

## **SIUC Computing Advisory Committee**

**SIU Student Center, Vermillion Room**

**November 12, 2015**

### **Opening**

The regular meeting of the SIUC Computing Advisory Committee was called to order at 8:02am on November 12, 2015 in the Vermillion Room of the SIU Student Center by Bill Bruns.

Minutes from the previous meeting were distributed. A motion to approve was made by Tom Furby and seconded by JP Dunn.

### **CAC Members and SIU IT Employees in Attendance**

- Bill Bruns, Chair (Civil Service Council)
  - Norman Carver (Graduate Council)
  - JP Dunn (AP Staff Council)
  - Tom Furby (Law School)
  - George (Sam) Goodin (AP Staff Council)
  - Tom Imboden (ISAT)
  - John McCall (Faculty Senate)
  - Michelle Zhu (Computer Science)
  - Scott Bridges (CIO, Information Technology ex-officio)
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- John Ahrens (Information Technology)
  - Kris Guye (Information Technology)
  - Jim Jones (Internal Auditor, SIUU)
  - Jerry Richards (Information Technology)
  - Michael Shelton (Information Technology)
  - Gi Vania (Information Technology)

### **CAC Members Not in Attendance**

- Richard Beach (Library Affairs)
- Dimitrios Parhas (Graduate Student Association)
- Jason Phillips (Civil Service Council)
- Travis Rotheiser (Undergraduate Student Government)
- Andy Wang (Dean's Council)
- Preston Yun (Undergraduate Student Government)

Status Reports were given by the directors of each of the areas of Information Technology:

- Michael Shelton – Network Engineering and Telecommunications

- Kris Guye – Technology Services
- John Ahrens - Applications
- Jerry Richards – Enterprise Systems
- Gi Vania – Research Computing
- Scott Bridges – Security and CIO matters

Supplements that were provided are attached.

#### Old Business

- None

#### New Business

- Bill Bruns was re-elected Chair for the 2015-2016 Academic Year by unanimous consent.

The meeting was adjourned at 9:30am.

**Computer Advisory Committee**  
**11/12/15**

**Telecommunications Services**

1. Campus (outdoor) fiber/building-to-building fiber
  - a. Phase 1 of 6 completed
  - b. On hold due to lack of funding
2. Centrex to VOIP – on hold due to lack of funding

**Network Engineering**

1. Switch replacement
  - a. Gig to the desktop
  - b. 10gig to distribution layer
2. VPN
  - a. Was Juniper, end-of-life
  - b. Now Cisco and using two-factor authentication
3. Bandwidth
  - a. Currently two providers, ICN and Clearwave, 3.1gig combined for I and I2
  - b. Will be two providers, Cogent and Clearwave, 5gig to the Internet and 10gig to I2
  - c. Cost savings after the first year of around \$150k
4. Edge redesign
  - a. Multiple firewalls, now failover capable, better throughput
  - b. More design and implementation work to be done
  - c. Planning to move RezNet and the wireless networks outside the firewall
5. Outdoor wireless
  - a. Light pole wireless, significant expansion of outdoor wireless
  - b. Other locations covered, based on where people are likely to gather/use wi-fi
6. Lawson Wi-Fi
  - a. Based on students' inability to access on-line resources during class
  - b. Phase one, one classroom only, proven success
  - c. Phase two, three additional classrooms, being scheduled to avoid interfering with classes
7. Cat 3/Cat 5 cable upgrades
  - a. Eliminated all Cat 3 on campus, some off-campus Cat3 still exists
  - b. Researching how much Cat 5, Cat 5 vs. Cat 5e and the need to upgrade Cat 5
8. Enhanced connectivity to off-campus locations
  - a. Surplus Property, Archeology, Head Start Carbondale, Head Start Marion, Evaluation Development Center
9. Developing plans to eliminate all T1, LRE and DSL networks

Enterprise Systems, CAC Notes, 11-12-2015

Office 365 Migration – reduce support costs, leverage existing contract w/ Microsoft

Mail completes today

OneDrive complete

SharePoint – sites being migrated now, workflows by end of November

Lync is on premise (will be updated over Christmas)

Training posted through SalukiTech web page

GoogleDocs decommissioned after Spring 16 semester, process to export/import to OneDrive

Aegis - TridentHE - Identity Management SW

SSO – Web Single Sign-On – ADFS, Shibboleth 3.0, eCAS

SHA-1 -> SHA-2 hashing algorithm change for SSL and code signing certificates, newer browsers will expect it; no more SHA-1 available from Incommon/Comodo

High Availability Site – 2<sup>nd</sup> SmartRow in place, Now on building generator

VMware, Hyper-V Virtual Servers -> Windows Server 2008 R2, 2012 R2, Linux: RedHat/CentOS

Virtual Server Pricing				Additional Hardware	
QTY	Servers	Specification	Cost / Month		
1	Small Virtual Server	1 CPU, 1GB Memory, 40GB Disk	\$29.91	0	Additional Memory 1 GB GB \$2.50 /GB
0	Medium Virtual Server	2 CPU, 2GB Memory, 40GB Disk	\$41.99	0	Additional Disk 1 GB incr GB \$0.10 /GB
0	Large Virtual Server	4 CPU, 4GB Memory, 40GB Disk	\$66.15	0	add \$5.00 /CPU (Mem - max 8GB/server) (purchased in 10GB increments)
		Server Total/Month	\$29.91		
		<b>Server Total (Yearly)</b>	<b>\$358.92</b>		

Storage

Compellent ½ Petabyte on 3 Compellents across 3 sites; 10 cents/GB/Mo -> includes backup, replication for FS8600 NAS Gateway; VM storage the same; Trying to get to 3-5 cents/GB/Mo OneDrive (unlimited)

FS8600 – eventually move to Windows Server based file sharing

VM Server -

Microsoft RMS – secure info delivery, limiting access to documents such as corporate [e-mail](#), [Word](#) documents, and web pages

Cloud – DR, ADFS, Web Infrastructure

# Computer Advisory Committee

## Information Security and CIO Status Update (November 12, 2015)

### 1. Security Update

- a. IT is continuing work toward campus-wide desktop encryption. Desktops from various areas/departments with sensitive information have been encrypted. 500+ in total.
- b. Deploying two-factor authentication (Duo) with the new VPN.
- c. Have implemented Splunk for comprehensive log analysis.
- d. Continuing scans for identifying Windows XP machines.
- e. Released a new Information Security Program, per Board policy.
  - i. Working to matrix existing policies, procedures, standards, and guidelines into the ISP.
  - ii. An area of weakness that needs to be identified is rogue wireless access points.
- f. Worked to identify an encrypted file service solution.
- g. Working to put a system in place to assess risk when the university purchased new computer systems and software.

### 2. CIO Update

- a. IT is feeling the effects of the budget crunch.
  - i. Many positions remain unfilled.
  - ii. New projects will be on hold.
- b. Lab Workstation Replacement.
  - i. Due to the budget crunch there will be no available money to refresh workstations in labs across campus.
- c. Desktop Replacement – Basic Technology Fee.
  - i. IT is working to identify a mechanism to reinstate the desktop replacement program.
- d. Network Control Center.
  - i. IT will be restructuring the NCC.
  - ii. Restructuring will include more automated monitoring.
  - iii. Existing staff will be disbursed to appropriate areas of IT.
  - iv. Side benefit will be that IT will establish a quasi-24/7 help desk.
- e. IT is working to document a comprehensive disaster recovery plan.
- f. IT is moving toward a hybrid cloud environment.
  - i. Office365 represents a first move in this direction.
- g. Tablet Initiative.
  - i. The existing tablet initiative will likely be replaced by a voucher program which will allow students to use the voucher (amount to be determined) in the IT Computer Store toward a purchase of a laptop, tablet, desktop, etc.
- h. Efficiency.
  - i. With the budget situation and likely no real new projects IT will be concentrating on internal efficiencies.
- i. Strategic Communication and Initiatives
  - i. IT has assigned a staff member to concentrate on grant writing, fund raising, and continued support of IT Day.

Topics from Enterprise Applications:

Kuali Research – We are working with OSPA to implement Kuali Research to handle pre-, post- and awarded-status grants. Enterprise Apps will be providing database and application patching support, OSPA the functional knowledge to run the app.

ACA – Our HRMS and development resources are pulling together the list of employees for whom SIU must offer insurance due to their hours worked. This will be continuing through Q1 of Calendar year 2016.

Degree Works – Campus wide effort to replace CAPP, the Degree Works project will augment advising to enable better communications and planning for academic success for our students by helping them see prerequisites, education planning, etc.

Application Development – We are adding a junior application developer in order to be able to apply some locally appropriate solutions on campus. This is a person we’ll be looking to invest in and get a return sometime within the next couple months.

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### Tech Services Update

- ITSM (Information Technology Service Management)
  - I have formed a committee to evaluate ITSM software solutions. There is a huge need for a service management "ERP" solution to tie IT services together across departments within IT. All of these solutions are designed to accommodate student needs in most or all areas including housing requests, facilities, etc. We will focus implementation on IT and will then discuss offering it to other areas on campus who are interested. This will be implemented based on ITIL (Information Technology Infrastructure Library) guidelines.
- Desktop/Application Virtualization
  - Early in 2016 we will start a desktop/application virtualization project. The goal is to provide improved services to our students by reducing the need for lab specialization. The goal would be to offer all the software a student needs at any lab machine they sit down at. Additionally, it could make the same software available to BYOD.
- Campus wide computer lab inventory
  - To support the virtualization project mentioned above and other benefits, we will be performing a hardware and software inventory of all of the computer labs on campus including departmental labs. We hope to utilize existing technical staff, but will supplement as needed to complete the inventory.
- Project Management Office
  - The project management office has been busy working on projects for Dr. Jim Allen's office, Tamarah Workman and Degree works, and several others. We are looking for ways to grow the PMO to enable more collaboration with other University areas.