Subnet Managers Meeting

Wednesday, November 28, 2012
Agenda

• Central IT Updates – Scott Baily, ACNS

• Purchasing update – Farrah Bustamante, Purchasing

• IS Application Updates – Alan Hill, IS

• VOIP Update – Dave Hoffman, Telecom
Agenda (cont.)

• RAMtech Licensing / Renewal Update – Diane Noren, RAMtech

• RamCT upgrade update – Kevin Nolan, ACNS

• Security – Steve Lovaas, ACNS

• Network Operations Center – Greg Redder, ACNS

• Technology update Lecture Capture – Rusty Scott, ACNS (11:30)
New Passwords requirements

• Approved at IAC in September

• Steve Lovaas will have more about this in his update
Email Outsourcing

• Committee’s work is largely completed

• Conducted well attended open forum event

• Worked with PR on a publicity campaign

• Finished with pilots and reference checks

• Final report delayed, but should be out in time for the December IAC meeting
Cellular Futures

- Discussed at Operations Committee yesterday
- Going back and looking for opportunities to establish a strategic partnership
- Plan is for both (modest) stipend and corporate plan options
- Until discussions are finalized, no further details are available
NSF Cyber Infrastructure Award

• Notified in September of an award of $486K

• Funding available January, 2013 to:
  Establish research core network, at either 40 or 100 Gbps
  – Also upgrade core backbone network

• Increase off-campus BW from 10 to 30 Gbps

• Establish dedicated, dynamic bandwidth via Internet2’s DYNES infrastructure
InCommon Digital Certificates

• After a few years of trying...

• Finalizing the contract amendment

• Steve Lovaas will have more comments
Staffing Updates

• A big welcome to Erica Burr

• A big welcome back to Adam Warren

• Search for a Unix admin closes today
  – Hope to fill two vacancies from the pool

• Search for a Windows admin is wrapping up
Questions?

- Are most welcome
Purchasing Update

• Farrah Bustamante, Purchasing

• HP

• Cellular futures
IS Application Update

• Alan Hill, Information Systems
VoIP Project Update

November 29, 2012
Currently Installed: 1513 phones
Goal by Dec 31: 1800 phones

Legend for Map:
- Completed
- In Process
- VoIP Certified
Gigabit Options

1. The VoIP Project will upgrade your network switches to 10/100 PoE switches as needed.

2. Departments have the option to upgrade to Gigabit by covering the cost difference for Gigabit switches.
Gigabit Options (cont.)

3. Department will need to purchase/lease the Polycom 560 gigabit phone.

4. NOC will work with department to determine cost-sharing details.

Questions?
RAMtech Licensing Update

• Diane Noren, RAMtech

Licensing

• Microsoft:

  – Setting up an information session in January/February time frame on new products and what has changed.

11/28/2012
RAMTech Licensing

- Mathematica: Renews January 1
- SPSS: Renews January 1.

Reminders:
- Campus Agreement
- Acrobat Pro site license $8.00 per FTE
- Symantec $3.61 per computer
- All need to be paid for. Sending out reminders.

11/28/2012
RamCT Blackboard Update

• Kevin Nolan, ACNS

• End of semester reminders.

• Final grade import.

• SP 9 will be applied Jan 2.
Security items

- eID password policy change
- Datacenter firewalls
- Safe*Connect NAC
- SSL gateway
- InCommon certificates
- eduroam
Pending Password Policy Change

• New eID password policy (coming soon)
  – 15-character minimum, 1 year refresh
  – Dictionary check, no complexity requirements
  – 14 consecutive failures ➔ 1-hour lockout

• All eIDs (including students)
• IT Security Policy language pending IAC approval
• eID password creation site updates in progress
• Staff: rolling implementation (old 6-month cycle)
• Students: Registration Ready
New Datacenter Firewalls

• Two Juniper SRX 5800s now on the network

• Testing performance, policies

• First servers moving by winter break
NAC Expansion

• Expanding to main campus:
  – Guest wireless
  – LSC kiosks
  – Some drop-in labs, checkout laptops

• Should improve guest, ease client config

• Server is installed, testing configs
SSL Gateway

• New OS version (7.2 R6) applied yesterday
  – Most clients will auto-update
  – A few may need manual install of 7.2 software

• Reminder: reducing use of custom URLs
  – Subnet managers now use regular URL too
    • https://secure.colostate.edu
InCommon Certificate Service

- We’re now members!
- Unlimited free certs (including EV certs)
- Working on details of process
- Stay tuned for the ability to request SSL certs
- Personal certs (S/MIME, email) down the road
eduroam

• International EDU visitor WiFi internet access
• We’re now members (dev/test phase)
• “eduroam” SSID at any member institution
• Tying this to FreeRADIUS upgrade
• Interested? Come to the PDI session
  – Monday, January 14th, 11:00 am
A dhcp packet walks into a bar and asks for a beer...

Bartender says, “Here, but I’ll need that back in an hour!”  @brandoncarroll
Agenda

- Traffic Stats
- Wireless update
- Multicast
- Network Operations Policy and CIC updates
- Miscellaneous
Traffic Stats

• Internet Outages: 0

• Exceeding “2G” from the Internet daily
Wireless update

• Additions/upgrades

• csu-net5

• Time Capsules

• Bonjour
Wireless update
Additions/upgrades

• Moby (department funding and UTFAB)
• ERL (building project – under construction)
• Washington School (building project – due soon!)
• Konkel House (building project – due soon!)
• E2 (building project, in progress)
Smaller, stronger, better.

**csu-net5**
is ‘live’ in Morgan

If you can see it, click it.

Devices that are not 5GHz capable will not ‘see’ csu-net5. See the Library Help Desk for questions and support.

Now in Clark, Morgan, Eddy, Engineering, BSB, LSC, TiLT, USC.
Wireless update
Time Capsule

• Apple backup device.

• If must have: Use as wired device and disable wireless.

Wireless update
Bonjour

• Support on Xirrus platform (Moby, Clark, Morgan, CS)

• Hope to start testing AirPlay in classrooms soon.
Multicast

• Best practices for WDS
Multicast
Best Practices for WDS

Three reminders first:

1. Buildings that undergo the VOIP certification and hence the Network Operations Policy standardization are configured to support multicast. Other networks...not so much.

2. A gig connected server can swamp the LAN – building backbones are usually 1G. Throttle down the server (see following reference slides).
Multicast (cont.)

3. Improper configuration, or on a non-supported network, may likely result in DoS of bandwidth for LAN members.
Multicast
Best Practices for WDS

STEP 1
From the WDS MMC, open the Server Properties page.

Multicast Properties

- Multicast IP Address:
  - Obtain IP address from DHCP
  - Use addresses from the following range:
    - IPv4 From: 239.82.172.1 To: 239.82.172.254
    - IPv6 From: FF15::1 To: FF15::1:FF

Note: Verify that there is no overlap between this range and IP addresses being used by other multicast servers on your network.

Transfer Settings:
- Keep all multicast clients in a session at the same speed
- Separate clients into three sessions (slow, medium, fast)
- Separate clients into two sessions (slow and fast)
- Automatically disconnect clients below this speed (in KBps): 256

239.82.your_subnet.x
STEP 2

• In the registry, browse to HKLM\SYSTEM\CurrentControlSet\Services \WDSServer\Providers\WDSMC\Protocol and set the TpMaxBandwidth setting to 10 or less. (See following reference list.)
Multicast
Best Practices for WDS

• Reference link:

Network Operations Policy and CIC update

- SSH in 2013
- Building update
- Building proctors and outage notifications
- Switch installs/upgrades and affect in labs or conference rooms
Network Operations Policy and CIC update
SSH in 2013

• Next step in “hardening the network”.

• Switches accessible via Secure Gateway
Network Operations Policy and CIC update
Building update

Buildings completed since last meeting in September:

- Moby complex (Moby, ATC, IPF) (VOIP)
- Computer Science (VOIP)
- Student Services (VOIP and CIC funding)
- Centennial Hall (VOIP)
- Administration (VOIP)
- Green Hall (VOIP)
- Washington School (Building Project)
Network Operations Policy and CIC update
Building update

Pending (by Jan. 15)
• Forestry (VOIP, CIC and department funding)
• Wagar (VOIP, CIC and department funding)
• Natural Resources (VOIP, CIC and department funding)
• NRRL (VOIP)
• Microbiology (VOIP, CIC, department funding)
• Pathology (VOIP, CIC, department funding)
• Moby addition (building project)
• Konkel House (building project)
• Shepardson (VOIP, department funding)
Network Operations Policy and CIC update
Building proctors and outage notifications

• Building with multiple network managers –
  Testing out process of sending network outages via Building Proctors
Network Operations Policy and CIC update
Switch installs/upgrades and affect in labs or conference rooms

• To make more efficient use of ports – ports not used in months are evaluated for need.

• This sometimes misses ports for conference rooms and labs.

To rectify:
– NOC to work closely with network managers on this particular issue
– NOC quickly and personally fixing the problems when they come up
Miscellaneous

• HP special pricing extended...

• MDFs/IDFs Housekeeping (literally!):  
  – Let us know if you find folks storing stuff in MDFs/IDFs and we’ll work with you to clean up.  
  – Same for improper cabling.  
  – Report unlocked doors and doors propped open.
Tech Update – Echo 360

• Rusty Scott, ACNS

• Lecture Capture