Renderman / Zync Render Guide

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1. Installing Zync

Create Zync account https://www.zyncrender.com/
Download Zync Desktop Client App
From Zync Desktop App, install Maya plugin.

2. Scene Set-Up

MAKE SURE IT IS 25FPS.
If it is not in 25fps, go to Maya's settings / time slider / framerate and check the "keep keys at current frames" option before swapping to 25. Now Change the start/end values from 1.4 to 1, 200.5934329 to 200 etc etc. SAVE CHANGES.

Open the render settings window and check your settings below.

Common Tab

File Output:

- Ignore image format in this section but if EXR is available, select it otherwise leave it on Maya IFF.
- Frame/Animation ext: name#.ext (not single frame)
- Frame Padding: depends how many frames total are in your sequence.

Frame Range:

- Set the range you want to be rendered out.

Renderable Cameras:

- Choose the camera you wish to render from.
- If you require an alpha channel, select it here.

Image Size:

- HD 1080

Sampling Tab

Set max samples accordingly. If you're planning to use the denoiser, dont go above 256. If you leave Min samples at 0, it will use the square root of the maximum value.
If you have glass in your scene, you may need to play around with the Integrator and Ray Depths settings.

Features Tab

Denoise:

- Denoise: Choose Cross-Frame for animations.
- Filter: Default

Motion Blur:

- Turn on motion blur and camera blur if necessary. If the shot has too much blur, turn down the shutter angle.

Passes Tab

Outputs:

By default it should be RGBA (A for alpha), leave it on this unless you need a Z channel or other passes.

Image Format:

Definitely use OpenEXR (exr). This will store 32bit colour depth and an Alpha Channel.

Filter: Gaussian is fine with the filter size at 2,2.

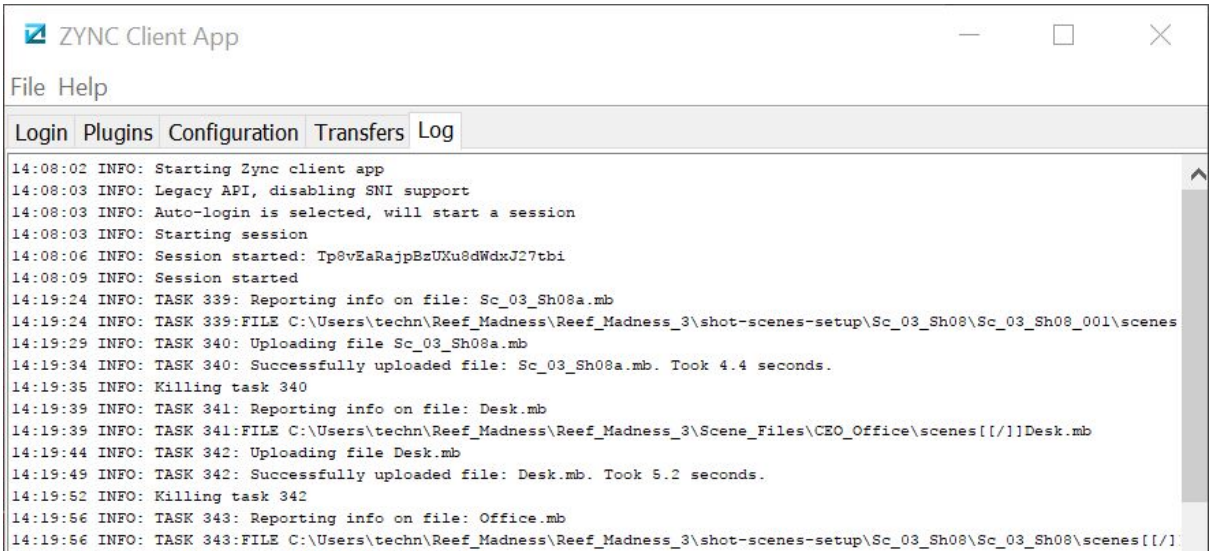
3. Zync Setup

Make sure the Zync plugin is loaded into maya, open its window and set your options.
Number of machines: (1-50) sets the number of machines that will work on your animation.
Machine Type: Choose from 8,16,32,64 in Regular or Preemptible.
Regular Machines are dedicated to your project, Preemptible machines will cancel your job in favour of regular machines but are cheaper (Basically using the leftovers).
I usually stick with 32 core Preemptible.
Set Project: Set the project folder name for this job.
Job Priority: If you are submitting multiple jobs that will run at the same time, use this number to tell Zync which one to prioritize otherwise leave it at 50.
Frame Range: Ensure this matches the range you want to render.
Chunk Size: SET THIS TO 1 when using preemptible. If it is 1, you will only lose one file if the render is cut off. If it is set to 10 and has completed 9 but is cut off, you'll lose all 10 of them.
Camera: Make sure this matches the camera you want to render from.
Render Layers: Leave on defaultRenderLayer.

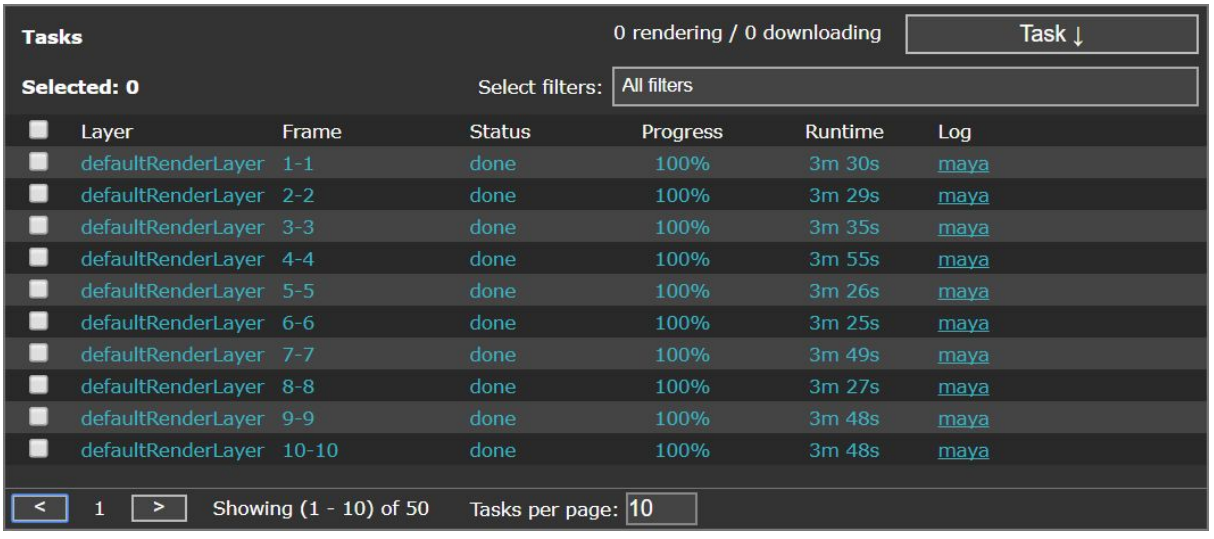
Login with Google and ensure the Zync Desktop Client App is running and the Zync web console is open. Zync web console can be found at "yourname".zync.io/

4. Launch Job

Press the big launch job button. Nothing will seem to happen for a while but it is just Zync uploading all the files associated with the scene. You can check the upload progress in the Zync Client App's "Log" Tab. It should look something like this.



Once all files are uploaded you should see the progress start in your web console. Once files are completed their status will change to 'downloading' and then 'done'.



The images will be downloaded back to your Output directory set in Maya's Zync window.

5. Denoising

Unfortunately rendering with Zync doesn't run the denoising process as it is a separate process that runs after. If you batch render locally on your computer this process runs automatically.

Open the start menu and type in 'CMD'. When the command prompt window opens, Enter the following with the appropriate location link.

```
cd C:\directory\to\your\image\folder\
```

For example: "*C:\Users\Username\ProjectName\renderman\ProjectName\images*"
Press enter.
Now copy/paste in:

```
for /R %f in (*.exr) do ("C:\Program
Files\Pixar\RenderManProServer-21.4\bin\denoise.exe" --crossframe on %f)
```

And press enter.
You will now see versions of your images appear with 'filtered' in the name. These are your denoised images. Copy them to a separate folder.

6. Deleting render jobs once completed

Once your render has completed, all of its files and folders, including all of the rendered images are stored on Zync until you delete them. This incurs a small fee per 24/hrs so unless you screwed up and need to submit another render for that same scene, you should delete them. To do this, open your Zync web console and select "My Account" on the right hand side. Now select "Projects" on the left hand side. A list of current projects will appear and the delete button should be visible beside them. This will delete the folder at 4am, so if you change your mind before then you can press undo.