

**Computational Resource Allocation Group (CRAG)
Monthly Meeting
Friday 4th April 2014 at 13.00
Room 103, Podium Building, 1 Eversholt Street, London NW1 2DN**

Minutes

Chair:

1. Prof Nik Kaltsoyannis (NK) – *Molecular Quantum Dynamics and Electronic Structure*

Present:

2. Prof Dario Alfe (DA) – *Thomas Young Centre (Materials Science)*
3. Dr Tom Couch (TC) - *Research Comp & Facilitating Services, ISD*
4. Ms Clare Gryce (CG) – *Head of Research Computing and Facilitation Services, ISD*
5. Mr William Hay (WH) – *Datacentre Services, ISD*
6. Dr Andrew Martin (AM) - *Structural & Molecular Biology*
7. Dr Bruno Silva (BCS) – *Research Computing Platforms Team Leader (Service Lead), ISD*
8. Dr Sergey Yurchenko (SY) – *Atomic, Molecular, Optical and Positron Physics*

Apologies:

9. Dr Nicholas Achilleos (NA) – *Astrophysics and Remote Sensing*
10. Mr Thomas Jones (TJ) – *Research Platforms Team Leader (Infrastructure Lead), ISD*
11. Dr Ian Kirker (IK) - *Research Comp & Facilitating Services, ISD*
12. Dr Simon Kuhn (SK) – *Engineering Sciences*
13. Jo Lampard (JL) - *Senior Research IT Services Facilitator, ISD*
14. Dr Vincent Plagnol (VP) – *Next Generation Sequencing*

In attendance:

15. Corrinne Frazzoni (CF) – *Administrative Services, ISD (Minutes and meeting support)*

1. Approval of Minutes of last meeting held on 12th March 2014

The Group approved the Minutes of the last meeting. There were no matters arising.

2. Update on status of current Actions

The list of current Actions (see table at end) was updated.

3. Review of any requests for additional resources on local HPC facilities

There were no new requests for additional resources.

4. Review of Legion usage statistics <http://feynman.rits-isd.ucl.ac.uk:8888>

Core availability was improving.
Some with large slowdown, in particular Climate Science.
170 active users

**Actions: Investigate slowdown for Climate Science users
Add slowdown to monthly report with commentary**

5. Review of IRIDIS and EMERALD usage statistics

The group reviewed the IRIDIS and EMERALD usage statistics for March 2014.

IRIDIS

83 Active users (Feb = 75)

91% Utilisation (Feb = 95%)

A scheduled University maintenance event required a reservation to stop jobs running (7 hours overnight). Users were informed. The main management node became unresponsive and required a reboot. This resulted in the loss of jobs. Southampton use their Cfl allocation to accommodate local users who may not have Cfl accounts. This distorts their metrics.

EMERALD

52 Active Users (Feb = 40)

79.4% Utilisation (Feb = 85.6%)

The default job length has been reduced with an additional queue created for longer jobs. This should reduce overall queue times. Very few EMERALD users experienced high slowdown ratios, due to much shorter run times than expected. May be addressed by user education.

6. Discussion: CRAG report on priority access

The group discussed the CRAG report on priority access which had been presented to the RCGG. It had been decided to go ahead and a web page had been created, offering 3 options. Termly calls were planned via research service list and IT managers.

7. Discussion: New research themes proposal

The group discussed the research themes provided by the VP Research department and collated from the REF and the various funders.

It was agreed to use the REF units of assessment for the new research themes.

8. AOB

There was no other business.

9. Next meeting date and agenda

Tuesday 13th May 2014 from 13.00-15.00

Venue: Room 103, 1st floor, Podium Building, 1 Eversholt Street, London, NW1 2DN.

Agenda (Items) for the next meeting:

Standing items:

1. Approval of Minutes of last meeting
2. Update on status of current Actions
3. Review of any requests for additional resources on local HPC facilities
4. Review of Legion usage statistics
5. Review of IRIDIS and Emerald usage statistics

New items for next meeting:

- Final version of application form

LIST OF CURRENTLY APPROVED EXCEPTIONAL REQUESTS

Requesting user	CRAG approval date	details of exception	start date agreed	end date agreed	date removed	Implementation Notes
Eugenio Pasini	17/01/2014	Scratch quota increased to 1TB for the requested period	17/1/2014	17/4/2014		

LIST OF CURRENT ACTIONS

Shaded (closed/completed) items will be deleted in the next version.

	Actions	Status	Owner
135	Review of Legion usage statistics	<p>(12/7/2013): BCS to investigate the unexpected wait time spikes for users with small run times.</p> <p>(17/9/2013): ONGOING</p> <p>(11/10/2013): Standing Agenda Item: Identify (full name & user ID) & contact users with systematic problems, try to resolve problems.</p> <p>(22/11/2013): BCS to investigate whether it is possible to remove jobs from the slowdown graph which are part of arrays that have already started.</p> <p>(13/12/2013): Slowdown statistics for job arrays to be calculated according to start time of first job in array only. Check-pointing jobs also to be treated similarly according to initial start time (except for jobs that fail quickly).</p> <p>(17/01/2014): Pending confirmation. ONGOING</p> <p>(14/2/14): ONGOING</p> <p>(12/03/14): ONGOING</p> <p>(04/04/14): Revisit in May – make modifications and review stats from January onwards, comparing to same periods in previous year. ONGOING</p>	BCS
140	General policy proposal for priority access to Research Computing resources	<p>(17/9/2013): BCS to draft new policy to be presented at next meeting.</p> <p>(11/10/2013): ONGOING</p> <p>(22/11/2013): The group would like an explanation of what the value of the 'C' factor included in the leasing calculations is, and how it was derived. NK suggests that the last paragraph belongs before the section about leasing as it relates to buying hardware. Regarding the</p>	BCS

		<p>access policy for purchased and leased nodes, the group would like to see written down some guarantee of how long owners/leasers would have to wait before they could access their nodes. They would also like to see some consideration of the implications for killing active jobs and how this would be handled.</p> <p>(13/12/2013): BCS to recirculate updated priority access document for next meeting including recommendations for two tier pricing system for immediate/delayed access.</p> <p>(17/01/2014): BCS to report back to next CRAG meeting with a proposal for promoting the new policy. (14/2/14): the proposal was made, and will be implemented as follows: Email to the Research Computing Forum Email to the service mailing lists Information to be provided on website in relevant location (TBD) with “promotional” information. ONGOING</p> <p>(12/03/14): CG expressed concern re admin overhead involved in responding to call. Need to be clear on risks and ensure information is out there. Meeting to be held 13/3/14. ONGOING.</p> <p>(04/04/14): See current agenda item 6 above. CLOSED</p>	
141	Multi-disciplinary research and nature of consortia	<p>(17/9/2013): BCS to provide list of unusual requests for next meeting with Consortia definition and objectives.</p> <p>(11/10/2013): Monitor requests and report to Feb 2014 highlighting any bounced requests by consortia.</p> <p>(22/11/2013): ONGOING</p> <p>(13/12/2013): ONGOING</p> <p>(17/01/2014): ONGOING</p> <p>(14/2/14): Report no monitored requests done, showing a number of cases where applicants had been moved because they misunderstood what the consortia represented. Add discussion to agenda for next meeting. ONGOING</p> <p>(12/03/14): Discussed under item 7. Prepare list of research themes. ONGOING</p> <p>(04/04/14) Discussed under item 7. CLOSED</p>	BCS
151	KPI for legion wait times	<p>(17/01/2014): After correcting for job arrays, mean slowdown will be calculated for each job type (single core, single node, multi-node etc.) on a monthly basis. The use of this measure will be evaluated at a subsequent CRAG meeting.</p> <p>(14/2/14): This is now being done for senior management reports – will be introduced in coming Legion statistics reports. ONGOING</p> <p>(12/03/14): ONGOING</p>	BCS

152	Job submission patterns	(12/03/14): Investigate job submission pattern, particularly for Logsdail. NEW ACTION (04/04/14) CLOSED	BCS
153	Slowdown	(12/03/14): Request breakdown of slowdown per user. (04/04/14): CLOSED	BCS
154	Job submission times	(12/03/14): Email list of UCL IRIDIS users to advise that CRAG looking at job submission times, noting there will be extra capacity available from 1 August. NEW ACTION (04/04/14): CLOSED	BCS
155	Functions to add to application system	(12/03/14): Functions to add to application system <ul style="list-style-type: none"> - Students to indicate name of PI/supervisor - Add option to change PI/cost centre on system in cases where PI leaves but student remains at UCL. - User to choose from a drop-down menu of research themes (to be defined). - Provide link on form to example of correctly completed form. - Reminders for PIs who have reserved advance resources, when a new user applies (04/04/14): ONGOING	IK
155	Research themes for user accounts	(12/03/14): Collate list of research themes, based on those used by funding bodies e.g. EPSRC and those used by UCL. Add to April agenda. NEW ACTION (04/04/14): CLOSED	BCS/CF
156	Dissolution of consortia	(12/03/14): Contact the leaders of the dissolved consortia to advise them of this and invite to remain as part of an informal expert advisory community. NEW ACTION (04/04/14): Wait for RCGG approval. ONGOING	NK
157	Legion usage statistics	(04/04/14): Investigate slowdown for Climate Science users. NEW ACTION	BCS
158	Legion usage statistics	(04/04/14); Add slowdown to monthly report with commentary. NEW ACTION	BCS