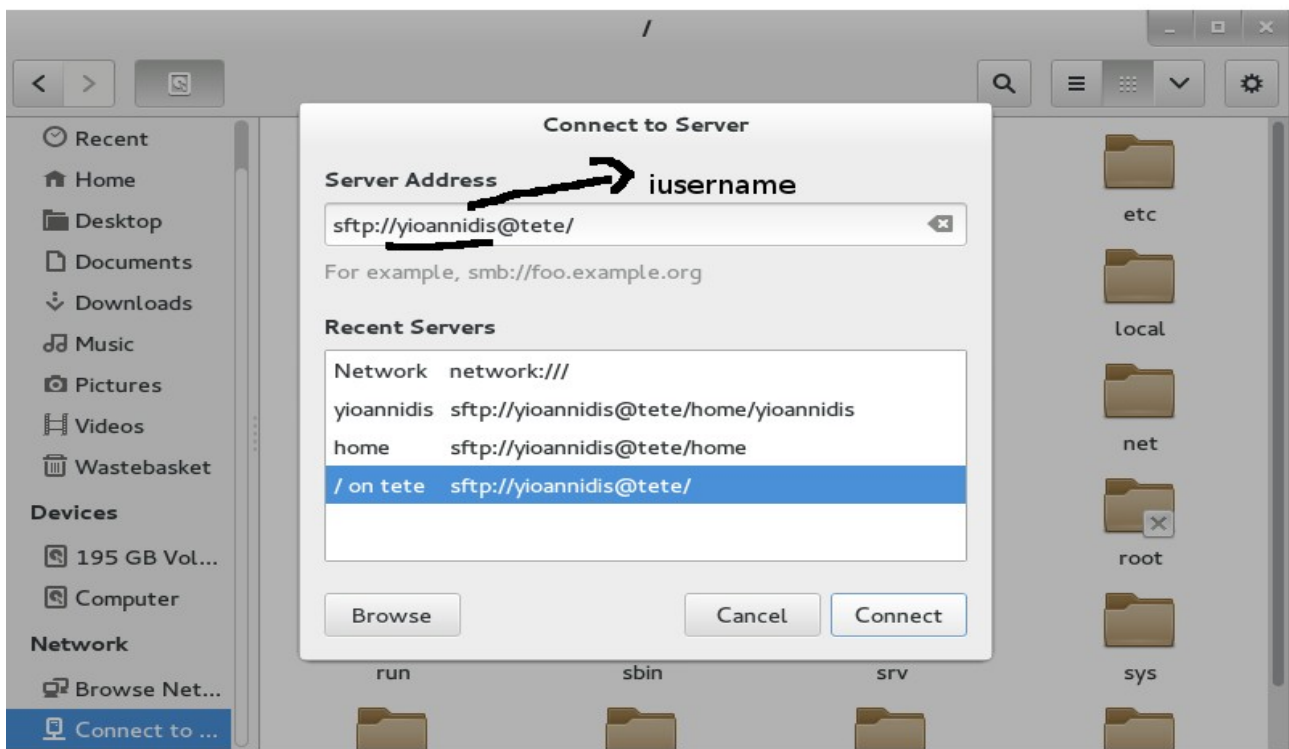


Qube Renderfarm Guide: Houdini

Scene setup

In order to prepare your scene for submission to the renderfarm, the following steps are suggested:

- Place scene file, and associated scene assets (eg. Textures, Sims etc.) in folders, within a single directory
- Make use of relative file paths using the \$HIP or \$JOB variables when assigning all scene assets
- (If \$JOB is being used it can be set in the textport i.e.
set -g JOB = /render/i1234567/myHoudiniSceneDir)
- Copy the entire scene folder to your directory within /render on the tete server.
 - This can be done using the Connect to Server... option which can be found in the Places main linux menu, all the way down



server address: **sftp://username@tete/**

- It is sensible to add a bookmark to this location, so it can be easily accessed when setting up and accessing future renders.
- Copy and Paste can be used to copy your scene directory into this directory ready for use on the render farm.

- Alternatively files can be copied using the sftp command line tool.

- Start Qube:
- Submit a Houdini job by clicking on: **Submit-Houdini SimpleCmd-Houdini (hrender) Job...**

Suggested Qube Settings

The following defaults are a good starting point for starting a Houdini job on the renderfarm.

Instances: Set number of frames to render in parallel (not more than 40)

Range: Specify frame range in the format start-end.

scenefile: Enter path to scene file to render i.e.

/render/username/myHoudiniSceneDir/simpleShattering.hipnc

The screenshot shows the configuration window for a Houdini render job. The 'Name' field is 'yanHrenderSimpleShattering'. 'Priority' is '9999'. 'Instances' is '10'. The 'Qube Frame Range' section has 'Range' set to '1-10', 'Execution' set to 'Individual frames', and 'rangeOrdering' set to 'ascending'. The 'Preview Frames Submission' section has 'Use Preview Frames' unchecked, 'Frame Numbers' empty, 'Preview Priority' set to '-1', and 'Preview Subjobs' set to '1'. The 'Required Parameters' section has three rows: 'hrender' with a dropdown set to 'hrender', 'csh.exe (Win)' with an empty dropdown, and 'scenefile' with a text field containing '/render/yioannidis/myHoudiniSceneDir/simple'. A hand-drawn arrow points from the 'username' part of the 'scenefile' path to the 'username' dropdown in the 'hrender' row.

Driver/Cop: Select -d for rendering and -c compositing network output

Driver/Cop Value: Pick your output driver. I.e. /out/mantra1

R: Make sure this setting is enabled in order to make sure that a non-graphics render license is used rather than a full Houdini license

Cmd Template: Render command to be executed. This needs to include commands to initialize the HoudiniEnvironment. We recommend starting with the entire template shown here:

```
cd /opt/hfs ; source houdini_setup_bash;% (csh)s "%(hrender)s" -e -f QB_FRAME_START  
QB_FRAME_END -i QB_FRAME_STEP %(driver_cop_arg)s %(driver_cop_value)s %(argv)s "%  
(scenefile)s" -v
```

Resubmit Houdini (hrender)

Driver/Cop:

Driver/Cop Value:

Optional Parameters

Output width:

Output height:

Image Fraction:

Output file:

v: ☐

R: ☒

Qube SimpleCmd and Shell Parameters

Cmd Template:

Shell (Linux/OSX):

Qube Worker Selection

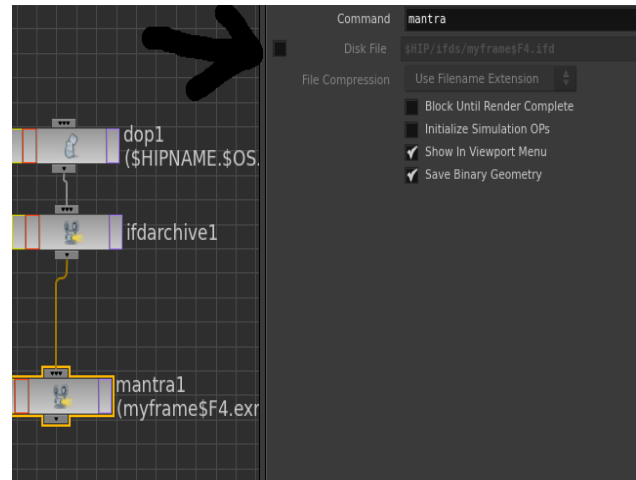
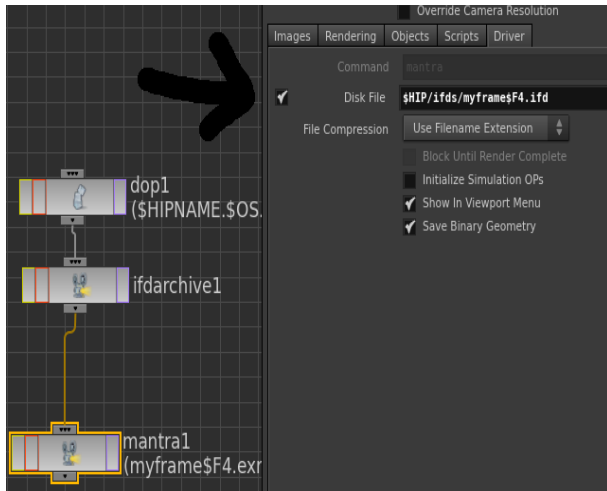
Hosts:

Groups:

☒ Expert Mode

You can use the above command to either render your live scene directly or even generate **ifd** files for later use

(Houdini 14 equivalent setup)




Resubmit Houdini (hrender)

Omit Hosts	<input type="text"/>	Browse
Omit Groups	<input type="text"/>	Browse
Priority Cluster	/	Browse
Host Order	<input type="text"/>	Browse
Requirements	<input type="text"/>	Browse
Reservations	host.processors=1	Browse
Restrictions	<input type="text"/>	Browse

Qube Advanced Job Control

Flags	auto_mount	Browse
Dependency	<input type="text"/>	Add
Email (job complete)	<input type="checkbox"/> i7762165	
Email (failed frames)	<input type="checkbox"/> i7762165	
Blocked	<input type="checkbox"/>	
Stderr->Stdout	<input type="checkbox"/>	
Job Label	<input type="text"/>	
Job Kind	<input type="text"/>	
Process Group	<input type="text"/>	

Set Defaults Clear Defaults ☒ Expert Mode  Cancel Resubmit

Environment Variables: Used to add environment variables.
Must have variable for license server set here

Resubmit Houdini (hrender)

Retry Frame/Instance

0

Retry Work Delay

0

Subjob Timeout

-1

Frame Timeout

-1

Qube Job Environment

Cwd

/home/yioannidis

Environment Variables

Key	Value
SESI_LMHOST	burton.bournemouth.ac.uk

Impersonate User

Qube Job Validation & RegularExpression-based Output Parsing

Min File Size


0

regex_highlights

Set Defaults

Clear Defaults

☒ Expert Mode



Cancel

Resubmit

Resubmit Houdini (hrender)

Impersonate User

Qube Job Validation & RegularExpression-based Output Parsing ▾

Min File Size

0

▲▼

regex_highlights

regex_errors

regex_outputPaths

regex_progress

regex_maxLines

20

▲▼

Qube Actions ▾

generateMovie

☐

Qube Notes ▾

Account


▼

Notes

Set Defaults

Clear Defaults

☒ Expert Mode



Cancel

Resubmit