

ncca RenderFarm Tool

Maya: VRay

Constantinos Glynos

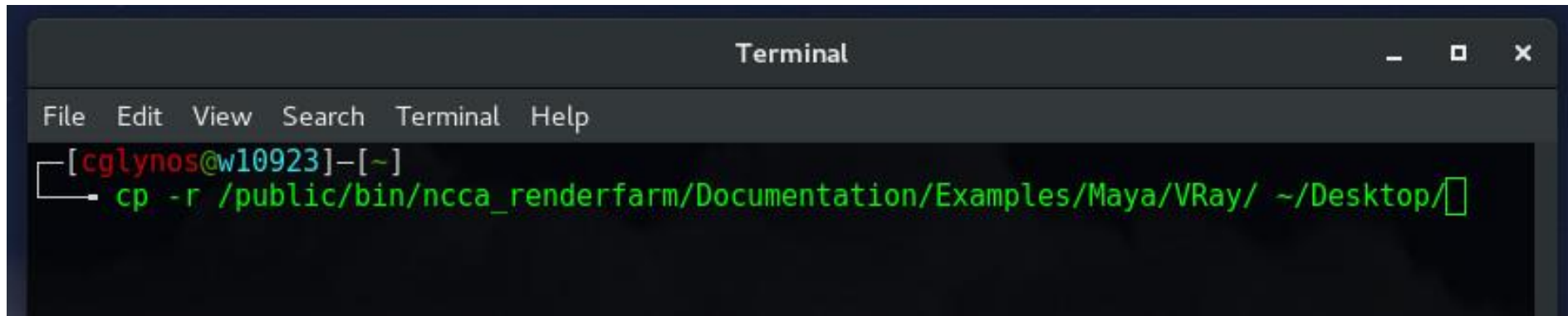
Michail Agoulas



Copy the example scene

run the copy (cp) command with the recursive flag (-r)

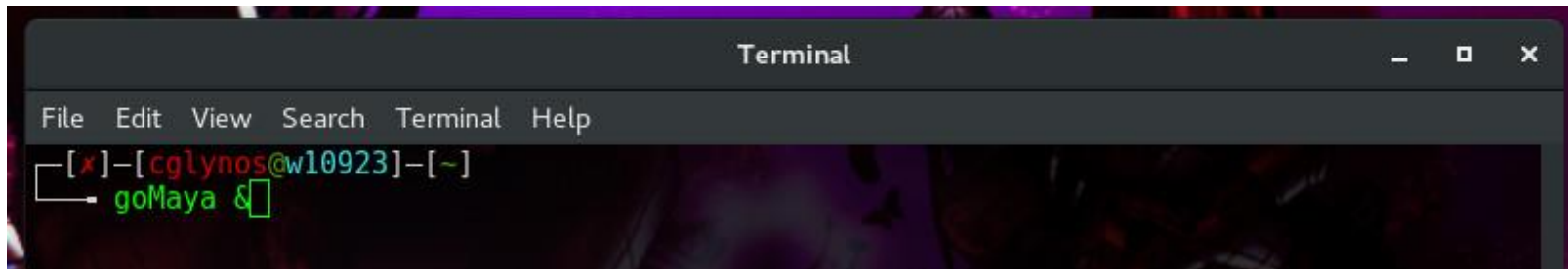
```
cp -r /public/bin/ncca_renderfarm/Documentation/Examples/Maya/VRay/ ~/Desktop
```



```
Terminal
File Edit View Search Terminal Help
[cglynos@w10923]~
└─ cp -r /public/bin/ncca_renderfarm/Documentation/Examples/Maya/VRay/ ~/Desktop
```

Open Maya

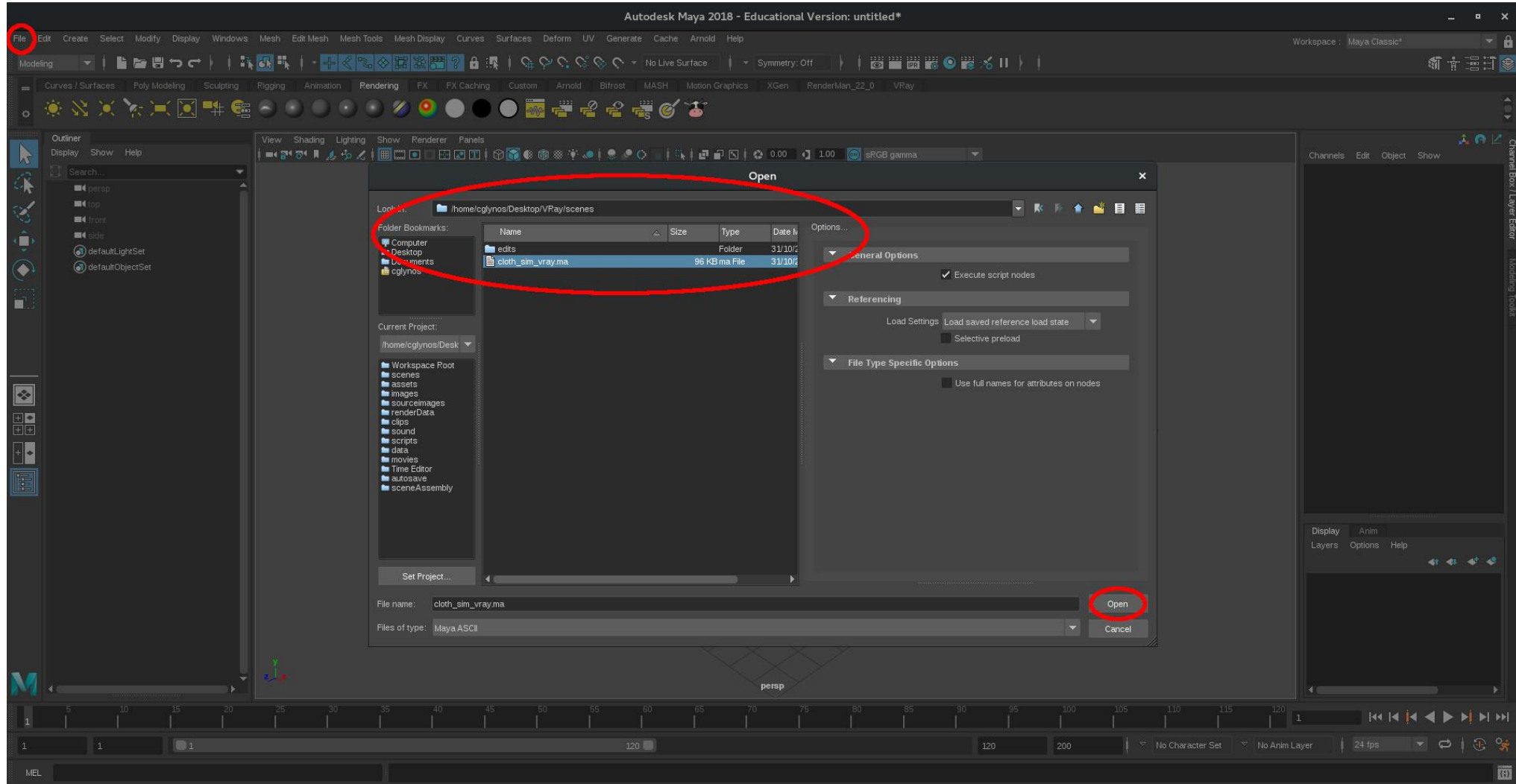
```
goMaya &
```



```
Terminal
File Edit View Search Terminal Help
[*]-[cglynos@w10923]~
└─ goMaya &
```

Open the example scene

File -> Open -> cloth_sim_vray.ma



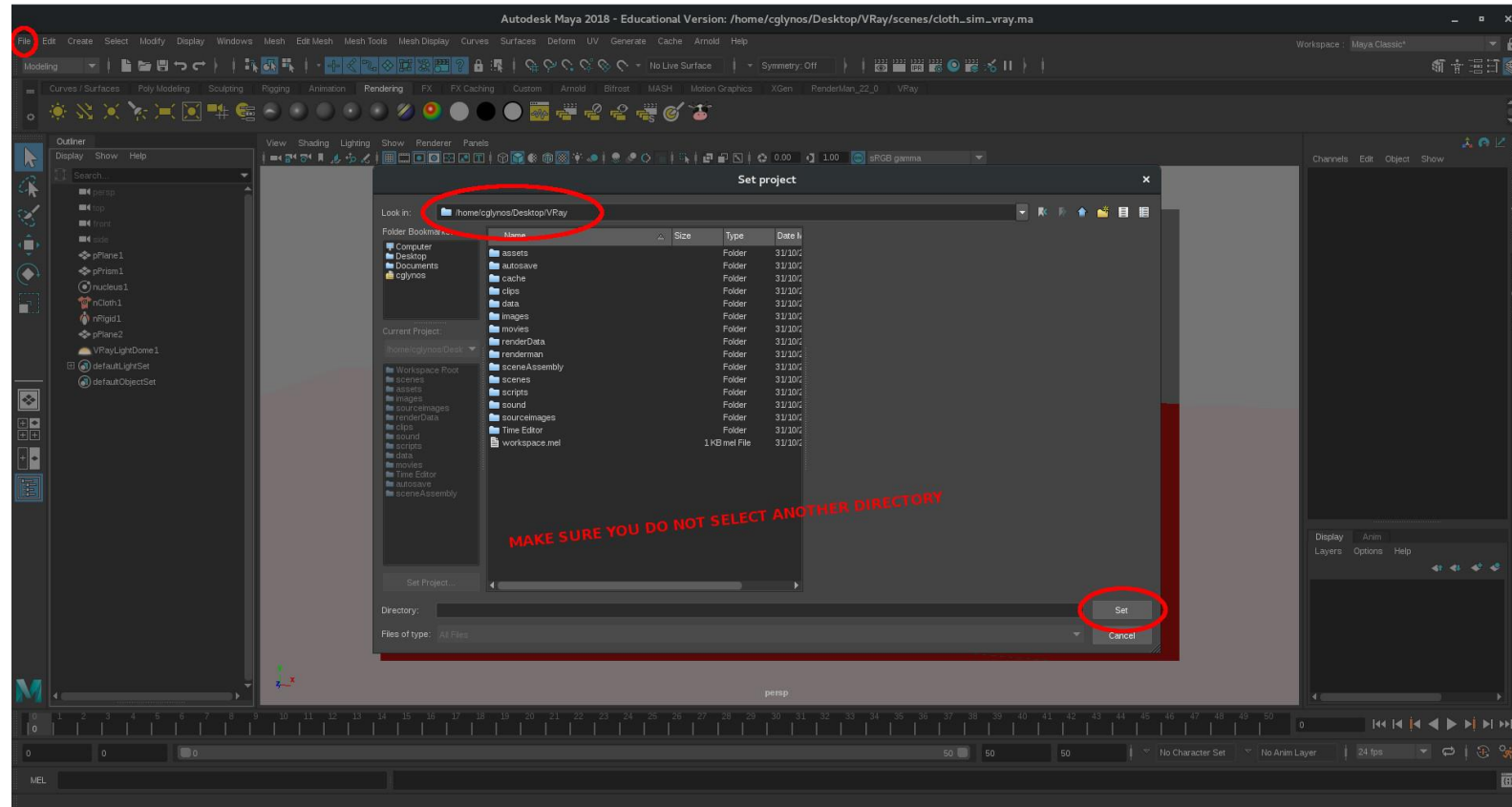
Set project directory

File -> Set Project...

Select the directory which is parent to all the project data files and folders.

Make sure you do not select another directory inside the parent directory

Click Set



Update the textures

Select the **pPlane1** mesh

Go to the [Attribute Editor](#) -> VrayMtl1

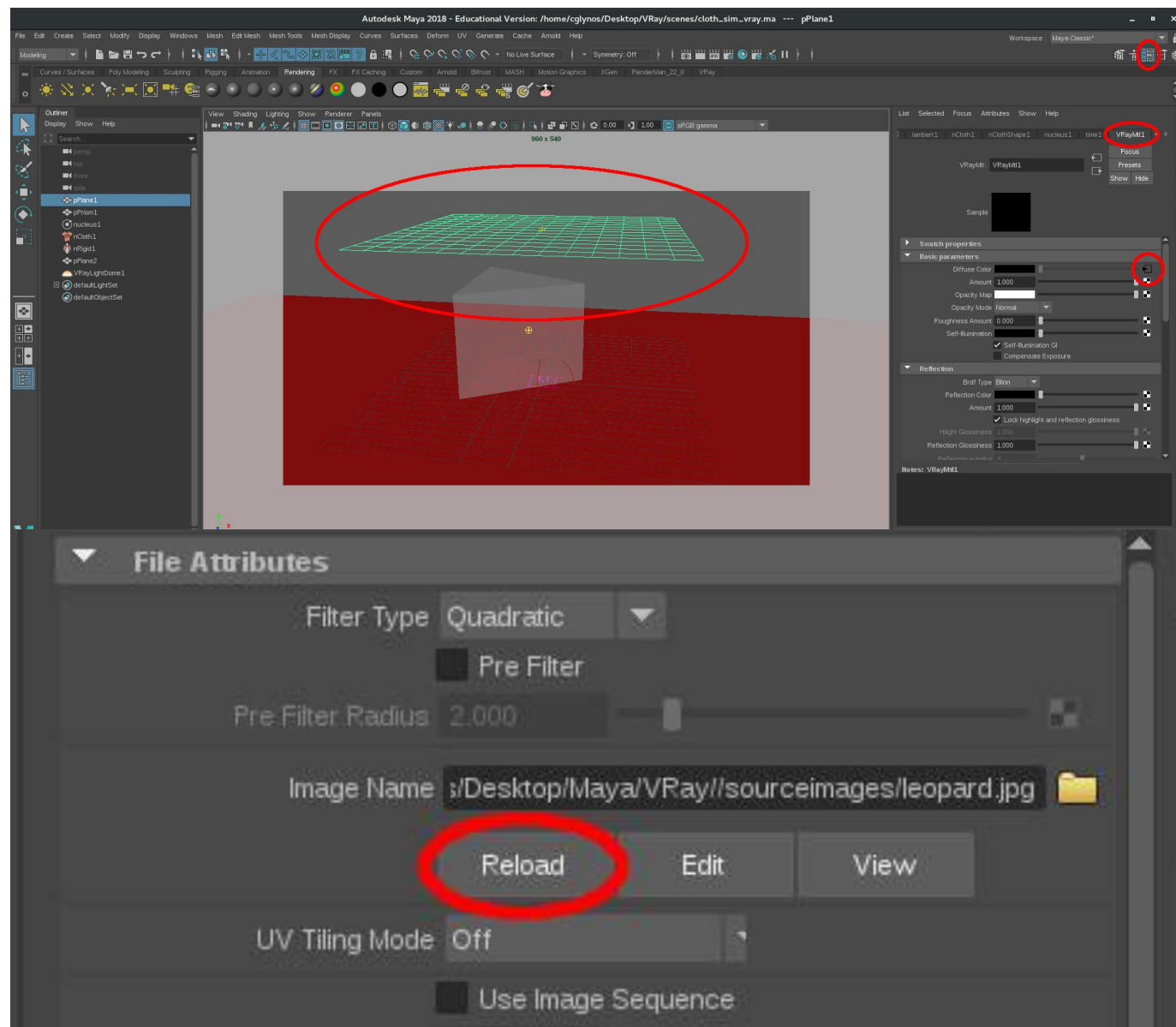
Click on the **Diffuse colour** option box

Under the **Image Name** text box, click on **Reload**.

After hitting **Reload**, that long path should now say:

sourceimages/leopard.jpg

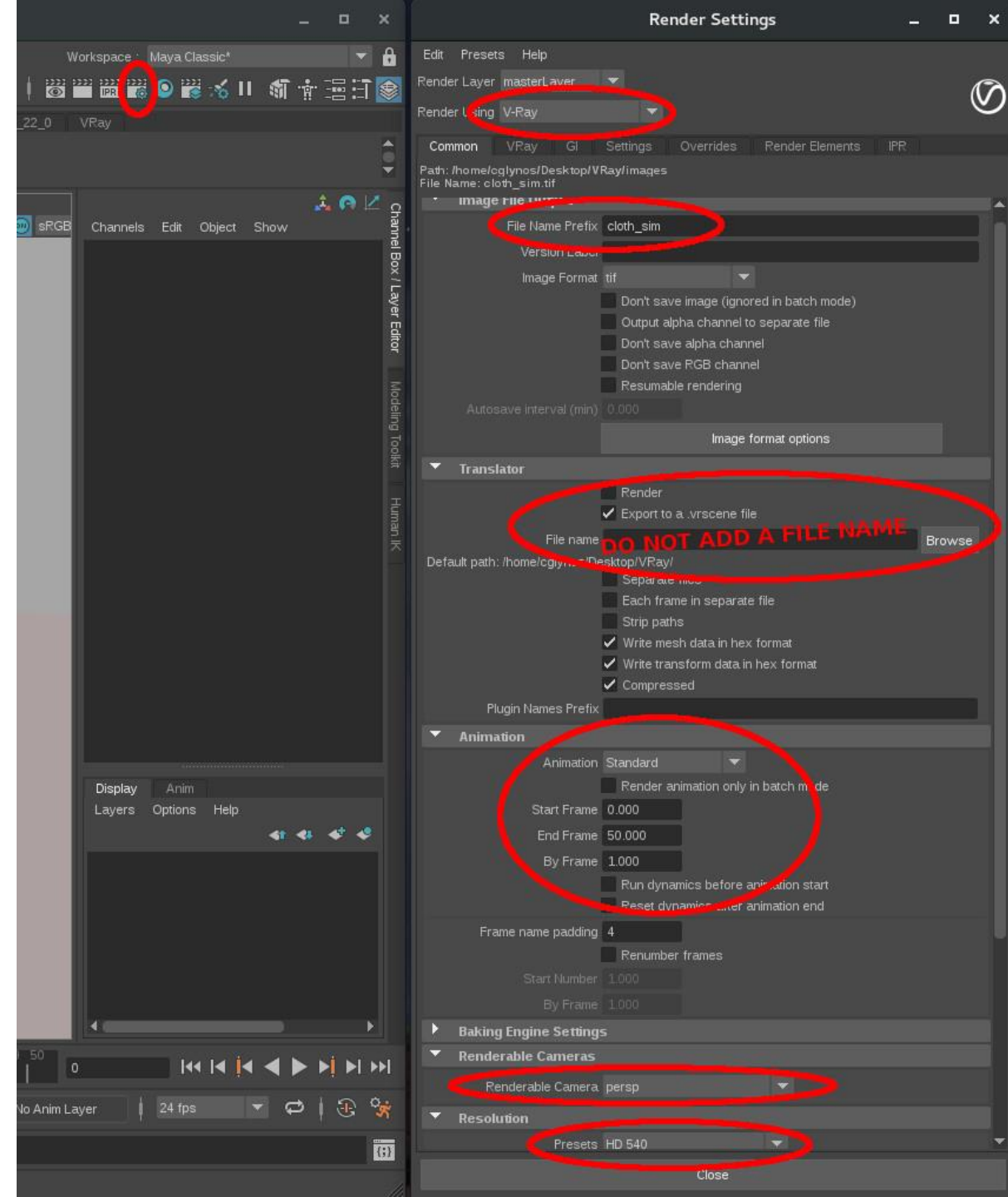
Do the same for the rest of the objects if they have any textures



Check the render settings

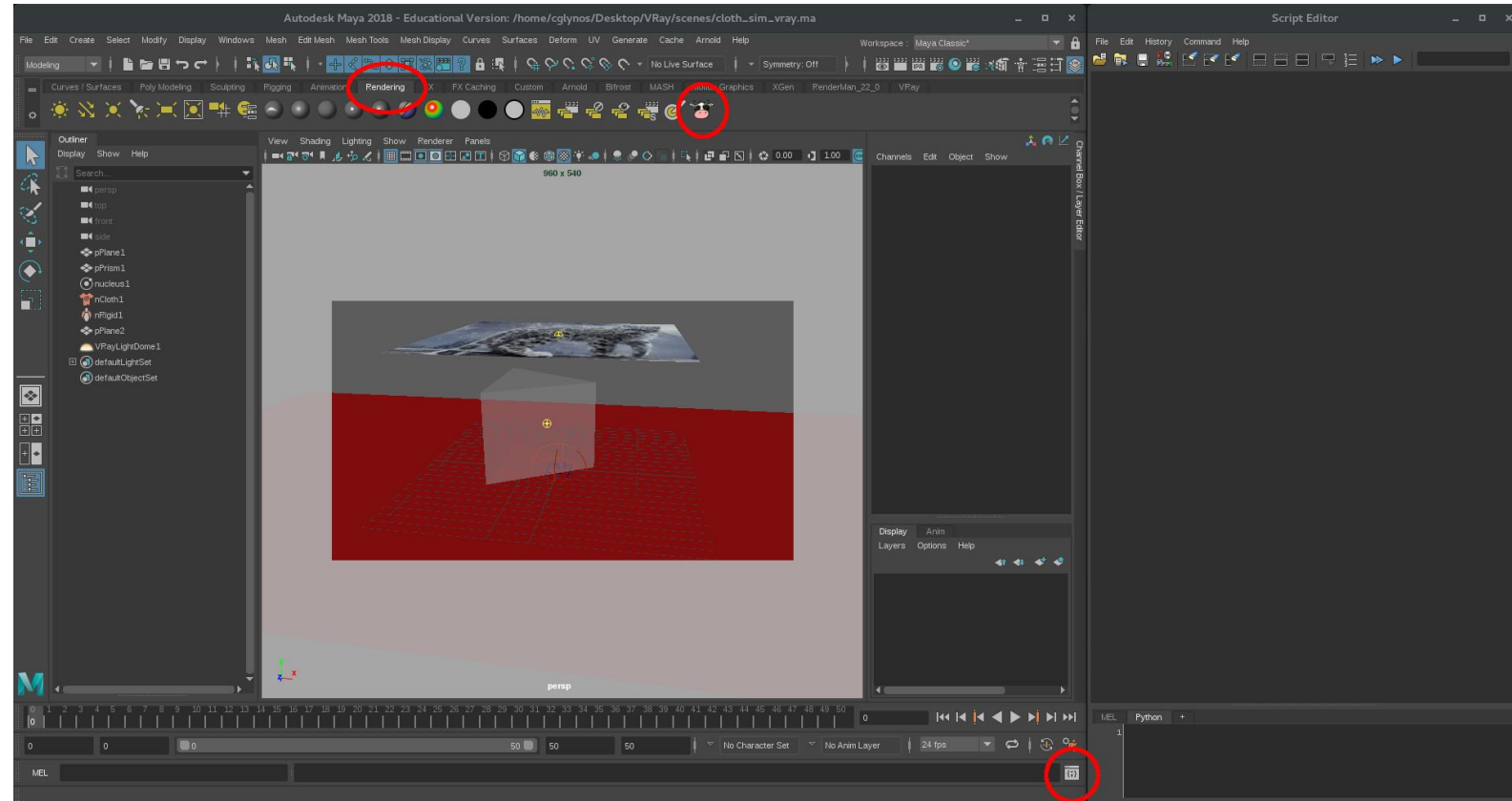
Check that your render settings are correct:

- Select the **VRay** renderer
- Make sure you have a **name** for the output renders
- Tick on **Export a .vrscene** file
- **Do not give a file name for the .vrscene**
- Check the **format** and **frame padding**
- Make sure your **animation frames** are correct
- Select the **camera** to render from
- Set the correct **resolution**



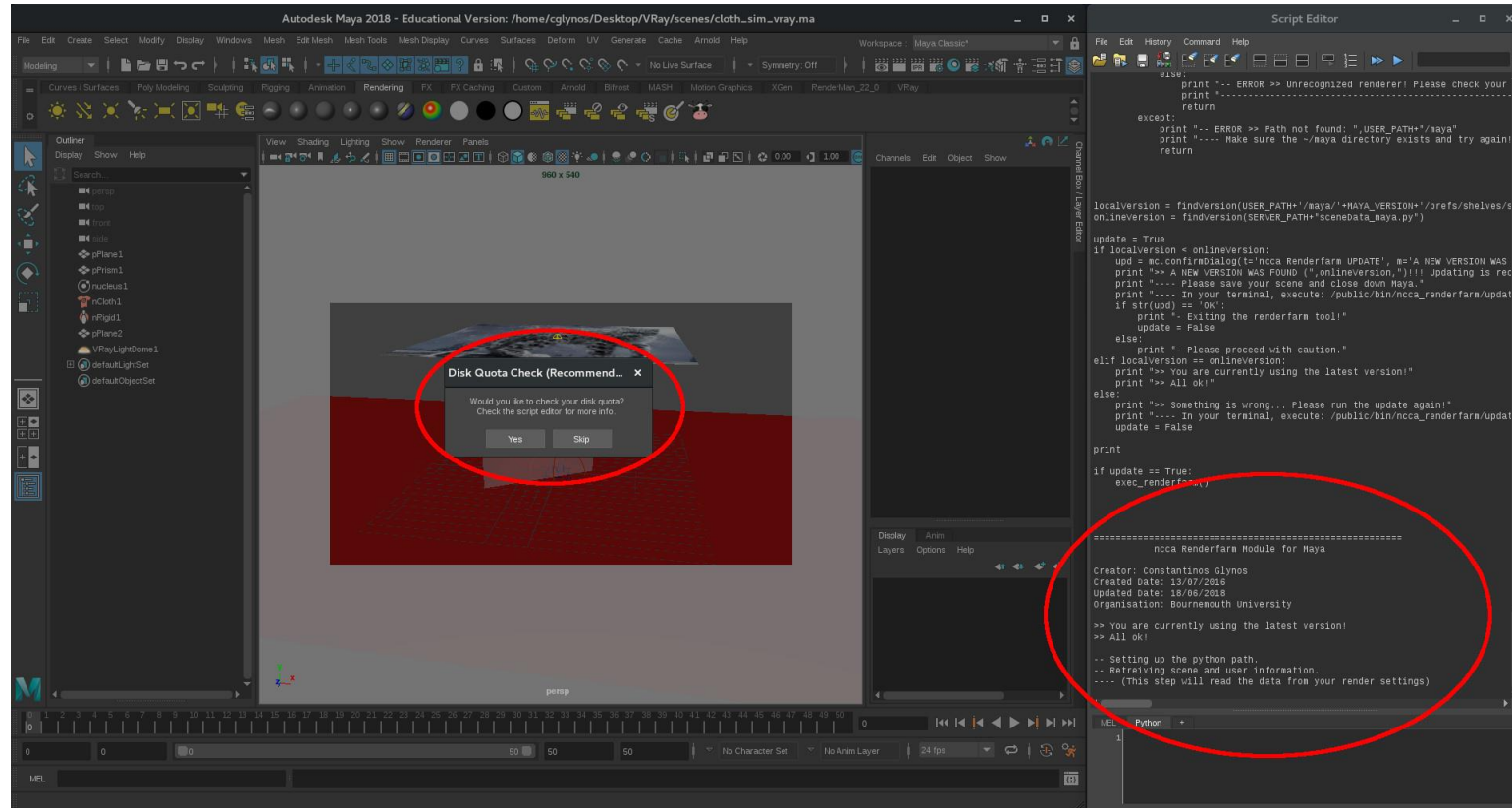
Let's render

- Press **Ctrl + S** to save the scene
- Open the **Script Editor** for debugging information
- Go to the **rendering shelf**
- Hit the cow!



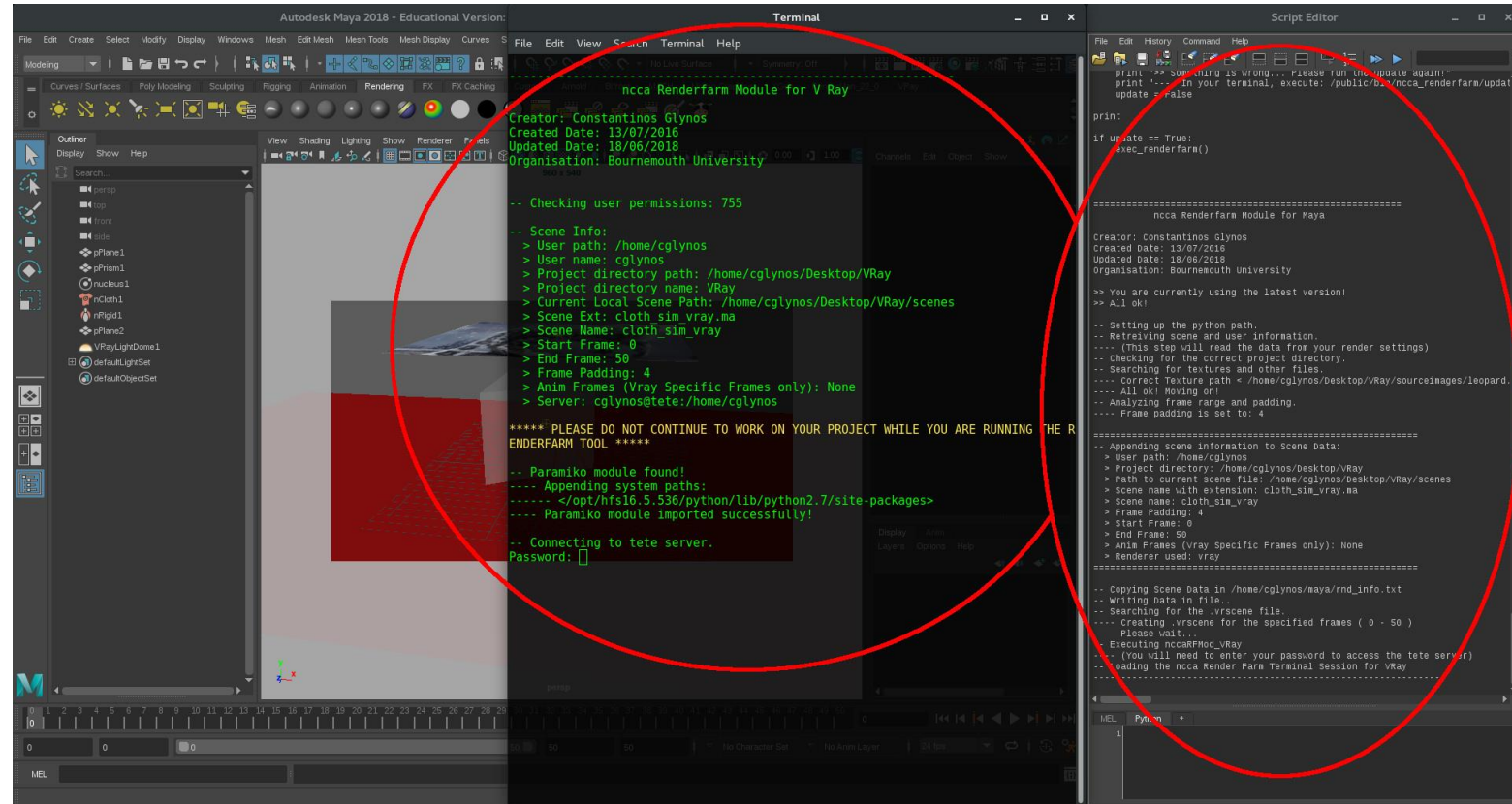
Using the tool

- Check your local disk space (quota), or **skip** if not needed.
- Check the **script editor** for any warnings about the version of the tool you are using.



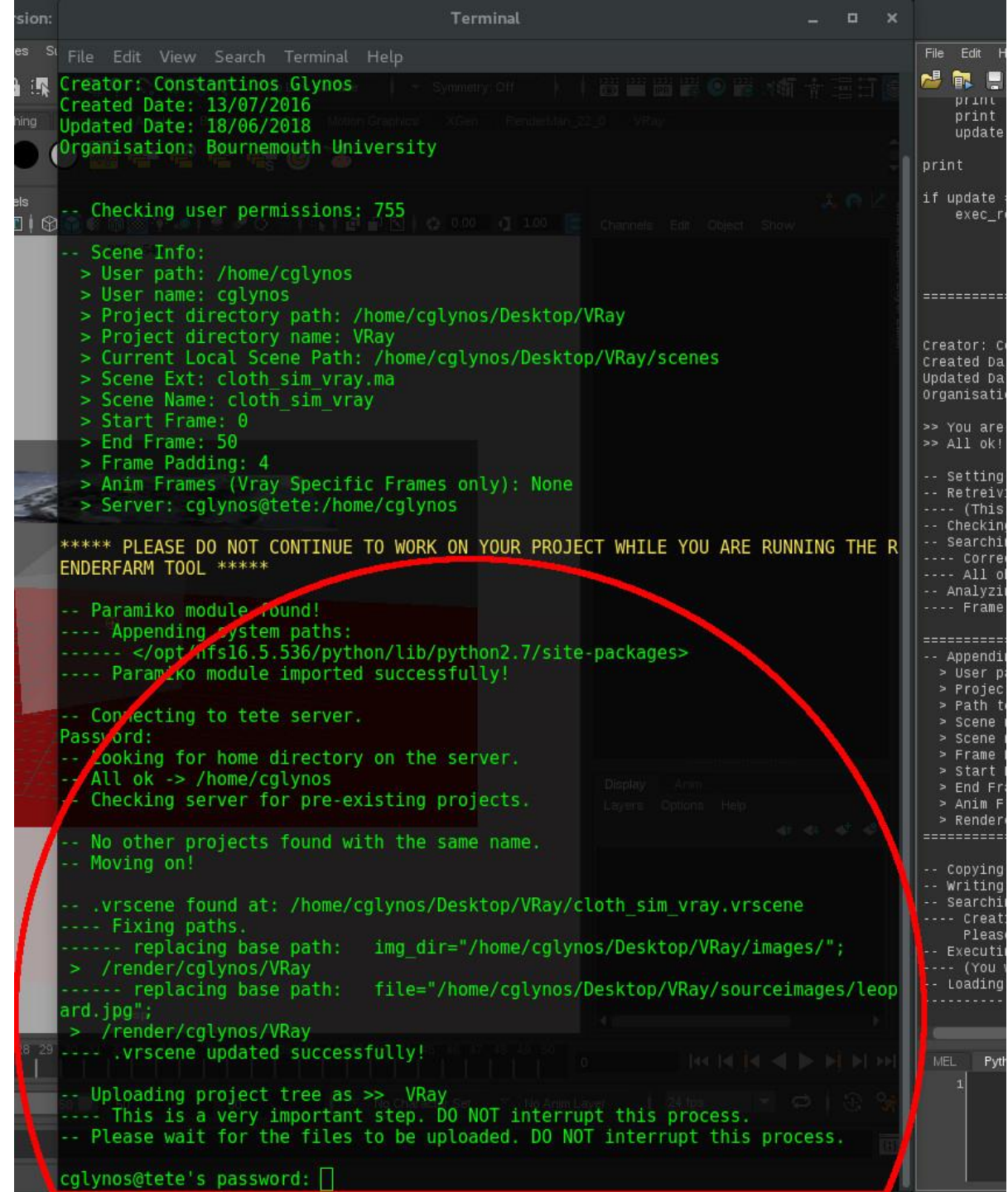
Using the tool

- The tool will generate your `.vrscene`. If one exists, already it will ask you if you want it to be replaced. Otherwise, it will use the old `.vrscene` for your renders.
- A new `terminal` will appear which links to the renderfarm.
- Check the data passed on to the renderfarm by reading the `script editor` and the `terminal`. If not correct, just close the terminal to cancel the process.
- DO NOT USE MAYA OR CONTINUE TO WORK ON YOUR SCENE WHILE YOU SUBMIT A JOB TO THE RENDERFARM.**
- Enter your `password` to continue.



Using the tool

- The tool will check if you have any existing directories with the same name on the server and prompt for action (replace or rename).
- It will also update your `.vrscene` file to match the paths of the renderfarm.
- Enter your `password` again to upload your project directory onto the tete server.



```

Creator: Constantinos Glynos
Created Date: 13/07/2016
Updated Date: 18/06/2018
Organisation: Bournemouth University

-- Checking user permissions: 755

-- Scene Info:
> User path: /home/cglynos
> User name: cglynos
> Project directory path: /home/cglynos/Desktop/VRay
> Project directory name: VRay
> Current Local Scene Path: /home/cglynos/Desktop/VRay/scenes
> Scene Ext: cloth_sim_vray.ma
> Scene Name: cloth_sim_vray
> Start Frame: 0
> End Frame: 50
> Frame Padding: 4
> Anim Frames (Vray Specific Frames only): None
> Server: cglynos@tete:/home/cglynos

***** PLEASE DO NOT CONTINUE TO WORK ON YOUR PROJECT WHILE YOU ARE RUNNING THE R
ENDERFARM TOOL *****

-- Paramiko module found!
---- Appending system paths:
----- </opt/hfs16.5.536/python/lib/python2.7/site-packages>
---- Paramiko module imported successfully!

-- Connecting to tete server.
Password:
-- Looking for home directory on the server.
-- All ok -> /home/cglynos
-- Checking server for pre-existing projects.

-- No other projects found with the same name.
-- Moving on!

-- .vrscene found at: /home/cglynos/Desktop/VRay/cloth_sim_vray.vrscene
---- Fixing paths.
----- replacing base path:  img_dir="/home/cglynos/Desktop/VRay/images/";
> /render/cglynos/VRay
----- replacing base path:  file="/home/cglynos/Desktop/VRay/sourceimages/leopard.jpg";
> /render/cglynos/VRay
---- .vrscene updated successfully!

-- Uploading project tree as >> VRay
---- This is a very important step. DO NOT interrupt this process.
-- Please wait for the files to be uploaded. DO NOT interrupt this process.

cglynos@tete's password: 
```


Using the tool

- Once the files are uploaded, the tool will prompt for a quota check on the server.
- If you do not have enough disk space (quota) available on the server, your renders will not be saved anywhere.
- Skip online quota check iff you are sure you have enough space available.

```
Terminal
File Edit View Search Terminal Help
Entering /home/cglynos/Desktop/VRay/sourceimages/.vrayThumbs
/home/cglynos/Desktop/VRay/sourceimages/.vray 100% 144KB 9.5MB/s 00:00
Entering /home/cglynos/Desktop/VRay/sourceimages/.mayaSwatches
/home/cglynos/Desktop/VRay/sourceimages/.maya 100% 12KB 5.6MB/s 00:00
Entering /home/cglynos/Desktop/VRay/sourceimages/3dPaintTextures
/home/cglynos/Desktop/VRay/sourceimages/leopa 100% 746KB 10.9MB/s 00:00
/home/cglynos/Desktop/VRay/cloth_sim vray.vrs 100% 231KB 6.3MB/s 00:00
Entering /home/cglynos/Desktop/VRay/renderman
Entering /home/cglynos/Desktop/VRay/renderman/textures
Entering /home/cglynos/Desktop/VRay/images
Entering /home/cglynos/Desktop/VRay/images/tmp
/home/cglynos/Desktop/VRay/images/tmp/test.00 100% 250KB 10.1MB/s 00:00
/home/cglynos/Desktop/VRay/images/tmp/cloth_s 100% 577KB 10.7MB/s 00:00
/home/cglynos/Desktop/VRay/images/cloth_sim.0 100% 2042KB 11.1MB/s 00:00
/home/cglynos/Desktop/VRay/images/cloth_sim.0 100% 2042KB 11.0MB/s 00:00
Entering /home/cglynos/Desktop/VRay/assets
Entering /home/cglynos/Desktop/VRay/scenes
Entering /home/cglynos/Desktop/VRay/scenes/edits
/home/cglynos/Desktop/VRay/scenes/cloth_sim_v 100% 96KB 7.0MB/s 00:00
/home/cglynos/Desktop/VRay/workspace.mel 100% 2033 2.1MB/s 00:00
Entering /home/cglynos/Desktop/VRay/.vrayThumbs
/home/cglynos/Desktop/VRay/.vrayThumbs/leopar 100% 144KB 9.6MB/s 00:00
Entering /home/cglynos/Desktop/VRay/.mayaSwatches
/home/cglynos/Desktop/VRay/.mayaSwatches/leop 100% 12KB 5.9MB/s 00:00
Entering /home/cglynos/Desktop/VRay/Time Editor
Entering /home/cglynos/Desktop/VRay/Time Editor/Clip Exports
Entering /home/cglynos/Desktop/VRay/movies
Entering /home/cglynos/Desktop/VRay/data
Entering /home/cglynos/Desktop/VRay/scripts
Entering /home/cglynos/Desktop/VRay/sound
Entering /home/cglynos/Desktop/VRay/clips
Entering /home/cglynos/Desktop/VRay/renderData
Entering /home/cglynos/Desktop/VRay/renderData/shaders
Entering /home/cglynos/Desktop/VRay/renderData/irImages
Entering /home/cglynos/Desktop/VRay/renderData/depth
Entering /home/cglynos/Desktop/VRay/renderData/fur
Entering /home/cglynos/Desktop/VRay/renderData/fur/furShadowMap
Entering /home/cglynos/Desktop/VRay/renderData/fur/furAttrMap
Entering /home/cglynos/Desktop/VRay/renderData/fur/furEqualMap
Entering /home/cglynos/Desktop/VRay/renderData/fur/furImages
Entering /home/cglynos/Desktop/VRay/renderData/fur/furFiles
Entering /home/cglynos/Desktop/VRay/cache
Entering /home/cglynos/Desktop/VRay/cache/bifrost
Entering /home/cglynos/Desktop/VRay/cache/nCache
Entering /home/cglynos/Desktop/VRay/cache/nCache/fluid
Entering /home/cglynos/Desktop/VRay/cache/particles
Entering /home/cglynos/Desktop/VRay/sceneAssembly
Entering /home/cglynos/Desktop/VRay/autosave

-- Upload complete!

-- Disk Quota Check (Recommended)
---- Would you like to check your disk quota before rendering? (y/n):
```


Using the tool

- The **output images directory** is set from within your **.vrscene** and project directory settings.
- Check the **Job info** data before submitting the job to Qube.
- Type **y** and **Enter** to continue.

```
Version:
Curves S...
Caching
Panels
File Edit View Search Terminal Help
/home/cglynos/Desktop/VRay/.vrayThumbs/leopard 100% 144KB 9.6MB/s 00:00
Entering /home/cglynos/Desktop/VRay/.mayaSwatches
/home/cglynos/Desktop/VRay/.mayaSwatches/leopard 100% 12KB 5.9MB/s 00:00
Entering /home/cglynos/Desktop/VRay/Time Editor
Entering /home/cglynos/Desktop/VRay/Time Editor/Clip Exports
Entering /home/cglynos/Desktop/VRay/movies
Entering /home/cglynos/Desktop/VRay/data
Entering /home/cglynos/Desktop/VRay/scripts
Entering /home/cglynos/Desktop/VRay/sound
Entering /home/cglynos/Desktop/VRay/clips
Entering /home/cglynos/Desktop/VRay/renderData
Entering /home/cglynos/Desktop/VRay/renderData/shaders
Entering /home/cglynos/Desktop/VRay/renderData/iprImages
Entering /home/cglynos/Desktop/VRay/renderData/depth
Entering /home/cglynos/Desktop/VRay/renderData/fur
Entering /home/cglynos/Desktop/VRay/renderData/fur/furShadowMap
Entering /home/cglynos/Desktop/VRay/renderData/fur/furAttrMap
Entering /home/cglynos/Desktop/VRay/renderData/fur/furEqualMap
Entering /home/cglynos/Desktop/VRay/renderData/fur/furFiles
Entering /home/cglynos/Desktop/VRay/cache
Entering /home/cglynos/Desktop/VRay/cache/bifrost
Entering /home/cglynos/Desktop/VRay/cache/nCache
Entering /home/cglynos/Desktop/VRay/cache/nCache/fluid
Entering /home/cglynos/Desktop/VRay/cache/particles
Entering /home/cglynos/Desktop/VRay/sceneAssembly
Entering /home/cglynos/Desktop/VRay/autosave

-- Upload complete!

-- Disk Quota Check (Recommended)
---- Would you like to check your disk quota before rendering? (y/n): n
-- Skipped disk quota check.

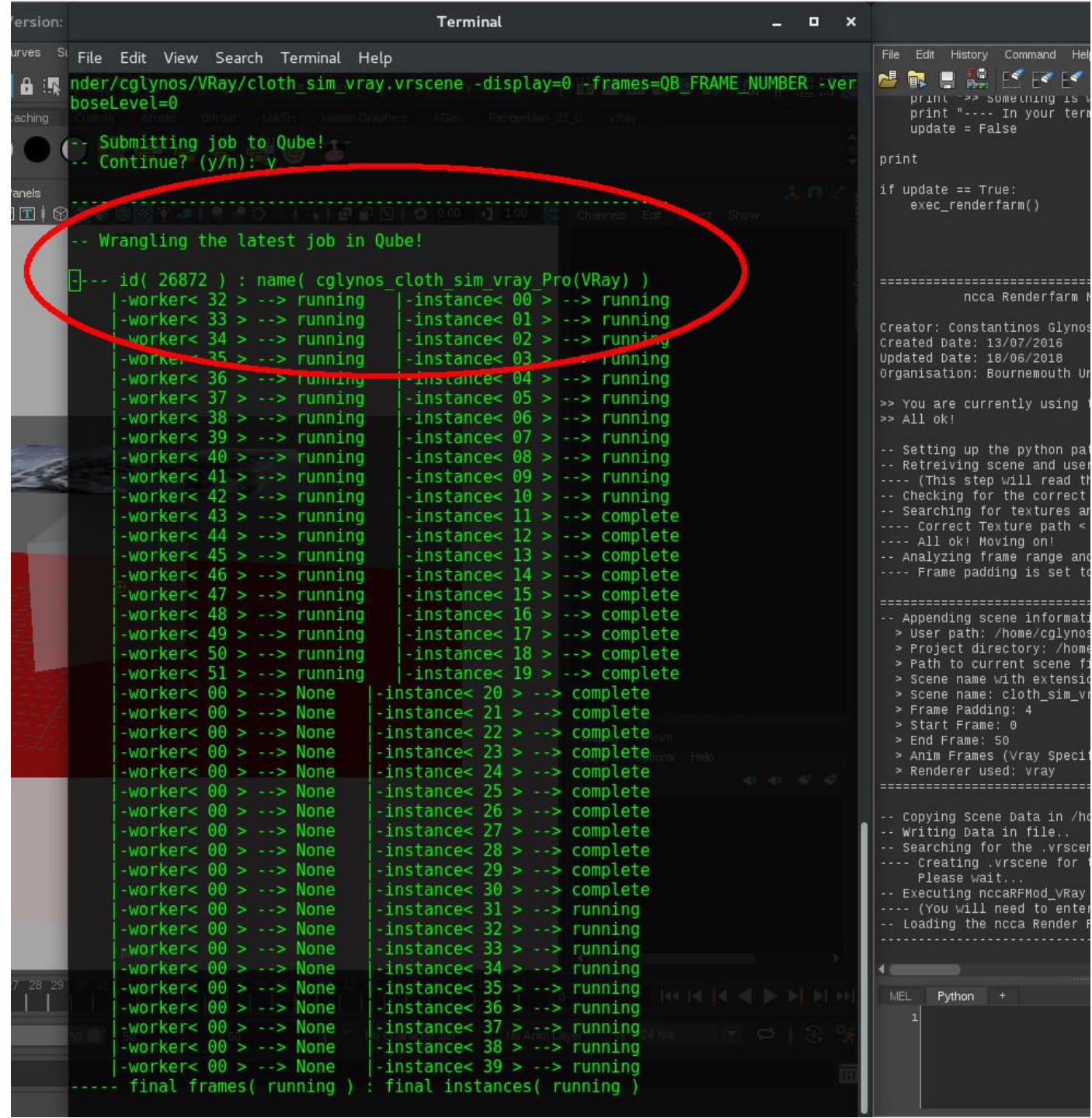
-- Accessing Qube..

-- Job Info:
> job Name: cglynos_cloth_sim_vray_Pro(VRay)
> job Priority: 9999
> job Number of Frames: 51
> job Instances: 40
> job Frame Range: 0-50
> job Project Path: /render/cglynos/VRay
> job Scene File: /render/cglynos/VRay/scenes/cloth_sim_vray.ma
> job Frame Padding: 4
> job Cmd Line: LD_LIBRARY_PATH=/opt/software/ChaosGroup/V-Ray/Maya2018-x64/li
b/linux_x64/gcc-4.4 /opt/software/autodesk/maya/vray/bin/vray.bin -sceneFile=/re
nder/cglynos/VRay/cloth_sim_vray.vrscene -display=0 -frames=QB_FRAME_NUMBER -ver
boseLevel=0

-- Submitting job to Qube!
-- Continue? (y/n): y
```


Using the tool

- **Wrangle** your renders from the terminal.
- At this point you can **safely close the terminal** and wrangle your renders from **Qube**. But it's advised that you leave the terminal open.
- Now we **wait** for it to finish.
- You can **now continue** to work on your scene.



```
version:
File Edit View Search Terminal Help
nder/cglynos/VRay/cloth_sim_vray.vrscene -display=0 -frames=QB_FRAME_NUMBER -ver
baseLevel=0
-- Submitting job to Qube!
-- Continue? (y/n): y
-- Wrangling the latest job in Qube!
[--- id( 26872 ) : name( cglynos_cloth_sim_vray_Pro(VRay) )
-worker< 32 > --> running -instance< 00 > --> running
-worker< 33 > --> running -instance< 01 > --> running
-worker< 34 > --> running -instance< 02 > --> running
-worker< 35 > --> running -instance< 03 > --> running
-worker< 36 > --> running -instance< 04 > --> running
-worker< 37 > --> running -instance< 05 > --> running
-worker< 38 > --> running -instance< 06 > --> running
-worker< 39 > --> running -instance< 07 > --> running
-worker< 40 > --> running -instance< 08 > --> running
-worker< 41 > --> running -instance< 09 > --> running
-worker< 42 > --> running -instance< 10 > --> running
-worker< 43 > --> running -instance< 11 > --> complete
-worker< 44 > --> running -instance< 12 > --> complete
-worker< 45 > --> running -instance< 13 > --> complete
-worker< 46 > --> running -instance< 14 > --> complete
-worker< 47 > --> running -instance< 15 > --> complete
-worker< 48 > --> running -instance< 16 > --> complete
-worker< 49 > --> running -instance< 17 > --> complete
-worker< 50 > --> running -instance< 18 > --> complete
-worker< 51 > --> running -instance< 19 > --> complete
-worker< 00 > --> None -instance< 20 > --> complete
-worker< 00 > --> None -instance< 21 > --> complete
-worker< 00 > --> None -instance< 22 > --> complete
-worker< 00 > --> None -instance< 23 > --> complete
-worker< 00 > --> None -instance< 24 > --> complete
-worker< 00 > --> None -instance< 25 > --> complete
-worker< 00 > --> None -instance< 26 > --> complete
-worker< 00 > --> None -instance< 27 > --> complete
-worker< 00 > --> None -instance< 28 > --> complete
-worker< 00 > --> None -instance< 29 > --> complete
-worker< 00 > --> None -instance< 30 > --> complete
-worker< 00 > --> None -instance< 31 > --> running
-worker< 00 > --> None -instance< 32 > --> running
-worker< 00 > --> None -instance< 33 > --> running
-worker< 00 > --> None -instance< 34 > --> running
-worker< 00 > --> None -instance< 35 > --> running
-worker< 00 > --> None -instance< 36 > --> running
-worker< 00 > --> None -instance< 37 > --> running
-worker< 00 > --> None -instance< 38 > --> running
-worker< 00 > --> None -instance< 39 > --> running
----- final frames( running ) : final instances( running )
```

Finishing off

- Once the renders are **complete**, the tool will prompt you to **open the project directory** on the server.
- Type **y** and **Enter** so that the tool can **open your project directory on the server**. Otherwise, type **n** and **Enter**.
- You can now close the terminal by pressing **Enter** again or by using the **close button**.

