CSU Subnet Managers
May 24, 2017

Mow your Snow!
Agenda

• IS Update – Josh Clark

• ACNS Project Updates– Dave Hoffman

• Windows Update – Joe Volesky

• Middleware Update – Randy Miotke
Agenda (cont.)

• RAMtech/Licensing – Diane Noren

• Security – Steve Lovaas

• Network/Telecommunications – Greg Redder
IS Update

Josh Clark, Information Systems

• ODS Web Accounts

• Banner Web Accounts

• CampusM
ACNS Summer Projects

-Dave Hoffman, ACNS
Corporate LMS
Using Brightspace from D2L

• Goals
• One Stop Shopping for Faculty/Staff Training Needs
  – Skills Development
  – Career Development
  – Compliance
• Phase I – By July 15
  – Training & Organizational Development
  – Technology Training Center (Fall Ramp Up)
• Phase II – By Sept 15
  – Other Departments current on the TTC Registration Site
• Phase III – By Dec. 31
  – Other Training including Environmental Health, RICRO, etc.
ECHO360 Upgrade
Upgrading to Cloud

• Goals
  – Unlimited Cloud Storage
  – Analytics
  – Better Mobile Platform

• Impact
  – All Echo Appliance will need to point to the new server
  – All Personal Capture Users will need to download new software from echo360.org

• Timeline
  – Migration has begun: All Personal Captures and Last Two Years of Course Content
  – Live on New Servers Aug 1.
  – Training during Fall Ramp Up
Windows Group

Joe Volesky, ACNS

• MS Licensing
Licensing

Microsoft

• EES- Enrollment for Education Solutions
  – CSU’s current subscription based model
  – Renews June 30 for new 3-year contract
  – FTE counts spread sheet distributed at IAC, these counts are for the following products:
    • Desktop Bundle, Core
      = Office+Windows+Core CALs
    • Desktop Bundle, Enterprise
      = Office +Windows +Enterprise CALS
    • Office only + Core CALs only
  – Note: There is no self-reporting of FTEs for the purpose of licensing the above 4 products – IR data rules!
Licensing

• Windows Server and System Center
  – Core-based licensing
    – All physical cores in each server are required to be licensed.
    – Each physical processor is required to be licensed with a minimum of 8 physical cores.
    – Each physical server is required to be licensed with a minimum of 16 physical cores.
    – Core licenses are sold in packs of two (i.e. 2-pack core licenses).
    – Minimum purchase for any physical server: 8 x 2 core packs
    – E.g., 2-socket, 12-core server: 24 total cores, must license each core, so: 12 x 2 core packs
    – Core Infrastructure Suite = Windows Server + System Center license, core-based licensing, should be discounted (we’re waiting for quotes for this product)
Licensing

• Feedback that we need:
  – Tell us the distribution of Desktop Bundle Core vs. Enterprise in your area (using FTE counts provided to IAC reps)
  – If you are only licensing Office+CALs, we need to know that, and whether that applies to all of your FTE, or if you’re licensing some FTE one way and some another way
  – For all other products (Visio, Project, SQL Server, Windows Server, System Center etc.): self-provided counts for each product

• Time is of the essence – we need your counts as soon as possible - by Friday May 26, 2017
Licensing

- Adobe Creative Cloud-reminders
  
  Device Licenses
  
  – If you are rebuilding Labs and renaming computers
  
  You must send an email to
  
  Diane.Noren@colostate.edu

  1. name of old computer – remove creative cloud
  2. name of new computer- Creative cloud is to be installed on

  - If the old computer is not removed from the portal you are taking someone else's license.
Licensing

- Matlab - site license being discussed
- Acrobat Pro - same cost as last year.

Questions
Middleware

Randy Miotke, ACNS

• eID self-service updates
  – In testing
  – Deploy to production last part of June

• WebAuth
  – End of support – 7/1/2017
  – Service ends on 12/31/2017
Middleware

• Web accessibility compliance sessions for web managers and developers
  – Two sessions
  – Email coming soon

• Brief survey on web accessibility to web managers
Licensing
Diane Noren, RAMtech

• Microsoft EEs

• Adobe
Security: How you can help

Subnet Manager Meeting
24 May 2017
Steve Lovaas, Information Security Officer
How you can help us upgrade our security

• Weak Servers
• Weak Authentication
• Excessive Open Control Ports
• Weak Encryption
• Weak Web Apps

Pick a tactic in one of these areas, let us know, get started!
Weak Servers

• Old/unpatched OS, known vulnerabilities, weak configs
  – Respond to Nessus scans, BitSight alerts
• Finally kill all XP, 2003, SQL 2005
  – I’m going to block these as I see them (nobody should see them)
• Retire Win7 and 2008r2 by Summer 2019!
  – A year early – let’s talk if you need help
• Finish move away from weak infrastructure apps
  – Awareness campaign in October on this theme
Weak Authentication

• Duo
  – Opt-in starting in July
  – Required use will start with a few critical central services (HR, etc.)

• Shibboleth
  – End of eID WebAuth
  – Move away from LDAP and Windows integrated authentication

• Windows best practices
  – Credential theft/re-use: Pass-the-Hash, etc.
Weak Encryption

• Web server
  – Do what you can to get an A: https://www.ssllabs.com/ssltest/
  – InCommon certs rather than self-signed
  – The Logjam vulnerability (CVE-2015-4000) – weak ciphers

• SSH
  – Upgrade your SSH server
  – Analogous to the SSL issues we’ve been addressing

• Mail
  – Be ready to help evaluate/pilot mail encryption tools
Weak Web Apps

• Fix outdated Apache, IIS, CMS, PHP
• HTTPS everywhere (see https://www.colostate.edu)
  – See “Weak Encryption”
  – Does your server support TLS 1.2? Does it need SSLv3?
  – Firefox enabled TLS 1.3 in February – are we ready?
• If you have a web server in mainsite...
  – Consider the ACNS F5 load balancer
  – Web Application Firewall coming soon
Summary

• So again...
  – Pick one of these areas
  – Let us know what you’re working on
  – Make some progress
  – Let us know how it goes
Network & Telecom Operations
Network & Telecom Operations

• Construction
• Core/border connections/speeds
• Multicast
• Edge switch ports
• Wireless
• Data Centers for Colleges
• Telecom
Construction

Active:

- New Stadium (West side: network installed)
- New Chemistry (Network installed)
- New Biology (Network installed)
- New Health Center (Network installed)
- Shields Underpass

Started:

- TMI (started!)
- WCNR Addition (started!)
Core/Border connections/speeds

Border:

- New border routers coming this summer.
- Looking to 100G FY19!
Core/Border connections/speeds

Dual 10G upgrades completed Spring 2017:

- VTH MDF
- DMC
- Yates
- BSB (upgrades from MDF to HHS DC)
- Gifford
- Aggie Labs
- Chemistry
- Green Hall (almost done)
- Gibbons
- NESB
- Rec Center
- EECL (1 10G link due to fiber constraints)
Core/Border connections/speeds

Dual 10G upgrades due by end of FY17:

- Shepardson
- USC
- A/Z
- Clark A
- Hartshorn
Multicast

Multicast on CSU campus best practice:

• 239.82.subnet.node

  For example: 239.82.201.x
Edge switch ports

- Building or remodel projects need to pay for any switch or modules necessary for their project.
- Large moves of people around by a department will also necessitate the need for the department to pay for the switch or module.
Edge switch ports

- If it's neither of the previous and it's just due to normal growth, then we do the following:
  - Look for any 0 port counters and remove those that have been dormant for over 90 days.
  - Make sure all computers are connected behind phones where a desk and a phone exist in the same space.
  - We can install one of the older but supported PoE switches out of the general switch inventory. This will probably be 100M edge ports. If the department wants something with higher speed or PoE+, they'll have to pay for that.
Edge switch ports

In the MDF, we can use up to 50% of available space on modules A/B for desktop systems with NOC approval. So, that might help some MDF locations that run out of ports.
UTFAB approves FY19 budget:
300 Wave2 APs for General Assignment Classroom buildings:
  - Eddy
  - Engineering
  - BSB
  - Chemistry
  - Rockwell
  - Plant Sci
  - Wagar
  - AZ
  - Education
  - Clark
  - Morgan
  - TiLT
Wireless

csu-eid:
  • Same but different: csu-eid appears in Housing and Campus buildings the same, but network & support are different.

csu-guest:
  • Bandwidth restriction removed in many campus buildings for Summer events.
    – students/staff/faculty – use csu-eid or eduroam!
Wireless

Be a good WiFi citizen campaign...
Data Centers for Colleges

Dual 10G links directly from core to a “demarcation switch”:

– College purchases 10G link optics, demarcation switch
– Multiple vlans trunked from core to demarcation switch
– One data center per college per campus*

*Excluding E7
Wireless

• Facebook:  www.facebook.com/csuwireless

• Twitter:   @CSUWireless
Telecom

VM PIN resets:

– Transitioned to HelpDesk
– 491-7276
– help@colostate.edu
Telecom

What's that?
It's an old phone.
Weird. How does it take pictures?
VoIP Update/Upcoming

- Message Waiting Indication: should be fixed.
- Continued work on presence: Hope to have an update in the coming weeks.
- Building POE project
  - Turn off power to ports that don’t need it.
- Authorization codes: Working on servers to replace the Nortel. Voice prompt instead of “stutter dial tone”.
- 7599 Phones installed!
Telecom

Reminders:

– Moving Phones – Don’t!
  • Telecom will move them for FREE
  • If you unplug phone from wall to reboot it – plug back into same jack, please.

– Move Policy:
  • Phones can only be moved by ACNS/Telecom. To instigate a phone move by ACNS/Telecom, a service order must be placed.
  • A $56 fee will be assessed for each phone that was moved without a preceding service order.
  • Turning off POE (Power over Ethernet) to non-phone ports.

– No Building Power = No network = No Phone
Thank you.

Network Operations
&
Telecom Operations
Next Subnet Managers Meeting

Wednesday, September 20, 2017
10 am – noon
LSC 308 - 310

Enjoy your Summer!

...and don’t worry...Kevin will be back next time!