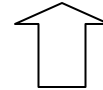


The Renderfarm and Houdini!

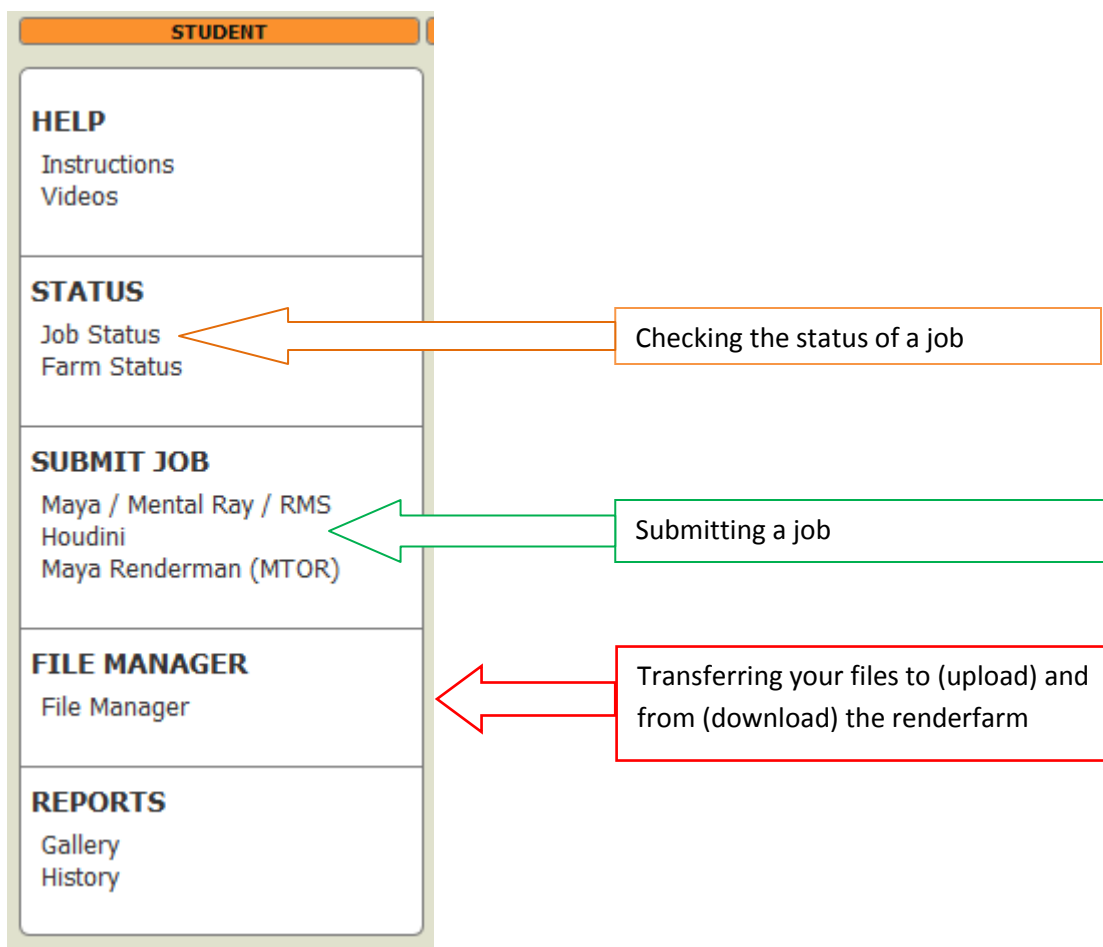
The renderfarm is super easy to use with Houdini, here's a quick guide. For more information see the SFDM documentation.



First, go to the SFDM website and click on the Renderfarm page.

There are two essential tasks to be performed here:

- 1. Transferring your files to be used for the render (and retrieving your results)**
- 2. Submitting (checking status, or stopping) the job**



SFDM website – Renderfarm page – File Manager

With regard to the File Transfer:

This really is “MyFile” which you may have used before. Most importantly – **set up a directory (folder) with your user name** ie. in my case dfowler. Once you have this set up you can transfer your files into that directory.

- Inside that directory:
 - hipnc (or hip) file at the top level – there must be only one!
 - Any textures/cache/geo files that you are referencing in the hipnc file (remember to use relative references – ie. \$HIP/textures/mytexture.rat)
 - Note you may have subdirectories as long as they are relatively referenced in the hip file (if you are using custom otls Houdini searches locally first)

NOTE: If you are not working remotely you may transfer your files over the network without using MyFile.

SFDM website – Renderfarm page – Submit Job - Houdini

With regard to the Submission:


Follow the steps once you click Houdini – you will be prompted for Mantra 10 or 11

You will also be prompted for the frame range, name of the mantra node that has your render settings, and the name for the output file (note this name and the frame range override the hipnc settings)

That’s it! It’s that easy!

SFDM website – Renderfarm page – Job Status

Once your job is submitted you can click on the **job #** under **job status** to find out what the current status of your job is (or if you need to terminate the job). If you are rendering to tga files you will be able to see your image right here (without transferring). If you are using picnc it will not display but will be fine viewed in mplay.



Job Status									
Running Jobs - Using 2 of 2 nodes. Using 3 of 40 job slots.									
Job	User	Frames	Priority	Start	Type	Total CPU	Average	Status	
163568	yangxu20	0/201/201	0		mayatomr			Awaiting Render...	
163567	lialiu20	1/201/201	0	12/27 02:05 PM	mayatomr			Rendering...	
163565	xzheng20	1/199/200	0	12/27 11:22 AM	mayatomr	5.5 Days	39.6 min/frame	Rendering...	

Completed Jobs									
Job	User	Frames	Priority	End	Type	Total CPU	Average	Status	
163566	lialiu20	200-400	0	12/27 11:47 AM	mayatomr			Complete	
163564	huliee22	0-200	2	12/24 06:55 AM	mayatomr	2.1 Days	15.1 min/frame	Complete	
163563	huliee22	0-200	4	12/24 06:17 AM	mayatomr	0.2 Days	1.4 min/frame	Complete	

Once you click on Job Status Job ID you this will take you to the following display:



The screenshot shows a web-based render farm interface. On the left, there are navigation tabs: HELP, STATUS, SUBMIT JOB, FILE MANAGER, and REPORTS. The main area displays job details for Job # 163568, including the username 'yangxu20', project name 'HKbedroom (Project folder is 1808 MB)', and render file 'HKBedroom_22_sunny_lower.mb'. The status is 'Awaiting Render...'. Below this is a table of frames with columns for Frame, Start Time, End Time, Render Time, and Host. All entries in the table show 'Awaiting Render...'. A 'Refresh' button is located below the table.

Frame	Start Time	End Time	Render Time	Host
200	Awaiting Render...	Awaiting Render...	Awaiting Render...	Awaiting Render...
201	Awaiting Render...	Awaiting Render...	Awaiting Render...	Awaiting Render...
202	Awaiting Render...	Awaiting Render...	Awaiting Render...	Awaiting Render...
203	Awaiting Render...	Awaiting Render...	Awaiting Render...	Awaiting Render...
204	Awaiting Render...	Awaiting Render...	Awaiting Render...	Awaiting Render...

To retrieve your files, go to the File Transfer manager and download your job folder.

NOTE: Keep your directories as clean as possible! This will speed up the renderfarm usage for everyone including you!

Tip: It is a good idea for your own organization to have your directories neatly organized. As long as you are using relative references you can set up your file structure in a manner that is convenient.

Suggestion: job.hipnc

/textures
/geo
/otls

And so on. The only crucial part is to ensure the hipnc file is on the top level.

NOTE: If you are having trouble due to java incompatibilities with myfile to access the renderfarm – try using **FileZilla**. Host **render.sfdm.scad.edu** Username: **dfowler** Password: **your scad password**