



COMP2007 - Game Development

Cinemachine

This tool is used for fine-grained control over the Unity Camera.

Camera movement effects like panning, blending and compositing between shots are provided with an easy to use set of components. Cinemachine allows us to easily create several types of in-game camera movement, such as 3rd person and first person cameras.

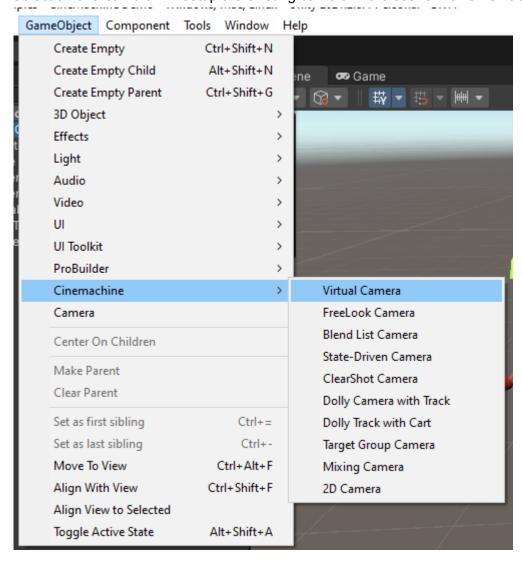
Cinemachine documentation

Installing

Cinemachine is an official Unity package, you can install it through the package manager window, like any other package we have worked with in the past.

Using Cinemachine

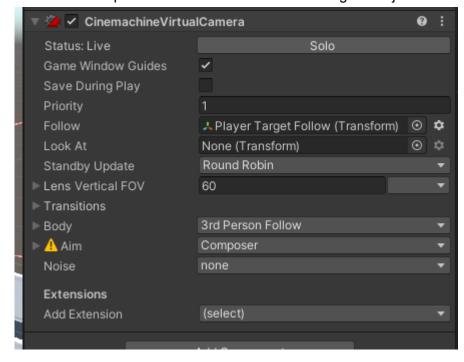
Access Cinemachine's virtual cameras from the GameObject top menu, under Cinemachine. Selection of a camera will setup the existing camera in the scene with Cinemachines components.



Cinemachine uses the Cinemachine Virtual Camera component on a gameobject to control the camera. We can place as many of these as we wish in the scene, they can take control of the main camera one at a time.

Virtual Camera

NOTE: the component should not be on the same gameobject as the camera.

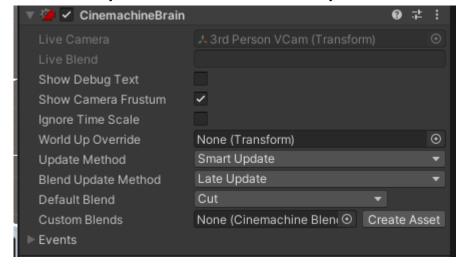


Cinemachine Brain component

The Gameobject with the Camera component in the scene will use a Cinemachine Brain component to communicate with any Cinemachine virtual cameras in the scene.

Cinemachine Brain

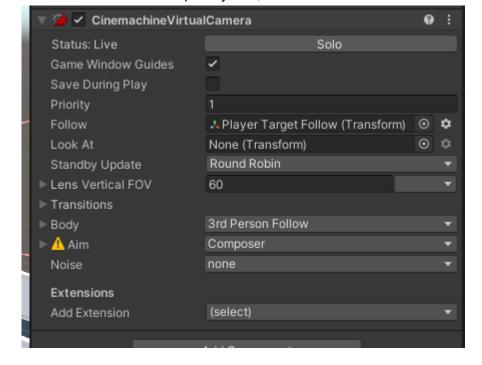
NOTE: You only need one Cinemachine Brain in your scene with one Camera component



Using the priority system to swap cameras dynamically

The virtual camera component has a **Priority** setting that picks the virtual camera with the highest setting. The virtual camera with the highest priority will control the main camera with the cinemachine brain component.

The camera below has a priority of 1, if other virtual cameras in the scene have a lower priority, this one will be picked to control the main camera.



Using this system, we can control the camera seamlessly, including character view (1st or 3rd person etc) to cut scenes and other views like security cameras.

Links

Cinemachine documentation
Virtual Camera
Cinemachine Brain



