# FreeLiveLinkForStypeHFprotocol Instructions

Version 0.1

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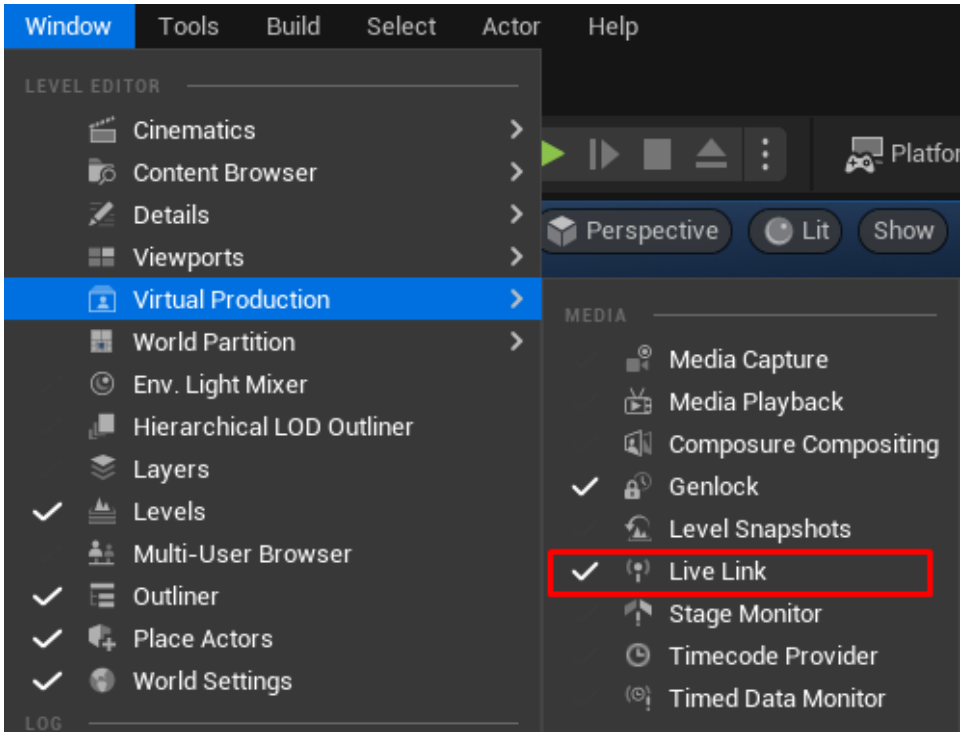
Download FreeLiveLinkForStypeHFProtocol ZIP file. Extract its contents to the **Plugins** folder of the desired project. If there is no Plugins folders, make one.

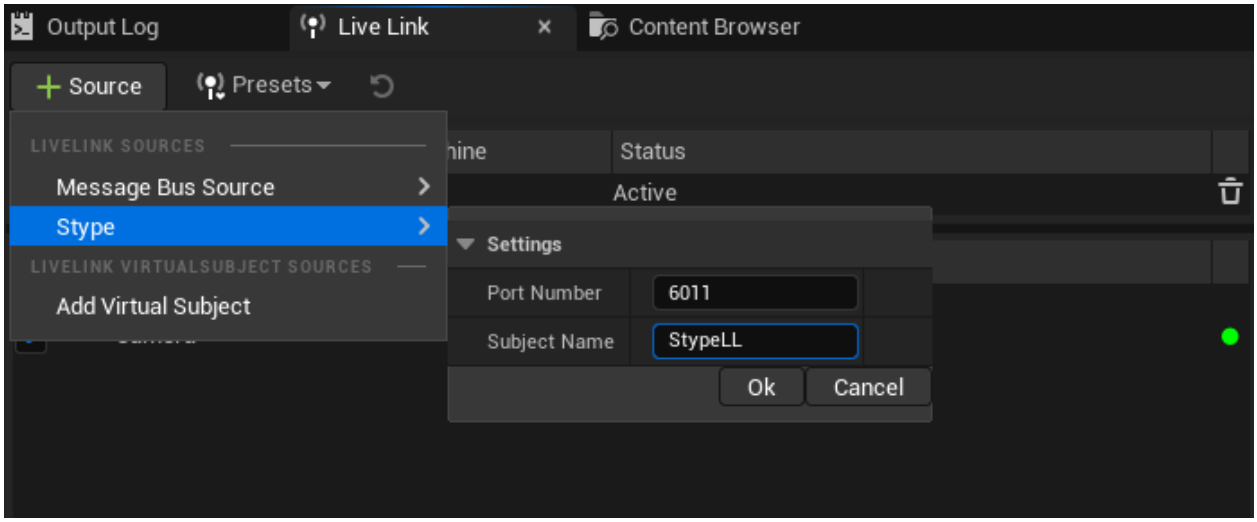
There are two ways how you can run your project, either via Play / Game mode, or you can also package your project. First we will describe setup when using Play or Game mode, and in the second part of this manual we will show you how to build the plugin so you can package your project.

## Play or Game mode

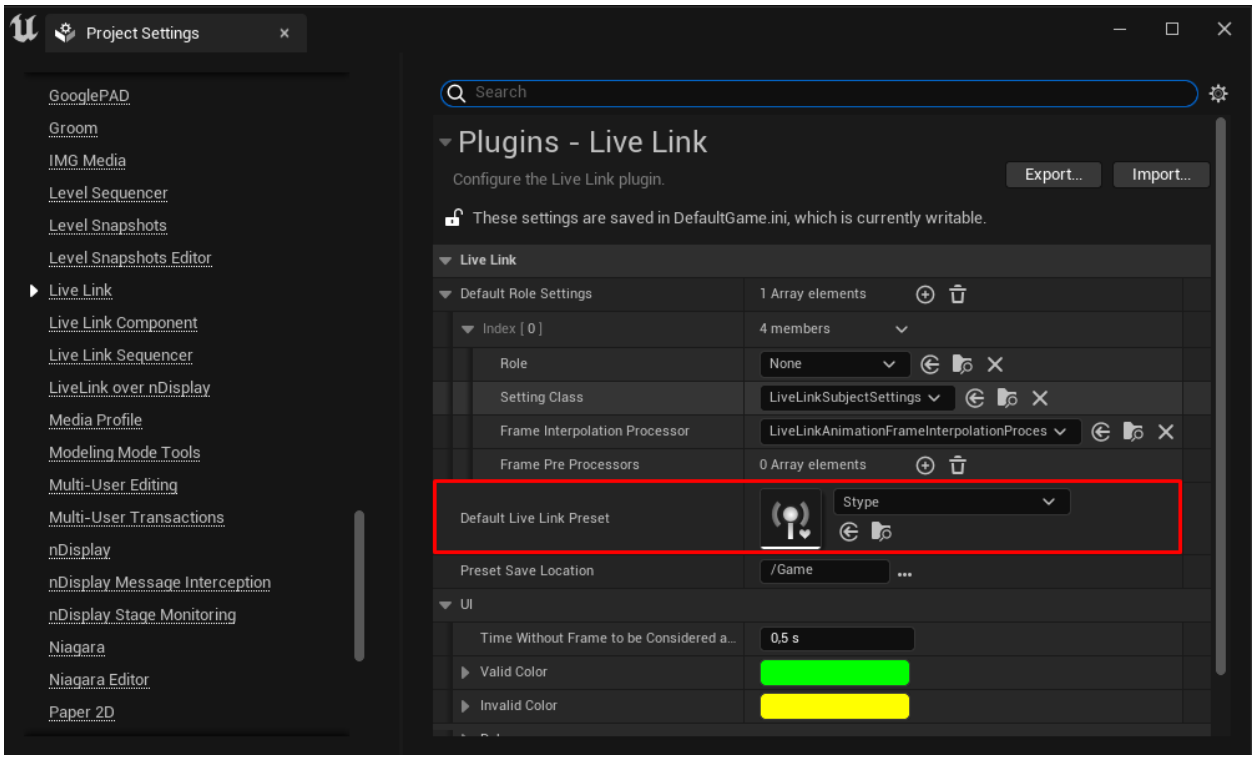
Run the project and add a LiveLink source. If LiveLink is not visible, open it via *Window -> Virtual Production -> LiveLink:*



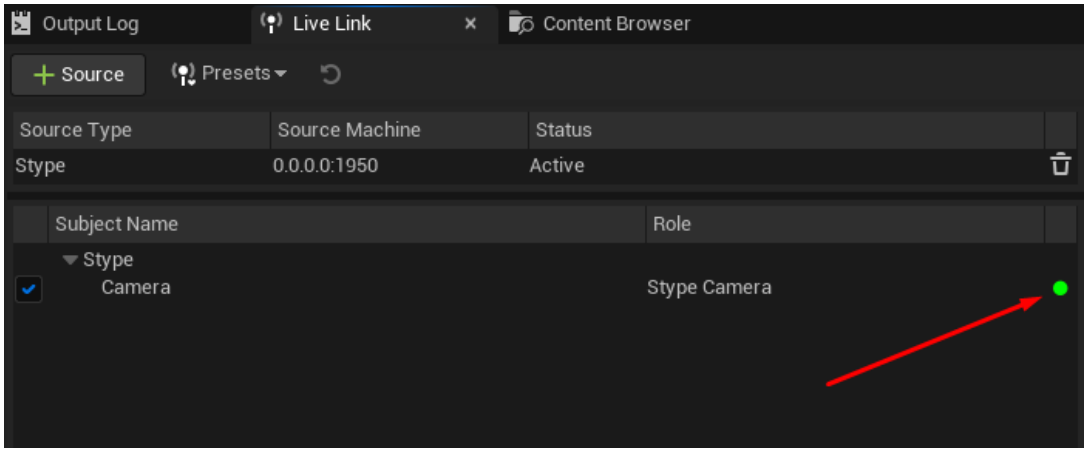
Once LiveLink is visible, set it up with desired port on which you are receiving tracking data:




Make sure to change **Default Live Link Preset** to one that you created since you will be using Switchboard to run the project, so we need to make sure that the correct preset will be loaded when the project is opened. This can be found in **Project Settings -> Plugins -> LiveLink.**



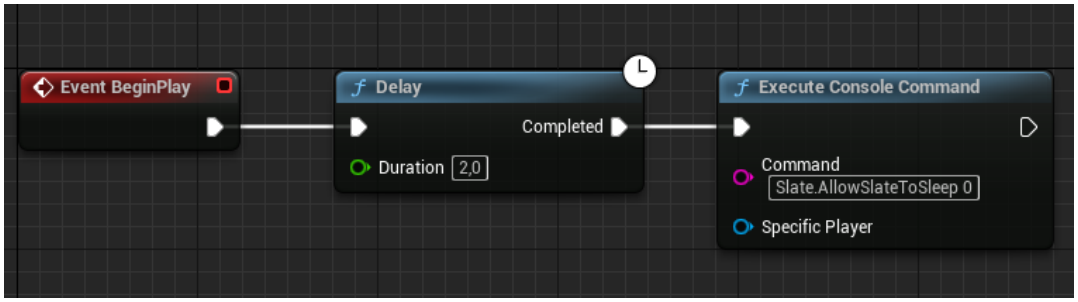
This should be enough to receive tracking data to Unreal. When you open the project again, if everything is correct you should see green dot near the LiveLink subject name, like this:




If you are using nDisplay make sure to add an additional command (**Slate.AllowSlateToSleep 0**) when you run the nDisplay node. You can do this a couple of ways, either with blueprints or with Switchboard.

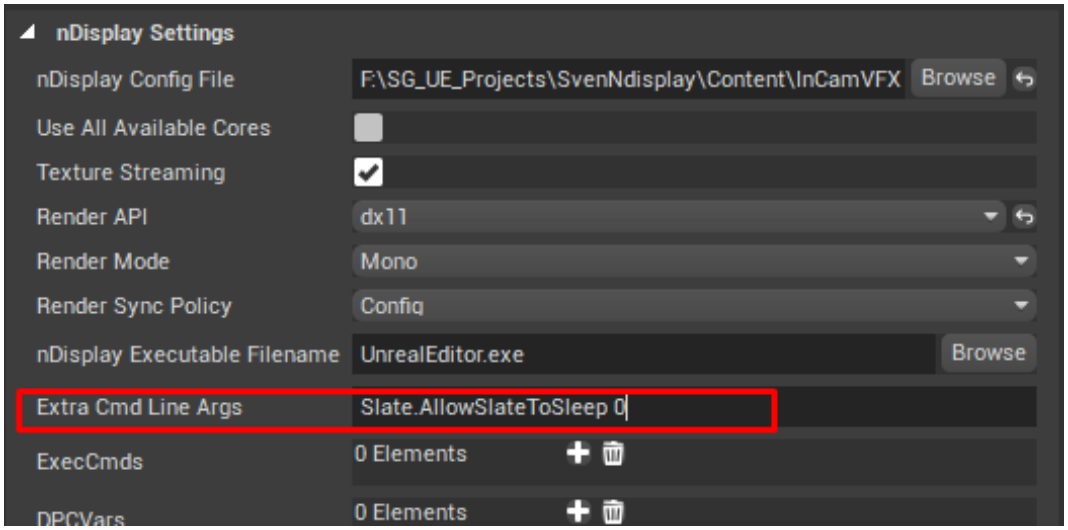
- **Blueprint setup**

When setting it via blueprint, easiest way would be to open Level Blueprint, depending on what you already have, add Execute Console Command with above mentioned command, so your level blueprint looks something like this:

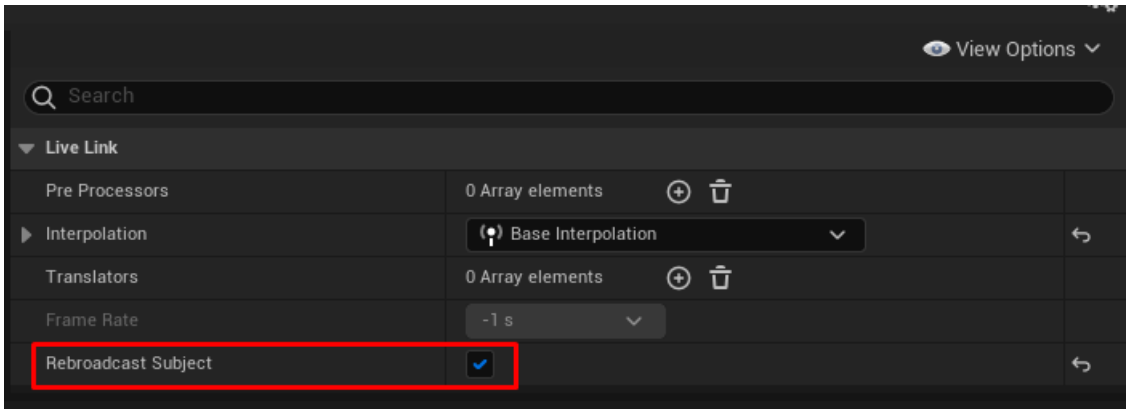



- **Switchboard setup**

If you find it's more convenient for you to set this up via Switchboard, you can do it in Switchboard settings. Open up the settings tab, scroll down to nDisplay settings and find *Extra Cmd Line Args* and write down the command there.

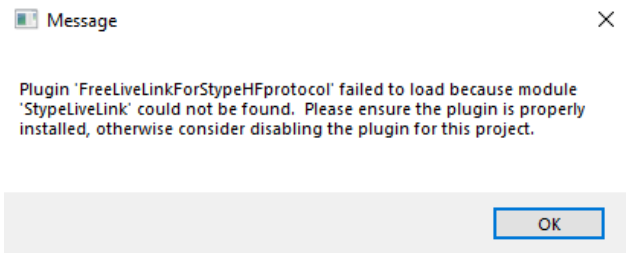



Also, when using multiple Nodes on nDisplay make sure to tick ***Rebroadcast Subject*** inside LiveLink Subject. This will broadcast tracking data from the Unreal Editor engine to all nDisplay nodes inside SwitchBoard.

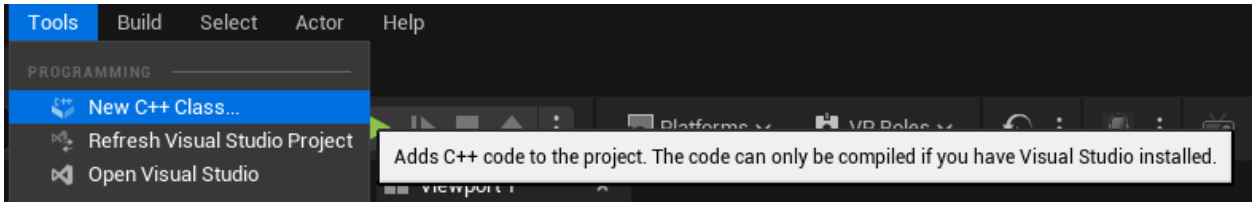


## Package and cook your project

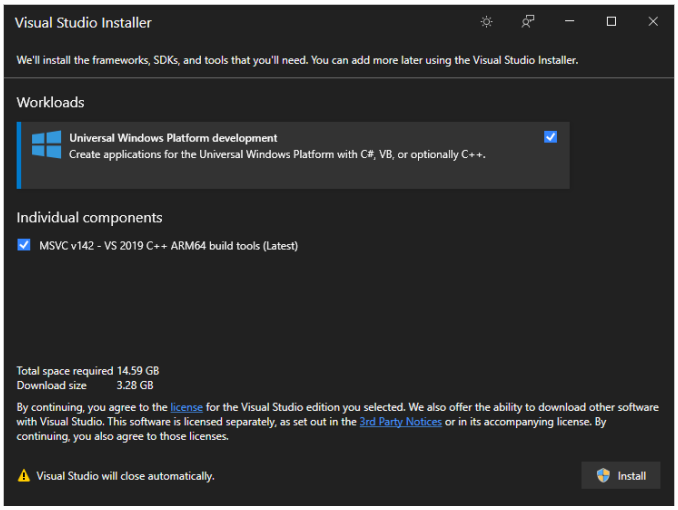
If you wish to package or cook your project content, you will need to build the plugin by yourself. Without doing this you will get and error in output log that looks like this:



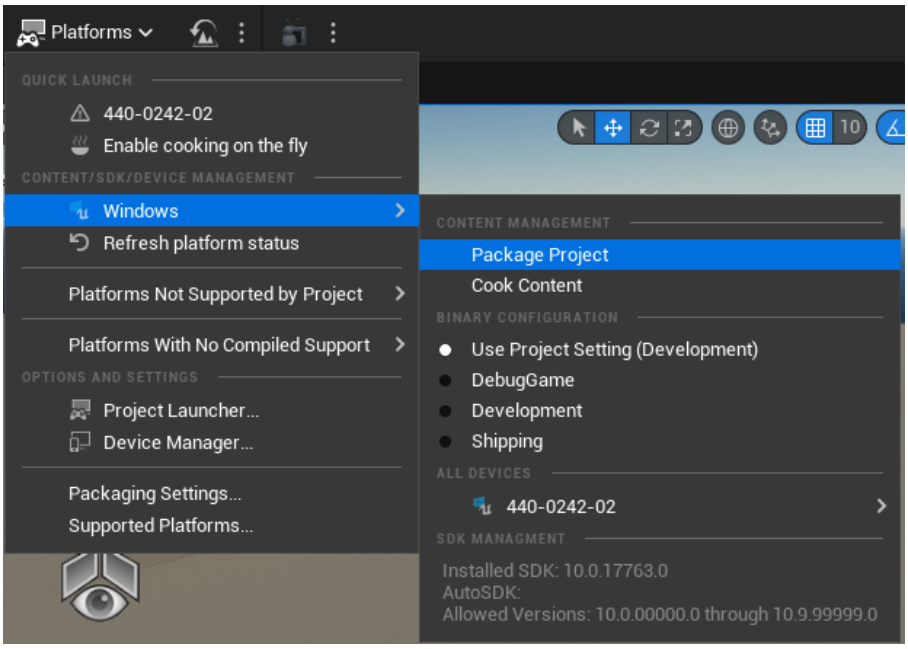

Make sure that your project is C++ type, not Blueprint. If it's already Blueprint, you can add one C++ class in your project and Unreal will automatically convert your project to C++. It will look something like this:




Make sure you have Visual Studio installed. Also it will ask you to install some additional dependencies, install them also:



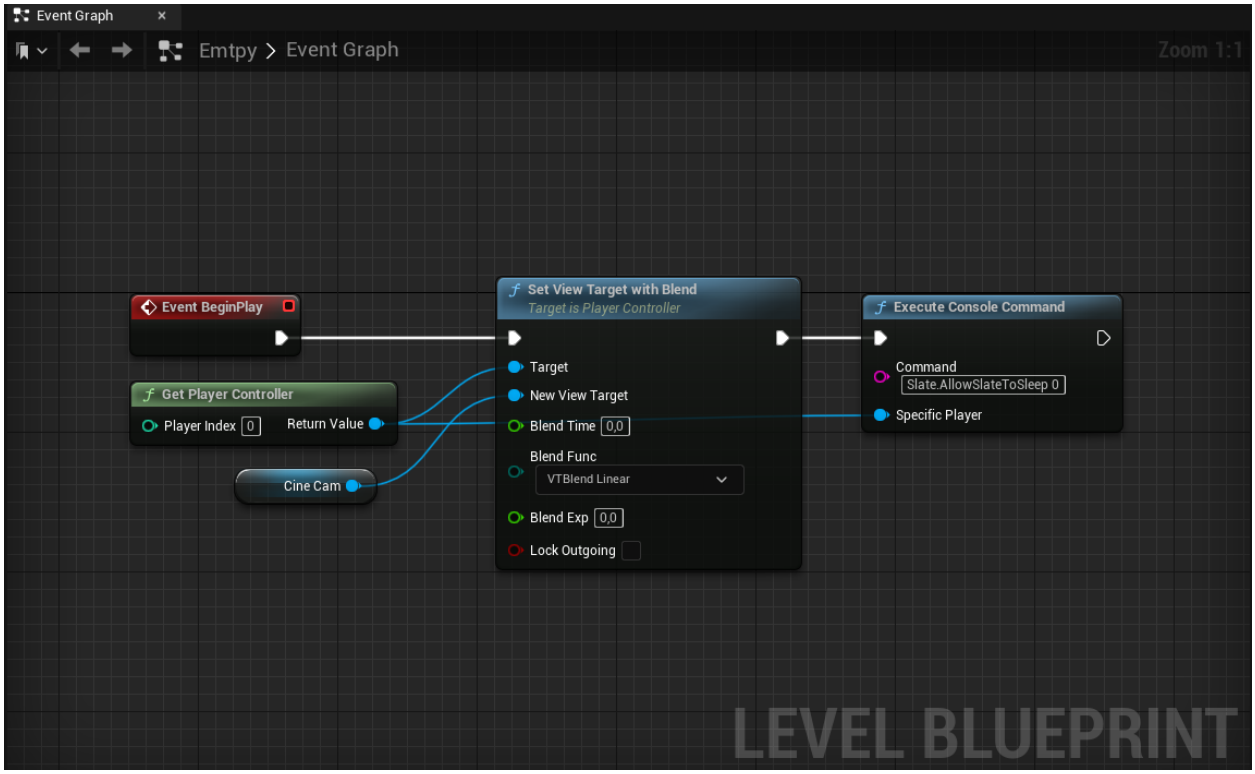
After installing, run the Unreal Project and package it, like this:




Unreal will ask you to pick the destination folder for your executable file. You should be now able to run windows executable project file.

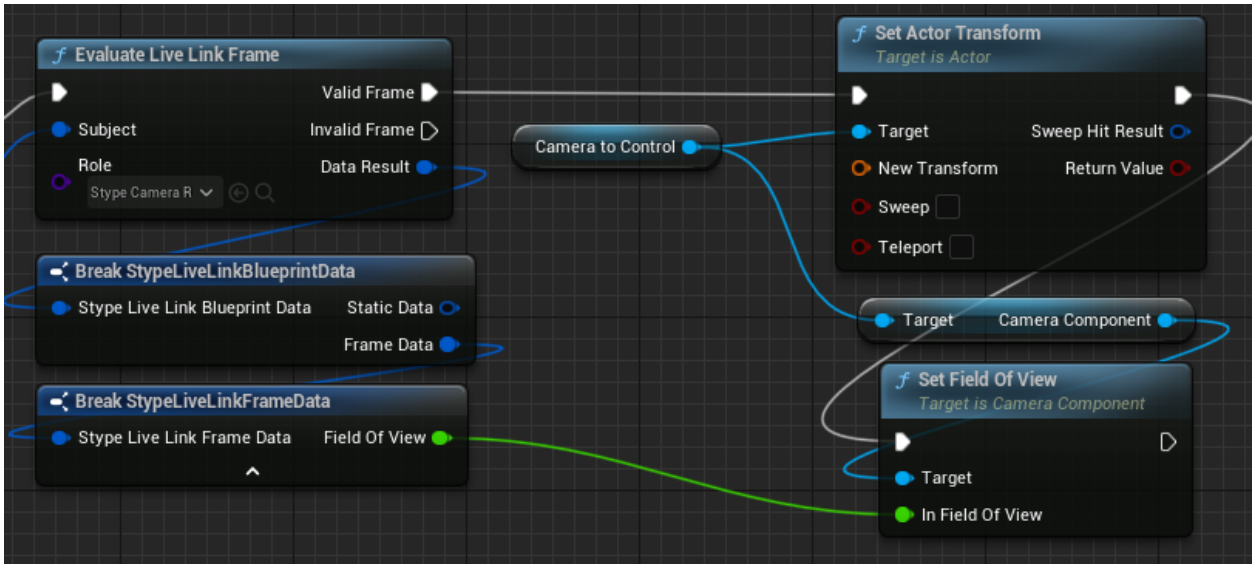
| Name | Date modified | Type | Size |
|---|---|---|---|
| LiveLinkTest | 3.1.2023. 13:42 | File folder | |
| Engine | 3.1.2023. 13:42 | File folder | |
| Manifest_UFSFiles_Win64 | 3.1.2023. 13:42 | Text Document | 260 KB |
| Manifest_NonUFSFiles_Win64 | 3.1.2023. 13:42 | Text Document | 3 KB |
| Manifest_DebugFiles_Win64 | 3.1.2023. 13:42 | Text Document | 1 KB |
| LiveLinkTest | 3.1.2023. 13:42 | Application | 142 KB |

Also make sure that your level blueprint consists of **Set View Target With Blend** node which makes sure your Cine Camera Actor with Live Link component is possessed on event begin play. Otherwise you will not see what your camera sees:


Event Graph
Emtpy > Event Graph
Zoom 1:1
Event BeginPlay
Get Player Controller
Player Index 0
Return Value
Cine Cam
Set View Target with Blend
Target is Player Controller
Target
New View Target
Blend Time 0,0
Blend Func
VTBlend Linear
Blend Exp 0,0
Lock Outgoing
Execute Console Command
Command
Slate.AllowSlateToSleep 0
Specific Player
LEVEL BLUEPRINT

## Connecting zoom and focus data

By default, zoom and focus data is not connected to the Cine Camera Actor. If you wish to use that data, one way of doing it would be like this. Either in level blueprint or in blueprint you created, use ***Evaluate Live Link Frame*** node to break LiveLink data. For example, if you want to get Field of View data, you can connect it like this:




If you want to connect focus data you can use Focus data from LiveLink Frame data, multiply it by 100, then connect it to Manual Focus Settings.