

C2w protocol specification

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Requirement

- Users can chat in the public interface;
- Users can see the lists of users and movies;
- Users can select a movie and enter the movie room;
- Users in the same movie room can see the messages sent in this room;
- Users can see the states of the others.

Message formats

Scenario 1: while logging in

```
LOGIN<CRLF>  
IP<CRLF>  
PORT<CRLF>  
USERNAME<CRLF>
```

LOGIN: 01 to identify a login request for client.

If this login request is accepted, LOGIN in the message sent from the server will be 11; if not, LOGIN will be 10.

Message formats

Scenario 2: Chat Message request

```
CHAT<CRLF>  
IP<CRLF>  
PORT<CRLF>  
USERNAME<CRLF>  
TIME:<space>TEXT<CRLF>
```

CHAT: 02 to identify a chatting request for client.

Message formats

Scenario 3: Chat Message reply in main interface and movie room

```
TRANSFER<CRLF>  
IPAddressPresentList<CRLF>  
TIME:<space>TEXT<CRLF>
```

TRANSFER:

TRANSFER is the identifier to tell that this is a transfer message when a server received a chat message and is going to send this message to the others users who are online.

TRANSFER as 31 to be a reply in the main interface and 32 to be a reply in the present movie room.

Message formats

Scenario 3: Chat Message reply in main interface and movie room

```
TRANSFER<CRLF>  
IPAddressPresentList<CRLF>  
TIME:<space>TEXT<CRLF>
```

IPAddressPresentList:

```
31CRLF  
192.168.1.1;192.168.2.1;192.168.2.3;CRLF  
1267626900: Hey, anybody online?CRLF
```

Message formats

Scenario 4: Enter MovieRoom Request/Reply

```
MovieRoom<CRLF>  
IPAddress<CRLF>  
PortNumber<CRLF>  
USERNAME<CRLF>  
MovieName<CRLF>
```

MovieRoom: is the identifier to tell that this message is a message while a client would like to enter the MovieRoom.

MovieRoom 04 to identify a chatting request;
41 to identify an accepted chatting reply;
40 for a refuse chatting response.

Message formats

Scenario 6: List of Movies

```
ListMovie<CRLF>  
IPAddress<CRLF>  
PORT<CRLF>  
Username<CRLF>  
MovieNameList<CRLF>
```

ListMovie

we set the value of ListMovie as 61 to identifier it is a message of or sending the list of Movies' name.

MovieNameList

Server MUST reserve the list of movies' name in its local database.

Message formats

Scenario 7: LogOut Message

```
LOGOUT <CRLF>  
IP<CRLF>  
PORT<CRLF>  
USERNAME<CRLF>
```

LOGOUT 07 to identify a login request.

LOGOUT in the message sent from the server will be 71;

If it is refused, LOGOUT will be 70.