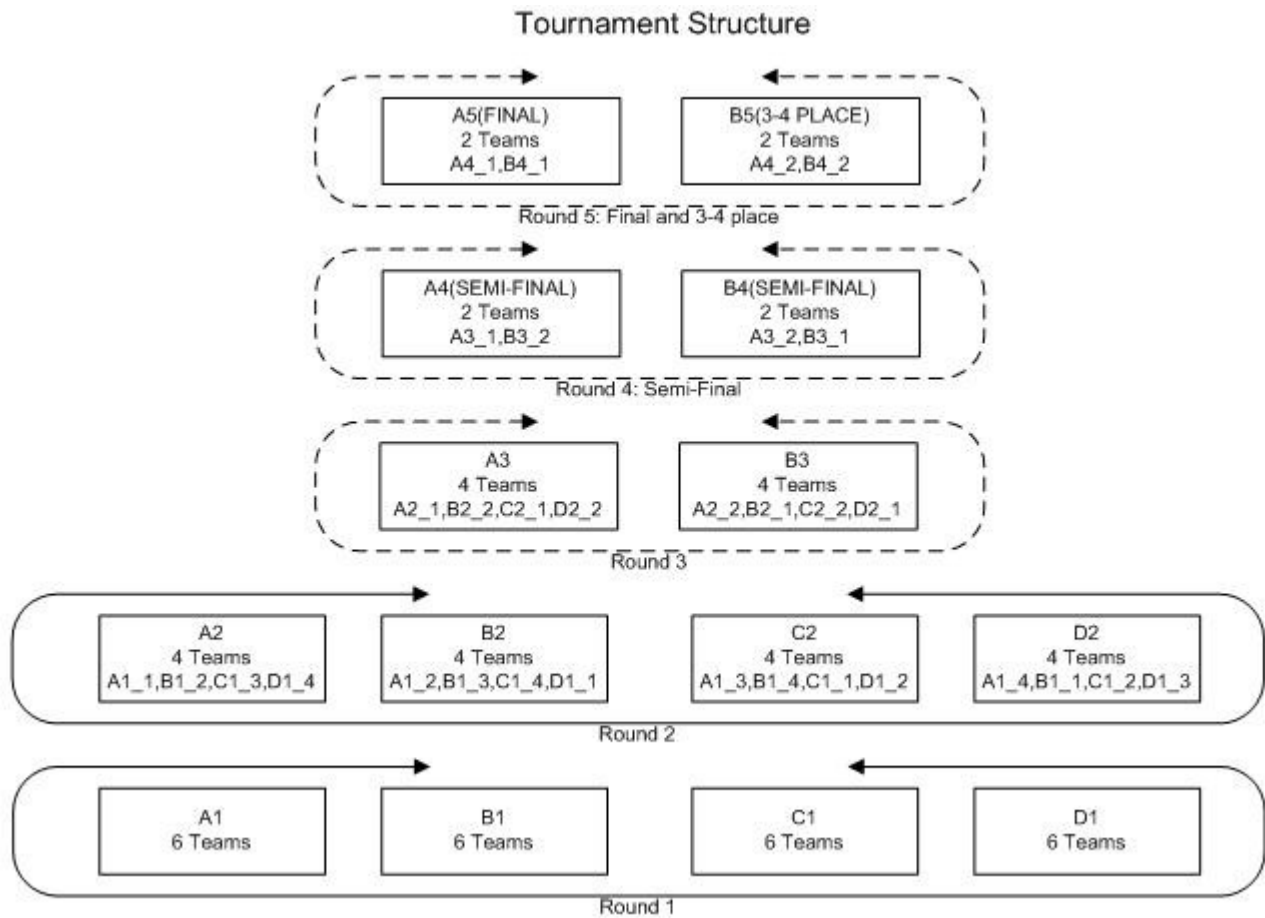


# Rules 3D Simulation League 2009

## Tournament Structure

- Games consist of two halves, each of which lasts 5 minutes, teams will play 3 vs. 3.
- There will be three points allocated for a win and one point for a draw. A forfeit will record a score of 3:0.

Games will be played according to the following structure.



## General Issues and Human Referee

- The OC tests all teams before the first/preliminary round, in the setup days. But the OC is not responsible for testing teams during the games.
- Between the rounds, teams are allowed to upload new versions of their agents, at their own risk. The OC will announce time slots and deadlines for this. Teams do not have access to their home directories during the rounds.
- Games in each round run automatically with the use of a league manager script. So, it is required that the agents run with a specified startup script. The format of this script is described below. It is the teams own responsibility to make their agents work with this script.
- Each game is overseen by a referee. Most of the time the games are refereed by the OC members themselves, but on the discretion of the OC, referees can also be picked among volunteers. These volunteers need to have a good understanding of the rules. There is always a member of the OC around.
- The referee cannot judge the games of his/her own team.
- The referee acts in situations that cannot be detected by the simulator. This includes fouls by a team and situations where the game is stuck.
- Goals are also judged by the referee, in the case that a goal is not counted in the right way by the simulator or the league manager.
- The referee judges the games according to the announced rules. In unpredicted situations, the referee decides based on his/her common sense.
- During a game only one representative (usually the team leader) of each of the playing teams are allowed near the referee.
- Decisions made by the referee are binding. If a team keeps complaining to the referee about a decision made by that referee, he/she may ask the OC to assign your team a penalty.
- Complaints about a game will be checked after finishing all the games of the current round, by the referee and the OC.
- If the referee is unable to make a decision in a situation, the referee and one member of each team involved may appeal to the OC.

## Rules for Agent's behavior

### **Goalie: Lying Down in Front of the Goal**

If the goalie or any other agent lies down in front of the goal for more than 30 seconds, with the result of preventing the ball from entering the goal and that agent is actively influencing the game (i.e. by blocking a ball or hindering a player of the opposing team) it will be punished by a drop-ball at the corner of the penalty area.

If this agents continues with this behavior for more than one quarter of a game, it will be banned from the game.

If the behavior is judged to be purposely blocking the goal without actively reacting to the ball, the same penalty will be awarded.

### **Goalie: Touching the Ball With Hands**

A goalie agent is allowed to touch the ball with its hands, but only if the hands of this agent is located inside the penalty area of its own goal. To be able to identify one of the agents in the team as the goalie,

it should always carry the number one.

### **Carrying the Ball**

It is illegal for an agent to carry the ball for more than 5 seconds. When the ball is carried by the agent for more than 5 seconds it is penalized by a drop-ball.

### **Kick-Off**

It is illegal to score a goal straight from kick-off. Therefore the ball should first leave the middle circle before it can result in a goal being scored by a following action. A goal scored by breaking this rule will not be counted.

### **Normal Walking**

For the sake of natural realism it is mandatory to walk in a biological realistic way. Showing unrealistic behavior can be punished by a free-kick for the opposing team.

When this rule is judged to be intentionally broken or is used for more than one quarter of the game time, this behavior will be penalized by banning the offending agent from the game/ending the game with a 3-0 advantage for the opposing team.

### **Blocking the Ball**

It is forbidden for an agent to intentionally block the ball by, in an inactive way, preventing another agent from getting to the ball, for instance by lying on top of it, or blocking of all routes to it by lying in front of it. This situation is handled by issuing a drop-ball.

### **Pushing and Pulling**

It is not allowed to intentionally push or pull an agent. The referee should use its own common sense to judge this behavior. If an agent intentionally pushes or pulls another agent, the agent being pushed or pulled will be awarded a free-kick.

### **Touching the Ball**

It is not allowed to touch the ball for more than 20 seconds continuously. If this behavior causes disadvantage to the opposing team, a free-kick will be awarded.

### **Rules for Fair Play**

The goal of the game is to play soccer according to fair and common sense understanding of soccer and to restrictions imposed by the virtual simulated world of the 3D soccer simulator. Circumvention of this is considered violating the fair play commitment and its use during the tournament games is strictly taboo.

Violation of the fair play commitment includes for example:

- Using another teams binaries in your team.
- Jamming the simulator by sending excessive commands per client.
- Direct communication between players by using other communication means, such as sockets or inter-process communication.
- Working with the competition machines or restarting them intentionally.

Any of these is strictly forbidden. Other strategies might be found violating the fair play commitment, after consultation with the rule committee. However, we expect it to be pretty clear what a fair team should be like. In particular, the destructive disruption of an opponent agent operation or the advantage

gains by other means than explicitly offered by the simulator counts as unfair game play.

If you are in doubt of using a certain method, please ask the rule committee before the tournament starts. If a team is found to use unfair programming methods during the tournament, it will be immediately disqualified.

## Rules for Validity of a game

### **Agents Failure**

In case of an agent failure due to any programmatic problems related to the agent itself, the following procedure will be applied.

- If agents of a team get disconnected from the simulator before the 30th second of the game, the game will be restarted for up to three times.
- If the problem persists, by agreement of both teams minor code changes may be made by the team in their own code or the team may change their binary. Only if these things can be done in less than 2 minutes. This will be a last opportunity for this team. After that, if the agents again runs improperly the game would continue as if nothing was wrong or the team will lose with a score of 3:0.
- If your agents get disconnected from the simulator after the 30th second, the game will continue, and if it is impossible to continue the impaired team will lose with a score of 3:0.

### **Simulator Failure**

In case of any failure in the simulator that can be regarded as to be in favor of either side the human referee will decide on continuation of the game by consulting the rule committee. If the committee decides on stopping the game, based on the problem and situation, the match will be either restarted from the beginning or continued from the stopped time. The decision of the committee on this is final and cannot be negotiated.

## Rules for tie-breaks

In the case of tie breaks, the instruction is:

- goal differences of teams in this round
- If the goal differences is zero then their head-to-head games will be checked. If again there is no difference, two extra halves will be played.
- If the result is the same, the OC will use a coin toss to decide.