orxSPAWNER structure

Summary

```
[SpawnerTemplate]
Object           = ObjectTemplate
WaveSize         = <int>
WaveDelay        = <float>
ActiveObject     = <int>
TotalObject      = <int>
AutoReset        = <bool>
CleanOnDelete    = <bool>
ObjectSpeed      = <vector>
Position         = <vector>
Rotation         = <float>
Scale            = <vector> | <float>
Interpolate      = <bool>
Immediate        = <bool>
UseAlpha         = <bool>
UseColor         = <bool>
UseRotation      = <bool>
UseScale         = <bool>
UseRelativeSpeed = <bool>
UseSelfAsParent  = <bool>
IgnoreFromParent =
none|all|rotation|scale|position|position.rotation|position.scale|position.p
osition
OnSpawn          = <command>
```

Details

Here's a list of the available properties for an `orxSPAWNER` structure:

- `Object`: Defines the name of the object (ie. its config section name) that will be spawned. This can be a randomized value.
- `WaveSize`: Number of object to spawn in every wave. 0 or no value means no automated wave spawning. This can be a randomized value.
- `WaveDelay`: Time elapsed (in seconds) between two waves. Its default value is 0, which means there are no delay between two waves (ie. continuous spawning). If a negative value is provided, the wave system is deactivated. The wave system only works for spawners that have been created and therefore owned by an orxOBJECT.
- `ActiveObject`: Number of allowed active object at the same time. When this limit is reached the spawner can't spawn objects anymore till some of the spawned objects are deleted. 0 or no value means unlimited active objects.
- `TotalObject`: Number of total objects the spawner is allowed to create. When this limit is reached the spawner will deactivate itself and send an event [1]. 0 or no value means unlimited total objects.
- `AutoReset`: If this is set to `true`, when the spawner reaches its total limit, it'll be reset instead

of deactivated. An event [2] will be sent to notify the user. After being reset, the spawner will continue spawning as if it was brand new with the current active and total object counters back to 0. By default this property is set to `false`.
- `CleanOnDelete`: If this is set to `true` all the spawned objects still leaving will be deleted as soon as the spawner gets deleted. Defaults to `false`.
- `ObjectSpeed`: If this property is defined, it'll give an initial speed to every spawned object that will override any speed setting of the object itself. By default, there's no speed override.
- `Position`: Position of the spawner in its parent space, in pixels. Defaults to (0, 0, 0).
- `Rotation`: Rotation of the spawner in its parent space. Angle in degrees around z axis. Defaults to 0°.
- `Scale`: Scale of the spawner in its parent space (z is ignored for 2D objects). By default its value is 1.0. [3]
- `Interpolate`: When interpolate is set to true, sub-frame precision spawning will be emulated if needed. Defaults to false.
- `Immediate`: If set, the delay will be ignored for the first wave after creation or reset; Defaults to false.
- `UseAlpha`: This only works if the spawner is linked to a parent orxOBJECT. If so and its value is set to `true`, it will transmit the parent's alpha to any spawned objects. By default its value is `false`.
- `UseColor`: This only works if the spawner is linked to a parent orxOBJECT. If so and its value is set to `true`, it will transmit the parent's color to any spawned objects. By default its value is `false`.
- `UseRotation`: This only works if the spawner is linked to a parent orxOBJECT. If so and its value is set to `true`, it will transmit the parent's rotation to any spawned objects. By default its value is `true`.
- `UseScale`: This only works if the spawner is linked to a parent orxOBJECT. If so and its value is set to `true`, it will transmit the parent's scale to any spawned objects. By default its value is `true`.
- `UseRelativeSpeed`: If set to `true` and the spawner has a value for `ObjectSpeed`, the applied speed will be relative to the spawner's current rotation and scale. By default its value is `false`.
- `UseSelfAsParent`: If set to `true`, all spawned object will have the spawner as parent (in the orxFRAME hierarchy sense). This means that every spawned object will move together with its spawner parent: it will adapt to its position, rotation and scale. If you only want a spawned object to adopt the current orientation of the Spawner, see ObjectSpeed and UseRotation. By default this property's value is set to `false`.
- `IgnoreFromParent`: none|all|rotation|scale|position|position.rotation|position.scale|position.position; NB: Defines which parts of the parent's transformation will be ignored when transmitted to the spawner. Defaults to none.
- `OnSpawn`: Command to run on an object after it has been spawned. Defaults to none.

Latest config settings for the Development Version

We endeavor to keep the config properties on this page up to date as often as possible. For up to the minute config information for the latest version of Orx, check the most recent published at:

CreationTemplate.ini and

SettingsTemplate.ini

Additionally these files can be found under your orx source tree in the `orx/code/bin` folder.

1)
Type = orxEVENT_TYPE_SPAWNER, ID = orxSPAWNER_EVENT_EMPTY
2)
Type = orxEVENT_TYPE_SPAWNER, ID = orxSPAWNER_EVENT_RESET
3)
ie. (1.0, 1.0, 0.0)

From:
https://www.orx-project.org/wiki/ - **Orx Learning**

Permanent link:
https://www.orx-project.org/wiki/en/orx/config/settings_structure/orxspawner

Last update: **2025/09/30 17:26 (14 months ago)**