

Playblasting Sequences for Editing and Labeling in Premiere

Problem: When editing layout passes and animation for our film, we often were told that we needed our shots labeled so we could receive better feedback on specific shots. Unfortunately, we were playblasting full sequences instead of shots, meaning that we would have to create separate adjustment layers and time and name them for every shot, which sounded time consuming, and would need to be fixed every edit.

Solution: Instead of making our own labels and adjusting them each edit, we chose to simply playblast shots and have them labeled with the correct naming conventions so that we could use the “Clip Name” effect on an adjustment layer so we could show the shot name and mask off the extension. In order to do this, we needed to understand how to render from the sequencer and check all the settings so that they would playblast correctly.

Working with the Camera Sequencer

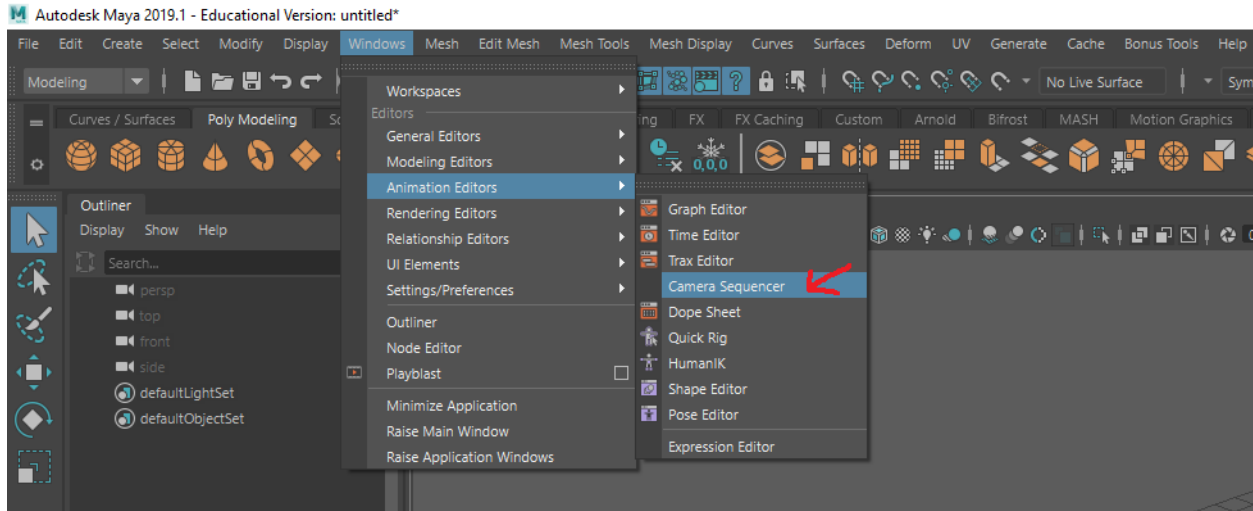
One of the problems I encountered as an editor and a member of the layout team was using the Camera Sequencer in Maya to edit and playblast sequences that are easy to label and edit in Premiere. In this section I will go over all the functions and features of the Camera Sequencer and how our team used it in order to playblast all the shots so that they could be labeled and edited together in Adobe Premiere Pro.

Why do we use the Camera Sequencer?

When animating or adjusting layout, you will be working in sequences, which are a series of shots in a film. The Camera Sequencer allows you to play back shots with different cameras to allow the animator to see if their sequence flows and makes sense from shot to shot. This is helpful in layout in finding good timing and framing for your shots relative to one another. The Camera Sequencer shows you and allows you to adjust how your sequence plays out. While there is a lot of function to using the camera sequencer, abusing its abilities can cause your animators and editors peril later in the pipeline, so it is helpful to be knowledgeable about what the sequencer is used for and to ensure your file will be easy to work with later when animating and rendering.

Finding the Camera Sequencer

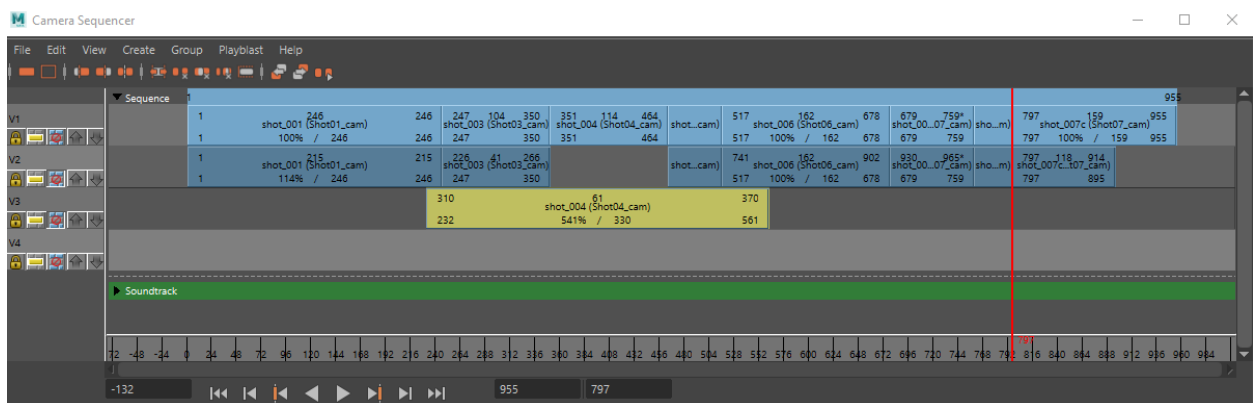
The Camera Sequencer is located under Windows>Animation Editors>Camera Sequencer.



Navigating the Camera Sequencer

When starting with the Camera Sequencer, you will need to create shots. To create a shot, go to Create>Shot [] options. A window, “Create Shot Options” will open. Here you must name your shot, choose your camera, and pick a frame range. Your first live action reel and animatic should give you a general time frame that should be translated to frames. It is easiest to split up your reel into the sequences in premiere and find out how long each of these are so that you may have ball park frame range for your layout team to start working with. Remember that we work in 24 frames per second so make sure to keep that in mind when converting your reel from seconds to frames.

Once you have created your shots and lined them up in your sequencer, they might look like this.



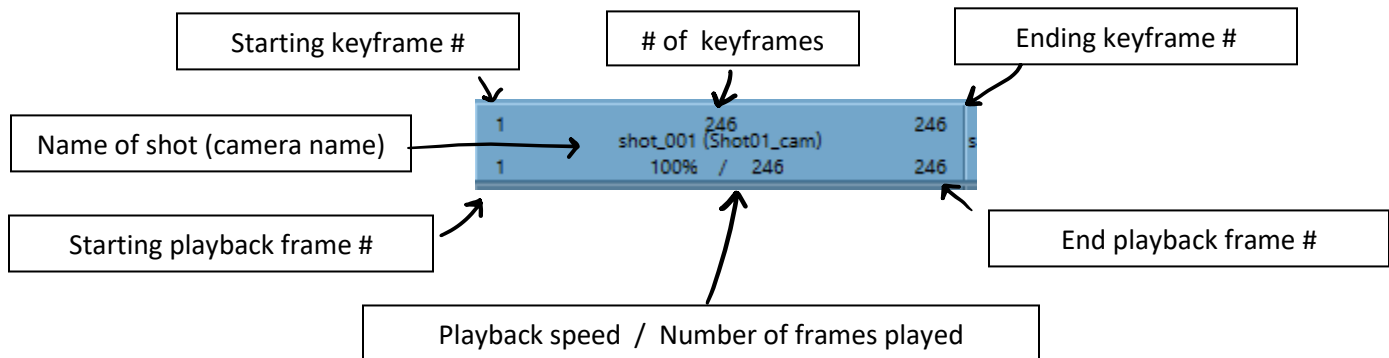
It is important to understand what the sequencer does and how this translates to what is played back. I moved some things around to explain some of the functions to you.

When you play your animation from the camera sequencer, it will play your shots in order in the way that you lay them out. It allows you to have layers, and it will only play the shots that are on top, meaning the greyed-out shots in my example would not be seen when played back. *The camera sequencer allows you to move, lengthen, shorten, speed up or slow down any of your shots.* Often, you

will receive feedback about a shot being too slow, so the sequencer can allow you to do that, or cut off frames. **The Camera Sequencer shows you and allows you to adjust how your sequence plays out.**

You can also create an ubercam through the sequencer which will appear as a camera in your viewport and allow you to playback your sequence without having your Camera Sequencer open! You can find it at Create>ubercam.

The Shot Explained



So, the “top” numbers will be the frames that you are keying in Maya as you are working. These will be the numbers of the frames you put your keys on and the keys you see in the graph editor. If you click (a knife tool will appear when hovered) and drag on the starting or ending keyframe numbers, you will be able to cut or add time to your shot. This will literally add or take away frames from your shot. The numbers will adjust, and these will be the same numbers that you see in your graph editor and in your Maya workspace.

The middle part tells you what your shot is named, and which camera it is playing from.

The bottom will show you what your playback frames are. This is where the camera sequencer can be both helpful and dangerous. If you click and drag your shot on the bottom number, it will speed up or slow down the playback speed for your sequence. **This will include your animations!** This is very helpful for adjusting timing in layout in order to see how something will play at a different speed relative to your other shots without having to manually retime your animations in the graph editor. (it sucks) This allows for quick and easy camera timing tweaks.

What makes this bad? While retiming in your sequencer is quick and easy, you will notice some things change on your shot:

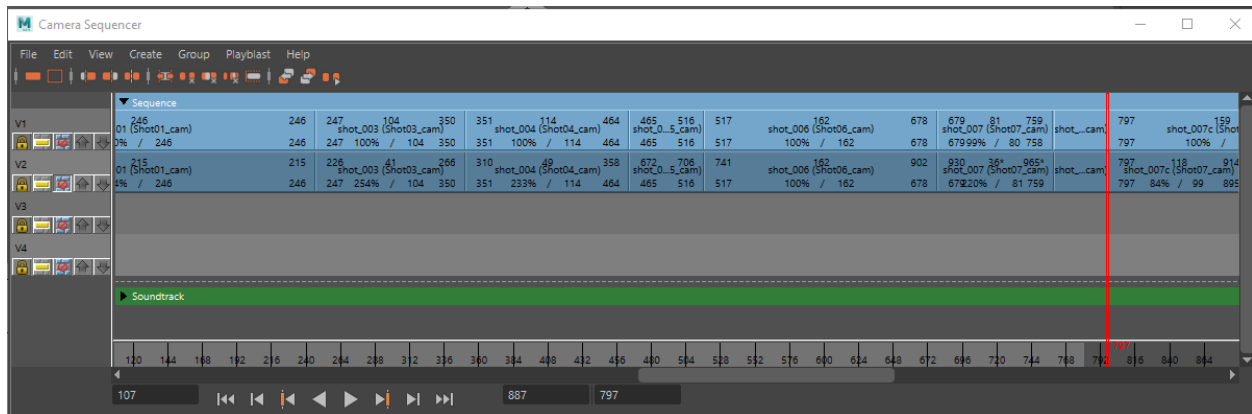
310	61*	370*
	shot_004 (Shot04_cam)	
232	541% / 333	564

So this is a shot slowed down, or dragged out 541%. When you play it from the sequencer it will play your keyed animation at a speed of 541% slower. You will see that your shot originally had 61 frames, which will be the number of frames you animate with, but it will play back slower and extend the animation over 333 frames. Now this is fine if you need to adjust your timing to see what would work for your sequence, but if left alone, this would mean you have 200 frames less to animate with than what will be played in your sequencer. This would be quite annoying to animate for exact timing, especially when you are using reference footage to base your animation off of—the frames will not line

up and, when you play your animation normally in Maya, outside of your sequencer, it will only play the 61 frames (this plays A LOT FASTER than 333 frames), and you must work and animate between that smaller frame range. BAD!

Solution? You would have to retime your animation and line up your animation to fill the new frame range.

Team Delivery faced this problem after finalizing layout and beginning animation.



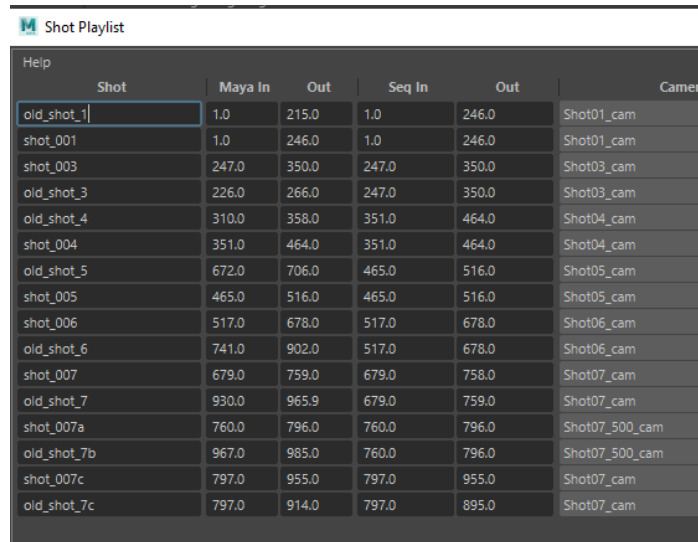
The sequence at the top is what you should aim for when starting animation. This has the actual keyframe range lined up with the camera sequencer playback. This allows you to animate on all of the frames available to you and will playback normally in your Maya workspace! Excellent!

At the end of layout however, most of our sequences looked like the sequencer at the bottom. We had sped some stuff up and slowed things down to help with timing. While this is perfectly okay for testing out ideas and suggesting changes to sequences, it is not feasible for animating, rendering, or anything post-layout.

Fixing Your Sequencer for Animation

So if you are at this point, not all is lost. You can create a new, proper sequence and realign your animation to fit within your new frame range. I recommend either keeping and renaming your old shots to "old" so you can keep them in your file for reference while you retime everything. Then duplicate and properly name all your new clean sequence.

Now you can go in and change your shots to align with the new bottom numbers to allow yourself the 100% of the frames. If you are having trouble seeing the frame numbers, you can go to View>Playlist to pull up all your shots.



Shot	Maya In	Out	Seq In	Out	Camera
old_shot_1	1.0	215.0	1.0	246.0	Shot01_cam
shot_001	1.0	246.0	1.0	246.0	Shot01_cam
shot_003	247.0	350.0	247.0	350.0	Shot03_cam
old_shot_3	226.0	266.0	247.0	350.0	Shot03_cam
old_shot_4	310.0	358.0	351.0	464.0	Shot04_cam
shot_004	351.0	464.0	351.0	464.0	Shot04_cam
old_shot_5	672.0	706.0	465.0	516.0	Shot05_cam
shot_005	465.0	516.0	465.0	516.0	Shot05_cam
shot_006	517.0	678.0	517.0	678.0	Shot06_cam
old_shot_6	741.0	902.0	517.0	678.0	Shot06_cam
shot_007	679.0	759.0	679.0	758.0	Shot07_cam
old_shot_7	930.0	965.9	679.0	759.0	Shot07_cam
shot_007a	760.0	796.0	760.0	796.0	Shot07_500_cam
old_shot_7b	967.0	985.0	760.0	796.0	Shot07_500_cam
shot_007c	797.0	955.0	797.0	955.0	Shot07_cam
old_shot_7c	797.0	914.0	797.0	895.0	Shot07_cam

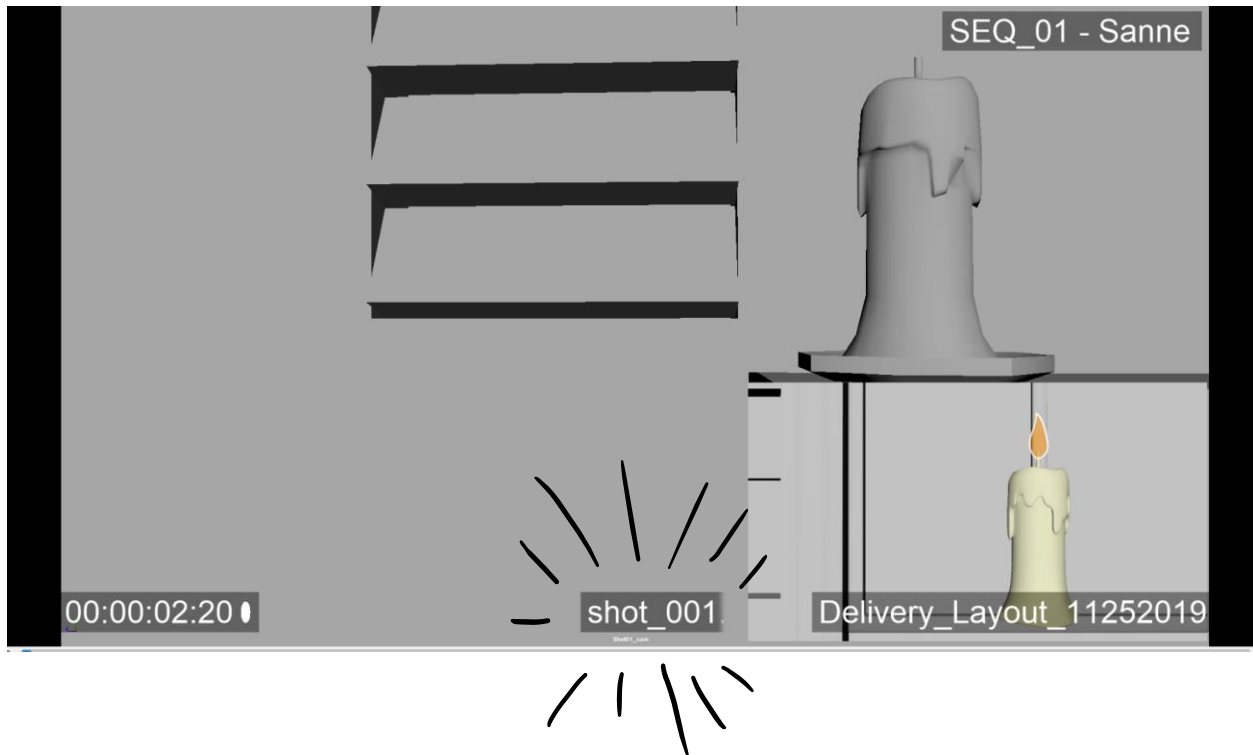
Once everything is lined up, it's time to fix your camera animation and character animation. Unfortunately, there is no easy way to line everything up other than selecting them and fixing them in your graph editor. An easy way to select all your animation is by making it so you can only select your nurbs curves and drag select all your controllers and use the retime tool in the graph editor to roughly line your keyframes up within your new frame range.

Then you can delete your old shots and work from a fresh, zeroed out sequencer with full control over your shots!

Playblasting with Camera Sequencer

As editor for Delivery, I ran into an issue trying to label my shots so our professors could give us feedback on specific shots and cameras. We wanted to be able to playblast our sequences with the ornament showing the camera name and wanted to playblast shot by shot so that we could use the file name adjustment layer in Premiere to show the shot name.

Like So:



So the camera name is very small and barely legible but it there if someone really wants to know what camera you are using in that shot.

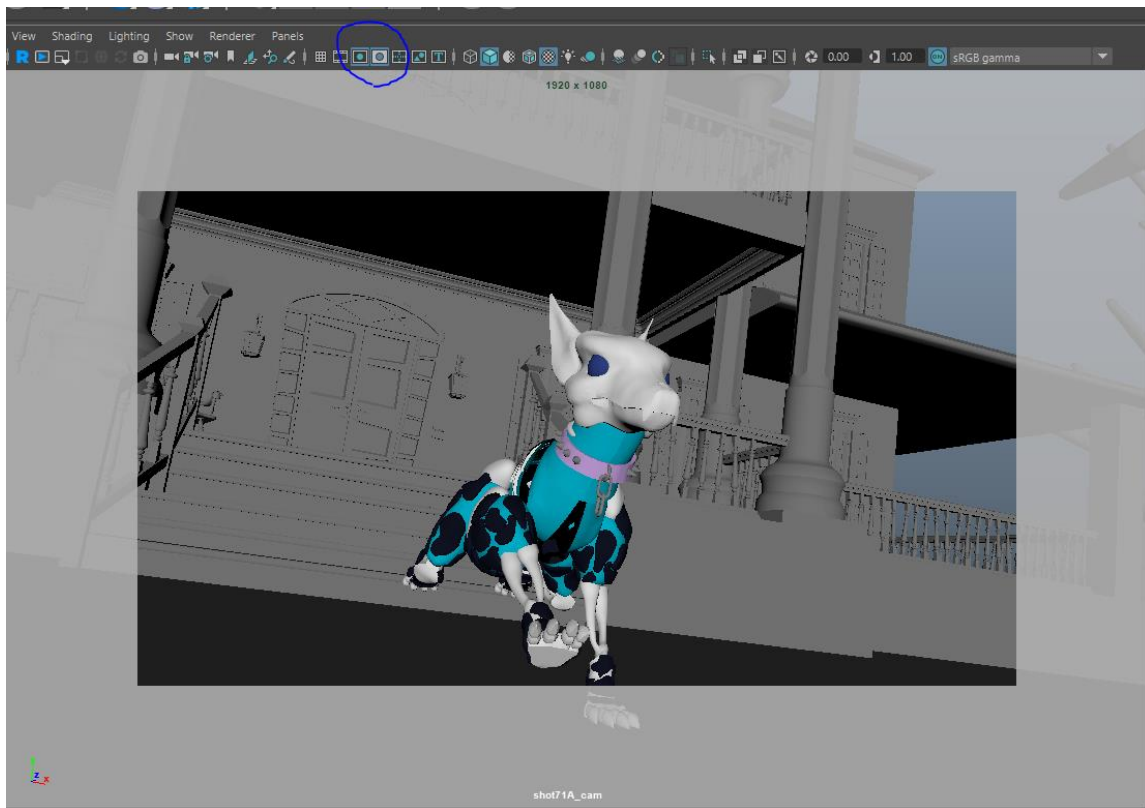
I highly recommend playblasting all shots instead of playblasting your whole sequence as it will be much easier for your editor to adjust timing or cutting the ends of shots.

I put together a guide for my team so that they would playblast their sequence through the sequencer so that I would have their shots playblast individually and with the ornaments enabled so we could see what camera they used.

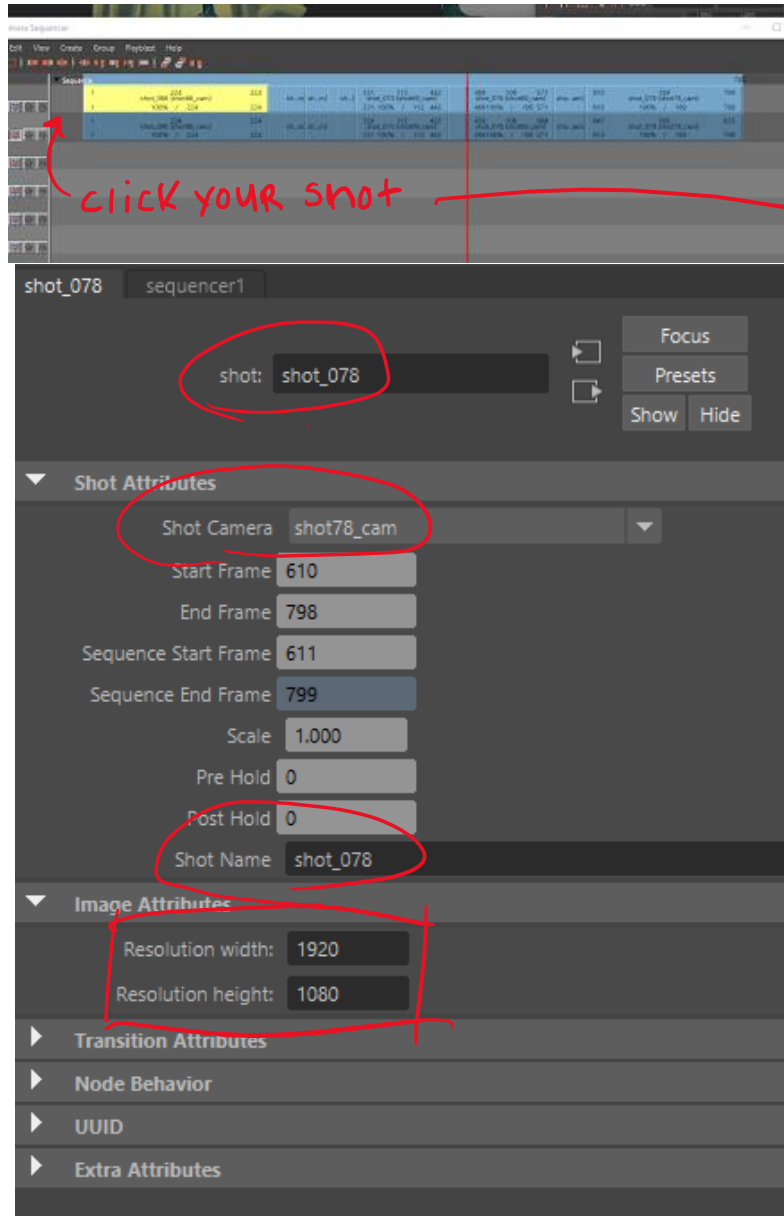
Step By Step Guide to Playblast Properly

1. **Open your file. Play through it** through the sequencer or your ubercam to make sure that everything looks okay! If you hid geometry while animating, make sure it is visible again. If you have reference footage, make sure it is hidden. In case you forgot, the sequencer can be found under Windows -> Animation Editors -> Camera Sequencer **If there is a film gate, please turn it off with these buttons at the top so that it goes away.**

(note*: when you are working with layout, you should always look at your shots the the film gate up when setting up your cameras so that you can see what area is safe but remember to turn it off when you playblast!)

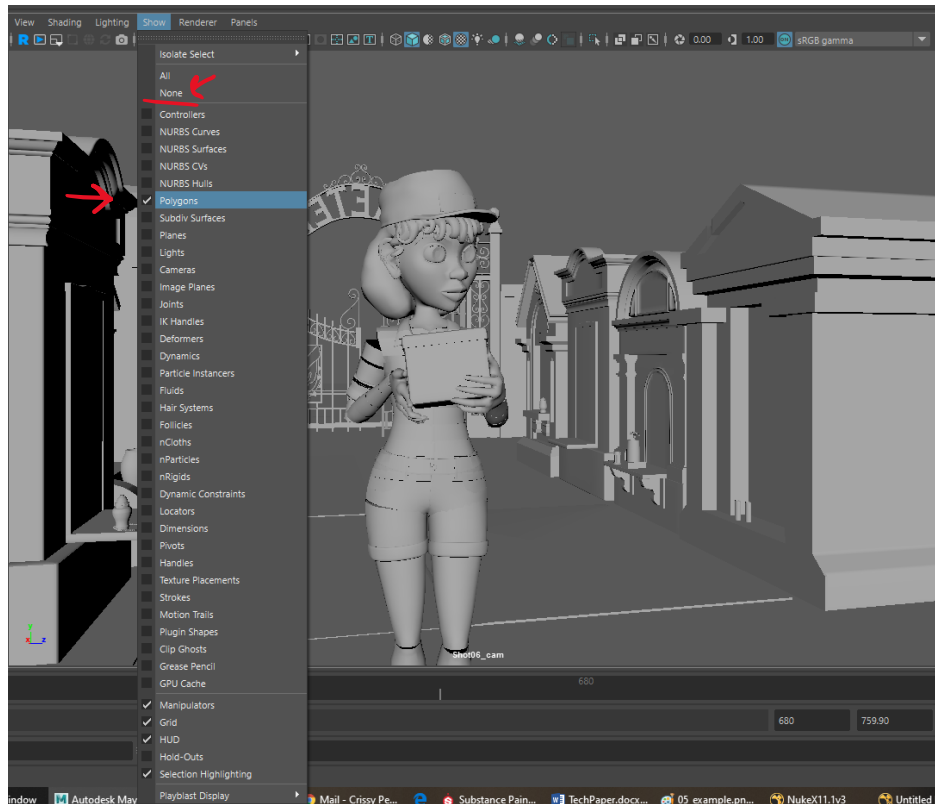


2. **Check your Resolution/Naming Conventions for your shots!** Some of the newly created sequences may have had their resolution changed back to default, which is a weird and wrong resolution. To check this, click each shot in your sequencer and go to your attribute editor and make sure that they are named properly (consistent naming conventions save us A LOT of time in the back end, if you there are inconsistencies ask or check the shot list!) and that your resolution is set to 1920 x 1080 in your Image Attributes tab.

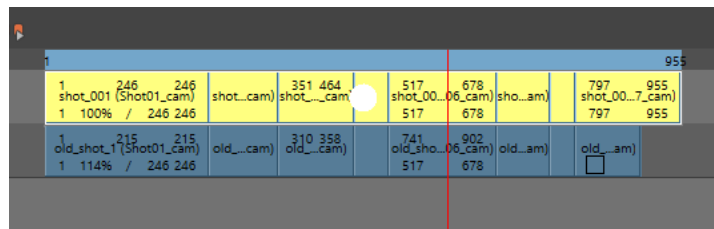


3. Next **make sure your Caps Lock is OFF** so that it doesn't playblast to the world that your caps lock is on (it will show up at the top of the playblast lol)

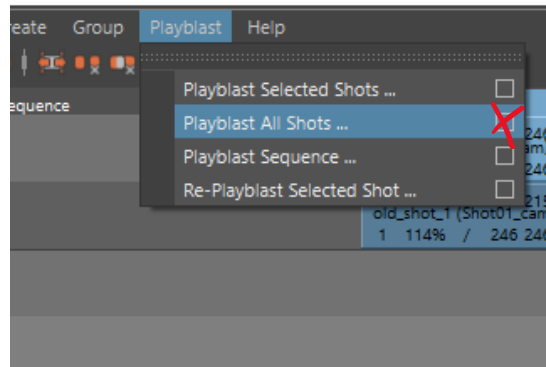
4. We don't want to see your nurbs curves, only your polys! **Go to Show in your viewport and make sure that ONLY POLYGONS is selected.** Also take this time to make sure you aren't selecting any geometry or anything visible in the scene.



5. Time to playblast. For editing sake, it is easiest if you playblast your sequence shot by shot so they can be adjusted later. **From your camera sequencer, select your sequence.**

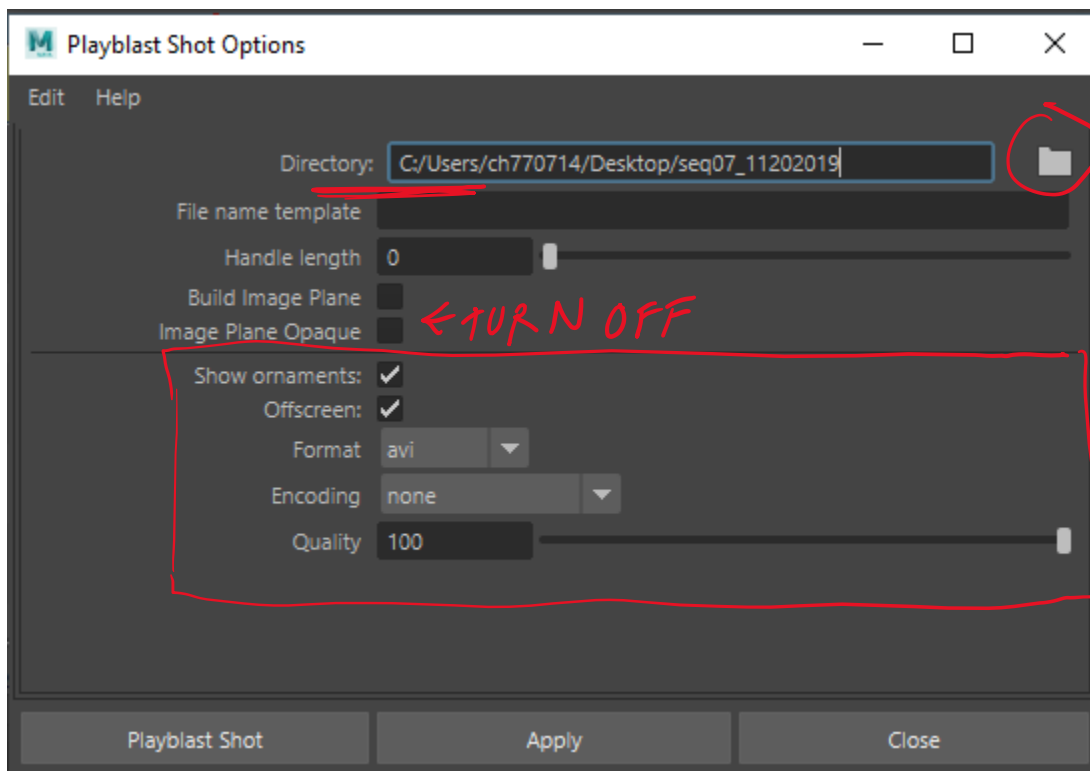


6. With all your shots selected (just the ones you want to playblast, not the old locked ones beneath!), go to **Playblast -> Playblast selected shots**.



7. A Playblast Shot Options box will appear. Set **your directory to a folder in your project**. It will dump each shot into it so try to have a new one for each pass of animation (i suggest naming the folder the date of the pass). Then turn off build image plane and image plane opaque (this might already be done, but refer to my image for the correct settings)

8. Make sure **show ornaments is ON** and your format is set to **avi**, and your quality is at **100**.



9. Then **press apply or playblast shot**. They should all go into your directory folder. Check to make sure that they playblasted properly by going to the folder and opening your view pane and selecting content. It will show your files like this:

The screenshot shows a file explorer window with the following structure:

- Share pane:** View (selected)
- pane:** Extra large icons, Large icons, Medium icons, Small icons, List, Tiles
- pane:** Content (selected)
- Layout:** Sort by, Group by, Add columns, Size all columns to fit
- Current view:** Item check boxes, File name extensions, Hidden items, Hide selected items, Options
- Show/hide:**

The directory path is: Network > charanimsup > Classof2020 > Delivery > 06_EDIT_PremiereFiles > source_footage > EDIT_11222019

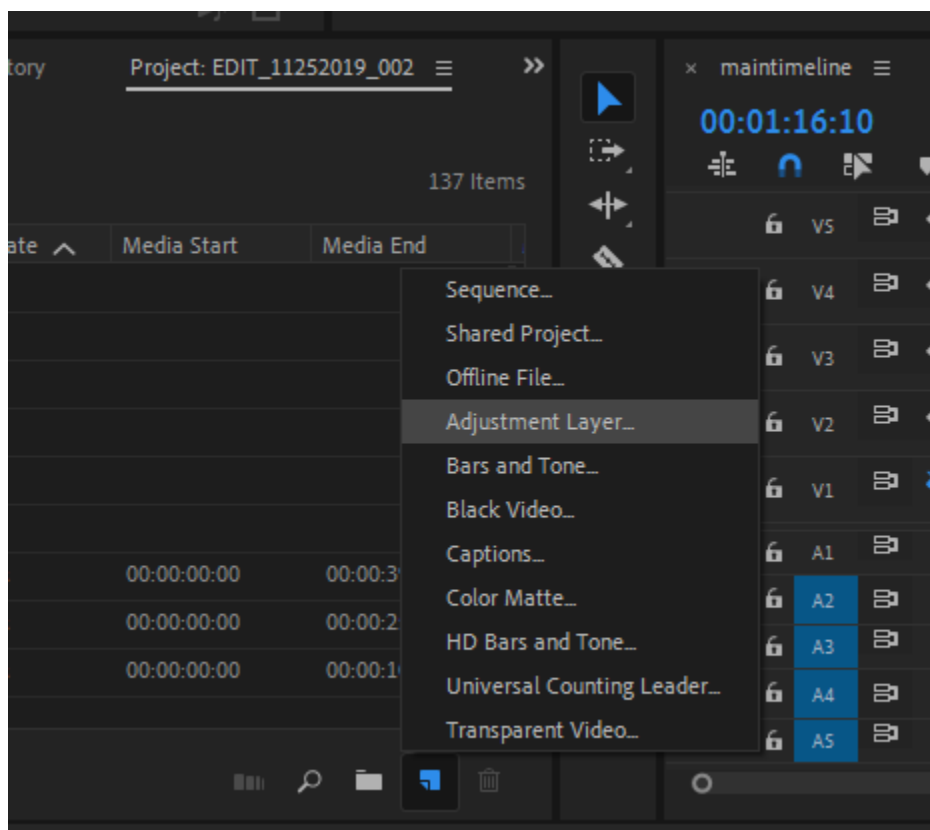
File Name	Length	Frame height	Frame width	Size	Date modified
shot_003.avi	00:00:10	1080	1920	1.42 GB	11/21/2019 5:01 PM
shot_003.avi	00:00:04	1080	1920	616 MB	11/21/2019 5:01 PM
shot_004.avi	00:00:04	1080	1920	676 MB	11/21/2019 5:01 PM
shot_005.avi	00:00:02	1080	1920	308 MB	11/21/2019 5:01 PM
shot_006.avi	00:00:06	1080	1920	961 MB	11/21/2019 5:01 PM
shot_007.avi	00:00:06	1080	1920	943 MB	11/21/2019 5:02 PM
shot_007a.avi	00:00:03	1080	1920	480 MB	11/21/2019 5:01 PM
shot_007b.avi	00:00:01	1080	1920	219 MB	11/21/2019 5:01 PM
shot_008.avi	00:00:00	1080	1920	136 MB	11/22/2019 12:53 AM
shot_008b.avi	00:00:00	1080	1920	118 MB	11/22/2019 12:56 AM
shot_008c.avi	00:00:03	1080	1920	539 MB	11/22/2019 12:56 AM
shot_009.avi	00:00:04	1080	1920	628 MB	11/22/2019 12:56 AM
shot_010.avi	00:00:03	1080	1920	462 MB	11/22/2019 12:56 AM
shot_011.avi		1080			11/22/2019 12:56 AM

If you are an editor and you are still reading this paper, you might be wanting to know how to label your shots in premiere. If your team has followed all the steps above, you should have gotten a nice collection of files that are in the correct aspect ratio and named properly. Make this an EXPECTATION from your team EVERY time so that you do not have to continuously fix it for them!

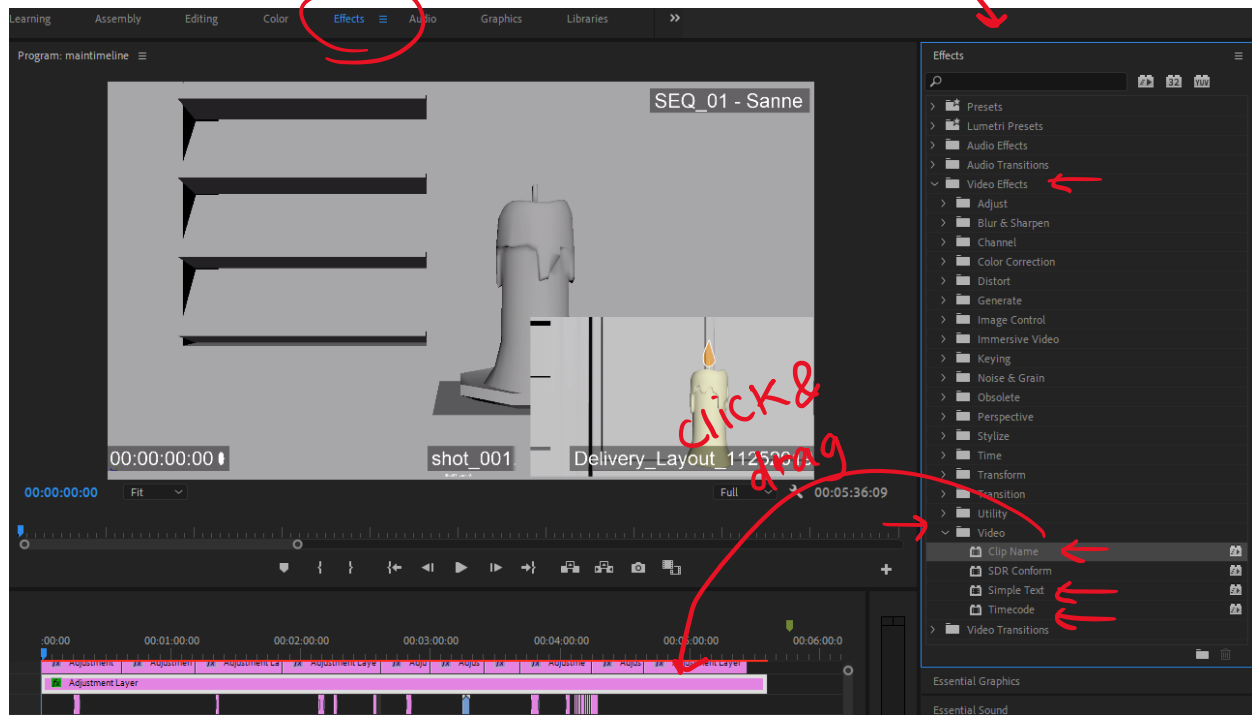
Labeling Your Shots in Premiere

Once you have brought all your shots into Premiere and edited them, you can get started putting the necessary bells and whistles on top such as the time code, the shot name, the name of the Edit, and perhaps the sequence number.

In premiere at the bottom of your window in the project bin, click the piece of paper and create a new adjustment layer. Make sure it is 1920 by 1080 with 24 fps and 16:9 aspect ratio. Drag that onto your timeline on the top video layer and extend it over the length of your short film.



Make sure you are on the Effects Workspace to grab your necessary effects (timecode, title, etc.)



When you put these onto your adjustment layer, you should see more options become available to you on the effect controls when you select your adjustment layer. You can close the motion and the opacity tabs to look at the different controls for Simple Text, Timecode, and Clip Name.

I use Simple Text to put the name and date of the edit. You can use position to put it where it where you want it!

I use the Timecode function to put a timecode! Make you are using the correct setting and having the timecode pull from the correct Source Track. For us, I set this to the adjustment layer so it does not reset after each shot.

Now for the Clip Name! Again, position it and make sure it is pulling from the correct Source Track. Make sure you set it to Right Justified so that the .avi or whatever doesn't bounce past your mask. Then create your mask by clicking the rectangle, checking the "Inverted" mask, and covering the .avi so you just have the shot_###. And Then you should have all your correctly named shots labeled!

The screenshot shows the Adobe Premiere Pro interface with the Effect Controls panel on the left. The panel is titled "Effect Controls" and has a menu icon. Below the title bar, there are tabs for "Lumetri Scopes", "Source: (no clips)", and "Audio Clip Mixer: maintimeline". The main area of the panel is divided into sections for different effects. The "Simple Text" effect is selected, and its properties are listed: Position (1678.2, 1019.5), Justification (Center), Size (10.0 %), and Opacity (40.0 %). The "Timecode" effect is also selected, and its properties are listed: Position (162.1, 1022.0), Size (10.0 %), Opacity (40.0 %), Field Symbol (checked), Format (SMPTE), Timecode Source (Generate), Time Display (24), Offset (0), Starting Timecode (00:00:00:00), Label Text (None), and Source Track (Video 7). The "Clip Name" effect is selected, and its properties are listed: Mask Path, Mask Feather (10.0), Mask Opacity (100.0 %), Mask Expansion (0.0), Inverted (checked), Position (1197.6, 1022.0), Justification (Right), Size (10.0 %), Opacity (40.0 %), Display (Sequence Clip Name), and Source Track (Video 2). Handwritten red annotations include: a red box around the "Effect Controls" title bar; a red arrow pointing to the "Simple Text" effect; a red arrow pointing to the "Timecode" effect; a red arrow pointing to the "Clip Name" effect; a red box around the "Inverted" checkbox; a red box around the "Right" justification dropdown; a red box around the "Mask (1)" section; and a red arrow pointing to the "Mask (1)" section with the text "CREATES MASK". A red asterisk is also present on the left side of the panel.

Effect Controls

Lumetri Scopes Source: (no clips) Audio Clip Mixer: maintimeline

Master * Adjustment Layer maintimeline * Clip Info

fx Motion

fx Opacity

fx Time Remapping

Speed 100.00%

fx Simple Text

Edit Text

Position 1678.2 1019.5

Justification Center

Size 10.0 %

Opacity 40.0 %

fx Timecode

Position 162.1 1022.0

Size 10.0 %

Opacity 40.0 %

Field Symbol

Format SMPTE

Timecode Source Generate

Time Display 24

Offset 0

Starting Timecode 00:00:00:00

Label Text None

Source Track Video 7

fx Clip Name

Mask (1)

Mask Path

Mask Feather 10.0

Mask Opacity 100.0 %

Mask Expansion 0.0

Inverted

Position 1197.6 1022.0

Justification Right

Size 10.0 %

Opacity 40.0 %

Display Sequence Clip Name

Source Track Video 2

00:04:09:17