

Novel Approaches to HPC User Engagement

Clair Barrass and David Henty



Funding

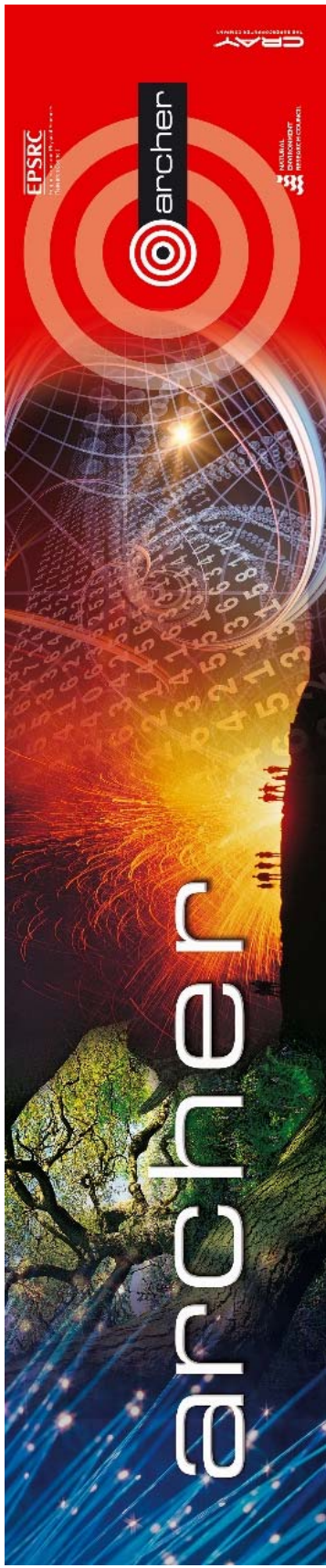
- Thanks to
- ARCHER project
- PRACE via the EU's Horizon 2020 Research and Innovation Programme (2014-2020) under grant agreements 653838 and 730913.



Novel approaches to HPC user engagement

- Outreach
- Driving Test
- Training
- Impact





Outreach

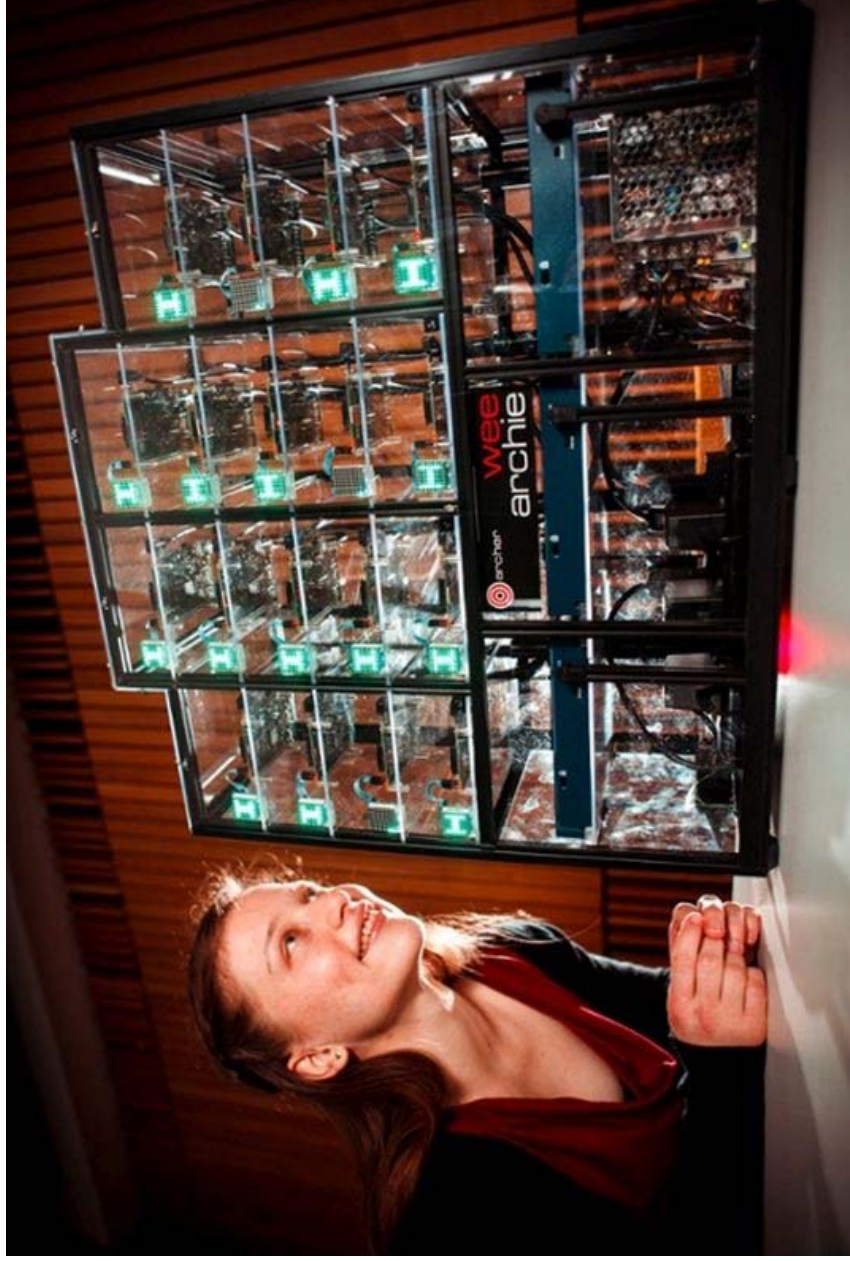


Outreach

- Wee Archie
- Build your own Supercomputer app
- Champions
- Image competition and calendar



Wee ARCHIE



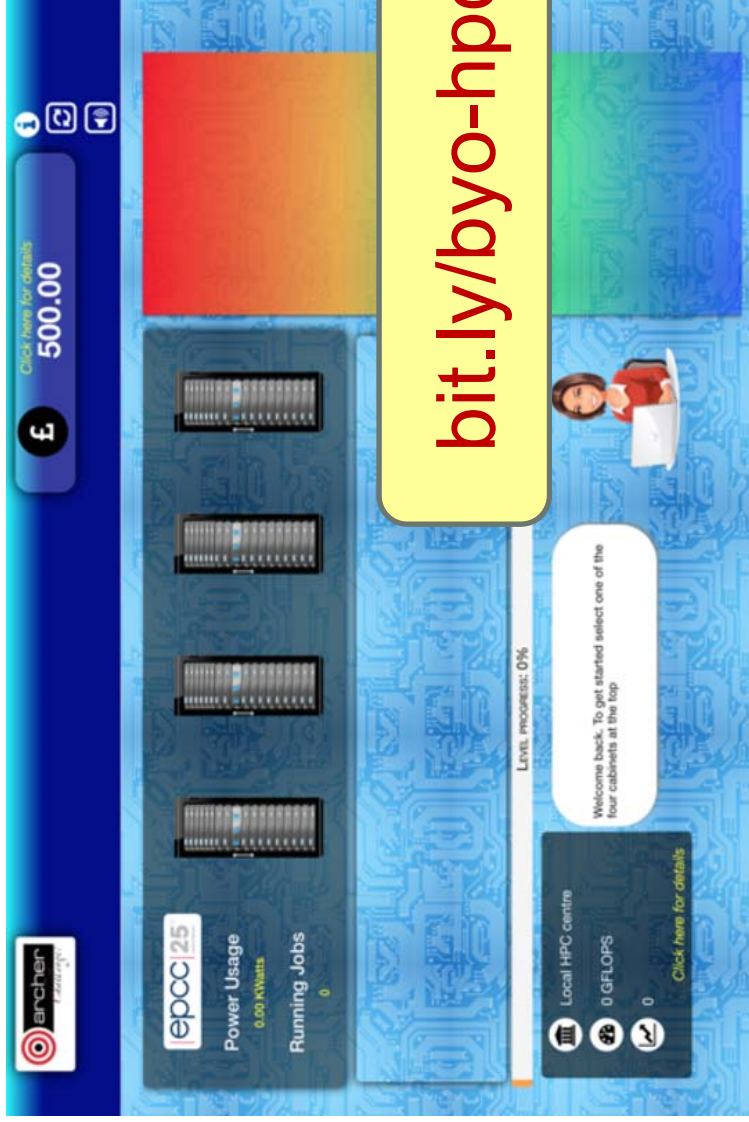
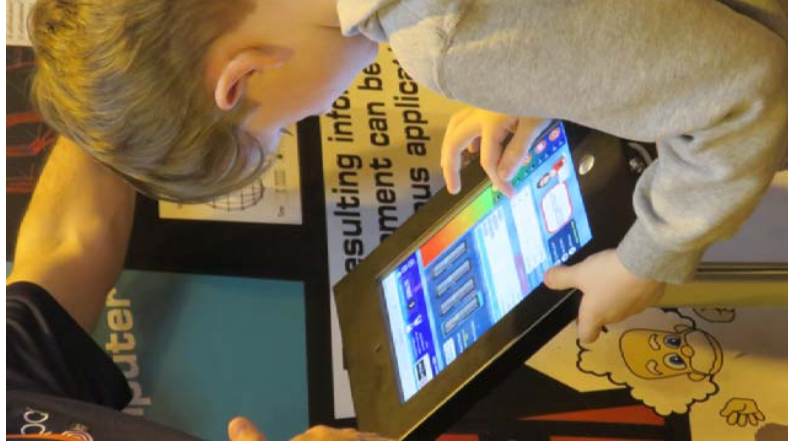
Wee ARCHIE



Bean-Bag Sorting



Build your own Supercomputer app





Champions

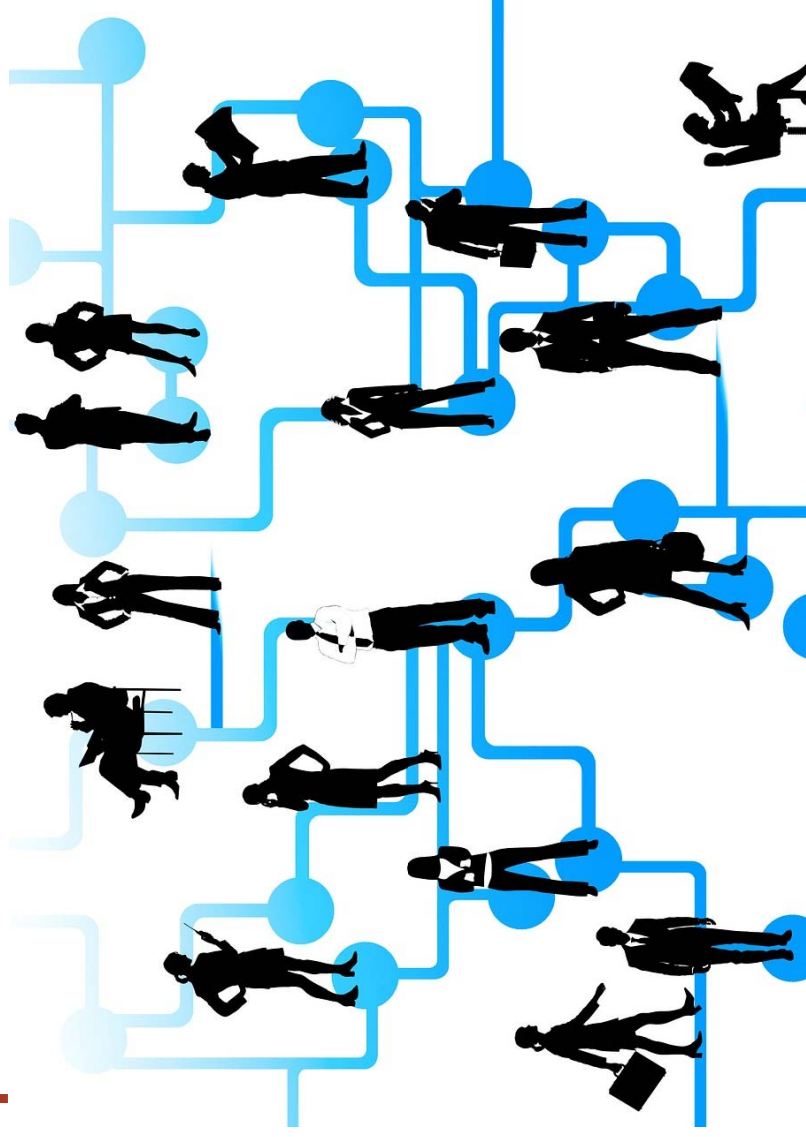
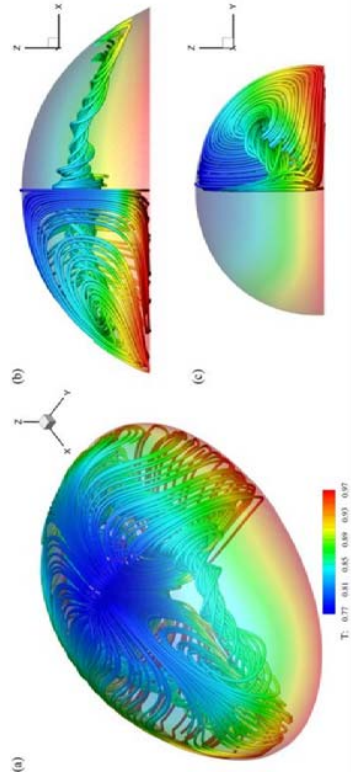


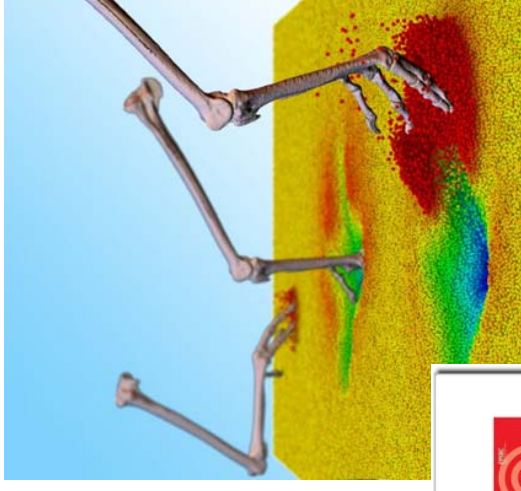
Image competition and calendar



Winning image 2014 : Dr Pedro J. Sáenz, University of Edinburgh Institute for Materials and Processes.

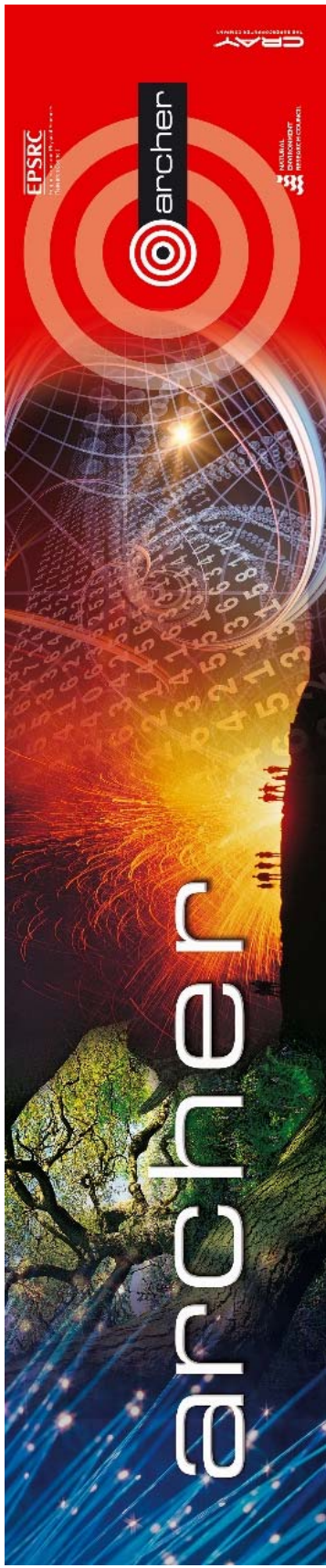


Winning image 2015 : Mr Ivan Langella, University of Cambridge, Department of Engineering.



Winning image 2016 : Dr Peter Falkingham, Natural Sciences & Psychology, Liverpool John Moores University.





Driving Test



Driving Test

Question 6 of 29

Go to 6 - Not answered [Go](#)

6. Why should the /work filesystem be used for working datasets?
(select all that apply)

- it is designed for very high performance
- it has a large (more than a petabyte) storage capacity
- it is backed up on a daily basis
- it is accessible from the compute nodes
- it has a lifetime longer than the ARCHER service

[Submit answer](#) [Skip for now](#) [End quiz](#)



Driving Test

Question 12 of 29

Go to 12 - Not answered Go

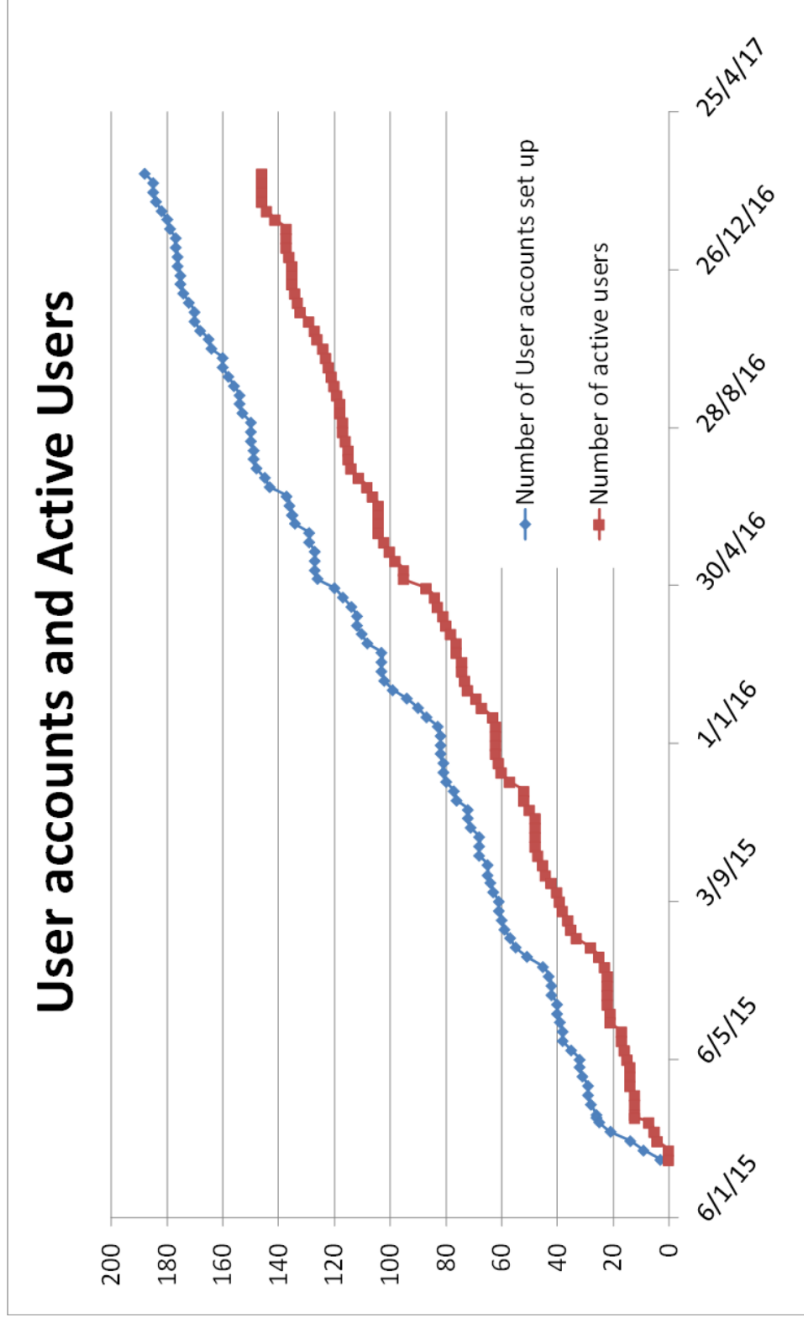
12. Which command would you use to find out which compilers and libraries are currently loaded in your ARCHER session?

- ls -l /usr/local/lib
- module list
- echo \$PATH
- module avail

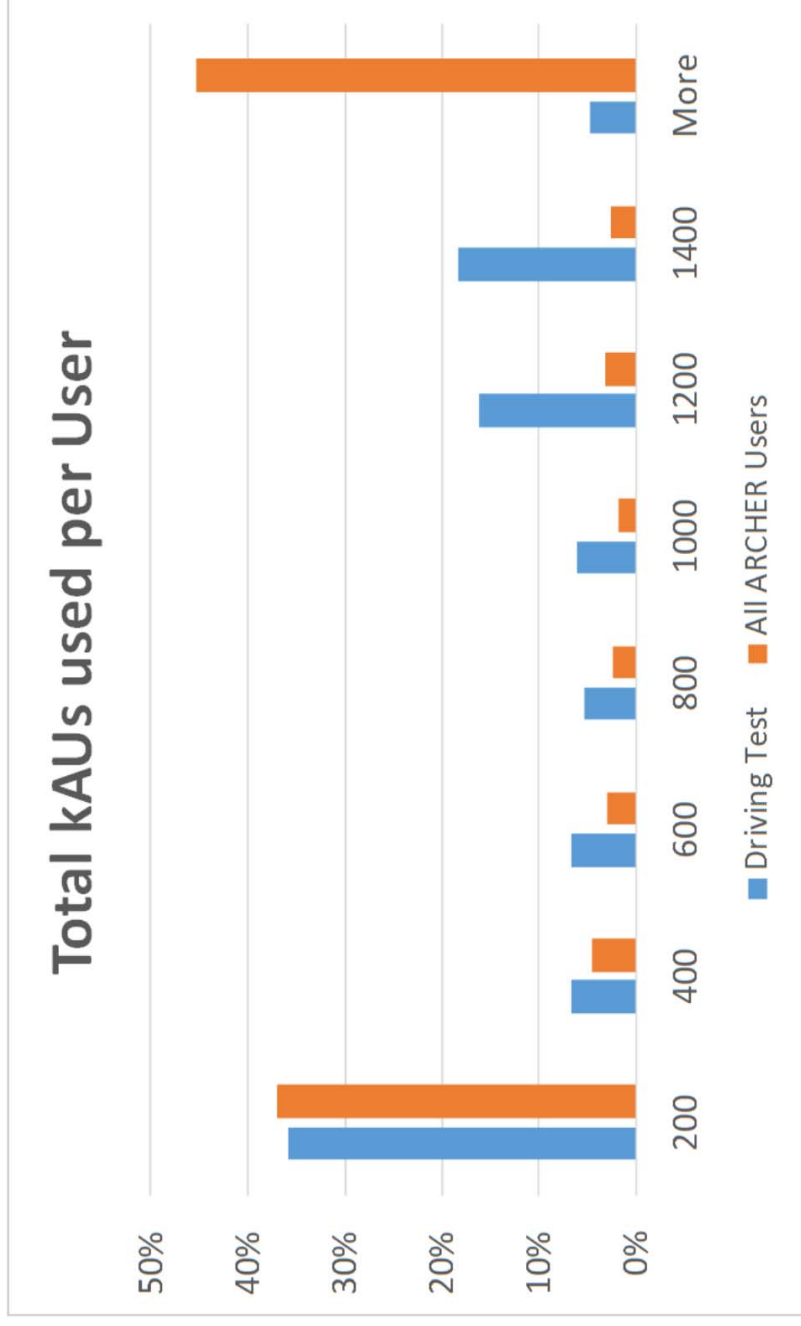
Submit answer Skip for now End quiz



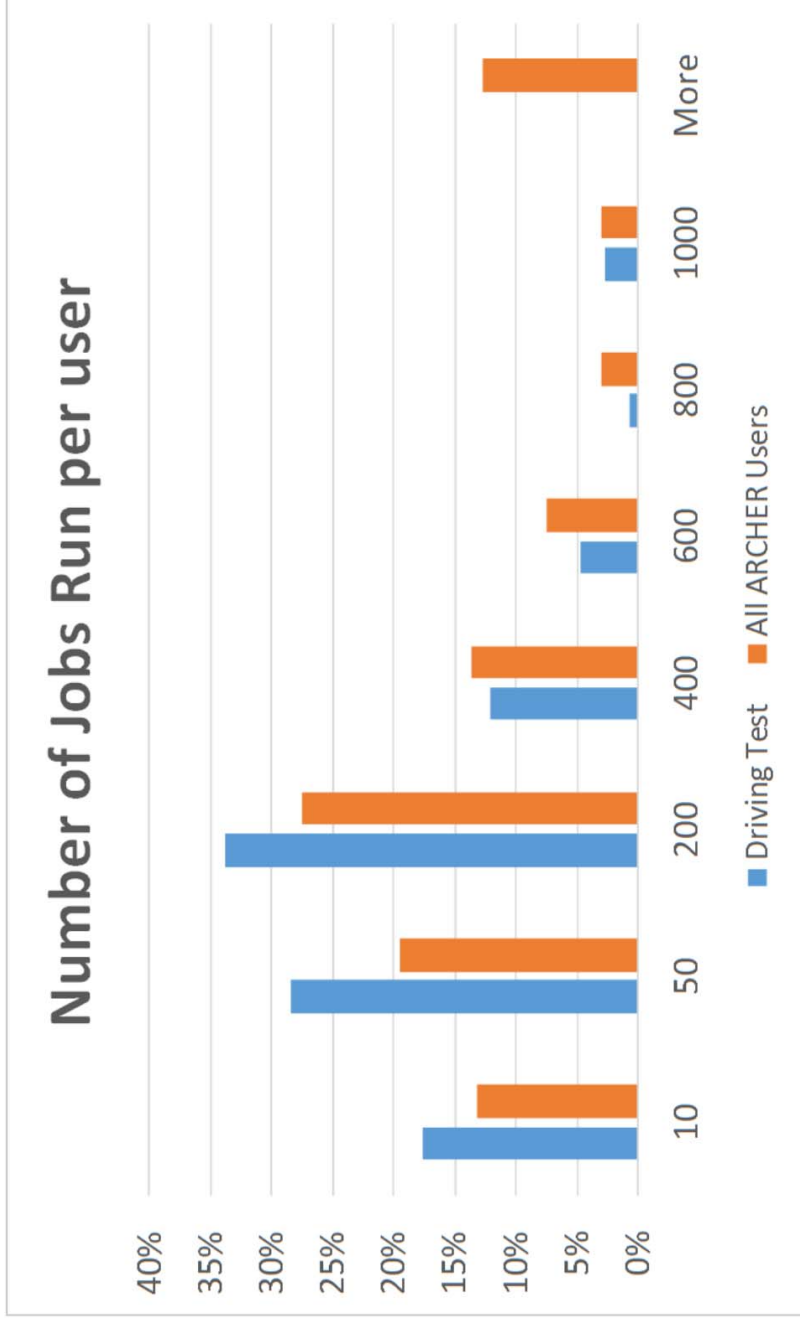
Driving Test

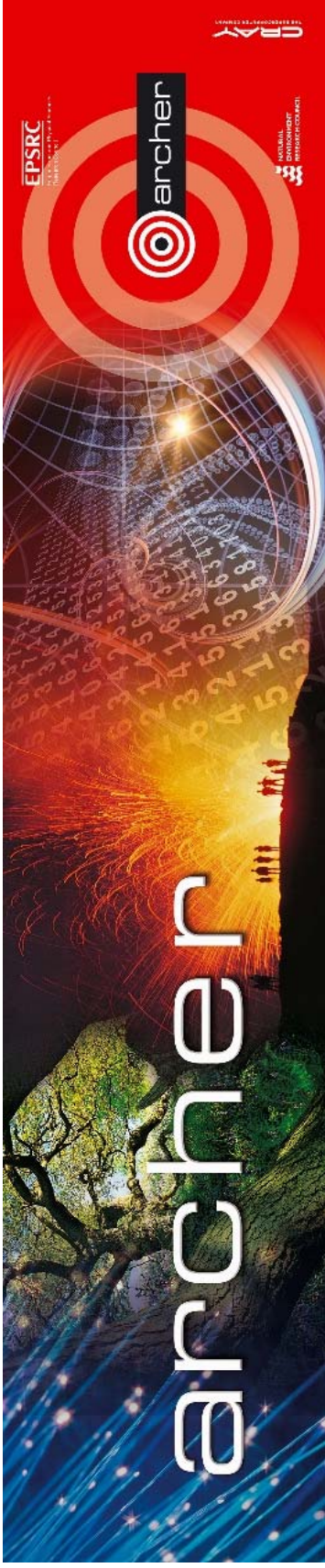


Driving Test



Driving Test

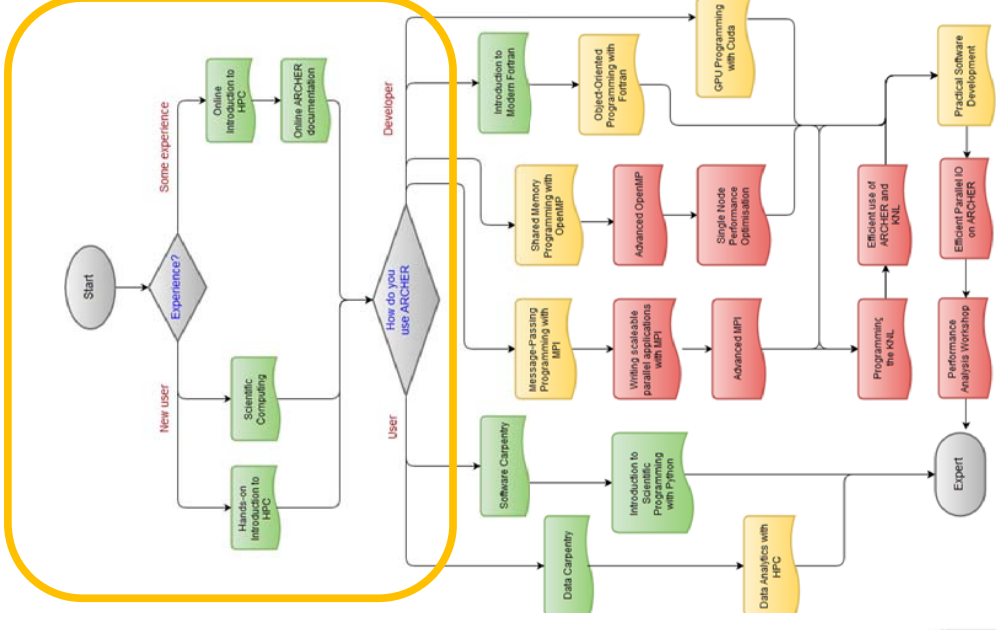
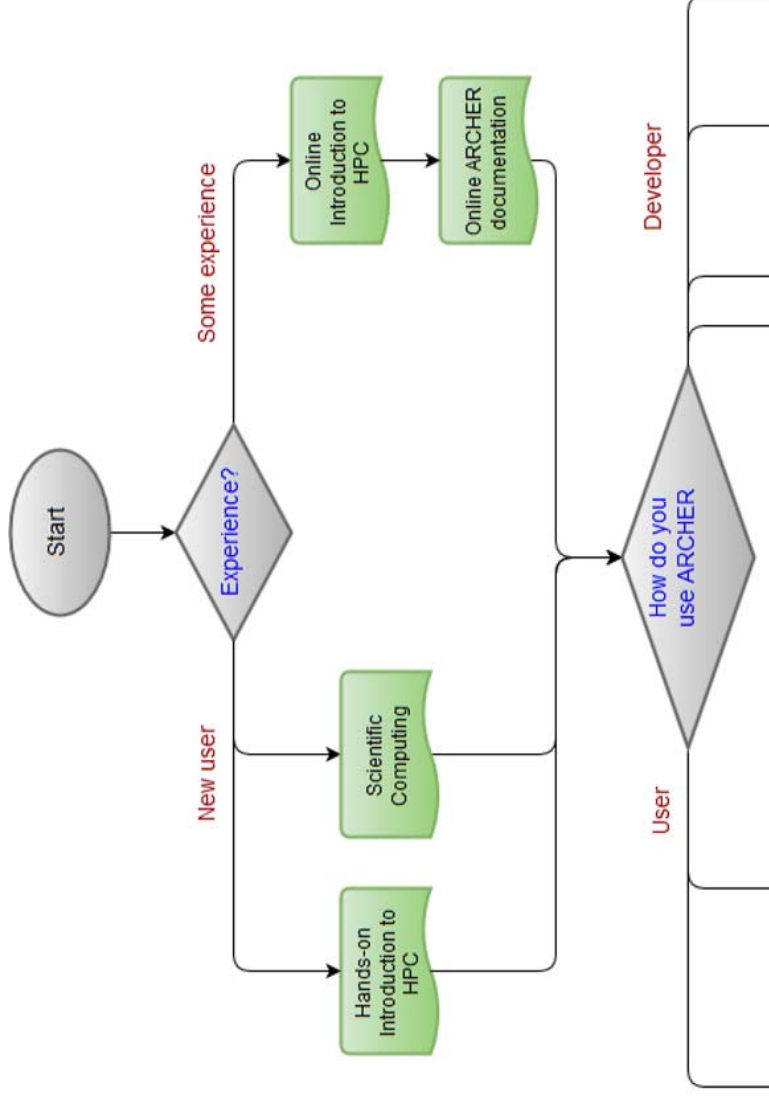




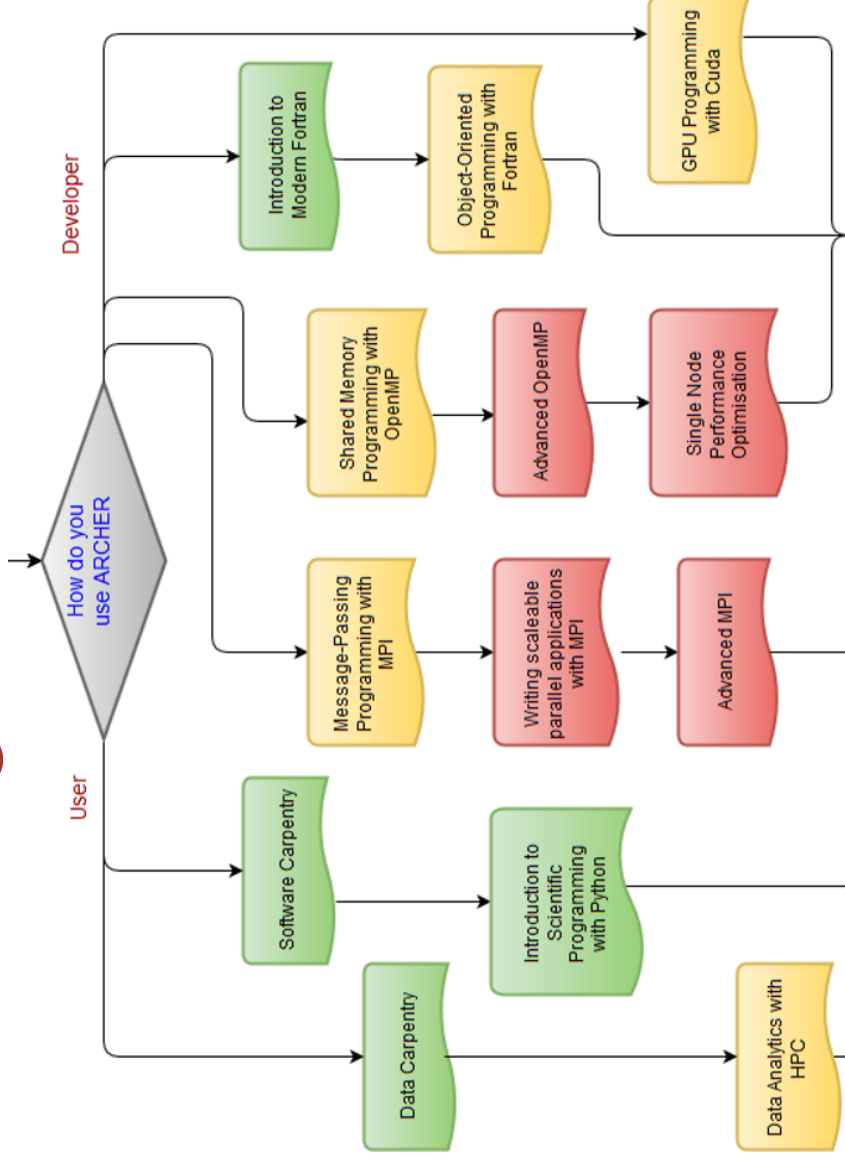
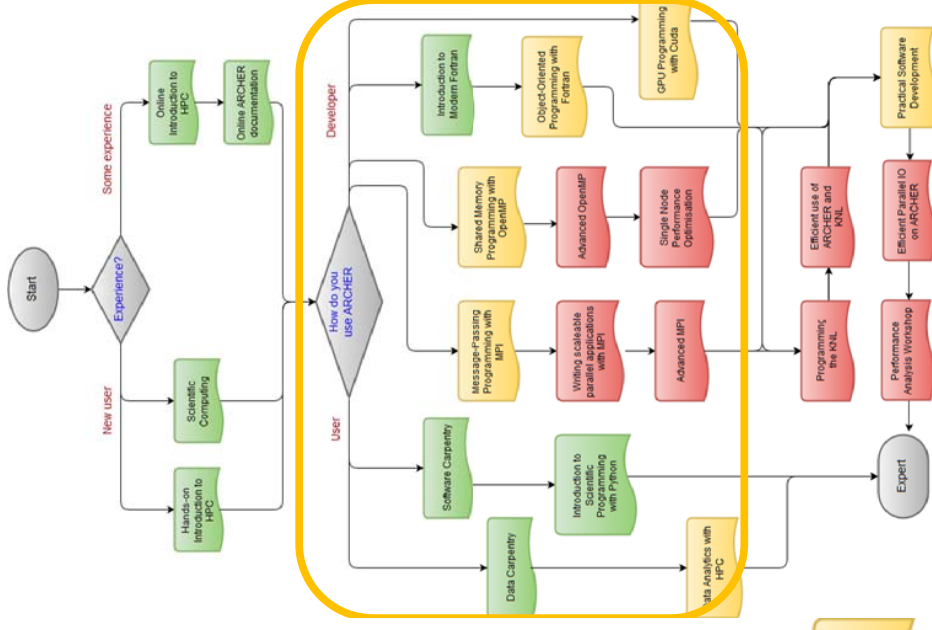
Training



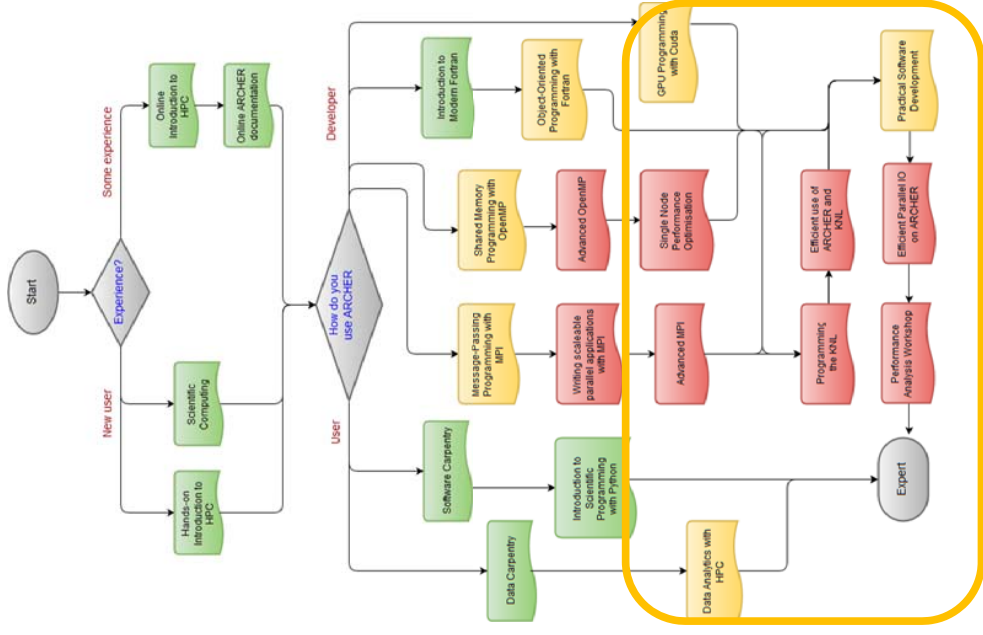
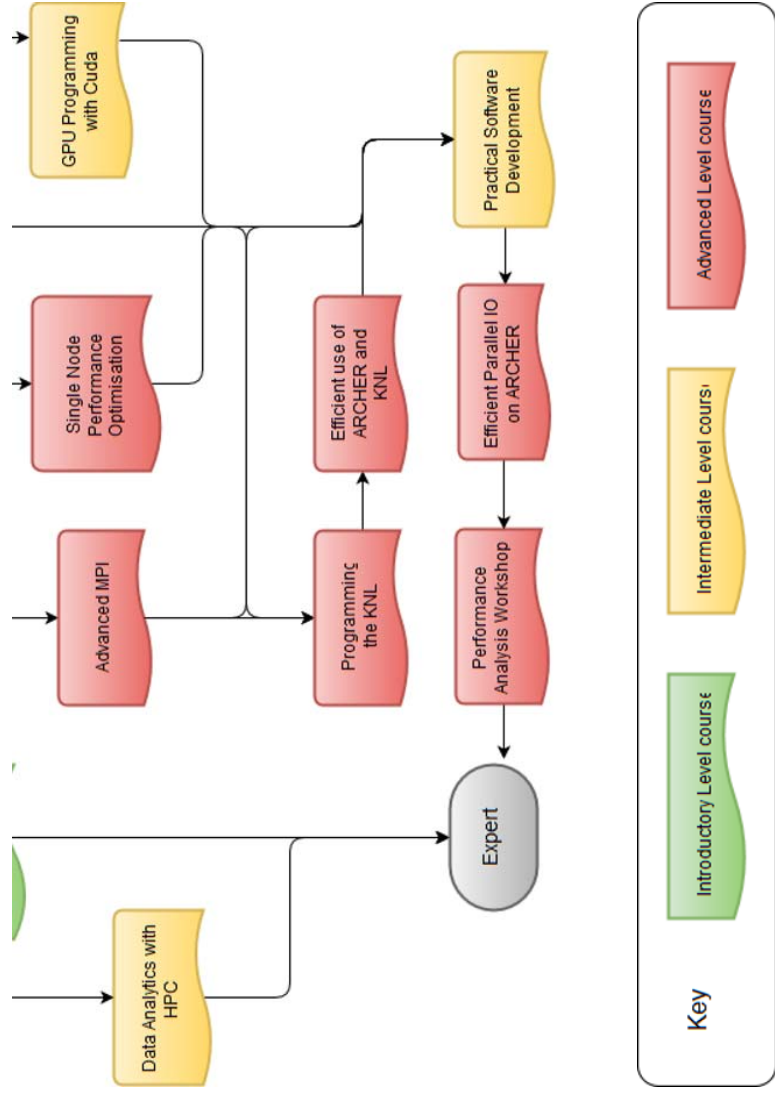
Training



Training



Training



Training



[Home](#)
[ABOUT ARCHER](#)
[GET ACCESS](#)
[USER SUPPORT](#)
[DOCUMENTATION](#)
[SERVICE STATUS](#)
[TRAINING](#)
[COMMUNITY](#)
[INDUSTRY](#)
[OUTREACH](#)

You are here: [ARCHER](#) » [Training](#) » [Training](#)

Google Custom Search

Upcoming Courses

- [Online Training](#)
- [Driving Test](#)
- [Course Registration](#)
- [Course Descriptions](#)
- [Virtual Tutorials and Webinars](#)
- [Locations](#)
- [Past Course Materials Repository](#)
- [Feedback](#)

Contact Us

support@archer.ac.uk

Tweets by @ARCHER_HPC


ARCHER HPC S...
 @ARCHER_HPC
 New user mailing
 [ARCHER] Maintenance
 Wednesday 26th April 0800 -
 2000 BST: edin.ac2p9pv8j
 (SAFE login required)

Training

The list below shows past ARCHER courses. Please follow the links in the list to find out more about each course.

Past courses

2017

Message-Passing Programming with MPI	19-21 April 2017	Southampton	Course Materials
Hands-on Porting and Optimisation Workshop: Making the most of ARCHER	4 April 2017	Birmingham	
Programming the Manycore Knights Landing Processor	3-4 April 2017	Leeds	Course Materials
Shared-Memory Programming with OpenMP	29-31 March 2017	Southampton	Course Materials
Efficient Parallel IO on ARCHER	29-30 March 2017	Durham	Course Materials
Single-Sided PGAS Communications Libraries	27-28 March 2017	Warwick	Course Materials
Message-Passing Programming with MPI : in collaboration with Women in HPC	15-17 February 2017	UCL	Course Materials
Performance Analysis Workshop	8-10 February 2017	Southampton	Course Materials

2016

Writing Scalable Parallel Applications using MPI	12-13 December 2016	Manchester	Course Materials
--	---------------------	------------	----------------------------------



Training



- Home
- My channel
- Trending
- Subscriptions

LIBRARY

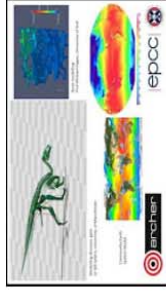
- History
- Watch Later
- ARCHER Virtual Tutori...
- askanexpert2
- Supercomputing: "Ask...
- IHPCSS-2016-MPI
- ARCHER SAFE User G...
- ARCHER SAFE User G...
- ARCHER Case Studies
- EPCC Iso9000 Training
- ARCHER Introduction ...**
- ARCHER Scientific Co...
- ARCHER Quick Help T...
- Short Introduction to ...
- ARCHER Training Cou...

Search



- Home
- Videos
- Playlists
- Channels
- Discussion
- About

ARCHER Introduction to HPC



ARCHER UK National Supercomputing Service • 14 videos • 571 views • Last updated on 14 Sep 2016

Add a description

Play all

Share

Playlist settings

Add videos

- Lecture 1: Introduction - what is HPC**
by ARCHER UK National Supercomputing Service
26:22
- Lecture 2: Parallel programming patterns**
by ARCHER UK National Supercomputing Service
32:30
- Lecture 3 - Parallel scaling concerns**
by ARCHER UK National Supercomputing Service
28:29
- Lecture 4: Building blocks (CPU, memory and accelerators)**
by ARCHER UK National Supercomputing Service
38:01
- Lecture 5: Building blocks (OS, processes and threads)**
by ARCHER UK National Supercomputing Service
17:32



Training

Registering, logging in, passwords

How to register on SAFE

1. Go to the SAFE [New User Signup Form](#)
2. Fill in your personal details. You can come back later and change them if you wish
3. Click "Submit"
4. You are now registered. Your SAFE password will be emailed to the email address you provided. You can then login with that email address and password

At this point your account is registered on the SAFE but you do not have a machine account for ARCHER. To obtain a machine account on ARCHER you require a *Project Code* and a *Project Password* (if required). Your project's PI or Project Manager should be able to supply you with these details.

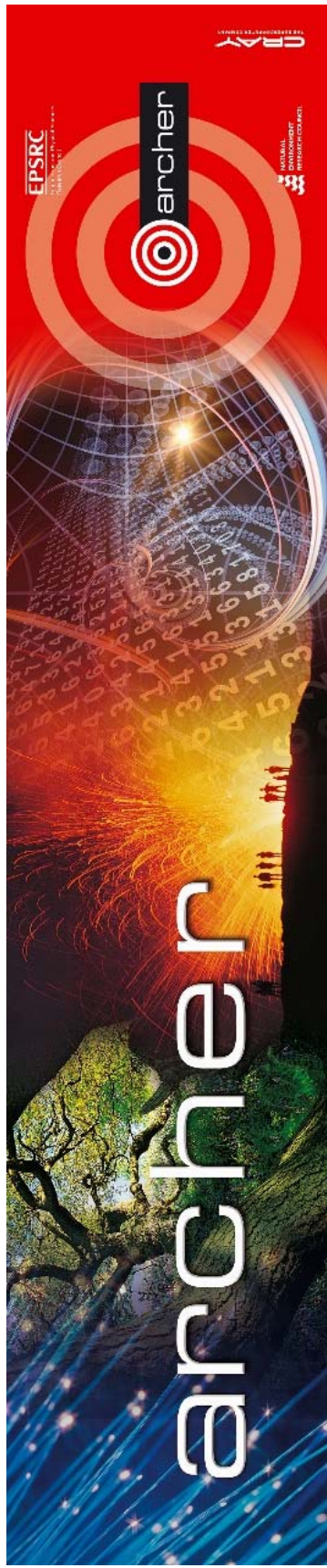
Once you have them you should:

1. Log into SAFE
2. On the Main page, click the "Request New Account" button.
3. Select the correct project from the drop down list
4. Enter the correct project password for the project you have selected.

How to login to SAFE and Overview of Main Page

1. Go to the SAFE <https://www.archer.ac.uk/safe/>
2. Type in the email address you have registered with
3. Type in your SAFE password





Impact



Impact

- Kirkpatrick Model



Level 1	Level 2	Level 3	Level 4
Reaction	Learning	Behavior	Results



Impact



Impact



Filesystems

Show Names

Show Answers

Name ↑	Progress (%)	#1	#2
*****	100% ✓	B	B
Class Total		100%	0%

Click on Question #s or Class Total %s for a detailed question view



BARRASS1

Menu ▾

1 of 2

● MULTIPLE CHOICE

FINISH QUIZ

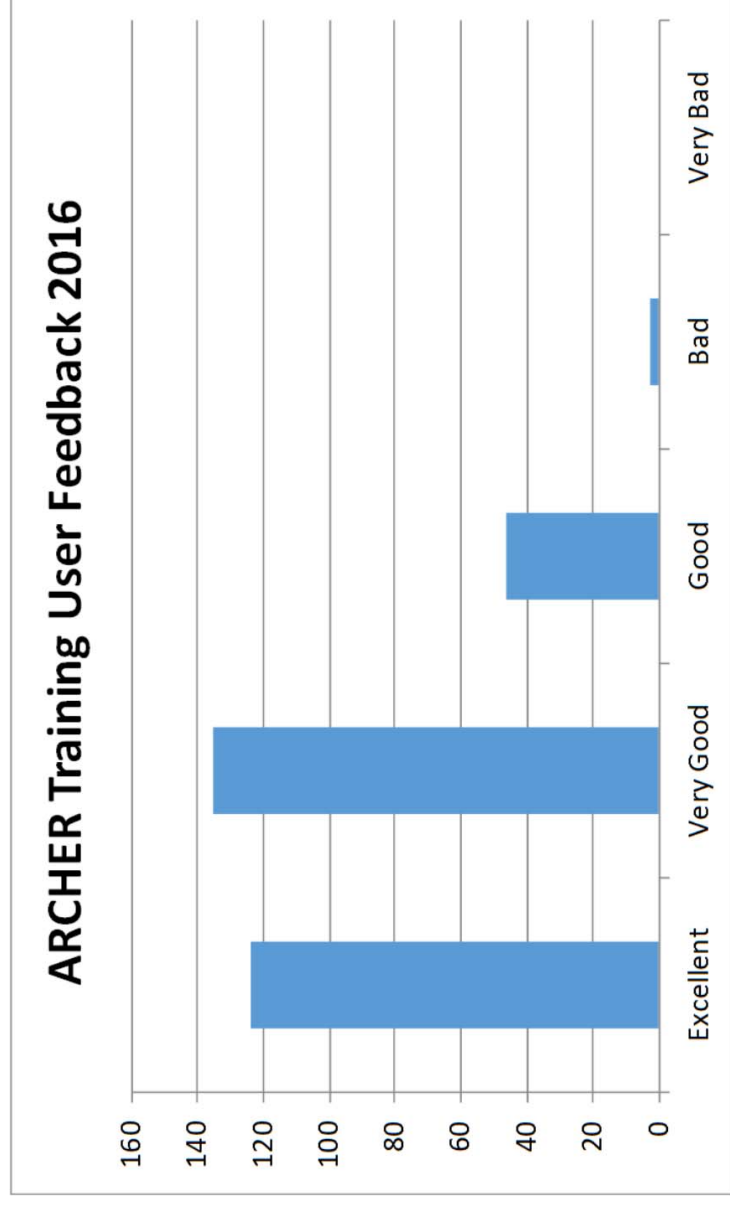
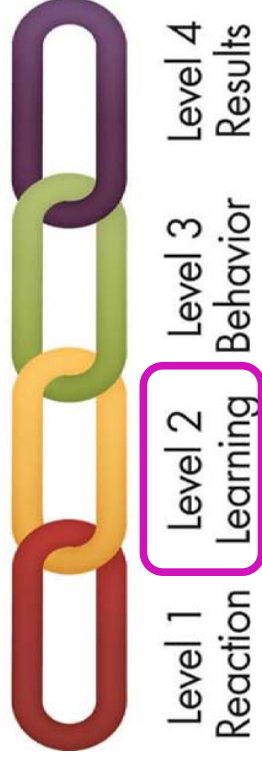
Which of the following file systems can be seen from an ARCHER compute node?

- A /home
- B /work
- C /rdf

1 of 2
K < 1 2 > K



Impact



Impact



ARCHEr Training Follow-up Feedback

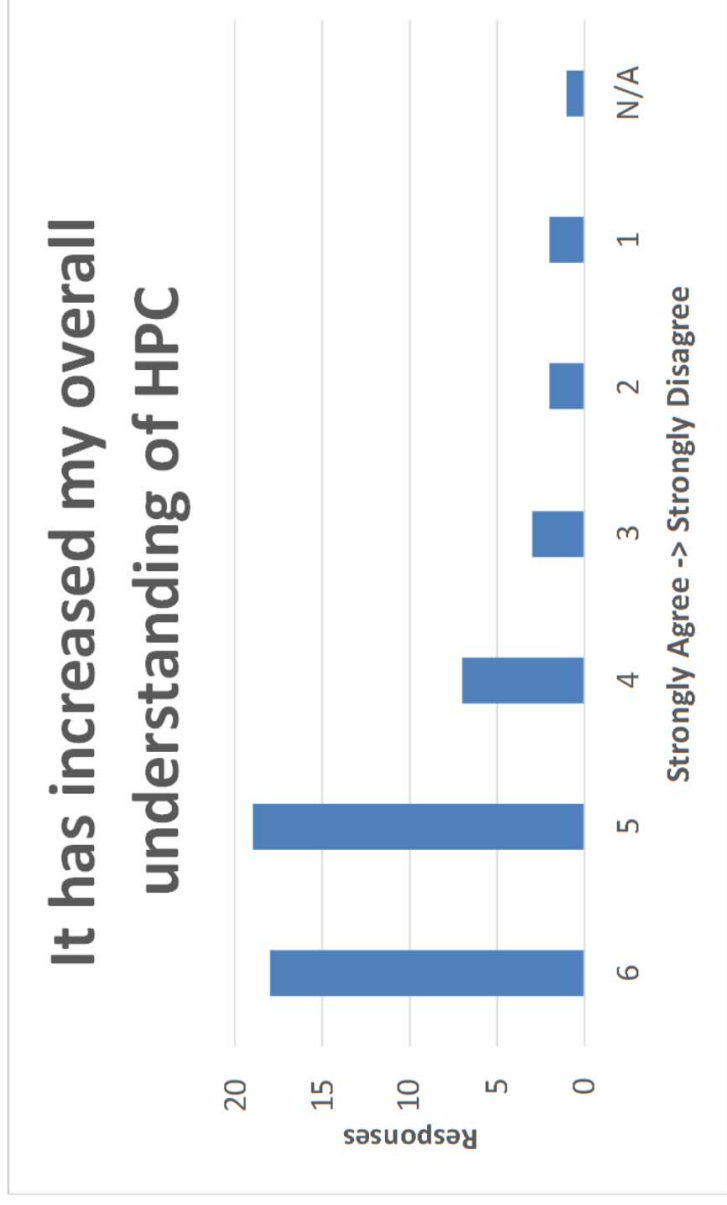
2016

Please use this form to provide follow-up feedback for ARCHEr courses after 3 or more months to help us gauge the longer term impact of the ARCHEr training programme.
Note that this current survey is relevant for those who attended ARCHEr courses between August 2015 and July 2016

*** The ARCHEr Training Team will make a donation of £1 to Save The Children for each completed survey response ***
We hope you will support us in raising as much for this good cause by sending us your form.



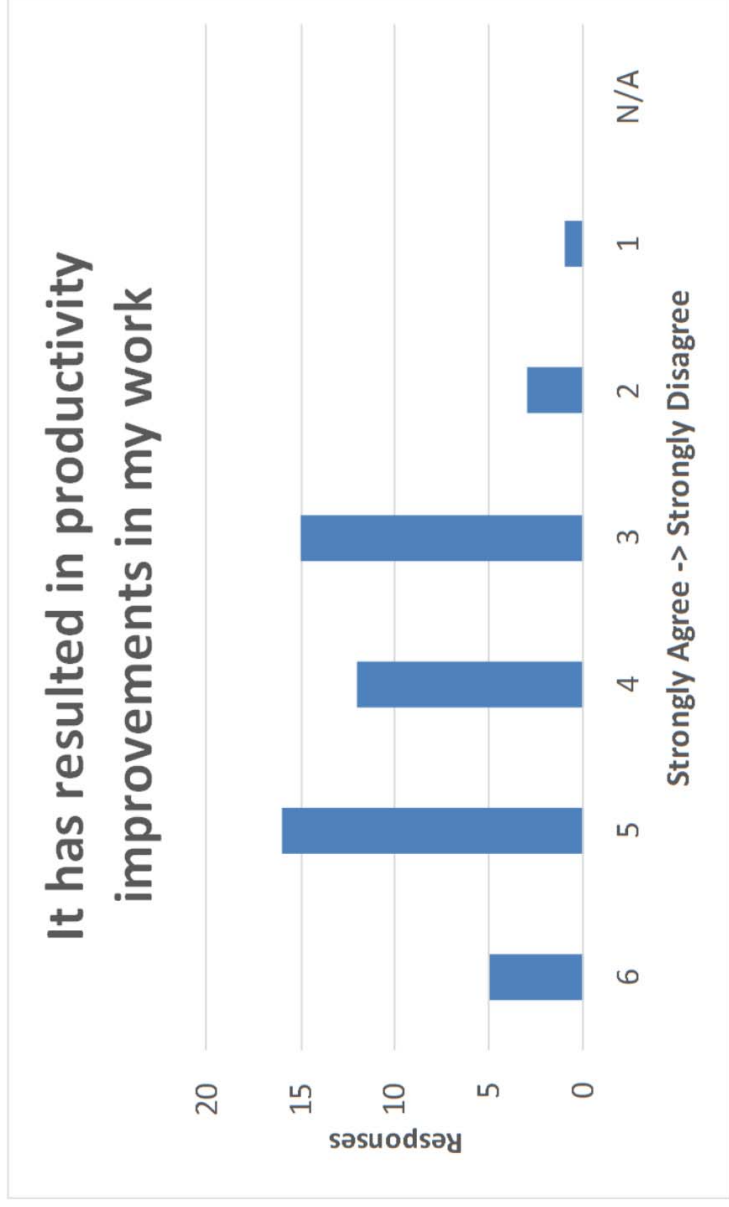
Impact



Impact



- Level 1 Reaction
- Level 2 Learning
- Level 3 Behavior
- Level 4 Results



Novel approaches to HPC user engagement

- Outreach
- Driving Test
- Training
- Impact

