

## Terms and Conditions of Access – Academic Partners

Please read these Terms and Conditions. By clicking the “Submit” button you are agreeing to abide by the ARCHIE-WeSt Terms and Conditions.

The main scope of ARCHIE-WeSt is to provide computational resources for academic and industrial users. The resources should be used ethically and in accordance with the law.

ARCHIE-WeSt is a not-for-profit shared facility jointly funded by the EPSRC and the University of Strathclyde. It is hosted and managed by the University of Strathclyde – accordingly, when we refer to “we”, “us” etc, we are referring to the University of Strathclyde acting in this capacity. When we refer to a “user”, we are referring to a user to whom we have granted access to ARCHIE-WeSt.

These Terms and Conditions apply to academic users only.

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### A. General

All applications must be submitted by the Principal Investigator (“PI”) for the project to which the application relates. Each project must have at least one PI associated with it, but the number of associated users is not restricted.

Two service levels operate within the HPC service: Service Level 1 (SL1: High Priority Service) and Service Level 2 (SL2: Low Priority Service).

Service Level 1 is charged at the standard rate (see Section F & Appendix A) and is available to all members of staff and postgraduate students of Partner Institutions.

Service Level 2 is also available to all members of staff and postgraduate students of Partner Institutions. Access is charged annually at the rate of £500 per user for the 12 month period beginning 1<sup>st</sup> April.

Further details of the Service Levels operating on ARCHIE-WeSt can be found in Appendix D.

#### I. For Service Level 1 Projects:

1. The PI/user will be required to pay in advance for the resources requested. If the purchased resource is not used during the project we will not be able to make any refund at the end of the project. In addition, more resource can be purchased for the project at any time.
2. It is the user's responsibility to ensure that any and all jobs and data which are submitted to ARCHIE-WeSt are accurate and meet the user's requirements. ARCHIE-WeSt has no responsibility whatsoever for any jobs or data which are submitted to it by a user. If any job is submitted by mistake, is incomplete, inaccurate or unsuitable, or uses incorrect starting data, the time wasted for such calculations will not be refunded.
3. The applicant should specify the number of core-hours requested and the disk space requested. If the project requires storage of large amount of data for the period longer than one month, the applicant should justify his or her needs.

4. To protect the service, in the case of a user breaching these Terms and Conditions or if we have reasonable grounds to suspect that these Terms and Conditions have been breached by a user, we reserve the right to suspend the user's access to the account, halt execution of any program, to close the account and to inform the host Institution accordingly. In such circumstances any money paid for the resources will not be refunded.
5. Users are asked to voluntarily provide a short “success story” of their research conducted on ARCHIE-WeSt for publication on our web-pages.
6. As part of building the case for sustainability, academic users are asked to acknowledge ARCHIE-WeSt while presenting results obtained, according to Appendix B.

## **II. For Service Level 2 Projects:**

1. The applicant should specify the number of core-hours and the disk space required.
2. To extend a project the user is obliged to provide a description of the project to be published on our web-pages, a report of the results obtained so far and justification of the requested resources.
3. To protect the service, in the case of a user breaching these Terms and Conditions or if we have reasonable grounds to suspect that these Terms and Conditions have been breached by a user, we reserve the right to suspend the user's access to the account, halt execution of any program, to close the account and to inform the user's host Institution accordingly.
4. The recipient of the free resource agrees to provide a short report of their project (up to 400 words) within 1 month after the project end date. The report should state how the resources were used, what data were obtained, what conclusions were made based on the data obtained, and where the results will be published (or state other ways of disseminating the results). The reports will be strictly confidential and used only internally within the ARCHIE-WeSt Support Team.
5. Users are asked to voluntarily provide a short “success story” of their research conducted on ARCHIE-WeSt for publication on our web-pages.
6. The user is obliged to acknowledge ARCHIE-WeSt while presenting results obtained with free resources, according to Appendix B.
7. The user is obliged to list any research output involving ARCHIE to PURE and to associate it with UOSHPC via the Equipment section.
8. For the avoidance of any doubt, if a user is using ARCHIE-WeSt free of charge, these Terms and Conditions (with the exception of the charging terms) will still apply in their entirety.

## **B. Obligations of the ARCHIE-WeSt Support Team+**

1. We are obliged to consider each application submitted to us in accordance with these Terms and Conditions. A decision will normally be made within 2-4 weeks from submission (although this timeframe is not guaranteed), and if successful, the applicant will be informed as soon as is reasonably practicable thereafter. If the awarded time differs from the resource requested, justification will be provided. In the case of rejected applications an explanation will be provided together with suggestions on how to improve the project to make it more likely to be successful in the event of a further application being submitted.
2. We will endeavour to maintain the hardware running 24 hours a day and at its optimum capacity, subject of course to unexpected failures or power cuts, scheduled downtime or emergency maintenance. In the case of unexpected failures or power cuts we will try to restore the system as soon as possible.

3. In the case of essential scheduled maintenance work or system upgrades we will endeavour to inform users at least 2 weeks in advance, however we reserve the right to take the system down at short or no notice for emergency maintenance, should we consider it necessary.
4. We will endeavour to take reasonable steps to protect users' data from being lost or corrupted and to protect users' privacy and intellectual property rights.
5. We will endeavour to help the user with installation of open-source software required for the project. Nevertheless, the user should be aware that some particular software packages cannot be installed on ARCHIE-WeSt due to its internal limitations. The same applies to licensed software.
6. Prior to installing any licensed software on ARCHIE-WeSt, the user must notify us of the software in question and provide us with proof of licensing. In the case of licensed software, the installation and the accessibility of the software will depend on the package: in some cases the licences of individual users might be sufficient to run the software on ARCHIE-WeSt. In general, installation and the access of the software will depend on the details of particular licence and whether or not installation is permitted by the licence given by the software provider.
7. If the software required by the users requires ARCHIE-WeSt to purchase separate licences, the costs will be met by the user. ARCHIE-WeSt reserves the right to require that the user pays any such costs to ARCHIE-WeSt in advance of it acquiring the licences in question.
8. We will endeavour to provide a reasonable level of basic training and support for using the ARCHIE-WeSt High Performance Computer and its associated installed software.
9. We will endeavour to respond to any complaints and suggestions about the service and provide necessary support in a reasonable and timely manner.
10. We are not responsible for the accuracy and stability of any software package used on ARCHIE-WeSt nor for errors produced by incorrect usage of the software.
11. Subject to clause B. 8 above, we are not obliged to provide support in using software – any such support will be provided at our discretion. In the case of more advanced problems with usage of particular software we will try to find an academic expert in this software and ask him/her to support the user. Nevertheless, it will be a personal decision for the academic to provide advice or support, and a matter of negotiation between the parties concerned.
12. We are not responsible for, and have no obligations in respect of, solving users' scientific problems or interpreting the results obtained by using the service.

### **C. Obligations of the ARCHIE-WeSt users**

1. Users shall only use ARCHIE-WeSt for the project and purposes for which they were given access, as specified in the user application and, where appropriate, the research project's grant award.
2. Users may not under any circumstances use ARCHIE-WeSt for any private activity. Furthermore, private files should not be stored on ARCHIE-WeSt. For the avoidance of doubt, private activity and private files means any activity or file which does not directly relate to the project and purposes for which the user was given access to ARCHIE-WeSt. ARCHIE-WeSt must not be used for any personal communication e.g. email.
3. Users should not disrupt, interrupt or interfere with the working of ARCHIE-WeSt in any way.
4. Users must not under any circumstances interfere with any other users' work, corrupt their data or invade their privacy.
5. Users must not under any circumstances infringe copyright or other intellectual property rights of any user, of ARCHIE-WeSt or of any third party, or take data from any database or dataset without the explicit or implied permission of its owner.
6. Usage of another person's account(s) (whether by a user or non-user) is not permitted.
7. User account passwords must be kept confidential and it is the user's responsibility to ensure

this.

8. Users must not use ARCHIE-WeSt for the purposes of, or as a means of facilitating, voice or email communications with another party.
9. Users must not misuse the Internet from ARCHIE, for example by sending spam or malicious software, by accessing web based email, by pretending to be someone else, or by doing anything that might hinder or prevent someone else from using the Internet legitimately.
10. ARCHIE-WeSt must not be used for illegal or immoral purposes (as to which we shall be the judge), including, without limitation, theft, fraud, drug-trafficking, money-laundering, terrorism, pornography, violence, cruelty, incitement to racial hatred, prostitution, paedophilia, or for offensive, obscene, abusive, menacing, defamatory or insulting behaviour.
11. Users are personally responsible for what they do using the service. If the user breaks the law the user is accountable, not the service. Users should be aware that if we have reasonable grounds to suspect that a user is engaged in a criminal activity, the matter will be reported to the appropriate authorities.

#### **D. Responsibilities of the PI**

1. The PI must be a member of staff at a partner institution.
2. The PI is responsible for submitting user applications and reports (when applicable) and for ensuring that the user has a legitimate need to access and use ARCHIE-WeSt for the purposes of the project.
3. The PI shall (i) make users aware that access to and use of ARCHIE-WeSt is subject to these Terms and Conditions; and (ii) have regular meetings with users to review the progress of the project and the use being made of ARCHIE-WeSt for the project.
4. Where the PI knows or has reasonable grounds to suspect that the user is breaching these Terms and Conditions, the PI must notify us immediately.
5. The PI is responsible for ensuring that associated users have a legitimate and valid contract at a partner institution. The PI must notify the ARCHIE Support Team upon the expiry or termination of a user's contract of the project.

#### **E. Responsibilities of the user**

1. The user is responsible for preparing input files, running jobs, collecting results and transferring data between ARCHIE-WeSt and their personal computer.
2. While the user's home directory will be automatically backed up, we will not backup the /lustre partition. It is the responsibility of the user to ensure that all necessary data is copied to the user's storage area.
3. The user is responsible for the appropriate use of software and hardware according to the project specification.
4. The user is responsible for the use of any software used if valid software licenses are not already available on the system.
5. The user is responsible for complying with (i) these Terms and Conditions, (ii) the Code of Conduct (as set out in Appendix 3), (iii) the regulations of the University of Strathclyde, and (iv) the law of Scotland.
6. The user is responsible for ensuring that the scheduling of their work takes into account any downtime for scheduled maintenance. The ARCHIE Support Team reserves the right to terminate any jobs as necessary in order to power the system down for scheduled maintenance.

## F. Charges

1. Charges for academic users for Service Level 1 are non-negotiable.
2. The user must pay in advance for the SL1 time awarded.
3. Charges are calculated per Allocation Unit of CPU time, defined as 1 core-hour on an ARCHIE standard compute node i.e. 1 core-hour of the Intel X5650 2.66GHz CPU (Turbo disabled).
4. The standard price per Allocation Unit is as described in Appendix A. Note that industrial users are offered a priority service at a higher rate. This option is available to Academic users also, again at a higher rate.
5. Different parts of the service will be charged at different multiples of the Allocation Unit to reflect the differing levels of performance. These are:

Service Element	AU multiplier
Standard node	1.0
High memory node	1.5
GPU node	12.0

6. Data storage is free up to 250GB. Thereafter there is a monthly charge of £25 per 500GB for every part 500GB used.
7. SL1 users will be allowed to temporarily exceed their quota for up to 7 days via a soft-quota mechanism. Should a user fail to remove data and return to being under quota, or fail to arrange a higher quota under F.6 above, they will be charged at double the rate described in F.6.

## G. Limitations, guarantees and refunds

1. The service is provided “as is” and we give no guarantee or warranty whatsoever as to reliability.
2. We cannot guarantee that calculations will be completed before any given deadline.
3. We cannot guarantee that all calculations will be completed. The failure in delivery of the resources might be caused by things which are beyond our control, such as power cuts, fire etc. If the system becomes and remains unavailable for a substantial period, we will refund money for any unused resource.
4. We do not undertake to backup the /lustre storage area. If it is necessary to backup such data then it is the responsibility of the user to ensure that all necessary data is copied to the user’s storage area.
5. We do not undertake to provide long-term data storage. It is the responsibility of the user to ensure that all necessary data is copied to user’s local desktop or storage facility within 1 month of the end of a project.
6. We cannot guarantee that any information or advice provided is accurate, complete and/or useful. The user is responsible for using any advice and information.
7. In the case of any hardware problems we will endeavour to e-mail affected users as soon as is reasonably practicable following detection of the problem. We will not restart by default any affected jobs.
8. If we are not able to provide resources purchased by the user we will refund the money paid.
9. If, within a month prior to the project starting date, the user gives us notice that they no

longer requires the purchased resources, we will refund the entire money paid. We reserve the right to not accept any future applications from this user or associated group.

10. We reserve the right to make changes to the service and make reasonable changes to these Terms and Conditions; once we have posted these changes on our website, the new version will then apply to all users.

## **I. Data protection**

1. PI and user details will be used only within Strathclyde University for the purposes of providing access to, and administering and managing, the ARCHIE-WeSt system and for related purposes.
2. The ARCHIE-WeSt Support Team will have the right to access user's files (cf C.2) in order to (i) filter viruses and otherwise ensure the security and integrity of the ARCHIE-WeSt system, (ii) verify compliance with these Terms and Conditions, and (iii) check user activity where there is a reasonable suspicion that these Terms and Conditions may have been breached. Any such accessing will be on a reasonable and proportionate level and will be carried out with the express authorisation of the Director of the ARCHIE-WeSt Support Team.
3. Where the user's files contain the confidential information of a third party (ie a funder), the user shall notify the ARCHIE-WeSt Support Team accordingly and the parties shall endeavour to agree specific procedures (balancing the legitimate needs of the respective parties) which will apply to that confidential information. In the event that such procedures cannot be agreed, the confidential information should be removed from ARCHIE-WeSt.
4. In the case where there is a reasonable suspicion of a user engaging in illegal activity, the ARCHIE-WeSt Support Team will give access to user data to the authorities, as and when required by law.

## **J. Governing Law**

These Terms and Conditions shall be governed by and interpreted in accordance with Scots law, and the Scottish courts shall have the exclusive jurisdiction in respect of any and all disputes.

## **Appendix A: Charges**

1. The standard price per Allocation Unit is £0.04 for Academic users. VAT will be charged at the usual rates as appropriate. The price for users from the University of Strathclyde is £0.03 due to the substantial co-investment made by the University. Note that industrial users are offered a priority service at a higher rate. This option is available to Academic users also, again at a higher rate.

## **Appendix B: Acknowledgements**

1. In all graphical presentations such as conference presentations, posters, lectures etc., the graphical logo of ARCHIE-WeSt should be used. In papers, reports etc., include this statement in the Acknowledgement paragraph: "Results were obtained using the EPSRC funded ARCHIE-WeSt High Performance Computer ([www.archie-west.ac.uk](http://www.archie-west.ac.uk)). EPSRC grant no. EP/K000586/1."

## **Appendix C: Code of Conduct**

By accepting the Terms and Conditions the user accepts this Code of Conduct. The service is shared by numerous people and projects and it is essential for us to ensure that all users will be keen to cooperate with other users, give assistance to each other where possible and create a supportive community of ARCHIE-WeSt users. The code of conduct is a set of rules of

etiquette ensuring the user is not being a nuisance to colleagues in other projects or interfering with the smooth running of the system. With all users following the code of conduct, we can be sure that the system runs as efficiently as possible under the given circumstances.

1. This is a shared service and you should respect other users' needs. The system is not established only for you and the Support Team has to support all users, maintain hardware and software, and may not be able to answer all possible questions.
2. Try to not overload the Support Team. Some user problems may be lie out-with the expertise of the Support Team, for example, specific software queries which are scientific or engineering in nature rather than purely computational. Sometimes consultation with more experienced colleague may be more efficient.
3. In the case of software problems please read the documentation given by the software provider.
4. Users must not overload the job queues. There is no automatic control on number of jobs launched by one user but a user will not be able to run on more than 576 cores at any one time. In the case of projects requiring running a very large number of calculations please contact the ARCHIE-WeSt Support Team.
5. Parallel jobs will be limited to 576 cores (equivalent to a single rack) by default. If you need to run a larger job, contact the Support Team. In such cases we may refer you to another facility.
6. Jobs should be launched from the /lustre partition, not from /users. The job running time is limited to 14 days.
7. Keep an eye on disk usage; if you exceed your hard-quota limit your calculations will terminate and we will not refund the time wasted in such a way. You will be charged according to section F.7 if you remain above your soft quota limit after 7 days. Copy your data to your local computers as often as necessary in order to remain within your quota.
8. In the case of long calculations please use checkpoints (restarts) frequently. It will help you to avoid frustration in the case of unexpected problems like power cuts and losing huge amount of data and CPU time. Normally, we will not refund resource allocation if you need to repeat calculations from the very beginning because you did not use checkpoints when it was possible for you to do so.
9. Do not run CPU intensive jobs on the login nodes. While it is acceptable to compile, or run very short preparatory processes on the login nodes, any job which begins to require a significant amount of CPU time or RAM should be run on one of the queues. The ARCHIE-WeSt Support Team reserves the right to terminate any inappropriate jobs running on the login nodes.
10. We do not plan to administer the service with a heavy hand. In our experience, when users become aware that what they are doing is causing problems to others, they are anxious to change this. However, if you ignore the Code of Conduct we will bring it to your attention, and if you do so seriously or persistently, we will take it up with your Principal Investigator. If necessary, we will hold jobs, or terminate them, in order to keep the system as a whole operating smoothly.
11. The Code of Conduct will change as the service evolves.

## **Appendix D: Service Level Agreements**

**Definition: Working days** are defined as Mon-Fri 9am-5pm excluding public holidays and any other days when the University is closed.

### **Service Level Agreement 1 (SL1): Priority Service**

Any submitted jobs to the ARCHIE-WeSt HPC facility under the Priority Service will receive the following benefits in addition to our standard Terms & Conditions:

1. Funds transferred to the ARCHIE-WeSt account will be converted into core-hour allocation credits. These credits will be divided over an agreed time (accounting period), which by default will be the overall duration of the ARCHIE project. Thus the number of core hours allocated will be defined at the start of the usage agreement.
2. Unused credits at the end of an accounting period will be carried forward to any new accounting period.
3. SL1 users will be able to use more than their allotted allocation within an accounting period on a best efforts basis, by transferring credits from a future allocation, as agreed with the ARCHIE-WeSt Support Team.

Soft disk quotas will be implemented with a limit of 250GB **per user** for each project (hard quota is 500GB) the user is involved in on /lustre and 50GB **per user** on /users (hard quota is 100GB).

4. Where a future allocation is not available, SL1 users will be able to submit jobs under the terms of SL2, upon agreement with their Head of Department.
5. Any jobs submitted under SL1 will be guaranteed to receive the requested resource (up to the limits described in Appendix C above) in order to run in a timely manner (subject to the usual scheduling rules where competing SL1 jobs are concerned). Minimum queuing times cannot be specified since any number of SL1 jobs can be queuing at any given time.
6. Support queries by SL1 users will receive a response within 4 working hours, which will be at a minimum an acknowledgment of the problem and an indication of a time to resolution.
7. By the default maximum job running time is 14 days. This limit can be increased in certain cases where appropriate justification is provided.

### **Service Level Agreement 2 (SL2): Low Priority Service (Available to Partner Institutions users only)**

Any jobs running under the Low Priority Service will be subject to the following conditions in addition to our standard Terms & Conditions:

1. Any jobs submitted under SL2 are not guaranteed to receive the requested resource. Best efforts will be made to ensure that resources are available for SL2 jobs, however, this will at all times be dependent on the level of SL1 activity.
2. No action will be taken to minimise queuing times for any jobs. All jobs submitted to the queue will, without exception, be subject to standard scheduling rules.
3. There will be a maximum job time of 14 days.

4. Hard disk quotas will be implemented with a limit of 50GB **per user** on /users (hard quota 100GB) and 100GB **per user** on /lustre (hard quota 250GB). It is possible to increase the disk quota on /lustre to 250GB of soft and 500GB of hard where appropriate justification is provided. The quotas are irrespective of the number of projects a user is involved in.
5. Support queries by SL2 users will receive a next-working-day response.
6. The subscription fee period is 1st April – 31st March the following year.
7. The subscription fee should be paid in February or March preceding the next subscription fee period.
8. The subscription fee paid for one user is not transferable to other user under normal circumstances. Subscription fees may be transferred from one user to another at the discretion of the ARCHIE-WeSt support Team in exceptional circumstances.
9. Subscription fees are non-refundable.
10. It is user's (or PIs) responsibility to pay the subscription fee in time.
11. Failure to pay the subscription fee will result in disabling the users from the queues.

#### **Service Elements common to both SL1 & SL2**

1. **Backup:** /home/users is backed daily starting 21:00 hours, with rolling backup of seven days kept. **The /lustre partitions is backed up to tape for disaster recovery purposes only.**
2. **General availability:** every reasonable effort will be made to keep our HPC resource available and operational 24 hours per day, seven days a week. The ARCHIE-WeSt Support Team are not contracted to provide out-of-hours support and any support activity out-with working hours will be performed on a best efforts basis.
3. **Planned maintenance:** as discussed in section B
4. **Unscheduled maintenance:** as discussed in section B