

PARTICLES SCRIPT INTERFACE

View online: <https://www.construct.net/en/make-games/manuals/construct-3/scripting/scripting-reference/plugin-interfaces/particles>

The `IParticlesInstance` interface derives from `IWorldInstance` to add APIs specific to the **Particles** plugin.

Particles APIs

isSpraying

A boolean indicating whether the object is actively emitting particles (when in *Continuous spray* mode).

rate

Set or get the number of particles created per second.

In One-shot mode this property can be assigned immediately upon creation to adjust the number of particles created, but once particles are already created assigning the value will have no effect.

sprayCone

Set or get the angle in radians through which particles are fired.

initSpeed

Set or get the initial speed of particles in pixels per second.

initSize

Set or get the initial size of each particle in pixels.

initOpacity

Set or get the initial opacity of each particle, as a float from 0 to 1.

initXRandom

initYRandom

Set or get the range of random offsets to the particle's position on each axis.

initSpeedRandom

Set or get the range of random offset to the particle's speed on creation.

initSizeRandom

Set or get the range of random offset to the particle's size on creation.

initGrowRate

Set or get the initial grow rate (change in size over time) for each particle, in pixels per second. Zero will keep the same size over time, a positive value will increase the size of the particle over time, and a negative value will shrink it over time.

initGrowRandom

Set or get the range of random offset to the particle's grow rate on creation.

acceleration

Set or get the acceleration of each particle, in pixels per second per second.

gravity

Set or get the downwards acceleration caused by gravity, in pixels per second per second.

lifeAngleRandom

Set or get an amount of random change to each particle's angle to apply during its lifetime, in radians.

lifeSpeedRandom

Set or get an amount of random change to each particle's speed to apply during its lifetime, in pixels per second.

lifeOpacityRandom

Set or get an amount of random change to each particle's opacity to apply during its lifetime, in the range 0-1.

timeout

Set the time in seconds each particle can last before being destroyed when the *Destroy mode* is *Timeout*.

setParticleObjectClass(iObjectClass)

Call with an [IObjectClass](#) to set the Particles object to spawn instances of that object class instead of drawing its own particles. Pass `null` to restore the default behavior of the Particles object drawing its own particles. For more information see *Advanced particle effects* in the [Particles manual entry](#).

fastForward(time)

Skip ahead the particle effect by a time in seconds. For example fast-forwarding by 3 seconds will cause the Particles object to instantly spawn, move and destroy particles as if 3 seconds had gone by. This is useful for making sure particle effects appear ready immediately, rather than taking a few seconds to move their particles out from the spawn point.