



HOW TO PREPARE YOUR UNREAL PROJECT FOR PIXERA

INSTALLATION OF UNREAL 4.26b

1) What you need:

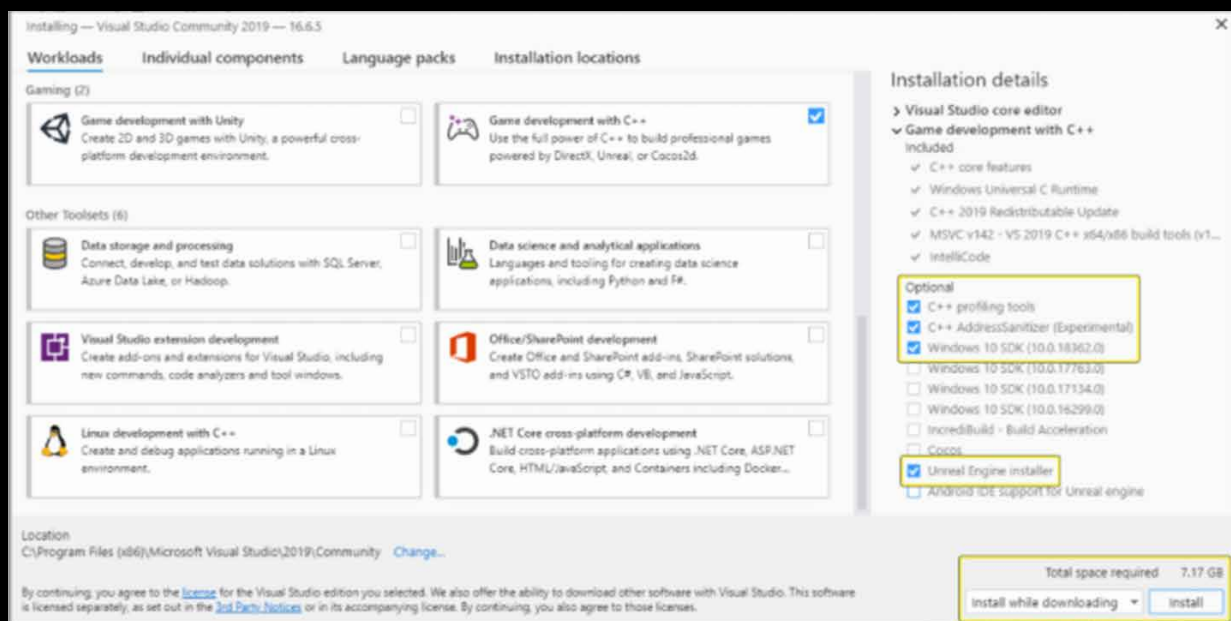
- ▶ Unreal Engine 4_26-B (Unreal_Engine_4-26_B.zip from AV Stumpf)
- ▶ Visual Studio 2019 (<https://visualstudio.microsoft.com/de/downloads/> Community License is fine)
- ▶ .NET 4.8 SDK (<https://dotnet.microsoft.com/download/dotnet-framework/thank-you/net48-developer-pack-offline-installer>)
- ▶ PIXERA_Connect.zip
- ▶ PUX file

2) Unzip the Engine in your preferred folder.

3) Install .NET

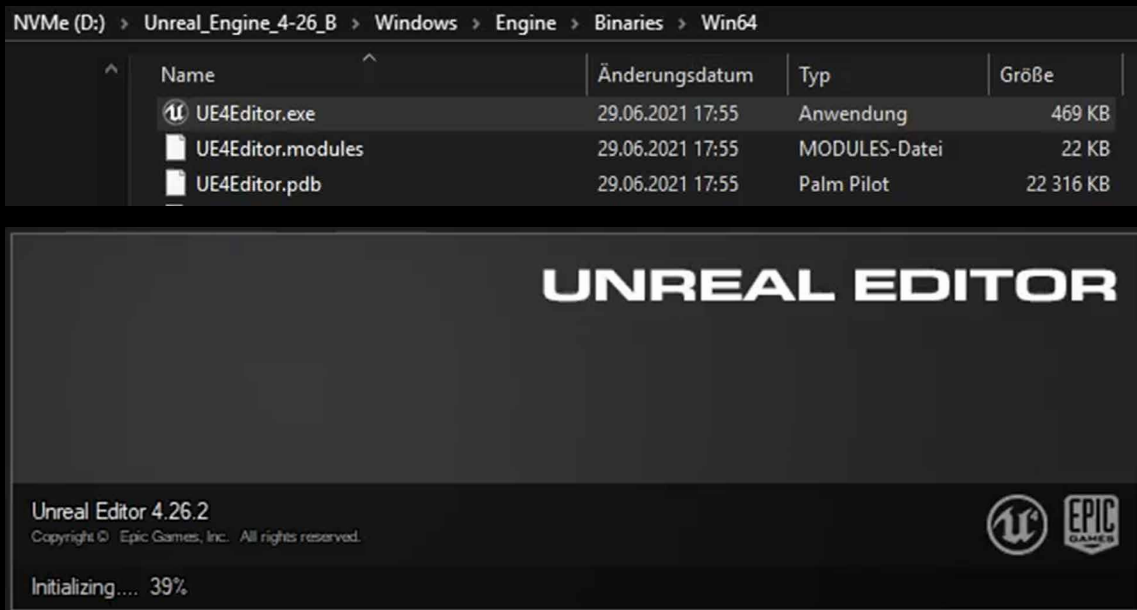
4) Install Visual Studio including following Options:

- ▶ Add **Game development with C++** (under Workloads) and following options:
 - ▶ C++ profiling tools
 - ▶ C++ AddressSanitizer
 - ▶ Windows 10 SDK (10.0.18362 or newer)
 - ▶ Unreal Engine Installer



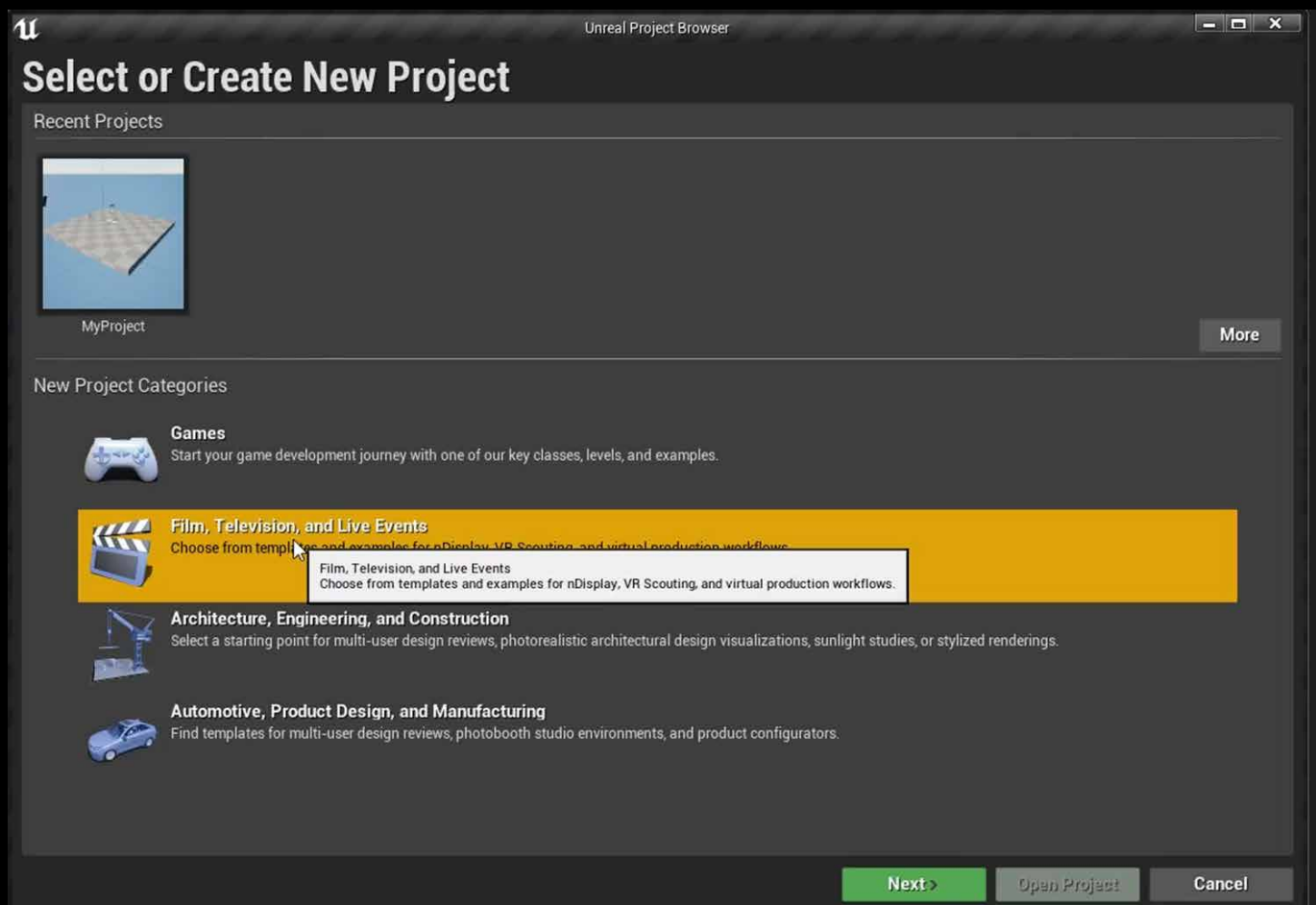
LAUNCH UE4EDITOR

Open UE4Editor.exe (Unreal_Engine_4-26_B\Windows\Engine\Binaries\Win64\)



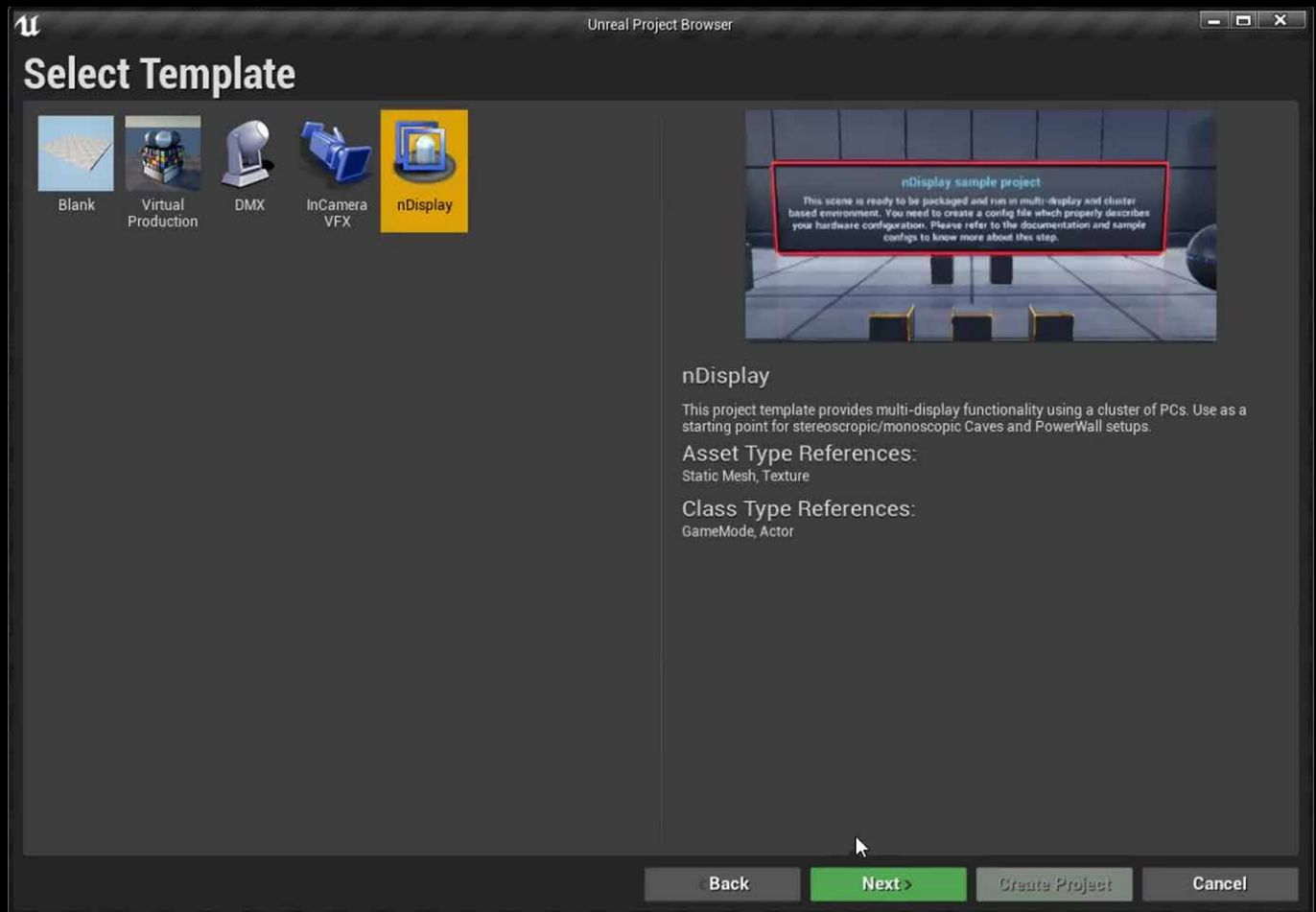
Stay patient – first startup will take some minutes...

Select from New Project Categories „Film, Television, and Live Events“

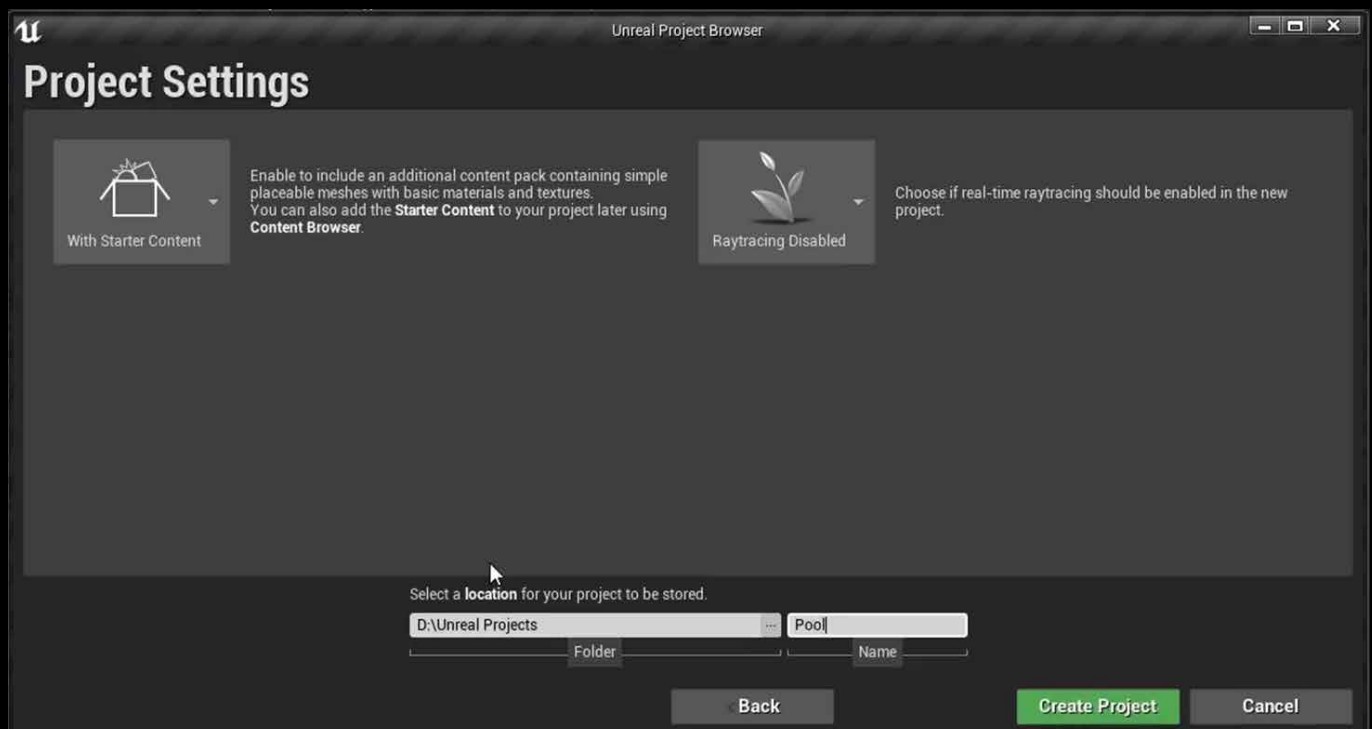


Click next.

Select nDisplay Template. Click next.



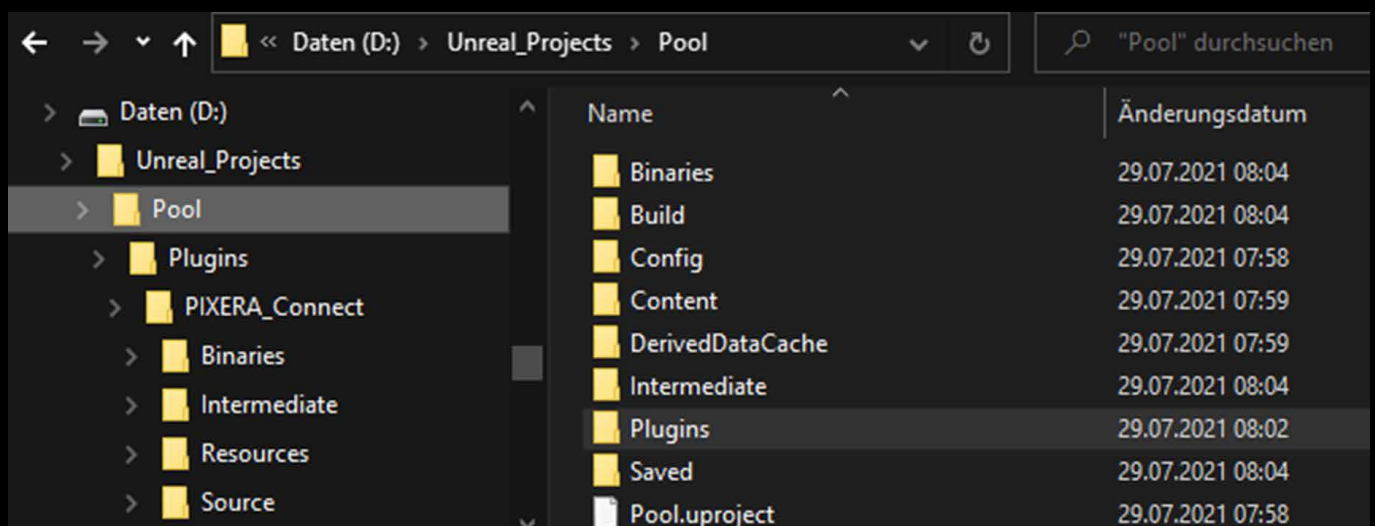
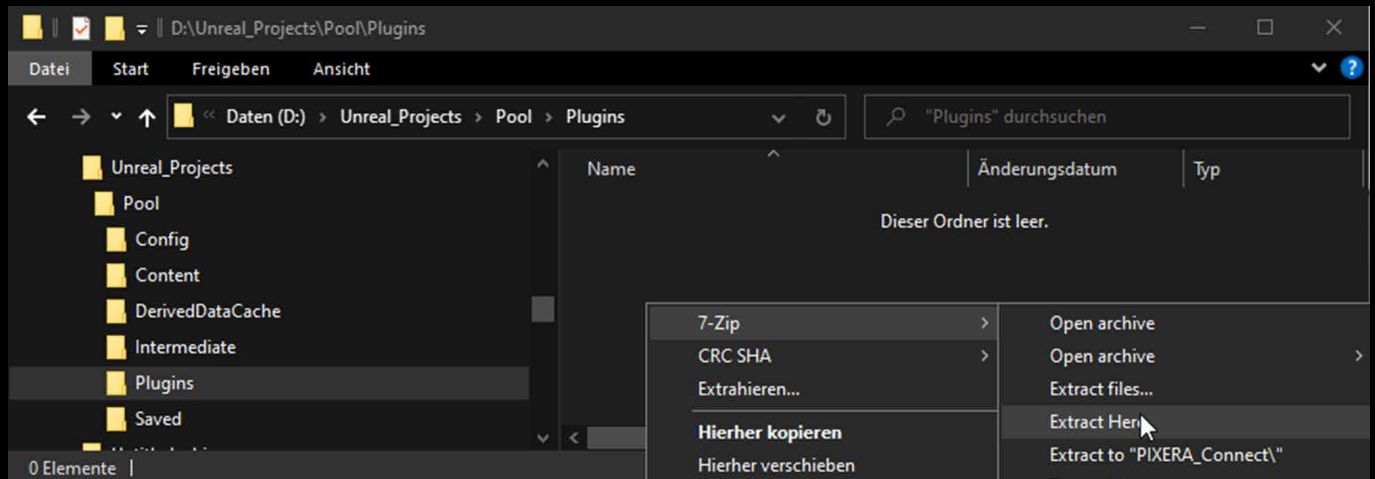
Choose your location and Create Project.



First Initializing will take some minutes...

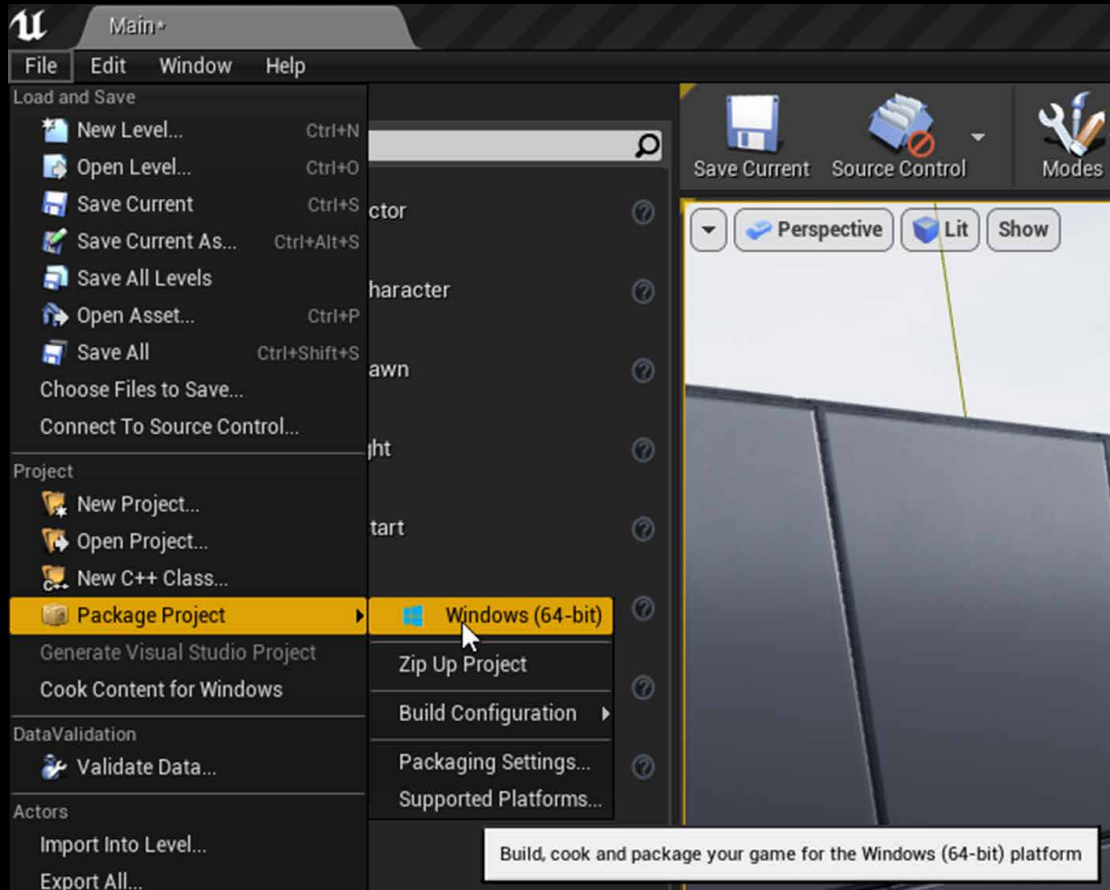
Create a folder called „Plugins“ next to your project file (D:\Unreal_Projects\Pool\Plugins)

Extract PIXERA_Connect.zip directly (without subfolders) to created Plugins folder.



PACKAGE PROJECT FOR PIXERA

To package the project in unreal click on **File → Package Project → Windows (64-bit)** and select the directory you want to pack it. (D:\Unreal_Projects\Pool_export)



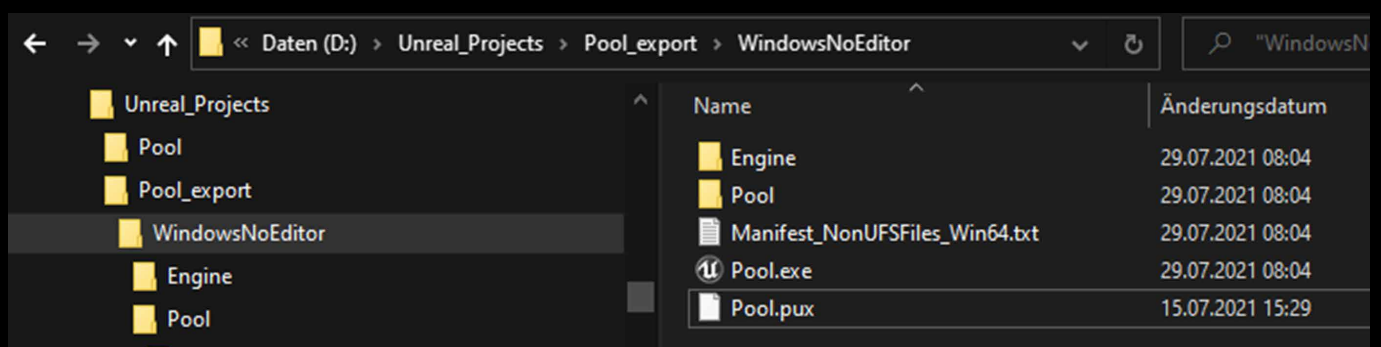
Copy RXInterop.dll from PIXERA install directory to your unreal project directory:

C:\Program Files\AV Stumpf\PIXERA\build_1-7-90\data\rxInterop\RXInterop.dll

→ Next to your "real" *.exe (D:\Unreal_Projects\Pool_export\WindowsNoEditor\Pool\Binaries\Win64)

For Texture sharing copy *.pux file next to your exported *.exe

(D:\Unreal_projects\Pool_export\ WindowsNoEditor) and rename it to the same name as packed exe (Pool.pux).



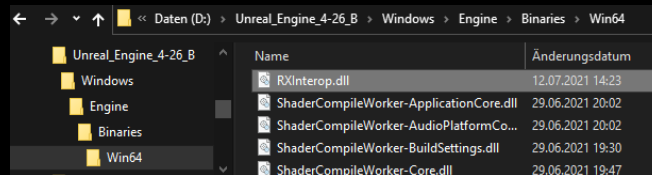
Now you can use your packed project in PIXERA.

LOAD UNREAL PROJECT IN DASH GAME MODE

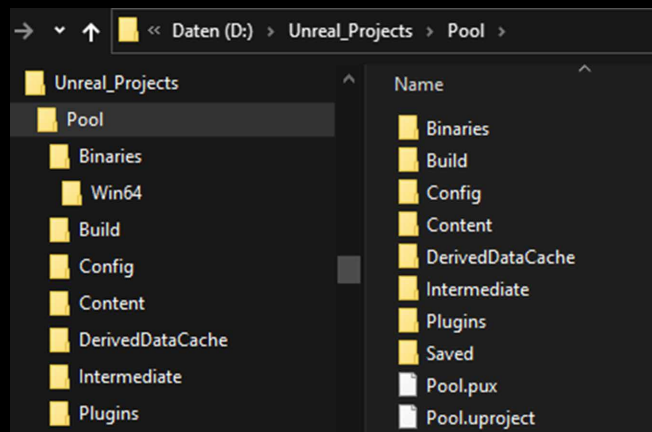
Copy **RXInterop.dll** from PIXERA install directory to your unreal directory next to your UE4Editor.exe:

C:\Program Files\AV Stumpf\PIXERA\build_1-7-95\data\rxInterop\RXInterop.dll

→ Next to UE4Editor.exe (D:\Unreal_Engine_4-26_B\Windows\Engine\Binaries\Win64)

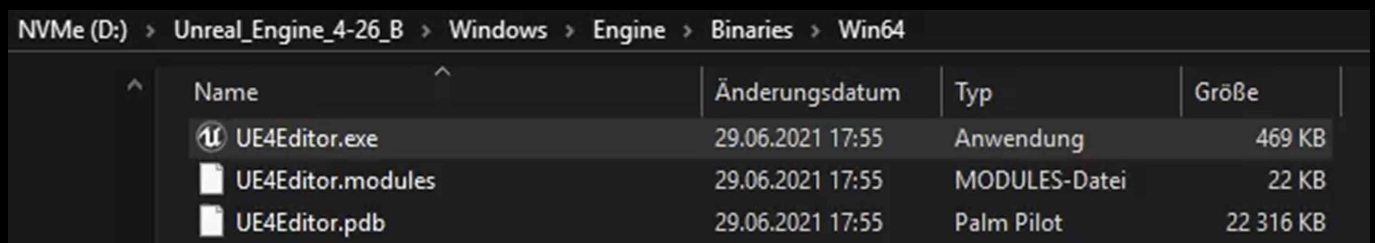


For texture sharing copy *.pux file next to your project file (*.uproject D:\Unreal_Projects\Pool\) and rename to the same filename as *.uproject file.



Import your scene in PIXERA and add it to the timeline

Select Dash Game Mode in inspector and set **UE4Editor.exe** (Unreal_Engine_4-26_B\Windows\Engine\Binaries\Win64\) via Explorer Window in **Editor Path**



Greate your config file and distribute to clients.

Pleas note, that Unreal have to be installed on your clients in the same direcorey as on your director.

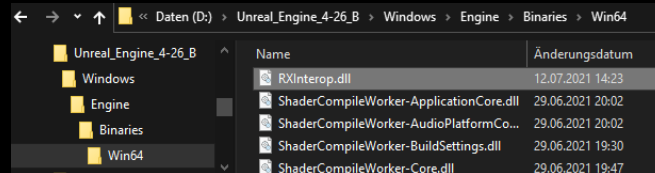
Starting in dash game mode will take a while.

LOAD UNREAL PROJECT IN MULTIUSER MODE

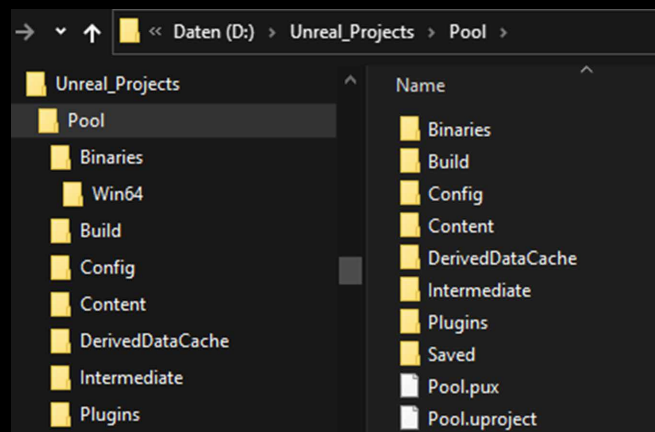
Copy **RXInterop.dll** from PIXERA install directory to your unreal directory next to your UE4Editor.exe:

C:\Program Files\AV Stumpf\PIXERA\build_1-7-95\data\rxInterop\RXInterop.dll

→ Next to UE4Editor.exe (D:\Unreal_Engine_4-26_B\Windows\Engine\Binaries\Win64)



For texture sharing copy *.pux file next to your project file (*.uproject D:\Unreal_Projects\Pool\) and rename to the same filename as *.uproject file.



In Unreal you multi-user Plugin have to be enabled.

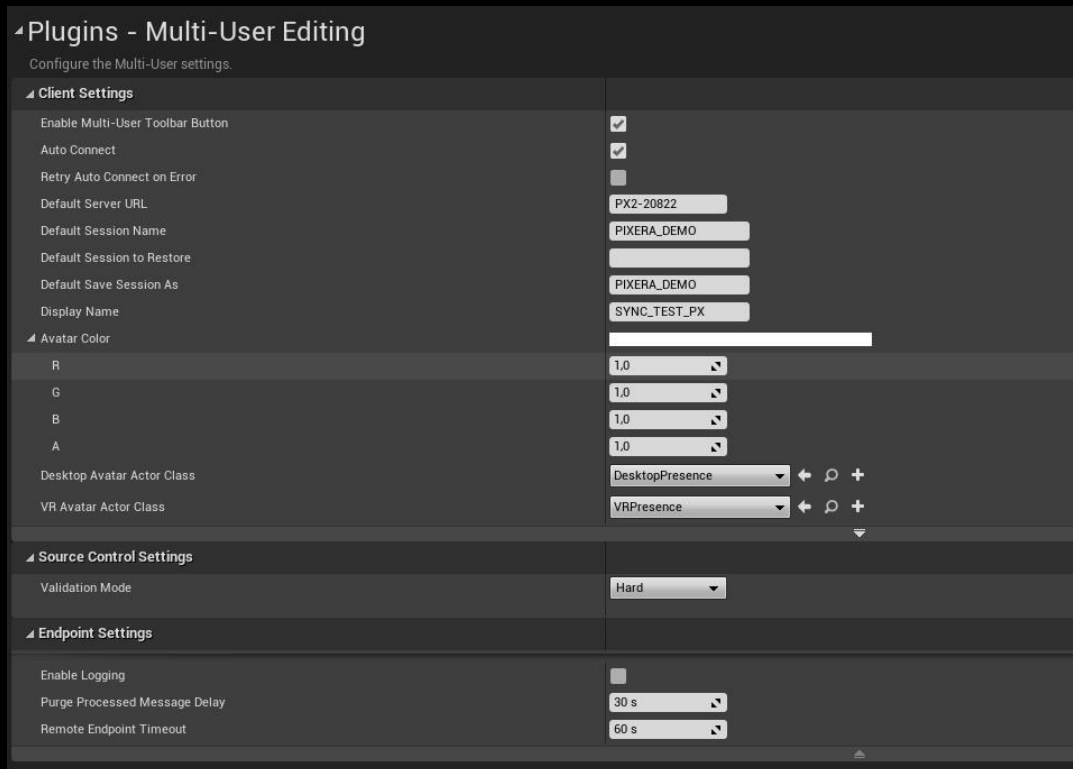


After saving and restarting your Unreal scene navigate to Project Settings (Edit->Project Settings..)

Navigate to Plugins -> Multi-User Editing.

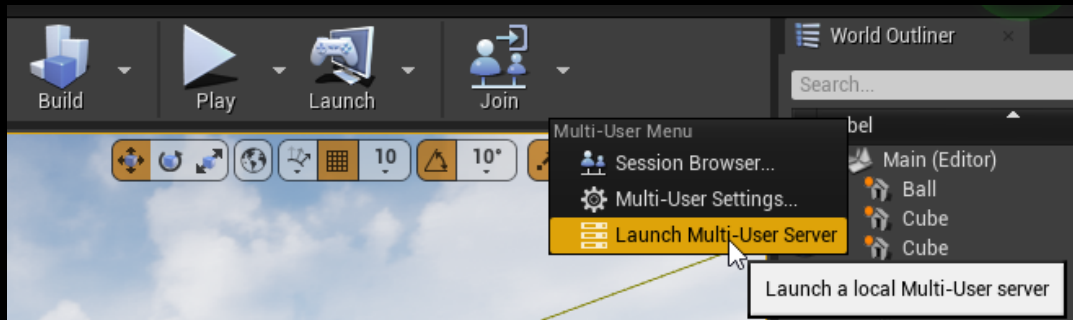
“Enable Multi-User Toolbar Button” and “Auto Connect” have to be enabled.

Further please enter the Windows computer name of your Unreal Server in “Default Server URL” and assign a name for “Default Session Name”.



Save your project and reopen it.

In your toolbar click on the arrow next to Join and select **Launch a local Multi-User server**.



A new window should pop up. Close Unreal again.

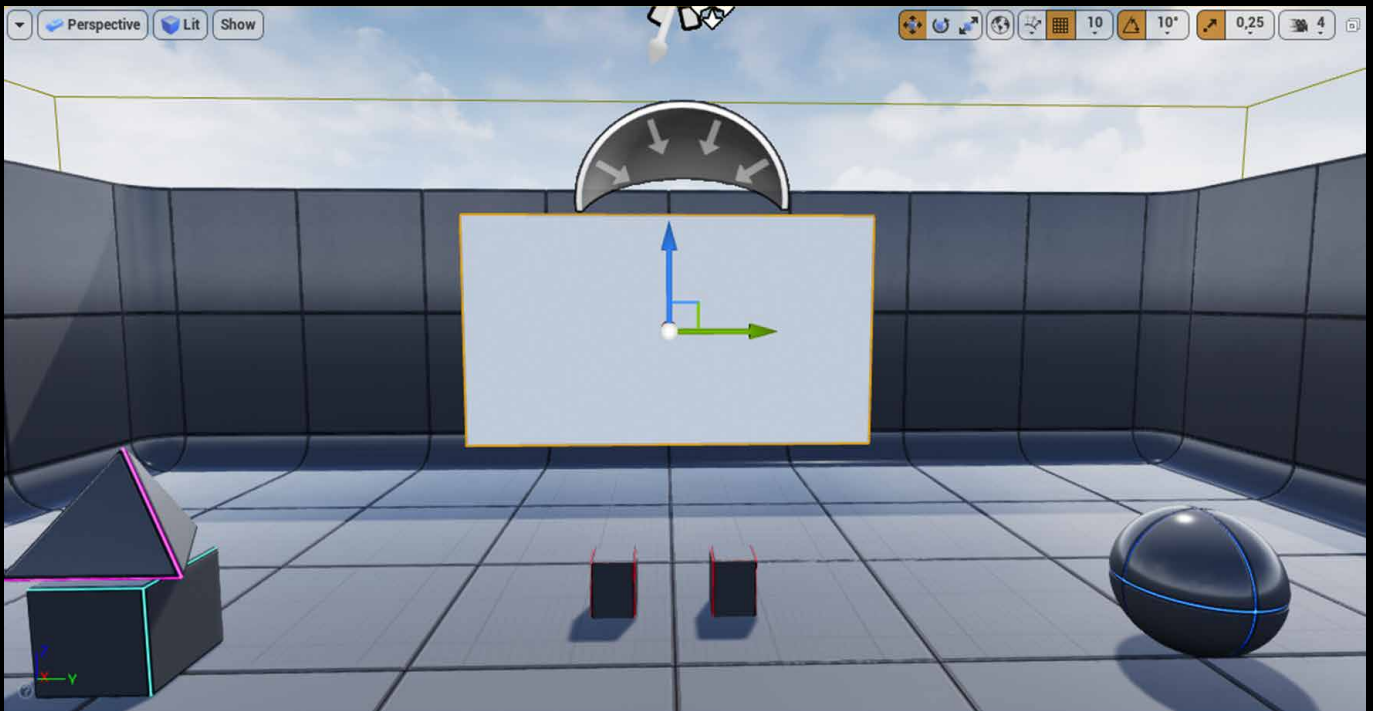
Import your scene in PIXERA and add it to the timeline.

Select Multiuser Mode in inspector and set **UE4Editor.exe** (Unreal_Engine_4-26_B\Windows\Engine\Binaries\Win64\UE4Editor.exe) via Explorer Window in **Editor Path**.

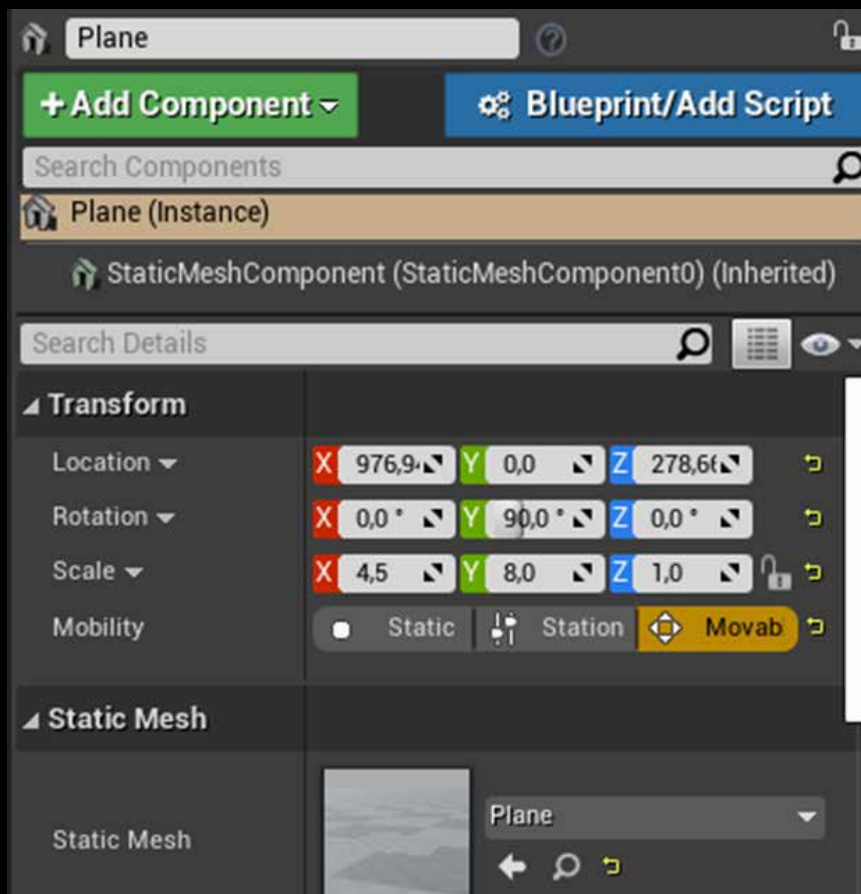
Open Unreal again and enjoy Multi-User Mode with PIXERA.

UNREAL TEXTURE SHARING

Add a plane (can be another shape as well) to your project and place it.

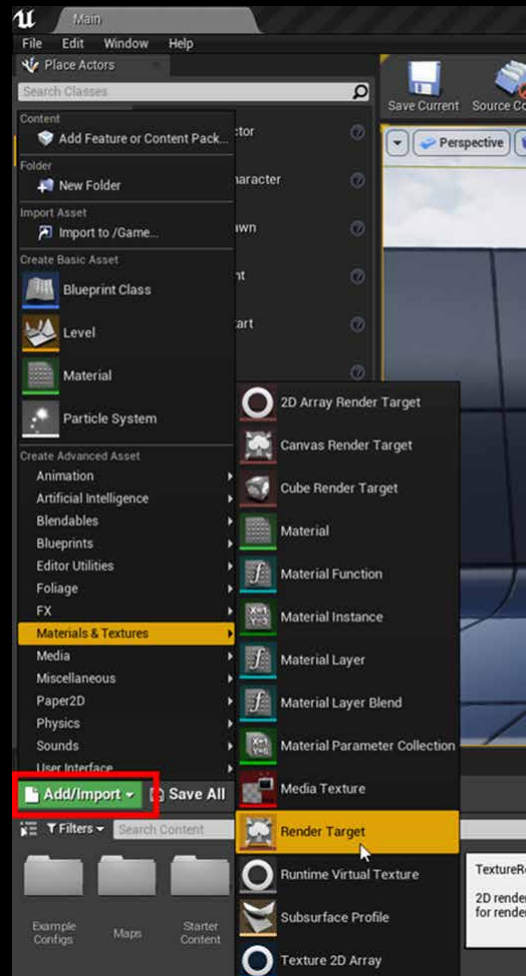


If you want to control position out of PIXERA set it movable.

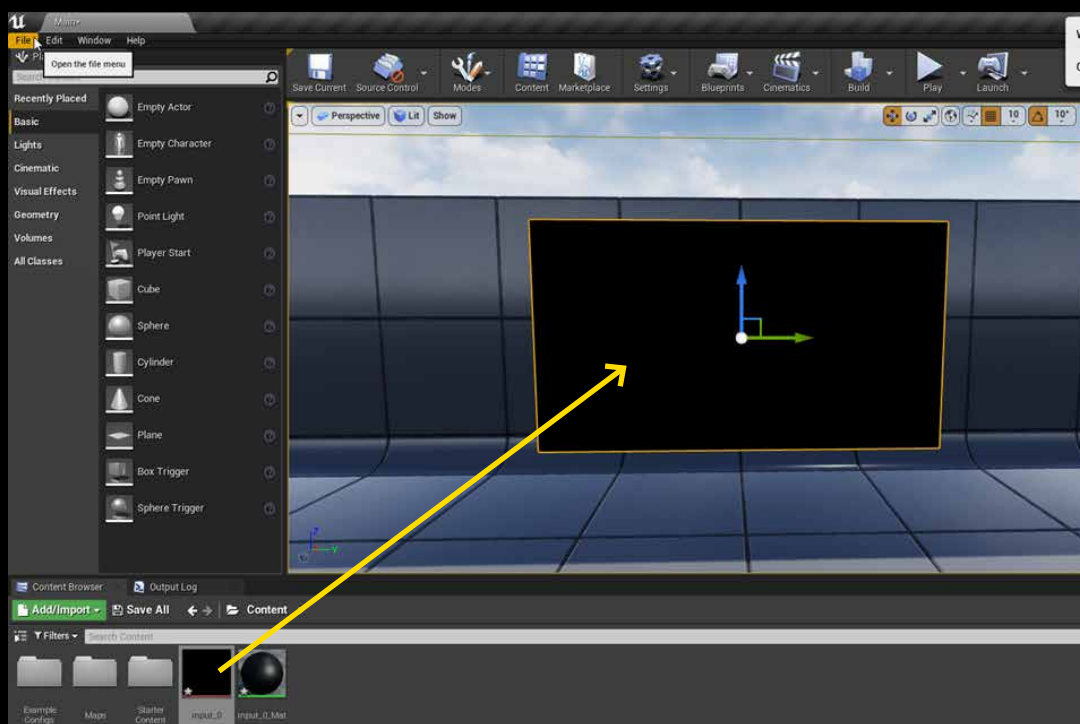


Add a render Target by clicking on **Add/Import** and navigate to **Material & Textures – Render Target**.

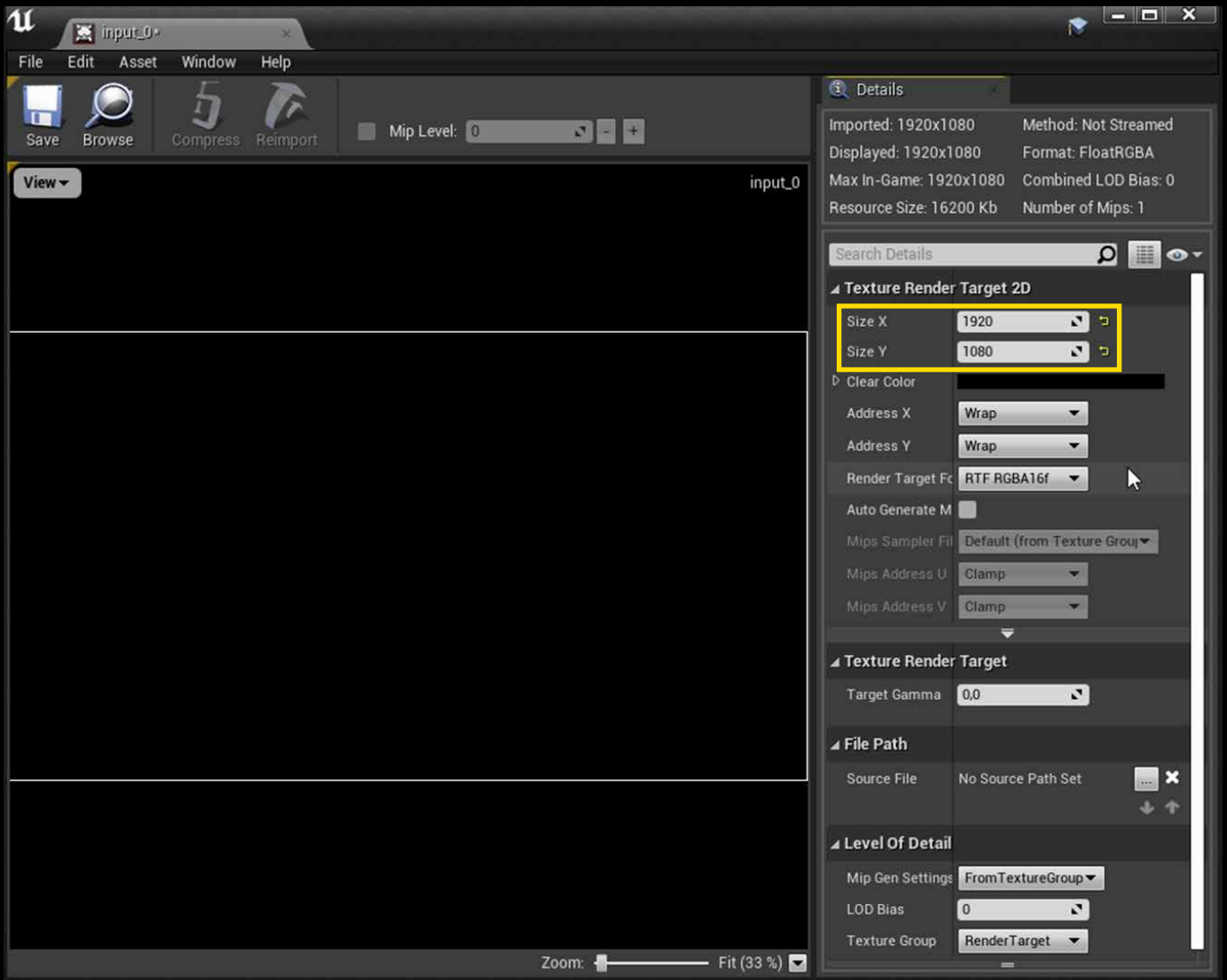
Rename it if you want.



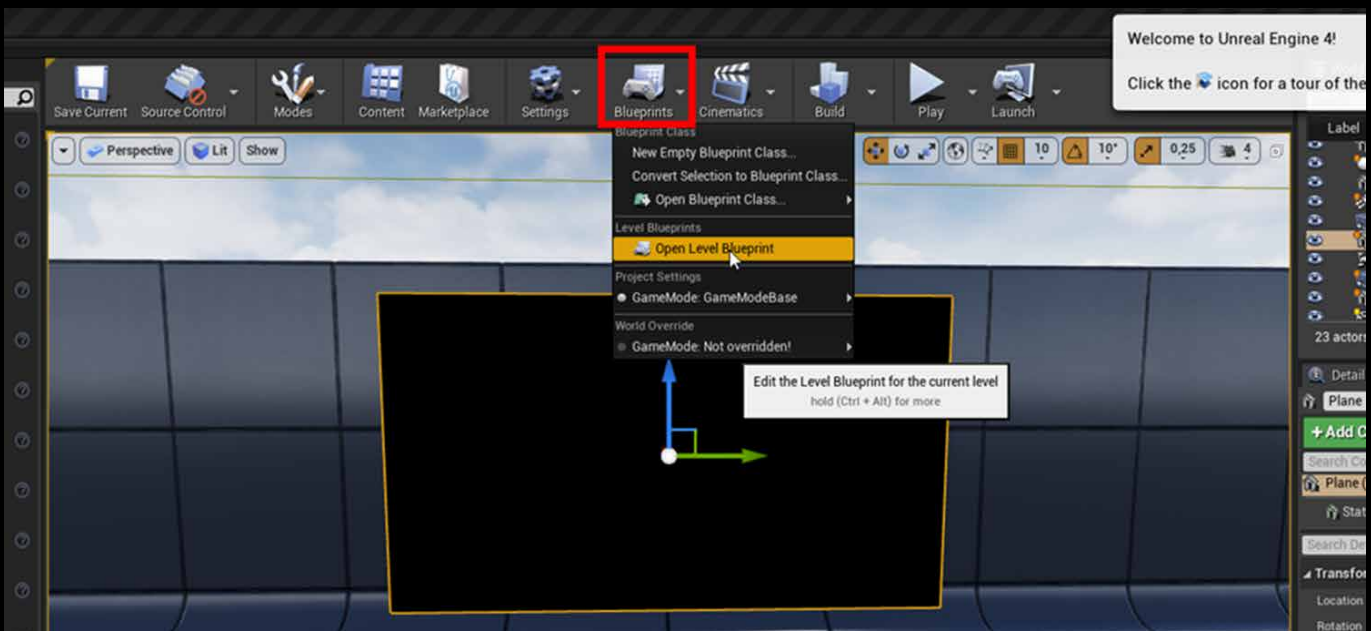
Drag and drop the created render target to your plane. A new material will be created automatically.



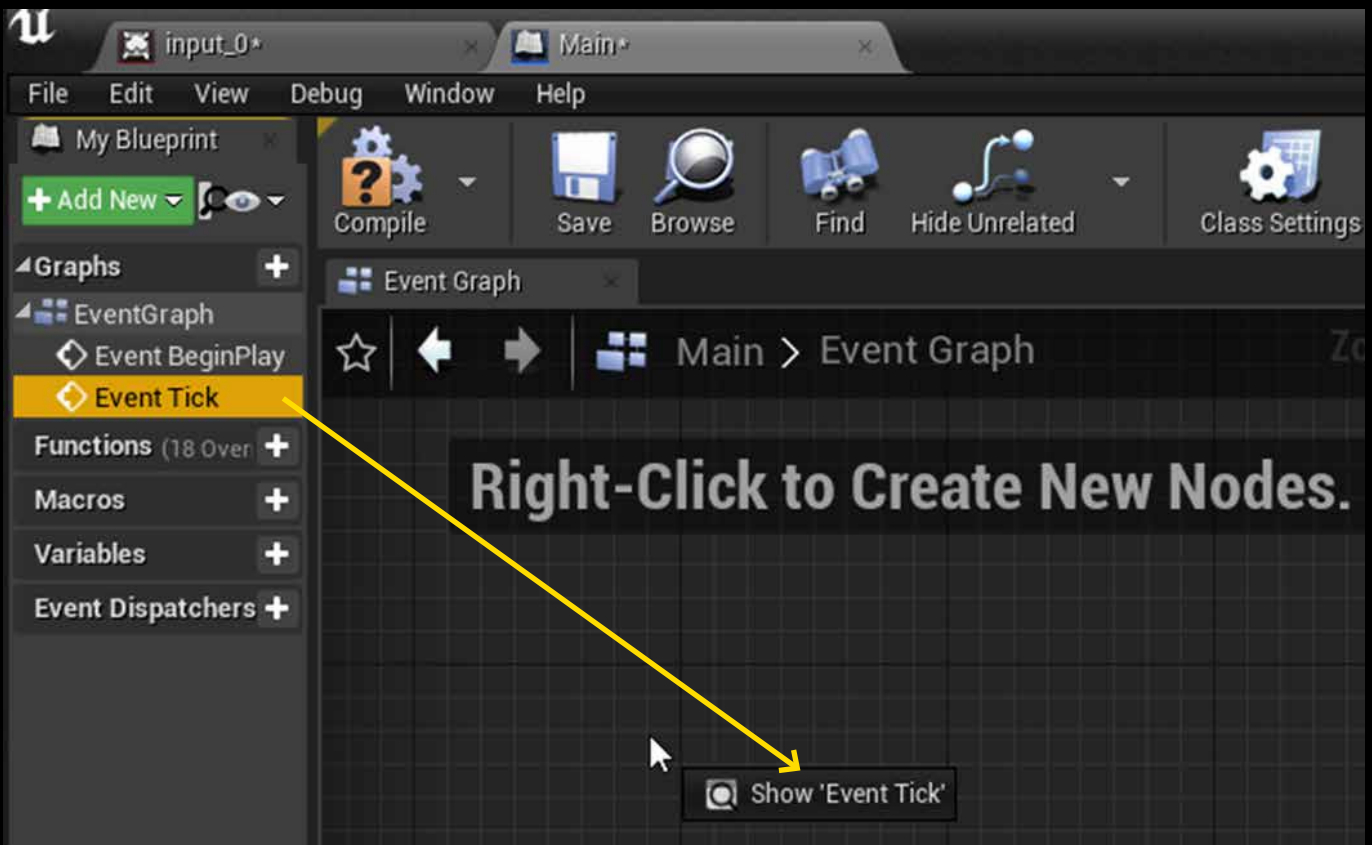
Double click the created render target to adjust the resolution - **Save**.



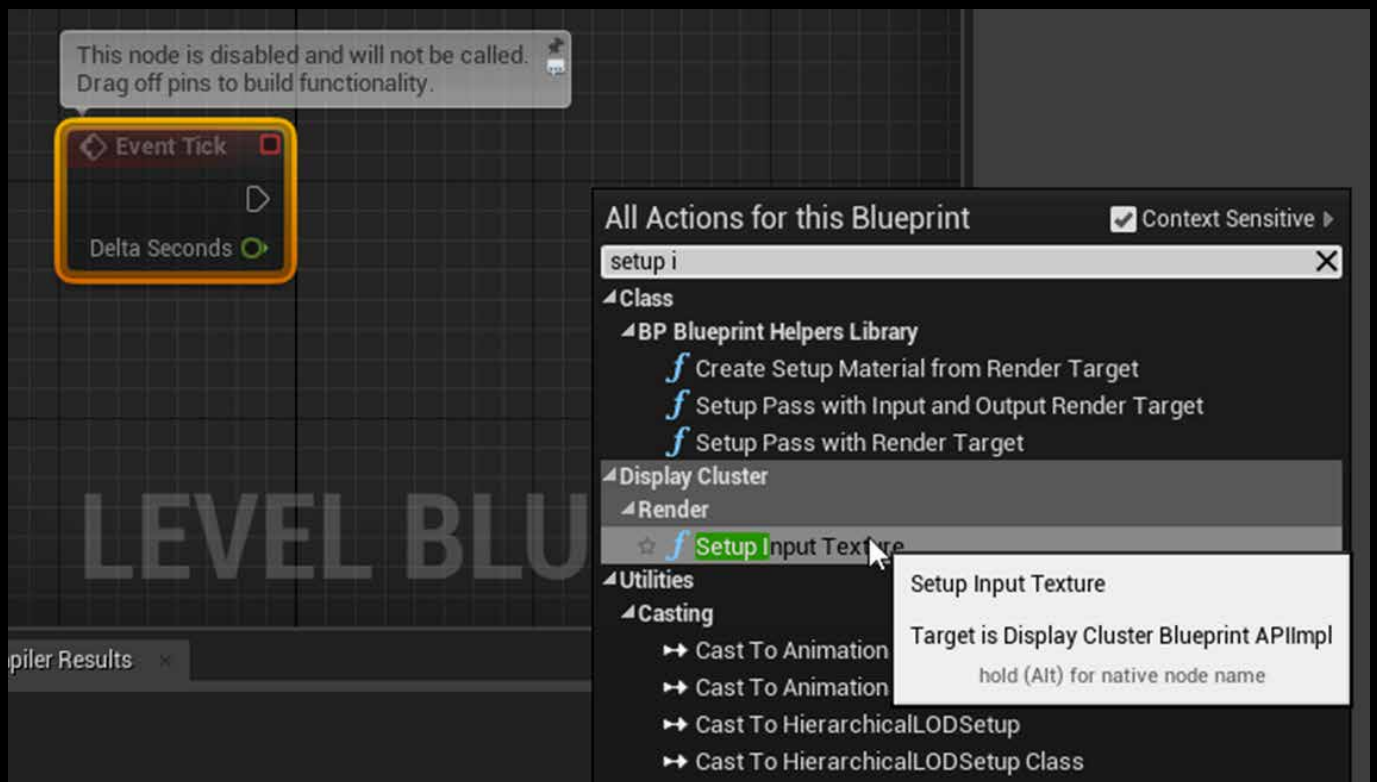
Open **Blueprints - Level Blueprint**.



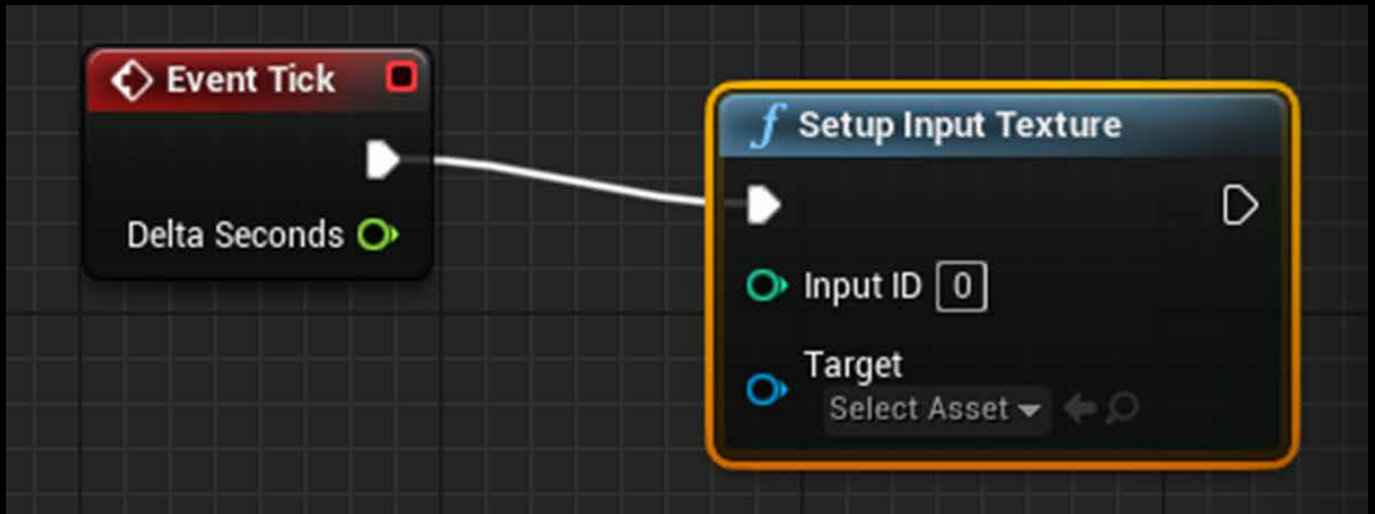
Add **Event Tick** from left hand site to your Event Graph.



Right click in the event graph and add **Setup Input Texture**.

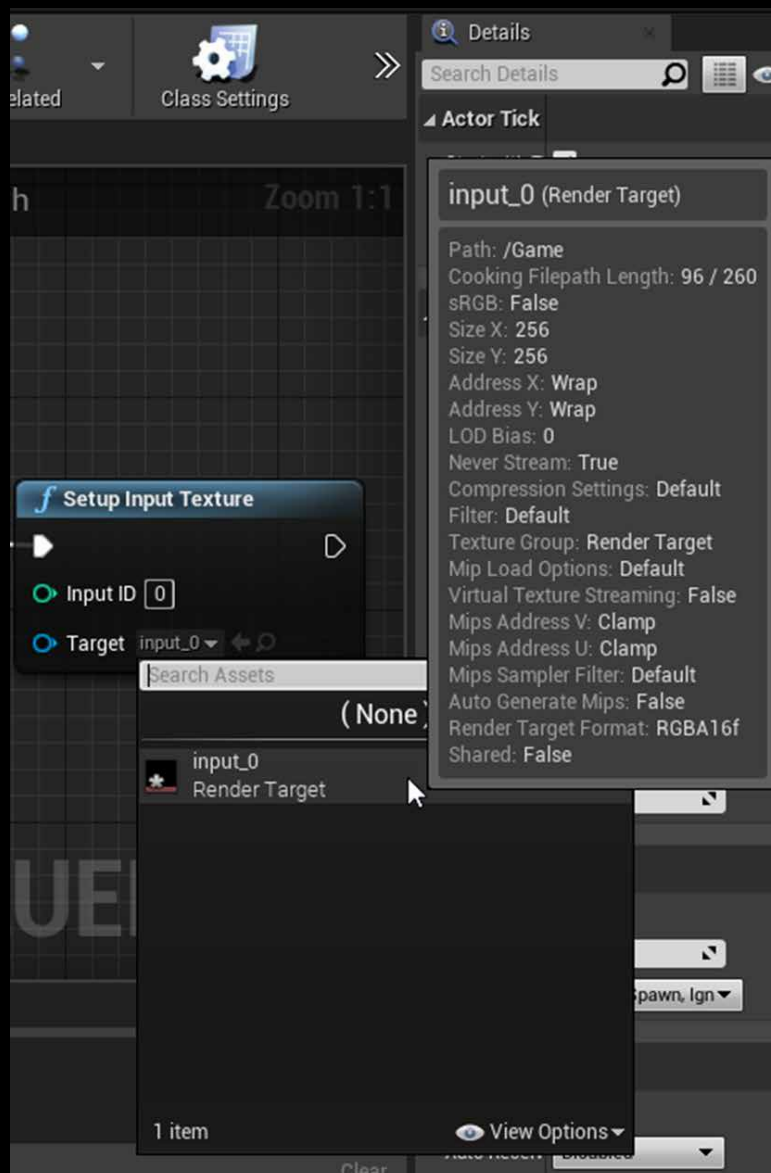


Connect those two.

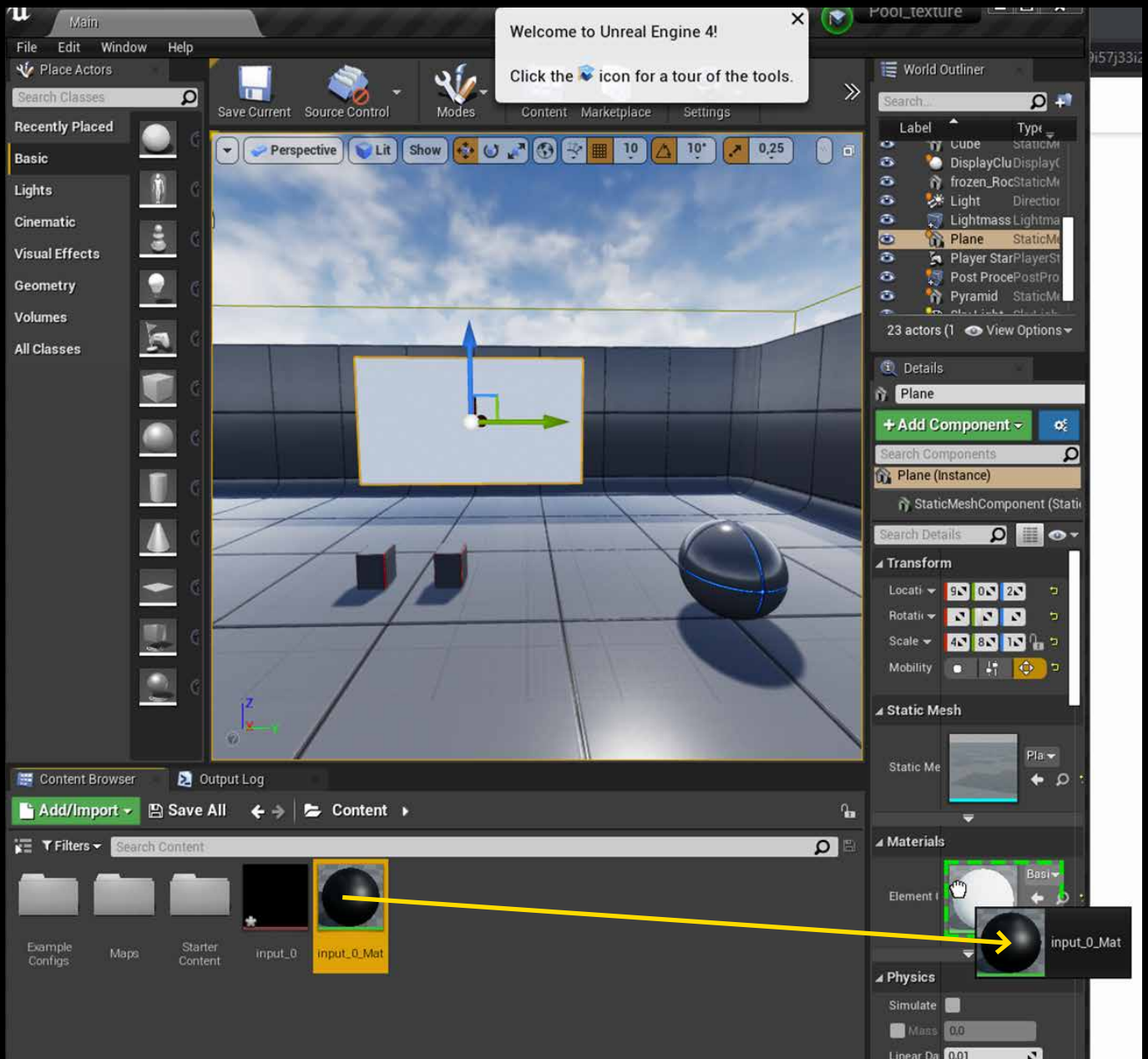


Note: The Input ID in "Setup input Texture" refers to sampler ID in PIXERA's PUX file.

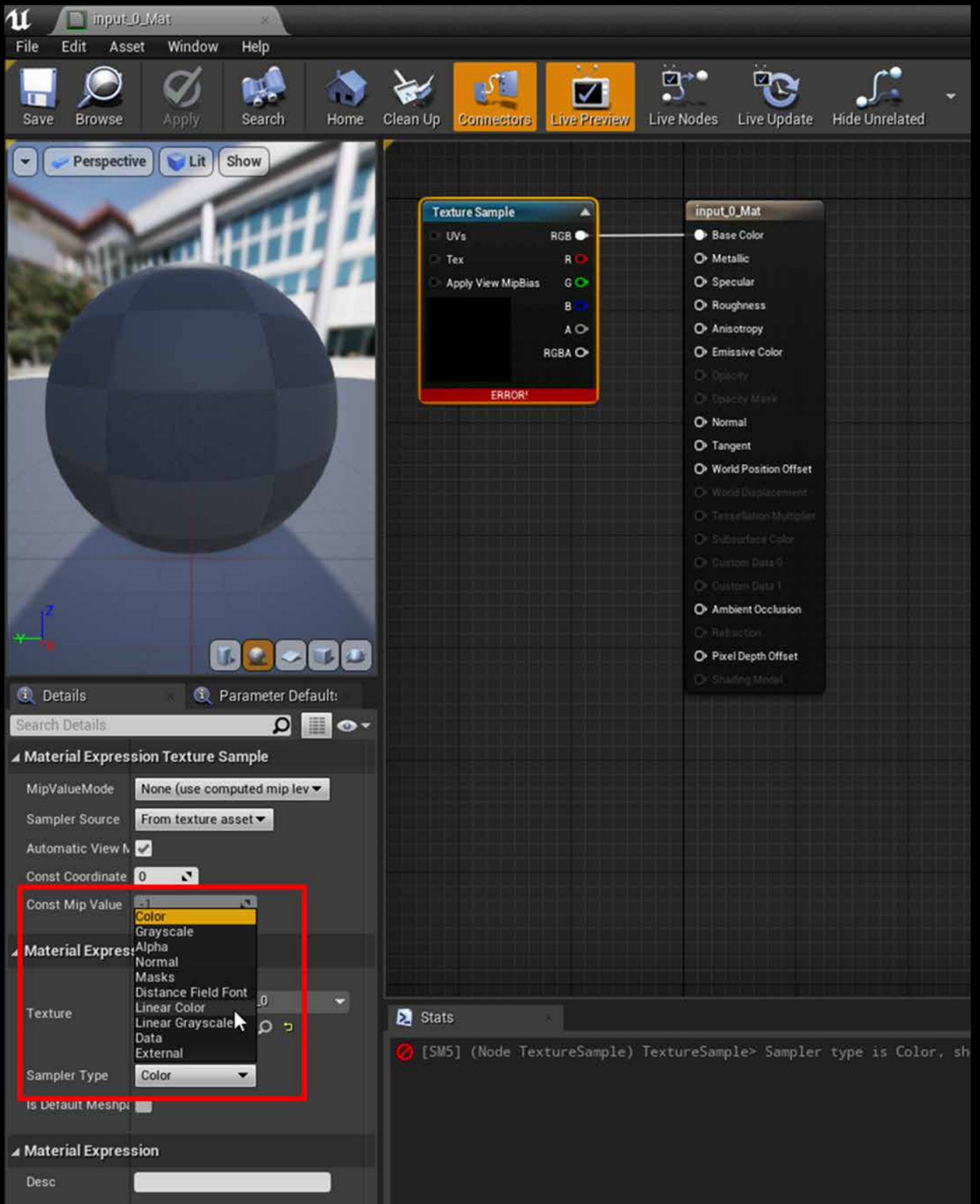
Select your created render target. **Save**



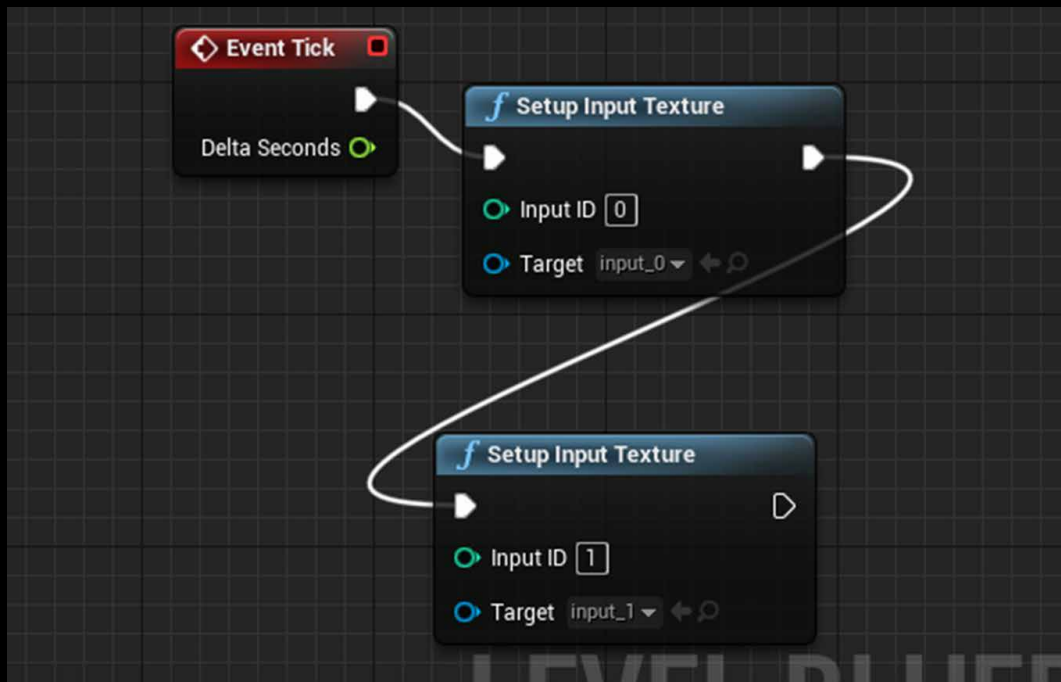
Drag and drop the material to Material in the properties of your plane:



DoubleClick the material. Select the texture sample and change the Sampler type to Linear Color. **Save.**



If you want to have two targets to share, do the same procedure and connect them as shown:



Finished

Here how it looks like in PIXERA:

