ARCHER Technical Assessment Form:  
University of Edinburgh Access

**Note: this form is for University of Edinburgh applications only. Technical Assessment forms for other access routes can be found on the ARCHER website at** [**http://www.archer.ac.uk**](http://www.archer.ac.uk)

**Instructions:**

1. Complete Section 1 below as fully as possible. If you have any questions or require clarification, please contact the ARCHER helpdesk ([support@archer.ac.uk](mailto:support@archer.ac.uk))
2. Return the completed form (as a Word document) to the ARCHER helpdesk ([support@archer.ac.uk](mailto:support@archer.ac.uk)).
3. The ARCHER 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 ARCHER service.

Completion of this form implies permission for user details to be stored in the ARCHER 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. **Previous Use of HPC Resources.** 
   1. **Which other HPC services have you used?**

[Enter list of other HPC services]

* 1. **If you have used other HPC 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. **ARCHER Software and Support Requirements.**

## Summary of software requirements.

**What are the main codes you will be using? A description of available software on ARCHER is given here** [**http://www.archer.ac.uk/documentation/software/**](http://www.archer.ac.uk/documentation/software/)**. Please provide links to codes/software not presently available on ARCHER.**

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

[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 ARCHER]

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

|  |  |
| --- | --- |
| Expertise in your group | Yes/No/NA |
| ARCHER 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 ARCHER Resources.** 
   1. **Compute resource specification**

The online kAU calculator (<http://www.archer.ac.uk/access/au-calculator/>) can be used to help complete this section and contains a list of kAU rates.

**There are 24 cores per node on ARCHER**. Generally, we would expect users to use all cores on a node. If you cannot use all cores on a node please ensure you have stated why in Section 5 below.

**Total kAU:** [Enter total kAU from resource calculation specified in Section 5 below]

* 1. **Disk space requirements.**

/home: Small, backed-up. For project critical files (e.g. source code)

/work: Large, high-performance, not backed-up. For input and output from calculations

RDF: Large, backed-up, long-term. Data analysis and long term data storage.

|  |  |
| --- | --- |
|  | Storage |
| /home (required) | [e.g. 10 GB] |
| /work (required) | [e.g. 1 TB] |
| RDF (if required) |  |

1. **Case for Support**

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

* Research problem being addressed
* Justification for the compute resources requested (how did you arrive at the total specified in 4.1 above)
* Justification of the disk space requested if (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 ARCHER by the proposed work.

**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 ARCHER?**

[Enter estimated percentage]

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

[Please describe the mechanism you will use to transfer data from ARCHER 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 ARCHER? | 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 ARCHER service?** **Yes / No**

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

**Name:** [Enter name]

**Position:** [Enter job title]

**Date:** [Enter date completed]