# Communication Technologies Advisory Group

Notes

# June 7, 2018

# **Present:** Keith Boswell, Kevin Lee, Greg James, Ed Rogers, Franklin Finch, Joshua Gira, Mark Williams, David Ladrie, Shawn Dunning, Josh Jury, Chris Eichman, Jonas McCoy, Debbie Carraway, Greg Sparks

# **Welcome**

**Staffing Update**

* NOC Manager position (reporting to Kristina) setting up phone interviews
* Alan’s retirement gathering - June 28th 3:45-5:30, Arboretum

## CATV

* Repair work in five residence halls this summer - mostly complete
* Working on new contract with Spectrum (2 years with option for 1 addl)
  + Channel lineup is good-with new contract we are gaining additional channels

**MDFs**

* Security system upgrades in progress (with SAT) are mostly done

Just a few things left to get done before end of June

**Infrastructure Records**

* Classroom maps being reworked
* Fiber inventory in progress - cables only (26% complete)

**Building Infrastructure Projects**

* In construction: CVM Main, Nelson, Schaub, Lang & Comp Labs Kamphoefner, Delta Zeta, Sigma Phi Epsilon, Avent Ferry D   
  In design: Brooks, Dabney, CMAST

**Campus Network**

* Centrex Replacement NMDF, SMDF zones (construction)
* I-440 Widening project - new route fiber now pulled, awaiting termination (bids will be awarded in August)
* New alternate fiber route Main Campus to CVM - installation in progress
* Backbone updates - Investigating requirements and implementation standards
* Firewall Service Module migration continues.
  + Peele - Complete
  + Avent Ferry/Hillsborough - one OIT context
  + ITECS - moving 6/7
  + EB3
* VPN decision made - **Decided on Cisco**, have quote, looking at professional services
  + Testing going on now internally - expect to implement next 2-3 months
  + Will allow for 2-factor for VPN
    - Will begin evaluation immediately after go-live
    - Integrate with DUO

**NIST**

* -Demo of the Secure University Research Environment (SURE) will be presented at June (delayed from April) CITD as a result of CTAG suggestion-move out

**Data Center**

* DC1 Decommissioning
  + Continuing to gather inventory
  + Order complete for MCNC fiber to provide a 100Gbs connection to DIT’s EDC
  + Evaluating options for resilient connectivity
  + Working towards first equipment installation in EDC (DIT’s Eastern Data Center) this month
  + Target date for completion December 22, 2019
* DC2 - study completed for new electrical/mechanical systems- Ed, Joseph, Facilities are reviewing
* Interior Layer 1 (fiber) upgrade for DC2 and COLO - RFP at Purchasing
* Updating DC Guidelines and Procedures
* Working with UA to make decision about Poe’s future as MDF

Poe Town Hall - 5/14 - cost seems to be primary concern of moving

servers from Poe to more secure location - secondary concern around physical access for support staff

**Access Layer**

* Big Layer Two (BLT) project - 44 of 47 academic buildings designed (93%)
* Vlan 60 (wired NOMAD) - decommissioned.
* Working on PCI vulnerabilities for NTP and updating network diagrams

**Cellular/mobile**

* Indoor - Spidercloud - design in progress on [next 9 buildings](https://docs.google.com/spreadsheets/d/1daic4iHUd2thrJUQWXu4qh0ho9mE9GhokGRHsOnD30k/edit?usp=sharing)

**IT Strategic Planning**

* [Interim Report](https://oit.ncsu.edu/wp-content/uploads/2018/05/Interim-Report-First-Round-Initiatives-Spring-2018.pdf) now online
* Service Planning
  + Working towards cleaning up Svc Now tables so we can start adding more services
  + Talking with potential consulting partners for CMDB and working to name a process owner
  + Work moving forward to separate incident (Nik) and knowledge (Kristina)

● Stan North Martin is leading mechanics phase of IT governance initiative

**Budget**

* Added DC2 needs to the campus IPL (integrated priority list)

**Unified Communications**

* Partner Updates: UNCG, App State, NC A&T, Pembroke- Upgrades and certificates are going on
* Conference Now
  + Q from group: How does this compare to the new features of Google Meet?

**Systems & Development**

* Staffing
  + Network Tools Developer - <https://jobs.ncsu.edu/postings/100952>
  + Title will be changed to a more general title
* Tools Updates
  + Nucleus replacement - up/down, threshold
  + AKiPS -- thresholds and alerts
* Development
  + Integrating network device discovery with S&C

## Wireless

* Have paid for professional services to help upgrade controllers to 8.x code - Still working through issues - no implementation date set yet-still testing
* New controllers for 8.x code have been installed

Looking to move to 4 large subnets for wireless users per manufacturer’s recommendation

○ Final building moves this week

* Classroom wireless
  + [Classroom Coverage](https://docs.google.com/spreadsheets/d/1EM_YfPCHXV7BNHRdlUaj0_x6E75tMZblSppfhlmfJgQ/edit#gid=2136708155) - current list
  + 86 out of 237 110-classrooms remain - most will be done this summer
* Beacon focus group met on 2/27/18
  + Agreed to meet again in the fall
* EDUROAM (secure SSID)
  + Released SecureW2 to OIT as next text group, most issues are with High Sierra.
  + Working on SecureW2 documentation, collaborating with Walk-in Center and Help Desk - not planning to highlight as preferred method at NSO
  + Goal is to eventually transition as many stakeholders as possible to use this SSID
    - Eduroam use - see monthly metrics link below
* Now tracking wireless metrics as part of overall [monthly metrics](https://oit.ncsu.edu/campus-it/campus-data-network/communication-technologies-metrics/)

### HCI

### ScaleIO will be platform

### “one-off” VMs (only instance is in DC1) will be first workloads to shift to this hardware

* Plan is to run at least Hyper V in addition to VMWare

**Storage Infrastructure**

* AFS backups are working again
* Changing from Netbackup to Data Protection Suite (Dell/EMC product), shifts backup traffic to Ethernet from Fiber Channel

### Parking Lot Items

* Routing licenses at the BDF level – when and how much should occupants pay? Interim solution is 50/50 when “desired”, ComTech funds when required
* “virtual data center” – 4/5/18 - still some need for “flat” networks (even outside the data center)

## Upcoming Meeting Dates

* Next CTAG Meeting – July 12, 2018 - 9:30, AFTC 106