

A photograph of a RoboMaster competition control room. Several individuals are seated at desks with multiple computer monitors, wearing headsets and face masks. The room is dimly lit with blue and purple ambient lighting. The text is overlaid on a dark blue rectangular background on the left side of the image.

RoboMaster Champion
Referee's Client Interface
Instructions (RMYC)

Referee System Overview

- The Sever is the control center of the entire Referee System. It collects data from all robots, battlefield components and clients during the competition, and automatically determines the outcome of the competition according to the rules. It can visualize the data and log to the users through UI interface and can be manually controlled by the referee.
- The Referee's Client Interface includes the competition status panel, competition control panel, robot's referee system status panel, robot status panel, battlefield component control panel and auxiliary panel. All of the above information will be displayed on two screens, with the auxiliary panel displayed on the secondary screen.
- Due to version iterations, the illustrations in this manual may be different from the actual display.

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Overview



Youth Championship(Primary) 2022
v2.0.0(571)
test_room_0328

Red Team

90
0
Base HP 10000/10000

Round
- / -

Blue Team

90
0
Base HP 10000/10000

R1 Standard 69

RobotOnline Reset

bullet: 0 Revive

Durability:400 Eject

200 / 200 Disconnect

[R1-Standard] Normal

[R2-Standard] Normal

[R3-Engineer] Chassis Back Armor,

[R4-Base] Normal

B1 Standard 64

RobotOnline Reset

bullet: 0 Revive

Durability:400 Eject

200 / 200 Disconnect

Free Prepare Check Battle Confirm

R Victory Draw B Victory

Revive All Eject All Reset All Disconnect All OpenLog Reset SchoolName

R Warning Start B Warning

Red Team Rune	Unavailable	Available	Get Buff
Blue Team Rune	Unavailable	Available	Get Buff
Red Large Projectile hit	Unactivated	Activate	Disable
Blue Large Projectile hit	Unactivated	Activate	Disable

Projectile Bottles A B C D E F G H I J K L

R2 Standard 63

RobotOnline Reset

bullet: 0 Revive

Durability:400 Eject

200 / 200 Disconnect

[B1-Standard] Normal

[B2-Standard] Normal

[B3-Engineer] Normal

[B4-Base] Normal

B2 Standard 54

RobotOnline Reset

bullet: 0 Revive

Durability:400 Eject

200 / 200 Disconnect

R3 Engineer 67

B3 Engineer 60

R3 Engineer 67

RobotOnline Reset

bullet: 0 Revive

Durability:0 Eject

300 / 300 Disconnect

Red Team Rune
 Unavailable | Available | Get Buff || Blue Team Rune | Unavailable | Available | Get Buff |
| Red Large Projectile hit | Unactivated | Activate | Disable |
| Blue Large Projectile hit | Unactivated | Activate | Disable |

B3 Engineer 60

RobotOnline Reset

bullet: 0 Revive

Durability:0 Eject

300 / 300 Disconnect

R4 Base 57

B4 Base 49

R4 Base 57

RobotOnline Reset

bullet: 0 Revive

Durability:0 Eject

3000 / 3000 Disconnect

Red Team Rune
 Unavailable | Available | Get Buff || Blue Team Rune | Unavailable | Available | Get Buff |
| Red Large Projectile hit | Unactivated | Activate | Disable |
| Blue Large Projectile hit | Unactivated | Activate | Disable |

B4 Base 49

RobotOnline Reset

bullet: 0 Revive

Durability:0 Eject

3000 / 3000 Disconnect

ROBOMASTER

1.1 Division of Panels



Youth Championship(Primary) 2022

Red Team

Base HP 10000/10000

v2.0.0(571)

Round

test_room_0328

Blue Team

Base HP 10000/10000

Competition Status Panel

R1 Standard

RobotOnline Reset

bullet: 0 Revive

Durability:400 Eject

200 / 200 Disconnect

R2 Standard

RobotOnline Reset

bullet: 0 Revive

Durability:400 Eject

200 / 200 Disconnect

R3 Engineer

RobotOnline Reset

bullet: 0 Revive

Durability:0 Eject

300 / 300 Disconnect

R4 Base

RobotOnline Reset

bullet: 0 Revive

Durability:0 Eject

3000 / 3000 Disconnect

Red Team's Robot Control Panel

<p>[R1-Standard] Normal</p> <p>[R2-Standard] Normal</p> <p>[R3-Engineer] Chassis Back Armor,</p> <p>[R4-Base] Normal</p>	<p>[B1-Standard] Normal</p> <p>[B2-Standard] Normal</p> <p>[B3-Engineer] Normal</p> <p>[B4-Base] Normal</p>
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Robot's Referee System Status Panel

Free Prepare Check Battle Confirm

R Victory Draw B Victory

Revive All Eject All Reset All Disconnect All OpenLog Reset SchoolName

R Warning Start B Warning

Competition Control Panel

Red Team Rune	Unavailable	Available	Get Buff
Blue Team Rune	Unavailable	Available	Get Buff
Red Large Projectile hit	Unactivated	Activate	Disable
Blue Large Projectile hit	Unactivated	Activate	Disable
Projectile Bottles	A B C D E F G H I J K L		

Buff and Reload Control Panel

B1 Standard

RobotOnline Reset

bullet: 0 Revive

Durability:400 Eject

200 / 200 Disconnect

B2 Standard

RobotOnline Reset

bullet: 0 Revive

Durability:400 Eject

200 / 200 Disconnect

B3 Engineer

RobotOnline Reset

bullet: 0 Revive

Durability:0 Eject

300 / 300 Disconnect

B4 Base

RobotOnline Reset

bullet: 0 Revive

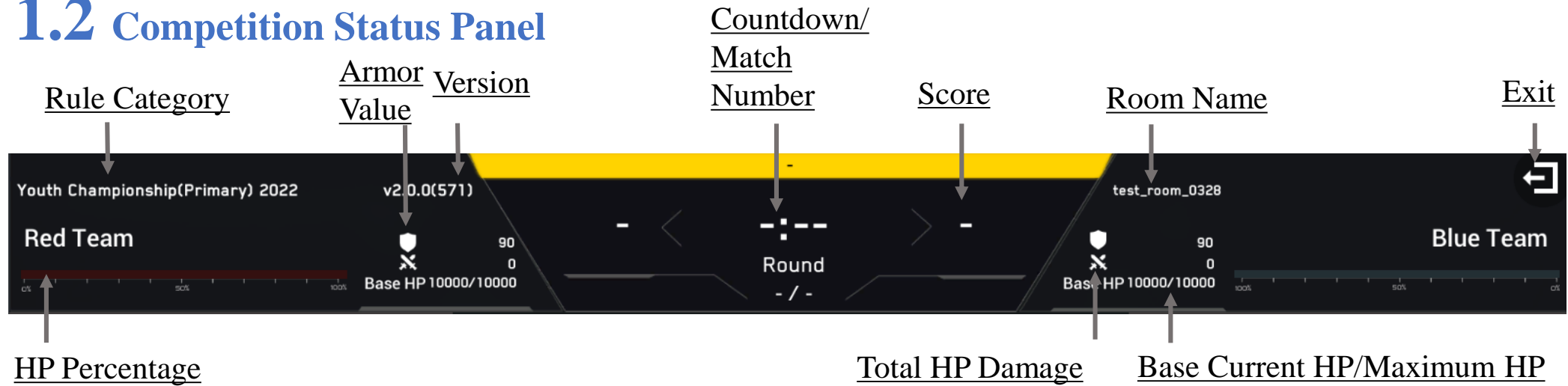
Durability:0 Eject

3000 / 3000 Disconnect

Blue Team's Robot Control Panel



1.2 Competition Status Panel



1.3 Robot's Referee System Status Panel

Equipment Name

[R1-Standard]	Normal	[B1-Standard]	Normal	} Client, Robot Referee System Modules ^① and Connection ^②
[R2-Standard]	Normal	[B2-Standard]	Normal	
[R3-Engineer]	Chassis Back Armor,	[B3-Engineer]	Normal	
[R4-Base]	Normal	[B4-Base]	Normal	

Referee System Modules^①: Client (Client), WIFI (Main Controller Module), Armor (Armor), Speed Mon (Speed Monitor Module), Light Ind (Light Indicator Module), RFID (RFID Interaction Module), UWB (Positioning System Module), VTM (Video Transmitter Module), CAP (Capacitor Management Module)

Connection^②: Green indicates a normal module, yellow indicates an abnormal module.

If the client is disconnected, the following will be displayed: Client disconnected

If the client is disconnected but the robot disconnected, the following will be displayed: Robot disconnected

If a module is disconnected, its name will be displayed.

1.4 Competition Control Panel



Button Name	Function Description
Free	Enter the Free Stage. This button is unavailable during the competition.
Prepare	Enter the 2-Minute Setup Period. This button is unavailable during the competition.
Check	Enter the 20-Second Initialization Period. This button is unavailable during the competition.
Battle	Enter the 5-1 countdown and then the 5-Minute Round
Confirm	After a round ends, the referee confirms match results with both teams.
R/B Victory	The referee manually determines the match results.
Draw	If abnormalities occur during the competition, such as an abnormal battlefield component, a potential hazard, etc., click this button to finish the competition after synchronizing the information
Revive all	Revive all robots. This button is unavailable during the competition.
Eject all (Red/Blue)	Eject all robots (Red/Blue). This button is available beyond the competition, but unavailable during the competition.
Reset all	Rest all robots' statuses. This button is unavailable during the competition.
Disconnect all	Disconnect robots from the server. This operation is usually required at the end of a round
Open Log	Open the server log
Reset school name	Refresh the school name, team name and schoold badge of the current team
Warning (Red/Blue)	Issue a yellow warning to all robots of the Red/Blue Team
Start/Reset	When entering the 2-minute setup period/ or the round ends, the referee will confirm the results of both sides

1.5 Buff and Reload Control Panel

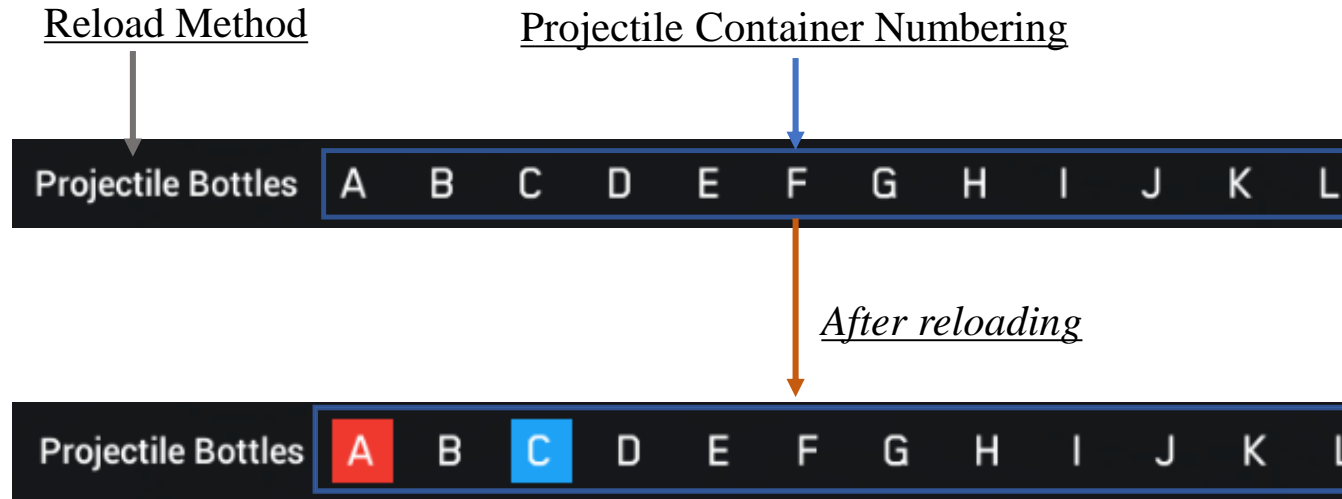


Current Status

Red Team Rune	Unavailable	Available	Get Buff
Blue Team Rune	Available	Unavailable	Get Buff
Red Large Projectile hit	Activated, 28s left	Activate	Enable
Blue Large Projectile hit	Unactivated	Activate	Disable

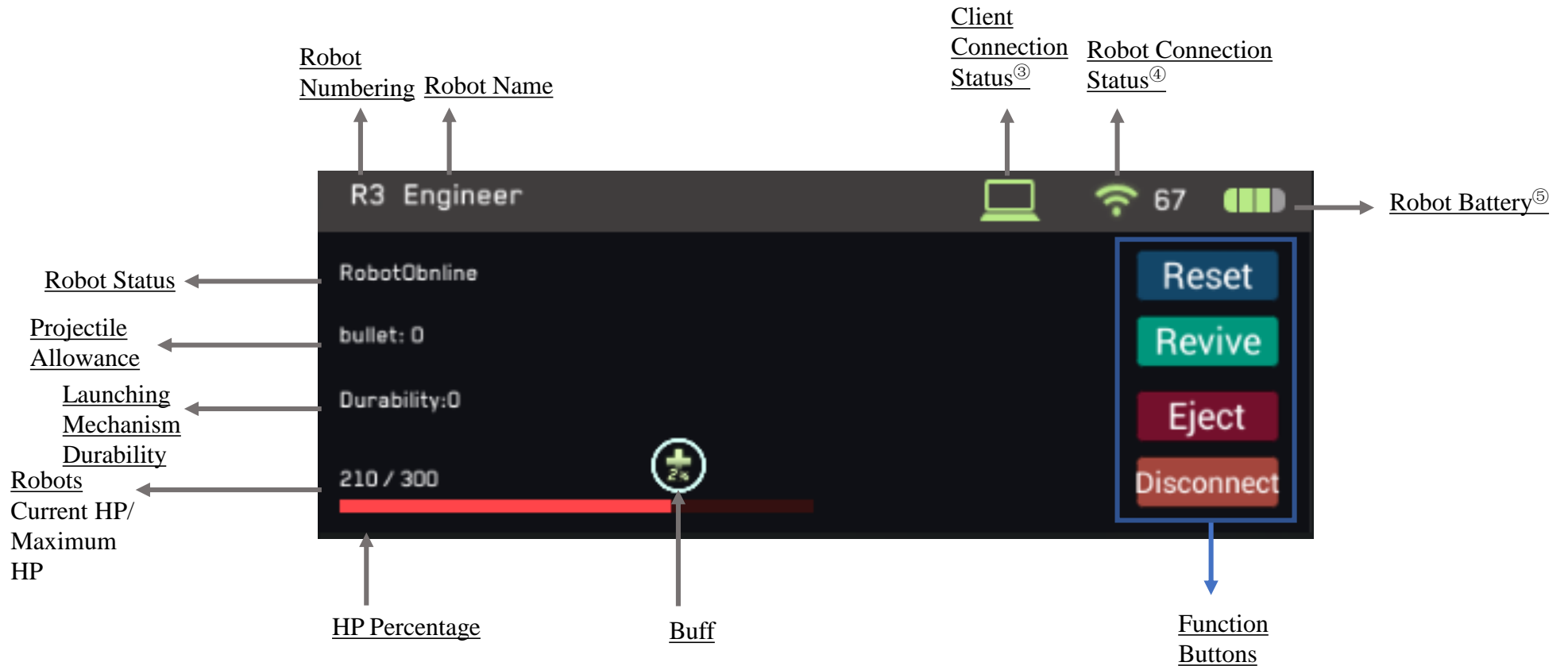
Click the “unavailable” button, the Power Rune will become inactivable.
Click the “available” button, the Power Rune will become activable.

Click the “activation” button, the left side will display the effect of being hit by the activated Large Projectile and the remaining effective time
Click the “disable” button, the team cannot be hit by the Large Projectile
Click the “enable” button, the team can be hit by the Large Projectile



Reload all the Standard Robots of the Red Team. A/B has a red background
Reload all the Standard Robots of the Blue Team. C/D has a blue background

1.6 Robot Control Panel



Client Connection Status^③ : If the Client is connected, it will display green. Otherwise, it will display red.

Robot Connection Status^④ : If the robot is connected, it will display green. Otherwise, it will display red.

Robot Battery^⑤ : When the battery is 75% or above, it will display green; when the battery is 50% or less, it will display red.

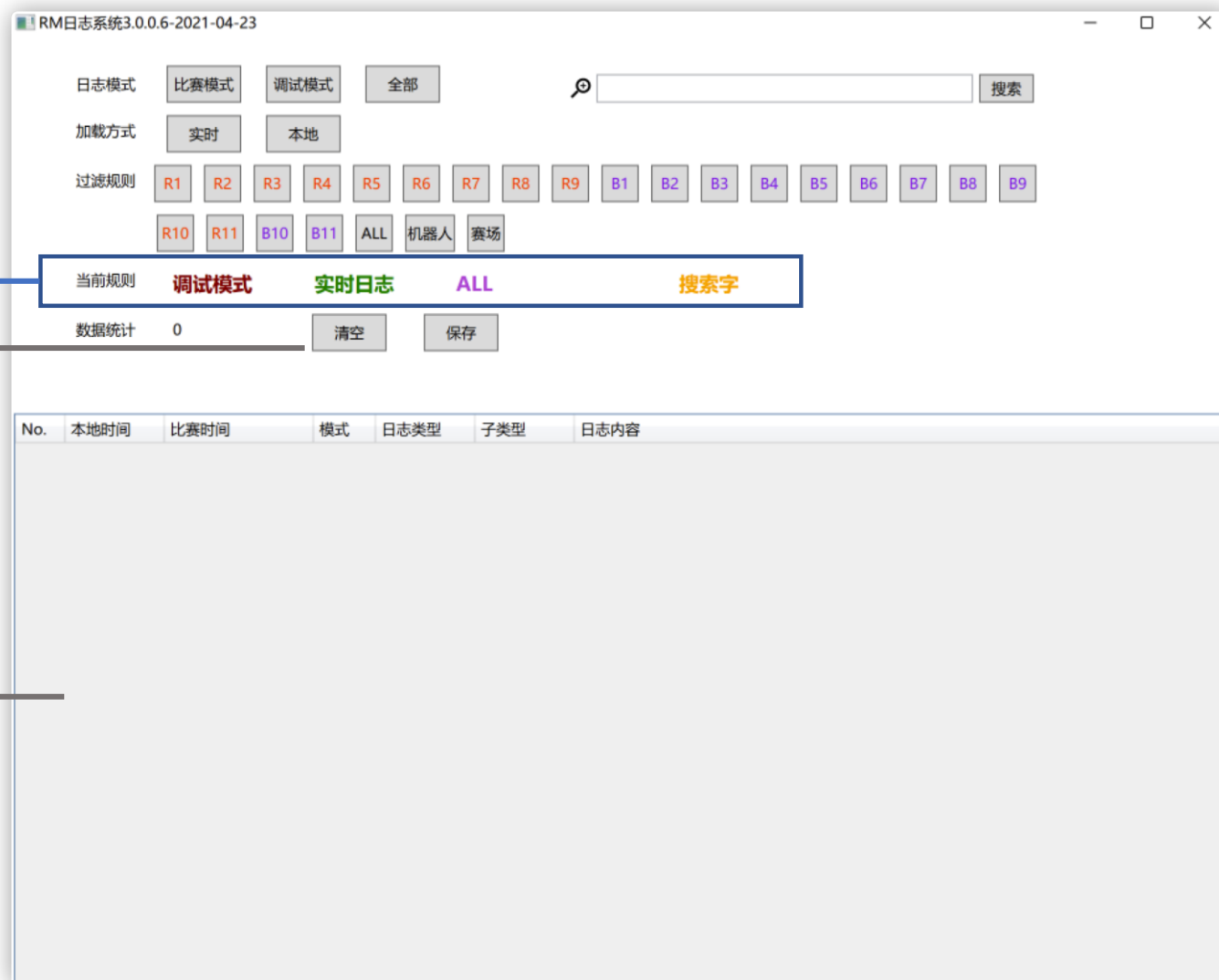
2 Log system



Selected log mode, loading method, filter rule and search words

Empty/save filtered (un)filtered real-time logs

Log display zone



Note:

1. The local logs will be automatically backed up to the cloud when the network is connected, and the backed up local data will be automatically deleted from the local area after 7 days.
2. The log system supports multi-clienting (Max 6).

3. Server



```
C:\Users\RM2022\Desktop\RoboMaster Champion (553)\RoboMasterChampion_Data\StreamingAssets\rm-champion-server\RMServer.exe
----- svr:test_room_0309 match:S1Scene2022_mid -----
S0 TCP GateSvr Listen in 25862
S0 UDP GateSvr Listen in 52102
S1 TCP GateSvr Listen in 54998
S1 UDP GateSvr Listen in 54999
GSGate Init Succ
GSHall Init Succ Ver:1.3672
S0 UDP LogSvr Listen in 62103
login hash = 0
Curr Token = eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJ6b251X21kIjoxOX0.gExzp1MzvFA1_CiYYEYF6UdJTtfxkTBAo_6lrx8hvIo
712970776 Enter Room
Curr Room State=ers_Wait Time Left=-1
Curr Room State=ers_Wait Time Left=-2
Curr Room State=ers_Wait Time Left=-3
Curr Room State=ers_Wait Time Left=-4
Curr Room State=ers_Wait Time Left=-5
Common HttpResponseToFile Error Response status code does not indicate success: 401 (Unauthorized).
Curr Room State=ers_Wait Time Left=-6
Curr Room State=ers_Wait Time Left=-7
Curr Room State=ers_Wait Time Left=-8
Curr Room State=ers_Wait Time Left=-9
Curr Room State=ers_Wait Time Left=-10
```

Note: The server will be automatically hidden when the referee system is started, and can be displayed by pressing F11