

# 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 Stumpfl)
- 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)
- Y PIXERA\_Connect.zip
- 💙 PUX file

#### 2) Unzip the Engine in your preferred folder.

#### 3) Install .NET

#### 4) Install Visual Studio including following Options:

- X Add **Game development with C++** (under Workloads) and following options:
  - ≺ C++ profiling tools
  - ≺ C++ AdressSanitizer
  - 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.

U	Unreal Project Browser 📃 🗖 🗙
Select Template	
	<image/> <image/> <section-header><text><text><text><text></text></text></text></text></section-header>
	Back Next> Greate Project Cancel

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.

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### PACKAGE PROJECT FOR PIXERA

To package the project in unreal click on File  $\rightarrow$  Package Project  $\rightarrow$  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 Stumpfl\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 Stumpfl\PIXERA\build\_1-7-95\data\rxInterop\RXInterop.dll

→ Next to UE4Editor.exe (D:\Unreal\_Engine\_4-26\_B\Windows\Engine\Binaries\Win64)

← → ▾  🔤 « Daten (D:)		Unreal_Engine_4-26_B > Windows > Engine >	Binaries > Win64
Unreal_Engine_4-26_B		Name	Änderungsdatum
		🗟 RXInterop.dll	12.07.2021 14:23
, Engine		ShaderCompileWorker-ApplicationCore.dll	29.06.2021 20:02
Binaries		ShaderCompileWorker-AudioPlatformCo	29.06.2021 20:02
Win64		ShaderCompileWorker-BuildSettings.dll	29.06.2021 19:30
- WINCA		ShaderCompileWorker-Core.dll	29.06.2021 19:47

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** 

NVMe (D:) →	Unreal_Engine_4-26_B $\rightarrow$ Windows $\rightarrow$ Engine $\rightarrow$	Binaries → Win64		
~	Name	Änderungsdatum	Тур	Größe
	UE4Editor.exe	29.06.2021 17:55	Anwendung	469 KB
	UE4Editor.modules	29.06.2021 17:55	MODULES-Datei	22 KB
	UE4Editor.pdb	29.06.2021 17:55	Palm Pilot	22 316 KB

Greate your config file and distribute to clients.

Pleas note, that Unreal have to be installed on your clients in the same direcory 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 Stumpfl\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 an restarting your Unreal scene navigate to Project Settings (Edit->Project Settings..) Navigate to Pugins -> Multi-User Editing.

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

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

Plugins - Multi-User Editing Configure the Multi-User settings.	
⊿ Client Settings	
Enable Multi-User Toolbar Button	
Auto Connect	
Retry Auto Connect on Error	•
Default Server URL	PX2-20822
Default Session Name	PIXERA_DEMO
Default Session to Restore	
Default Save Session As	PIXERA_DEMO
Display Name	SYNC_TEST_PX
▲ Avatar Color	
	1,0
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Desktop Avatar Actor Class	DesktopPresence 🗸 🔶 🗩 🕇
VR Avatar Actor Class	VRPresence + D +
▲ Source Control Settings	
Validation Mode	Hard
∡ Endpoint Settings	
Enable Logging	
Purge Processed Message Delay	30 s
Remote Endpoint Timeout	60 s

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. Cluse 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\) 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.

	× - • ×
File Edit Asset Window Help	
	1 Details
Save Browse Compress Reimport Mip Level: 0	Imported: 1920x1080 Method: Not Streamed Displayed: 1920x1080 Format: FloatRGBA
View - input_0	Max In-Game: 1920x1080 Combined LOD Bias: 0 Resource Size: 16200 Kb Number of Mips: 1
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	▲ Level Of Detail
	LOD Bias 0
Zoom: 🚪 — Fit (33 %) 🔽	Texture Group RenderTarget 💌

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.

Crent nex C	f Setup Input Texture
Delta Seconds O	
	Input ID 0
	Target

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

Select your created render target. Save

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slated Class Setting	5	Actor Tick
h Z	oom 1:1	input_0 (Render Target)
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Drag and trop 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.





Event Tick
Delta Seconds O
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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:

Use Inputs		
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