

Particle System / Particle

Namespace **Playniax.ParticleSystem**

Inherits from **MonoBehaviour**

Script can be found in **Assets/Playniax/Framework/Demos/Radar System/Scripts (MonoBehaviour)/CustomParticle.cs**

Public fields	Description
<code>float timeScale = 1</code>	The scale at which time passes.
<code>float delay</code>	Suspends the execution for the given amount.
<code>Vector3 velocity</code>	The velocity of the particle.
<code>Vector3 constant</code>	The constant of the particle.
<code>float friction</code>	The friction of the particle
<code>float gravity</code>	The gravity of the particle.
<code>Vector3 spin</code>	The spinning speed of the particle.
<code>Vector3 targetScale</code>	The target scale of the particle.

To create a particle simply create a sprite and add the [Particle](#) component to it.

Read [Getting Started](#) for more info.

Particles from script

Particles can also be created by an [Emitter](#) or you can create particles from script.

By creating particles from script you essentially create your own emitter.

Example can be found in **Assets/Playniax/Framework/Particle System/Scenes/Example 05 - Particles From Script (Jet Engine).unity**

Example script can be found in **Assets/Playniax/Framework/Particle System/Scenes/Scripts (MonoBehaviour)/JetEngine_Example.cs**

```
using Playniax.ParticleSystem;
using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class JetEngine_Example : MonoBehaviour
{
    public Sprite sprite;
    public Material material;
    public int orderInLayer;
    public float timer;
    public float interval = 1;
```

```

void Update()
{
    timer -= 1;

    if (timer <= 0)
    {
        timer = interval;

        var renderer = new GameObject("Particle").AddComponent<SpriteRenderer>();

        renderer.sprite = sprite;

        if (material) renderer.material = material;

        renderer.sortingOrder = orderInLayer;

        renderer.transform.parent = transform;

        renderer.transform.position = transform.position;

        var particle = renderer.gameObject.AddComponent<Particle>();

        var r = Random.Range(.75f, 1);
        var g = Random.Range(.5f, .75f);
        var b = Random.Range(.25f, .5f);

        particle.startColor = new Color(r, g, b, 1);

        particle.targetColor = new Color(1, 1, 1, 0);

        particle.ttl = Random.Range(1.5f, 1.25f);

        particle.targetScale = Vector3.zero;

        var scale = Random.Range(0, .25f);
        particle.startScale *= scale;

        particle.velocity = Random.Range(.75f, 1.25f) * Vector3.left;

        particle.name += " (" + particle.gameObject.GetInstanceID() + ")";
    }
}

```