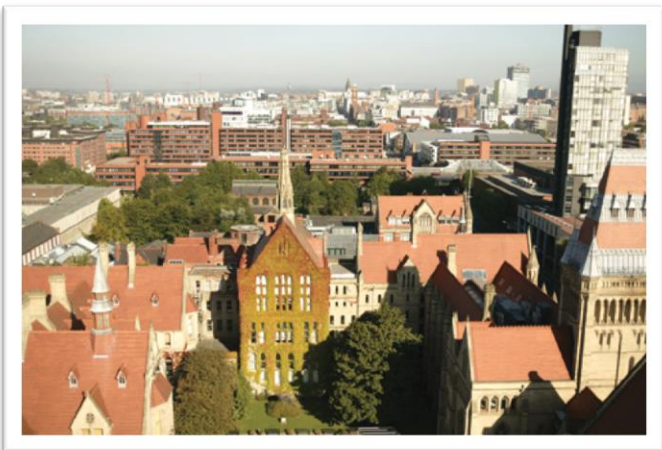# IT Services
Supporting your research
A newsletter from the IT Services for Research (ITSfR) group

Welcome to issue #2, May 2013, in a [regular series](#) of updates on **IT research support** and facilities for postgraduates, researchers and academics of The University of Manchester.

Your main Faculty contact email addresses (for research computing support) are given in the section – *News from the Faculties*; emailing your research computing queries this way will also automatically raise a job for you in the *Remedy* tracking system. Routine work should continue to be submitted through the IT Service Desk on ext.65544 or via online submission at:
http://www.manchester.ac.uk/servicedesk

Long running jobs on PCs

Postgraduate students, and others, often run long running compute jobs on their own PCs. If you have a managed Windows desktop machine, it will be equipped with power management to reduce energy costs to the University. Any compute job that needs to run unattended for some time on your PC will need an exemption to the PowerMan software to stop it from being automatically shut down. Contact your local IT support for guidance on how to do this.

Notes: (1) a modern PC (£350–£400) is typically many times faster than those from 4 to 8 years ago; (2) one or more of the high performance / throughput systems, mentioned elsewhere in this newsletter, may also be applicable.

Research Data Management Service

The Research Data Management (RDM) Service is being introduced in a phased approach. Phase One of the Research Data Management Service was launched at the end of January 2013 and offers the following:

- A single point of contact for RDM enquiries.
- A website to provide a single location for information and resources.
- Support materials for Data Management Planning, such as templates and good practice examples, in alignment with what funding bodies are demanding.
- Dedicated support staff that can provide advice and training.
- Procedures & guidance on the RDM policy – what researchers need to do and when.

The full service will be launched in Autumn 2013 and will include a system that will allow researchers to manage and store their data.

The RDM Service is underpinned by the University of Manchester RDM Policy, which adheres to the RCUK Common Principles on Data Policy. For further information please see: www.manchester.ac.uk/researchdata or contact the Research Data Management Service Team via researchdata@manchester.ac.uk.

The Wired Network

IT Services are aware that the University wired network is too slow for many research groups' needs. We are working to make both "quick win" improvements and also longer term provision. In an example of the former, some laboratories in the Michael Smith Building now have 1Gbps connections.

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The SciProgramming Mailing List

This is a new listserv list intended for Manchester researchers who develop software.
It is explained further here:
https://www.applications.itservices.manchester.ac.uk/show_content.php?id=180.
The web page also contains a link to the *Research Software: Made in Manchester* site we reported on last month.
Thanks to Mike Croucher in EPS IS for setting this up.

Research Software Development – the next Forum

Some research groups have all the skills necessary to develop and maintain research software, but many only have a subset of the experience and skills required. The next IT Services for Research group forum on **26 June 2013** will be discussing this topic and will have an external guest speaker from University College London: Dr James Hetherington. The forum will be held in Uni Place 2.220 from 1-2pm with a buffet lunch served from 12.30pm.
See James' abstract below:

"Software is an increasingly important component of research. A growing proportion of researchers carry out their research through the medium of computer code. Such research often suffers through the lack of software development best practice within research teams. While postdocs and PhD students do not have the time, and are not incentivised, to produce high-quality software usable by other researchers and sustainable beyond the lifetime of a project, generic software developers are not equipped to understand the academic context of the research.

In order to address this problem, UCL, under the leadership of the Vice-Provost for research, has established a Research Software Development Team, staffed by experts combining professional software development expertise with experience as academic researchers. Based within UCL Information Services Division's new Research IT Services department, the team will work with research groups across college to further UCL's efforts in computationally-based research.

In this seminar, Dr James Hetherington, leader of the new team, will explain the role of the team and how its services are accessed, and present some basic software development practices which researchers can adopt to enhance research efficiency, reliability, and impact."

Microsoft Plugs Azure Cloud Data Centre Into the Janet Network

Microsoft has announced that universities on the Janet network will be able to connect directly into its Azure Cloud data centre in Dublin, thanks to a 'peering' project.

Janet is the private network used by UK universities; it provides its own connections, rather than relying on the public Internet, so Janet users can enjoy better speed and security. Now Microsoft has hooked up its Dublin data centre, it should be easier and quicker for staff and postgraduates to take advantage of Azure platform-as-a-service and infrastructure-as-a-service offerings.

Appointment to PRACE Industrial Advisory Committee

Dr Lee Margetts has been appointed to the PRACE Industrial Advisory Committee (IAC), where he will be representing The University of Manchester, the N8 HPC Service and NAFEMS.

PRACE is the *Partnership for Advanced Computing in Europe* and leads the Tier 0 European Supercomputing Service.

The role involves advising PRACE in how they can better promote and support the use of High-End Computing in industry. The Tier 2 N8 HPC (http://n8hpc.org.uk/) service (run by Manchester and hosted at Leeds) has a similar industry focus. Representation on the PRACE IAC will make it easier for N8 HPC to benefit from and support European actions. NAFEMS (http://www.nafems.org/), where Lee is Chairman of the High Performance Working Group, is the International Society for Engineering Simulation.
Its membership includes 1000+ firms from FTSE 100 companies to SMEs and micro firms.

How will this external advisory role benefit The University of Manchester? Lee is a member of the Research Applications and Collaboration (RAC) Team in IT Services; anyone at the University who is thinking about applying for access to PRACE facilities, training or funding is encouraged to take advantage of these links by contacting the RAC Team for advice and support: its-research@manchester.ac.uk.

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Call for Proposals DECI-11

The *Distributed European Computing Initiative* is currently inviting proposals for 12 months project access to European HPC facilities. This includes CPU time and a limited amount of applications support. See http://www.prace-ri.eu/DECI-11-Call for further details on how to apply.

The deadline for submissions is 1pm on **10 June 2013**. DECI-11 is coordinated by PRACE. If you would like assistance with your proposal, please contact lee.margetts@manchester.ac.uk.

New Hardware via the Revolving Green Fund

A loan from the University Revolving Green Fund (RGF) will be used over the summer to refresh about 50% of the hardware in *Red Queen*, the "Computational Shared facility (CSF) prototype" cluster, run by Research Infrastructure (RI).

The same loan is to be used to replace one of the many small research group-owned HPC clusters on campus with some new hardware for the CSF.

In the coming financial year (2013/2014), more RGF funds will be available to replace such old HPC clusters. If you are the owner of such a cluster and would like to explore the possibility of replacing it via the RGF, please contact its-ri-team@manchester.ac.uk.

Condor

The Condor Pool backbone should be further strengthened soon to provide smoother 24/7 operation of this facility and reduce wasted cycles. More details of the increase in core count; etc.; will be available next month.

You can view further information on Condor at: http://condor.eps.manchester.ac.uk/.

N8 High Performance Computing

Project Principal Investigators can apply for access to this facility through a lightweight peer review process, the details of which can be found on the N8 HPC website: http://n8hpc.org.uk.

INteractive Computational LINux Environment–*INCLINE*

The Computational Shared Facility (CSF) has been a great success, but is configured primarily for batch work. Interactive (e.g., GUI-based) work can be done, but an environment *designed* for development, testing and post-processing would be more productive.

The Research Infrastructure team is planning to launch an interactive shared facility based on the same financial model as the CSF. If you are interested in such a service, please contact its-ri-team@manchester.ac.uk.

Computational Shared Facility (CSF)

For CSF information, please contact the IT Services Research Infrastructure team at: its-ri-team@manchester.ac.uk.

The CSF website is also available at: http://ri.itservices.manchester.ac.uk/csf/.

IT Services for Research website

A new website for IT Services is currently being constructed, within which will be a dedicated IT Services for Research (ITSfR) section.

An initial draft ITSfR web page is available for comment at: http://ri.itservices.manchester.ac.uk/ITSfRG/.

Any comments or suggestions regarding this page can be forwarded to ITSfR lead, Ian Cottam: ian.cottam@manchester.ac.uk

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News from the Faculties

Engineering and Physical Sciences

Your contact email is EPS-ITResearch@manchester.ac.uk.

The EPS IS team recently held a successful pilot **surgery** on north campus, offering "*help and advice relating to computational based research*" to EPS staff. Researchers brought a range of questions and problems that included queries about site licensed applications, open source software, using the Condor pool to solve massive problems (terabytes of data and 1000s of hours of compute) and general advice on good programming practice. Future surgeries for PhD students and research staff on the main campus will be advertised over the coming months.

Thanks to Jonathan Boyle in EPS IS for organizing these surgeries and reporting on them here.

Humanities

Your contact email is Hum-ITResearch@manchester.ac.uk.

Humanities Faculty IT Research Development Team
This team specialises in providing bespoke web applications and databases compliant with funding bodies' requirements for security, resilience and archiving of project data.

Members of research staff in the Faculty have been asked to update their publically available research profile for REF 2014. Theresa from the team will be at a drop-in session for School of Law staff to demonstrate how to update profile details (1 July 2013 2-4pm Williamson 4.08). No need to book, just drop by. If anyone from other Schools would also like such a session, please ask your External Relations Manager or Research Support Manager to contact Theresa Teng (contact details to the right) to arrange a date.

Humanities IT are currently cataloguing the large number of datasets on Faculty servers to ensure compliance with data protection legislation. If any researchers use either Access or spread sheets (or equivalent desktop software) for small research databases and keep them on a shared drive or your own P: Drive, please could you inform the team what the database is used for; whether there is personal or sensitive data on it; and whether it is still necessary to keep this database. Contact Theresa Teng or Phil Bradbury (contact details to the right).

Current projects news
The Humanities team is also currently collaborating with the Faculty's web team on the new public website for the Manchester Interdisciplinary Collaboration for Research on Ageing (MICRA) research centre.

This team are designing and implementing a dynamic data-driven section of the site. Contact Andrew Jerrison for more information (details below).

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Life Sciences

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Next edition
The next edition of this newsletter will be circulated at the end of June 2013.

If you have any news to contribute, please contact the ITSfR lead, Ian Cottam: ian.cottam@manchester.ac.uk before 21 June.

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