Computing Strategy Group Minutes

24th August 2022

Present: Jane Hillston, Boris Grot, Joy Candlish, Alastair Scobie, Bjorn Franke, Tim Colles, Ajitha Rajan, Petros Wallden

Apologies: None

<table>
<thead>
<tr>
<th>Summary</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PREVIOUS MEETING</td>
<td></td>
</tr>
<tr>
<td>Approval of previous minutes and matters arising</td>
<td></td>
</tr>
<tr>
<td>Actions completed from previous meeting where discussed and agreed.</td>
<td></td>
</tr>
</tbody>
</table>

1.1 Providing information on funded research grants to Computing team - Information to computing from Janet’s team. Tim, Joy and Alastair will meet to discuss how we could improve on this. Jul 22: Meeting held. Joy will ask Janet to submit examples of bids so that we can identify what information is useful. Boris pointed out that the new server room space request form will capture much of the needed information. Aug 22: Joy has asked Kirstin to connect with Alastair and Tim.

[ACTION: Joy (to ask Lorna to schedule)]

1.2 Forum server rooms - Jane and Boris have been discussing our needs with Mark Parsons (EPCC). Jane, Joy and Alastair are meeting with SRS. It was noted that at least one of the CDTs has considerable funds to spend on computing OpEx, but not CapEx - we should investigate creating an SRF (Small Research Facility). Additional potential spaces were suggested for housing servers - these will be investigated. Oct 21: this action predates the EIDF proposal. Alastair and Joy to consider whether SRF still required. Janet and Mark Parsons are discussing how charging might work for EIDF. Feb 22: still waiting on clarity on how EIDF will be charged for. Sitting with Director of Finance. Jul 22: this is still sitting with the Director of Finance. Janet and Mark Parsons have been pushing. Costs have been agreed with EPCC. Janet has proposed an interim process, but we need this approved by ERO.

[ACTION: ON HOLD (to consider how to create an SRF)]

Aug 21 - The School has agreed with EPCC the hosting of School GPU provision at EIDF. There are a lot of details to be worked out, particularly the financial model. The intention is to have paid for and free tiers. A high performance storage system will be available across all GPUs. It was commented that we need to start informing PIs of this so that they can begin to factor this into new research grant proposals. Oct 21 - Alastair has been trying to arrange a meeting with EPCC to discuss the proposed EIDF facility in greater detail. Once he has more detail, he will be asking the School's EIDF working group to disseminate information within the institutes. Feb 22: Two Informatics researchers are piloting the EIDF facility. Jul 22: Boris and Alastair had recently met with the EPCC team. More technical details have been provided, but progress wrt. commissioning has been slow. Equipment is in place and systems installed, but EPCC still sorting out storage system. They are targeting end August for user access, with perhaps a small number of test users before. Aug 22: Target date is now end September.

[ACTION: Alastair / Boris]

Aug 21 - The University has allocated some capital funds to improve the cooling in the Forum server rooms. The first step is for Estates to engage a contractor to produce a feasibility study.
Oct21 - Estates have contracted a consultancy firm to produce the feasibility study. The consultancy firm met with Estates and School reps in late September to discuss requirements. The consultancy firm will undertake an on-site survey in early November and produce a report by early December.

Feb22 – The final report produced three costed options. The first to add 6 HPC racks (with in-rack cooling) in IF-B.02, the second to add 14 HPC racks in IF-B.02 and the third to locate 14 HPC racks in the Water Tank Room IF-B.Z21. All three proposals were in excess of £1m. Subsequently consultancy firm proposed a value-engineered option with no power or cooling resiliency (for the additional racks). The feasibility of this option is being considered with estates and the COs – could it realistically be a first stage option, with power and cooling resiliency being added at a future date.

Jul22 – the value engineered option has been funded. Joy is contacting Steven Goodall in Estates to arrange a meeting to discuss next steps.

Aug 22 – Estates have been contacted to arrange an initial scoping meeting

[ACTIION: Joy]

1.3 ISG/Informatics relationship - As we are increasingly making use of ISG services, it makes sense for us to improve our dialogue with ISG - both for ISG to inform us of forthcoming developments and for the School to provide ISG with feedback on our use of ISG services. Alastair will investigate how other schools manage such dialogue.

Aug21 - Alastair had discussed this with the College IT Strategy and Engagement officer (Victoria Dishon) and the School’s IS relationship manager (Angus Rae). Neither felt that it was appropriate, or viable, for the IS relationship manager to attend the School’s CSG meeting. Joy suggested that the IS Director of User Services (Gosia Such) be invited to periodic CSG meetings for constructive dialog and that the IS Chief Information Officer (Gavin McLachlan) be invited to periodic general meetings to hear more general feedback from the School. Alastair will ask both if they are willing to attend. He will also create a standing agenda item to report back at CSG meetings on IS developments. Oct21: Angus Rae has suggested inviting IS directors on a rotational basis, rather than Gosia Such. Alastair will invite Tony Weir to attend a research-focused CSG meeting. Feb22: Tony has agreed to meet with CSG. Alastair to schedule a one-off meeting. Jul22: Alastair to invite Tony to August meeting.

Done.

1.4 Age of GPUs in taught student cluster - As the MLP cluster is only needed by the MLP exercise during part of the year, it makes sense to make it available to others to use for the rest of the year. However, the current GPUs in the cluster have too little memory (only 6GB) to be of any use to most researchers. It was suggested that we could replace some of the GPUs in the cluster with more powerful GPUs with significantly more memory. Alastair will investigate the feasibility of doing this. One concern is that this may necessitate a reduction in the total number of GPUs in the cluster.

Aug21 - Alastair reported that whilst Iain Rae had concluded that replacing the GPUs should be possible, it hadn’t been possible to procure any of the commodity GPUs that we typically buy. Boris suggested that we investigate data grade GPUs - procuring these via EPCC/EIDF might be faster than open market. Oct21 - Alastair will ask Mark Parsons whether EIDF could be used for MLP and taught student projects - if the answer is yes, contributing to EIDF might be a better use of funds. Feb22 – Alastair reported that Rob Baxter and Mark Parsons thought that such teaching use was consistent with EIDF goals and that they are happy to consider this use. However, this would require the EIDF team to add support for splitting the A100 GPUs into smaller virtual GPUs, and this functionality won’t be available in the near future.
Jul22 – Alastair reported that a few Landonia cluster nodes had been upgraded such that 8 of 48GB A6000 GPUs were now available. Additionally, the School is paying for 8 of 40GB A100 GPUs in the EIDF cluster – how these will be made available is still under discussion with EPCC. 

Aug22 – Alastair to arrange to meet with Mark Parsons to discuss. 

1.7 **Eddie/Eleanor GPU refresh** – Alastair will request more information from ISG on how the refreshed GPU provision will look. Jul 22 – still awaiting final details, but likely to be similar to existing provision with Singularity. 

[**ACTION: Alastair**]

1.9 **Proposal to increase network segmentation in the School’s data network** - Alastair will arrange for the proposed changes to be publicised well in advance of implementation to give staff and students opportunity to highlight any difficulties the changes might cause. Jul22 – this is in progress. The self-managed dynamic DHCP wires have been completed. Next step is to tackle the wires hosting the Windows Managed Desktop devices. Aug22 – securing the Windows Managed Desktop wires is scheduled for October 

[**ACTION: Alastair**]

2. **Preparedness for academic year 2022/2023 - discussion**

- Alastair 
  - annual student lab desktop refresh completed 
  - flip desks now all replaced by standard desks 
  - have sufficient laptops in stock for incoming PGRs 

- Bjorn 
  - Concerned about Euclid and Learn performance 
  - Jane asked whether move away from PTs help load on EUCLID – Bjorn predicts not 
  - Learning Technologists – concern about Inf1A – no course design because a new course 
  - Port to new version of Learn (Ultra) - not impacting on us this year. New version is incompatible with current version. Will be mandated for AY 23-24. LTs will need to work closely with course organisers to manage the migration. [**ACTION: Alastair to add a place-marker for this in the 2023 Computing plan**] 
  - Back to normal on-campus this year, but have a few students who will need to be on-line for the first few weeks 
  - No hybrid tutorials, except flipped classrooms 
    - though will need to be prepared to change in case of significant local outbreak 

3. **Discussion on research computing with Tony Weir (Director of IT Infrastructure, Information Services Group)**

Tony presented on recent developments particularly wrt. the Eddie cluster. Supply chain delays have caused problems. It was agreed that a meeting between Boris, Alastair, interested academics and members of the ITI Research Services team would be useful to discuss how to increase Informatics use of this facility. Alastair to arrange. 

[**ACTION: Alastair**]

We should promote the use of DataShare where it is appropriate. Alastair to arrange for our guidance to be reviewed and revised where required. 

[**ACTION: Alastair**]
<table>
<thead>
<tr>
<th></th>
<th><strong>Date of next meeting:</strong> 13:00-14:30 31st October 2022 Turing Room / Teams</th>
</tr>
</thead>
</table>
