

Ringling HPC Cluster

HPC submission process
Motion Design

Integration with Cinema 4D

The Big Picture

- Stages of a render job:
 1. Preparing to render
 2. Render job submission
 3. Monitoring the render job
 4. Retrieving and reviewing results

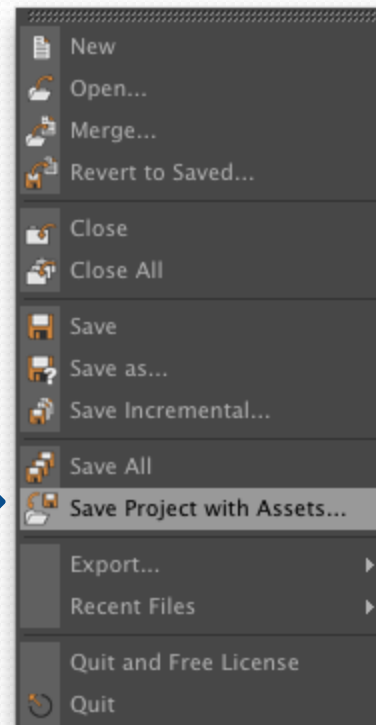
How to... SUBMIT

- Open the Cinema 4D file and prepare it just as if you are going to render it locally
 - Set the needed output file resolution
 - Set the camera view to render
 - Check your render settings to assure they are optimized and set for rendering

How to... SUBMIT

Inside Cinema 4D with your file open:
Go to “File” and click

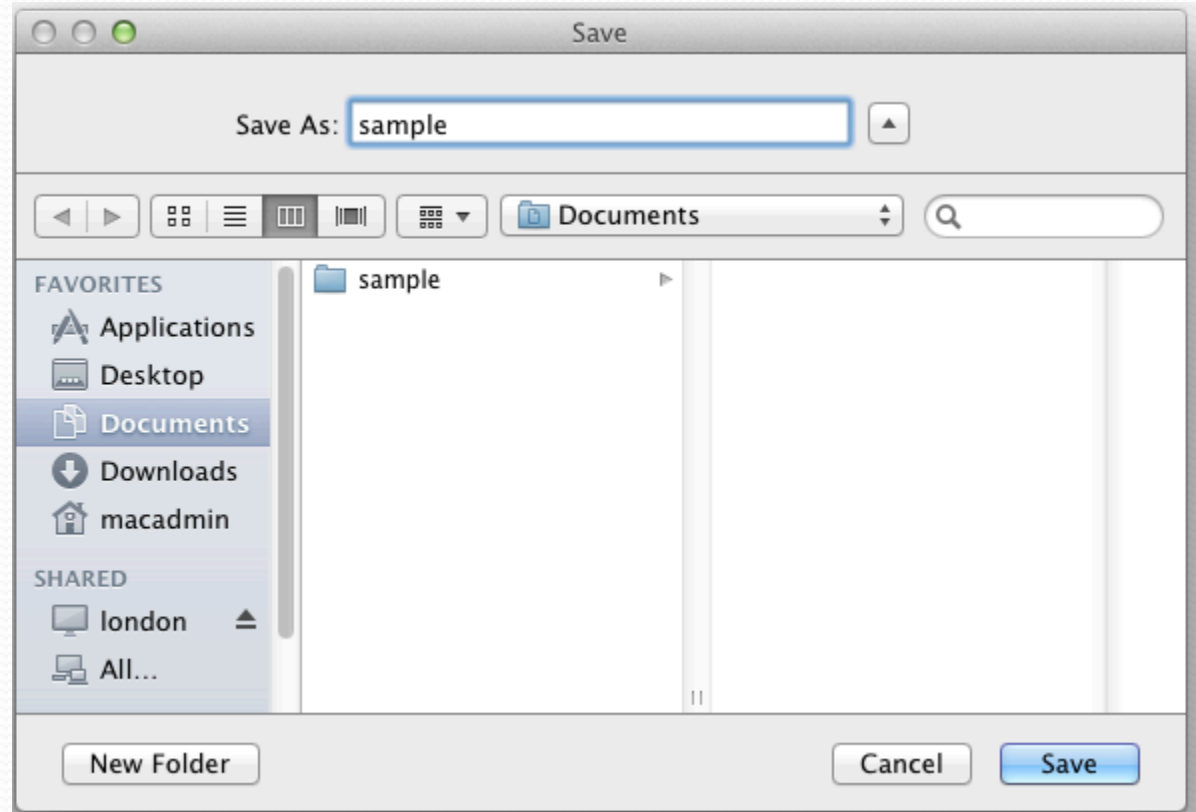
“Save Project With Assets”



How to... SUBMIT

Save your project with assets in a RenderProjects folder in your homespace (If the RenderProjects folder does not exist, create it). This will create a project folder which will include all assets and source images in the project.

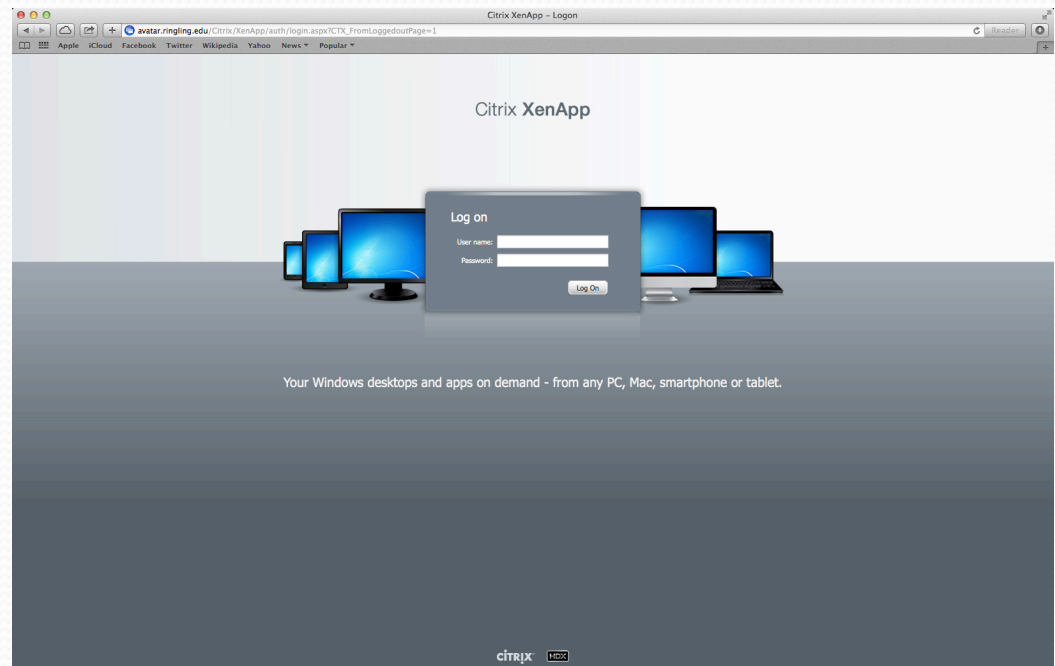
* Note: This project **MUST** be saved in your homespace in order for the renders to go through!



How to... SUBMIT

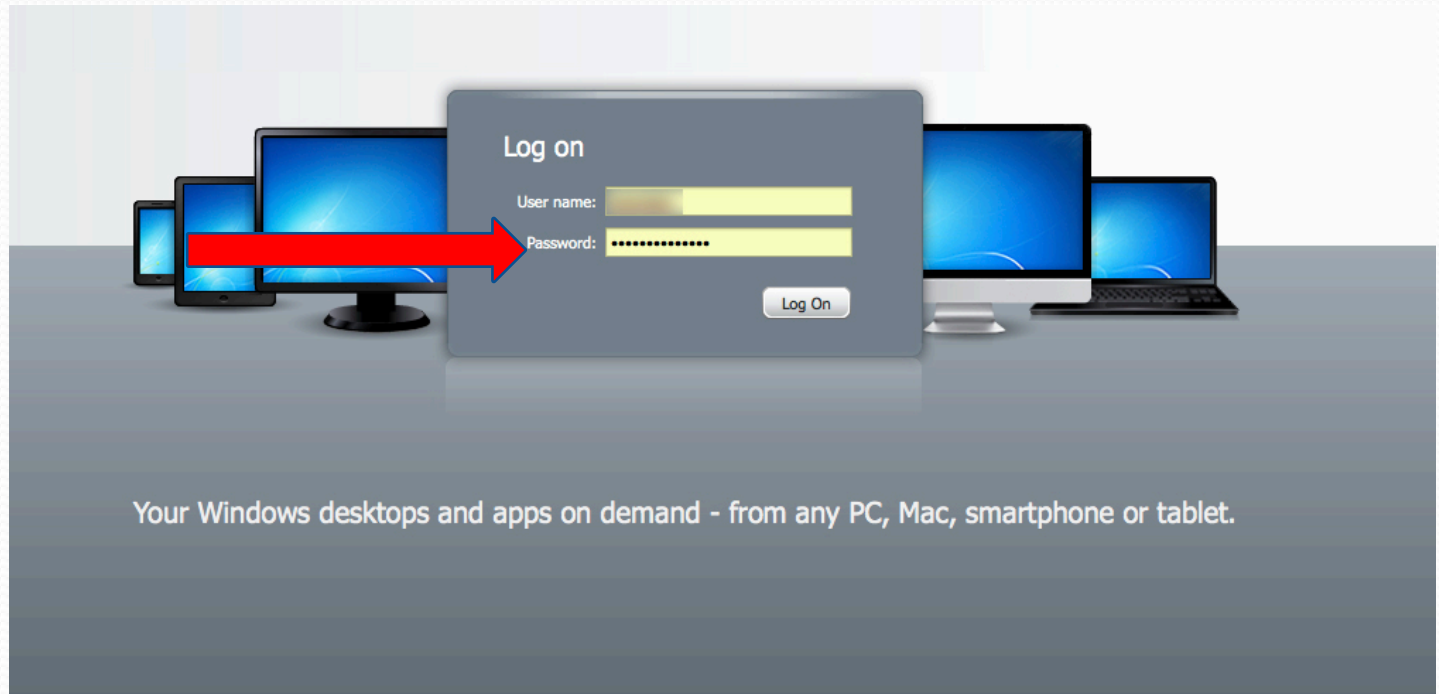
Open up Safari and enter the following address in the address bar:

“<http://avatar.ringling.edu>”



How to... SUBMIT

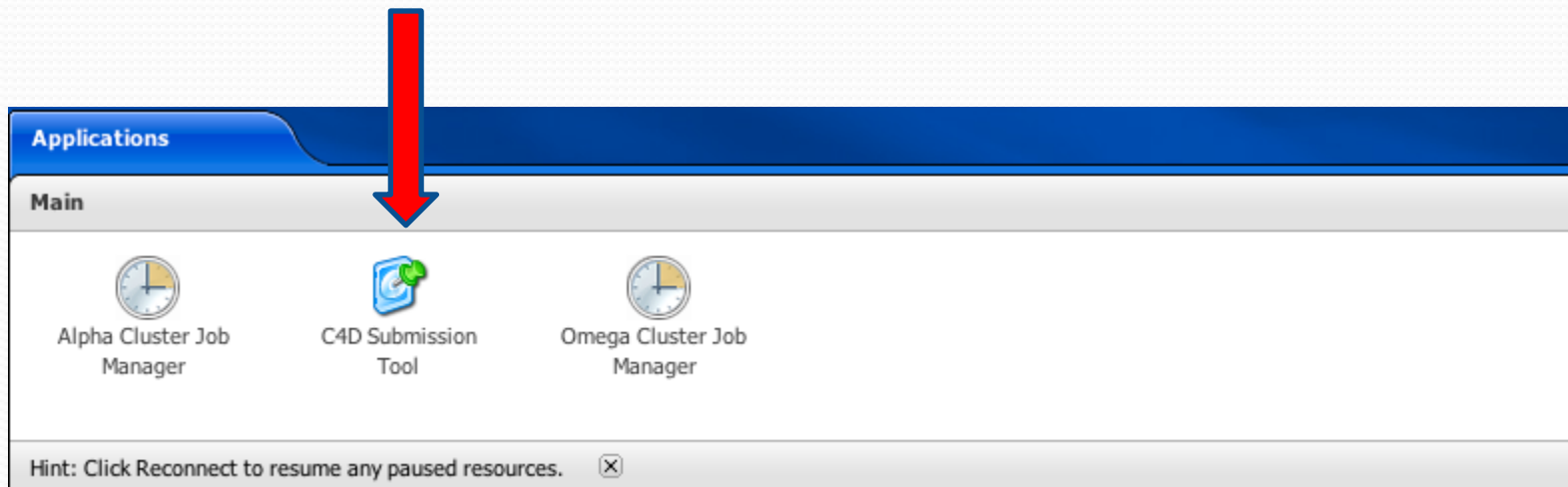
Use your regular Ringling user and password to log in to the website.



How to... SUBMIT

Here you will find the Job managers and the submission tool.

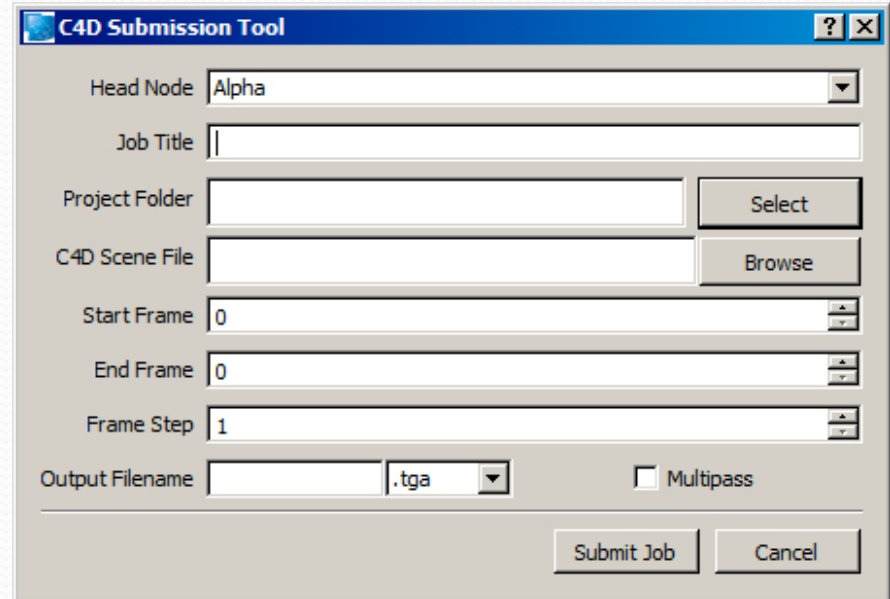
For now select the submission tool.



Note: With this “Citrix” system, you will be launching Windows applications on your Mac. This means it might look different than what you are used to.

How to... SUBMIT

This window will pop up (it might not come up instantly)



The image shows a Windows-style dialog box titled "C4D Submission Tool". It contains several input fields and buttons for configuring a submission job. The fields are: "Head Node" (a dropdown menu showing "Alpha"), "Job Title" (an empty text box), "Project Folder" (an empty text box with a "Select" button to its right), "C4D Scene File" (an empty text box with a "Browse" button to its right), "Start Frame" (a text box with "0" and a spinner), "End Frame" (a text box with "0" and a spinner), and "Frame Step" (a text box with "1" and a spinner). At the bottom, there is an "Output Filename" field with a ".tga" dropdown menu and a "Multipass" checkbox. Two buttons, "Submit Job" and "Cancel", are located at the bottom right.

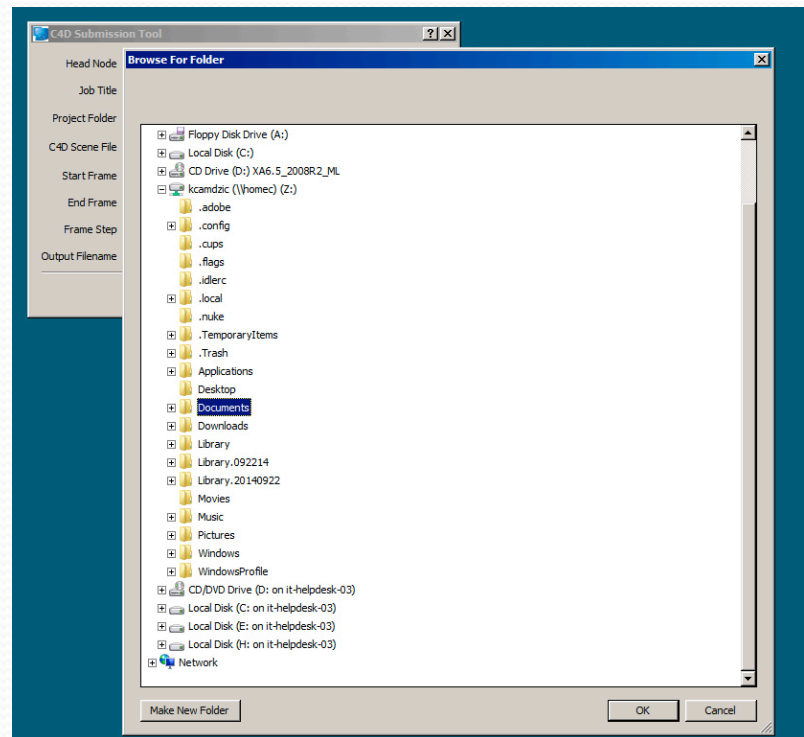
| Field | Value |
|-----------------|--------------------------|
| Head Node | Alpha |
| Job Title | |
| Project Folder | |
| C4D Scene File | |
| Start Frame | 0 |
| End Frame | 0 |
| Frame Step | 1 |
| Output Filename | .tga |
| Multipass | <input type="checkbox"/> |

How to... SUBMIT

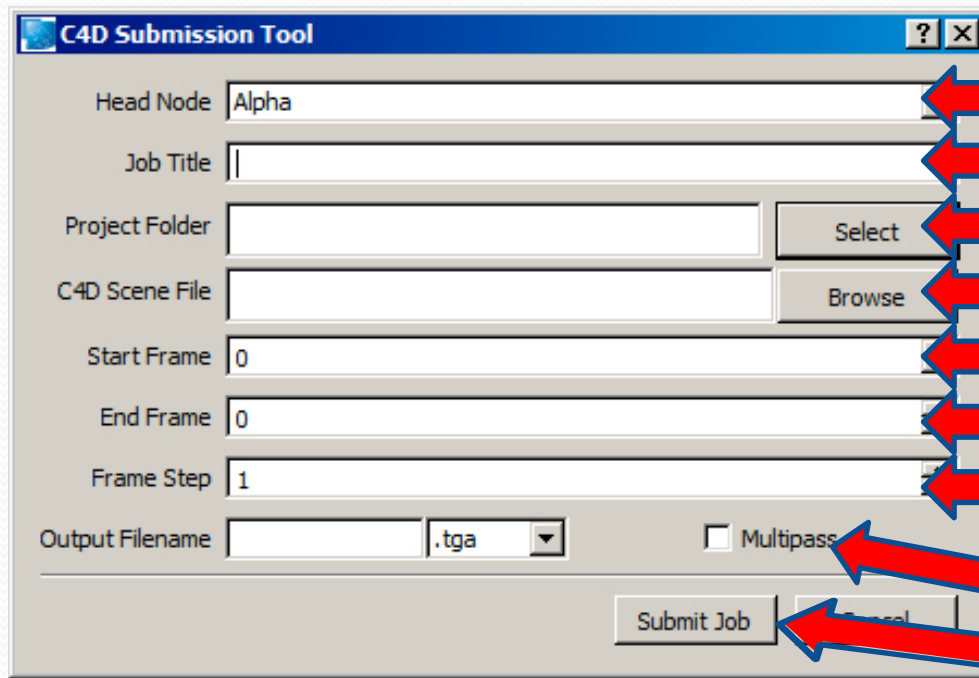
Hitting Browse will get you to your homespace. Navigate to where you saved that project.

Note that this will be a Windows application that you are opening and thus the layout might look strange to you.

Your homespace will be listed with your username, followed by (Z:\)



How to... SUBMIT



The screenshot shows the 'C4D Submission Tool' dialog box. It contains the following fields and controls:

- Head Node: A text field containing 'Alpha'.
- Job Title: An empty text field.
- Project Folder: A text field with a 'Select' button to its right.
- C4D Scene File: A text field with a 'Browse' button to its right.
- Start Frame: A text field containing '0'.
- End Frame: A text field containing '0'.
- Frame Step: A text field containing '1'.
- Output Filename: A text field followed by a file type dropdown menu set to '.tga'.
- Multipass: A checkbox that is currently unchecked.
- Submit Job: A button at the bottom right.

Red arrows point from the text descriptions on the right to each of these fields and buttons.

Selected Head Node

Title of the render job

Folder you've saved to

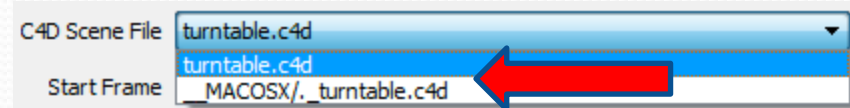
C4D file to be rendered* First frame to render

Last frame to render

Interval (normally 1)

Output filename and type and Multipass option when needed
Submit button to launch job

* This list includes all C4D files in the selected Project Archive. Often there is just one Max file. If needed, choose the appropriate file to render. Disregard such files that begin with _MACOSX or ._



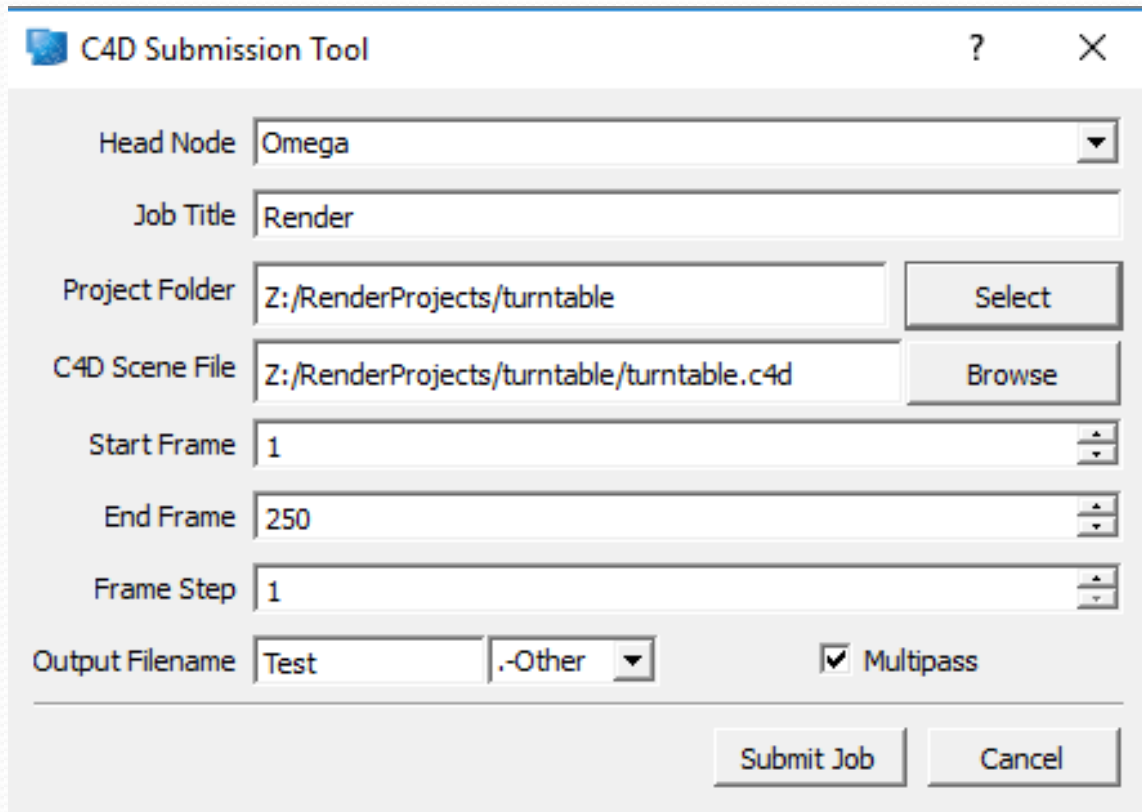
This close-up shows the 'C4D Scene File' dropdown menu. It lists three items:

- turntable.c4d (highlighted in blue)
- turntable.c4d
- ._MACOSX/._turntable.c4d

A red arrow points to the first item, 'turntable.c4d'.

How to... SUBMIT

- An example submission ready to go!

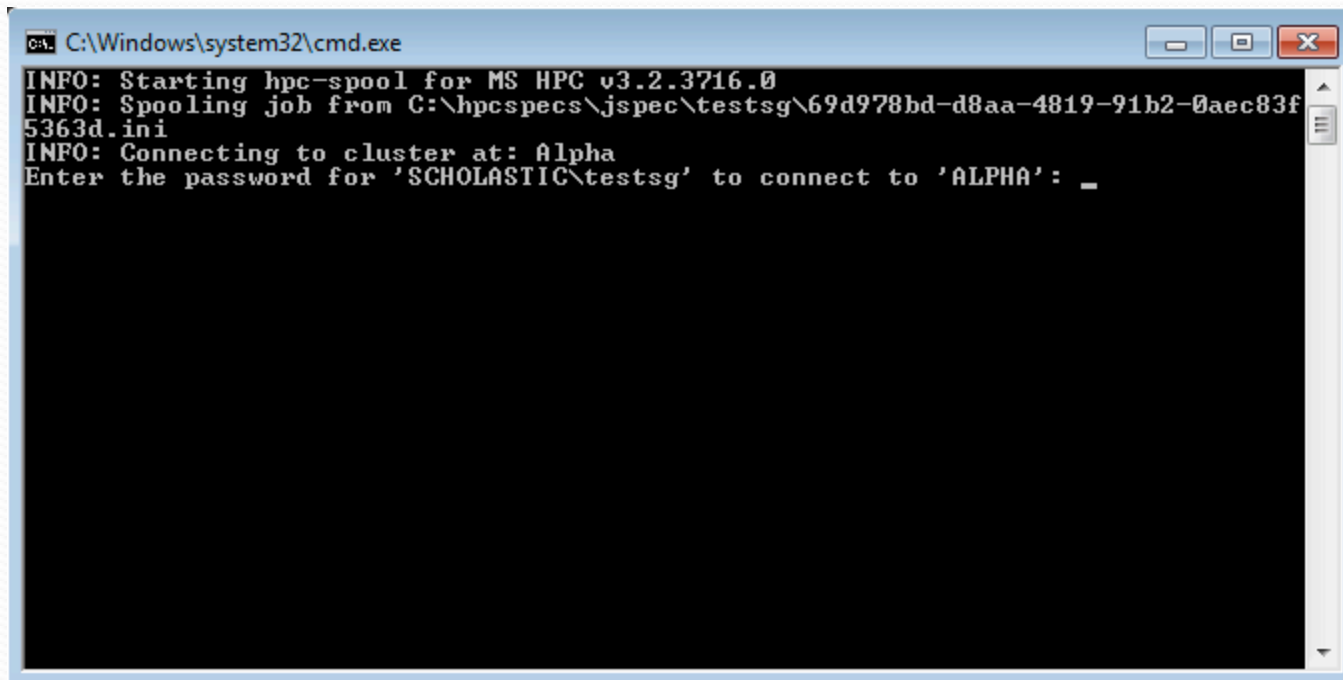


The screenshot shows a software window titled "C4D Submission Tool". It contains several input fields and buttons for configuring a submission. The fields are: "Head Node" (a dropdown menu showing "Omega"), "Job Title" (a text field with "Render"), "Project Folder" (a text field with "Z:/RenderProjects/turntable" and a "Select" button), "C4D Scene File" (a text field with "Z:/RenderProjects/turntable/turntable.c4d" and a "Browse" button), "Start Frame" (a text field with "1"), "End Frame" (a text field with "250"), and "Frame Step" (a text field with "1"). At the bottom, there is an "Output Filename" section with a text field containing "Test", a dropdown menu showing ".-Other", and a checked checkbox labeled "Multipass". At the very bottom are two buttons: "Submit Job" and "Cancel".

Make sure there are no spaces or special characters in any of your file or folder names or your file will NOT render

How to... SUBMIT

- After you hit “Submit”, a command window will appear to connect to the cluster and launch your render job

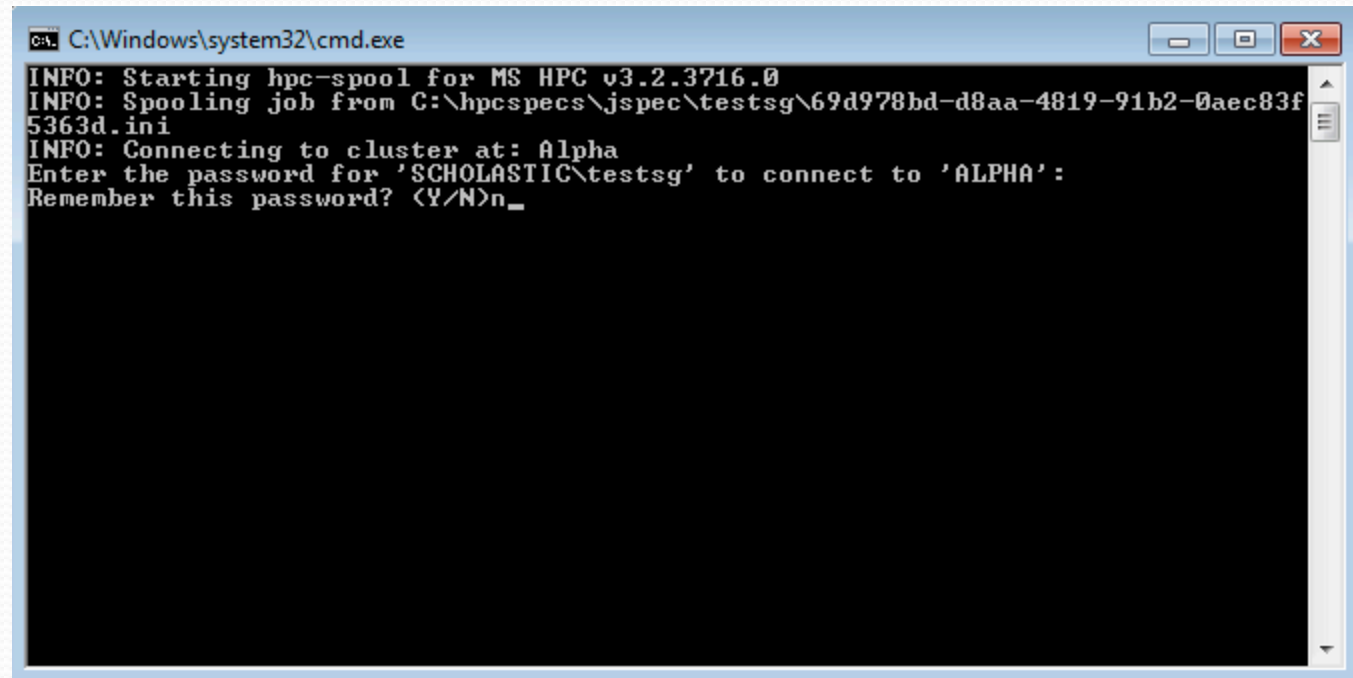


```
C:\Windows\system32\cmd.exe
INFO: Starting hpc-spool for MS HPC v3.2.3716.0
INFO: Spooling job from C:\hpcspecs\jspec\testsg\69d978bd-d8aa-4819-91b2-0aec83f5363d.ini
INFO: Connecting to cluster at: Alpha
Enter the password for 'SCHOLASTIC\testsg' to connect to 'ALPHA': _
```

How to... SUBMIT

- You may be prompted for your password
 - When you are typing your password, NOTHING shows up on the screen! Don't worry – your password is being entered!

When prompted, you might choose to save password or not.



```
C:\Windows\system32\cmd.exe
INFO: Starting hpc-spool for MS HPC v3.2.3716.0
INFO: Spooling job from C:\hpcspecs\jspec\testsg\69d978bd-d8aa-4819-91b2-0aec83f5363d.ini
INFO: Connecting to cluster at: Alpha
Enter the password for 'SCHOLASTIC\testsg' to connect to 'ALPHA':
Remember this password? (Y/N)n_
```

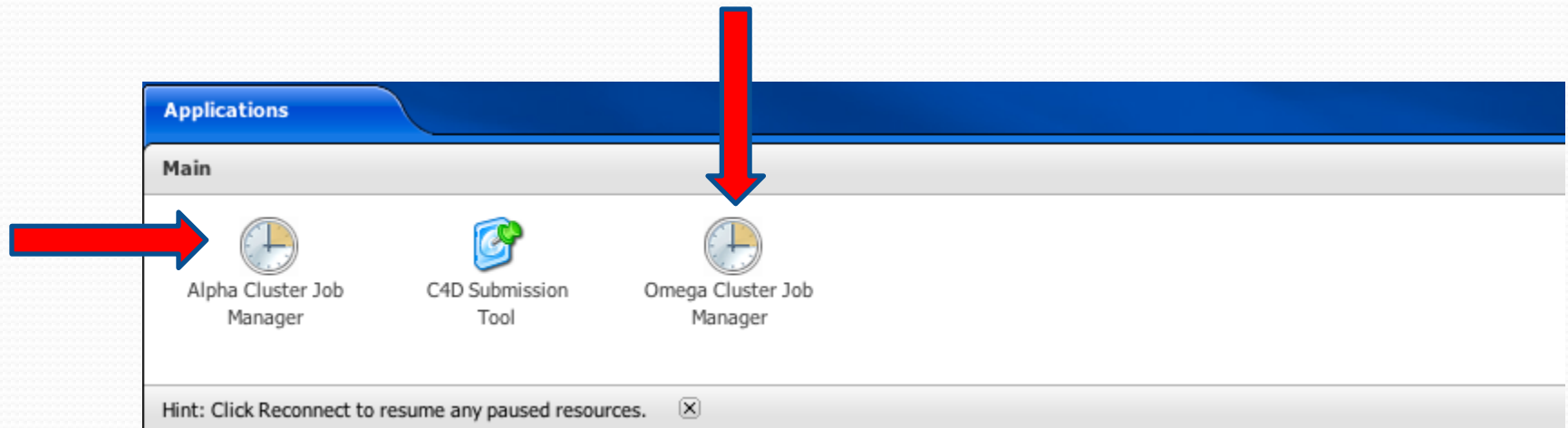
How to... SUBMIT

- Congratulations! Your job has been launched.
 - A few key pieces of information:
 - Your files and logs will be returned to an **output share**
 - Both can be monitored from the labs during the render job
 - Files are organized based on folders with the job number and the cluster it was submitted to. For example:
 - 38.Omega -> job 38 on the Omega cluster
 - Folders with output and logs on the share will be erased after 72 hours of its creation

How to... MONITOR

Monitoring the render job

- Launch the Job Manager
- Choose the corresponding cluster for your job on the website



How to... MONITOR

The screenshot displays the 'Cluster ALPHA - HPC 2008 R2 Job Manager' application. The interface includes a menu bar (File, View, Actions, Options, Help), a toolbar with navigation and search options, and a main workspace divided into three panes: 'Job Management', 'Active (1)', and 'Actions'.

Job Management Pane: A tree view on the left showing job categories. Under 'All Jobs', 'Active' is selected. Under 'My Jobs', 'Active' is also selected. Under 'By Job Template', 'Default' is selected.

Active (1) Pane: A table showing the status of active jobs. A red arrow points to the table header, and another red arrow points to the 'Active' category in the 'Job Management' pane.

| Job ID | Job Name | State | Owner | Progress | Submit Time | Requested |
|--------|------------|---------|-------------------|----------|-----------------------|-------------|
| 1180 | testSubmit | Running | SCHOLASTIC\testsg | 33% | 10/8/2012 10:28:06 AM | Auto-Auto S |

Actions Pane: A list of actions available for job management, including 'Job Submission' (New Job, New Single-Task Job, New Parametric Sweep Job, New Job from XML File), 'Job Actions' (View Job, Modify Job, Add Task to Job, Copy Job, Submit Job, Cancel Job, Requeue Job, Export Job), 'Task Actions' (View Task, Cancel Task, Requeue Task, Requeue Failed Sub-Tasks, Export Task), and 'Help Resources' (Overview of HPC Job Manager, Creating and Submitting Jobs, Tracking Job State).

Your latest job now running in the cluster

Different ways to look at your jobs – active ones, all or look at just your jobs or everyone's jobs

How to... MONITOR

Under "My Jobs"
you can check the
progress of your
render jobs



The screenshot displays the 'Cluster ALPHA - HPC 2008 R2 Job Manager' application. The interface includes a menu bar (File, View, Actions, Options, Help), a toolbar with navigation and search options, and a main workspace divided into several panels.

Job Management Panel: This panel on the left contains a tree view with the following categories:

- All Jobs
 - Configuring
 - Active
 - Finished
 - Failed
 - Canceled
- My Jobs
 - Configuring
 - Active
 - Finished
 - Failed
 - Canceled
- By Job Template
 - Default
 - C4DTemplate
 - CATemplate
 - IDTemplate

The 'Active' state under 'My Jobs' is highlighted, and a red arrow points from the text to this selection.

Active (1) Table: The main workspace displays a table with the following columns: Job ID, Job Name, State, Owner, Progress, Submit Time, and Requested. The table contains one entry:

| Job ID | Job Name | State | Owner | Progress | Submit Time | Requested |
|--------|------------|---------|-------------------|----------|-----------------------|-------------|
| 1180 | testSubmit | Running | SCHOLASTIC\vestsg | 33% | 10/8/2012 10:28:06 AM | Auto-Auto S |

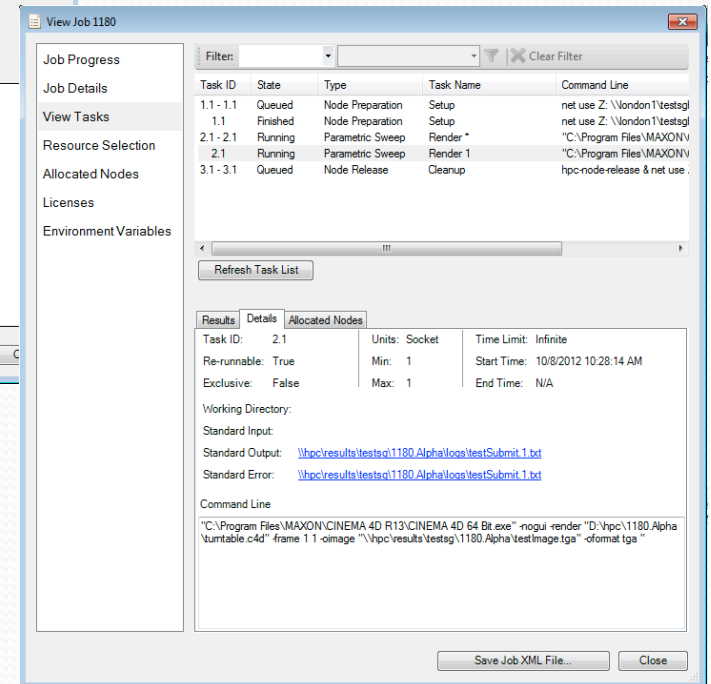
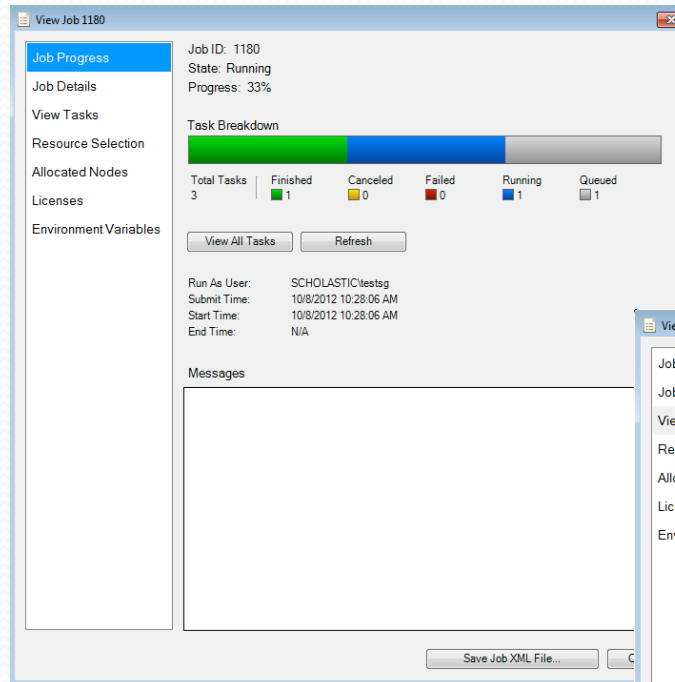
Actions Panel: The rightmost panel contains several sections of actions:

- Job Submission:** New Job ..., New Single-Task Job ..., New Parametric Sweep Job ..., New Job from XML File ...
- Job Actions:** View Job ..., Modify Job ..., Add Task to Job ..., Copy Job ..., Submit Job, Cancel Job, Requeue Job, Export Job ...
- Task Actions:** View Task ..., Cancel Task, Requeue Task, Requeue Failed Sub-Tasks, Export Task ...
- Help Resources:** Overview of HPCJob Manager, Creating and Submitting Jobs, Tracking Job State, Managing Jobs and Tasks

The status bar at the bottom indicates 'Data updated: 10/8/2012 10:29:05 AM'.

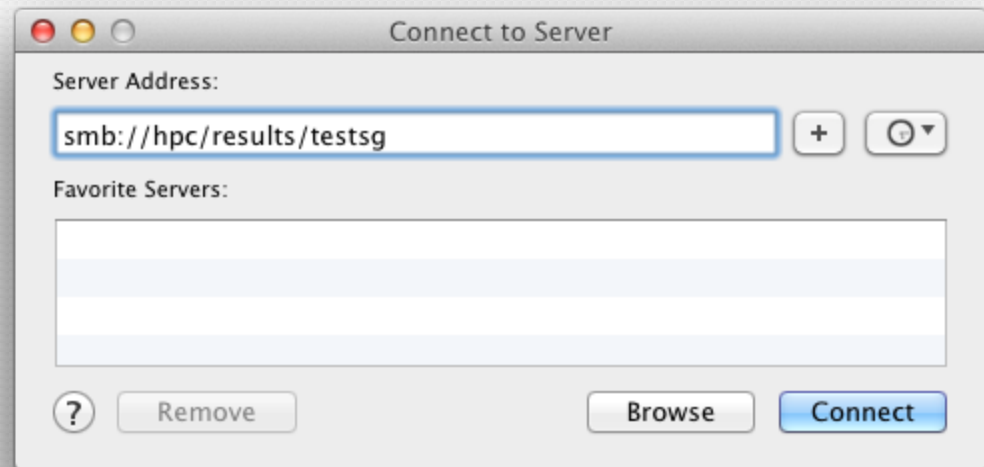
How to... MONITOR

You can get more information on your job by double clicking the job itself



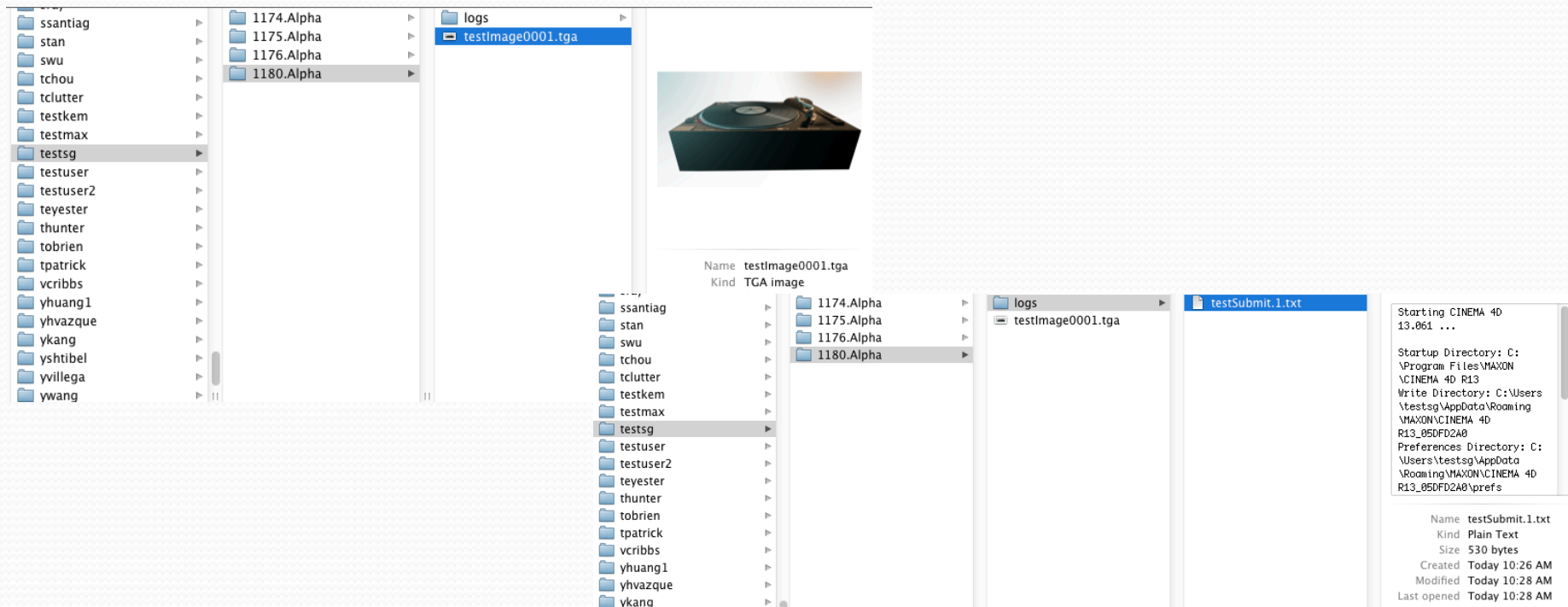
How to... RETRIEVE

- Retrieve rendered frames and logs
 - Connect to Server
 - **smb://hpc/results/[your username]**



How to... RETRIEVE

- Retrieve rendered frames and logs
 - In the connected share you will be able to browse to your outputted frames and logs.



How to... GET HELP

- When you run into questions while rendering in the cluster
 - Check with your peers – can they help you out?
 - Check with your instructors – can they help you out?
 - Check the IT Render Support page for announcements, resources, and troubleshooting tips at it.ringling.edu/C4D
 - If that doesn't help, submit a ticket through support.ringling.edu or make a zoom appointment with IT to speak with one of our Render Support Specialists (<https://rcadhelpdesk.youcanbook.me/>)

How to... GET HELP

- What information is needed to get help beyond the forums?
 - Background regarding the status and the issue
 - Include the “Job ID” from the hpc job manager if possible
 - Be sure to note that the render job type is Cinema 4D