

Advanced Insects System

18.000 insects instances 120 FPS

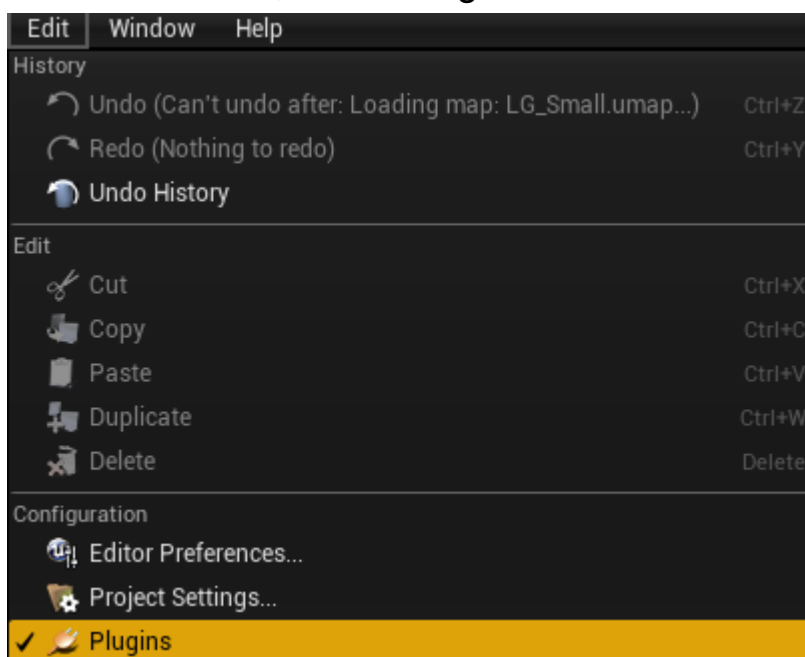


Update 1.7

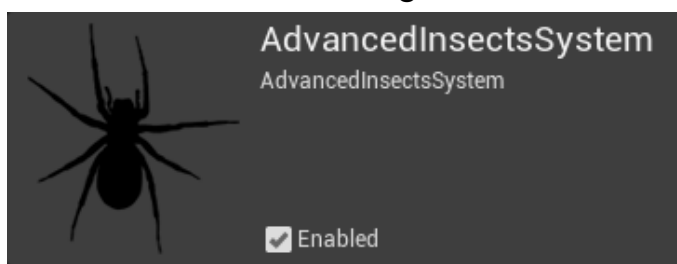
This system uses threads to calculate the movement of all insects for more FPS. Bugs can crawl on any collision, avoiding Pawn or Character or follow pawn. The main thread only move instances.

Setup

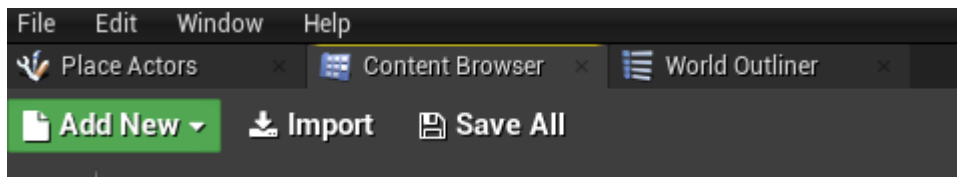
1. Install plugin from Epic Store Launcher
2. Open your project
3. In the Edit menu, select Plugins.



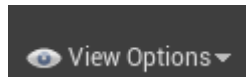
4. Find and enable the Plugin AdvancedInsectsSystem



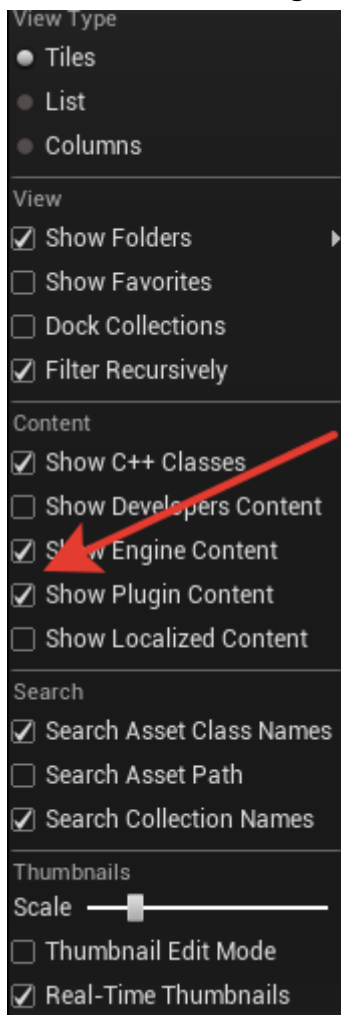
5. Select “Content Browser”



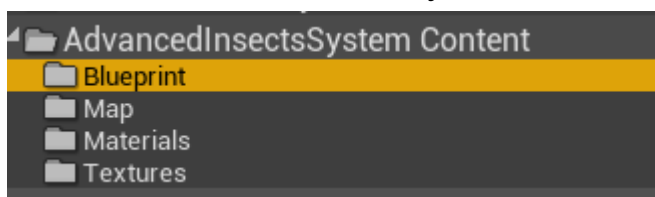
6. Select “View Options”



7. Select “Show Plugin Content” and “Show Engine Content”

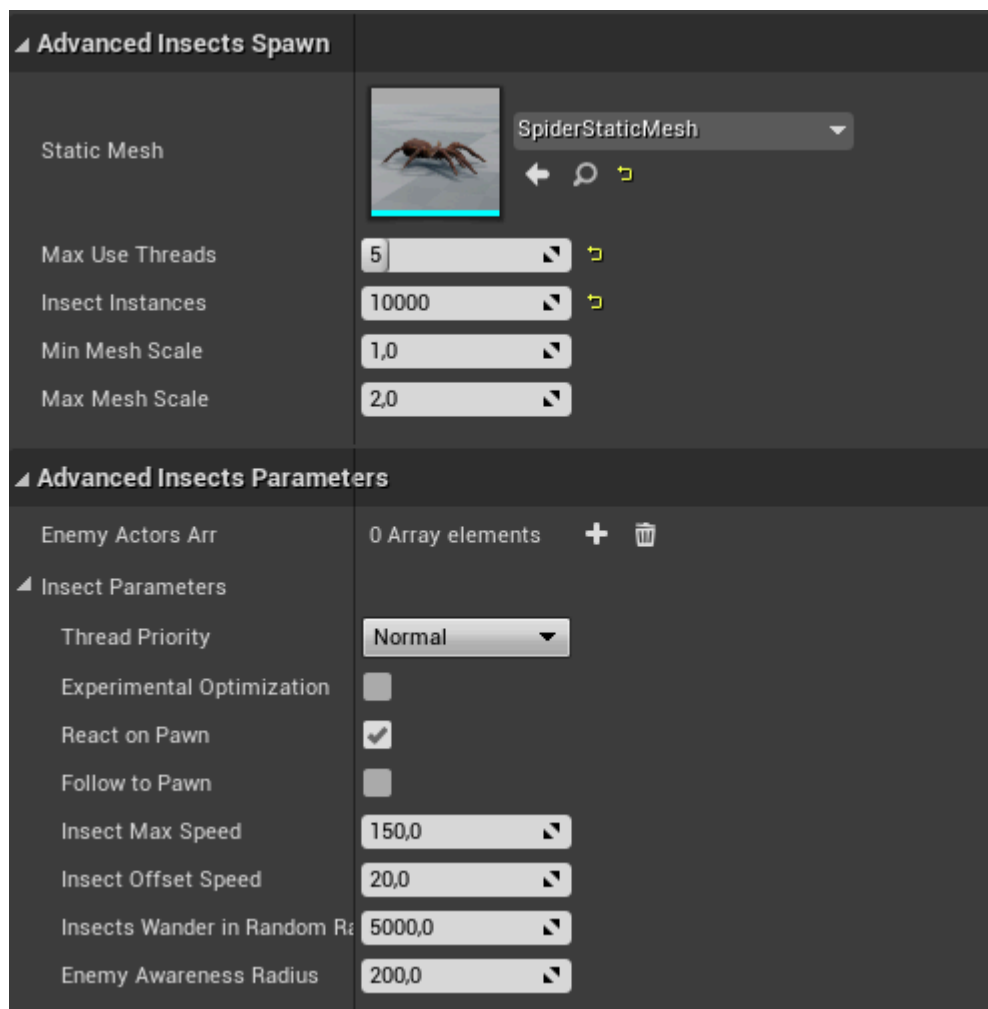


8. Go to “AdvancedInsectsSystem Content\Blueprint”



9. Drag and Drop BP_InsectSystemActor in your scene.

10. Select BP_InsectSystemActor in the scene and chose the parameters you need.



Static Mesh - You can select static mesh for the insect's system.

Max Use Threads - How many threads running in the background to calculate insects logic. We are **recommended** 1 thread per 1000-2000 instances.

Insects Instances - How many instances are used.

You can use a random mesh scale change range **Min Mesh Scale** - **Max Mesh Scale**.

Thread Priority - You can set priority for background threads. We recommended Normal priority.

Experimental Optimization - used the delay in the threads.

Insects Wander in Random Radius - Insects will move in a random radius.

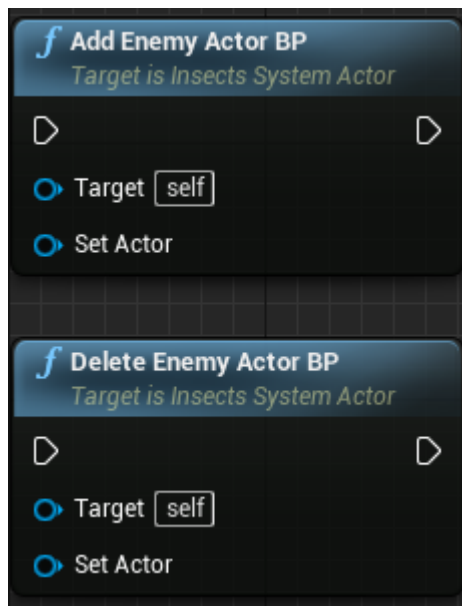
React on Pawn - Insects will react with all pawns added to array EnemyActorsArr.

Follow to Pawn - Insects will follow to all added to the array, EnemyActorsArr actors.

Enemy Awareness Radius - The radius at which the insect reacts to the pawn.

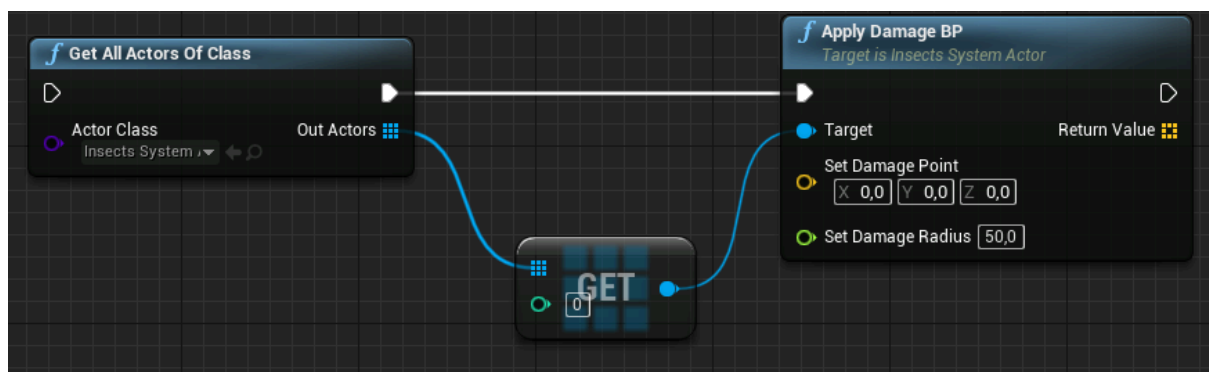
Avoidance Actor Root Arr - You can add actors to react with the insects.

You can add the actor to reacting in the blueprint BP_InsectSystemActor class

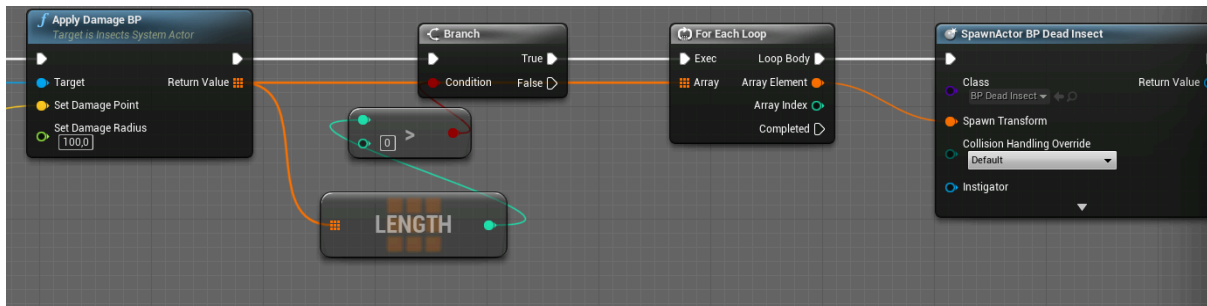


Update 1.1.0

You can kill insects. Use ApplyDamageBP function.

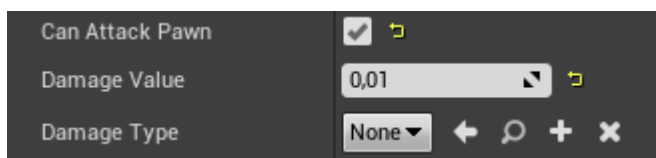


Set damage location and radius. ApplyDamageBP returns FTransform Array off all insects locations and size. You can use a returned vector to spawn dead insects with any effects.



Update 1.2

- + Insects can attack the player.
- + Small fixes.

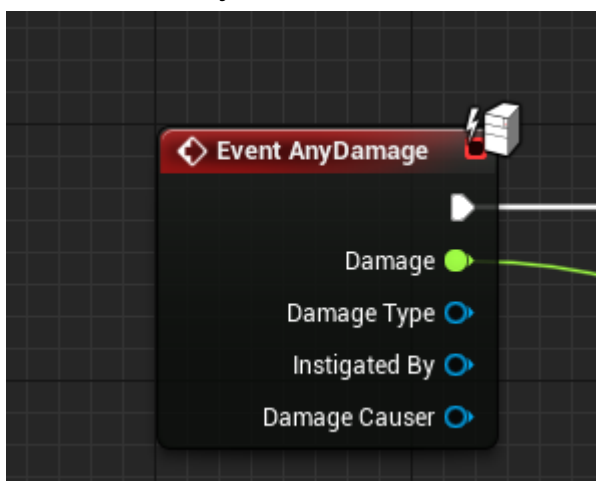


Can Attack Pawn - Insects will attack the character if they are nearby.

Damage Value - Damage per tick per one insect.

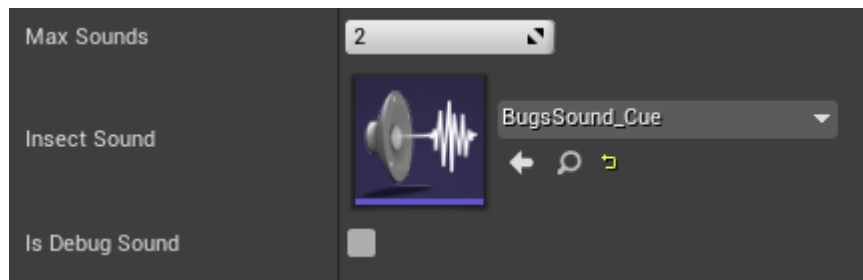
Damage Type - Your class of damage type.

The event in your character for incoming damage.



Update 1.3

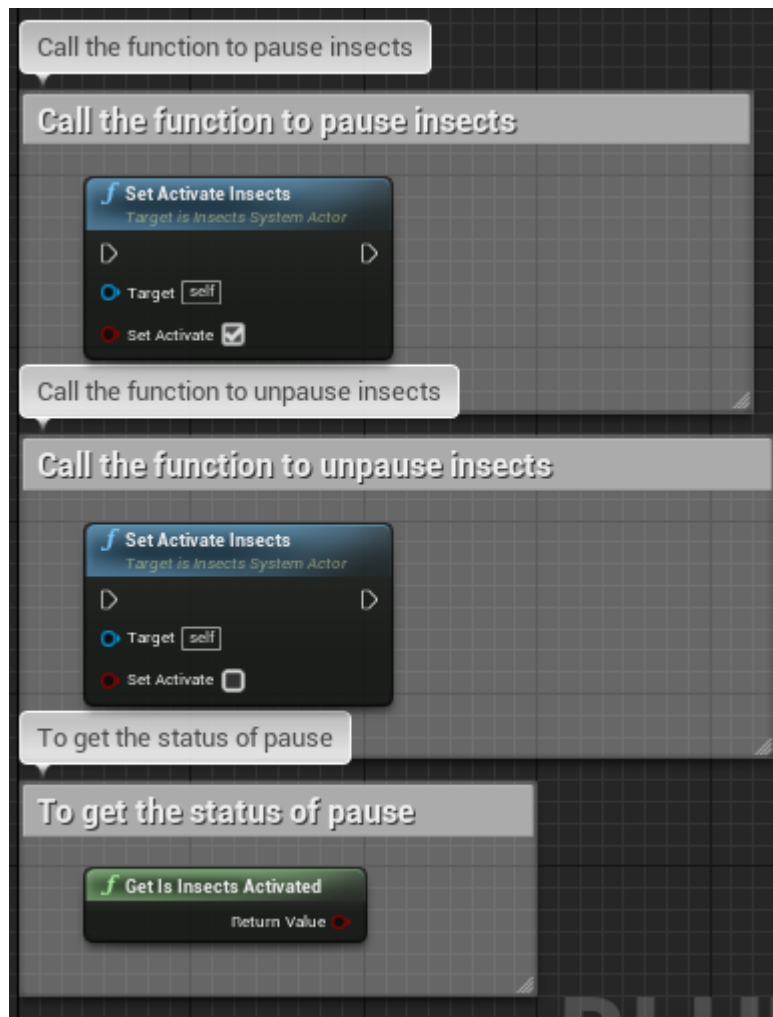
- + Added sound for insects.



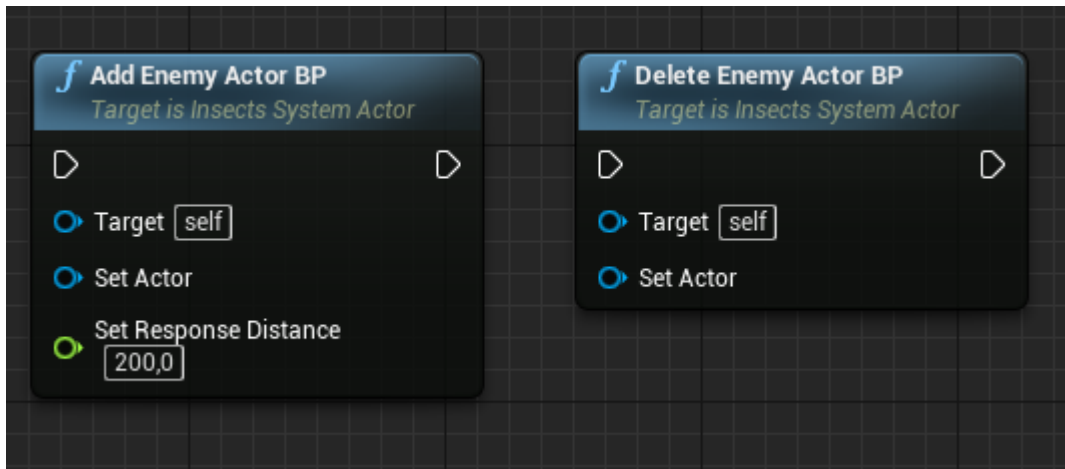
The sound is calculated to the nearest beetle and the player's camera.

Update 1.3.1 UE 4.25 - 4.26

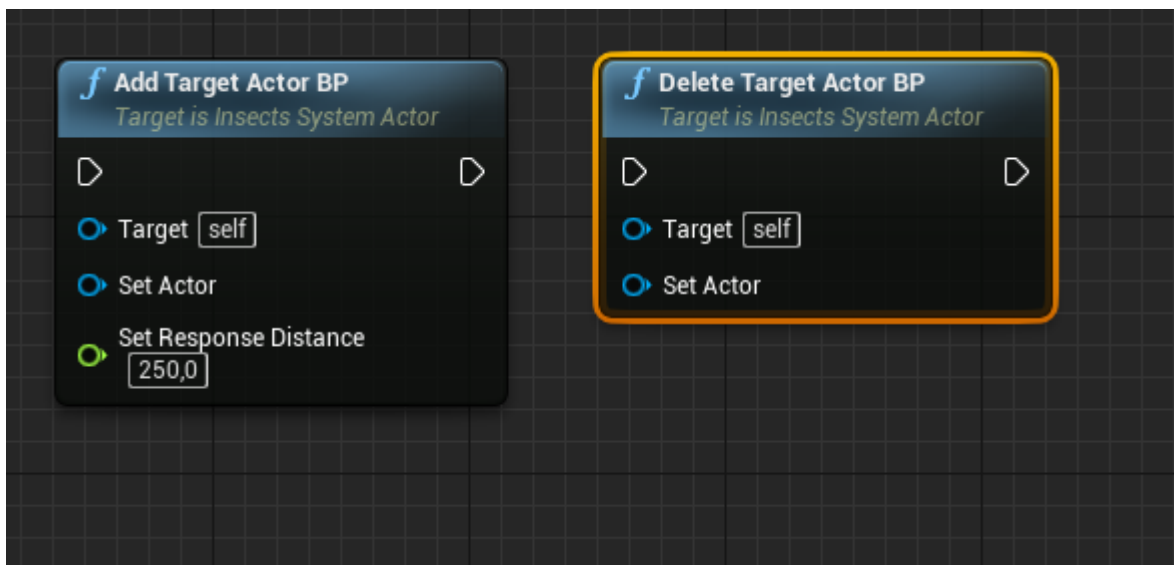
- + Added pause and unpause functions to the insect system



Use the following functions to add opponents for insects. Insects will try to run away from them.



Use the following functions to add a target for insects. Insects will try to pursue the goal.



Update 1.3.2 UE 4.25 - 4.26 - 13.01.2021

- + Bug fixes

Update 1.4 UE 4.25 - 4.26 - 16.01.2021

- + support Android OS

Update 1.5 4.26 - 08.02.2021

- + Added an experimental feature - added the Box Collision actor, insects will avoid it. This way you can build any complex terrariums for insects.

Advanced Insects System - Update 1.8.3

- + Add manual Start and Stop functions (For a delayed launch.)

Manual Start and Stop System

f Start Insects System
Target is Insects System Actor



Target

f Stop Clear Insects System
Target is Insects System Actor



Target

f Get Is Insects Initialized
Target is Insects System Actor

Target

Return Value

