

Capture The Flag Tournament Rules

The Playing Field

- Two teams of 10 players compete, the Reds and the Blues.
- The playing field is a 50x50 plane centered at the origin, (0, 0, 0).
- Each team has a home-side—Blues on the negative side of the X-axis, Reds on the positive side.

Gameplay:

- If a player is tagged offside, the player is sent to jail.
- If a player tags the jail on the other team's side, all of the jailed teammates are freed. The freed teammates are automatically zapped back to random locations on their home-side ("free walkbacks"). The agent that tagged the jail does not automatically return home.
- Agent's cannot move their own team's flag.
- When the game starts, each flag is surrounded by a 'safe zone' in which offside players cannot be tagged. This zone is static and vanishes once the flag is removed from the zone.

Tournament:

- Tournaments are a series of automatically run games between two teams.
- The winner of a tournament is that team which has won the most individual games in the tournament.
- By default, a tournament is composed of 5 games.
- The results of the tournament are printed to the output log

The End of the Game:

- The game is over when one of the following conditions has been met:
 - one team's flag has been carried to the other team's side
 - all players from one team have been captured
 - 500 simulated seconds have elapsed
- The winning team is the team that:
 - captures the other team's flag; or,
 - the one that captures all of the other team's opponents; or,
 - if neither of the above conditions are met, then the winning team is the one which has possession of its opponent's flag for the larger portion of the game.
- The results of the competition are printed to the output log.

The Agents:

- Agents have a maximum speed of 1.0.
- The agent's sensor range is 20 units.

Technical Details:

- Your entry into the competition should be a single breve class, a subclass of "CaptureTheFlagPlayer" with a unique name.
- Your team will arbitrarily be assigned to be the red or blue players. Blue players have the team number "0" and live on the negative side of the X-axis. Red players have the team number "1" and live on the positive side of the X-axis.