

Results of the Survey into the IT Needs of Birmingham Researchers (conducted April/May 2017)

Background

The first University wide survey of the IT needs of researchers was commissioned by PVC Tim Softley and ran from 12th April until 12th May 2017. This brief document looks at the major themes and summarises IT Services' response.

563 people viewed the survey and 481 contributed answers to all or part of it. EPS, LES and MDS had similar response rates with 133, 117 and 128 responses respectively from each College, whilst CAL and SS contributed 56 and 49 responses.

81% of respondents were staff, 17% students, and 2% did not declare a status.

Your Concerns

The table below lists your concerns and what we have done about them. We've also colour coded the responses as green, amber and red

- Green** we believe significant progress has been made
- Amber** some progress has been made but there's more to do
- Red** there's still a lot more work to be done

Of course you may disagree with our assessments; if you do please let us know. (Good as well as bad feedback welcome!)

Your Said	We Did
Principal Concerns	
Across the Colleges three principal concerns came through loud and clear	
IT Services needs to be more responsive to user requests. Long wait times for what are often perceived as non-challenging tasks causes a high degree of frustration. The response times quoted for request submitted through the Service Desk (a default value of 10 working days) were seen as unacceptably long.	We appreciate that waiting for a response to a service desk call can be frustrating and 10 days is a long time to wait for a fix. Analysis suggests calls are resolved more quickly than this with the average being between 4 and 5 days depending on the College. A number of College IT teams now have dedicated resource aligned to research support and this will help improve responsiveness in key areas.

<p>There was significant frustration at being denied administration rights to desktop, personal computers. Wait times of several days for what were often perceived as straightforward tasks were frequently highlighted, with comments that this impacted adversely on research activity.</p>	<p>Developing a policy on granting administration rights on desktop and laptop machines straddles an uneasy boundary between convenience for you as the user and security risks which could potentially affect many more people. We have a good record in Birmingham in protecting the campus from malicious attacks and do not want to jeopardise this.</p> <p>Current policy is that all justifiable requests to the Service Desk for admin rights will be granted (subject to review by your College IT Manager). Depending on the College this may be a temporary elevation of rights, or a more permanent arrangement.</p> <p>In the longer term we are looking at automating this procedure so that rights may be granted in a speedier fashion and revoked when no longer required.</p>
<p>Many researchers commented that desktop computers provided by the University are inadequate</p>	<p>Desktop computers are provided from College budgets and independently of IT Services. These concerns have been fed back through your College IT Manager</p> <p>If specialist IT hardware is required to perform research activity, where possible, a request for funding should be written into the research grant. Assistance with specifying and costing the hardware is available from IT Services.</p>
<p>Other Comments</p>	
<p>Calls for further investment in BEAR and particularly BlueBEAR (HPC) facilities</p>	<p>BEAR infrastructure (compute, storage and research networking) receives significant funding each year through IT Services budgets. During 2016 we also received substantive investment to create the CaStLeS environment, providing dedicated infrastructure for research into life sciences and available to all Colleges working in this area.</p> <p>For many years this investment enabled us to grow the BEAR environment. However some of</p>

	<p>the kit is now in need of replacement meaning the budget is now more concentrated on renewal, leaving limited opportunity for further growth.</p> <p>During May this year our new multi-million pound, research-focussed data centre will open providing capacity for future growth for several years to come.</p>
<p>Further investment in BEAR (Part 2)</p>	<p>BEAR services are not just about the kit. Infrastructure needs skilled people behind it to deliver the best for the community.</p> <p>The Advanced Research Computing (BEAR) Team was already populated by highly skilled individuals but in the last 12 months we have been able to expand the team. 6.5 new posts have been created in the team in the last year and all have been filled by further skilled individuals.</p> <p>There's no shortage of work and these new people make a real difference to the ability of researchers to exploit the technology.</p>
<p>Better WiFi provision and coverage</p>	<p>We are moving away from our current wifi vendor and replacing the infrastructure with Hewlett Packard's Aruba equipment, widely acknowledged as the joint best network solution in the world. The project is benefiting from significant investment and well underway with a planned completion date in 2019. Several areas have already been converted including Computer Science, the Main Library, Alan Walters building and Poynting Physics</p>
<p>Better facilities for remote access (virtual private networks, VPN)</p>	<p>A new remote access and VPN service was launched in February 2018. It is available to all staff and research postgrads, and can be requested through the Service Desk.</p>
<p>Better support for Linux and MAC desktops, and permission to purchase these</p>	<p>All justifiable requests to purchase Linux and Mac computers will be granted (subject to funds being available and review by your College IT Manager).</p> <p>There are a number of staff across IT Services that are trained to support Linux and Mac Operating Systems, with a number of College IT teams having</p>

	dedicated Linux and Mac specialists aligned to research support
Big data – capacity for storage and guidance and training for analysis.	<p>Demand for data and storage has grown significantly. The centralised Research Data Store (RDS) is available to all researchers with a free allocation of 3 TB per project (larger volumes may be purchased at a cost effective price). Storing your data on the RDS has several advantages:</p> <ul style="list-style-type: none"> • High speed connectivity to BEAR services • Data are backed-up regularly • Data are replicated between two data centres delivering security against equipment failure and resilience. • Data are managed by a professional team of technical experts, further safeguarding integrity. <p>Drop-in sessions on data management are held regularly in various locations across campus. Further support in data analysis is available through the Research Software Engineers and the Researcher Training and Engagement Officer (see below for further details)</p> <p>This is a very dynamic area and more support will become available during the coming months.</p>
Support with programming , which is increasingly becoming a fundamental part of the research process. This mirrors developments nationally and the rise in importance of the ‘Research Software Engineer’ role.	<p>Within the Advanced Computing (BEAR) team we have now created a Research Software Group with 5.5 Research Software Engineers (RSEs).</p> <p>https://intranet.birmingham.ac.uk/it/teams/infrastucture/research/bear/rsg/research-software-group.aspx</p> <p>This team provides programming Advice, Support for BEAR users, and Coding support which can involve embedding an RSE within a research group for up to 20 half-day sessions.</p>
Other Issues	
Misconceptions about BEAR facilities	Several ‘urban myths’ seem to have developed access to BEAR facilities. Full details of BEAR can

	<p>be found at www.bear.bham.ac.uk but in summary:</p> <ol style="list-style-type: none"> 1. The service is provided free of charge to the vast majority of users. Only when exceptionally large resources are required (for example, more than 3 TB storage for a project) is a contribution to costs necessary. 2. Requesting access to BEAR is straightforward. A simple request made through the Service Desk is all that is required. 3. We already have a Dropbox-like facility, known as BEAR DataShare which allows the sharing of data with collaborators both within the University and externally.
<p>Stability of BEAR DataShare</p>	<p>At the time of the survey (April/May 2017) we had experienced some issues with BEAR DataShare. These were worked on as a priority and the service is now very reliable.</p> <p>We have added functionality over the year and the service is now widely used across the campus (approaching 3000 users/collaborators).</p>
<p>A need for more training came through loud and clear. The scope covered existing facilities (BEAR, existing applications eg Matlab, and new areas such as big data, data management and data analytics.)</p>	<p>Within the Advanced Research Computing (BEAR) Team we have now created a Research Engagement Group with a dedicated Researcher Training and Engagement Officer. Our training programme and supporting documentation is under active review as we begin to expand our offering.</p> <p>Full details of training courses can be found at https://intranet.birmingham.ac.uk/it/teams/infrastucture/research/bear/bear-training/index.aspx</p> <p>Amongst many initiatives are:</p> <ul style="list-style-type: none"> • As a University we have now signed up to the Matlab Academy Online Training Suite – a series of online courses which significantly increases the training material available to us. • Birmingham is a member of Software Sustainability Institute (SSI) and through them have access to Software Carpentry material (https://software-carpentry.org/) . This year, six Carpentries Instructors have been trained who will then be empowered to deliver training using material from the SSI

How Did We Do? Satisfaction levels with IT Services and with BEAR Services (scores out of 5)	
IT Services overall satisfaction score	3.26
BEAR Services satisfaction score	3.79