CSU Subnet Managers
September 27, 2017

We meet again!
Agenda

• IS Update – Josh Clark

• Office 365 – Lance Baatz

• Middleware Update – Randy Miotke

• RAMtech/Licensing – Diane Noren
Agenda (cont.)

• Canvas – Kevin Nolan

• Security – Steve Lovaas

• VOIP – Kyle Haefner

• Network/Telecommunications – Greg Redder
IS Update

Josh Clark

- KFS
- HR
- Banner

- Sept 13 Birthdate data incident debrief
Office 365 - Spam Filtering
Lance Baatz, ACNS

Exchange Online Protection
Assigns SCL of 1-9

SCL 9
QUARANTINE
HOLDING
AREA
(High Confidence Spam)

SCL 1-4
SCL 5-8

Office 365
Favorites
Inbox 54
Sent Items
Drafts
Contoso Admin
Inbox 54
Eirate
Sent Items
Deleted Items 1
 Junk Email
Notes
Office 365 – Exceptions to Spam Filtering

• Centrally managed transport rules for known good senders (SCL -1)
• Addresses/domains added to individual user Safe Sender lists
  – http://help.mail.colostate.edu/tt_o365_alloworblocksender.aspx
• Email forwarded to external or non-Exchange mailbox
• Junk E-mail filtering settings changed or disabled by user
Office 365 – Quarantine Options (SCL 9)

• Quarantined messages retained 15 days

• Self service release: http://help.mail.colostate.edu/tt_o365_release-quarantine.aspx

• Testing: Generate daily summary e-mail showing quarantined e-mail
Office 365 – Other Topics

Microsoft Teams

• PowerShell Admin Coming Soon
• Rumored merger with Office 365 Groups
• Currently Failing Accessibility Testing
• Test Teams Sites Available
Office 365 Questions?
eID – Randy Miotke, ACNS

• Self-service update
  – Final testing and bug fixes
  – Mobile friendly
  – Release to production at 6:00 am on Tuesday, October 3

• WebAuth end of life December 31, 2017
  – All WebAuth functionality will be removed from eID production.
  – Websites still using WebAuth will no longer be able to retrieve the WebAuth form.
Shibboleth

• Signing certificate rollover
  – Test identity provider - 9/28/2017
    • CSU Federation test – no interruption in service
    • Production identity provider - 10/11/2017
      – CSU Federation – no interruption in service
      – InCommon Federation – no interruption in service
      – Point-to-point services – may be interruptions as SP operators change certificates

• Duo two-factor testing
External Identities Pilot

- Pilot with Advancement and the Registrar’s Office
- Authenticate with federated SAML IdP or social provider (Google, etc.)
- Person verification
  - Former students/applicants - Registrar
  - Donors - Advancement
- COmanage provides
  - Entity (person) registry
  - Unique ID for external and CSU users
  - Invitation service
  - Account linking
- COmanage data provisioned to Grouper then LDAP
- Production target Q1 2018
External Identities Pilot

External Identity On-Board Process

- CSU Website determines identity
- Adds CDOmanage Identity
- Updates LDAP from CDOmanage and Grouper
- Identity Admin Application (60 Sec Cron)
- Creates Identity
- Message Queue
- Add Identity Message
- Active Source Bus
- Banker
- HR
- Directory Services (LDAP)
eduPerson Directory

- Upgrade project underway
- New VMs
- New OS
- Extended eduPerson and colostateEduPerson schemas
- LDAP support for Grouper
- Target release Q1 2018
Licensing – Diane Noren

Adobe:
• Creative Cloud
  – Cost the same as last year
  – $250.00 per Named User
  – $175.00 per Device - must have computer name
  – Must notify RAMtech if computer name changes
  – Renewal available now: form on Ramtech website
    Sept. 28 renewal date

• Acrobat Pro
  – FTE based
  – Renews February
  – Estimated cost same as last year
Licensing

• Adobe E-sign
  – Price stayed the same as last year
  – $1.50 per completed document
  – Invoicing in process

• Microsoft
  – EES was renewed July 1.
  – I have not started billing yet.
  – Invoice emails will be sent first week of Oct.
RAMtech

- **Endnote**
  - Renewal notices sent
  - Version 8.0

- **Chem-Bio-Office**
  - Renewal notices sent
  - Chem-Draw 17 just released

- **Mathematica**
  - Renews Nov. 30, 2017

- **SPSS-Amos**
  - January 1 renewal
RAMtech

• Apple
  – iOS 11 released on Sept. 20, 2017
  – Configurator 2.5 new
  – Mac OS 10.13 – High Sierra released Sept. 25, 2017

New IPhone 8 cases available Oct. 1, 2017

• Questions?
Canvas

Kevin Nolan, ACNS

ProctorU

- Selected as campus proctoring solution.
- Much better pricing. Approx. $20 for a student to use for academic yr.
- Requires Chrome extension to work for instructor/student.
- Thoughts on how to deploy to campus computers / labs?
Security Updates

Steve Lovaas
Overview

• Equifax – what to do?
• Status of Pulse/Duo projects
• Demise of CrashPlan Home
• NELNET replacing SIPA for eCommerce
• HTML security headers
Equifax – what to do?

• Don’t fall for scammer sites
• Consider asking for a copy of your credit report
• Consider freezing your credit
• Monitor your existing accounts (bank, mortgage, credit cards)
• Consider filing your taxes early
Status of Pulse/Duo projects

• As soon as the integration of Duo with Shibboleth is complete
• Documentation will appear on ACNS web site
• Opt-in period for Duo
• Use Duo for the Pulse gateway (both remain up for the duration)
• Switch to new Pulse gateway, require Duo in 1st half of 2018
Demise of CrashPlan Home

- Code 42 CrashPlan pushed on campus a few years ago
- Still in business, but re-focusing on enterprise and small business
- Dropping home product
- They suggest Carbonite
- [https://9to5mac.com/2017/08/22/crashplan-home-being-discontinued](https://9to5mac.com/2017/08/22/crashplan-home-being-discontinued)
NELNET replacing SIPA

- eCommerce, mobile payments, event registration
  - Forest Service sticking with SIPA customization
- Roll-out through the year
- Bookstore soft-launch October 2\textsuperscript{nd}
- Contact bfs_pci@colostate.edu if you’re interested
HTML security headers

- BitSight grade “F” for Application Security (HTML response headers)
- Our next best-practice target
- Explained in ACNS web site doc
- [https://www.acns.colostate.edu](https://www.acns.colostate.edu) ➔ “Improving Website Security with HTML Headers”
### Application Security

**Grade Comparison**

in the **bottom 10%**

of all companies

Over the last 60 days

#### Grade Distribution: 758 records

<table>
<thead>
<tr>
<th>Grade</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>good</td>
<td>5.9%</td>
</tr>
<tr>
<td>fair</td>
<td>21.7%</td>
</tr>
<tr>
<td>neutral</td>
<td>0.8%</td>
</tr>
<tr>
<td>warn</td>
<td>22.5%</td>
</tr>
<tr>
<td>bad</td>
<td>42.2%</td>
</tr>
</tbody>
</table>

#### Tags

- Search: 
- All Dates:

<table>
<thead>
<tr>
<th>First Seen</th>
<th>Last Seen</th>
<th>Impacts</th>
<th>Host</th>
<th>Risk Vector</th>
<th>Grade</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>08-02-2017</td>
<td>09-23-2017</td>
<td>✔</td>
<td>you.colostate.edu:443</td>
<td>Application Security</td>
<td>BAD</td>
<td>No security headers are set</td>
</tr>
<tr>
<td>08-01-2017</td>
<td>09-23-2017</td>
<td>✔</td>
<td>ram.mftp.cira.colostate.edu:80</td>
<td>Application Security</td>
<td>WARN</td>
<td>Ineffective headers: Cache-Control, Missing required headers</td>
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<td>✔</td>
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<tr>
<td>08-19-2017</td>
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<td>✔</td>
<td>mollisois-3.nas.colostate.edu:30</td>
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<td>No security headers are set</td>
</tr>
<tr>
<td>08-02-2017</td>
<td>09-23-2017</td>
<td>✔</td>
<td>purchases.essuce.colostate.edu:443</td>
<td>Application Security</td>
<td>BAD</td>
<td>Ineffective headers: Cache-Control, Set-Cookie, Missing required headers</td>
</tr>
</tbody>
</table>
Questions?
VoIP Update

MIRROR PHOTOS

BEFORE IT WAS COOL
VoIP Update/Upcoming

- Fixed issue with calls skipping menus
- Working on call transfer issue.
- Continued work on presence. Vendor has identified the problem. We are testing a new patch
- Call Encryption – Nearly Complete...music on hold issues.
- 8204 Phones
Reminders

• Moving Phones – Don’t!
  – Telecom will move them for FREE

• Move Policy:
  – Phones can only be moved by ACNS/Telecom. To instigate a phone move by ACNS/Telecom, a service order must be placed: Service Order Form.
  – 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
A tcp packet walks in to a bar and says “I want a beer”, barman says “you want a beer?” and tcp packet says “yes, a beer”

@stevie_chambers
Network & Telecom Operations

Network Operations:
– Traffic loads
– Construction
– Wireless update
– Misc.

Telecom Operations:
– Documentation updates
– Data patching
– Removal of analog phone switches
– VOIP
Traffic loads

Note: 3Gbit/sec of this is wireless!
Traffic loads

Border:
- New border routers to be installed in October
- FY19: 100G to FRGP

Edge:
- Duplex mismatch, port errors, etc. – these are being logged (or seen!) now
Traffic loads

Edge (cont...)

New Links:
- 4 10Gbe links to the Medical Center
- 2 10Gbe links to Biology
- 2 10Gbe links to Chemistry Research
- 4 10Gbe links to the Stadium.

Planned upgrades:
- Clark C MDF
- MDF “cleanups”
- IDF “hand me downs!”
Construction

Done!:
- Multipurpose Stadium
- Chemistry Research
- Biology
- Health and Medical Center
- Shields Underpass

Started:
- TMI
- WCNR Addition
- A/Z addition
- Animal Science Addition
Wireless

- Stadium 128 (CSU’s, not counting 5Bars)
- Chemistry 34
- Biology 64
- Medical Center 58
Wireless
“Wave2” building upgrades (FY18)

- Clark (A/C-Wings)
- Eddy
- Plant Science
- Chemistry
- Rockwell
- A/Z
- Natural Resource
- Aylesworth (C-Wing)
- Visual Arts

UTFAB Funded
Wireless
Non UTFAB upgrades

• Going through non General Assignment related buildings and replacing 1st generation access points with 802.11ac Wave1 APs.
Wireless

• Xpressconnect configuration tool no longer available
• AdHoc WiFi networks, printers, etc. are causing interference.
Stadium WiFi

236 AP’s installed (above 50%)
1.718TB Total Data Transferred
4,548 Total Unique Users

900 Mbits/sec peak
2960 Peak Users at 2:56PM MST, (Right before Halftime)
Misc.

• New outage notification system
  – “Outage” vs “Maintenance”
  – No more maintenance completed notes
  – Outages:
    • Announcement of start of outage.
    • Announcement of resolution
    • In between – update to ACNS homepage
After hours business critical outages:

• Primary or secondary network manager has emergency contact procedures for ACNS services.

• Other staff need to contact primary or secondary network managers to escalate to ACNS emergency contacts. *(New outage system indicates this.)*
Documentation updates: Building standards updates

• Network switches must be in secured, communication rooms. Switches not permitted in the open (labs, offices, etc.)

• Buildings are required to have physically diverse paths to the campus fiber infrastructure from the MDF.
Documentation updates: Building standards updates

- Communication rooms must remain accessible via campus master key systems, preferably cardkey.

- Access to rooms cannot be blocked by doors, gates or fences not utilizing campus master key system.

- Cardkey access is advised for all communication rooms.

- Change "com closets" to “communication rooms"
Documentation Updates: Communication Room Agreements

• Revised form for Communication Room access

• Revised form for Communication Room Equipment Installation
  – Includes labeling requirement
Data patching

Currently:

– “do it yourself” model: Network manager purchase and install red data patch cables
– “service order” model: Telecom will do work for free in 3-5 business days

Proposed:

– “Helpdesk” model: 4 business hours, free
Removal of analog phone switches

• ERC - underway
• ARBL
• University Village
• Main SL-100 in Glover (The End!)
Thank you.

Network Operations
&
Telecom Operations
Next Subnet Managers Meeting

Wednesday, November 15, 2017
10 am – noon
LSC 308 - 310