# Infrastructure Technologies Advisory Group

Notes

# February 7, 2019

# **Present:**

# 

# **Welcome**

Reminder: Google group… [group-intag@ncsu.edu](mailto:group-intag@ncsu.edu)

**Staffing Update**

* NOC Manager position (reporting to Kristina) - George Green started Monday. 15+ years experience with ATT in NOC type environments.

**JEMS (Jack Exemption Management System) Decommissioning**

* Was decommissioned in January

**CATV**

* Evaluating pricing structures for 2019-20 academic year service.

**MDFs**

* NMDF (Poe) - Design study initiated for elec/mech upgrade.
* Poe. No date yet for push to remove non-ComTech equipment but will be after processes are in place for hosting non-OIT equipment in DC2/EDC
* Lake Wheeler MDF - We’ve approved design study to start.

**Infrastructure Records**

* Fiber inventory - OSP cables (92% complete), will move to internal fiber next.
* New PLA ground fiber maps.

**Building Infrastructure Projects**

* In construction: CVM Main, Dabney, Brooks, CMAST, Butler, Weaver Labs, Patterson.
* In design: Lambda Chi Alpha, Research 3, Polk, Fountain Dining, DH Hill Academic Success Ctr.

**Campus Network**

* Centrex Replacement NMDF, SMDF zones (construction), CMDF (design)
* Backbone updates - Investigating requirements and implementation standards
* VPN decision made - Working with NWN to do configuration and installation of production boxes
  + Hardware replacement scheduled for 2/20
  + SBL testing this week to see what impact will be
  + 2-factor will be implemented in near future after hardware deployment on 2/20. Goal is to use Duo but further testing needed.
  + Full tunnel will go live after 2FA is implemented.
* AFTC infrastructure lab expansion/upgrade - almost ready to move in.
* Redundant fiber entrances - SMDF zone - design in progress
* I-440 widening project
* New ISP contract for non-University tenants - RFP bids being evaluated

**Access Layer**

* Big Layer Two (BLT) project designs - 45/47 academic buildings (96%), 32/63 admin buildings (51%) - Target date for completion: summer 2019
* PCI - waiting on new second round of Pen test results

**Data Center**

* DC1 Decommissioning
  + First round of equipment for testing is operational
  + The target date for completion December 22, 2019
* Interior Layer 1 (fiber) standard - RFI responses under review
* Rack PDU RFI bids were due 2/5
* Intake processes being refined
* Cost model for rack space being refined

**Cellular/mobile**

* Indoor - Spidercloud - 6 buildings - working through LAA issue. List: [SpiderCloud](https://docs.google.com/spreadsheets/d/16ZpdmpP7JNH1_P2tvzCISjmNXMzE-VyaEY1KrZv3uPc/edit?usp=sharing)

**IT Strategic Planning**

* Service Planning
  + CMDB - discovery process is ramping up
  + CMDB implementation underway - team identified to scope out change management initiative for move into ServiceNow

**Unified Communications**

* Partner Updates: UNCG, App State, NC A&T, Pembroke
* Life Safety planning

**Systems & Development**

* Tools Updates
  + Port deactivation tool -- life
  + PLA Ground -- refresh
  + NetDisco2

## Wireless

* Classroom wireless
  + [Classroom Coverage](https://docs.google.com/spreadsheets/d/1EM_YfPCHXV7BNHRdlUaj0_x6E75tMZblSppfhlmfJgQ/edit#gid=2136708155) - current list
  + 4 out of 237 110-classrooms remain - spring break.
  + Future: need to begin discussion on 210 classrooms funding
* What to do with buildings never designed?
* Stafford Commons/Wolf Plaza - kickoff meeting held
* Beacon focus group - scheduled next meeting for 2/27/19 3pm AFTC 106
* EDUROAM (secure SSID) -
  + Wifi.ncsu.edu is now live with links to SecureW2 for eduroam
  + Need to determine best plan for migrating Cloudpath customers over to SecureW2.
* Now tracking wireless metrics as part of overall [monthly metrics](https://oit.ncsu.edu/campus-it/campus-data-network/communication-technologies-metrics/)

**Storage Infrastructure**

* Gary Li/Aaron Peeler visiting with various units to discuss current storage offerings and gather input on those and potential gaps
* Data Domain upgrade completed and temporary software data domain nearly drained, retiring Avamar grid, VM backups going to data domain
* EMC 7600 arrays reaching end of warranty period, plan is to move them to 3rd party hardware only support and replace them with new Unity arrays (DC2 array was purchased last FY, needs an expansion to fully replace DC2 7600)
* AuriStor transition has resumed after a few pauses for bug fixes and Infoblox implementation

**Server Infrastructure**

* Solaris retirement making good progress
  + 4 of 6 M5s retired - remaining two supporting SAR (one production, one for a parts donor)
  + Handful of T series left, working on cleaning up the last few apps using those
* HCI infrastructure testing underway at EDC

**Software Infrastructure**

* VMware license - joining UNC SO agreement - metered use, annual payment instead of 3-year agreements - need to decide how to handle FY2018-19 license renewal (current license ends ~March)
* Java (JDK) license - discussions with Oracle have revealed that Oracle doesn’t have a plan yet

### Governance Revamp

### Working through membership roster for top-level committee and the tier below

### Still need to figure out future of ITSAC-I and any relationship to this group

* + Quarterly?? More of a ComEx?

**Budget**

* Chasing one-time funds for servers, storage, data center move expenses

### 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 conversation confirms there’s still some need for “flat” networks (even outside the data center)

## Upcoming Meeting Dates

* Next InTAG Meeting – March 7, 2019 (canceling January meeting)