

ACCESS TO ARCHER

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Access

- Various types of Access
 - Amount of computation required
 - Duration required
 - Science Remit
 - Funding Body
 - We assess
 - Technical suitability
 - RCUK assess the Science case
- <https://www.archer.ac.uk/access/>



Small Scale Access

Used for trailing ARCHER

- Porting code, feasibility study
- Benchmarking to prepare for large applications
- ARCHER Driving Test
 - Simplest way to get access
 - Complete the test and if you are a UK academic you can apply for 1,200 kAUs for 12 months
 - http://www.archer.ac.uk/training/course-material/online/driving_test.php
- Instant Access
 - EPSRC researchers only
 - 1,200 kAU for 6 months
 - Office decision from EPSRC following technical assessment



Large Scale Access: EPSRC

Type	Max. Length	Resource Allowed	Notes
Grant (J-eS)	3 years	Unlimited	Use RAP Top-Up after first 3 years
Resource Allocation Panel (RAP)	1 year	Limit on total per call	
Leadership	2 years	Limit on total per call	High-impact, large resource, high-risk

All EPSRC applications require applicant to complete a Technical Assessment form and submit to the helpdesk ahead of submitting their application



Technical Assessment Process

- Complete form from ARCHER website
- Submit to helpdesk
- CSE team will assess technical suitability for ARCHER
 - Will discuss with applicant if required
- CSE team approve, sign form and return to applicant
- Applicant includes signed form with their application



TA Process (cont.): Topics covered

- Suitability of code for ARCHER
 - Parallel models used, dependencies, etc.
- Scaling of code/problem
 - Scaling proof required as part of application
 - Must be specific to type of problem addressed in application – general scaling data is not enough
- Technical expertise of team
 - Do they have the expertise (or access to expertise)
- Data management technical details
 - Organisation, storage and transfer of data



EPSRC Consortia

- A number of large scientific consortia make up ~60% of the EPSRC resource allocated on ARCHER
- New users can join consortia to get access to ARCHER instead of following other application routes

Materials Chemistry Consortium (MCC)	Mesoscale Engineering (UKCOMES)
UK Turbulence Consortium (UKTC)	Plasma Physics Consortium
UK Car-Parrinello Consortium (UKCP)	UK Consortium on Turbulent Reacting Flows (UKCTRF)
HEC Biological Simulation (HECBioSim)	

<http://www.archer.ac.uk/community/consortia/>



Large Scale Access: NERC

- Majority of access controlled through three consortia

National Oceanography Centre (NOC)

National Centre for Atmospheric Science (NCAS)

Mineral Physics Consortium

- No TA Required
- Can also apply through Leadership calls

<http://www.nerc.ac.uk/research/sites/facilities/hpc/>



Other UK Academic Researchers

- Other research councils/funders can add ARCHER time to their grants
 - TA usually formally required if applying through J-eS
 - If not through J-eS, EPSRC will still usually require a TA to be completed although it is not needed for the application process



Commercial Organisations

- Pre-commercial research can apply to Leadership Calls
- Access can also be purchased via EPCC



Champions Access

- To enable you to use ARCHER
- Each Champions would be allocated 1,200kAUs
- Please contact ARCHER Helpdesk for Information
- support@archer.ac.uk





EPSRC

NERC SCIENCE OF THE ENVIRONMENT

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THE SUPERCOMPUTER COMPANY

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