Animating Characters and Objects

Explore Unreal Engine's animation tools and editors for working with 2D and 3D characters and objects.

You can use **Unreal Engine**'s suite of powerful animation tools and editors to create character and object runtime animation systems, rendered cinematic content, and author new animation content directly in the engine.

Skeletal Mesh Animation

With the Skeletal Mesh Animation System, you can create robust animation systems for characters and objects within Unreal Engine. After importing a skinned mesh object as a Skeletal Mesh asset, you can manage its properties and build logic to run dynamic animation content using the Animation Blueprint visual scripting editor.

For more information about the using the **Skeletal Animation System** to animate characters and objects in unreal engine, see the following documentation:

Skeletal Mesh Animation System

Unreal Engine's system for animation and controlling characters.

Sequencer

You can use [Sequencer](#) to create and edit staged animation content for game cinematics or traditional animated filmmaking while taking advantage of Unreal Engine's animation and world rendering tools. When creating cinematic content using Sequencer, you can build custom character rigs, using [Control Rig](#) to animate characters directly in your scene while simultaneously animating other characters, objects, cameras, and effects.

For more information about using **Sequencer** to create cinematic animations in Unreal Engine, see the following documentation:

Cinematics and Sequencer

Sequencer is Unreal Engine's multi-track editor used for creating and previewing cinematic sequences in real time.

Control Rig

Using the Skeletal Mesh Animation System, imported characters can run animations that have been created in external DCC software. However, using [Control Rig](#), you can build dynamic animation rigs for characters and objects, enabling you to edit existing animations or create new animations within Unreal Engine. Using the [Control Rig blueprint graph](#) you can create dynamic rigs that can apply bone transforms to mesh skeletons. These animations can then be played in Sequencer or even baked as standalone assets that can be used in a runtime animation system.

For more information about using **Control Rig** to animate characters in Unreal Engine, see the following documentation:


Control Rig

Rig and Animate characters in real-time using Control Rig.

Paper 2D

Using Unreal Engine's 2D animation tool set, [Paper 2D](#), you can create traditional 2D characters or levels that are able to leverage the full capabilities of Unreal Engine's world rendering to create dynamic high-fidelity 2D and 2D / 3D hybrid projects. Paper 2D contains a suite of tools and editors that you can use to edit 2D textures, within the framework of Unreal Engine's modern light, world, and physics simulation.

For more information about creating traditional 2D and modern hybrid style projects using **Paper 2D** in Unreal Engine, see the following documentation:
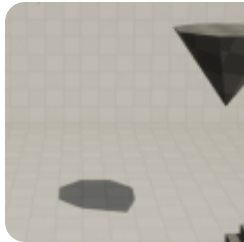
Paper 2D

Paper 2D is a sprite-based system for creating 2D and 2D/3D hybrid games in Unreal Engine.