# Communication Technologies Advisory Group

Agenda

# March 1, 2018

# **Welcome**

**New Employee**

* Enterprise Architect - Tony Copeland, started today

## CATV

* Repair work in five dorms this summer

**MDFs**

* NMDF generator replacement

**Infrastructure Records**

* Classroom maps being reworked
* Fiber inventory in progress

**Building Infrastructure Projects**

* In construction: CVM Main, Robertson, Nelson
* In design: Schaub, Kilgore, Brooks, Dabney, Kamphoefner, Lang & Comp Labs

**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.
  + Avent Ferry - discussions with EAS are underway
  + Public Safety - Scheduled for late March
  + EB3
* VPN evaluation has started - looking at Palo Alto, Juniper, Cisco
  + Currently cisco is the only vendor listed with a Linux client in production
  + Cisco AnyConnect Licensing model has changed drastically, for the good

**NIST**

* Short term SURE (secure university research environment) environment is there, long term environment is pending

**Data Center**

* State auditors seem to have taken an interest in Poe
* COLO planning in progress (current focus on gathering inventory)
* DC2 - study in progress for new elect/mech systems
* Layer 1 (fiber) upgrade for DC2 and COLO - finalizing 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 - 3650 updates for stragglers remain
* Installation of ASR 920 routers in routed buildings:
  + Talley - delayed,
  + Campus Police - Completed
  + OSCAR Lab - delayed,
  + DC0 - target of 2/18/18 - Completed

**Cellular/mobile**

* Indoor - Spidercloud - design started on “phase I” deployments <https://docs.google.com/spreadsheets/d/1daic4iHUd2thrJUQWXu4qh0ho9mE9GhokGRHsOnD30k/edit?usp=sharing>
* Outdoor - Small Cells - Real Estate working on standard agreement for all carriers - meeting this Friday

**IT Strategic Planning**

* Focus on service portfolio
* Governance team has issued report and is moving to mechanics phase
* Space/Tech initiative has an internal draft

**Budget**

* Continuing to communicate with various stakeholders regarding increase

**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 Avamar backup
* 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
* Have paid for professional services to help upgrade controllers to 8.x code - timeline coming soon
* Looking to move to 4 large subnets for wireless users per manufacturer’s recommendation
  + Subnets have been created and AFTC has been moved to new subnet
* Classroom wireless
  + [Classroom Coverage](https://docs.google.com/spreadsheets/d/1EM_YfPCHXV7BNHRdlUaj0_x6E75tMZblSppfhlmfJgQ/edit#gid=2136708155) - current list
  + 96 out of 238 110-classrooms remain (26 in design/construction)
* Beacon focus group met on 9/11
  + 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/)

**Large Data Sets**

* COS (and others) have need for some large (multi TB) dataset downloads from external sites (eg super computing centers) - existing connections/methods are inadequate
* Internal transfers are also increasing - instrumentation to compute., local data store to data center, etc.

### 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 – April 5, 2018 - 9:30, AFTC 106