

Hands for VR: SciFi

How To: Usage In The Unreal Engine 4 VR Template

just takes a minute, or two :)

Contents

1. Intro
2. Prepare Project
3. Hands for VR: SciFi
 - 3.1 Alien Hand
 - 3.2 Glove 1 (Mechanized Glove)
 - 3.3 Glove 1 remasterd
- 3.4 Glove 2

1 Intro

This tutorial will help you to use Hands for VR: Basic and Hands for VR: SciFi with the VR Template from Unreal Engine 4.

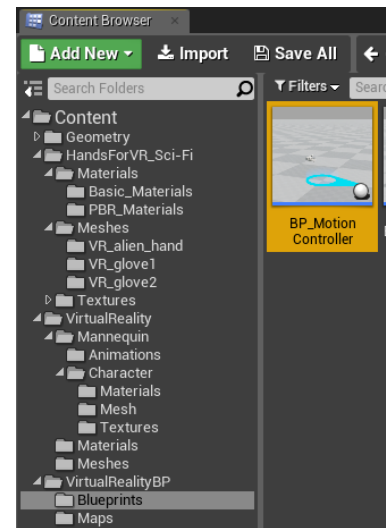
This guide is for beginners and covers all steps in detail. **Advanced users will be done in a minute or two!**

2 Prepare the project

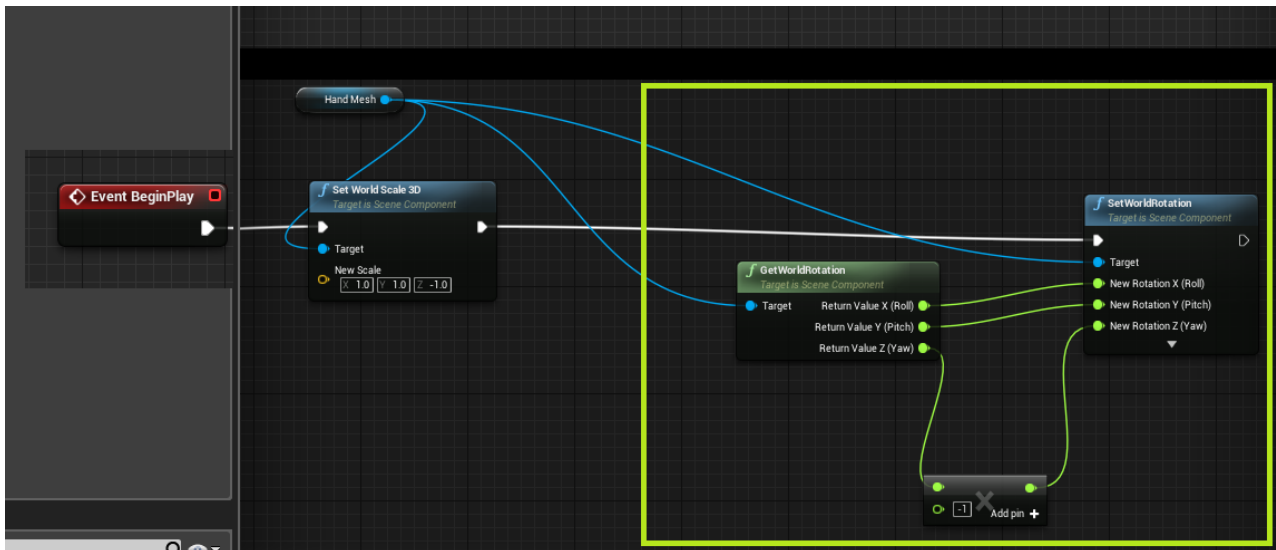
- Start the Epic Launcher
- Create new UE4 project (this guide uses version 4.14.3)
- In the Unreal Project Browser go to tab „New Project“ and choose „Virtual Reality“.
- Give your project a name and click „Create project“
- Go back to the Epic Launcher, into your Library, scroll down to your Depot and search for „Hands for VR SciFi“ or „Hands for VR Basic“.
- Click „Add to project“ and choose the project you just created.
- Open the project, and load the map „VirtualRealityBP\Maps\MotionControllerMap"

Now that you have the hands in your project, we need to make a few minor modifications to the standard template.

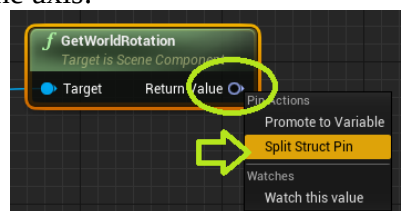
In the Content Browser, navigate to the folder „VirtualRealityBP\Blueprints\“ and open the asset „BP_MotionController“.



In the blueprint editor, open the Event Graph tab and search for the event „Event BeginPlay“. At the end of the execution flow, add the nodes as in the screenshot below:



Use „Split Struct Pin“ to get the the axis:



3 Hands for VR: SciFi

3.1 Alien Hand

In the Components panel, click on „HandMesh“.

In the Details panel to the right:

In the Mesh section, set the mesh to „VR_alien_hand_R“.

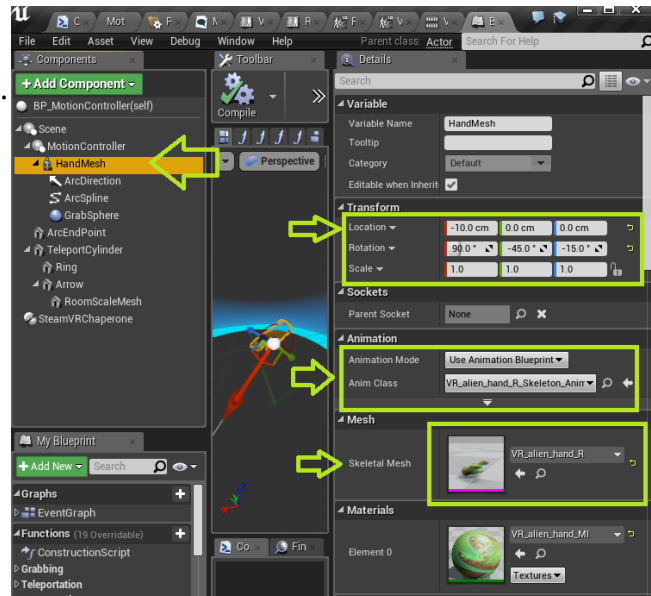
In the Animation section, set Anim Class to „VR_alien_hand_R_Skeleton_AnimBlueprint“.

In the Transform section, enter those values:

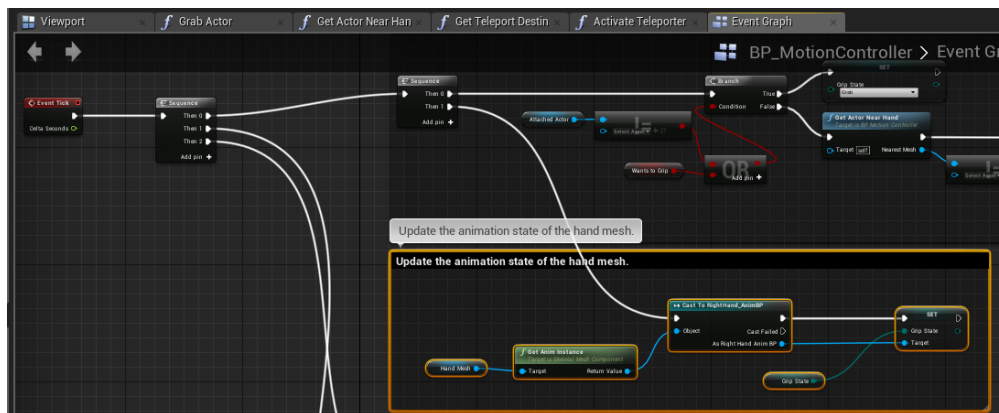
Location: -10, 0, 0

Rotation: 90, -45, -15

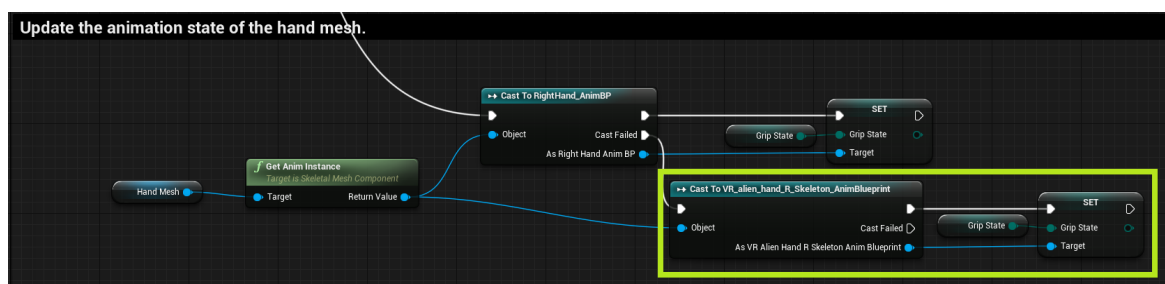
Scale: 1, 1, 1



Change to the Event Graph and find the event „Event Tick“, with the part that says „Update the animation state of the hand mesh“:

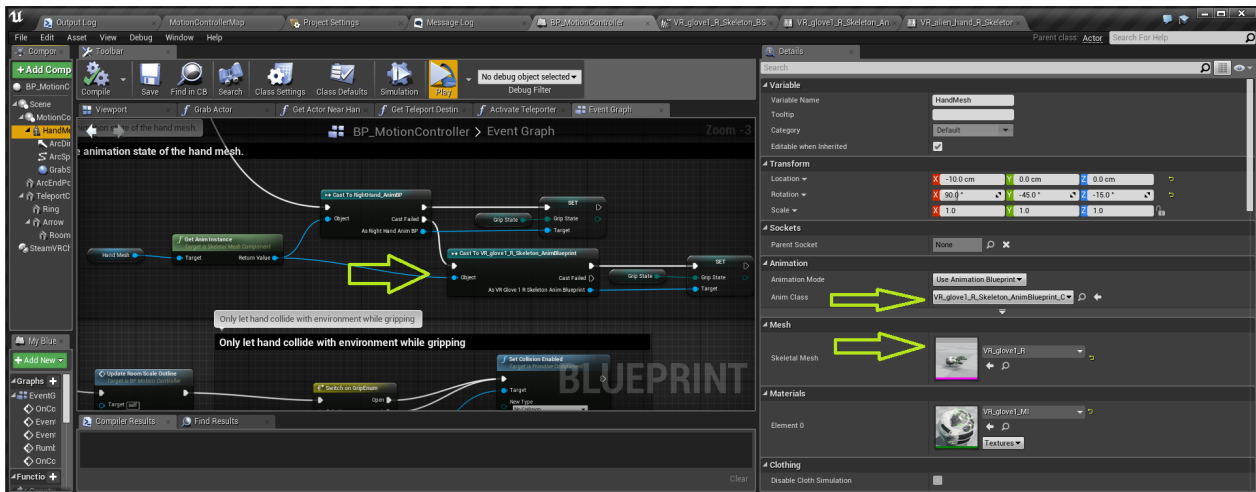


Pull out from „Get Anim Instance“ and cast to „VR_alien_hand_R_Skeleton_AnimBlueprint“. Connect to „Cast Failed“. Pull out from the blue pin of the cast and „Set Grip State“, connect the variable „Grip State“ to it, like in this screenshot:



Now start the „VR Preview“ and enjoy your new hands!

3.2 Glove 1 (Mechanized Glove)



In the Components panel, click on „HandMesh“.

In the Details panel to the right:

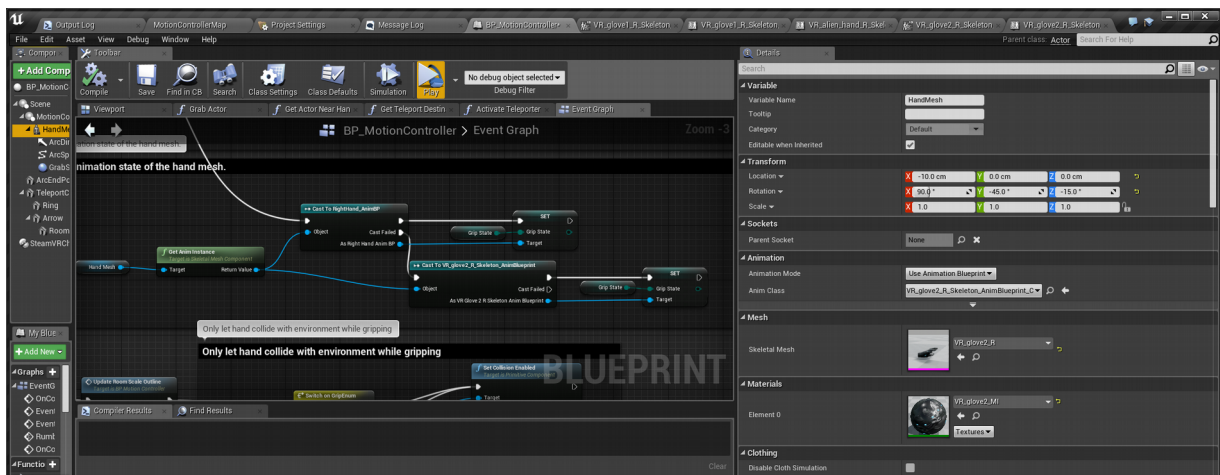
In the Mesh section, set the mesh to „VR_glove1_R“.

In the Animation section, set Anim Class to „VR_glove1_R_Skeleton_AnimBlueprint“.

Follow the directions of the alien hands for the Transform values

Change to the Event Graph and find the event „Event Tick“, with the part that says „Update the animation state of the hand mesh“.

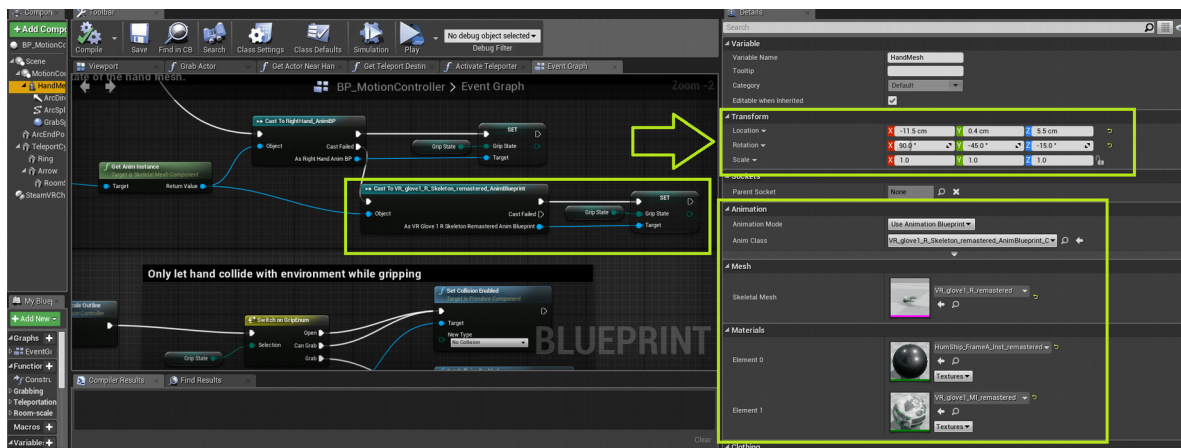
Pull out from „Get Anim Instance“ and cast to „VR_glove1_R_Skeleton_AnimBlueprint“. Connect to „Cast Failed“. Pull out from the blue pin of the cast and „Set Grip State“, connect the variable „Grip State“ to it, like in this screenshot:



Now start the „VR Preview“ and enjoy your new hands!

3.3 Glove 1 remastered

The remastered version of Glove 1 was provided by Justin Davis (justin@davis3d.com).



In the Components panel, click on „HandMesh“.

In the Details panel to the right:

In the Mesh section, set the mesh to „VR_glove1_R_remastered“.

In the Animation section, set Anim Class to „VR_glove1_R_Skeleton_remastered_AnimBlueprint“.

Use this Transform values:

Location: -11.5, 0.4, 5.5

Rotation: 90, -45, -15

Scale: 1, 1, 1

Change to the Event Graph and find the event „Event Tick“, with the part that says „Update the animation state of the hand mesh“.

Pull out from „Get Anim Instance“ and cast to „VR_glove1_R_Skeleton_remastered_AnimBlueprint“. Connect to „Cast Failed“. Pull out from the blue pin of the cast and „Set Grip State“, connect the variable „Grip State“ to it, like for the Glove 1.

3.4 Glove 2

Use the same procedure as for Glove 1 (NOT the remastered version).

The Mesh is named „VR_glove2_R“. The Animation Blueprint is named „VR_glove2_R_Skeleton_AnimBlueprint“.