

CSU Subnet Managers Meeting

Wednesday, Sept. 16, 2015

Less than 90 degrees,
must be Fall!

Agenda

- ▶ ACNS Updates - Scott Baily
- ▶ Office 365 Update - Dave Hoffman
- ▶ Campus Project Managers Users Group - Dave Hoffman
- ▶ VOIP Update - Kyle Haefner
- ▶ Adobe Creative Cloud Renewal - Kevin Nolan
- ▶ Canvas Update - Kevin Nolan

Agenda (cont.)

- ▶ Security Update - Steve Lovaas
- ▶ Networking Update - Greg Redder

We'll get you out of here by 11:15 so you have the opportunity to attend the president's fall address and picnic.

(We've limited Greg to 30 slides ;)

ACNS Updates - Scott Baily

- ▶ Advisory Committee for Academic Applications (ACAA)
- ▶ Campus Cloud Infrastructure Upgrade
- ▶ Internet2 Azure Services
- ▶ ISTeC Data Subcommittee



Advisory Committee for Academic Applications (ACAA)

Members

- ▶ Bryan Carney
- ▶ Bryan Gillispie
- ▶ Neal Lujan
- ▶ Terri Pecora
- ▶ Ed Peyronnin
- ▶ Ron Splittgerber
- ▶ Scott Baily (chair)
- ▶ Pat Burns and Dave Hoffman participate as ex-officio members

About ACAA

- ▶ An IAC Subcommittee (see <http://www.acns.colostate.edu/IAC>)
- ▶ Committee's charge will be available, as well as all meeting minutes
- ▶ Serving as a “gatekeeper” for new project requests, as per a major recommendation from a Spring 2015 external review of ACNS
- ▶ Working on an online project request form and corresponding workflow
- ▶ Questions?

Campus Cloud Infrastructure

- ▶ Bug was identified that resulted in two very significant FY15 outages
- ▶ Underlying storage has been “stable” since
- ▶ Investigating options moving forward

Internet2 Net+ Azure Services

- ▶ Net+ has negotiated terms that waive data egress charges
 - ▶ Very significant savings
- ▶ Contracting Services worked with I2 on Master Services Agreement
 - ▶ Would make it easier to include other Net+ services, including Azure
- ▶ Dell is CSU's reseller for Microsoft EES licensing
 - ▶ Dell and MS are still working through their piece of the agreement
- ▶ Hoping that this will be resolved soon

HPC Activities

- ▶ ITeC Cray recently upgraded
- ▶ Moving forward with the “condo model”
 - ▶ Every year, build a new cluster
 - ▶ Researchers have the option of purchasing nodes, home storage, etc
- ▶ CSU and CU were awarded \$4M grant from NSF
 - ▶ Shared 400+ TFLOP system
 - ▶ To be housed at CU
 - ▶ RFP is about to be released
- ▶ ITeC Research Computing Committee recommends additional support staff
 - ▶ CSU has .75 FTE while peers have between 4 and 15

ISTeC Data Management Committee

- ▶ Being re-formed
- ▶ Recently lost the chair and two committee members
- ▶ Resuming activities next month

Electric Vehicle Project



Questions or comments for me?

The slide features a white background with abstract green geometric shapes on the right side. These shapes include overlapping triangles and polygons in various shades of green, ranging from light to dark. A thin, light gray line also extends diagonally across the right side of the slide.

ACNS/Telecom Projects - Dave Hoffman

Project Stats

- ▶ 146 Active Projects
- ▶ 11 in Queue
- ▶ 4 New Requests

- ▶ Starting a new process for requesting projects

Office 365 Migration

Migrated from Exchange to Office 365

10,700

Mailboxes Still on Exchange

6000

64% Complete

Complete by October 9*

Migrating Colostate.edu MX Record

- ▶ Complete by Nov 1
- ▶ Outbound Mail Servers smart hosting to SPAM
Cannons need to be directed to
`smtp.colostate.edu`

Project Managers User Group

- ▶ Forming a Group to Share PM Practices
- ▶ Possibly for a PMI Chapter
- ▶ Meeting in Oct/Nov
- ▶ Looking to review larger PM tools

VoIP Stats - Kyle Haefner

- ▶ Phones
 - ▶ Previous 5,105
 - ▶ Current 5,634
- ▶ 1,884,612 calls in 2015
- ▶ 100% uptime since 06/12/2014

**The first VoIP call was made in 1974,
on the ARPANET**

Upcoming Buildings

| Building Name | |
|-----------------------|------------------|
| ARBL | October 2015 |
| VTH/DMC | Q4 2015 |
| CEMML | February 2016 |
| Weber | March 2016 |
| GSB | April 2016 |
| Yates | May 2016 |
| Engineering Buildings | Q3 2016- Q4 2016 |
| | |
| | |
| | |

Reminders

- ▶ Moving Phones - Don't!
 - ▶ Telecom will move them for FREE
 - ▶ We now send a friendly email 😊
- ▶ No Building Power = No network = No Phone



Additional Projects

- ▶ User editable Phone Tree audio
- ▶ Call Center
- ▶ Group call out
- ▶ SIP Trunking
- ▶ Push alerts to phones
- ▶ Multicast Paging/Push to Talk

Adobe Creative Cloud Renewal

Kevin Nolan standing in for Diane Noren.

- ▶ In Process
- ▶ Cost Staying the Same.
- ▶ Device License- \$175.00
- ▶ Named User -License-\$250.00

Canvas Update - Kevin Nolan

- ▶ Approx. 3,000 fall courses in Canvas.
- ▶ 8 courses in RamCT! (5 instructors)
- ▶ Firefox and Chrome preferred browsers
 - ▶ Issues with Safari and IE.
- ▶ Wholesale creation of spring courses by end of Sept.
 - ▶ Instructors need to be assigned in ARIES to see.
- ▶ RamCT and Spring 2016
 - ▶ Used for incompletes and to retrieve content.
 - ▶ End of May 2016 - begin process to decommission RamCT.

ACNS Middleware - Randy Miotke

- ▶ Grouper groups management
 - ▶ An enterprise access management system designed for the highly distributed management environment common to universities
 - ▶ Facilitates collaboration - You can set up groups, roles, and permissions for many purposes
 - ▶ Proof of concept in-progress
<http://www.internet2.edu/products-services/trust-identity-middleware/grouper/>

ACNS Middleware

- ▶ Grouper diagrams

- ▶ [Grouper high-level concepts](#)
- ▶ [Grouper architectural diagram](#)

- ▶ Grouper

- ▶ Proof of concept in-progress.

Hope to have something in November.

- ▶ Project page:

<http://www.internet2.edu/products-services/trust-identity-middleware/grouper/>

Upcoming changes to eID

- ▶ Authentication for eID creation and reinstatement process
 - ▶ Message with one-time use , expiring token sent to e-mail address on record with Admissions, HR, Semester at Sea
 - ▶ Self-service recovery for those that have an expired token
- ▶ Forgotten password help
 - ▶ One-time use , expiring token sent to recovery e-mail address supplied in eID create process or eID self-service
 - ▶ Alternate method of recovery for edge cases where e-mail can't be delivered
- ▶ Two-factor authentication for eID Admin
 - coming soon!

ACNS Middleware

- ▶ Shibboleth SSO
 - ▶ Identity Provider version 3 proof of concept in process
- ▶ Google accounts
 - ▶ An increase in compromised accounts sending spam

Security Update

Steve Lovaas, ACNS

Security Issues

- ▶ Security staffing
- ▶ Endpoint protection
- ▶ PCI compliance
- ▶ SSL gateway
- ▶ Broader vulnerability scanning
- ▶ Awareness & training

Security Staffing

- ▶ Replacing Scott Dawson
 - ▶ IT Security Analyst position - looking at resumes
- ▶ Added Angie Asmus
 - ▶ Focusing on PCI compliance

Endpoint Protection

- ▶ SCEP is the new SEP
 - ▶ Symantec contract ended in June
 - ▶ MS System Center Endpoint Protection (SCEP)
 - ▶ ACNS distributed install/uninstall template
- ▶ Many have switched already
 - ▶ Home, unmanaged users lagging
- ▶ Q: Where do *you* feel we are in the transition?
- ▶ Next step: management of AV

PCI Compliance

▶ PCI Team

- ▶ Collaboration with BFS
- ▶ Funding model being approved
- ▶ Open forum October 7th, LSC (invitation coming)

▶ PCI-DSS v3

- ▶ “Business as Usual”
- ▶ We dodged a bullet on e-commerce (for now)
- ▶ Looking for cloud e-commerce host
- ▶ TLS 1.2 baseline (June 30, 2016)

Next PCI Open Forum: Oct 7, 2015, 1 pm,
LSC Grey Rock Room

SSL Gateway

- ▶ Pulse Secure
 - ▶ New company, transition hurdles
 - ▶ Moving to minimum TLS 1.1 over winter break
 - ▶ Minimum TLS 1.2 by next summer
- ▶ Pulse replacement for Network Connect
 - ▶ Delayed by company transition
 - ▶ Will come over winter break
 - ▶ Two-factor authentication available soon

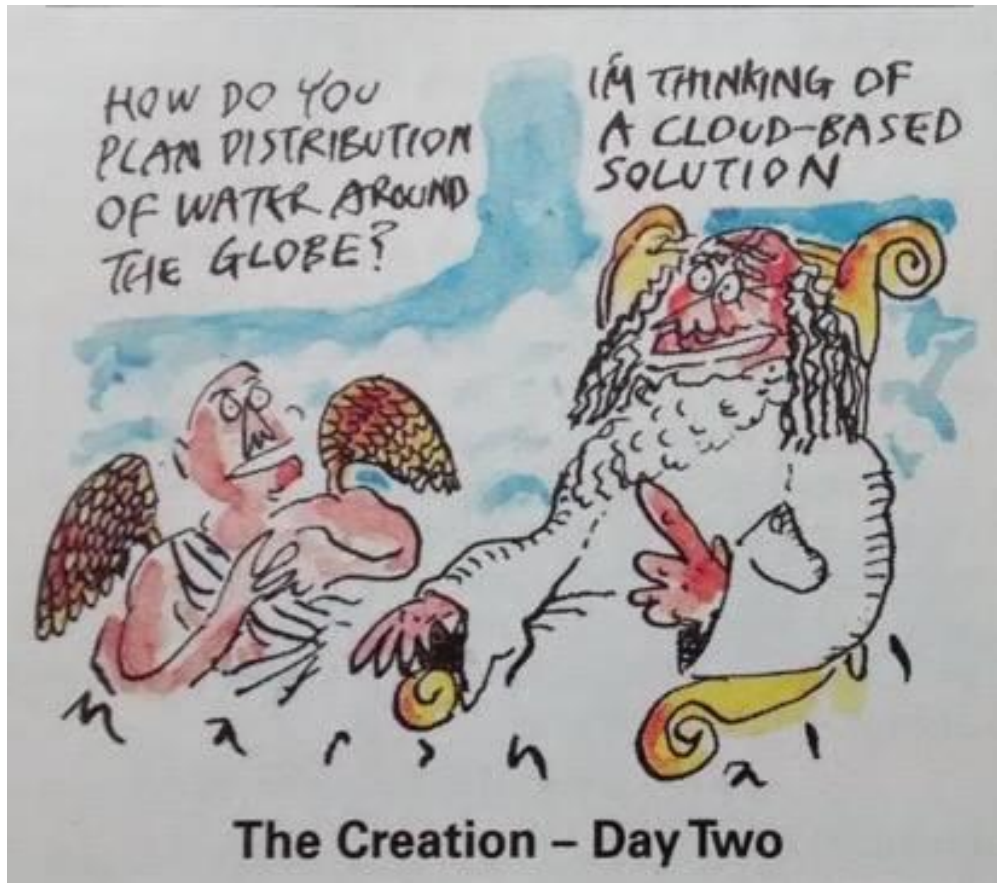
Broader Vulnerability Scanning

- ▶ We've been trying it out
 - ▶ 2 months of scanning subnets 1-19, no complaints
- ▶ Expanding starting in October
 - ▶ Monthly scan of everything, email just Critical/High
 - ▶ Standard IT Security Policy exemption request form

Awareness & Training

- ▶ SANS Securing the Human
 - ▶ Online security training & awareness refresher
 - ▶ Discounted through REN-ISAC partnership (1200 seats)
 - ▶ Starting with PCI, compromised eIDs, and by request
- ▶ October: Security Listening Tour
 - ▶ Learn concerns, pain points, local risks
 - ▶ Scheduling open drop-ins with colleges, large admin units
 - ▶ Individual chats, smaller groups - just let me know

NOC (Network Operations Center) Greg Redder



Agenda

- ▶ Outage!
- ▶ Campus bandwidth
- ▶ Network upgrades
- ▶ Wireless (of course!)
- ▶ Speedtest

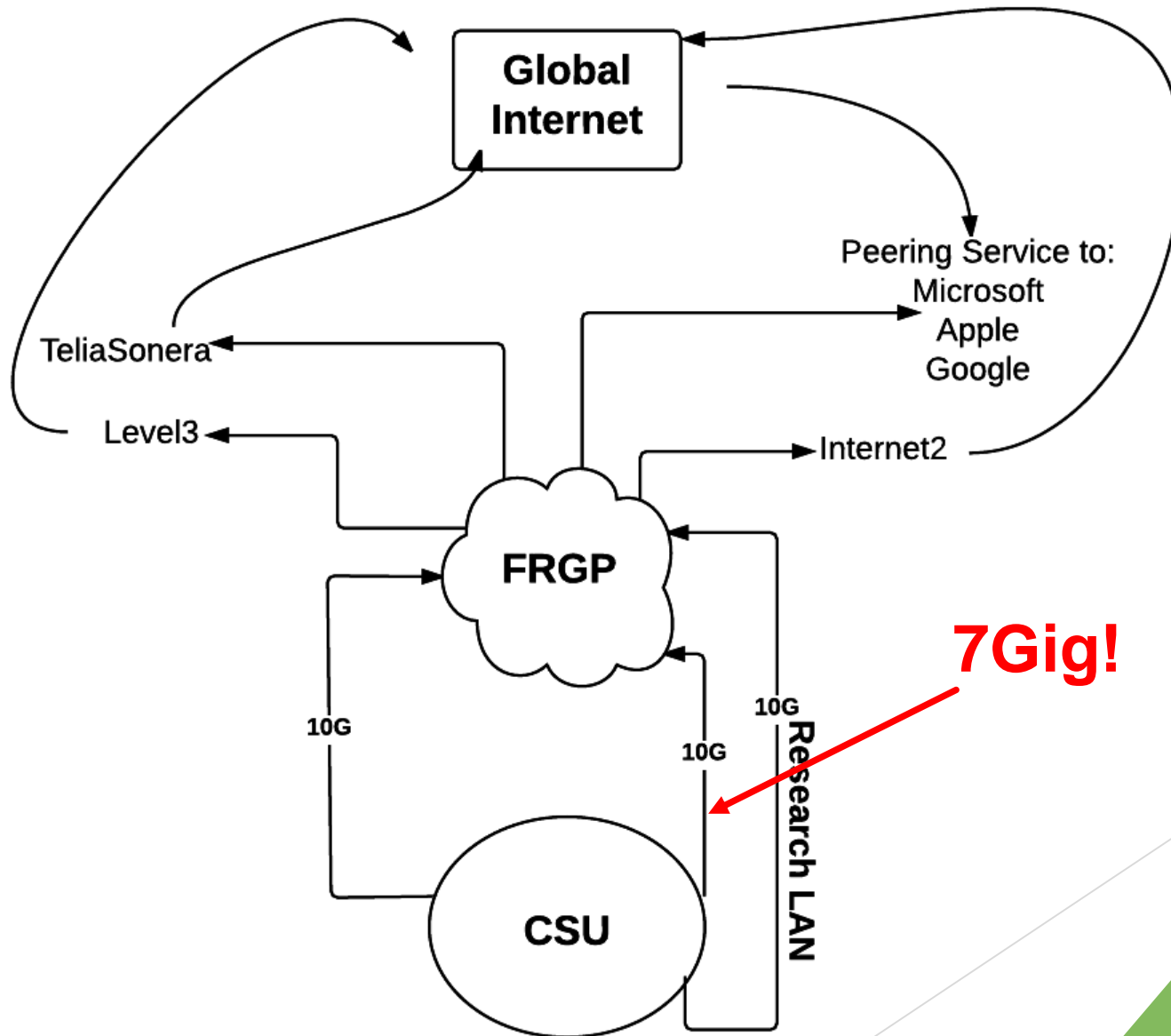
“Great” Internet Outage of 2015

100% uptime for Internet connection for years,
until...

**Tuesday, June 23, 2015:
12:15AM-2:15AM**

(100% uptime since then though!)

Campus Bandwidth



Campus Bandwidth

(April 2015)

- ▶ Main Campus Wired Connections: 31,874
- ▶ Main Campus Wireless: 54,769

Network Upgrades Recently Completed

- ▶ ARBL (CVMBS)
- ▶ AECOM (Engineering)
- ▶ UCA Addition (HHS)
- ▶ Ag Ed Addition (AgSci)
- ▶ Rockwell (COB)
- ▶ Bayfarm Horticulture Center (AgSci)

Network Upgrades Pending

Q3:

- ▶ GSB
- ▶ Weber
- ▶ Deer Facility and Foxhound
- ▶ Voc Ed

Q4:

- ▶ CVMBS @ South Campus
- ▶ Yates

Network Upgrades Construction

- ▶ South College Parking Garage
- ▶ Chemistry
- ▶ Biology
- ▶ Aggie Village
- ▶ New Medical Center
- ▶ Stadium



Wireless Upgrades

- ▶ **GA Classrooms, Morgan, TiLT:**
 - ▶ All have 802.11ac capability

- ▶ **Buildings with GA classrooms:**
 - All have 5GHz capability
 - All being addressed for any “holes”

- **Non GA buildings:**
 - 2.4GHz coverage nearly completed in all buildings
 - Going back and trying to address “holes”

Wireless

“Okay, now everyone hit ‘enter’” problem!

Clark A101 debriefing:

- Use csu-eid (csu-guest is not for production)
- Use 5GHz
- Set expectations accordingly

Wireless Issues

Current top issue:

- ▶ Macs continually reconnecting!
ACNS modified configuration tool:
<http://www.acns.colostate.edu/wireless>

Relay issues through:

- help@colostate.edu
- 491-7276
- Central IT Help Desk at Morgan Library.

Speedtest

speedtest.colostate.edu:7123

YOUR TEST RESULTS

SUMMARY DETAILS ADVANCED

UPLOAD SPEED
395.82 mb/s

DOWNLOAD SPEED
484.56 mb/s

Network latency: 1 msec round trip time
1 msec

[More information about NDT](#)
[More information about Measurement Lab](#)

TEST AGAIN

SOON TO BE IMPROVED

UPSs

- ▶ MDF: supported centrally
- ▶ IDFs: departmental choice
 - ▶ Department supplies batteries (2-3 year cycle)
 - ▶ Department supplies standard mgmt. card
 - ▶ ACNS will install and monitor

Thank you. noc@colostate.edu

Angie Asmus (security)

Steve Banghart (wireless)

Zack Davis (wireless)

Richard Duffy (switching/routing)

Jim Farnell (wireless)

Nic Garrison (switching/routing)

Kyle Haefner (VOIP)

Steve Lovaas (security)

Greg Redder (manager)

Robert Remsik (switching/routing)

Trent Shane (switching/routing)

Questions?

Enjoy the president's fall address and picnic.

► Next Meeting:

Wednesday, November 18, 2016

10 am - noon

LSC 372 - 374