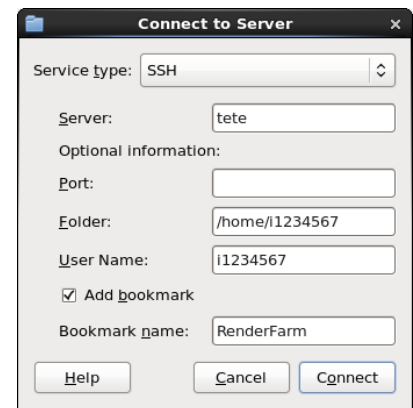


Qube Renderfarm Guide: Houdini

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"
```

The screenshot shows the 'Submit Houdini (hrender)' dialog box with the following sections and fields:

- Qube Job Basics:**
 - Name: Houdini (hrender) Job
 - Priority: 9999
 - Instances: 5
- Qube Frame Range:**
 - Range: 1-250
 - Execution: Individual frames (dropdown), 1 (spin box)
 - rangeOrdering: ascending (dropdown)
- Preview Frames Submission:**
 - Use Preview Frames: ☐
 - Frame Numbers: (empty text box)
 - Preview Priority: -1 (spin box)
 - Preview Subjobs: 1 (spin box)
- Required Parameters:**
 - hrender: hrender (dropdown), Browse button
 - csh.exe (Win): (empty text box), Browse button
 - scenefile: /render/i1234567/myproject/untitled.hipnc (text box), Browse button
 - Driver/Cop: -d (dropdown)
 - Driver/Cop Value: /out/mantra1 (text box)
- Optional Parameters:**
 - Output width: (empty text box)
 - Output height: (empty text box)
 - Image Fraction: (empty text box)
 - Output file: (empty text box)
 - v: ☐
 - R: ☒
- Qube SimpleCmd and Shell Parameters:**
 - Cmd Template:

```
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"
```
 - Shell (Linux/OSX): /bin/bash (dropdown)
- Qube Worker Selection:**
 - Hosts: (empty text box), Browse button
 - Groups: (empty text box), Browse button
 - Omit Hosts: (empty text box), Browse button
 - Omit Groups: (empty text box), Browse button
 - Priority Cluster: / (text box), Browse button
 - Host Order: +host.processors.avail (text box), Browse button
 - Requirements: (empty text box), Browse button
 - Reservations: host.processors=1 (text box), Browse button
 - Restrictions: (empty text box), Browse button

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)

☐

COX}

Email (failed frames)

☐

COX}

Blocked

☐

Stderr->Stdout

☐

Job Label

Job Kind

Process Group

Retry Frame/Instance

0

^

v

Retry Work Delay

0

^

v

Subjob Timeout

-1

^

v

Frame Timeout

-1

^

v

Qube Job Environment

Cwd

/home/i1234567

Environment Variables

Key	Value
SESI_LMHOST	burton.bournemouth.ac.uk

Impersonate User

Qube Job Validation & RegularExpression-based Output Parsing

Min File Size

0

^

v

regex_highlights

regex_errors

regex_outputPaths

regex_progress

regex_maxLines

20

^

v

Qube Actions

generateMovie

☐

Qube Notes

Account

v

Notes

Set Defaults

Clear Defaults

☒ Expert Mode

Cancel

Submit