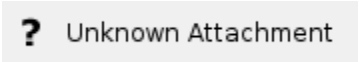


Creating a Material in Solaris

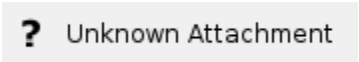
For more details on authoring materials in USD with LOPs, such as adding material references and variants, see [LOPS tutorial 1](#). We will outline the basic material workflow with *RenderMan* materials.

Create Material

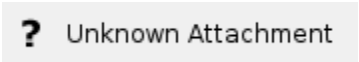
Materials are created within the Material Library LOP.



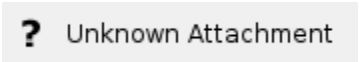
Dive inside the *materiallibrary* and once inside, create a RenderMan Material Builder(Hydra) node.



Inside your new RenderMan material builder node, this is where you can create your wonderful shading networks.



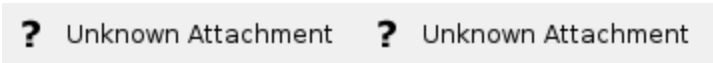
Go back up to the Material Library parameters and auto-fill materials. This will add your new material to the Solaris Scene Graph, ready to be assigned



Assign Materials


Fill in the Primitives and Material Path parameters on the *assignmaterial* node for each material assignment. You can either type the paths or drag and drop from the Scene Graph Tree. You can also use the *materiallinker* node

Here we are assigning the material we created above to /ToyBox_PlateB/PlateGeo

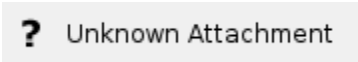


Multi-Renderer Workflow

- 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.

