Research Engagement & Data Group

2021 Annual Report

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Annual Report
2021

Introduction by Stephanie Thompson,

Research Engagement & Data Group Leader, Advanced Research Computing

The Research Engagement & Data Group (REDG) engages with researchers across the University, from postgraduate level to senior academics, to ensure that they are aware of all the advanced computing facilities available to them, as well as supporting their use of them through training workshops, 1:1 sessions and online learning materials. The Group also engage with other areas of Professional Services such as the Graduate School, Research Support Services, Research Planning, Library and Ethics to ensure that they are aware of and promote our services, as well as collaborating on overlapping areas such as Research Data Management.

The Research Engagement & Data Group is made up of 2.6 FTE:
- Stephanie Thompson – Research Engagement & Data Group Leader
- Aslam Ghumra – Research Data Management Specialist
- Debbie Carter – Research Training and Engagement Officer

In 2021, REDG focused on storage as we prepared to retire our redundant sync and share service, BEAR DataShare. We supported 53 researchers via Zoom sessions to ensure they found a suitable solution to migrate to, in many cases this resulted in them moving to the Research Data Store, which is a more suitable place for long-term storage of research data. With the ongoing pandemic, we coordinated the delivery of 29 workshops via Zoom to support use of our HPC-system and provide in-depth training on specific software via the Carpentries workshops.

The following report lists the projects and engagements that REDG have been involved in during 2021.

REDG Highlights for 2021
- Ensuring a smooth transition for researchers by providing advice on migration from BEAR DataShare
- Delivering 3x1 hour bespoke seminars for Schools/groups within EPS, MDS and CAL
- Increasing the number of researchers we support through Zoom sessions by 47%, from 141 in 2020 to 207 in 2021
- Recruitment of 6 new BEAR Champions from EPS and LES
- Covering all PGR College inductions as well as some School Inductions
- Doubling the provision of online, synchronous training workshops
- Providing regular opportunities for Carpentries trainers to provide feedback to improve course content and delivery
- Initiating more feedback on training workshops from participants & responding to it
- Providing two new online Canvas courses to support asynchronous learning

Collaborations within UoB

283

People whom we have engaged with at events/inductions

208

Number of people attending either a drop-in or 1:1 session

108

Researchers, staff or students attended bespoke training sessions

BEAR Champions

We have recruited 6 additional BEAR Champions this year from different Colleges, they help us to promote BEAR within their Schools, pilot new services and give feedback on existing services. The group meet monthly and over 2021 have provided key opportunities for outreach such as invites for seminars and inductions. Data Centre tours were provided for the following new BEAR Champions in October and November:

1. Matt Mould – EPS – PhD student in Physics & Astronomy
2. Daniel Donaldson – EPS – PhD student in EESE
3. Warrick Ball – EPS – Post-doc in Physics & Astronomy
4. Nezha Acil – LES – PhD student in GEES
5. Geraint Pratten – EPS – Post-doc in Physics & Astronomy
6. Jordan Deakin – LES – PhD student in Psychology

Special Interest Groups (SIGs)

Out of the 7 existing SIG's, only MATLAB and CFD are currently active – the MATLAB group now has a new Chair and we hope will restart running sessions in 2022. The Hacker Within Chair, Matthew Brett has now left UoB but there is high demand for a replacement, so we will be launching a new Coding Club in January with three monthly sessions already planned.

BEAR PGR Conference

After preparing for a hybrid event, insufficient numbers registered to attend the BEAR PGR Conference in-person, so it was again held online. A more streamlined, one day format on September 8th resulted in more consistent attendance of around 30 people. Nick Loman and Jack Grieve gave well-received keynote talks. The BEAR Conference Chair was given the task to upload the session recordings but in the end was not able to – agenda and posters are available here.

Professional Services

We are meeting regularly with the following groups/people:

- Library Services
- The Researcher Developer group which includes attendees from early career groups, HeFI and POD
- Graduate School Board and the Head of the Graduate School (currently Tara Wittin). We have been invited to have a stand at their new Graduate School talk series in January

Outreach

332

Researchers reached through induction events & bespoke sessions

16

Blog posts written

2,313

Unique page views of our blog posts

Induction Events & Bespoke Training

All events have been held online in 2021, it was again not possible to run the BEAR Challenge due to the pandemic but we plan to run it in 2022.

Event	Number of attendees
LES - Psychology - BEAR and Data Storage for Forensic Psychology PGRs	10
EPS - Metallurgy and Materials - AIMED group induction	20
DMP's for PGR's - Library session – sessions in June, October & November	53
EPS - Engineering PGR Seminar Series	26
COSS - City Redi Departmental meeting – Data Storage	26
EPS - PGR Induction	40
EPS - Engineering - PGR Induction	40
COSS PGR Induction	23
LES PGR induction	40
CAL - PG-Tips Seminar Series ELAL	5
CAL - Law Staff Induction	15
MDS – IIA Seminar	34

Drop-in Sessions

24 scheduled drop-in's were held in 2021 with additional 1:1 sessions totalling 208 attendees. The majority of queries were around migration of BEAR DataShare and data storage, with EPS having the most HPC-related queries – see table below and Appendix I):

	Total queries covered
Migration of BEAR DataShare	53
Data Storage	46
BlueBEAR - HPC	27
Introduction to BEAR	20
Mapping the RDS	23
Use of BEAR DataShare	14
Sensitive data	14
Globus data transfer	10
Data Management Plans	7
Other	12

Participation in Conferences/Groups

- Stephanie attended the Research Data Alliance (RDA) 17th Plenary in April
- Aslam attended the RDA 18th Plenary in November
- Stephanie became a member of the UKRI Cloud Workshop Organising Committee
- Debbie is a member of the IT Services People & Culture Wellbeing Group

Training

ARC doubled the number of training courses run in 2021 (29) compared to 2020 (15) with REDG coordinating the delivery of courses to 355 people, as well as delivering the Introduction to Linux course.

Training course	Number of courses run	Total attended
Introduction to Linux	6	67
Introduction to BlueBEAR	6	87
Fundamentals of Accelerated Computing with CUDA/C++	2	19
NVIDIA Baskerville AI training	2	53
R Carpentries	4	63
MATLAB Carpentries	3	27
Python Carpentries	4	55
Git Carpentries	4	37

Apart from the R Carpentries with on average 30 people registering, there is no clear difference in training demand with an average of 19 people registering for each course. The demand for particular courses per College can be seen in Appendix II, EPS showing the most demand for all training apart from R, which is most popular for researchers in LES. Regular meetings are being held with Carpentries trainers to discuss ways to improve the delivery of the training in general, as well as in specific courses such as Python & R.

Live Zoom polls have proven to be the most effective way to get feedback on training courses, with a high completion rate. For our Autumn training workshops, 96% of people who attended felt more confident in using BlueBEAR or the programming language after the course.

Canvas Courses

We have written and published two new Canvas courses in 2021 to diversify the learning opportunities on offer, providing asynchronous learning whenever the researcher needs it. BEAR Training Recordings provides access to previously recorded training workshops and Introduction to BlueBEAR is a written version of the workshop, including an introduction to HPC and examples to work through.

Canvas Course	Number 'students' currently enrolled (01/01/22)
BEAR Training Recordings	83
Digital Research Conversations	20
How to use BEAR DataShare	248
Introduction to BlueBEAR	51
Introduction to Linux	299
Open Research (collaboration with Library)	120

355
Training attendees

29
Courses ran over the year

96%
Training attendees felt more confident in the subject after attending BEAR training

91%
Training attendees would recommend the training to colleagues

Communications

62%

Reduction in BEAR DataShare logins since April when users were first told about the retirement

199

Number of Tweets

20,616

Twitter profile visits

199

Twitter mentions

140

New followers

BEAR DataShare Retirement

Communications around the BEAR DataShare retirement started in March 2021 and covered a range of formats, the most effective being regular emails to our mailing lists, which then prompted bookings for our drop-in sessions. Information was also included in IT Services newsletters, an ITS GO session, a Service Desk banner and modification of the BEAR DataShare login page. Five KB articles were written covering where to store data and how to migrate data off BEAR DataShare (main article here).

Newsletter

We send out a monthly newsletter to all those on our optional bear-updates mailing list and since May 2021, these have also been accessible to anyone via the 'News' section on our homepage, which makes it easier to share with both internal and external people.

Social Media/Web Engagement

Blog posts

In total, we either coordinated or wrote 16 blog posts in 2021 (9 more than in 2020) written by ARC team members. The most popular post was the retirement of BEAR DataShare, read by 791 people. The blog post on HPCwire Award Winners was the second most read post with 86 unique readers.

Social Media

We are gaining Twitter followers at a steady rate but profile visits have increased by nearly 500% from 3,498 in 2020 to 20,616 in 2022 – there was a gradual increase over the year from 329 per month in Jan 2022 to 3270 in December – this may in part be due to the 12 days of Christmas Twitter campaign that we ran, which featured facts about BEAR Services.

Webpage Updates

We wrote and uploaded guides on retrieval of files/version history on Windows and Linux via snapshots to the backup & retention webpages. We also added RDS-related webpages to the menu of the main RDS webpage to aid findability.

Other REDG Activity

540

New projects registered in 2021

30%

Increase in storage usage since Jan 2021 (739TB more)

Triaging Coordination

REDG have coordinated regular meetings between the ARC triagers to raise any concerns, as well as improve communication around new processes.

Outreach with other ARC groups

REDG met with members of a RDM team at the University of Edinburgh in June and the Group Leader of the Research and High Performance Support Team at the University of York (Emma Barnes) in October to discuss how their teams operate. We seem far ahead of York in terms of outreach and training provided.

Re-Registration of Projects & Contacting New PI's

REDG have been responding to queries around re-registering projects and asking for related publications. We have also been identifying and contacting PI's with new research grants to make them aware of all the BEAR services.

Equality & Diversity in STEM roles

- Through her STEM Ambassador role, Stephanie talked to Secondary Science Teachers from across the West Midlands about careers in science & computing in December.
- Stephanie gave a talk on careers adjacent to Academia for early career researchers for LES/EPS PERCAT.

Conclusion

Outreach and engagement has again been difficult in 2022 with the ongoing pandemic but we have built on the successful methods we developed last year for online drop-in sessions and training, as well as provided more opportunities for asynchronous learning. In 2022 we hope to release the IT Needs for Active Research Survey, which will allow us to gauge demand for new areas of training, get feedback on our services and assess how successful our outreach has been over the last 2-3 years.

With the retirement of BEAR DataShare, we will have more time to focus on other areas of service support and outreach and we hope to be able to attend in-person University events again to more easily reach non-BEAR users. The re-launch of a Coding Club should help fill a requirement for more community support around coding, as well as help raise our profile.

Appendix I

The types of queries dealt with via Zoom sessions per College for 2021.
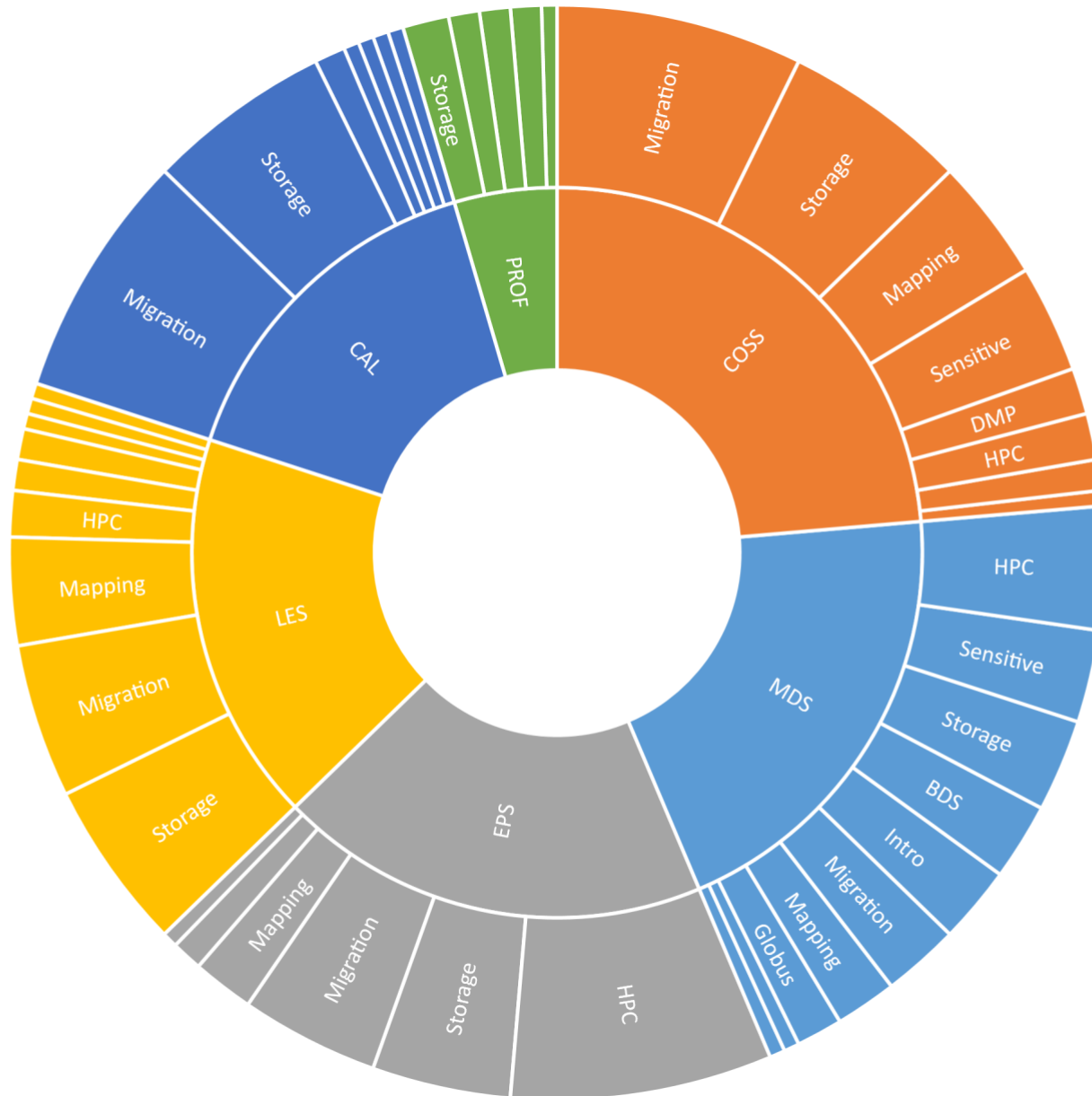
Appendix II

The proportion of registrations for each training workshop type per College for 2021.