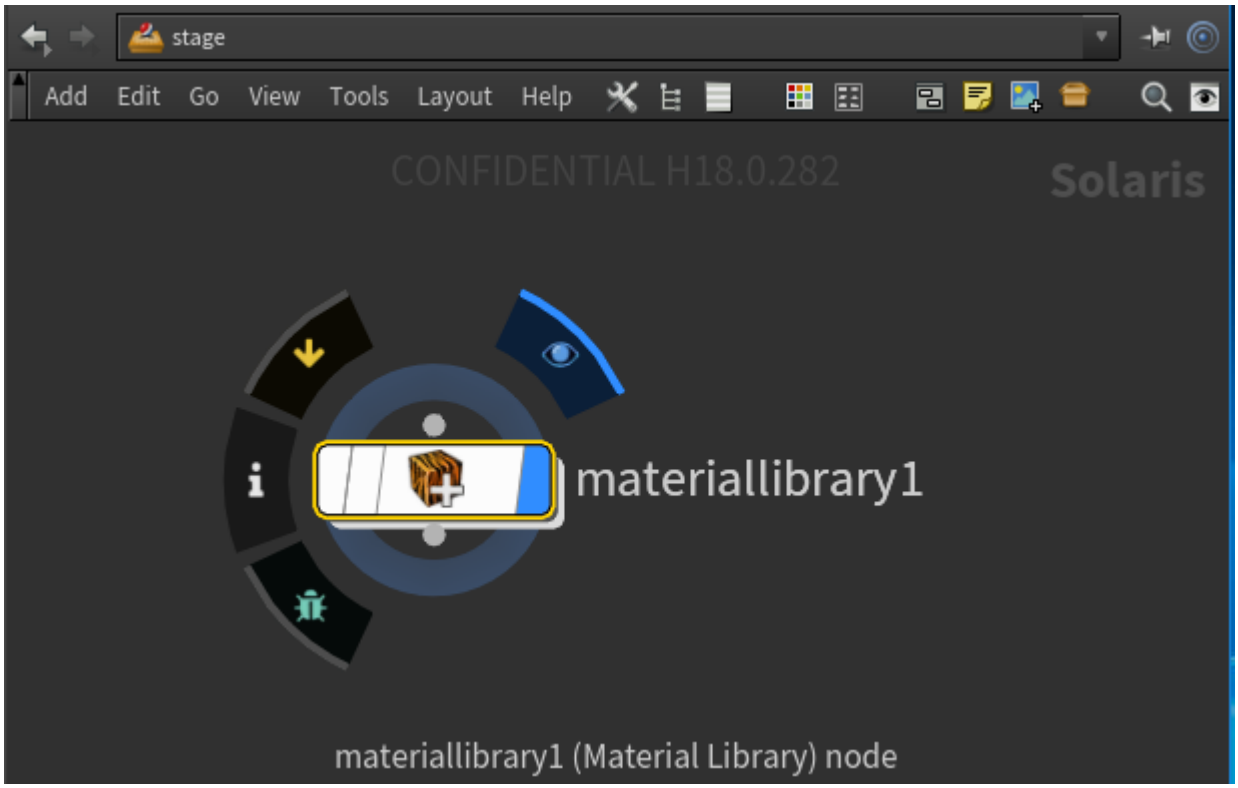
Creating a Material in Solaris

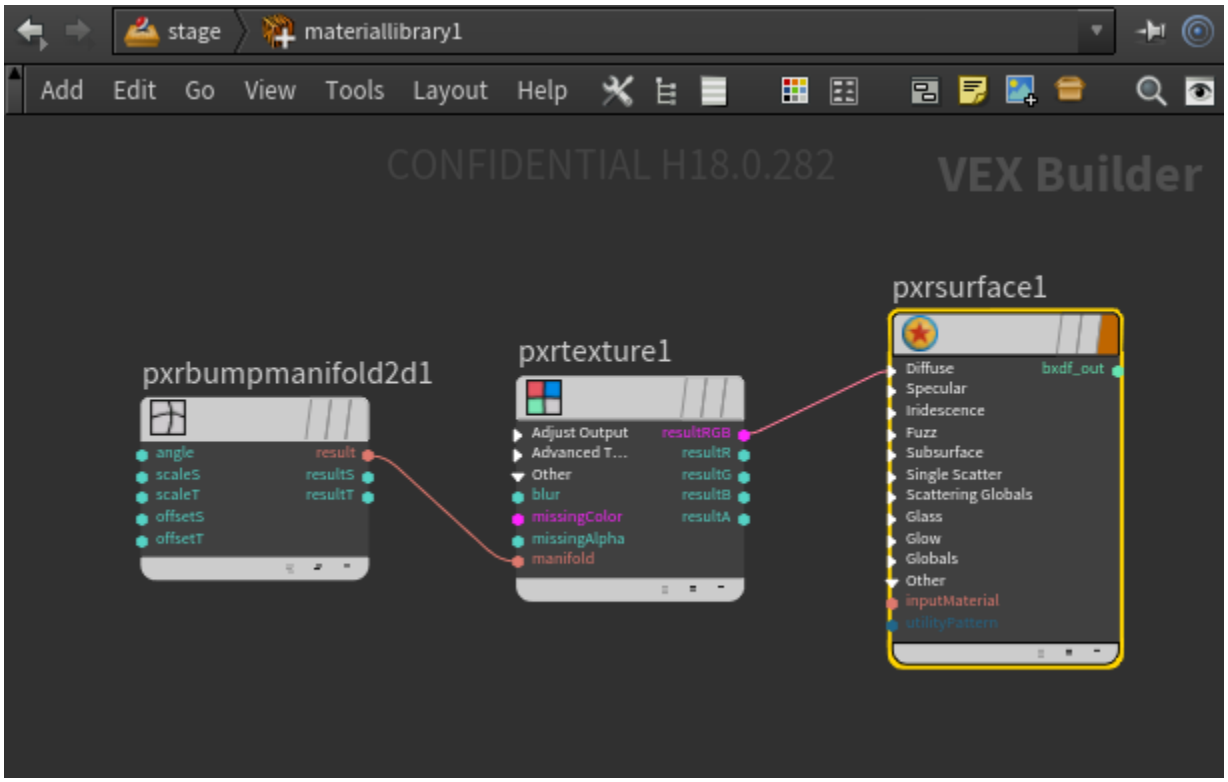
For more details on authoring materials in USD with LOPs, such as adding material references and variants, see LOPS tutorial 1. We will outline basic material workflow with *RenderMan* materials.

Create Material

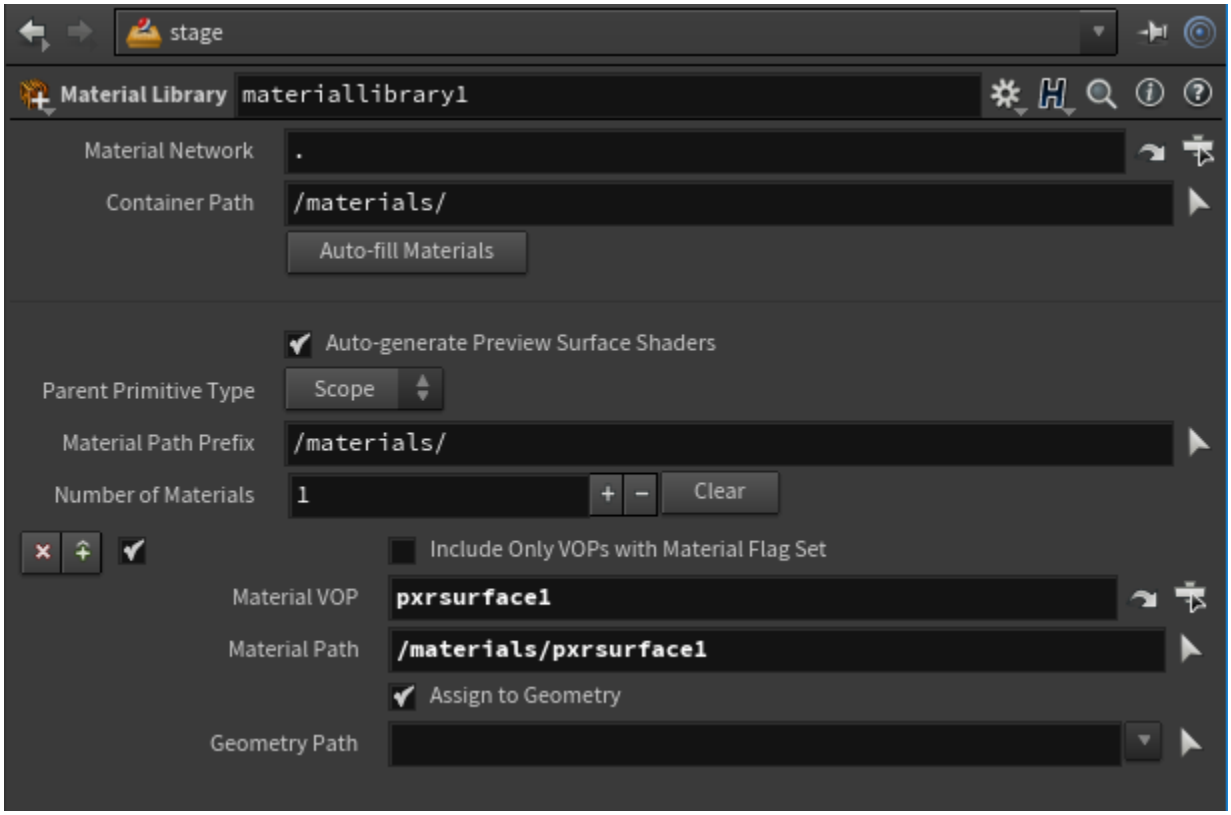
- Materials are created within the Material Library LOP.



- Dive inside and create your material network.

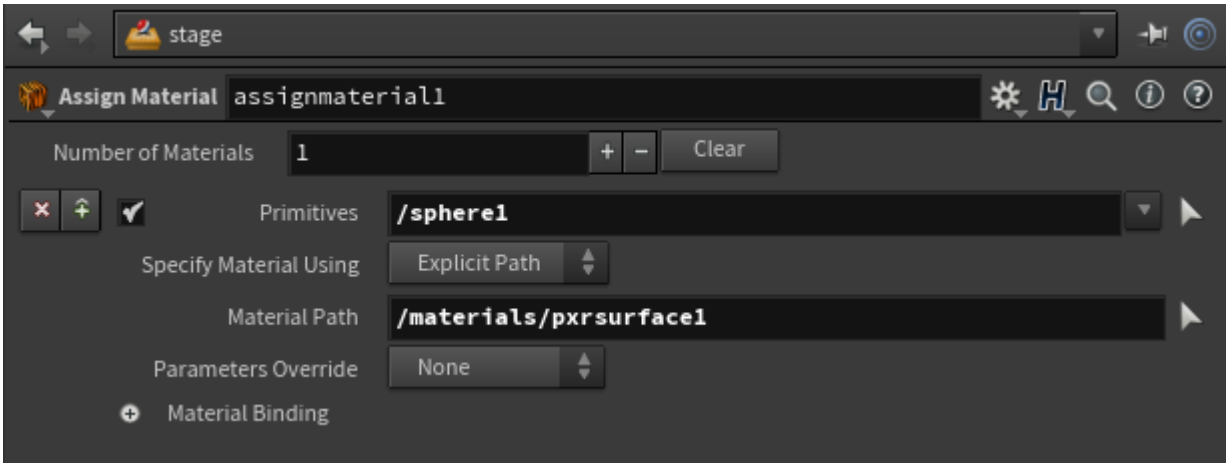


- Go back up to the Material Library parameters and auto-fill materials. See the note below.



Assign Material

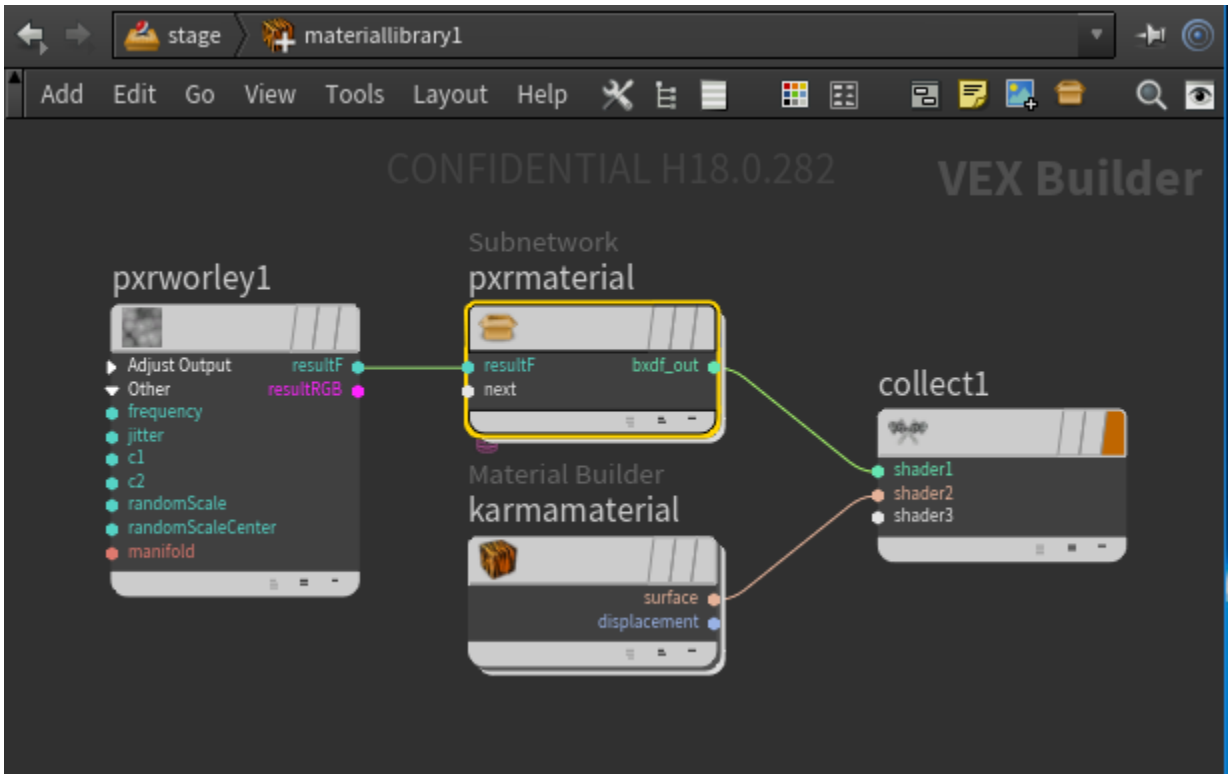
- Fill in the Primitives and Material Path parameters on the Assign Material LOP for each material assignment. You can either type the paths or drag and drop from the Scene Graph Tree. Here we are assigning the material we created above to a sphere.



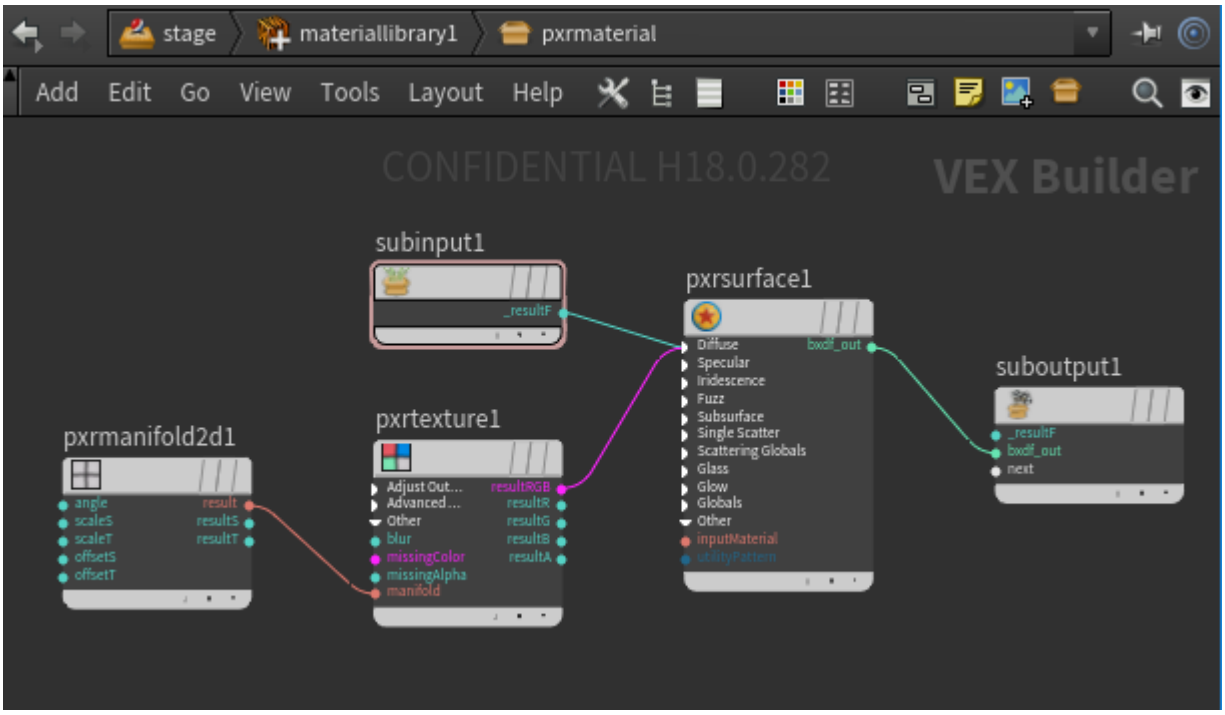
Multi-Renderer Workflow

- Solaris supports multi-render materials. To create, wire the different renderers' material networks to a collect node. The correct network is selected when a hydra render is started.

> PxrMaterialBuilder is not yet supported in Solaris, which is the default RfH workflow you see elsewhere. To package a RenderMan material network, create a subnetwork VOP.



- The Subnetwork VOP contains a subinput and a suboutput. Wire bxdf and displacement connections to the suboutput. These outputs should then be connected to the material library's collect node. The subinput VOP can be used for indirect inputs from the material library network.


stage
materiallibrary1
pxrmaterial
Add
Edit
Go
View
Tools
Layout
Help
CONFIDENTIAL H18.0.282
VEX Builder
subinput1
_resultF
pxrsurface1
Diffuse
Specular
Iridescence
Fuzz
Subsurface
Single Scatter
Scattering Globals
Glass
Glow
Globals
Other
inputMaterial
utilityPattern
bxdf_out
suboutput1
_resultF
bxdf_out
next
pxrtexture1
Adjust Out...
Advanced...
Other
blur
missingColor
missingAlpha
manifold
resultRGB
resultR
resultG
resultB
resultA
pxrmanifold2d1
angle
scaleS
scaleT
offsetS
offsetT
result
resultS
resultT