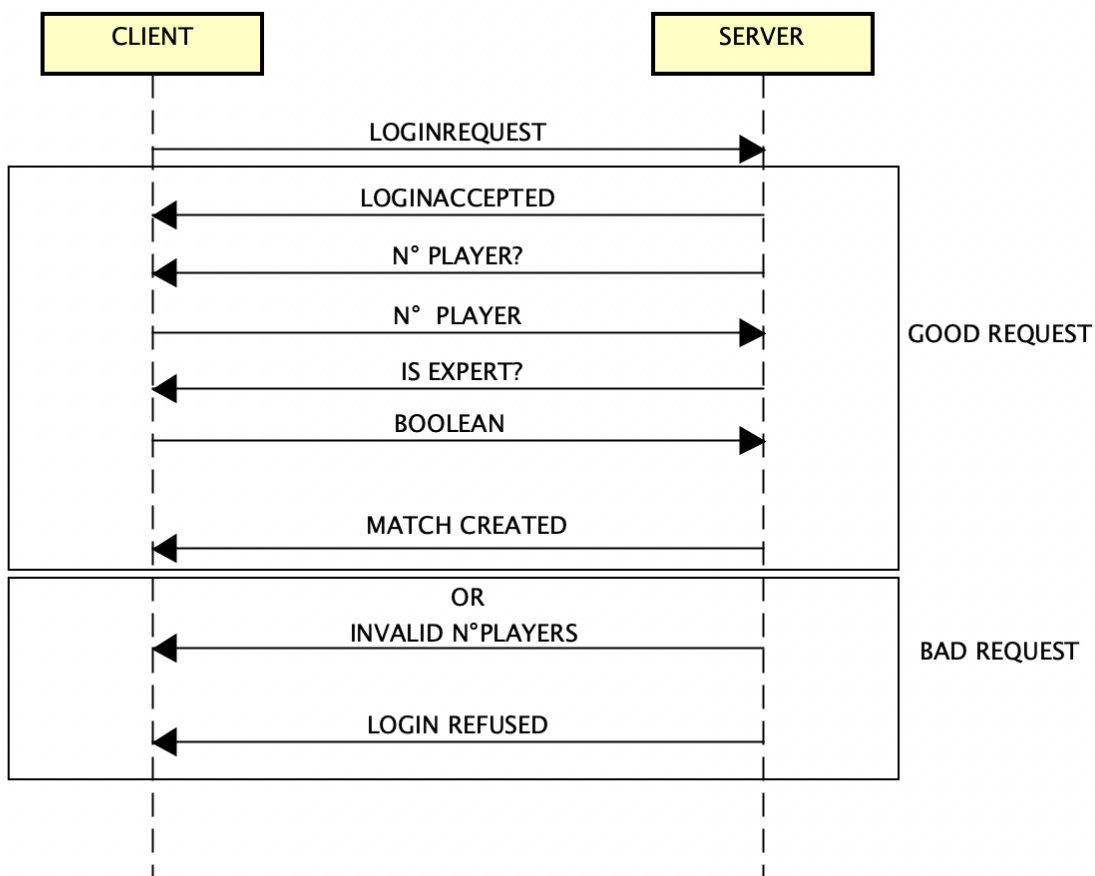
```
-----{
"Header": "INVALID-N-PLAYER",
"Channel": "PLAYER-ACTION",
"Body": {
  "Message": "N° player not valid"
}
}-----
```

```
{
"Header": "MATCH-CREATED",
"Channel": "PLAYER-ACTION",
"Body": {
  "Message": "New game created"
}
}
```

-----LOGIN OTHER PLAYERS-----

```
{
"Header": "LOGINREQUEST",
"Channel": "PLAYER-ACTION",
"Body": {
  "Message": "You are added to game"
}
}
```

```
-----{
"Header": LOGINREFUSED
"Channel": "PLAYER-ACTION"
"Body": {
  "Message": "Login refused"
}
}-----
```



ACTION

A player chooses an action, if the action is invalid the server sends an “Invalid action” message, otherwise the server accepts the action. When the actual one ends all the phases of his turn, the turn passes to an other player that will do again this part. At the end of the game, the server communicates who is the winner through an “End Game” message.

-----PLAYER ACTION-----

```
{
  "Header": "DO_SELECTASSISTANT",
  "Channel": "PLAYER_ACTION",
  "Body": {
    "Command" : {
      "type": "assistant choice",
      "number assustant": "3"
    }
  }
}
LOOP FOR 3:
{
  "Header": "DO_MOVEPAWN",
  "Channel": "PLAYER_ACTION",
  "Body": {
    "Command" : {
      "type": "move pawn",
      "moveToDininroom": "true",
      "moveToIsland": "false",
      "numberIsland": "null"
    }
  }
}
{
  "Header": "DO_MOVEMOTHERNATURE",
  "Channel": "PLAYER_ACTION",
  "Body": {
    "Command" : {
      "type": "move mother nature",
      "numberMovement": "2"
    }
  }
}
```

```

{
  "Header": "DO_CHOOSSECLOUD",
  "Channel": "PLAYER_ACTION",
  "Body": {
    "Command" : {
      "type": "cloude choice",
      "numberCloud": "3"}
    }
  }
}

```

```

-----{
  "Header": "INVALID",
  "Channel": "PLAYER_ACTION",
  "Body": {
    "Message": "Invalid action"
  }
}-----
{
  "Header": "OK",
  "Channel": "PLAYER-ACTION",
  "Body": {
    "Message": "Ok"
  }
}

```

AFTER:

```

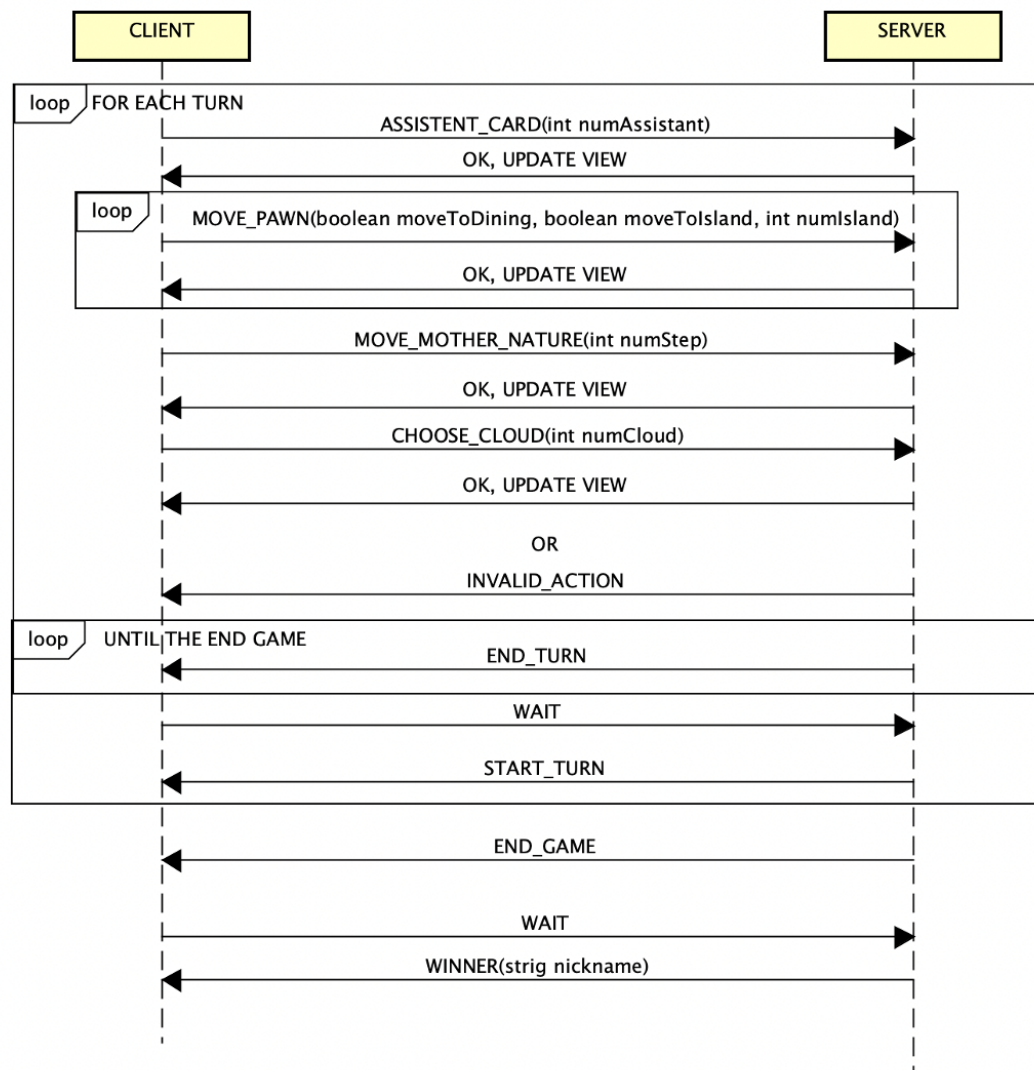
{
  "Header": "ENDTURN",
  "Channel": "PLAYER-ACTION",
  "Body": {
    "Message": "Your turn is over"
  }
}
{
  "Header": "START-TURN",
  "Channel": "PLAYER-ACTION",
  "Body": {
    "Message": "It is the turn of "namePlayer"" (TO ALL)
  }
}

```

LOOP OF EVERYTHING.

AFTER:

```
{  
  "Header": "ENDGAME",  
  "Channel": "PLAYER-ACTION",  
  "Body": {  
    "Message": "GAME OVER. The winner is "name player""  
  }  
}
```



DISCONNECTION

When a player disconnects, this will be notified to all the players, and if this happens during his turn, the server communicates who is the next player.

```
{  
  "Header": "DISCONNECTION",  
  "Channel": "PLAYER-ACTION",  
  "Body": {  
    "Message": "Player "nameplayer" disconnected" (TO ALL)  
  }  
}
```

IF THE DISCONNECTED PLAYER IS IN HIS TURN:

```
{  
  "Header": "NEWCURRENTPLAYER",  
  "Channel": "PLAYER-ACTION",  
  "Body": {  
    "Message": "The new current player is "nameplayer" (TO ALL)  
  }  
}
```

