



## Computing Strategy Group Minutes

16th August 2021

Present: Boris Grot, Joy Candlish, Alastair Scobie, Bjorn Franke, Ajitha Rajan, Tim Colles

Apologies: Jane Hillston

	Summary	ACTION
1.	<b>PREVIOUS MEETING</b>	
	<p><b>Approval of previous minutes and matters arising</b> Actions completed from previous meeting where discussed and agreed.</p>	
	<p><b>1.1 - School access to self-managed compute resources</b> - No paper produced yet (will do for next time) but ground work underway. Could use JAMF for MacBooks as this does key escrow. Reviewing impact but should be minimal and looks feasible to mandate as very lightweight. No equivalent for Linux self-managed machines, so might just have to do spot checks here or equivalent. Craig Strachan visiting academic staff and asking how they store data but do need to reach people that aren't self-selecting. Jane says there is a big College push on data security - many people have not done mandatory online courses for example. Would be nice to isolate T&amp;D staff from this list as they don't all handle student data. Maybe add this into the PDR. Mar21: Alastair reported that the original motivation for this has reduced as we now encrypt new Apple Mac devices, and record the FileVault keys, before distributing to staff/students. Aug21 : Alastair has been looking at the Managed Mac platform, with a view to mandating this for all new Macs. This would give the School oversight over the versions of software installed and would enforce encryption. Existing Macs could be simply migrated to JAMF at a later stage. Mac users would still have 'admin' rights so would retain ability to add and configure software. [ACTION: Alastair (to produce paper and demo JAMF)]</p> <p><b>1.2 - Tier 4 monitoring</b> - EUCLID not due for replacement till 2025. Student immigration get data out of EUCLID via API. Timetabling doesn't work for us due to no access for TSP staff. Using coursework, exam, and attendance at lectures with Tophat.</p> <p>Tophat download to EUCLID upload conversion proven to work in principle. Now just needs an easy to use interface for ISS. Aug21: Tim to discuss with Gillian Bell to determine what is required. [ACTION: Tim]</p> <p><b>1.3 - Providing information on funded research grants to Computing team</b> - Information to computing from Janet's team. Tim, Joy and Alastair will meet to discuss how we could improve on this. [ACTION: Joy (to ask Lorna to schedule)]</p> <p><b>1.4 - Response to change in Piazza charging model - discussion</b> - Piazza, the discussion board tool used for teaching, has recently moved from a free to a charged model. The cost is not insignificant. As there was no time to deploy an alternative in time for Semester 2, the School has decided to pay for an annual licence. We need to start deliberating on which</p>	<p>AS</p> <p>TC</p> <p>JC</p>

<p>technology/service we will use for AY 21/22. Bjorn and Tim will form a working group to identify and assess alternatives - to feed back to CSG and Teaching Committee.  Mar21: Members have been identified and invited, but the group have not yet met.  Aug21: Working group met and produced a long list of requirements. Only Piazza meets all the requirements. A College level working group is looking at the College's requirements for discussion boards - it will hopefully push for a Piazza, or equivalent, service to be delivered University wide. Meanwhile we will use Piazza for this AY and will have to pay for this out of School budget.  Completed.</p>	
<p><b>1.5 - Draft Computing plan for 2021 - discussion</b>  PGRDEVICES - the goals should be revised in consultation with Bob Fisher, DoGS. Alastair has provisionally revised the goals, but not yet confirmed with Bob. Aug21: Alastair confirmed with Bob, though timescales overtaken by events. VM server has been allocated and compute servers purchased. Project still needs to investigate where best to locate desktop 'servers'.  Completed.</p>	
<p>Bjoern suggested that we should seek to reduce the number of submission systems in use. It was agreed that Bjoern would form a working group to make recommendations. Mar21: Bjorn reported that Gradescope will be the default for the forthcoming exam diet and is licenced to the end of the calendar year. The group membership has been defined, but has not yet met.  Aug21: Bjoern reported that the group will start meeting in October 21.  [ACTION: Bjoern]</p>	<b>BF</b>
<p><b>1.6 Forum server rooms</b> - 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.  [ACTION: Joy / Alastair (to consider how to create an SRF)]</p>	<b>JC/AS</b>
<p>Aug21 - 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.  [ACTION: Alastair / Boris]</p>	<b>AS/BG</b>
<p>Aug21 - 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.  [ACTION: Alastair]</p>	<b>AS</b>
<p><b>1.7 Terms of Reference and membership</b> - The tabled paper was discussed. Joy will amend to make it clear that the remit of the group is also to consider external computing services, in particular those provided by ISG. Joy will also amend membership to include Ajitha.  Completed.</p>	
<p><b>1.8 ISG/Informatics relationship</b> - 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.</p>	

	<p>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. [ACTION: Alastair]</p> <p><b>1.9 Age of GPUs in taught student cluster</b> - 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.</p> <p>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. [ACTION: Alastair]</p>	<p>AS</p> <p>AS</p>
<p>2.</p>	<p><b>Updates from working groups</b></p> <p>Updates as per tabled paper A. No resulting actions.</p>	
<p>3.</p>	<p><b>Email forwarding</b></p> <p>The University will soon disallow the auto-forwarding of University email to external email addresses (unless in exceptional circumstances). This is to reduce the chance of confidential information being leaked. According to IS, there are 61 Informatics accounts where there is at least some degree of auto-forwarding to out-with O365. IS have been asked to work closely with us on the comms on this.</p>	
<p>4.</p>	<p><b>University security stance</b></p> <p>UK universities are experiencing a significantly increased level of threat from hostile agents.</p> <p>According to JISC, as of mid March, 7 FE and 4 HE institutions were impacted by ransomware during 2021, in addition to 15 educational institutions who sustained high levels of impact during 2020. UHI was offline for 3 weeks. Newcastle offline, to some degree, for a month. JISC is expecting more disruption, particularly during critical periods such as exam results, clearing, start of session. Compromised accounts are routinely sold on the "dark web" and hostile agents are using these accounts to probe for vulnerabilities within University firewall perimeters.</p> <p>The University SLT are very concerned and IS are taking action to reduce the University's exposure to these threats. CSE have formed an IT security working party, reporting to the College IT managers, which will consider the impact of future IS proposals - George Ross and Stephen Quinney are representing Informatics on this group.</p>	

	<p>Already implemented or due for imminent rollout :-</p> <ul style="list-style-type: none"> <li>• VPN required for access to all UoE RDP (and XRDP) services</li> <li>• MFA (multi factor authentication) for Office 365 (several of us have been trialling this for months)</li> <li>• Email auto-forward ban</li> </ul> <p>At proposal stage :-</p> <ul style="list-style-type: none"> <li>• VPN required for access to all UoE SSH (*) services. College is arguing strongly that Schools should be allowed to keep managed SSH services visible without VPN, but it is likely that we will be expected to deploy MFA to be allowed this. Alastair’s main concern is the impact of this proposal on collaborators based at other institutions who use our SSH services and who might not be able to use our VPN (at same time as using VPN to their own institution, for example).</li> </ul> <p>Likely coming :-</p> <ul style="list-style-type: none"> <li>• MFA for VPN</li> <li>• MFA for other services</li> <li>• Clamp down on those self-managed websites which are accessible from out-with UoE</li> <li>• An expectation that we reduce the number of our firewall holes</li> </ul>	
<p><b>5.</b></p>	<p><b>EdLAN replacement</b></p> <p>Paper C, a project completion map provided by IS, shows which aspects of the EdLAN replacement have been completed.</p> <p>All our Forum, AT and Bayes traffic now flows through the new EdLAN network - our network core routers now connect to the new local building distribution routers. This has had no user visible change to our network service, though we do now have slightly reduced redundancy on our uplink from the Forum to EdLAN. Ultimately, the network edge switches (in the IT closets) will be connected to the local building distribution switches - our existing core routers will remain only for servicing our server rooms.</p> <p>We now have a test new-EdLAN edge switch in place in the Forum. We are now starting work on testing how our office desktops, etc, will work with the new EdLAN network at the edge - particularly wrt. VLAN selection, DNS and DHCP. We will need to adapt our infrastructure, which relies on significant automation to reduce workload. This testing will demonstrate to what level IS can take over management of our edge network. Note that server room networks are not in scope for the EdLAN project - these will continue to be school managed.</p> <p>The project's plan had been to migrate to the new EdLAN edge in December 2021 (for AT) and February 2022 (for Forum and Bayes). However these dates are now very much in doubt due to technology issues and delays elsewhere in the project.</p>	
<p><b>6.</b></p>	<p><b>Preparedness for Semester 1</b></p> <p>The following were agreed after discussion :-</p>	

	<ul style="list-style-type: none"> <li>• Lab usage <ul style="list-style-type: none"> <li>○ Distancing - effectively a proxy to capacity <ul style="list-style-type: none"> <li>▪ must set capacity based on 1m</li> <li>▪ not moving lab computing desktops</li> <li>▪ Building Review Group will set maximum capacity per room <ul style="list-style-type: none"> <li>• Noted that students using laptops, or indeed otherwise studying in the labs, will count towards capacity</li> </ul> </li> </ul> </li> </ul> </li> <li>• Taught lab sessions <ul style="list-style-type: none"> <li>○ gaps between bookings <ul style="list-style-type: none"> <li>▪ currently just normal 10 minutes gap <ul style="list-style-type: none"> <li>• concern regarding queuing outside labs</li> </ul> </li> <li>▪ no guidance yet from University</li> </ul> </li> </ul> </li> <li>• Guidance re personal equipment (eg laptops) <ul style="list-style-type: none"> <li>○ Continue recommending students bringing laptop... <ul style="list-style-type: none"> <li>▪ Does our wording need updated? <ul style="list-style-type: none"> <li>• Explain that desktops are available...</li> <li>• Action: Tim will check / update wording</li> </ul> </li> </ul> </li> <li>○ University laptop scheme <ul style="list-style-type: none"> <li>▪ Action: Alastair to check whether still running</li> </ul> </li> </ul> </li> <li>• Remote provision <ul style="list-style-type: none"> <li>○ Remote desktop (UUN.remote.inf.ed.ac.uk) <ul style="list-style-type: none"> <li>▪ will be continued</li> </ul> </li> <li>○ Lab desktop (UUN.lab.inf.ed.ac.uk) <ul style="list-style-type: none"> <li>▪ Will be retained for those desktops out-of-service due to capacity limits <ul style="list-style-type: none"> <li>• Might need some capacity for students who are self-isolating or students who can't be local to Edinburgh</li> </ul> </li> </ul> </li> </ul> </li> <li>• Tutorials <ul style="list-style-type: none"> <li>○ no capability for hybrid in Semester 1 <ul style="list-style-type: none"> <li>▪ possible issue with students who may be self-isolating</li> </ul> </li> <li>○ do we want / need for Semester 2 <ul style="list-style-type: none"> <li>▪ awaiting news from University</li> <li>▪ noted long lead time in preparing spaces</li> </ul> </li> </ul> </li> <li>• Introduction to DICE lecture <ul style="list-style-type: none"> <li>○ Learn course - has been revised <ul style="list-style-type: none"> <li>▪ feedback suggests this was popular last year (300 students enrolled)</li> <li>▪ Action: Alastair to check that learn course is referenced from computing.help.inf.ed.ac.uk</li> </ul> </li> <li>○ Face to face not planned</li> </ul> </li> <li>• IT support <ul style="list-style-type: none"> <li>○ online / in person with screen (need hours) / on-line chat <ul style="list-style-type: none"> <li>▪ normal working hours / Mon-Fri 2-4pm first few weeks of term / Mon-Fri 10:30am to 12:30pm</li> </ul> </li> <li>○ Considering how to improve our comms to students</li> <li>○ Action: Alastair to check whether IS mobile clinics running...</li> <li>○ Should we have a piazza mechanism for student support - particularly self help <ul style="list-style-type: none"> <li>▪ peer support re initial setup</li> </ul> </li> </ul> </li> </ul>	<p>TC</p> <p>AS</p> <p>AS</p> <p>AS</p>
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<b>7.</b>	<p><b>Report from CLISC</b></p> <p>None.</p>	
<b>8.</b>	<p><b>Date of next meeting</b></p>	