# Communication Technologies Advisory Group

Notes

# March 1, 2018

Present: Ed Rogers, Franklin Finch, Shawn Dunning, Greg James, Tony Copeland, Mark Williams, Debbie Carraway, Chris Allen, Chris Eichman, Leslie Dare, Kevin Lee, Josh Gira, Keith Boswell, Josh Jury, Greg Sparks

# **Welcome**

Thanks Debbie for the Donuts

**New Employee**

* Enterprise Architect – Greg James introduced new employee that started today-Tony Copeland

## CATV

* Repair work in five dorms this summer-Per Housing we are waiting on pricing from Spectrum

**MDFs**

* NMDF generator replacement-information back regarding pricing to replace

**Infrastructure Records**

* Classroom maps being reworked
* Fiber inventory in progress

**Building Infrastructure Projects**

* In construction: CVM Main, Robertson (almost done) Nelson
* In design: Schaub, Kilgore, Brooks, Dabney, Kamphoefner, Lang & Comp Labs
* Construction almost ready to start Schaub and Kilgore

**UPS -** Replacement project is underway-on track to finish this fiscal year

**Campus Network**

* Centrex Replacement NMDF,(mostly done) SMDF zones (construction)
* Backbone updates - Investigating requirements and implementation standards
* New alternate fiber route Main Campus to CVM - MCNC is waiting on conduit from Google- 440 widening project will infringe more and more on NC State campus property
* 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 (Cisco has competitive pricing)

**NIST**

* Short term SURE (secure university research environment) environment is there, long term environment is pending-Comtech’s role is more architectural.

**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 report is out in its final version
* Governance team has issued report and is moving to mechanics phase

Ctag possibly advisory team. Eric Sills will be invited to Ctag meetings to determine how to move forward

* Implementation Team working on interim report that will walk through all the initiatives that show highlights of what’s been accomplished
* Service Porfolio-Evergreen consultant coming in March
* Space/Tech initiative has an internal draft

**Budget**

* Continuing to communicate with various stakeholders regarding increase-Greg asked everyone to talk with their business folks regarding increase

**Unified Communications**

* Partner Updates: UNCG, App State, -newest schools (NC A&T, Pembroke)
* Life safety infrastructure installation
* UC Suite Upgrade to 11.5
	+ interactive audio conferencing (adds the ability to set up security features)

**Systems & Development**

* Infrastructure Upgrades
	+ Moved all servers to Avamar backup
* Tools Updates
	+ VictorOps -- cloud event management-in progress of deploying
	+ AKiPS – network modeling tool-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-major upgrade is pending
* 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
* Now tracking wireless metrics as part of overall [monthlinnovativey 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