

Doomsday Engine - Feature #1314

Particle spawn rate affected by mobj visibility

2003-12-28 00:42 - danij

Status: New	Start date: 2003-12-28
Priority: Normal	% Done: 0%
Assignee:	
Category:	
Target version: Rendering	
Description When mobj type generator is defined (ie instead of assigning a generator to every state of a monster) all the particles are "shared" between all mobj's of this type on the level. For instance when assigning a flame generator to eg the Lost Soul the particles are shared between all Lost Soul's on the map, even if they arn't visible. This makes mobj type generators unuseable atm. Unfortunately this means using a copy generator for every state of the model. The by product of this is very "un-even" effects and doesn't look too good. Perhaps a generator flag is needed to prevent "sharing" or to limit the "sharing" to only visible mobj's. Dani J Labels: Graphics	
Related issues: Related to Feature #1699: Particle renderer 2.0 New 2014-01-03	

History

#1 - 2004-01-02 19:36 - skyjake

Logged In: YES
user_id=717323

This is not a bug. :-)

A mobj type generator is supposed to share the particles with all the mobs of the type. This is because with some mobj types the number of mobs changes dramatically during gameplay, and I don't want to keep changing the particle allocation at runtime.

The workaround is naturally to set a large enough max particle count for mobj type generators.

#2 - 2004-01-03 23:24 - danij

Logged In: YES
user_id=849456

Ah ok :-)

Still it would be usefull to set a minimum particle count for in cases where some wads use extreme numbers of the same mobj type and the particle generators look silly only generating 1 particle a second.

#3 - 2004-01-05 16:41 - skyjake

Logged In: YES
user_id=717323

If one limits the "sharing" to only the visible mobs, there is a problem: when an object is moved suddenly into the view (e.g. when teleporting) there will be a moment when the particle effect "resumes" normal operation. The severity of this depends on the life time of the particles.

One possibility would be to give more particles to objects nearby, and less particles to faraway things. The only downside would be that the spawn rate would become variable, which might make it more difficult to tune the particle effect to one's liking. But OTOH, who cares what the effect looks like from a great distance? :-)

#4 - 2005-05-29 14:08 - danij

Converting to RFE (see previous comments).

#5 - 2007-05-28 06:43 - danij

Logged In: YES
user_id=849456

Yes that would be a much better solution (assign more particles to objects nearby). Depending on how steep the "ramp" is, a variable spawn rate might not be that much of a problem.

I think this would naturally be the best solution for particle generators anyway, eg if they are within a certain distance run as normal but the closer they get to the max draw distance you could start reducing the spawn rate and increasing the alpha amount of the particles (so that they disappear smoothly).

#6 - 2009-05-05 10:01 - yagisan

Logged In: YES
user_id=1248824
Originator: NO

bump - whats happening here ?

#7 - 2013-10-21 16:24 - skyjake

- *Tags set to Particles, Renderer*

#8 - 2013-10-21 16:28 - skyjake

- *Subject changed from Particles shared when using a mobj type generator to Particle spawn rate affected by mobj visibility*

Changed title to more accurately describe what is being discussed here.

#9 - 2019-11-29 16:38 - skyjake

- *Related to Feature #1699: Particle renderer 2.0 added*

#10 - 2019-11-29 16:38 - skyjake

- *Target version set to Rendering*