

SciFi Nuclear Lab Documentation

[Quick setup of the "Nanite" & "Lumen" on UE5](#)

[How to work with a sequencer?](#)

[What do I need to add to my character to make him interact with panels, buttons, doors, etc.?](#)

Important Notice:

The Parallax Occlusion Mapping function has a negative effect on FPS. You can disable this function if you need to significantly increase FPS. (MI_MasterMaterial_Parallax & MI_MasterMaterial_DirtParallax > IsParallax = False)

Every blueprints with a light source has an IsLightShadow option. Disabling this option will significantly increase FPS.

❖ **Quick settings:**

1. Install Blueprints on your scene

2. Install BP_Controller on your scene. Select Target Actor(s) and options ("SwitchAction")

"SwitchAction" = 0 - Power On / Off , (if target actor BP_MaterialsManager = Custom Color)

"SwitchAction" = 1 - BP_Platform_Moveable - Move , (if target actor BP_MaterialsManager = Random Color)

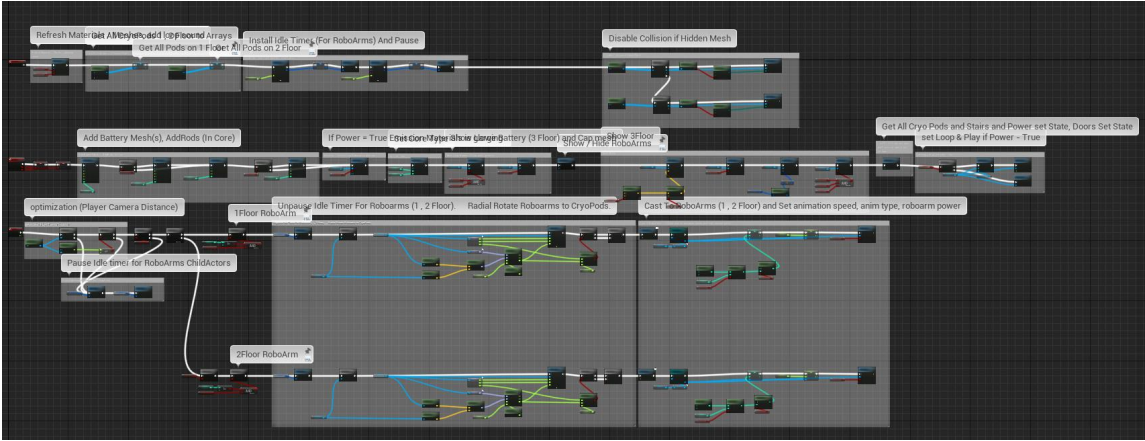
3. Press TAB when approaching the trigger zones (BP_Controllers)

BP_MaterialsManager - Used to change the color and material type of the objects in the scene in bulk. You can specify a radius so that the blueprint paints only part of the scene. "ActorsToIgnore" - this option is needed to ignore the selected actors.

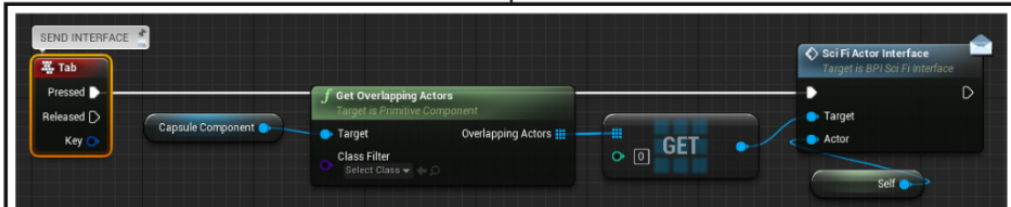
BP_PowerManager - This blueprint for changing the energy state of objects. When there are many actors in the scene, the blueprint captures all interactive actors in the area.

BP_Controller can control BP_PowerManager.

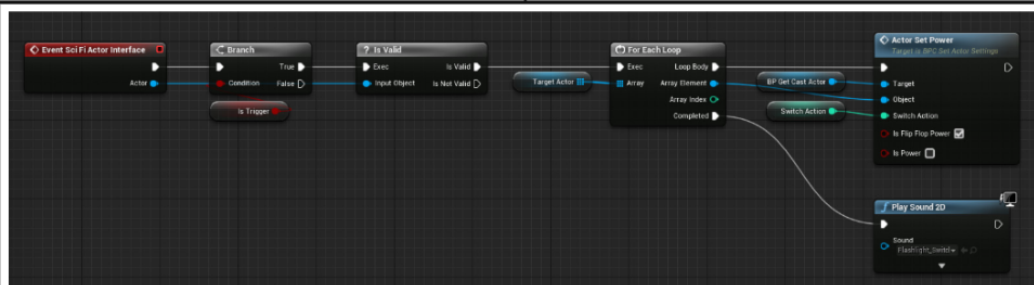
Inside each blueprints there are hints.



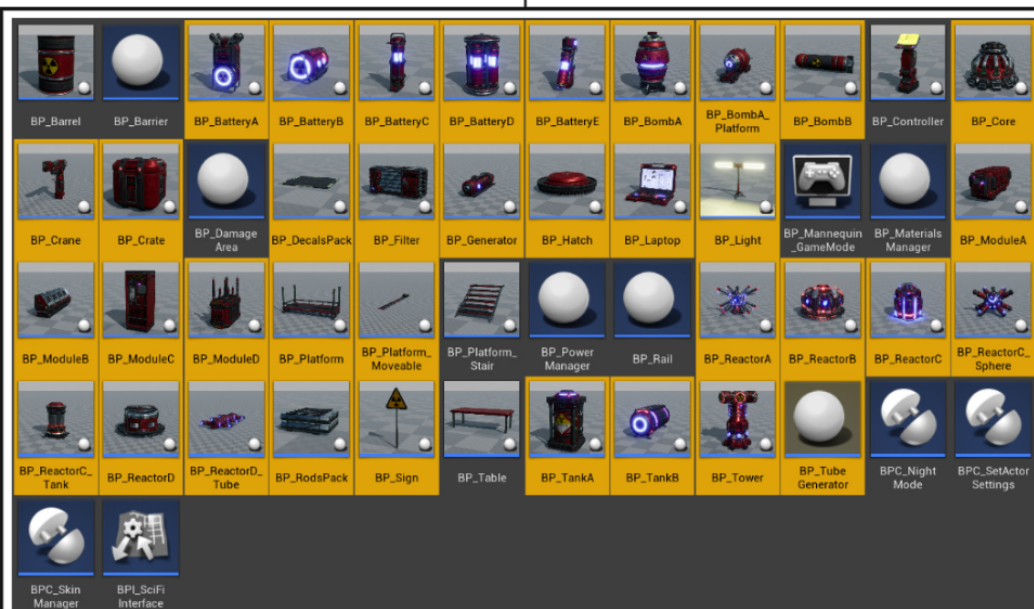
Interaction Chain



Action Interface

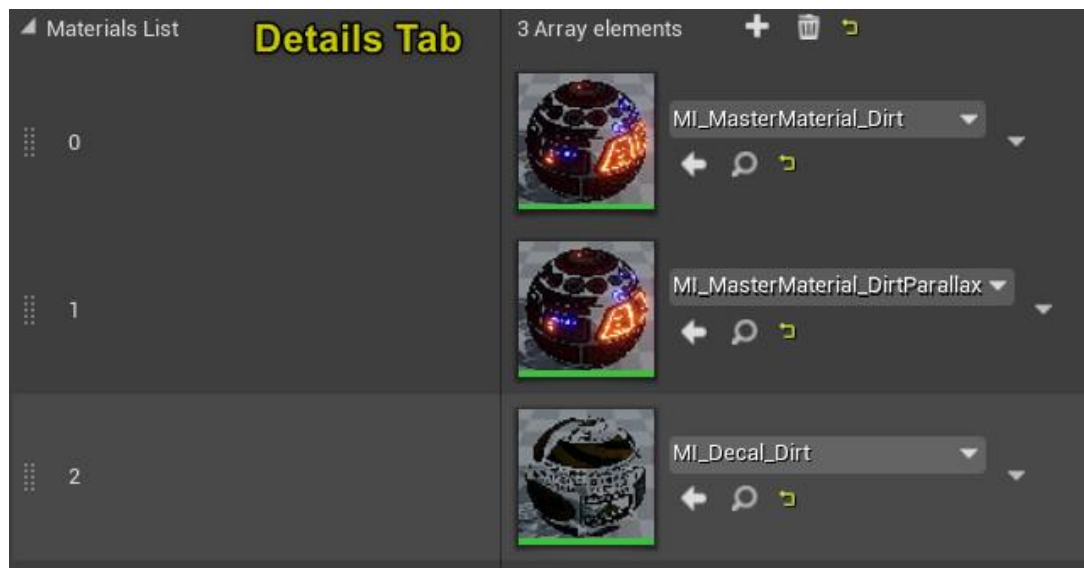


Cast List

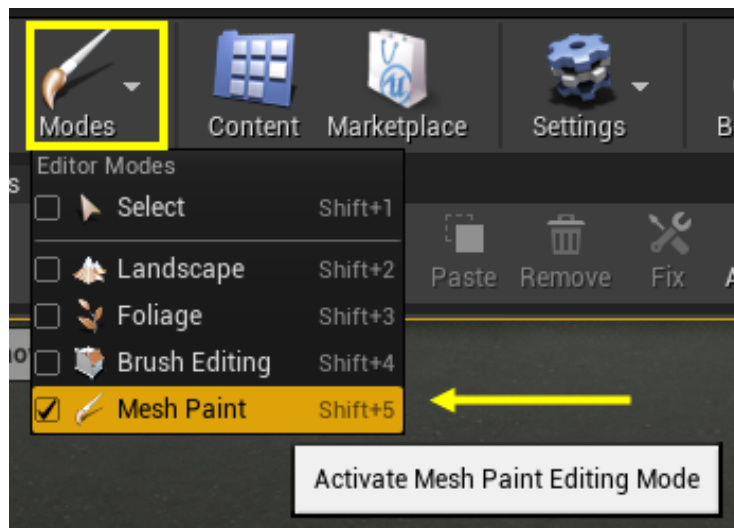


Interaction Actors

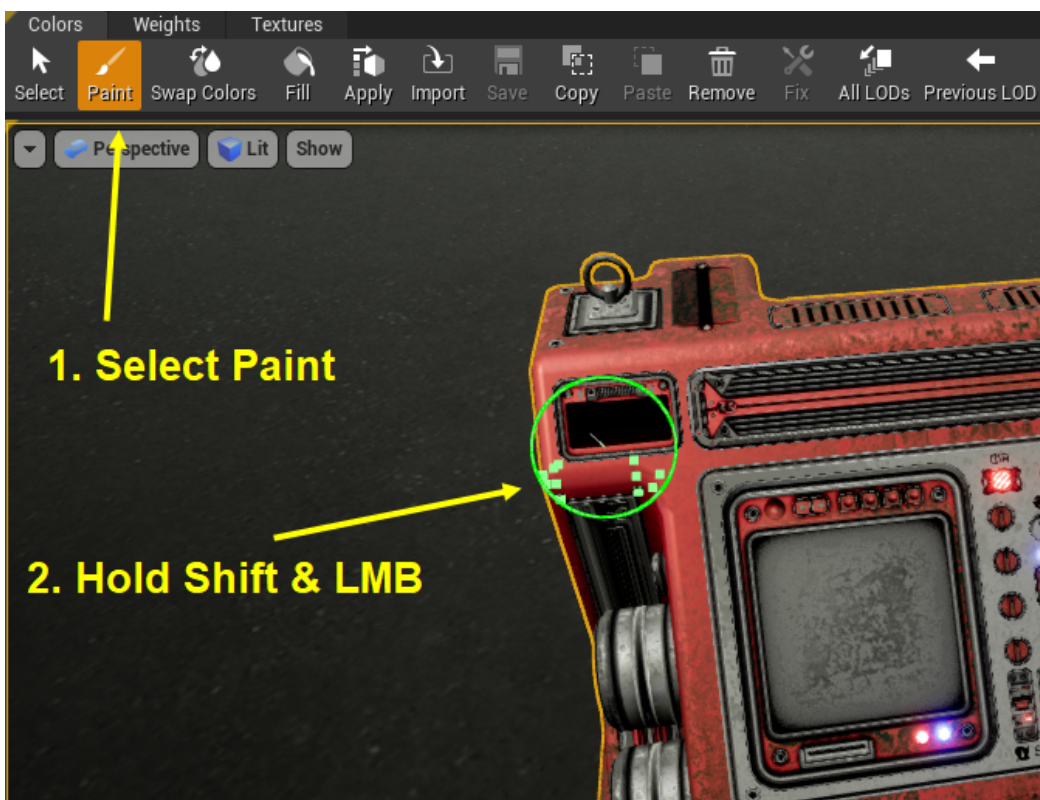
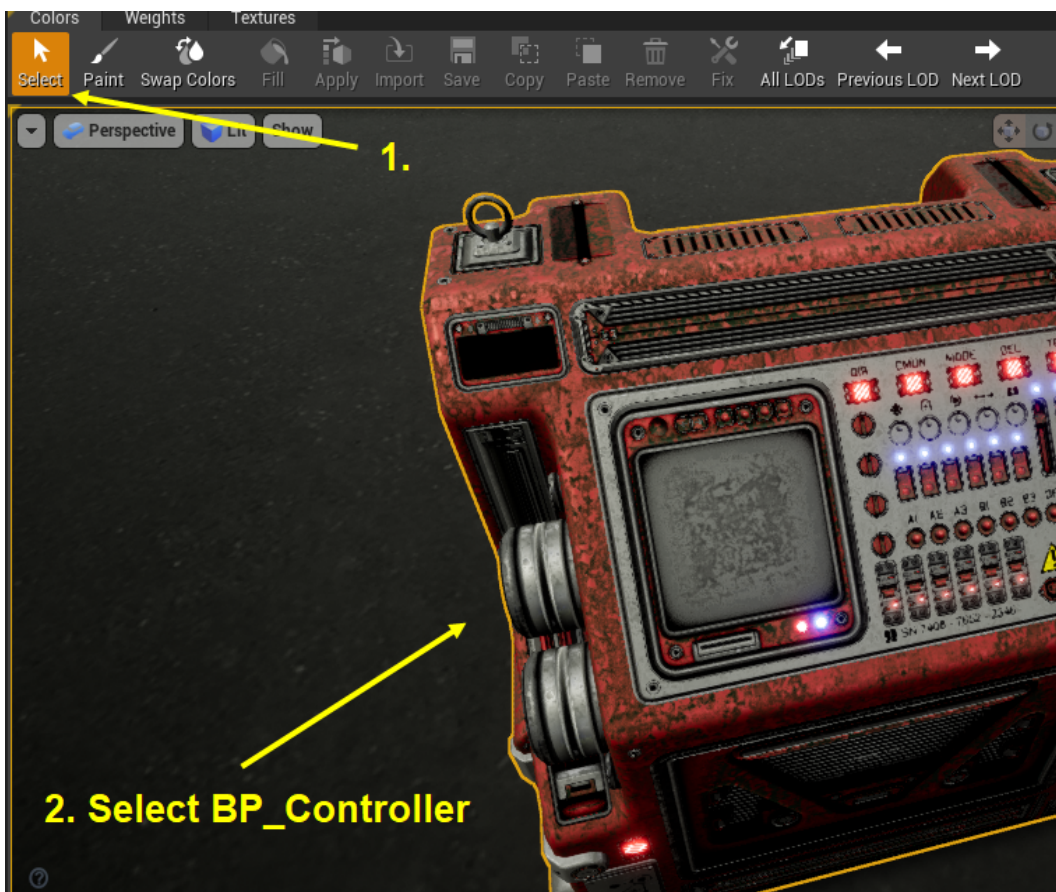
How to use the Vertex paint?



1.



2.



❖ BPC_SkinManager

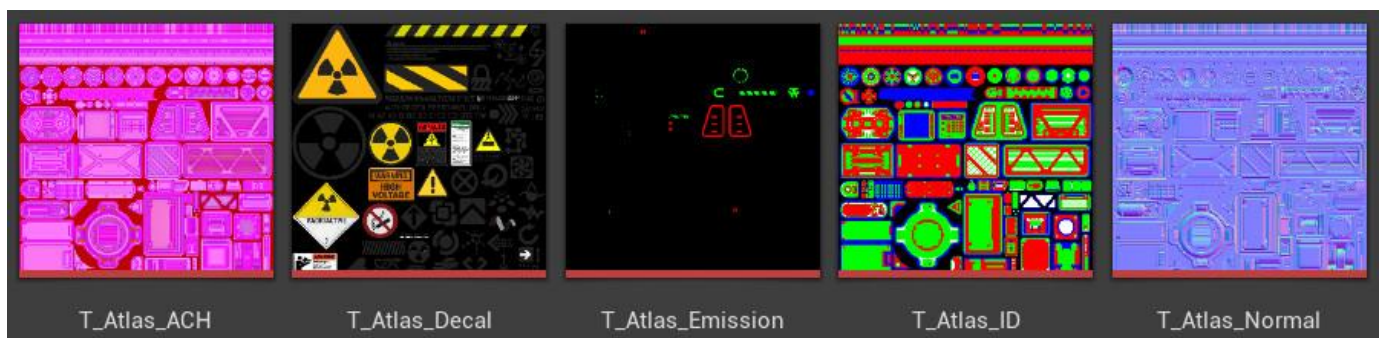
The component that is needed to change these parameters:



The component changes the parameters in M_MasterMaterial

❖ M_MasterMaterial (Instances)

Main Atlases:



T_Atlas_ACH:

A - Ambient occlusion (RED Channel) - AO Settings in master material

C - Curvature Channel (GREEN Channel) - Curvature settings in master material

H - Height Channel (BLUE Channel) - Parallax Settings in master material

AO (Ambient occlusion) (T_Atlas_ACH)

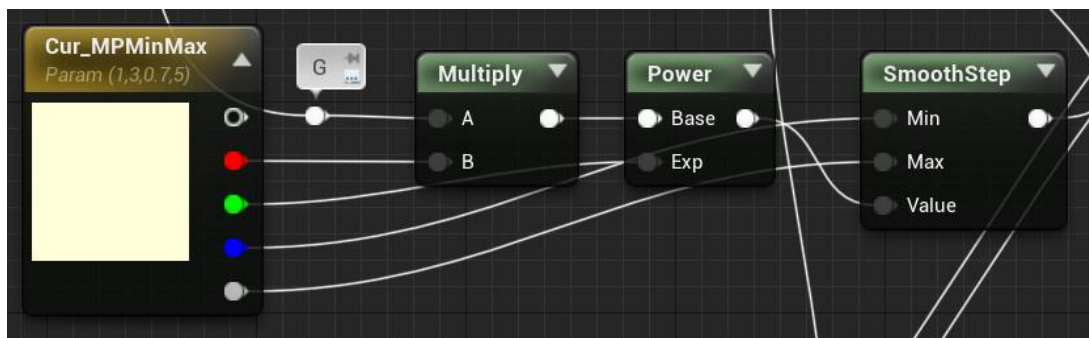
AO_IDInt - (T_Atlas_ID RGB) - Ambient occlusion intensity

AO_PMMM - **P**ower + **M**ultiply + **C**lamp **M**in + **C**lamp **M**ax

Curvature (T_Atlas_ACH)

Cur_IDInt - (T_Atlas_ID RGB) - Curvature intensity

Cur_MPMInMax:



Noise_PMMM - **P**ower + **M**ultiply + **C**lamp **M**in + **C**lamp **M**ax

Parallax (T_Atlas_ACH)

The standard function is used (ParallaxOcclusionMapping)

