USD: basic notes

Chapters

- 1) How to do a variant
- 2) How to export data
- 3) export animation

1) How to do a variant

To add several geometry:

a component Geometry per model

a componentGeometryVariants to gather all components

To add several materials

a component material per variant

All the time

a material library with material path prefix /ASSET/mtl/ a component output and click on button saveToDisk to export the vairants (under export option, modify the type of export for exemple usd, usda..)

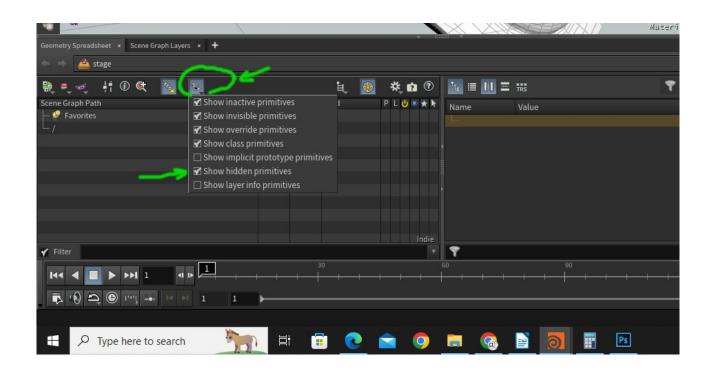
To check the variants or bring them back in scene

sublayer to load them all (when lucky in the solaris geometry spreadsheet there is an icon with a show hidden primitives menu that deploys all the variants)

setVariant node to choose which one will be in use

(either with variant set index and variant name index)

(or variant set mtl for example and then a variant name or variant set geo and variant name the variant set can be found on componentGeometryVariants (geo by default) and componentMaterial (mtl by default))



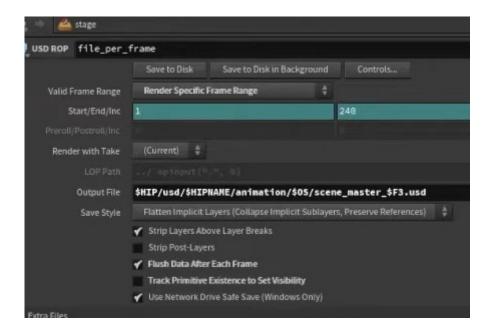
2) How to export data

add ConfigureLayer nodes after each step that should be saved on drive with option start new layer

put something in the comment like the file path so it is easy to know where the file comes from in heavy networks

3) export animation

Use a configure layer to write files out with option start new layer ticked and save path setting on the rop node to export frame by frame (by default usd is exporting entire scene frame range)

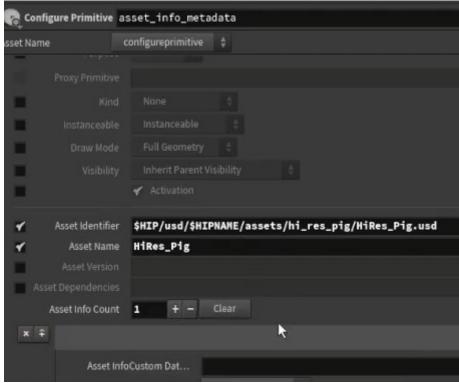


Then use usbStitchClip to stich clips together (usd stitch will request too much memory) usb stitch lists all the independent files,

switch from proxy to render and view the AOVs



before writing asset to disk add a primitive configure so it writes where the asset is coming from



add a configure layer to set up axis for example see in graph layer window if correctly set up

