**abstract\_unity\_player**

**Subspecies of:** agent  
**Microspecies of:** model

Attributes:

* **shape**: attribute of type geometry. Returns the shape of the receiver agent
* **location**: attribute of type point. Returns the location of the agent
* **name**: attribute of type string. Returns the name of the agent (not necessarily unique in its population)
* **index**: constant of type int. Returns the unique index of this agent in its population. Read-only attribute
* **host**: attribute of type model. Returns the agent that hosts the population of the receiver agent
* **peers**: attribute of type list. Returns the population of agents of the same species, in the same host, minus the receiver agent
* **members**: attribute of type container. Returns the list of agents for the population(s) of which the receiver agent is a direct host
* **agents**: attribute of type list. Returns the list of agents for the population(s) of which the receiver agent is a direct or undirect host
* **heading**: attribute of type float. rotation to apply for the display of the agent in GAMA
* **to\_display**: attribute of type bool. display or not the agent in GAMA
* **z\_offset**: attribute of type float. offset along the z-axis for the the display of the agent in GAMA
* **movement\_max\_y**: attribute of type float. maximal y-value
* **player\_agents\_perception\_radius**: attribute of type float. Allow to reduce the quantity of information sent to Unity - only the agents at a certain distance are sent
* **player\_agents\_min\_dist**: attribute of type float. Allow to not send to Unity agents that are to close (i.e. overlapping)
* **cone\_distance**: attribute of type float. distance of the cone for the display of the agent in GAMA
* **player\_rotation**: attribute of type float. Rotation (angle in degrees) to add to the player for the display of the agent in GAMA
* **player\_size**: attribute of type float. Size of the player for the display of the agent in GAMA
* **x\_movement\_strafe**: attribute of type bool. Use Strafe for movement along x-axis
* **x\_movement\_speed**: attribute of type float. Movement speed along the x-axis in Unity
* **camera\_clipping\_planes\_far**: attribute of type float. distance for the camera clipping (far)
* **selected**: attribute of type bool. is the agent selected
* **camera\_clipping\_planes\_near**: attribute of type float. distance for the camera clipping (near)
* **cone\_amplitude**: attribute of type float. amplitude of the cone for the display of the agent in GAMA
* **movement\_min\_y**: attribute of type float. minimal y-value
* **y\_movement\_speed**: attribute of type float. Movement speed along the y-axis in Unity
* **rotation\_speed**: attribute of type float. Rotation speed along the y-axis
* **color**: attribute of type rgb. color of the agent for the display in GAMA

Actions:

* **player\_perception\_cone**: no arguments, returns a result of type geometry. Wait for the connection of a unity client and send the paramters to the client
* **die**: no arguments, no value returned. Kills the agent and disposes of it. Once dead, the agent cannot behave anymore
* **tell**: (string msg, bool add\_name), no value returned
* **error**: (string message), no value returned
* **debug**: (string message, string separator, string end), no value returned
* **\_init\_**: no arguments, no value returned
* **\_step\_**: no arguments, no value returned