



DiRAC Resource Allocation Committee

Application for DiRAC-2.5y Director's Discretionary time

1 Purpose

To take advantage of the newly commissioned DiRAC-2.5y Data Intensive and Memory Intensive services, the Director has decided to make a number of large discretionary awards of DiRAC time on these services during the period January-March 2019. These awards will be made to proposals of outstanding scientific interest and timeliness and which can demonstrate that they would benefit significantly from concurrent access to large numbers of nodes during the period prior to commencement of the RAC 11 awards. Up to 9M core hours may be available and individual allocations of up to 5M will be considered.

2 Instructions

Please fill in the form below and send to diracseedcorn@jiscmail.ac.uk.

The maximum individual allocation of time via this call will be 5M x86 core hours. If you wish to discuss the size of your application in terms of core hours and/or number of nodes, please contact the Director, Mark Wilkinson (miw6@leicester.ac.uk).

Definition of resource hours

In this call, resources on the Data Intensive (Leicester), Data Intensive (Cambridge – x86 only) and Memory Intensive (Durham) services are available. Please see <http://www.dirac.ac.uk/resources> for a detailed description of these DiRAC hardware resources.

Resource hour units are defined as:

- **x86-core hours:** In one wall-clock hour one central processing unit (CPU) will provide one X86-core hour.
A two-socket system would have 2 processors each with say 16 cores (cpus) which would make this a 32 core system and provide in one wall-clock hour 32 X86-core hours.

Completion of this form implies permission for user details to be stored in the Service Providers' ¹ and Research Councils' databases and to be used for mailing, accounting, reporting and other administrative purposes.

¹ The DiRAC Service Providers are the University of Cambridge, University of Durham, University of Edinburgh (EPCC) and the University of Leicester.

Personal Details of the applicant and information on the application – to be completed by the applicant

1 Personal Details of the applicant

Name:	
Address:	
Affiliation:	
Position: (PDRA, Lecturer, etc.)	
Telephone number:	
Email address:	
Title of the project:	
Availability to use allocation*	

*To facilitate scheduling, please note any periods between January 18th and March 31st when you would not be able to make use of the allocation.

2 Scientific Justification for this application (Maximum ½ page) -

Note that these awards will be made to proposals of outstanding scientific interest, ambition and timeliness and which can demonstrate significant benefit from concurrent access to large numbers of nodes.

3 DiRAC Software and Support Requirements.

3.1 What are the main codes you will be using?

Enter list of all codes, with links to descriptions if possible, in the following table:

(Indicate, if possible, where the codes have been developed and your own experience of running this code.)

Name of the code	Owner	Source (web address)	DiRAC Technical Assessment application number

3.2 Software requirements (e.g. compilers, libraries, tools):

Enter list of software requirements to support your use of DiRAC in the following table:

Name of software	Version	Licenced? Y/N	Dependencies (if known)

3.3 Summary of support requirements

Summarise any other support requirements for this project in the box below:

4 Choice of DiRAC resource

The DiRAC resources are described in detail on the DiRAC web pages: <http://www.dirac.ac.uk/resources>. Please consult these pages to help you identify the system(s) you think most suitable for your application.

Please indicate the amount of time required on the service you would prefer. Maximum allocations: 5M core hours.

Service	Time in hours	Number of cores per run	Number of runs
DI@Cambridge: Xeon (x86) cluster			
DI@Leicester: Xeon(x86) cluster			
MI@Durham: Xeon(x86) cluster - using a large memory/core footprint and a large fraction of the system			