

Academic Computing Committee 2014-2015 Annual Report

In response to results from the Educause Faculty Technology Survey, which Oakland University participated in during the previous academic year, the Academic Computing Committee investigated faculty technology needs this year. Results from the survey indicated that faculty satisfaction with available research computing at Oakland University was below the average satisfaction reported at other universities.

The Academic Computing Committee then inquired with each unit in the College and Schools regarding research-related computing needs. This inquiry included needs relating to software, hardware, network infrastructure, and computing services. Guided by this feedback, the committee developed computing recommendations for the university. Consistent with the committee charge and aligned with the new university strategic plan, these recommendations address computing needs at the university.

The committee recommends both specific technology investments and criteria for evaluating requests for research computing resources. These recommendations are attached.

The committee also discussed disk encryption, file sharing, and other resources already available to faculty, but that not all faculty are aware of. Existing descriptions of these resources were identified on the university website for committee members to communicate to their respective units.

Academic Computing Committee Recommendations to the Senior Vice President for Academic Affairs and Provost and President on requirements for improvements and additions in computer facilities (both hardware and software) to meet the anticipated computing needs for the next five years. (Approved April 2015)

The Academic Computing Committee inquired with each unit in the College and Schools regarding research computing needs. Based on the feedback we received, we recommend that the university provide software access through a server distribution model. Ideally, this would include a virtual lab environment and the software listed below. This will address computing needs of faculty and students across disciplines throughout the university. Cost estimates calculated by UTS are attached.

- SPSS Premium Campus Edition, VCL
- Amos Campus Edition, VCL
- SPSS Text Analytics Campus Edition
- SAS
- JMP
- ArcGIS
- Qualtrics
- SYSTAT
- MatLab

At a minimum, we recommend a virtual lab environment with SPSS. Currently departments reported that about 130-160 faculty use SPSS and 6,500-8,000 students out of the current student population use SPSS during their OU career, and more users are expected if there was a university-wide license for the current version. The current university site license is for a version of SPSS that is more than ten years old. The current distributed licensing environment was adopted after a final 1996 report from the Senate Academic Computing Committee report. That report supported distributed desktop computing, given advancements in desktop computing at that time. Technology has evolved to web-based and mobile accessible environments that are not supportable in the current dated distributed model.

The university's current reliance on desktop and laptop computers for software distribution hinders the university's ability to be recognized as a strong research and scholarly environment and to foster student success through its teaching and learning environment. By providing virtual access to servers running key research and instructional software, the university will greatly expand access to critical software within the university community and provide access to the computing power necessary to engage in many of today's fields of research.

This recommendation will create a strong research and scholarly environment by providing faculty with access to both current software that is standard in many fields and the necessary computing power for large projects. Software access is a significant issue in the recruitment and retention of top researchers, and currently many faculty do not have access to modern versions of necessary research software. Faculty are also limited in their ability to engage in analysis of Big Data, the current data analysis strategy of studying large datasets.

This recommendation also establishes a robust teaching and learning environment by enhancing software access to students. Students will have access to current software necessary for their degree programs. Students enrolled in online courses and programs will have access to essential software without being required to be physically present on campus; this will facilitate course enrollment for students not living in the

Detroit metropolitan area. It will also enhance software access to current students without the need to establish additional computer labs on campus.

UTS Cost Estimates

Software	Year 1	Year 2	Year 3	Year 4	Year 5
SPSS Premium Campus Edition, VCL	\$57,290	\$63,018	\$69,320	\$76,252	\$83,878
Amos Campus Edition, VCL	\$10,861	\$11,947	\$13,141	\$14,455	\$15,901
SPSS Text Analytics Campus Edition	\$12,359	\$13,594	\$14,954	\$16,449	\$18,094
SAS	\$12,225	\$13,448	\$14,792	\$16,271	\$17,899
JMP	\$5,000	\$5,500	\$6,050	\$6,655	\$7,321
ArcGIS	\$10,000	\$11,000	\$12,100	\$13,310	\$14,641
Qualtrics	\$26,000	\$28,600	\$31,460	\$34,606	\$38,067
SYSTAT	\$78,700	\$86,570	\$95,227	\$104,750	\$115,224
MatLab	\$79,531	\$87,484	\$96,233	\$105,856	\$116,441
Distribution Layer - Dell Virtual Lab, VMWare View	\$300,000	\$330,000	\$363,000	\$399,300	\$439,230
Software Total	\$591,964	\$651,161	\$716,277	\$787,905	\$866,695
 New Position	 \$65,000	 \$66,300	 \$67,626	 \$68,979	 \$70,358
Benefit factor	\$29,250	\$29,835	\$30,432	\$31,040	\$31,661
 PROJECT TOTAL	 \$686,214	 \$747,296	 \$814,335	 \$887,923	 \$968,714

UTS Cost Estimates - SPSS Only

Software	Year 1	Year 2	Year 3	Year 4	Year 5
SPSS Premium Campus Edition, VCL	\$57,290	\$63,018	\$69,320	\$76,252	\$83,878
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Distribution Layer - Dell Virtual Lab, VMWare View	\$300,000	\$330,000	\$363,000	\$399,300	\$439,230
Software Total	\$380,509	\$418,559	\$460,415	\$506,457	\$557,102
New Position	\$65,000	\$66,300	\$67,626	\$68,979	\$70,358
Benefit factor	\$29,250	\$29,835	\$30,432	\$31,040	\$31,661
PROJECT TOTAL	\$474,759	\$514,694	\$558,473	\$606,476	\$659,122

Recommended Criteria for Evaluating Research Computing Proposals

(Approved by the Academic Computing Committee April 2015)

Research computing resources are a critical component of the university's research and scholarly environment. The Academic Computing Committee recommends the following guidance for UTS to use when evaluating requests for research computing resources.

The following criteria should be used to prioritize investments in research computing based on research outcomes:

- University licensing coordinated across campus that would be cost effective
- Infrastructure investments, for example a license server, that enable other enhancements in the university research environment
- Software and hardware that enables research productivity leading to publications disseminating research findings
- Software and hardware that facilitate external research funding
- Software and hardware that facilitate enhanced research collaboration among faculty
- Software and hardware that supports university engagement with communities around Oakland University