UNM IT Research Technologies Advisory Board
Wednesday, April 15, 2020

Chair: Patrick Bridges
Attendees: Karl Benedict, Tito Busani, Sylvia Celedon-Pattichis, Mark Emmons, Patricia Henning, Kathryn Jacobson, William Michener, Laura Putz, Edl Schamiloglu, Mark Servilla, Mary Tsiongas, Jon Wheeler, Elisha Allen, Duane Arruti, Grace Faustino, Jeff Gassaway, Brian Pietrewicz

Guest Presenters:

Notes: Deirdre Markham

1. Approval of Minutes (March 2020 minutes approved)
2. Action Item Follow-up
   a. Update on the Electronic Research Evaluation Committee – Edl Schamiloglu, Chair
      Edl advised they have been meeting monthly. Heather Himmelberger will review the compiled results of the Cayuse user survey at the committee’s next meeting. NMSU who is also interested in a new electronic research tool has joined the meetings. The committee will complete a further review of Click which is used by HSC and other health sciences groups. It incorporates HIPAA protections health science groups need. It is expensive relative to other options. There could be economies if main campus were added to the HSC license. They will move forward with reviewing other vendor options including further discussions with Cayuse after completing the Click review. After evaluating the vendor options, they will determine if they should move to RFP. Implementation is targeted for July 2021. The Cayuse contracts ends in 2024 with a required 3 month notice to end before that time.

Duane asked if the committee has included current institutional support for Cayuse as part of the evaluation process. Currently Cayuse is supported by financial operations. Duane sees this as a good opportunity to review the current support model. Edl advised Naren Tarikere who currently oversees Cayuse support is on the committee. Edl agreed working with Naren and IT to review the support approach would be useful. Grace advised Alesia Torres from IT is on the committee and attended the last meeting; she provided useful input on the enterprise approach and integration of a selected system into other applications. Sylvia asked how integration would be addressed for the selected system. Patrick advised integration is part of the evaluation for all potential vendors. Naren has been told that the new version of Cayuse will not allow for backwards integration so this is a good time to evaluate other options. Grace commented mapping is needed to integrate all existing current systems and improve data accessibility going forward. Karl commented the critical need to systematically access and retrieve data as the system is in use and during migration. Duane agreed there are opportunities to improve on data integration from back-end offices to PIs. Patrick agreed this is an important component of evaluating Cayuse to see if we aren’t using all the tools that are available and/or if with additional licensing and configuration of Cayuse if it would meet the needs identified from the committee’s evaluation.
b. Update on current Mathematica License and Next Steps Discussion (Grace/Patrick)
Mathematica licenses are expensive so they are evaluating if a VDI solution would be feasible rather than supporting on a per student or per faculty basis.

3. Informational Items:
   a. Next steps discussion for research computing maturity model assessments (Patrick)
      Patrick advised meetings with the subcommittees and subgroups to review the research computing assessment results are pending. After that is completed, Patrick will begin on the draft for an overall assessment.

   b. Virtual Desktop Support for Research Computing (Patrick)
      See discussion below under Limited Operations and item 3.c.

   c. Support for Remote Research Computing with CUI Requirements (Patrick)
      Patrick discussed a NSF funded project for CARC and Libraries to design a virtual environment to support research CUI needs. They are working with psychology to develop a prototype system based on their studies to collect PII data that can be linked to instrumentation data. IT is assisting with hosting the virtual system. With the move to remote work, they accelerated the project. As part of the full assessment, they identified gaps for supporting CUI in a virtual environment. They are evaluating if the gaps need to be addressed before rolling out the system or if they can move ahead to directly support researchers virtually.

      Patrick asked committee members to send him the impact and needs for remote research computing with CUI data including FERPA, PII, HIPAA data. This will assist with system and service development and evaluation. Committee members discussed exception requests for on-campus access that have been denied. Understanding their needs and the impact on lack of access will be helpful for deploying the project more widely and establishing priorities for additional usage.

   d. Limited Operations
      Karl advised that in addition to providing laptops to students, libraries has been exploring remote research computing. They have a limited number of systems so they are exploring the process for managing currently designated users and scaling this for additional users. On a small scale, they are able to support this effectively. Specifically, STATA for student use is being addressed using existing library licenses. STATA licenses are limited but floating to allow 2-3 seats at a time. They are providing access to Nvivo for a faculty researcher.

      Patrick advised CARC is continuing to remotely support main and north campus analysis and simulations as they did previously. Karl has been using Jupiter via VPN. Patrick advised this should be available without VPN.

      Duane reviewed the operational support IT has provided with limited operation status:
      - Worked across lines with IT Officers to provide hardware to students, faculty, and staff to allow for remote work.
- Escalated implementation of Palo Alto VPN. Clarified which applications required VPN and which ones could be moved off VPN.
- Worked with libraries on a successful laptop check-out program.
- Worked with units to provide effective remote access with users through teleconferencing, chat, or other tools.
- Forced password changes have been temporarily suspended.
- Duane discussed security concerns that have been raised around video conferencing. Alesia’s team is working to provide a support model for users interested in Microsoft Teams. Elisha discussed the at.unm.edu site where students, faculty and staff can request a Zoom Pro license and find FAQs on best practices for scheduling and securing Zoom meetings. UNM has an enterprise license for Zoom so there is no charge to students, faculty, or staff to get a Zoom Pro Account. If all attendees are UNM users, requiring authentication is the best approach. For students who are dialing in, a pin-code should be required to enter the meeting; this information should not be placed on a public website. They are working on enabling the waiting room feature and providing guidelines for using waiting rooms effectively. The public chat should be managed by the host to prevent sharing of inappropriate content. Elisha advised Zoom has responded nimbly to issues that emerged with the significant increase in usage and provided patches to help prevent hacking. Karl will share a FAQ for meeting configuration settings that was provided to library faculty.

Patrick asked what gaps exist for remote research work, what tools are needed:
- Software that has been accessible on-campus in labs or through floating licenses is not always available remotely due to license limitations. Brian discussed they are piloting use of VDI in Azure with end users. The pilot uses an actual virtual desktop. After this is tested, they will next evaluate streaming applications. The desktop looks and works like a standard desktop and runs locally. Streaming applications will run in the Cloud. This saves memory and therefore cost, but there are limitations such as mapping OneDrive. The service should be available soon. Defining the boundaries of the service is more complex. If you are working on a large data set, it has to go from CARC or Libraries to the Cloud. It will be necessary to appropriately educate users around the definitions as not all use cases can be accommodated unless the data can be loaded locally. This can be problematic for large data sets. It is also an expensive option, and it is difficult to completely identify the individual level cost with each application. The initial cost is very expensive and as the cluster grows it becomes less expensive but RAM off-prem is more expensive. Geography currently uses VDI for distance learning. RAM on-prem could be more cost-efficient. Karl asked about the security profile for the VDI implementation and if it can be used for CUI data. Brian advised the challenge with CUI is that it encompasses a wide-range of compliance needs so a single security profile for all use cases may be challenging. Initially, while the data will be secure, it won’t be run through CUI due to the variances of what is required within different CUI use cases. These could be added in the future. Elisha shared a survey that is intended to understand software needs for student computing. He requested the committee assist with getting more responses. It is likely not all needs can be met due to resource management and cost limitations. Priority would be given to options that meet
the needs for most users. As the system and request process is built-out, review of requests could flow through this committee’s intake and review process to evaluate requests that need funding or to provide direction to the research service catalog and existing resources.

- Bill advised they are interviewing faculty and students working with EPSCOR data and expect to be able to provide more information about computing needs after this is complete.
- Sylvia advised the COE methodology group is working one-on-one with faculty. Lee is continuing to provide support for the faculty.

4. Decision Items (none):

5. Security Updates (Jeff Gassaway)
   a. Policy Related Issues for Privacy and Security
      Jeff advised the current draft policy has been sent to the chairs. Once they have provided their comments, the drafts will be shared with the boards. Working groups have provided input and the faculty senate committees have the policy available for review. It is likely faculty senate input will be provided in Fall so the implementation date has been moved from July to late Fall. Karl agreed there has been good input so far.

   b. Security Issues, Emerging and Existing
      Jeff agreed with Elisha’s comments that Zoom has been productively responsive to security concerns.

   c. Security Strategy (none)

6. Open Floor/Announcements
   - Patrick and Grace sent an e-mail to advise the research service catalog is now available. The e-mail came from VP Research. The catalog is available at research.unm.edu. Please let Patrick and Grace know if you didn’t receive the e-mail and please disseminate to your faculty. Jon suggested an update for library services that are available for working remotely. Sylvia asked if information is available about collaboration tools and which tools are included. Grace advised that currently it would be for tools such as Zoom or Teams. The collaboration tools in the research service catalog were included to support research proposal development with internal and/or external partners.

      **Action Item:** Grace will send to the advisory board listserv and request the Provost send to the all-faculty listserv.

   - Bill discussed an NSF “dear colleague” letter (20-068) that will be requiring submission of meta-data and links to data in published articles from NSF funded projects. Currently, it is voluntary but the letter provides guidance for disciplines and domains to prepare for how they would meet these requirements.


      Patrick asked if Karl’s subcommittee should review the document. Karl agreed that it would be appropriate for them to take an initial review. Karl’s
understanding is the initial focus will be on collection and reporting requirement processes for data sharing and access. It is likely the guidelines will be applied to projects sponsored after required guidelines are adopted. Karl thinks it is unlikely it would be retroactive, but it would be beneficial to apply the new practices and policies to existing data. Jon discussed the value of consolidating approaches for incorporation of digital object identifiers and the centralization of data collection campus-wide. Karl agreed this is likely part of the increasing focus of acceptable practices for data sharing, repository access, and reuse and formalized practices on data sharing and documentation.

Next Meeting: *May 20, 2020, 9-10:30 am*