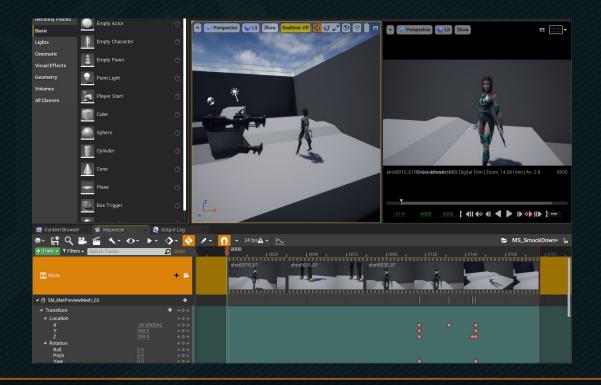
Intro to Sequencer Erica Penk

About Me

- Using Unreal since 2015 for Virtual Production, VR, Motion Capture, Film
- Employers: Trick 3D, Turner Studios, Profile Studios, ProxiVP
- Clients: Delta, Make-A-Wish
- Presentations: GGDA, Terminus

Teaser



Overview

- Sequencer Definitions / UI
- Sequencer Workflow
- Creating Master Level Sequence / Shots
- Animation / Shot Editing
- Render Out Final Cut

Project Setup Let's Get Started!

Project Setup

- Create New Project
- With Third Person Content Pack
- With Starter Content
- Add Paragon: Yin from Marketplace
- Open ThirdPersonExampleMap

Level Sequence What is it and How to Use it?

Level Sequence

- Is the "container" for your cinematic scene.
- Must exist before you can work in the Sequencer tab.
- Usually bound to a specific level. (If so, not visible unless in the right level.)
- Can have many "Tracks" (similar to Adobe layers)
 - Can Add Camera Cuts, Actors, Subscenes, etc
 - Edit / Animate Properties over Time

Sequencer User Interface

- 1. Toolbar
- 2. Sequence Breadcrumbs
- 3. Add / Filter Tracks
- 4. Timeline
- 5. Tree View
- 6. Tracks Area
- 7. Playback Controls

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Level Sequence Terminology

- Russian Nesting Doll Analogy
- Level Sequences inside of Level Sequences
- Take = Animation Data (characters, cameras, etc)
- Shot = character Takes + Camera(s)
- Master Sequence = All Shot Level Sequences for Scene
- Master Layout = blocked character Takes + virtual camera(s)



Sequencer Workflow Before We Begin

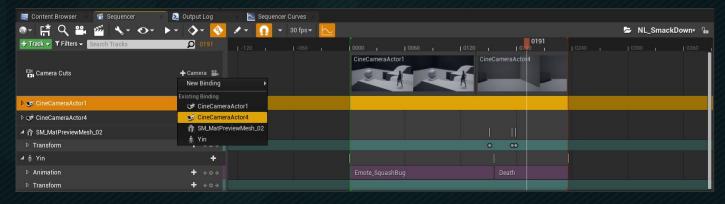
Workflow Considerations

- Working in a Team? Individual?
- Linear v. NonLinear Workflow?
- Source Control?
- Level Streaming or Subscenes for Collaboration?
- File Structure? Naming Conventions?

https://docs.unrealengine.com/en-US/Engine/Sequencer/Workflow/ToolUsage/index.html#mastersequenceworkflow https://docs.unrealengine.com/en-US/Engine/Sequencer/HowTo/TracksSub/index.html

Linear Example (individual)

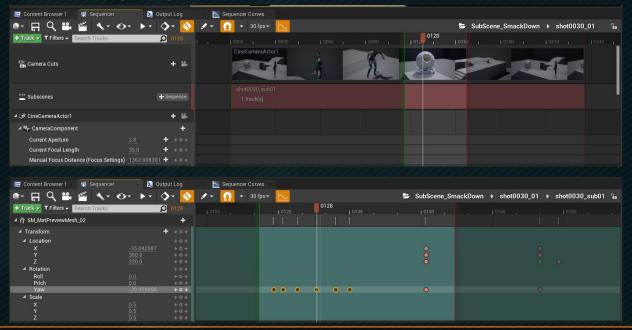
- 1 Level Sequence with Camera Cuts Track (usually multiple cameras)
- New Camera Binding for additional cameras
- Animation Takes included
- No Shots Track



https://docs.unrealengine.com/en-US/Engine/Sequencer/Workflow/ToolUsage/index.html#mastersequenceworkflow

Collaborative Subscenes

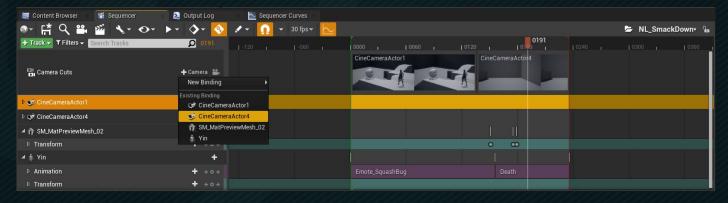
• Work in parallel on lighting, animation, cameras, etc (same scene)



https://docs.unrealengine.com/en-US/Engine/Sequencer/Workflow/ToolUsage/index.html#mastersequenceworkflow

Master Layout (Virtual Production)

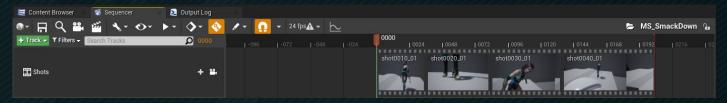
- 1 Level Sequence with blocked Character Animation
- Intermediate for blending mocap and recording virtual cameras
- No Shots Track
- Virtual Cameras require manipulation before adding to the Master Sequence



https://docs.unrealengine.com/en-US/Engine/Sequencer/Workflow/ToolUsage/index.html#mastersequenceworkflow

NonLinear Workflow For This Demo

• One Master Sequence with a Shots Track



Each Shot Level Sequence has a Camera Cuts Track with 1 Camera

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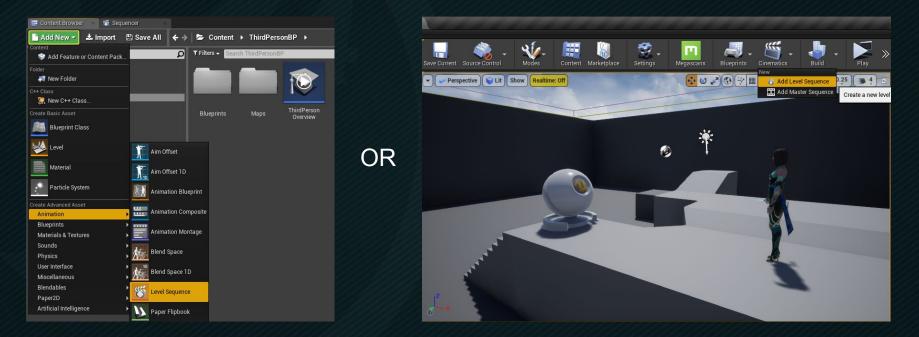
https://docs.unrealengine.com/en-US/Engine/Sequencer/HowTo/TracksSub/index.html

Practice Now it's Your Turn!

Add Actors to Scene



Create Master Level Sequence



https://docs.unrealengine.com/en-US/Engine/Sequencer/Overview/index.html https://docs.unrealengine.com/en-US/Engine/Sequencer/Workflow/ToolUsage/index.html#mastersequenceworkflow

Add Shots Track



Add Shot Level Sequences

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Add Actors



Add Animation



Adjust Playback Range

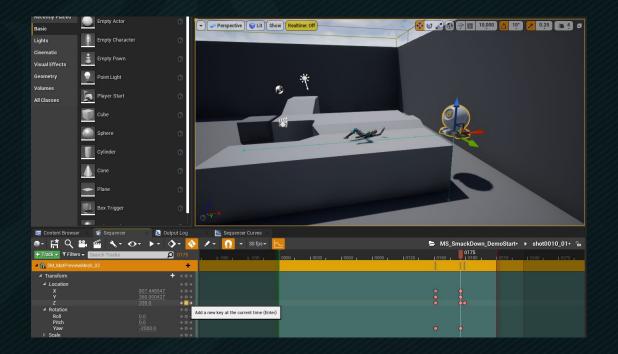
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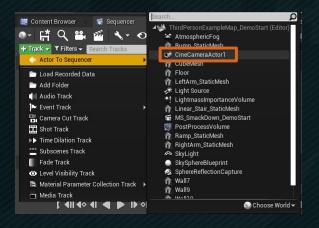
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Keyframe Animation



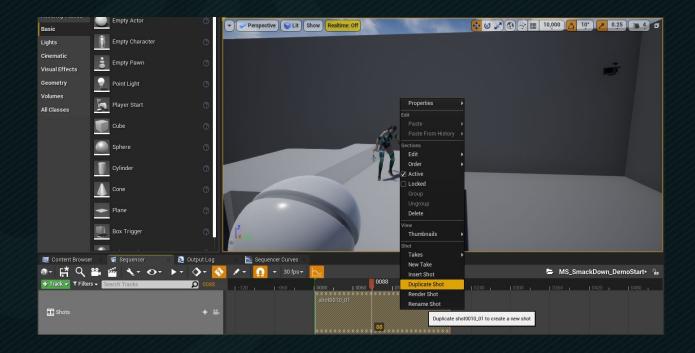
Add Camera / Camera Cuts Track



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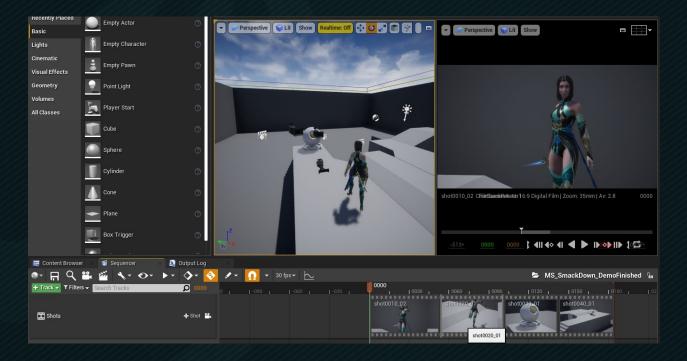
Duplicate Shot from Master Sequence



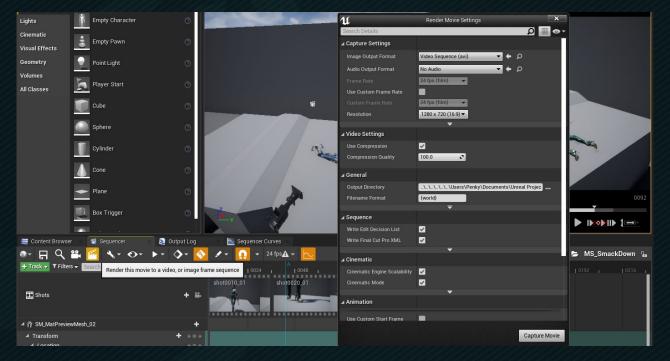
Adjust Cameras



Adjust Final Edit



Render Out Final Output



Tada!



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https://docs.unrealengine.com/en-US/Engine/Sequencer/Workflow/RenderMovieSettings/index.html

Sequencer Hotkeys

CTRL + MMB	Zoom	SPACEBAR	Toggle Playback
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, , .	Last / Next Keyframe	S	Sets Keyframe all Transforms
CTRL + G	Set Time / Frames	CTRL + L	Pilot / Eject Camera
$\leftarrow \ , \ \rightarrow$	Step Forward / Backward One Frame	CTRL + /	Cut Asset at Current Time
\downarrow	Start Sequencer Play	CTRL + ,	Trim Asset Left of Current Time
↑	Set Playback Time to 0	CTRL + .	Trim Asset Rt. of Current Time

https://docs.unrealengine.com/en-US/Engine/Sequencer/Workflow/CheatSheet/index.html