

# ANIMATION WORKFLOW TECH PAPER

Alright listen up because this ride's about to get WILD

This is an all exclusive one-way trip to organization and SUCCESS for our animation

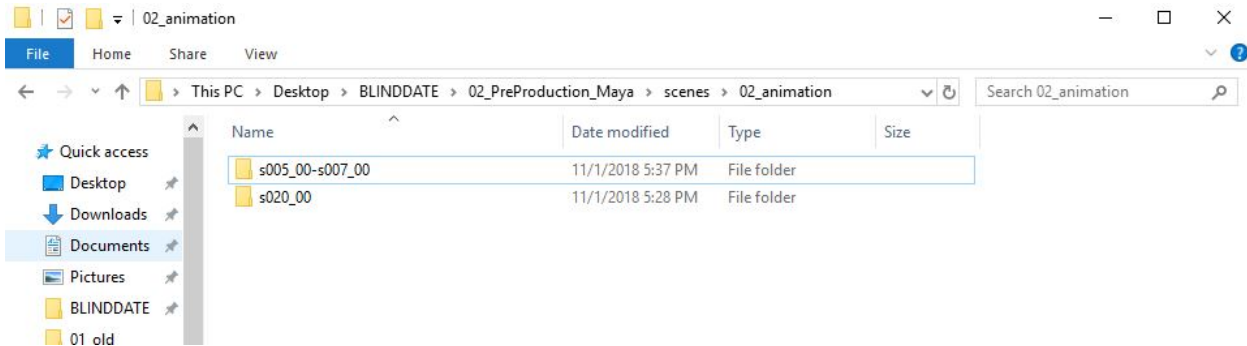
## STEP BY STEP

- Start by checking the Shot List
  - It is found in the drive (not server) under 01\_Development -> 03\_Documents -> 03\_shotlist -> Shot List
  - I would bookmark the shot list so you can quickly reference it often
  - This gives you information you NEED to know before you start animating
    - Difficulty: How hard is this shot ayy?
    - Type of animation:
      - Subtle: Any shot that doesn't involve full body movement
      - Action: Any shot that involves full body movement
      - Snake Only: Close up of the snakes, snake only shots
      - No animation: There is nothing that moves really
      - Prop only: Only a prop is animated, no characters
    - Assign Together
      - These shots are color coated. If you take on one, you most likely have to do the other ones too because they're a continuous action, we're just cutting cameras in the middle of it.
      - It's also easier for the same person to do those certain shots because you already have the character posed from the previous shot, and don't have to waste time posing from scratch again.
      - The ones without color can be animated individually
    - Props
      - What props if any are animated in the shot. I may have accidentally missed some, so it is up to you to double check and make sure that everything that is supposed to be animated in the shot is.
    - Editing Notes
      - Important for transitions between shots. I tried to put as many instructions as I could about how shots come together with animation, where characters exits frame, cuts in action, etc.
      - ALWAYS keep in mind the shot before and after.

- Our current layout reel has a pretty accurate representation of how edits come together with the rough animation, so please reference that.
  - Yeh, so the shot list can help you guys chooses what shot you want to do, and what it requires
- THE TASK REPORT
  - Located where the rest of the task reports are
  - Once you're animating a shot, or a set of shots, place your name in the animator slot
  - There's a bunch of stuff but skip over to the Animation Stage and Animation Status
  - Animation Stage
    - Take Reference Video
    - Stepping
    - In Between
    - Clean up
  - Animation Status
    - During each stage, you'll set Ready to be Checked for the animation leads to check your stuff, and approve.
  - In Layout
    - As you do renditions of your animated shot, and playblast them for critiques and dallies, you'll change it to "Add to Reel", and once Eileen puts it in the reel she'll change it to "In Reel"
  - Directors approval
    - Once Darlene approves we change it up
  - Animation Exported
    - ONLY once Darlene approves the animation, we will export the animation to put into the master sequence files. Instructions on this later

- Before you begin animating make sure you follow this sequence of events
  - Reference the documentation that animation team made for the shot you are animating
    - Behavioral Shotlist
      - <https://docs.google.com/document/d/1LeKD6jmIypYCr05cnHa0d6ZOyys9dECmyj1a-71KZXo/edit>
      - This lets you know what the emotions, objectives, and actions of each character should be.
      - This also lets you know when to definitely use stretchiness (green text) or how Theresa should be moving (purple text)
    - Animation powerpoint
      - [https://drive.google.com/open?id=19kFDe8snVLxzVnjobXXncHDmM447Bg-7NFmNxw\\_xSCQ](https://drive.google.com/open?id=19kFDe8snVLxzVnjobXXncHDmM447Bg-7NFmNxw_xSCQ)
      - This should remind you how the characters are supposed to move
  - Pre-visualize the shot (story board, write it down, do whatever you need to do to have a general idea of what is going on)
  - Shoot reference video based on your pre\_viz
  - Take your reference video into premiere, and edit the parts you like together
    - Get some screenshots of specific poses
    - Cut the video together with the frame count of the shot in mind to get a sense of timing
    - Draw over some of the poses to get more exaggerated poses that aren't possible in real life.
  - In general have a clear idea of what you want the shot to look like BEFORE you animate. Don't make it up as you go.

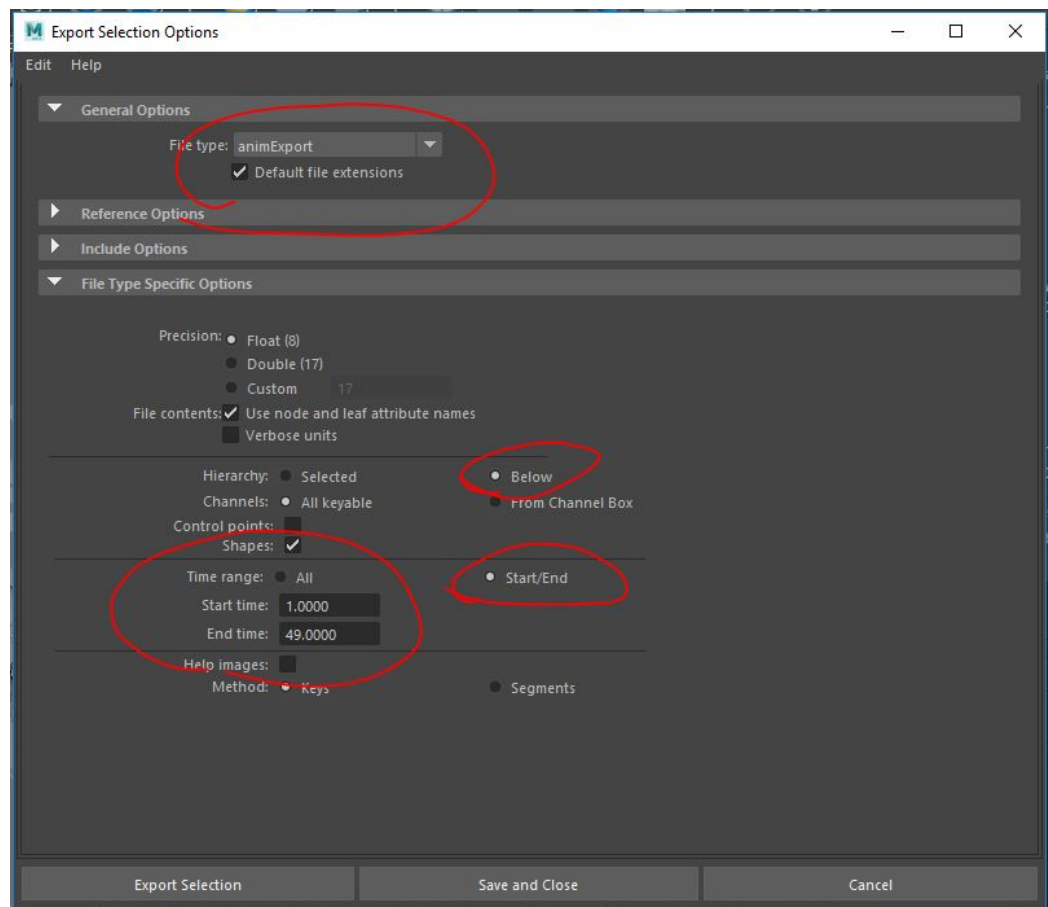
- ALRIGHT, now we take things into MAYA
  - Set your project please.
- Make sure everything you are referencing is in the correct place, and try to have the latest versions of things (the rigs, environment, etc)
  - Environment
    - should be under PreProduction\_Maya -> Assets -> Models -> Environments -> (NOT ENVIRONMENTSTOBECHECKED, NEVER REFERENCE FROM A TO BE CHECKED FOLDER)
  - Characters
    - should be under PreProduction\_Maya -> Assets -> Rigging -> Characters ->
  - Cameras
    - These are imported and not referenced, make sure to copy paste the latest versions from the server.
    - should be under PreProduction\_Maya -> Assets -> Cameras
- Setting up the Animation working file
  - Go to PreProduction -> scenes -> 02\_animation
  - This is where we'll be putting our animation working files
  - This should all be in the Blindate version on your computer not the server
  - Make a new folder for the shot you're working on, OR set of shots.



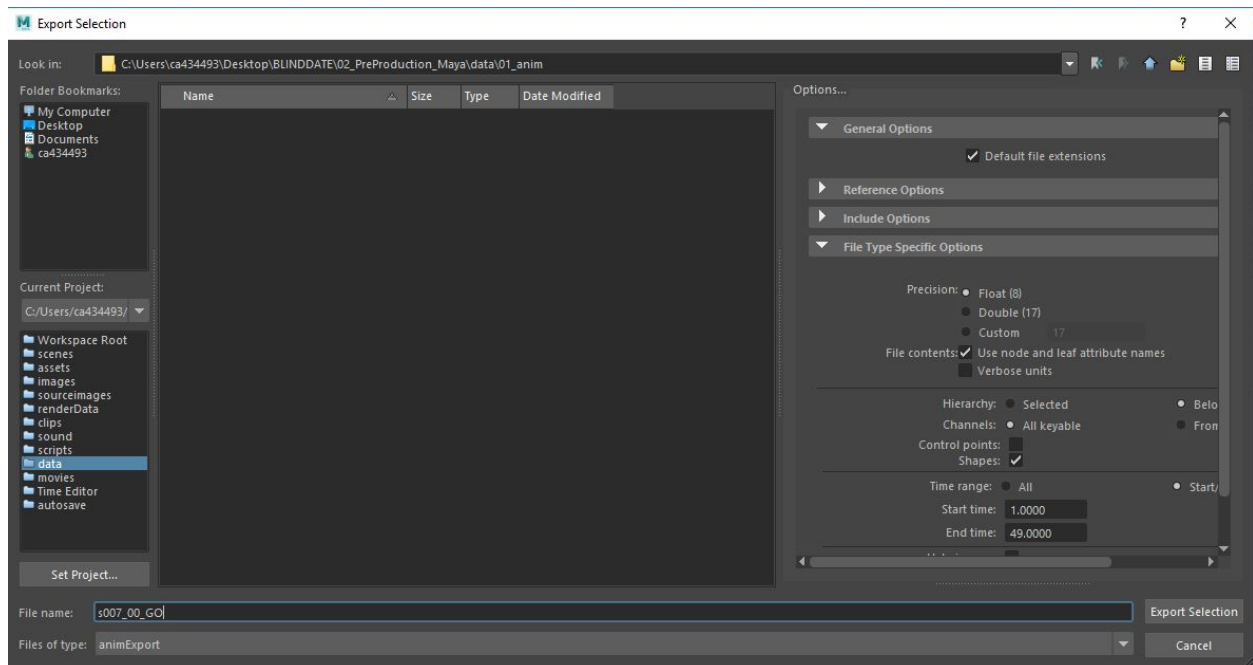
- Create a new file, and save it in the folder you created. Maybe something like s020\_00\_v001 or something so you can keep track of the versions you have.
- I personally add footnotes as I save as, so that I understand what that file was. Like s020\_00v006\_SteppedAnimation
- SAVE AS your file before you reference anything in. We were having trouble with referencing things first into an untitled file and not being able to save
- Reference in your Environment
- Reference in your Character
- Reference in any props you're animating
- IMPORT the Camera / cameras
- Set the cameras into a camera sequencer if you're doing multiple shots

- We are making a button so that you can select ALL the curves of a character in one go, because some of the curves are hidden, like the FKIK or Gordon's hat, snakes, etc
  - Place the ALL ANIM where you want the character to be generally placed.
  - Before you move anything else key ALL the curves (even the hidden ones) at -10
  - Set the frame range based on the shot(s) you're doing
    - Frame count can be found in the shot list
- 
- ANIMATE the thing
    - First pose key poses and step the animation
      - Run it by Animation Leads
    - Add In between poses
      - Run it by Animation Leads
    - Clean up
      - Run it by Animation Leads
    - Get Darlene to approve your shot
      - Once Darlene approves have her sign the signature notebook please
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- Anim EXPORT/IMPORT
    - First, select ALL the keys in your character (again we're gonna make a button for this)
    - Set a key at frame 1 and at the end the shot.
      - So shot 003\_00 is 49 frames long, so I would set keys at frames 1 and 49
      - If I'm doing a SET of shots it really depends on whether your shots are sequential or not. Most of them are. But I would still have keys at the end of each shot in case we tweak the pose slightly to cheat the camera on the next shot, even though it's all one continuous animation
      - For example, lets say I'm doing shots 017\_00 , 018\_00, and 019\_00
        - Shot 017\_00 is 96 frames long
        - Shot 018\_00 is 250 frames long
        - Shot 019\_00 is 72 frames long
        - I'm animating all these shots in one maya file, because it's a continuous action.
        - So my maya file would be  $96+250+72= 418$  frames long

- I would place keys on all the Theresa curves on frames 1, 96, 97, 346, 347, and 418. At the first and last frame of each shot.
- This way, if Theresa is walking at the end of shot 17, but she's not quite there to get in frame for shot 18, we shift her position between frames 96 and 97, where the cut happens. Almost like a stepped animation.
- This also lets us export the animation for each shot separately.
  - Do the same for all the curves in props
- We will be exporting animation for each individual character and prop
- Go to Windows -> Settings/Preferences -> Plug-in Manager
  - look for animImportExport.mll
  - check the Loaded and Auto load boxes
  - Press close
  - This plug in is not automatically loaded into Maya and you need it to be able to export animation
- Instructions for characters
  - Select the all\_anim for the character
  - Go to File -> Export Selection (click on the option box)
  - Make sure your settings match mine.



- We are exporting animations per shot, so set the time range to the appropriate amount based on what I said earlier about multiple shots in one maya file.
- So based on the previous example if I were doing shot 018\_00 I would set start time to 97 and end time to 346
- Click Export Selection
- Save your animation with the following naming convention
- s(shotNumber)\_(whatisBeingAnimated)
- So lets say we're exporting Gordon from shot 7, it would be called s007\_00\_GO
- Save it in the Data section, in a folder called 01\_anim
- The file will be saved as a .anim file



- Hooray you exported an animation which you can move to any referenced rig in any file.
- Props that are constrained work a bit differently
  - Since props are constrained to follow the action of something, exporting their data won't export the constrain data that is being placed on them since there are no actual key data to place into the .anim file
  - What we have to do is to convert all the constrain data into individual keys that we can export with the same method we used for the characters.
  - Select any curve or group node that is constrained to something else.
  - Go to the animation menu set -> Edit -> Keys -> Bake Simulation
    - This will turn the constrain data into individual keys on your prop

- ONLY do this on a different file and once the animation is final because it turns things into a bunch of keys that can't really be tweaked.
  - Follow the previously explain steps to export the animation.
- YAY THAT'S IT WE DID IT THANKS FOR READING ALL OF THIS GOOD LUCK ANIMATING I LOVE YOU