Cirrus Technical Assessment Form: Instant Access

**Note: this form is for Instant Access applications only. Technical Assessment forms for other access routes can be found on the Cirrus website at http://www.cirrus.ac.uk/access**

**Instructions:**

1. Complete Section 1 below as fully as possible. If you have any questions or require clarification, please contact the Cirrus helpdesk ([support@cirrus.ac.uk](mailto:support@cirrus.ac.uk))
2. Return the completed form (as a Word document) to the Cirrus helpdesk ([support@cirrus.ac.uk](mailto:support@cirrus.ac.uk)).
3. The Cirrus CSE team will complete Section 2 and will contact you directly for more information if it is required. This may take up to 10 days from receipt of the completed form.
4. You will be notified by the helpdesk of the outcome of this application and, if successful, a project will be created for you and your users on the Cirrus service.

**Notes:**

* The maximum project duration is 6 months.
* You can apply for a maximum of 20,000 Core-h *or* 800 GPU-h.

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

# Section 1: Resources and Case for Support (*To be completed by the applicant*).

1. **Project Information.**
   1. **Project Title:** [Enter project title]
   2. **PI Name and Contact Details.**

|  |  |
| --- | --- |
| **Name:** | [Please Complete Table] |
| **Department:** |  |
| **Institution:** |  |
| **Position Held:** |  |
| **Address:** |  |
| **Postcode:** |  |
| **e-Mail:** |  |
| **Telephone:** |  |
| **Nationality:** |  |

* 1. **Contact details for application (if different from PI above)**

|  |  |
| --- | --- |
| **Name:** | [Please Complete Table] |
| **Department:** |  |
| **Institution:** |  |
| **Position Held:** |  |
| **Address:** |  |
| **Postcode:** |  |
| **e-Mail:** |  |
| **Telephone:** |  |
| **Nationality:** |  |

* 1. **Proposed start date:** [Enter start date]

1. **Previous Use of HPC/Data Analytic Resources.** 
   1. **Are you an existing Cirrus user?** [Yes/No]
   2. **Which other HPC/Data Analytic services have you used?**

[Enter list of other HPC services]

* 1. **If you have used other HPC/Data Analytic services, please provide a summary of the number of core hours used and the types of jobs run (codes, core counts, typical job lengths):**

[Enter summary of previous service usage]

1. **Cirrus Software and Support Requirements.**

## Summary of software requirements.

**What are the main codes you will be using? Please provide links to codes/software.**

[Enter list of codes with links to descriptions if possible]

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

[Enter list of software requirements to support your use of Cirrus]

## Support Requirements How do you plan to port and optimize your code on Cirrus (delete as appropriate)?

|  |  |
| --- | --- |
| Expertise in your group | Yes/No/NA |
| Cirrus CSE Support | Yes/No/NA |
| Other (please specify) |  |

**Please summarise any other support requirements for this project:**

[Enter any other support requirements]

1. **Proposed Use of Cirrus Resources.** 
   1. **Compute resource specification**

Successful instant access projects receive up to 20,000 Core-h or 800 GPU-h to be used over a 6-month period so please ensure that your request fits within this allocation. Mixes of both Core-h and GPU-h are also allowed, for example 10,000 Core-h and 400 GPU-h. The ratio of Core-h to GPU-h is 25:1.

**Total Core-h for CPU node use:** [Enter total Core-h from resource calculation specified in Section 5 below]

**Total GPU-h for GPU node use:** [Enter total GPU-h from resource calculation specified in Section 5 below]

* 1. **Disk space requirements.**

By default, projects are granted 250 GiB of disk space. If you require more than this you should specify this here and justify the space required in Section 5 (Case for Support) below.

**Disk Space:** [Specify disk space requirements if larger than 500 GiB]

1. **Case for Support**

Please provide a brief summary (maximum 2 pages) stating why you are applying for Cirrus Instant Access. This should cover:

* Scientific problem being addressed
* Justification for the compute resources requested (how did you arrive at the total Core-h and GPU-h specified in 4.1 above)
* Justification of the disk space requested if more than 250 GiB (how did you arrive at the figures specified in 4.2 above)

[Enter Case for Support]

1. **Data Management and Transfer**

This section asks some basic questions about the data generated on Cirrus by the proposed calculations.

**7.1 How many files are typically produced by each job?**

[Enter the estimated number of files. This does not need to be exact, order of magnitude is sufficient here. For example, 1000 files per job. You should also state how these files are organised; for example, are they all stored in one directory or is there a hierarchy of directories?]

**7.2 How much data is read in by each job?**

[Enter estimated total size in MiB/GiB/TiB]

**7.3 How much data is produced by each job?**

[Enter estimated total size in MiB/GiB/TiB]

**7.4 What percentage of the produced data do you expect to transfer off Cirrus?**

[Enter estimated percentage]

**7.5 How do you plan to transfer data off Cirrus?**

[Please describe the mechanism you will use to transfer data from Cirrus to external sites for further analysis or archive. Please also state the sites that you will be transferring data to. You should also state roughly the amount of data that will be transferred in each transfer instance (i.e. how will the transfers be batched up).]

# Section 2: Technical Assessment (*To be completed by CSE team).*

**Date Received by CSE Service:** [Enter received date]

|  |  |
| --- | --- |
| Do the applicants have the technical expertise required for the proposed work? | Yes/No |
|  | |

|  |  |
| --- | --- |
| Is the software specified technically suitable for Cirrus? | Yes/No |
|  | |

|  |  |
| --- | --- |
| Is the compute time requested reasonable and have the resources requested technically justified? Are the storage requests reasonable? | Yes/No |
|  | |

|  |  |
| --- | --- |
| Is the data management and transfer plan reasonable and technically sound? | Yes/No |
|  | |

**Is the application, as outlined above, suitable for access to the Cirrus service?** **Yes / No**

|  |
| --- |
| Does the project require the technical capabilities of Cirrus?  Would a different computing resource be more appropriate? |
|  |

**Name:** [Enter name]

**Position:** [Enter job title]

**Date:** [Enter date completed]