

**SUMMARY FOR ARCHITECTURE & NEW TECHNOLOGY COMMITTEE**

**DATE: February 27, 2017**

**TIME: 10 a.m. – 12 p.m.**

**LOCATION: Dumke Room, Eccles Broadcast Center**

**IN ATTENDANCE:**

Mark Beekhuizen	David Blackburn	Pieter Bowman	Joe Breen
Steve Dean	Tim Ebner	Jeff Folsom	Matt Irsik
Sylvia Jessen	Jim Livingston	Chris Roberts	Steven Seal

**COMMITTEE SUPPORT:** Scott Sherman, Emily Rushton

**UNABLE TO ATTEND:**

Rebwar Baesmat	Derick Bingman	David Blackburn	Dean Church
Demian Hanks	Matt Harting	Josna Kotturappa	Chris Roberts
Steven Seal	Wes Tolman	Thomas Wolfe	

**AGENDA ITEMS DISCUSSED:**

- Senate Bill 14 requirements
- Campus-wide printing working group
- Network Architecture Community of Practice update
- Campus-wide electricity usage metering
- Open floor

**Senate Bill 14 requirements**

Mike Ekstrom, director for UIT Network & Communications Infrastructure (NCI), informed the committee that recently passed Senate Bill 14 has implications for the university multi-line telephone system. There are two major facets to the bill: 1) a 911 dialing requirement, which requires a telephone user to be able to simply dial “9-1-1” in an emergency instead of first dialing a 9 to get to an external line; and 2) a requirement that organizations be able to pass to emergency responders the accurate location information for voice over Internet protocol (VoIP) calls and to maintain accurate records of the location of those VoIP devices.

Currently, all Avaya and Skype for Business VoIP phones on campus have the ability to simply dial 911 (without the initial ‘9’ to get out). Traditional CenturyLink lines, however, still require the user to dial 9 first. There are approximately 15,000 CenturyLink lines on campus at this time. CenturyLink has told Ekstrom’s group that it will be relying on the safe harbor clause in the new bill (i.e. if you don’t upgrade your phone system, the new law doesn’t apply). CenturyLink does not want to support the Centrex system and would prefer to let users simply move to VoIP when they need to.

Ekstrom said the second requirement will be much more challenging to implement due to the distributed manner in which the U's network has been managed. Currently, there's no way to look at a particular port on a switch and determine which phone is connected to that port and where it's physically located, because each department has had the ability to move around cables as it needs to.

One member suggested storing the location info in the phone itself, but if the phone is moved, the location will then be inaccurate. Ekstrom said they are still trying to determine what level of due diligence is sufficient to comply with the law, but reiterated that everyone will need to work together. The official implementation date is July 1, 2017. Another member suggested looking for phones to purchase that are self-located. Ekstrom said this may be a good approach for the long-term, but right now they need to find a way to comply with the law in the short-term. He confirmed that the voice systems team *does* track the location of every Skype phone that has been deployed. But anyone can move that phone after the fact, and the voice systems team may not always be informed when that happens. Ekstrom said there is a process by which the voice systems team updates locations, but said that as an organization, there should be a more ubiquitous plan around this (beyond simply trusting that the information is correct based on the current processes). He also said the bill didn't give any guidance for dealing with soft phones, or calls placed through a computer, other than simply saying organizations are responsible for knowing where its phones are.

Ekstrom said at this point, this was an information-only item. Ekstrom and NCI associate director Trevor Long are working with the Office of General Counsel to determine what exactly will be sufficient to comply with the law, and they will come back to ANTC to give an update at the next meeting.

### **Campus-wide printing working group**

Clayton Barlow, associate director for Enterprise Architecture, and Randy Zimmerman, associate director for Operations & Logistics for Copier Fleet Services, gave this information-only presentation. Zimmerman, who previously led an implementation of a managed print system at Salt Lake Community College, talked about assessing the U's printing environment. The assessment discovered that the U was obtaining its printer and copier equipment from a state leasing program, leaving management of the equipment to individual departments. As such, there was confusion in regards to maintenance, billing, purchasing rules, pricing contracts, lease terms, and so on. Other issues discovered included lack of cost reporting/statistics, toner overload (or not enough toner), equipment redundancy, and departments buying more machines than needed, among other issues.

Since that initial assessment and discovery, Zimmerman's team has chosen and implemented a managed print system called uniFLOW. Zimmerman said they wanted something that was scalable and would save the U time and money. Currently they are working on establishing uniformity, reducing the number of devices on campus, simplifying management, reducing the number of vendors down to one

or two, among other things. They currently have 216 HP machines under uniFLOW management, and Zimmerman estimates they will manage 1,500-2,000 HP printers by the end of 2017.

Barlow jumped in at this point to remind the group that the campus-wide printing working group is looking closely at uniFLOW to determine whether it is a solution that can be used enterprise-wide, based on use cases and other research, or whether an RFP needs to be issued. The group has developed a long list of requirements based on needs across campus, and will evaluate uniFLOW against the list over the next couple of weeks to see if it's the best overall solution for the U.

CIO Steve Hess added that if the group puts together a business case and it doesn't save money, then a solution wouldn't be purchased (or expanded enterprise-wide, in the case of uniFLOW). But if it does save money, it's worth looking into as a possibility.

CTO Jim Livingston added that the group also needs to be working on the support model for printing across campus. He also clarified that this effort should be separated into two aspects: 1) the cost, standardization, and maintenance of multi-function printers/copiers across campus and hospital/clinics; and 2) the management of those devices, and the software that will allow the U to better manage a uniform printing system for students, faculty, and staff. The printing working group is working on the latter.

Barlow closed by letting the committee know he would share the evaluation criteria, use cases, and cost analysis via Box.

### **Network Architecture Community of Practice update**

Clayton Barlow also gave this information-only update. The Community of Practice spent some time on defining the U's network, and the answer they came up with is that the U is an enterprise network (based on the use cases, organizational goals, and IT strategic plans). Barlow said there are some portions of the network that need to behave in a very isolated/nonconnected manner, so those don't share the same enterprise features – but outside of those, the U is an enterprise network and should behave as such. One member asked about unique use cases, and Barlow said they understand connectivity profiles are complex and that on rare occasions, some groups will require nonstandard connection profiles. For those use cases, Barlow said they're envisioning the department would make a request to the Community of Practice for a unique connection profile. The CoP would review the request, figure out the best solution, then bring that solution to ANTC for approval. The actual workflow for this has not yet been finalized, but that would be the general idea.

Barlow reiterated that this is a University organizational initiative, not a UIT or ITS initiative. He also gave some details on private IP space. The group is still working out specifics, but there will be a large chunk of address space for "enterprise-wide services" (e.g. printing, scaled devices, VoIP, etc.). He said

they're still looking at how to divide up 10 space, but the idea would be to register and allocate space to an individual department so that there's record of it, and no one is using 10 space unless it's been allocated to them. There would also be a small amount of IP space that is non-allocated and non-routed. Barlow said they expect to have this all finished and figured out by Wednesday 3/8.

**Campus-wide electricity usage metering**

Paula Millington, director for the UIT Strategic Planning and Process Team, informed the committee that there's a legislative mandate to have all buildings hooked up to electricity monitors. There are two projects coming out of this: 1) UIT and Facilities Management (FM) will work together to get all meters connected to the network; and 2) FM will be looking at the life cycle of the meters, from acquisition to retirement. Meters are expensive (up to \$100,000 for one), so FM wants to know where those meters are and watch them over time. Millington's group will be engaging in both of these processes.

There was a brief discussion about raising awareness for individual departments/groups on campus to know how much electricity they're consuming on a regular basis, and Millington explained that's why her group is looking at this and trying to get a handle on it. Hess added that studies show when meters are installed, consumption goes down, and the committee briefly discussed the need for a way to show the data collected by meters in a user-friendly, accessible way to building occupants and the U community at large. It was mentioned that Cory Higgins (FM director of Plant Operations) is in charge of the larger project of monitoring electricity usage, and someone suggested Higgins come present on that larger project. Scott Sherman will work on getting that added to a future agenda.

Livingston added that another issue right now is mechanical systems abilities – e.g. automatically controlling temperatures in buildings, capacity within central plants, and the large amount of data coming off of those connected devices. Hess added that right now, the U is lacking in policies and flow charts to dictate how those devices get on the network, and that those need to be items addressed in IT governance.

**Open floor**

Scott Sherman asked how many groups were currently using ExamSoft, in case it's something the Office of Software Licensing should look into. Three groups were named: Pharmacy, Medicine, and Law.

Action summary			
Action	Topic	Person/Group	Next step
No actions taken	N/A	N/A	N/A