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

Welcome to issue #11, February 2014, 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 on the last page; 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 +44 (0) 161 306 5544 or via online submission at: www.manchester.ac.uk/servicedesk.

Web Page:
IT Services for Research

The web site for our support areas and all contact details is available here: www.its.manchester.ac.uk/research/.

DigiLab

The *DigiLab* will be a flexible area within the Alan Gilbert Learning Commons that will provide a space for academics, staff and researchers to test their inventions and innovations with students. It will be a hub for trialling and developing new technology.

This project, sponsored by the Library, is looking for academic *technology advocates*. If you are interested, please contact ros.bell@manchester.ac.uk from the Library or chris.mallon@manchester.ac.uk from IT Services.

nCrypted Cloud

We have some 70 volunteers trying this encryption layer on top of the cloud storage and sharing system: Dropbox. More are welcome; please email ian.cottam@manchester.ac.uk. The software is available for Windows, Mac, iOS devices and Android. A web browser interface is also available.

There are some caveats; the following systems are not supported:

- The Managed XP Desktop (please wait until you are updated to a more modern version of Windows)
- Snow Leopard – OS X 10.6 (please update to a more recent version of OS X if you can)
- Linux (promised at a later date)

Recent changes have made installation more straight-forward and the feature set offered by the browser interface has grown (e.g. you can "Trusted Share" files and folders to people who do not have the encryption software installed, setting viewing options, time limits and other attributes). You can still share entire Dropbox sub-folders without having to distribute your encryption password.

As well as volunteering to try this on top of Dropbox, the developers have asked us if anyone would like to be in their beta test of the same with Google Drive. Please use the email above if interested.

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Eduroam – not just for when you are travelling

As you may know, the WiFi service *Eduroam* allows you to connect automatically to the net when visiting many other institutions. Around campus we notice many postgraduates (and others) using *UoM WiFi*, rather than *Eduroam*. The former requires you to login explicitly every time you connect, has timeout settings and, for some work, requires the VPN Client to be active too. Please help spread the word that the automatic *Eduroam* service is a great enabler and time saver, locally as well as when on the road. Details are here: man.ac.uk/JbIMm3.

Windows Azure for Research – places still available

Microsoft Research will be offering free Azure training to RAs, academics and PhD students who want to use cloud computing. This training is *not* Windows specific. A laptop with any OS and a web browser is required.

Microsoft Research and The University are delighted to offer a no-cost, two-day, hands-on technical training event for academic researchers interested in cloud computing using Windows Azure. The training will be held 3-4 April 2014 at the School of Computer Science, at The University of Manchester. This is part of Microsoft's Windows Azure for Research programme –www.azure4research.com. Please register now for the remaining places bit.ly/1dxZ6Q9.

MATLAB and the Condor Pool

The latest edition to the Condor support web site is a note on how to checkpoint MATLAB code. This information is useful for other compute clusters and also for PC-based, long-running jobs.
man.ac.uk/uIsT7G

Computationally Intensive Research (CIR) Survey

Academics will shortly be receiving a short online survey about CIR usage and facilities. It should only take 5-10 minutes to complete and you will be helping to influence future strategy. The survey is from – and results will go to – Professor Chris Taylor and Gerry Pennell (Director of IT).

Scientific Software Support

On 26 February 2014 at the ITSfR Forum, Dr Mike Croucher, from EPS IT, gave an excellent talk on how IT can help in the support of scientific software, from commercial packages through open-source to bespoke software being developed here at UoM by numerous research groups.
Mike's slides are here:
https://www.dropbox.com/s/d4kx5d2l4fw24w8/Research Software Support.pdf.

File DropOff Service to be renamed ZendTo

Shortly the large file drop-off service trial should be in production and we are renaming it *ZendTo*. This is to emphasize that it is a transfer service and not storage. Users of the trial will be emailed individually, and there will be general announcements to all in the usual places. The Dropoff site should overlap the production ZendTo site by one month to give people time to move over.

Recovering files from Isilon

Both *shared research data storage* and *personal-drives* (P: drives) are based on the University's Isilon system. If you look in the knowledge base, you will see how to restore files yourself. There is no need to contact IT to do it. However, we have found an issue with doing this from Mac OS X 10.9 Mavericks. There is a workaround, which, if not in the knowledge base by the time of publication, you can request from the editor ian.cottam@manchester.ac.uk. An alternative workaround is to mount your files on any other system and restore from there (Mac pre-Mavericks, Windows or Linux).

Rat Tendon or Spaceship Hull?

The next meeting of the University of Manchester Image-based Modelling Club (#UoM-IMC) will be held from 1230-1400, Tuesday 4 March 2014.

The event is being held in the Michael Smith Building Seminar Room and will be chaired by Dr Jeremiah Kelly (FLS). A talk focused on future challenges for composites in Aerospace will be given by Professor Soutis (Director of UMARI and the NW Composites Centre). The purpose of this session is to facilitate cross-faculty collaboration in the imaging and computer modelling of composites (both biological and manufactured). Refreshments will be provided by Manchester Informatics to encourage networking.

Visit man.ac.uk/I5wnCY for further details and registration. You may also contact Dr Jeremiah Kelly (@emkayoh) or Dr Lee Margetts (@leemargetts).

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Abaqus

The EPS Applications team, in collaboration with Intrinsys, have arranged a one-day seminar entitled **Non-Linear Analysis, Fatigue and Optimisation featuring SIMULIA Abaqus**. Attendance is free but registration is required; details at marketing.intrinsys.co.uk/simulia-seminar-april-2014/index.html .

Abaqus is site licensed at Manchester – see man.ac.uk/th5JA6 (web site only available on campus) for more information.

Improve your computational science – do more, faster!

IT Services has a variety of introductory and intermediate courses on programming, visualization and code optimisation run by support staff from across IT Services.

Skills learned during these workshops and online courses can be applied to computational research codes, to both obtain results faster and to increase the size (or increased resolution) of the problem being solved.

Such techniques are invaluable on resources such as the CSF (ri.itservices.manchester.ac.uk/csf/), Condor (condor.eps.manchester.ac.uk) and N8 HPC (n8hpc.org.uk) as well as ARCHER (www.archer.ac.uk) and beyond.

But it's not just about high end computing, you can apply the skills you learn to codes running on modern multicore or GPU-enabled desktops to gain better utilisation of the resources available at your fingertips.

For bookings and background info please see: man.ac.uk/JumXz5.

List of Forthcoming Training Opportunities (2014)

FORTRAN programming language	Tue 04 March
High throughput computing using Condor	Wed 05 March
An introduction to OpenCL	Thu 06 March
Image-based modelling	Mon 24 March

Emerging Technology Conference: EMiT

Computational hardware is changing rapidly, with new and novel highly parallel computing architectures that are in a state of constant flux being unveiled all the time.

This forces significant questions about re-coding and future proofing existing scientific software. The term *Emerging Technology* is beginning to be used to describe this continual state of hardware change.

The Inaugural EMiT Event will take place on Friday 11 April 2014 at The University of Manchester and will focus on application in research of new methods and techniques to exploit this technology.

For more details please see: emit.manchester.ac.uk/.

Faculty Contact Emails

Humanities:
Hum-ITResearch@manchester.ac.uk.

Engineering and Physical Sciences:
EPS-ITResearch@manchester.ac.uk.

Medical and Human Sciences:
MHS-ITResearch@manchester.ac.uk.

Life Sciences:
FLS-ITResearch@manchester.ac.uk.

Next edition

The next edition of this newsletter will be circulated at the end of March 2014.

If you have any news to contribute, please contact the IT Services Research Lead, Ian Cottam: ian.cottam@manchester.ac.uk before 20 Mar 2014.

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