ncca RenderFarm Tool

Maya & Houdini

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What is a renderfarm?

“Avatar” took about 40 million computer hours to render. If one powerful PC was used, this operation could have finished in ~4500 years.

Took Weta Digital just over a month.

https://www.geek.com/chips/the-computing-power-that-created-avatar-1031232/

We have a renderfarm too!

Actually, it's not that bad...

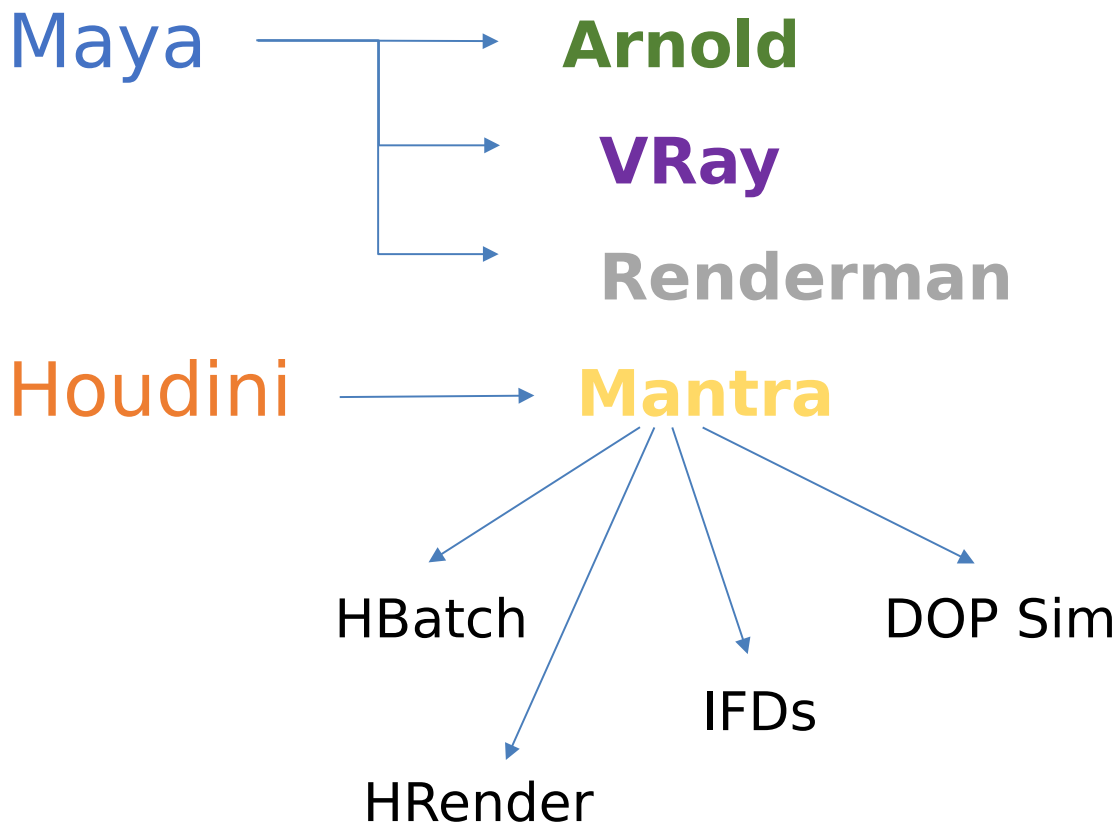
Our farm has

Machines / Workers = 16

Threads / Instances = 20

Total slots = 320

We support



BUT we have a few rules!

1. The Average Frame Time should take no longer than ~2.00 hours.
2. Manage / Wrangle your own renders. Kill and Remove your completed or failed jobs from Qube.
3. **Optimise and test your renders** locally before submitting to Qube.
4. If there is a stuck job on the farm, try to contact the owner of the job **politely**. If there's no response, then please contact our IT department and cc' the Animation Demonstrators to your email.
5. The Animation Demonstrators cannot delete or wrangle any jobs.
6. PLAY NICE! Offensive emails or misuse of the farm will not be tolerated.

The ncca renderfam tool is found here:

Linux:

/public/bin/ncca_renderfarm/

.....

Windows:

\\bournemouth.ac.uk\Data\Student\Public\Schools\FMC\NCCA\Renderfarm\ncca_renderfarm

The documentation & examples are found here:

Linux:

/public/bin/ncca_renderfarm/Documentation/

.....

Windows:

\\bournemouth.ac.uk\Data\Student\Public\Schools\FMC\NCCA\Renderfarm\ncca_renderfarm\Documentation

Before we begin #1

Make sure our home directory has the correct permissions:

Linux

chmod -R 755 /home/<your student number>

ex: chmod -R 755 /home/i1234567

Windows

It’s already setup by our IT.

Before we begin #2

Make sure Maya and Houdini have a rendering shelf:

open Maya

click on the rendering shelf

close Maya

……

open Houdini

click on the rendering shelf – if there is one

close Houdini

Let's install the tool

Notes:

Linux

. . ./ncca_renderfarm/Documentation/Tool/for_Linux/Install_Update_Uninstall.pdf

Windows

. . ./ncca_renderfarm/Documentation/Tool/for_Windows/Install_Update_Uninstall.pdf

Using Maya Arnold

Notes:

Linux

. . ./ncca_renderfarm/Documentation/Tool/for_Linux/Maya/Arnold.pdf

Windows

. . ./ncca_renderfarm/Documentation/Tool/for_Windows/Maya/Arnold.pdf

Using Maya VRay

Notes:

Linux

. . ./ncca_renderfarm/Documentation/Tool/for_Linux/Maya/Vray.pdf

Windows

. . ./ncca_renderfarm/Documentation/Tool/for_Windows/Maya/VRay.pdf

Using Maya Renderman

Notes:

Linux

. . ./ncca_renderfarm/Documentation/Tool/for_Linux/Maya/Renderman.pdf

Windows

. . ./ncca_renderfarm/Documentation/Tool/for_Windows/Maya/Renderman.pdf

- Warning -

Single threaded execution on the renderfarm due to licensing issues with Pixar.

Using Houdini Hbatch
(Linux only)

Notes:

. . ./ncca_renderfarm/Documentation/Tool/for_Linux/Houdini/HBatch.pdf

Using Houdini HRender
(Linux only)

Notes:

. . ./ncca_renderfarm/Documentation/Tool/for_Linux/Houdini/HRender.pdf

Using Houdini IFD
(Linux only)

Notes:

. . ./ncca_renderfarm/Documentation/Tool/for_Linux/Houdini/IFD.pdf

Using Houdini DOP Sim
(Linux only)

Notes:

. . ./ncca_renderfarm/Documentation/Tool/for_Linux/Houdini/DopSim.pdf