

High Performance Computing Update, June 2009

1. A meeting was held with users and potential users of high performance computing systems in April and this considered a proposal from the Director of IT Services to establish a core support service within IT Service for HPC. The proposal included the provision of 2 FTE professional staff (with experience of HPC) to provide infrastructure support and application “advice” and a core system to host and manage high performance computing nodes (or clusters) attached by various means. The proposal also included providing a small number of compute nodes to provide the core of a University HPC service. Researchers would be expected to contribute to this common facility through their grants - contributing their compute nodes and contributing to the cost of the staff and infrastructure. Over time the proposal expected the facility to become largely funded from research contract charges.
2. There was good discussion about the proposal and with some relatively minor reservations it was largely accepted.
3. The Director used the paper and feedback from this meeting at the IT Service planning meetings and included items in the proposed IT services budget to enable the service to be delivered.
4. At the meeting with VCEG, the proposal for research computing support was welcomed and the benefits it might provide to the University recognised. The Pro VC for research was very supportive (both at that meeting and at other times). IT Services plans included other key areas where resources were required to deliver service improvements (basic infrastructure, teaching and learning, business support systems). The feedback received at the meeting with VCEG recognised the institutional importance of all these areas including research computing support but the priority for attending to these matters put research computing at the end of the list.
5. Within the current, difficult financial climate, IT services is unable to find university funding for the two HPC support posts required and consequentially are not able to proceed with the development of the service as outlined in the paper from the Director. The capital funding required for the equipment to support the service has not been provided (really as a consequence of not being able to fund the staff posts).
6. In order to try to move things on in a positive way, IT Services could provide the following “support” for high performance computing:
 - a. With the research computing groups develop agreed institutional standards and good practice for setting up and running high performance computing facilities; this should simplify and minimise the work needed by research groups to interwork with the University’s core infrastructure;
 - b. With the agreement of the community oversee the development (by staff funded by departments and research grants) of facilities which would be widely used by the various research groups within the University;
 - c. Meet with research groups on a regular basis to ensure that the university’s core infrastructure provides appropriate support for the general computing requirements of researchers;
 - d. Host HPC systems in IT Services data centres but reserving the right to make charges for the power used by such systems (and the power needed to cool them).
7. It would be useful to convene another meeting to discuss the present position and the proposals made above.

Iain Stinson

Director IT Services.

June 9th, 2009.