

RESEARCH COMPUTING WORKING GROUP (RCWG) Extra-ordinary Meeting MINUTES

Date: Thursday 7th March 2013

Time: 12:00 – 14:00

Venue: Room 119, Podium Building, 1st floor, 1 Eversholt Street, London NW1 2DN

Members Present:

1. John Brodholt [JBr] - Chair

- 2. Daniel Buchan [DB] (representing: David Jones Bioinformatics)
- 3. Richard Catlow Dept. of Chemistry
- 4. Mat Disney Geography
- 5. Clare Gryce [CG] ISD Research Computing
- 6. Thomas Jones [TJ] ISD Research Computing
- 7. Nik Kaltsoyannis [NK] Chair of the CRAG
- 8. Angelos Michaelides Thomas Young Centre
- 9. Jacky Pallas [JP] Platform Technologies
- 10. Ian Sillitoe [IS] (representing: Christine Orengo Structural and Molecular Biology
- 11. Bruno Silva [BCS] ISD Research Computing

Apologies:

- 12. David Jones Bioinformatics
- 13. Christine Orengo Structural and Molecular Biology
- 14. Nick Achilleos [NA] Astrophysics Miracle Consortium
- 15. Peter Coveney [PV] Computational Life and Medical Sciences (CLMS)
- 16. Nora H De Leeuw [NDL] Thomas Young Centre

Outline Minutes, items decisions taken and Actions agreed are provided below.

Matters Discussed

1. Approval of Minutes of previous meeting (27th April 2012)

The draft Minutes of the previous meeting of the group held on 27th April 2012 was approved.

2. Update on status of Actions from previous meetings

The list of current actions from the previous meeting was reviewed and updated.

Proposed (outline) Research Computing Platforms Strategy

Previously circulated: (See Doc: Research Computing Platforms Strategy, File: RCWG 7 march 2013 Strategy and Bids.pdf).

3.1. The Group reviewed the Proposed Research Computing Platforms Strategy document previously circulated by CG (See RCWG 7 march 2013 Strategy and Bids.pdf).

BS presented the current state of ISD RC Platforms, indicating shortfalls and that access was restricted to command line only. BS explained that the aim was to provide increased usability and ease of access, as well as support for workflow management. Research IT services would underpin this service with the use of a VM-based UCL RC software stack across other systems, such as. virtual machines with log in nodes sitting on a UCL desktop. BS also explained that RC platforms were not readily scalable in order to absorb grant funding for dedicated infrastructure. It was intended that tailored computing platforms should be offered in order to provide scalable infrastructure hosting dedicated compute. UCL's software stack and virtualisation would permit access to resources and internal 'Cloud' as well as research and development for commercial 'Cloud' services. IS suggested the use of 'Amazon Cloud' or 'Google Cloud'. BS explained the importance of understanding the usefulness of these services to UCL i.e. how do UCL platforms integrate with 'Amazon Cloud', what are the number of Cores and CPUs and whether they fit with what UCL already has. Hence, it was important to gain first hand knowledge and experience of these services. CG highlighted the importance of using the same service stack across as many services as possible which would ensure that users are able to migrate to and fro easily.

- 3.2 BS also indicated the endorsing of the integration of HPC platforms across Tiers creating links between UCL Departments and regional institutions, as well as the sharing of software, access of protocols, policy and support. RITs would underpin this with increased co-ordination and shared architecting to promote seamless working across Tiers. Further investigations with regards to the relationship between Legion with Cfi would highlight any duplication of effort, as well as establishing whether Research Computing would be able to map software stacks and grid nodes via virtualisation services.
- 3.3 BS suggested how RITs would eventually establish a teaching and training cluster service to support skills development in computation research at UCL. An integrated and comprehensive training service would be developed for staff, research students and be delivered via Doctoral Training Centres. JB enquired as to whether these courses would be accredited, CG confirmed that they would be. BS requested input from members regarding the information presented and if there was any information lacking. As this information would then serve as a framework by which Research Computing could support bids. JB stated that information would also become the driver for the long term research computing strategy. RCWG Members to email CG with comments regarding Research Computing Platforms Strategy. (See new action 25)

4. Review of Research Computing Platforms proposed bids 13/14

Previously circulated: (See Doc: Research Computing Platforms Strategy, File: RCWG 7 march 2013 Strategy and Bids.pdf).

- 4.1. CG presented the Bid Proposals for 2013 through to 2016 and explained the RIISG had met to review all bid ideas and wish lists from all four domain groups, these lists were then collapsed and consolidated. CG highlighted the following areas:
 - Bloomsbury HPC (Legion) Legion IV project would reuse legion nodes for teaching and learning.
 - RC Platforms Infrastructure (hardware and software improvement)

NK enquired as to whether Legion IV monies could be used towards an off-site HPC or would monies be rolled into next year's Legion IV budget and where would the allocated £756k for Legion IV be spent? CG explained that monies would not be rolled into next year's Legion IV budget. Although monies could be allocated to a specific project, it would still be at "straw man" phase. This meant that monies would not be released until the project met final criteria known as a Project Initiation Document (PID) and therefore there was a possibility that the allocated £756k for Legion IV would not be released or could be used for another project. CG explained ISD were not making decisions regards which projects would be initiated or not but were merely making assessments on how monies should be released.

Members were concerned that the concept of "Straw man" would not allow timely or cost efficient spending and that although monies were allocated to a project there was no guarantee of funding release. It was suggested that the RCWG Chair contact the RIISG Chair to raise these concerns. (See new action 26)

- 4.2. CG explained that although an off-site HPC was important, there was aspiration to build a scalable HPC facility for which funding of £1000k had been allocated and that further areas required investigation such as design, service design, technical design, hosting and location. It was agreed that CG would report on the specific details of an off-site Data Centre at next RCWG meeting. (See new action 27)
- 4.3. RC enquired as to whether location for this off-site facility had been actively sought, CG explained that delays were due to contractual issues which required further clarification.
- 4.4. NK highlighted the disparity between the £30k allocated to Cloud and Virtualisation project and the £150k allocated to RC Platforms R&D. It was agreed to collapse both projects and name it "Cloud" (See new action 28)

5. AOB

5.1. None

6. Next Meeting Date

The next meeting will be on 2nd May 2013 from 2pm - 4pm, Venue: South Wing G14 Committee Room, Gower Street, London, WC1E 6BT.

6.1. Agenda Items:

- Cfi migration to larger service
- Update of Desktop integration
- Research computing expansion of IRIDIS

List of Current Actions

Shaded Actions will be deleted after next meeting.

No	Date	Minute	Owner	Action	Status and Notes
5	18/11/11	1.6.1	LRAW (Legion Resource Allocation Group, precursor to RCWG)	Establish policy for cluster/consortia leaders.	OPEN
					6/2 – no progress
					27/4 – no progress. Need to consider which group should own this action (CRAG or RCWG)
					16/10 – agreed that the CRAG should own this action
6	18/11/11	1.7.1	CG	Progress discussions within ISD regarding research computing use of Desktops.	OPEN
					6/2 – this is in progress within ISD
					27/4 – still in progress with ISD; ISD to report when significant progress has been made
10	06/02/12	4.1	NK	CRAG to discuss handling of 'large users; set appropriate threshold above which a report on usage will be required. Design report.	OPEN
					27/4 – referred back to the CRAG for recommendation Ownership changed to NK as new Chair or CRAG
					16/10 – agreed that this should be linked to the account application/re-application process
11	06/02/12	4.2	NK	CRAG to give further consideration to allowing users to monitor their own usage and raise actions as appropriate.	OPEN
					27/4 – ownership changed to NK as new Chair or CRAG
					16/10 – to be discussed at next CRAG meeting
					7/3 – CLOSED: (under close monitoring. CRAG to provide 12 month usage snapshot)
12	06/02/12	4.3	NK	CRAG to give further consideration to how researchers can be encouraged to make proposals for ambitious use of Legion, how this might be managed, and report back.	OPEN
					27/4 – ownership changed to NK as new Chair or CRAG
					7/3 – Encourage users to make cases to CRAG re any problems encountered.

13	06/02/12	4.4	NK	To provide data regarding use of Legion by taught students.	OPEN 27/4 – ownership changed to NK as new Chair or CRAG.
					Need for policy regarding use of Legion by taught students agreed.
					16/10 – CRAG is awaiting data to be provided by ISD Research Computing
					7/3 – CLOSED
15	27/04/12	2.1	CG	Legion account application form to be amended to indicate whether applicant is taught student or not.	27/4 – action opened
					16/10 – devolved to CRAG
17	27/04/12	6.2	RCWG	To consider at future meeting; whether projects that do not have direct funding for compute resources but bring in large overhead income should be given access to dedicated or 'priority' resources.	27/4 – action opened
					16/10 – to discuss at future meeting
					7/3 – CG to report back when Priority Access service is instated.
18	27/04/12	6.3	CG	Consult Research Services to confirm what costs can actually be put on grants, also with regard to need to align allocation periods and processes with the research services costing.	27/4 – action opened
					16/10 – CG to do by next meeting
					7/3 – ONGOING
19	27/04/12	7.3	CG	To seek clarification from RIISG regarding relationship of ISD bid process to Research Equipment Funding round.	27/4 – action opened
					16/10 – no progress to report
					7/3 – CLOSED
20	27/04/12	7.5	CG	To seek clarification where infrastructural operating costs for the offsite HPC would be met from in long term.	27/4 – action opened
					16/10 – no progress to report
					7/3 – CG to report back on costs if service of off-site HPC is passed on.
21	16/10/12	3.1	JB	To seek approval from RIISG to change name from Working Group to Executive.	16/10 – action opened
					7/3 – JB to report
22	16/10/12	6.1	JB	To provide utilisation, usage and throughput data for HECToR	16/10 – action opened
					7/3 – JB to report

23	16/10/12	6.4	CG	Apply changes to Cfl Application Form, circulate both policy and application form to users by end of October.	16/10 – action opened 7/3 – Completed
24	16/10/12		CG	CG to request Max Wilkinson to give presentation at next meeting.	16/10 – action opened
					7/3 – Pending
25	7/3/2013	3.3	All	Send CG comments regarding Research Computing Platforms Strategy	NEW
26	7/3/2013	4.1	JB	JB contact the RIISG Chair with the following concerns:	NEW
				 Possible re-allocation of £756k for Legion expansion/refresh elsewhere. 	
				 UCL Finance inflexible in moving capital items in between UCL's financial year. 	
				 Length of time UCL is taking to establish an off-site data centre which impacts on development of long-term HPC strategy. 	
27	7/3/2013	4.2	CG	To report on the off-site Data Centre at next RCWG meeting.	NEW
28	7/3/2013	4.4	CG	Collapse £30kCloud & Virtualisation project and the £150k allocated to RC Platforms R&D and name it "Cloud"	NEW