# 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/myRenders)

- 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
  - The following settings should be used:
    - **Service Type:** SSH
    - **Server:** tete
    - **Folder:** /home/i1234567
    - **User Name:** i1234567
      (replacing i1234567 with your username.)
  - 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: goQube

- Submit a Houdini job by clicking on: Submit–Houdini SimpleCmd–Houdini (hrender) Job...
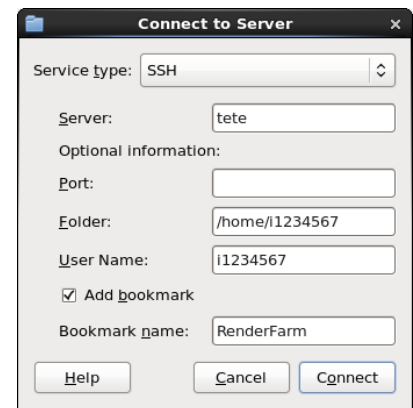
Suggested Qube Settings

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

Instances: Set number of nodes to use.

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

scenefile: Enter path to scene file to render i.e. */render/i1234567/myProject/untitled.hipnc*
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 Houdini Environment. 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"

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

| Qube Advanced Job Control | ▼ |

Flags	expand,auto_mount	Browse
Dependency		Add
Email (job complete)	☐	coxj
Email (failed frames)	☐	coxj
Blocked	☐
Stderr->Stdout	☐
Job Label	
Job Kind	
Process Group	
Retry Frame/Instance	0
Retry Work Delay	0
Subjob Timeout	-1
Frame Timeout	-1

| Qube Job Environment | ▼ |

| Cwd | /home/i1234567 |

	Key	Value
Environment Variables	SESI_LMHOST	burton.bournemouth.ac.uk

| 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 | Submit |