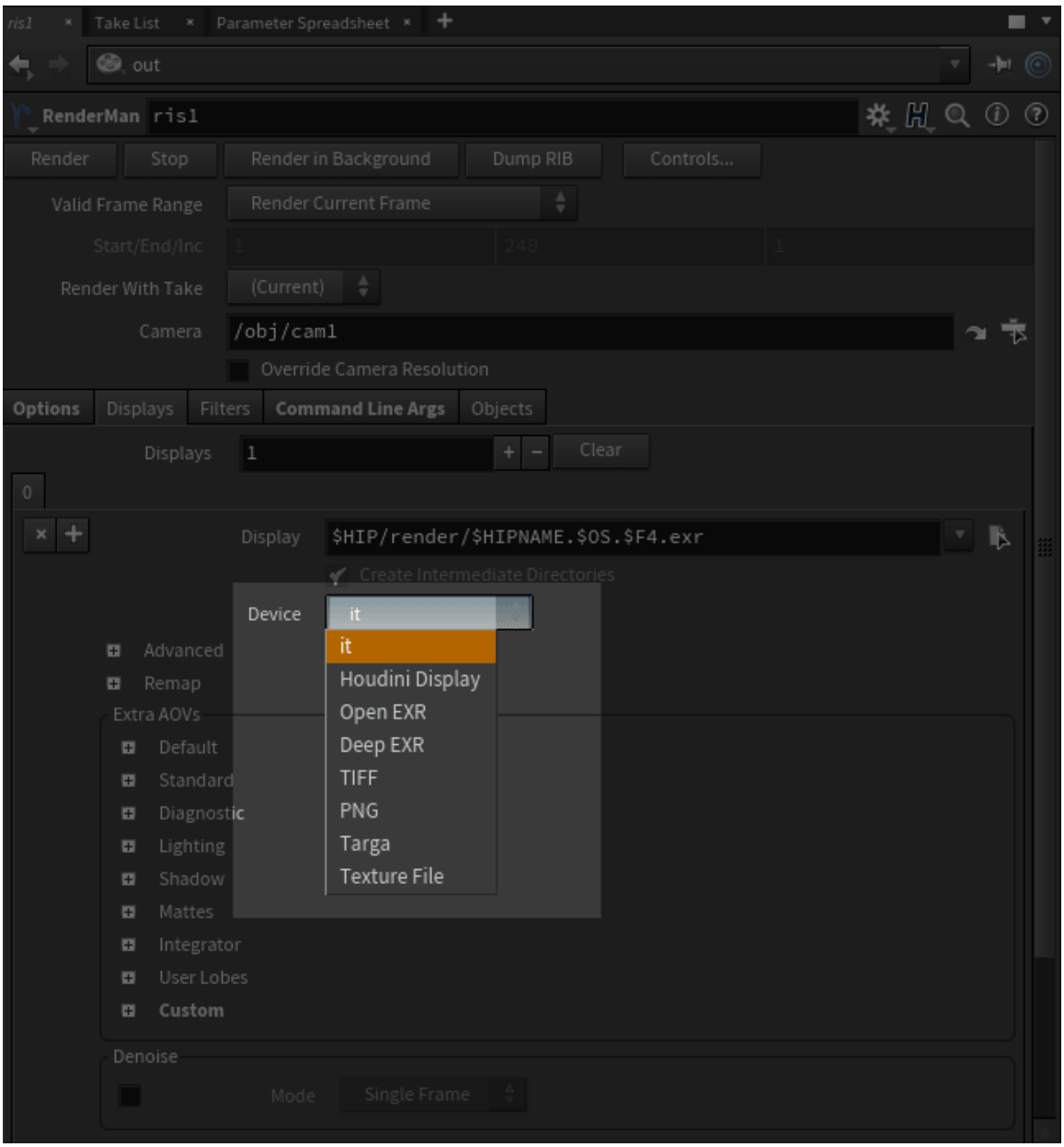
Rendering to a Device

You can preview your render interactively via RenderMan's Image Tool or Render View.

> More on rendering settings can be found in the ROP Node documentation

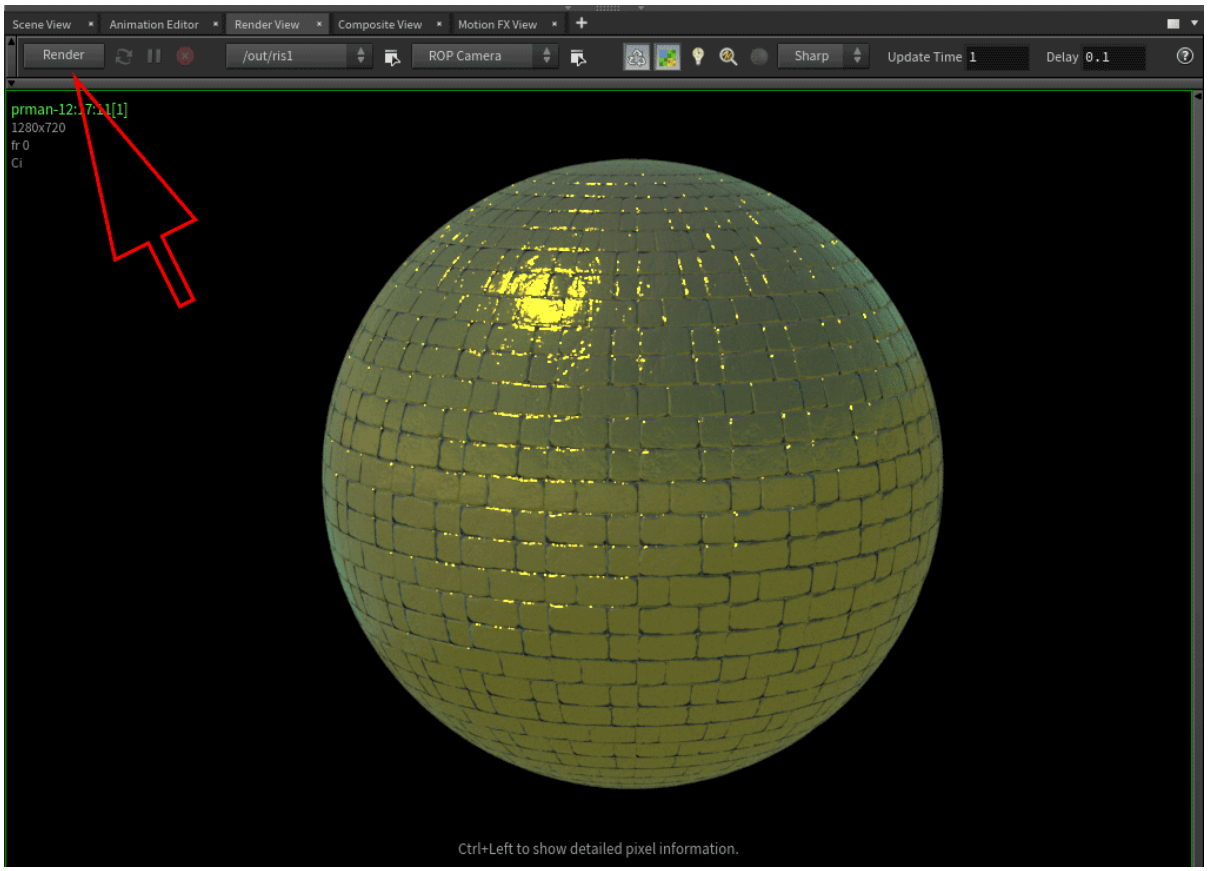
Using Image Tool

Set **Display Device** to "it" (the default)



Using Render View

Go to **Render View**. Select your output, e.g. /out/ris1. And press **Render** from inside the window.



You may also render to disk/RIB

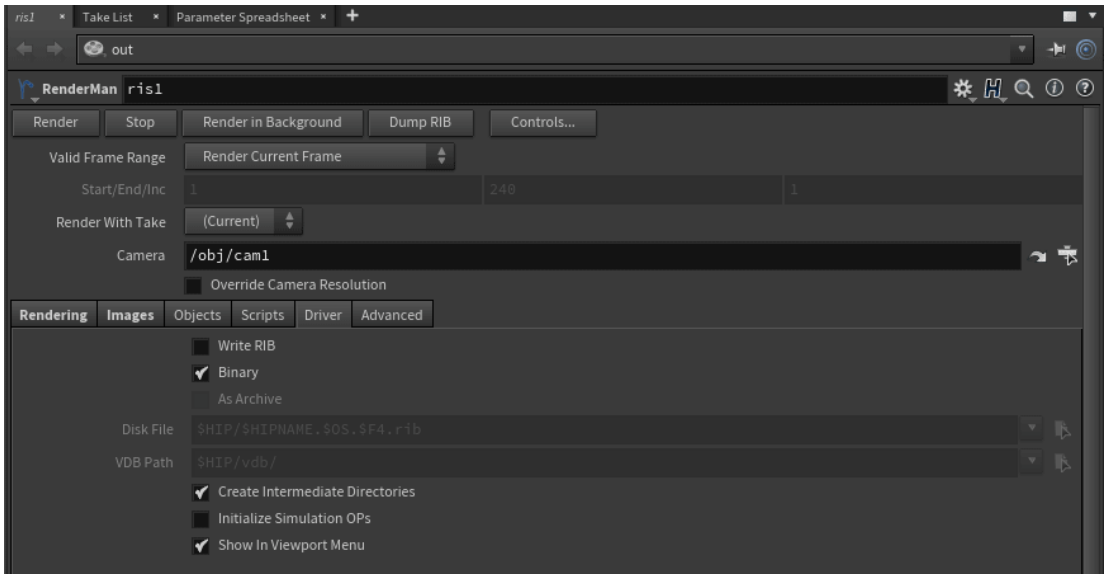
- Renderable RIB Export
- RIB Archive Creation
  - Import The Archive

Renderable RIB Export

Set Disk File in RenderMan RIS ROP's **Driver** Tab.

Check the box next to the parameter and when you select Render to Disk, it will output a RIB file.

For quicker RIB export, press the Dump RIB button on the ROP node or on the RenderMan Menu. These tools automatically toggle the RIB render checkbox.



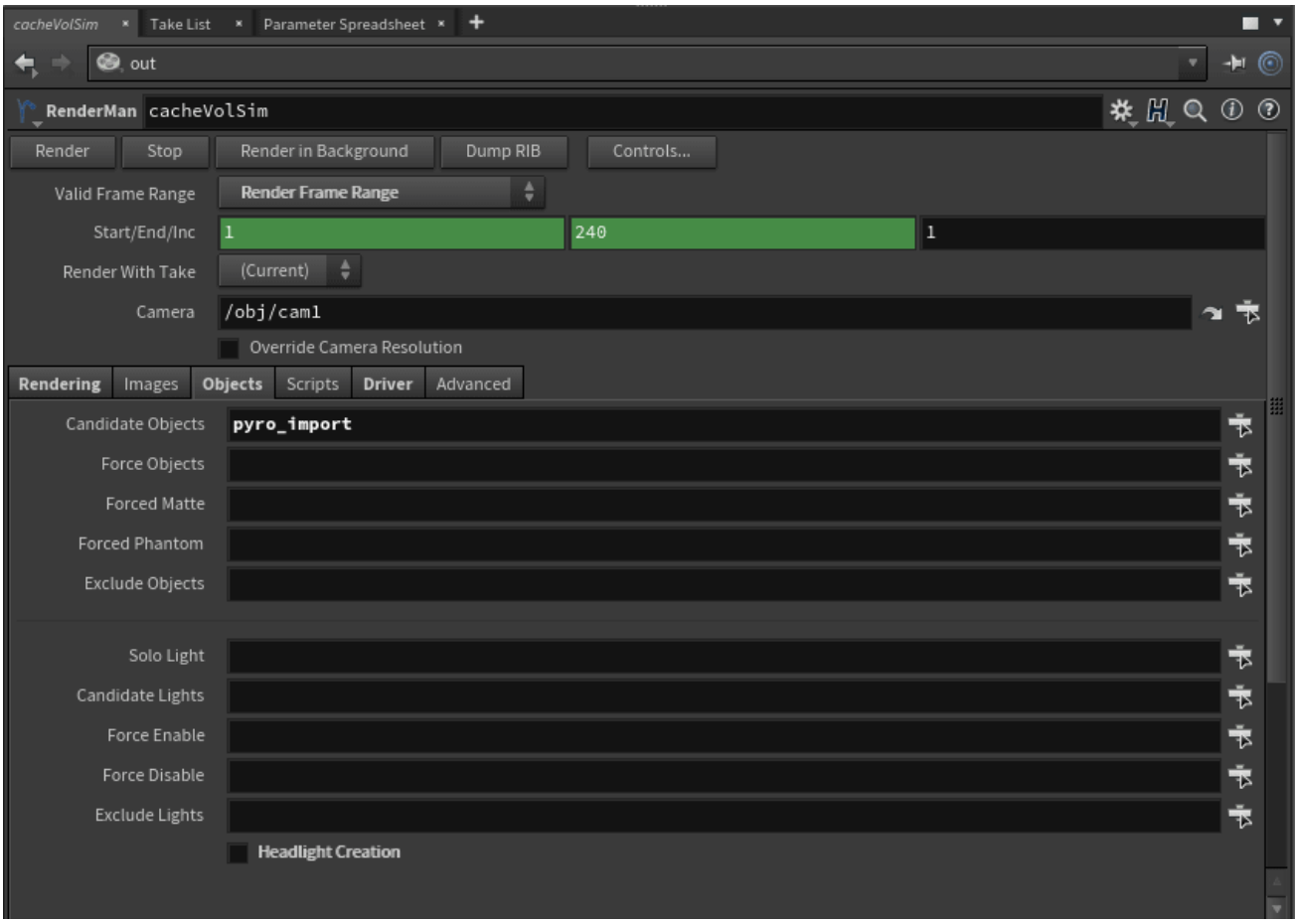
- Write RIB - Export a RIB file on rendering
- Binary - By default we write a compact file, but for hand-editing or debugging, uncheck this to output a larger ASCII file
- As Archive - This output will contain scene entities but not global data like render settings or displays, this file is not renderable on its own but can be referenced later in scenes
- Disk File - The output location of the RIB file, this defaults to your scene file (.hip) location
- VDB Path - export location of VDB data
- Create Intermediate Directories - Create the appropriate file structure automatically
- Initialize Simulation OPs - All POP and DOP will be reset to initial states when rendering
- Show SOHO viewport menu by default

RIB Archive Creation

To create archives for later rendering, the below steps describe how to do that. Archives are useful for delayed reading of scene entities for rendering instead of loading everything into the bridge product, eating memory and resources when they do not need to be displayed or processed until render time. Archives cannot be rendered on their own as they do not contain the appropriate render options and are meant for scene assembly where complexity is high.

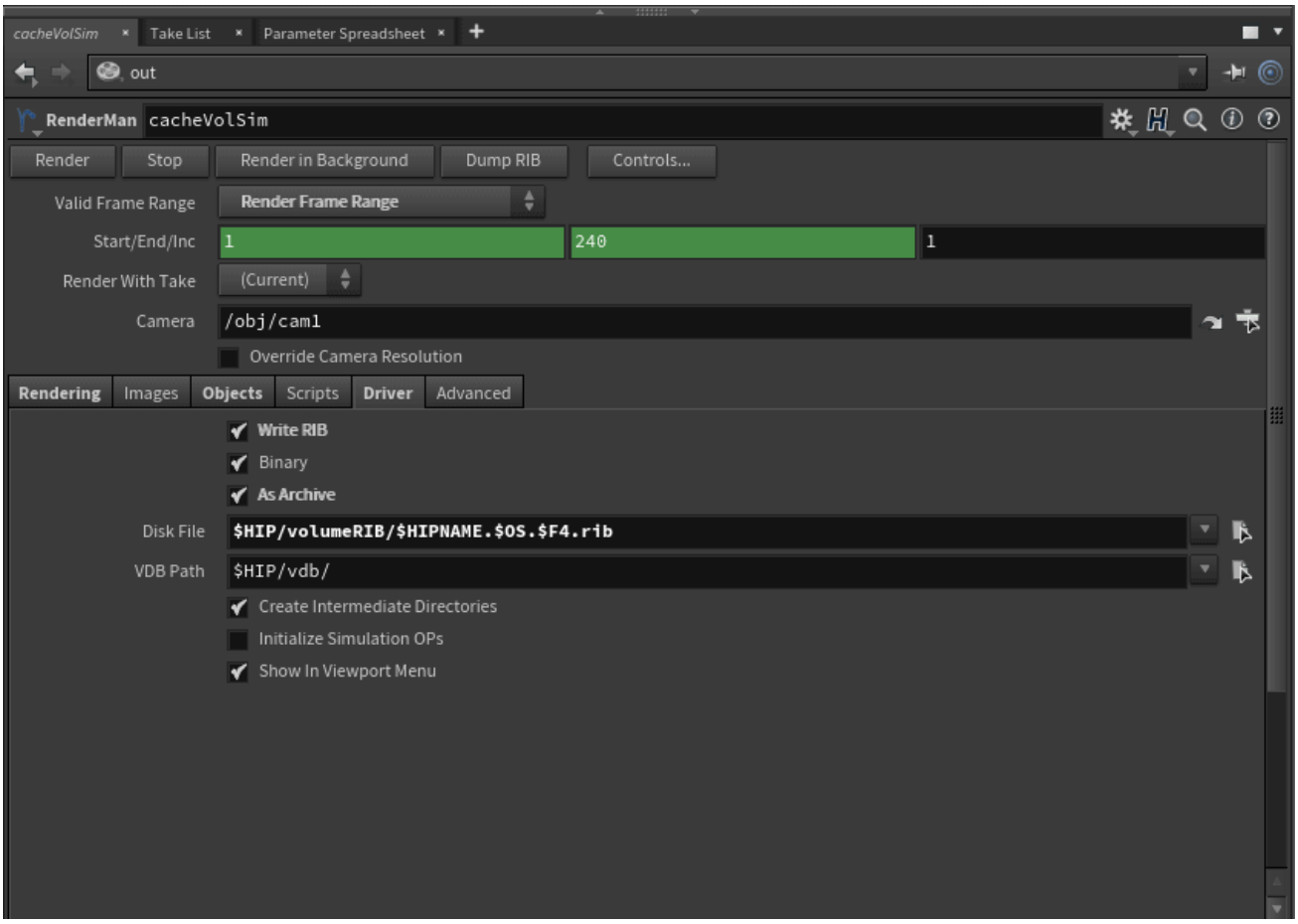
Create the RenderMan ROP node.

Here we are setting the candidate object to the pyro_import object in-scene inside the Objects Tab.



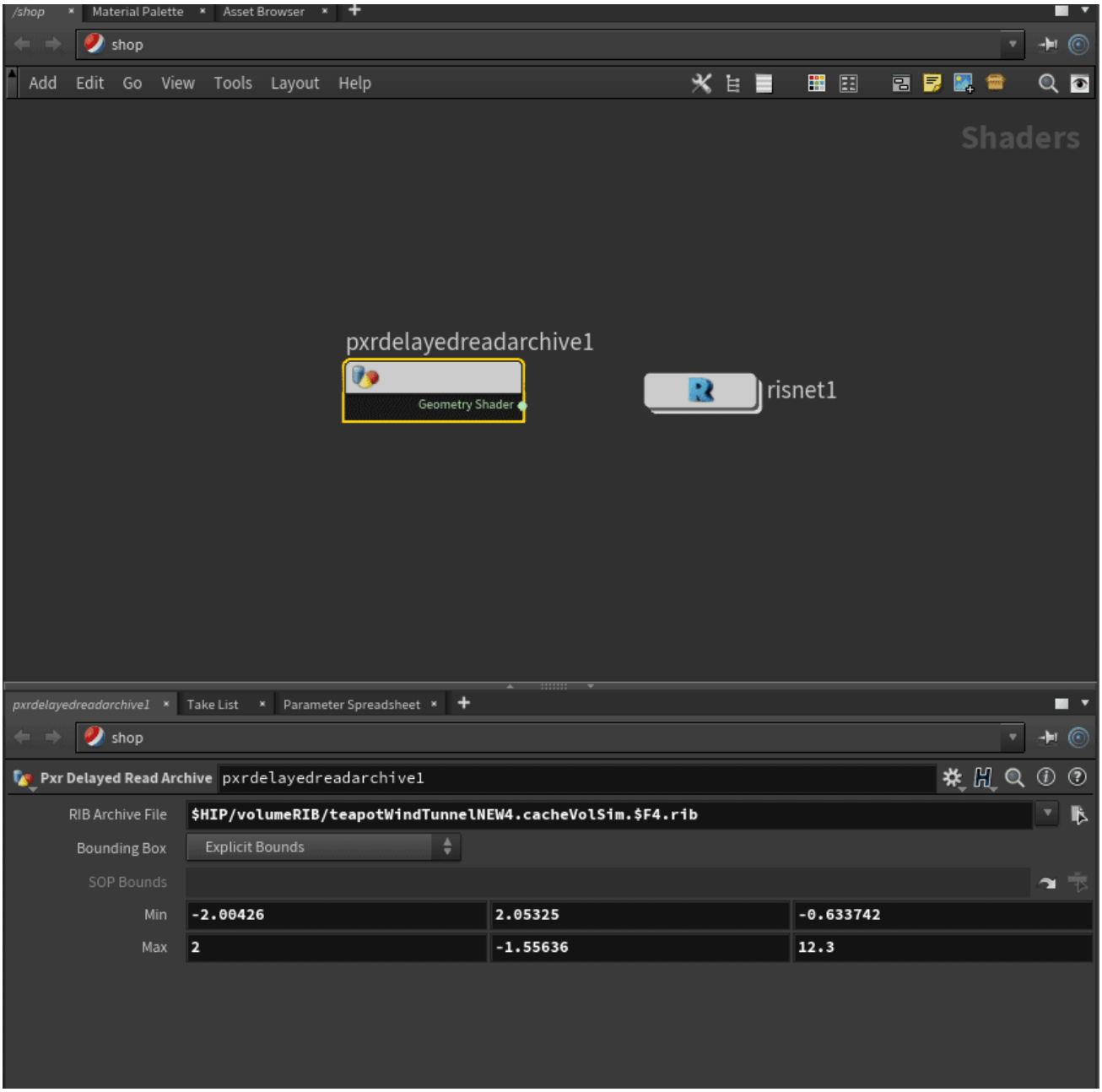
In the Driver Tab (used for RIB export) we select "Write RIB" and "As Archive" and provide an appropriate path.

Note we use the $F4 token so we get a (4 = 4 digits padding) RIB file each frame.



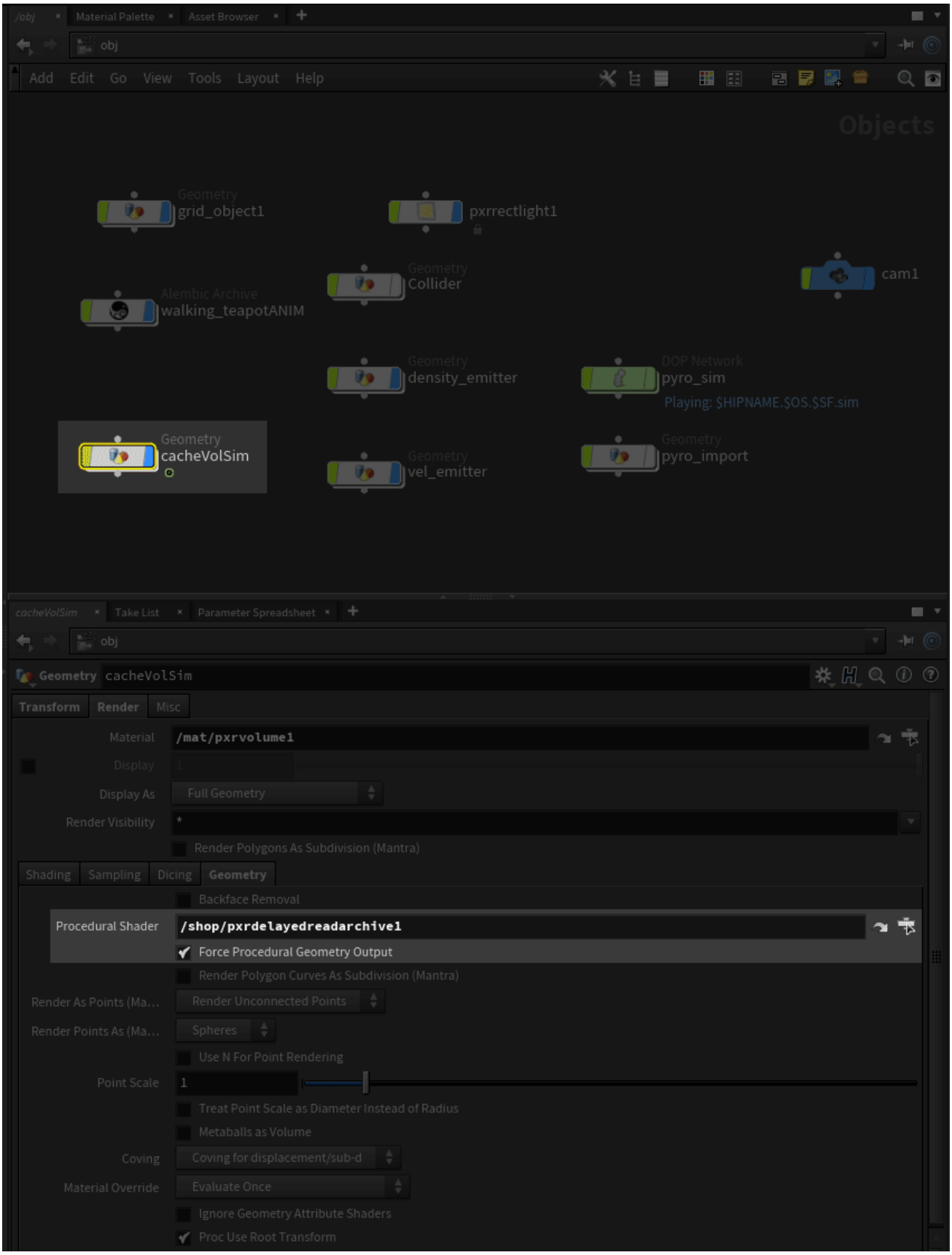
Import The Archive

This archive node can then reference the file written from the ROP node above in the SHOP.



It's not possible to wire up geometry shaders as "mat" nodes to a collector. Geometry shaders have to go in the older SHOP portion of the graph. Below you see a pxrdelayedreadarchive in the SHOP.

You see a null geometry node below, this points to the pxrdelayedreadarchive1 and has the appropriate shader assigned to the object(s) in the archive.


/obj
Material Palette
Asset Browser
obj
Add Edit Go View Tools Layout Help
Objects
Geometry
grid_object1
pxrrectlight1
Geometry
Collider
cam1
Alembic Archive
walking_teapotANIM
Geometry
density_emitter
DOP Network
pyro_sim
Playing: $HIPNAME.$OS.$SF.sim
Geometry
cacheVolSim
Geometry
vel_emitter
Geometry
pyro_import
cacheVolSim
Take List
Parameter Spreadsheet
obj
Geometry
cacheVolSim
Transform
Render
Misc
Material
/mat/pxrvolume1
Display
Display As
Full Geometry
Render Visibility
*
Render Polygons As Subdivision (Mantra)
Shading
Sampling
Dicing
Geometry
Backface Removal
Procedural Shader
/shop/pxrdelayedreadarchive1
Force Procedural Geometry Output
Render Polygon Curves As Subdivision (Mantra)
Render As Points (Ma...
Render Unconnected Points
Render Points As (Ma...
Spheres
Use N For Point Rendering
Point Scale
1
Treat Point Scale as Diameter Instead of Radius
Metaballs as Volume
Coving
Coving for displacement/sub-d
Material Override
Evaluate Once
Ignore Geometry Attribute Shaders
Proc Use Root Transform