

Depending on the stylization of your film, hand painted animation smears could contribute more to your stylistic approach. Now, there are ways to animate smears within Maya by manipulating the rig if it's set up to accomplish that. For Symfaunic, however, we wanted to push the painted aesthetic of our film, and decided to take this approach to our animation rather than using a standard motion blur.



Smear Frame used in Call of the Mountain

VS.



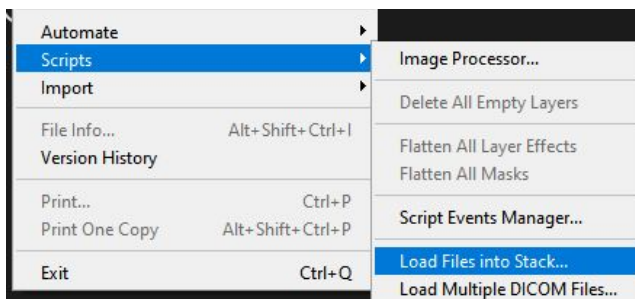
Motion Blur used in Spyro Reignited Trilogy

Important notes before beginning:

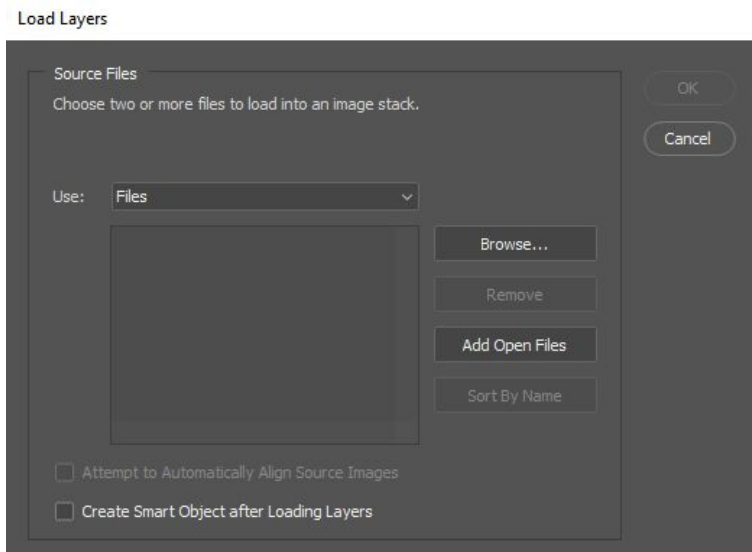
- Make sure that the files you intend to use for adding your smears are TIFFs, as Photoshop's "Load Files into Stack" script will not work with EXRs. Be sure to communicate this with either your rendering, lighting, or compositing teams and leads so that you can receive the appropriate files.
 - Decide whether the files you work on are pre- or post-compositing. On our film, we decided to paint the smears post-compositing, as the lighting and color correction was already established.
- Make sure the files you receive have an established naming convention. For Symfaunic, our exported render files were labeled `SEQ_##_GROUP_X_SHOT_#_COMP_####`. When it comes time to export from Photoshop, make sure that your files follow the naming convention your film uses.

Let's begin!

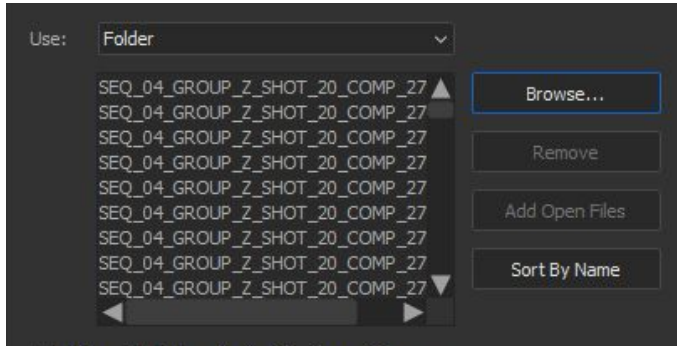
1. Open Photoshop
2. At the top of your window, go to **File > Scripts > Load Files Into Stack**



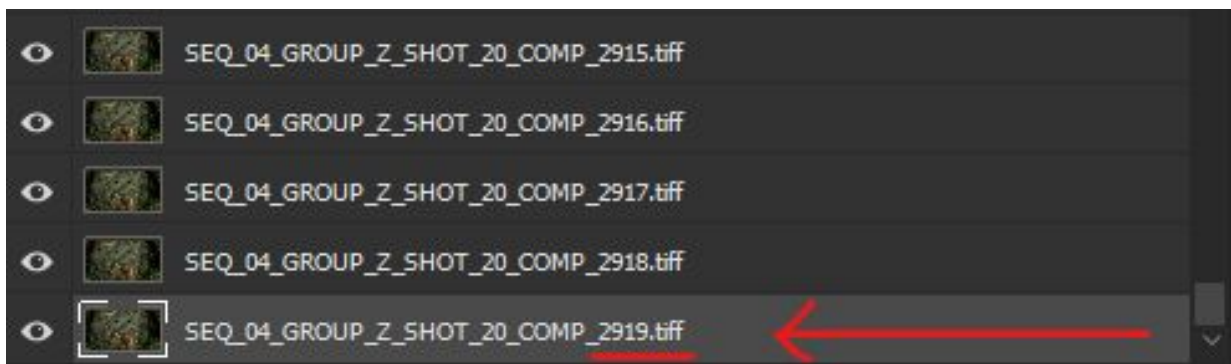
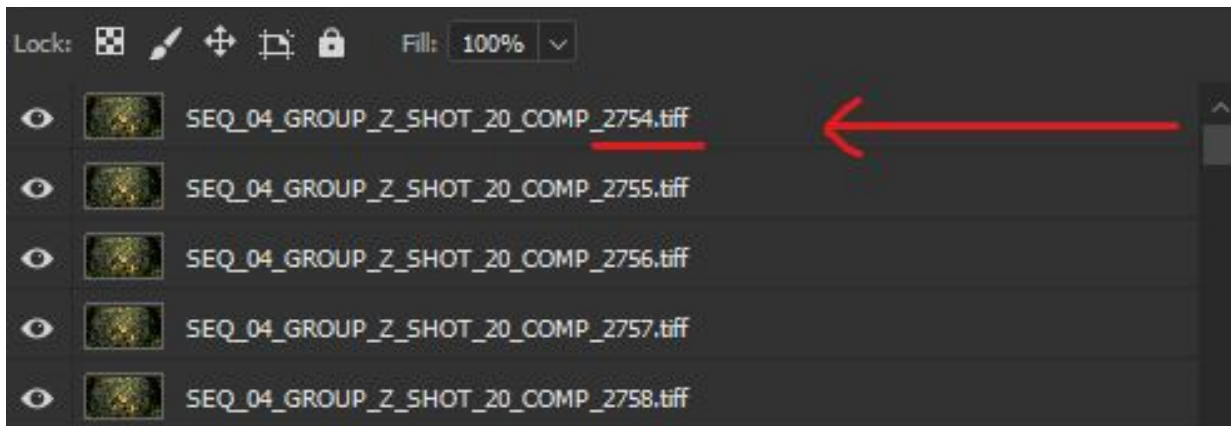
The *Load Layers* window should then appear.



- Most likely, you received your files in a folder. In the **Use** drop down menu, change your selection from **Files to Folder**. Once you have that, click **Browse** and search for the folder that contains all of your files. It will take a moment for Photoshop to load the contents of the folder, but once it's done your files should then appear in the once empty grey box in the middle of the window. Click OK.



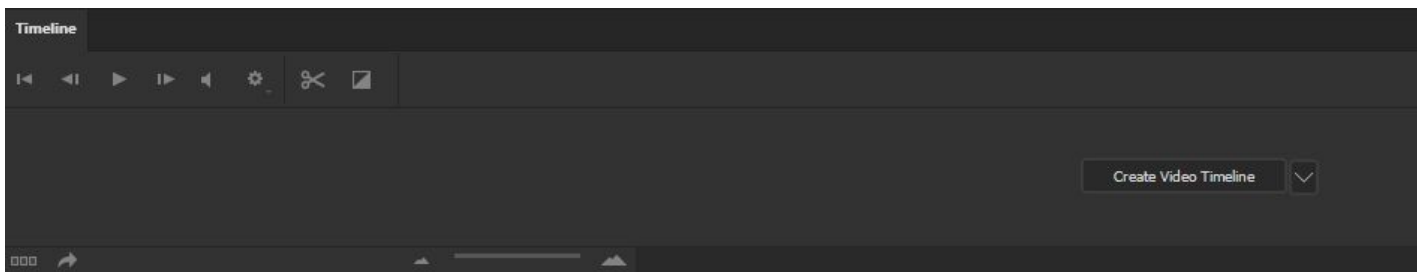
- All of your chosen files should now begin to load into the layers tab. Once they are all uploaded, you may notice that your layers were uploaded in reverse. Double check to see if that's the case. If it is, what this means is that the *last file in your upload* will be your first layer, and the *first file in your upload* will be your last layer.



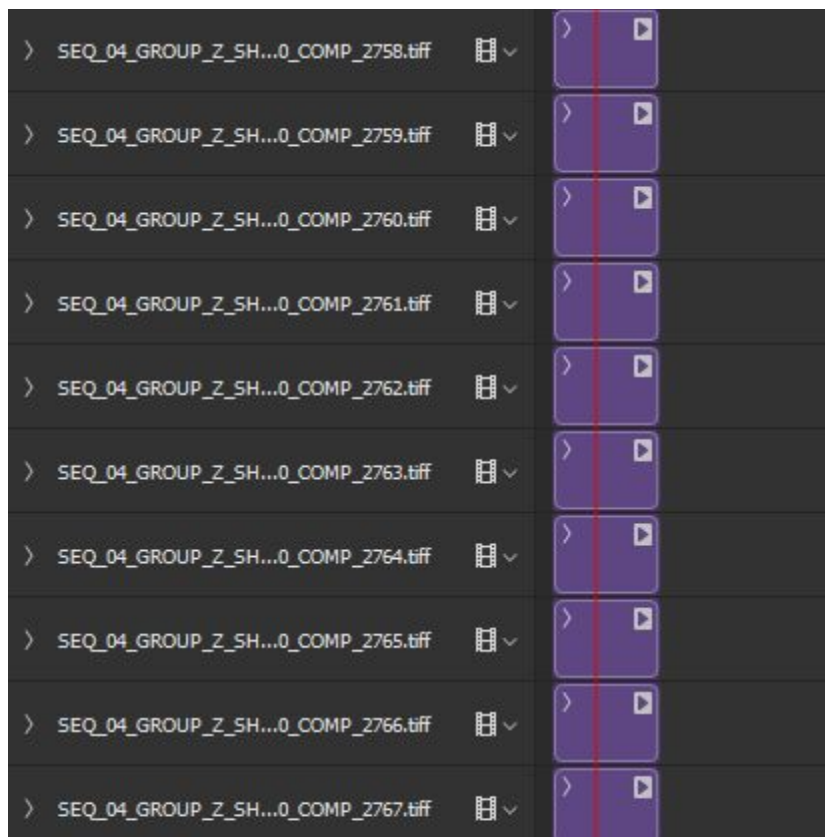
This is a problem because when we load these files into our timeline and use the *New Video Group from Clips* action, it will cause our animation to be ordered in reverse.


To correct this, select all of your layers and then go into **Layer > Arrange > Reverse**. Now your layers will be in the right order!

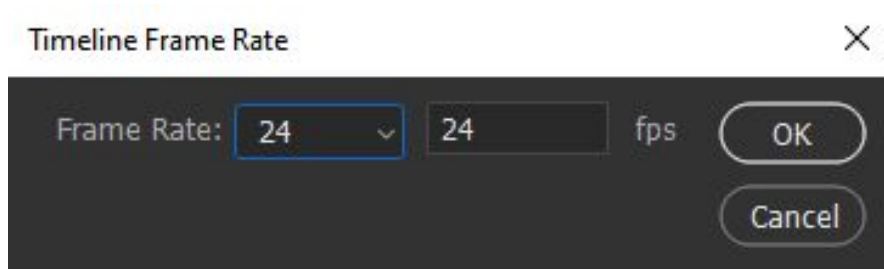
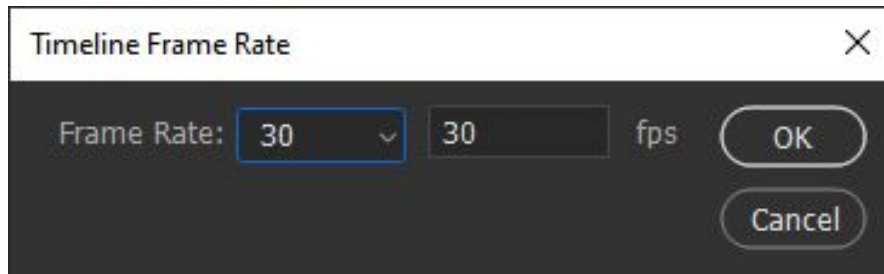
5. Go to **Window > Timeline** to open up your animation timeline. What should appear is the Video Timeline panel. Unlike the Frame by Frame panel, the Video Timeline panel will allow us to effectively use layers to add smears on top of the frames without affecting the rest of the animation.



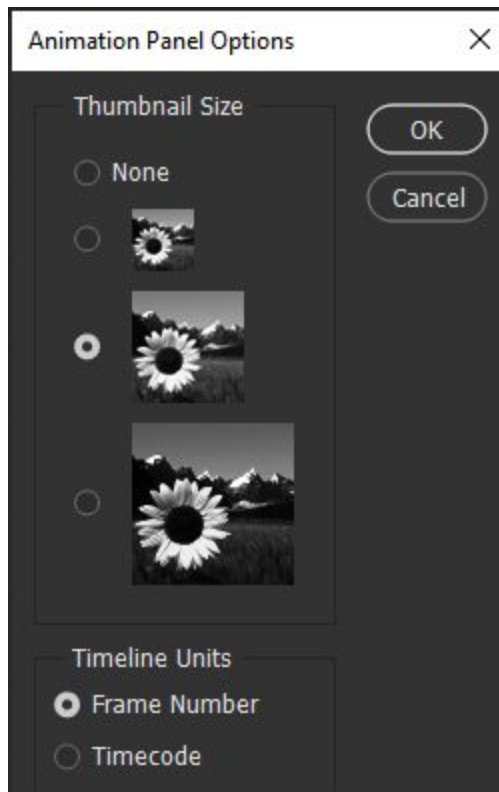
Click *Create Video Timeline*. This will load all of your layers into the timeline.



6. Before we begin, we need to make sure our timeline settings are correct. Click the Timeline settings icon  and go to *Set Timeline Frame Rate*. The default setting will be at 30 FPS. Change this to reflect the FPS you will be using for your film (typically you would be doing this at 24 FPS). Then click OK.



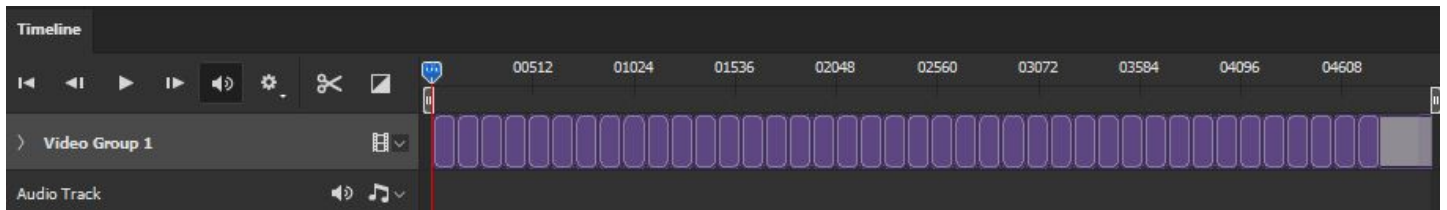
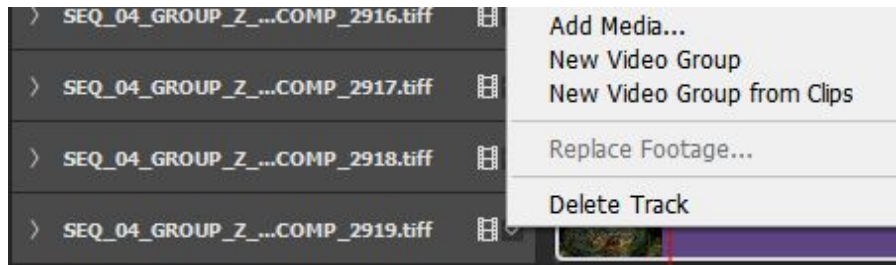
7. Next, you will want to go into *Panel Options*



You can change the thumbnail size to suit your preference, but under *Timeline Units*, make sure that it's set to frame number. Once that's all set, click OK.

8. Right now, all of your layers will be stacked on top of each other in the timeline under different video groups. Rather than painstakingly selecting and moving your layers one-by-one, select all of your layers in the timeline window. Then, using the drop down arrow on the last video group you have selected, select *New Video Group from Clips*. This will load all of your layers

into one video group! In the *Layers* panel, rename the video group the “Render Frames”

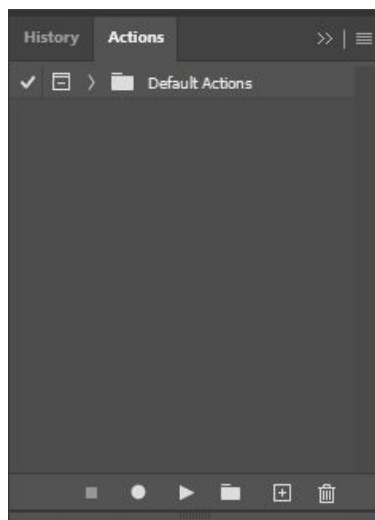


You have probably already noticed that when layers get loaded into the Video Timeline, they’re all at the same length of 120 frames. To resize these frames, you would have to go into each frame and drag the panel until it’s the correct frame size. This can get to be quite frustrating and tedious.

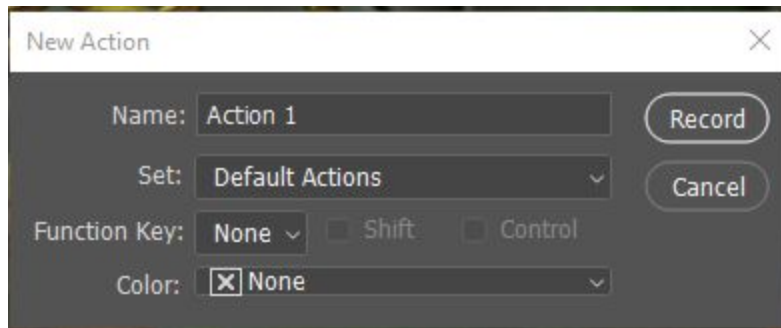
Since Photoshop does not have a script, I created a shortcut using Photoshop’s Action menu to make this process easier. **Before you create the action, however, make sure to have a frame in your timeline already selected.**

Creating an Action

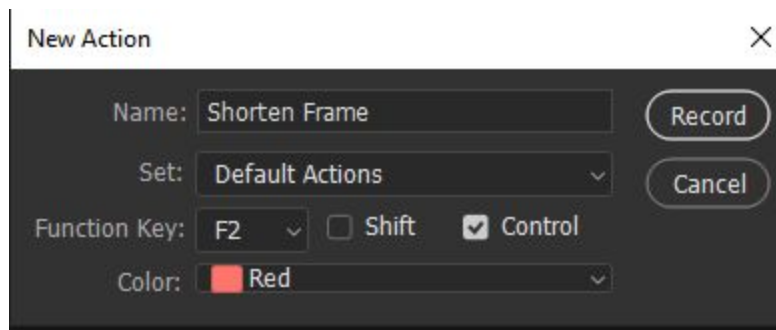
9. Go to **Windows > Actions** (or ALT + F9) to open the Actions panel.



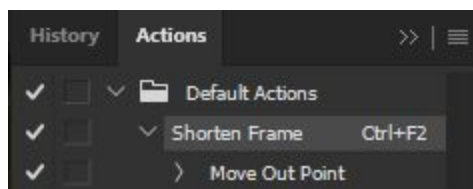
10. Click the *Create New Action* icon . The New Action window should appear



- a. Rename the action how you like. I will be naming it “Shorten Frame”
- b. Choose a shortcut key that will work with any custom keybinds you might possibly have. I used CTRL + F2. I also set a color to make it easier to find in the Action panel. Once you have that set up, click Record.

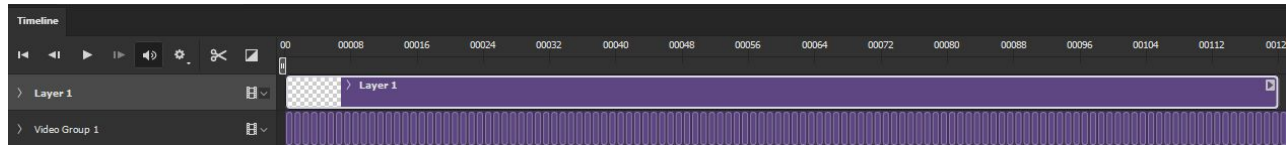


11. Once you click *Record*, Photoshop will be tracking your actions within the program. With the frame you already previously had selected, drag the end of the panel to shorten it to be 1 frame. To stop the recording, click the stop button located in the Action panel. Your action will now be recorded.

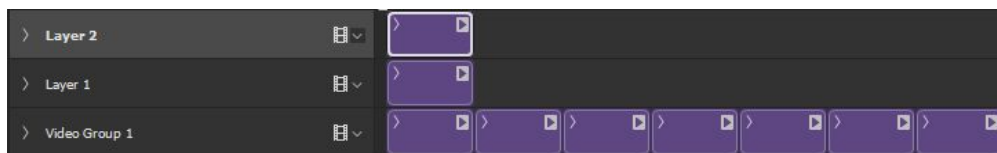


12. Go through frames and use your newly made action to set them all to the correct length. *Unfortunately, the action will not work if you have all your layers selected at once, and you will have to click through each frame individually.* This is mostly because of the restrictions of Photoshop. You may also have to use the action more than once for a frame depending on its length.

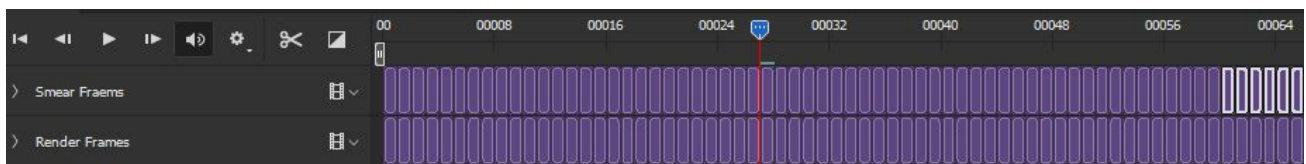
13. Scrub through your animation to plan where you will need to add smear frames. It would help to make a note of what frames you will be adding smears to.
14. Create a new layer in the *Layer* panel outside of the Render Frames video group. This new layer will appear at the end of your timeline. Select it and drag it to the beginning of your timeline.



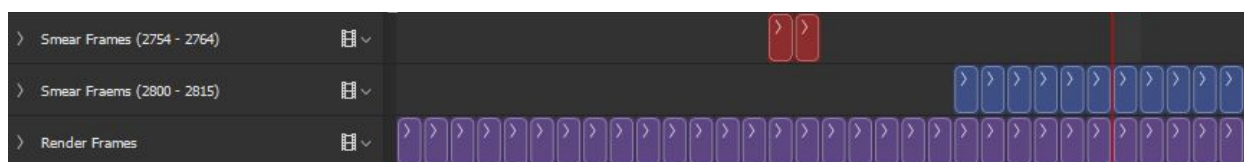
15. Shorten your new layer to the appropriate frame length.
16. Select your new layer, then copy and paste it. This will create a new layer/frame the same above your original selected frame.



17. Drag the pasted frame next to your original frame to create a new video group. Now when you copy and paste your blank layer, it will paste into your video group. I like to paste multiple blank layers so that I don't have to go through the process of shortening every new layer I create with the layer panel.




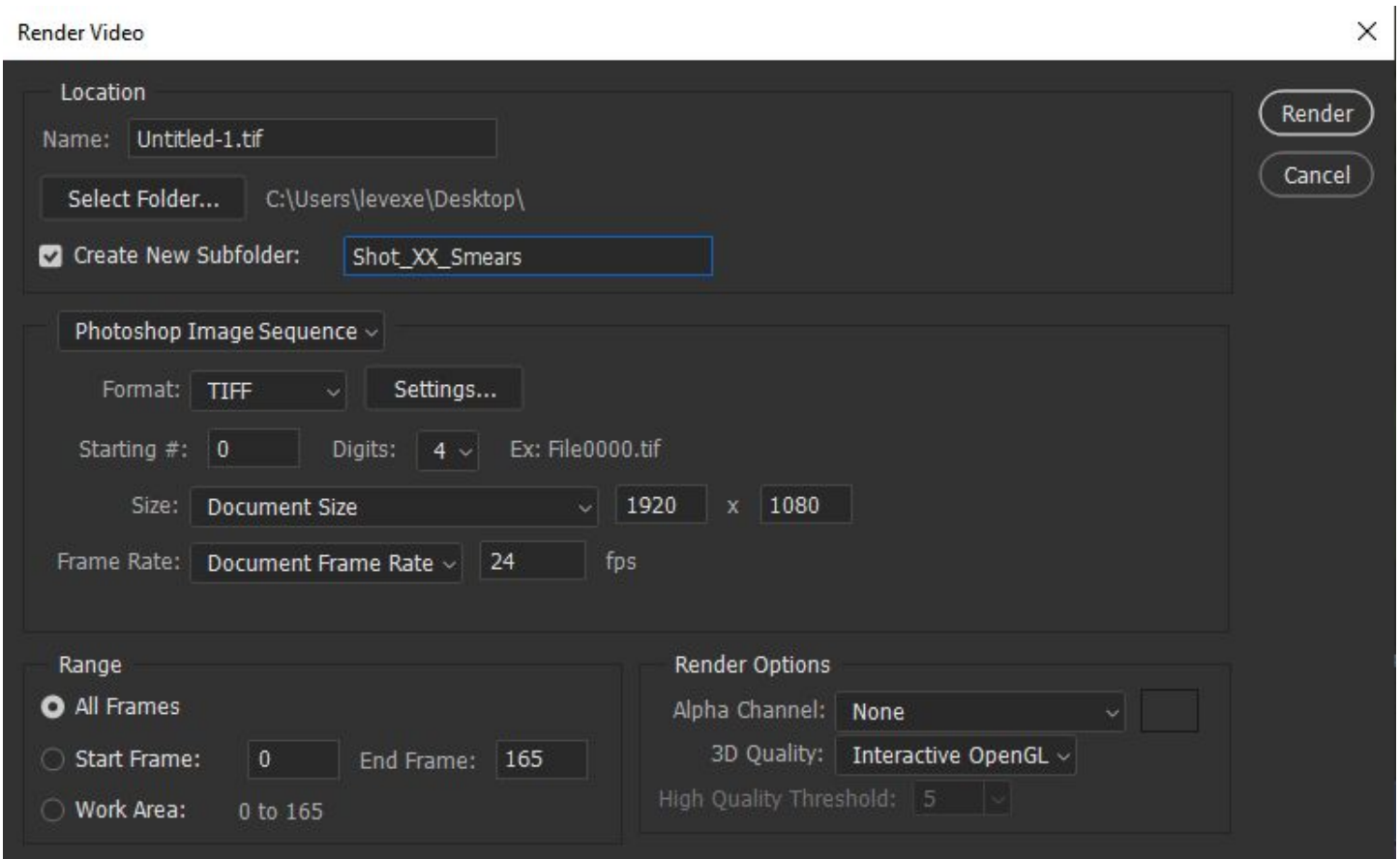
18. Feel free to make new video groups for different portions of the animation that will need smear frames to help with organization. With the Video timeline, you can rearrange your frames however you need!



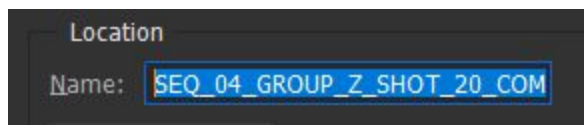
Now that you have everything set up, you can now begin to draw/paint your smears!

Exporting

1. To export, click Render Video icon  at bottom left of timeline window. This will open the Render Video window



19. In the *Name*: input, rename your file to match that of the original TIFF exports, but leave out the number space. Your file should then be named something similar to:
SEQ_##_GROUP_X_SHOT_##_COMP_



20. Click *Select Folder...* then make a new folder in a directory of your choice (Desktop, Pictures, etc) to export your files to. Name this folder SHOT_##_Smears

21. By default, the *Starting #* is set to 0. Renumber this to match the first file in your animation. For example, my first file had the number 2754



22. Double check to make sure that all of your settings are correct, such as checking your FPS, the file format, and the video range.
23. Once you have everything set, click Render. Once done rendering, you can zip the folder containing your smear frames and set it back to your Compositing team!

