# Communication Technologies Advisory Group

Agenda

# February 1, 2018

# **Welcome**

## New IPAM Solution - Greg/Early Yu

* Bluecat changed pricing model
* Looking to move to dynamic DNS/DHCP

## CATV

* Meeting next week with Spectrum to get new pricing. We will probably keep status quo for next 1-2 years
* Repair work in five dorms this summer

**MDFs**

* NMDF generator fire

**Infrastructure Records**

* Wireless maps complete minus crumbs (classroom maps to be reworked)
* Fiber inventory started

**Building Infrastructure Projects**

* In construction: CVM Main, Robertson, Nelson
* In design: Schaub, Kilgore, Brooks, Dabney

**UPS -** Replacement project is underway

**Campus Network**

* Centrex Replacement NMDF, SMDF zones (construction)
* Backbone updates - Investigating requirements and implementation standards
* New alternate fiber route Main Campus to CVM - waiting on MCNC
* Firewall Service Module migration has started.
  + EB3
  + Public Safety
  + Avent Ferry
* VPN evaluation has started - looking at Palo Alto, Juniper, Cisco
  + Currently cisco is the only vendor listed with a Linux client in production

**NIST**

* 3 new projects to be added to environment
* 92% complete towards compliance with 3 tasks remaining

**Data Center**

* COLO planning in progress (current focus on gathering inventory)
* DC2 - planning study started for new elect/mech systems
* Layer 1 (fiber) upgrade for DC2 and COLO - will issue RFP
* Updating DC Guidelines and Procedures
* DC1/DC2 FY17/18 critical projects in planning

**Access Layer**

* Big Layer Two (BLT) project - academic buildings in progress
* Access layer IOS upgrades - Mass 3650 updates were completed. Some stragglers remaining.
* NAC replacement POC in Wolf Village A building
  + Replaced 2 closets worth of Cisco switches with HP/Aruba switches - completed successfully
* Installation of ASR 920 routers in routed buildings:
  + Talley - delayed,
  + Campus Police - Completed
  + OSCAR Lab - delayed,
  + DC0 - target of 2/18/18

**Cellular/mobile**

* Indoor - Spidercloud - design started
* Outdoor - Small Cells - Real Estate working on standard agreement for all carriers

**IT Strategic Planning**

* Focus on service portfolio
* Governance team is close to moving to implementation phase
* Space/Tech initiative has an internal draft

**Budget**

* Primary focus for 17/18 remains upgrades to aging access layer
* 10% increase next year to reach sustainable funding - only took 13 years :)

**Unified Communications**

* Partner Updates: UNCG, App State, NC A&T, Pembroke
* Life safety infrastructure installation
* UC Suite Upgrade to 11.5
  + interactive audio conferencing

**Systems & Development**

* Infrastructure Upgrades
  + Moved all servers to new Satellite 6 environments
* Tools Updates
  + VictorOps -- cloud event management
  + AKiPS -- thresholds and alerts
* Development
  + Ansible for bulk conf change
  + PCI validation

## Wireless

* Waiting on trial unit and pricing for next gen AP
* Added additional routers to increase capacity
* Looking to move to 4 large subnets for wireless users per manufacturer’s recommendation
* [Classroom Coverage](https://docs.google.com/spreadsheets/d/1EM_YfPCHXV7BNHRdlUaj0_x6E75tMZblSppfhlmfJgQ/edit#gid=2136708155)
  + [First 15 classrooms](https://docs.google.com/spreadsheets/d/17DqHC-w0pF1qRnFHFBcmOam1onzsftle29JahvTPm_o/edit#gid=1200782244) (10 operational, 5 in construction)
  + Priority list for 110 classrooms
    - Look at tophat, moodle, larger rooms first
* Beacon focus group met on 9/11
  + Low hanging fruit is to look at creating a database for folks to voluntarily share info about existing beacons
  + Follow-up meeting rescheduled for Feb 27th 3-4:30, AFTC 106
* EDUROAM (secure SSID)
  + Working on SecureW2 documentation, collaborating with Walk-in Center and Help Desk
  + Would like to be ready for new student orientation
  + 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/)

### 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” – what is it and who pays
* Funding for server rooms, higher capacity (10Gbs ports), etc.

## Upcoming Meeting Dates

* Next CTAG Meeting – March 1, 2018 - 9:30, AFTC 106