

## DESCRIPTION OF OUR COMPUTE CLUSTER

### Head node

Name: WinGrid2008  
Hardware: Intel Xeon 2.33GHz, 8GB RAM, Total 300GB storage of which 200GB is available as shared space for users.  
Operating System: Windows Server 2008 (HPC Edition)  
Software Installed:  
HPC Pack 2008  
MS Visual Studio.NET 2005  
Magma  
R

### Compute Nodes (8 nodes – dual core)

Name: WINGRID-NODE001.....WINGRID-NODE008  
Hardware: Intel Xeon 2.00GHz, 16GB RAM, 160GB hard drives  
Operating System: Windows Server 2008 (HPC Edition)  
Software Installed:  
HPC Pack 2008  
Matlab 2008b  
Magma  
R

## ACCESSING THE CLUSTER

Start a Remote Desktop session to “WinGrid2008.Uncle”.

If you are unfamiliar with this it can be found at:

Start | All Programs | Accessories | Communications | Remote Desktop Connection

Type in “wingrid2008.uncle.newcastle.edu.au” as the name of the server and click connect. You can click the “options” box if you want more options. Login using your uncle username (UNCLE\abc123) and the relevant password.

## ACCESSING SHARED DATA STORAGE ON THE CLUSTER

You will be able to map the shared data are (<\\wingrid2008\shared>) both from the head Node and from your desktop etc. When creating folders, please use your name (in the form FirstNameGivenName e.g RobertSmith) or use your Unid/StudentNumber. This will identify the owners of data on that drive.

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There is about 200GBytes available on that shared space, although not all of it is available at any time to the other users of the WinGrid. Please use this space responsibly and delete any items no longer needed. Also be aware that any data stored on this shared area is visible to all other WinGrid users.

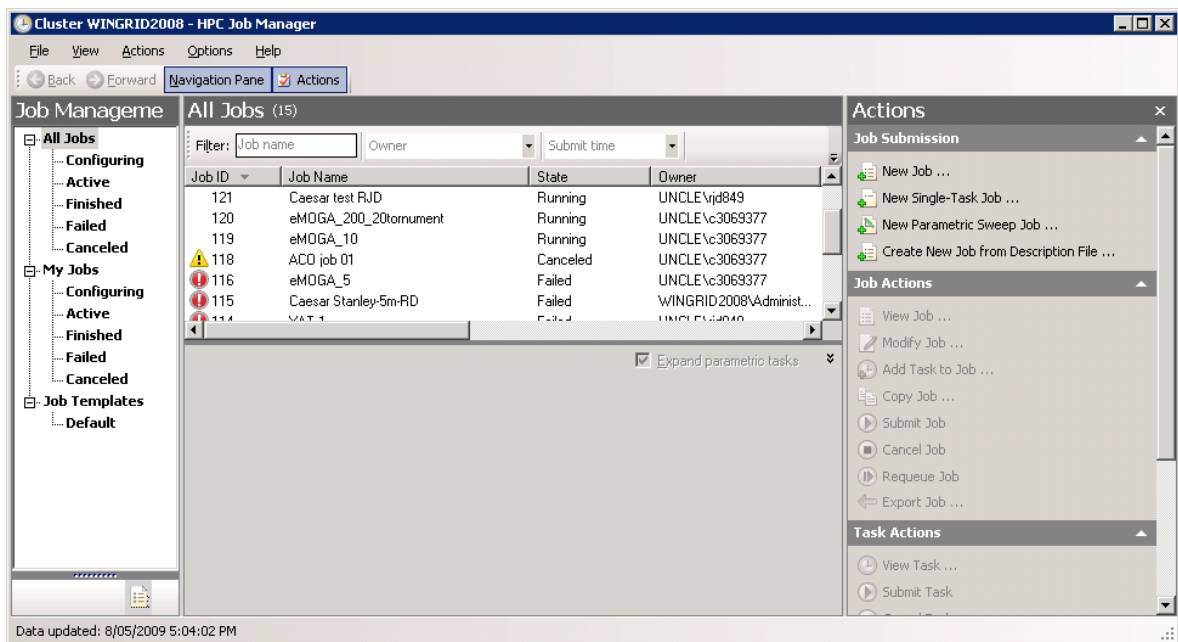
## HOW TO SUBMIT A JOB

### Using the compute HPC Job Manager with a template

(There are already some job templates for you to use as examples. These are located at [\\WinGrid2008\Shared\Demos](#))

Start up the “HPC Job Manager” and select “Create New Job from Description File...” from the right hand column.

- Browse to one of the templates and open it.
- Modify it to suit your needs.
- Click on “Submit”
- Enter your password to submit the job
- You will see your job in the centre part of the Job Manager window and you will be notified when it is finished or if there were any problems.
- Your output file is located in the working directory [\\WinGrid2008\Shared](#)... (or your specified location)



### A template in more detail

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I have set the template to only request 1 processor (SubmitJobSingleCore.xml). There is only 1 task which is your application and it will run on any available node

**New Job**

**Job Details**

Job name: Caesar - QT3-standard-8000yrs\_1 Single Cor

Job template: Default

Project:

Priority: Normal

**Job run options**

Do not run this job for more than:

Days: 0 Hours: 0 Minutes: 1

Run job until cancelled or run time expires

Fail the job if any task in the job fails

**Job resources**

Select the type of resource to request for this job:

Node

Enter the minimum and/or maximum of the selected resource type that this job is allowed to use:

Minimum: Maximum:

Auto-calculate  Auto-calculate

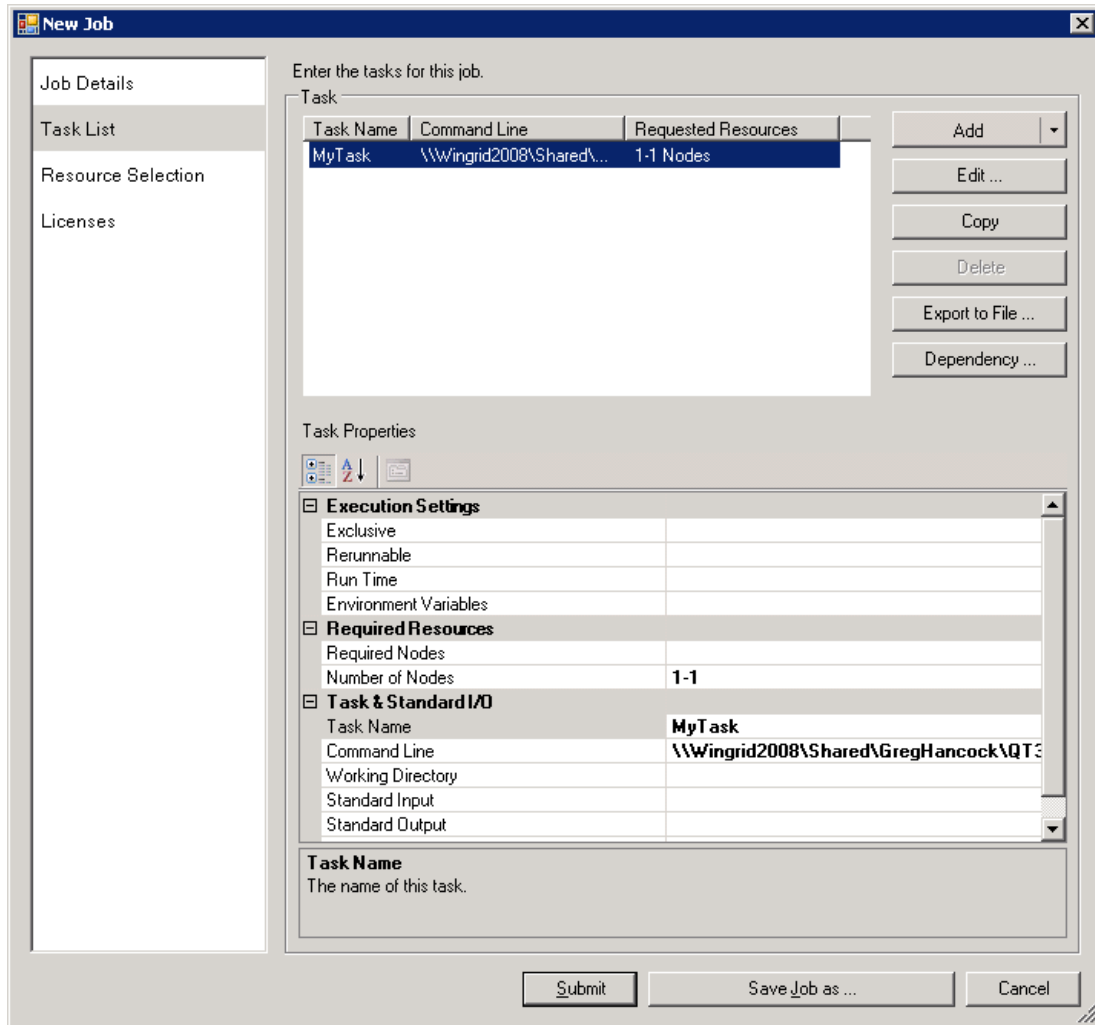
1  1

Use assigned resources exclusively for this job

No other jobs will be allowed to run on the selected nodes while the job is running.

Submit Save Job as ... Cancel

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There are separate documents relating to running jobs in R and Matlab.