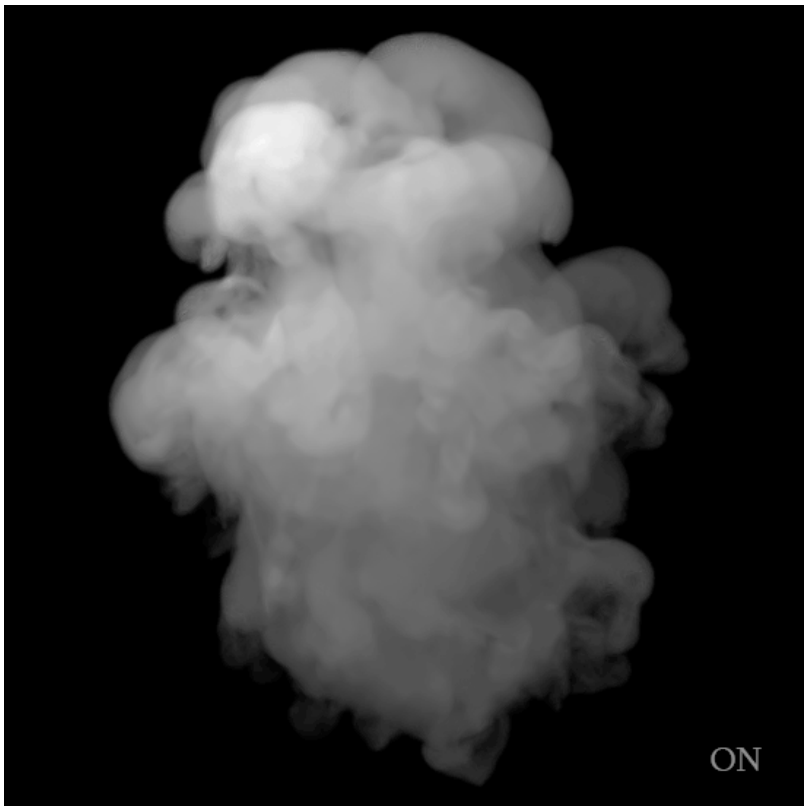
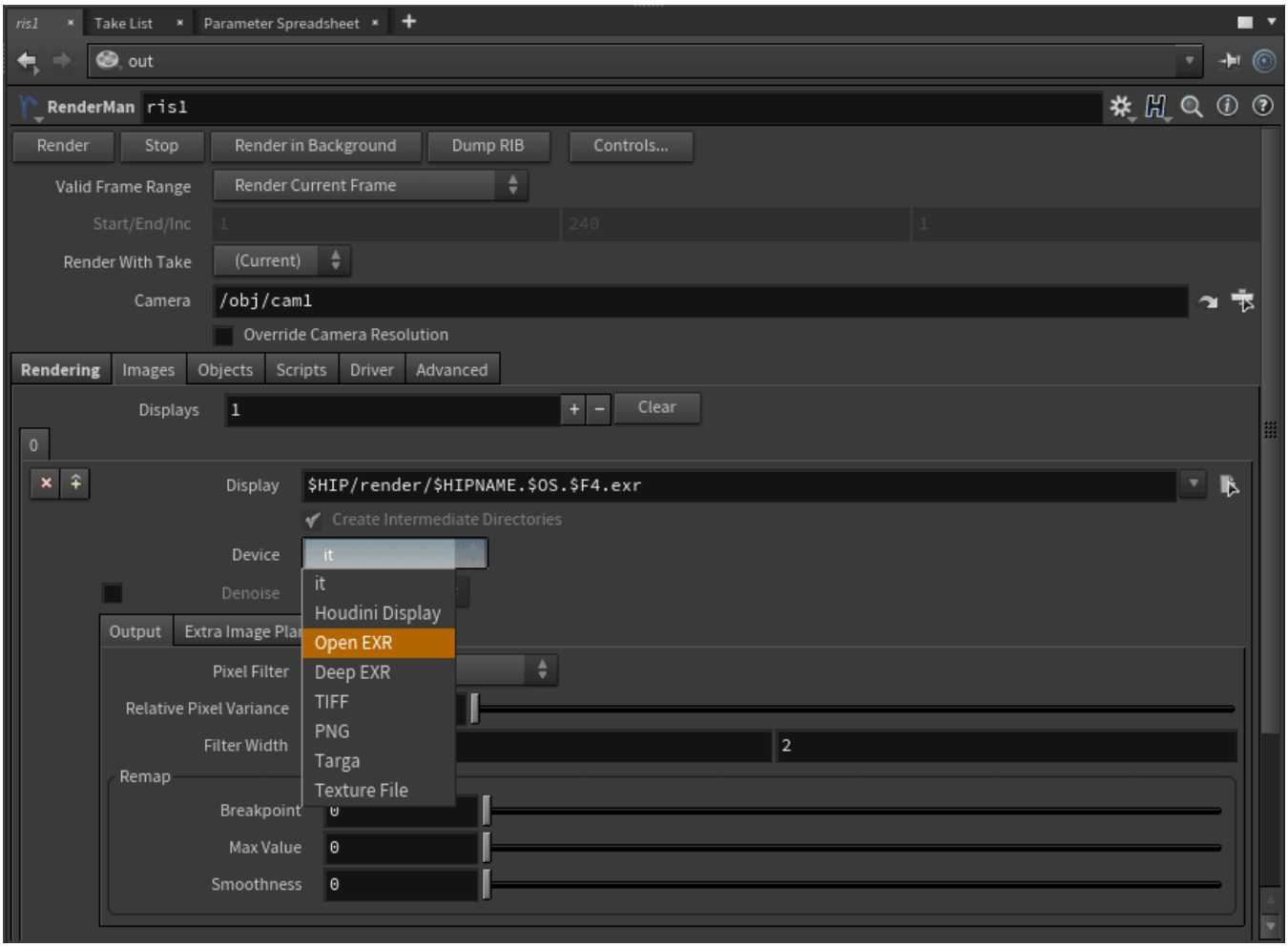
Denoising

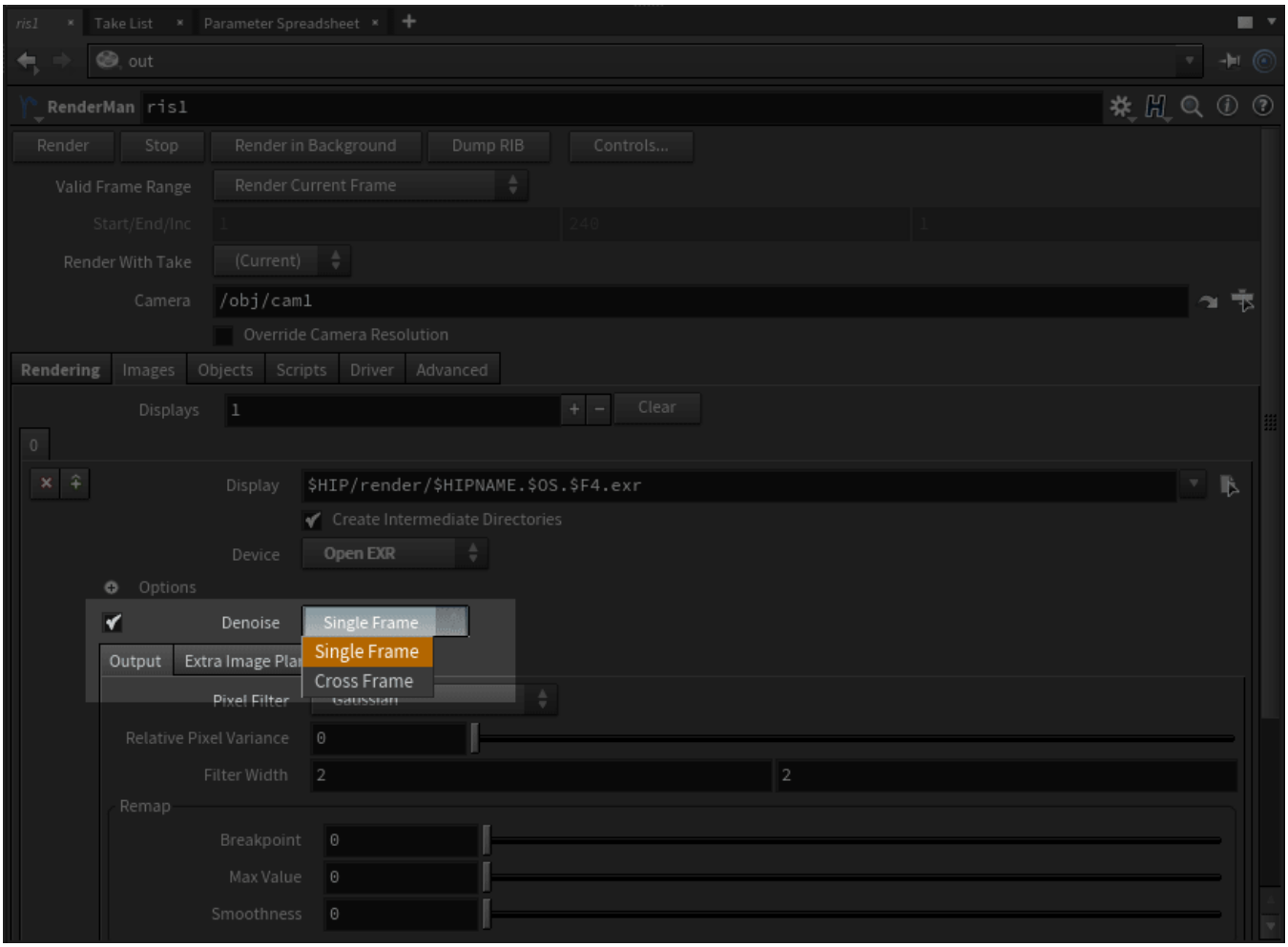
See Denoise Workflow for more information.



To output the multichannel EXR for the denoising workflow:

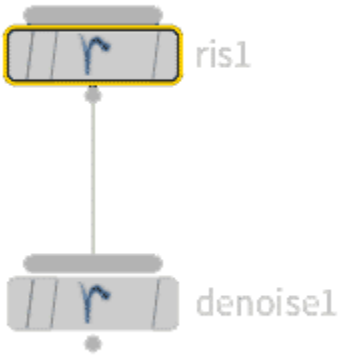
- ROP node > Images > Display Device > OpenEXR (This is for exporting final renders, for previewing with the Nvidia AI Denoiser in "it" you can leave the Display Device as "it")
- Select Single Frame or Cross Frame in ROP's Images Tab. This will auto-select the appropriate AOVs (only if you followed the step above)

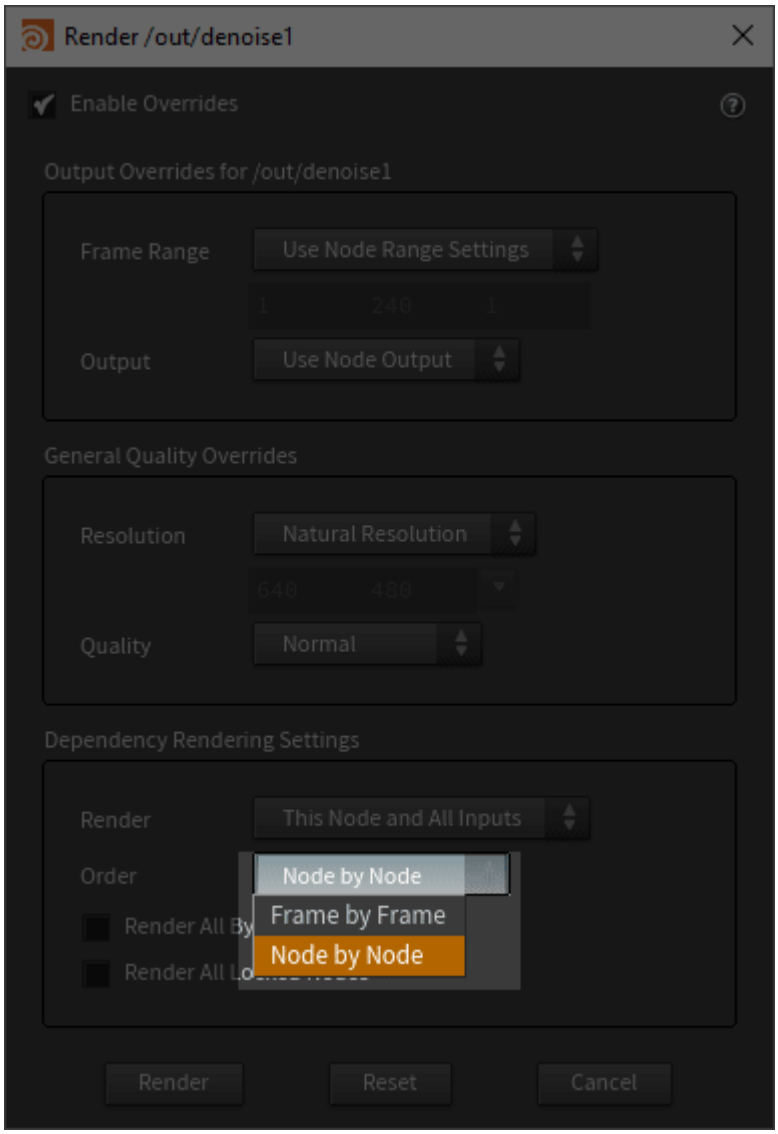

ris1
Take List
Parameter Spreadsheet
out
RenderMan
ris1
Render
Stop
Render in Background
Dump RIB
Controls...
Valid Frame Range
Render Current Frame
Start/End/Inc
1
240
1
Render With Take
(Current)
Camera
/obj/cam1
Override Camera Resolution
Rendering
Images
Objects
Scripts
Driver
Advanced
Displays
1
Clear
0
Display
$HIP/render/$HIPNAME.$OS.$F4.exr
Create Intermediate Directories
Device
it
Denoise
it
Houdini Display
Open EXR
Deep EXR
TIFF
PNG
Targa
Texture File
Output
Extra Image Pla
Pixel Filter
Relative Pixel Variance
Filter Width
2
Remap
Breakpoint
0
Max Value
0
Smoothness
0



This setting is also required to the use the Nvidia Denoise preview in "it" as we set the filter type to Importance

- Create a new Denoise ROP node
- Connect the original RIS ROP node from the above steps to the Denoise ROP
- Be sure the Controls... are set to Node by Node


ris1
denoise1


Render /out/denoise1
Enable Overrides
Output Overrides for /out/denoise1
Frame Range
Use Node Range Settings
1
240
1
Output
Use Node Output
General Quality Overrides
Resolution
Natural Resolution
640
480
Quality
Normal
Dependency Rendering Settings
Render
This Node and All Inputs
Order
Node by Node
Frame by Frame
Node by Node
Render All By
Render All
Render
Reset
Cancel

You have two choices in the Denoise ROP node of importance:

- Denoise: This uses the Houdini process to render and denoise the EXR and will lock Houdini
- Denoise in Background: This creates a new process to render and denoise while leaving Houdini free

Keep in mind the Denoise feature requires a multi-channel EXR to work.

Raw Render

Denoised Render

Raw Render Closeup

Denoised Closeup