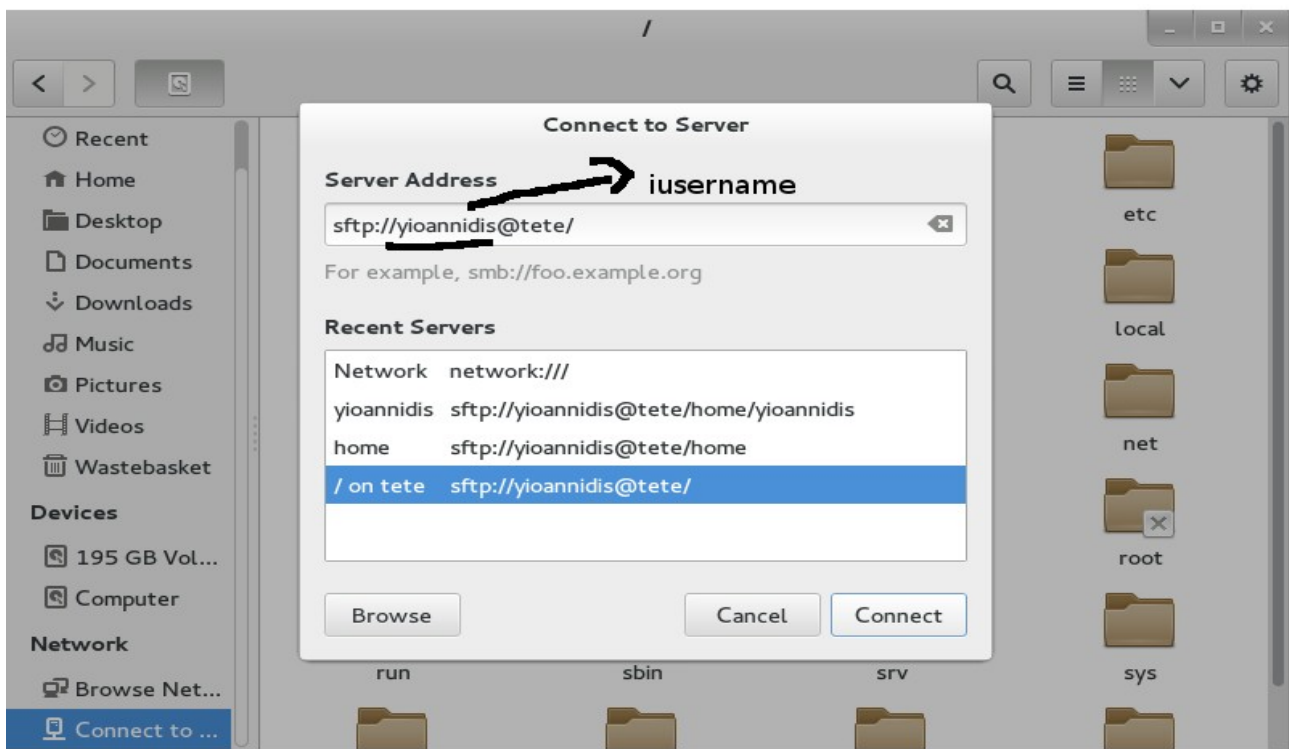# Qube Renderfarm Guide: Houdini (HBatch)

Scene setup

note: *versions of Houdini in the screenshots shown here will be different to the ones in current system because of continuous houdini updates,however it shouldn't affect the overall setup process*

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://iusername@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: <mark>Submit–CmdRange Job</mark>...

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)**
-Frame Range

the following is specified as part of the **Cmd Template** Command

-**Render Output Node**: ex. <mark>mantra1</mark>

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/software/sidefx/hfs17.0.416; source houdini_setup_bash;
hbatch -R -c "render -V -f QB_FRAME_START QB_FRAME_END mantra1***"
/render/username***/folder***/scene***.hipnc

Qube Job Basic

Name	SimulationQubeTestSimpleShattering15_HBATCH_CMDRAN
Priority	9999
Instances	2

Qube Frame Range ▼

Range	1-2
Execution	Individual frames ⌄ 1
rangeOrdering	ascending ⌄

Preview Frames Submission ▼

Use Preview Frames	☐
Frame Numbers	
Preview Priority	-1
Preview Subjobs	1

Parameters ▼

Command	cd /opt/software/sidefx/hfs15.0.313; source houdini_setup_bash;hbatch /render/yioannidis/ SimulationQubeTest/simpleShattering15_built.hipnc -c "render -V -I -f 1 2 ifdarchive1"
Shell (Linux/OSX)	/bin/bash

Priority	9999
Instances	10

Qube Frame Range ▼

Range	1-10

Preview Frames Submission ▼

Preview Priority	-1

Parameters ▼

Command	cd /opt/software/sidefx/hfs15.0.313; source houdini_setup_bash; hbatch -R -c "render -V -f QB_FRAME_START QB_FRAME_STEP mantra1" /render/yioannidis/
Shell (Linux/OSX)	/bin/bash
Frame Padding	0

Qube Worker Selection ▼

Priority Cluster	/	Browse
Reservations	host.processors=1	Browse

Frame Padding	0	

Qube Worker Selection ▼

Hosts		Browse
Groups		Browse
Omit Hosts		Browse
Omit Groups		Browse
Priority Cluster	/	Browse
Host Order	+host.processors.avail	Browse
Requirements		Browse
Reservations	host.processors=1	Browse
Restrictions		Browse

Qube Advanced Job Control ▼

Flags	auto_mount	Browse
Dependency		Add
Email (job complete)	☐	yioannidis
Email (failed frames)	☐	yioannidis
Blocked	☐	

	Key	Value
	HOUDINI_USE_HFS_PYTHON	1
	SESI_LMHOST	burton.bournemouth.ac.uk

Process Group

Retry Frame/Instance 0

Retry Work Delay 0

Subjob Timeout -1

Frame Timeout -1

Qube Job Environment ▼

Cwd /home/yioannidis

Environment Variables

Impersonate User

Qube Job Validation & RegularExpression-based Output Parsing ▼

Min File Size 0

regex_highlights

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