

CSU Subnet Managers Meeting

Wednesday, July 23, 2014

Almost dog days of Summer!

Agenda

- MS Office 365 – Scott Baily/Lance Baatz
- Innova EVS – Scott Baily
- DNS Server Update – Mike Willard
- Globus Launch – Jeremiah Baughman
- VOIP Update – Kyle Haefner

Agenda (cont.)

- Moving From RamCT to Canvas – Kevin Nolan
- Security Update – Steve Lovaas
- Network Operations Center – Greg Redder

Office 365 Update

- Office 365 Contract Status Update – Scott Baily
- Office 365 Service Overview – Lance Baatz

MS Licensing

- Internet2 and MS O365 licensing is done!!
- Licensing for Office suite has been out of compliance in many areas
- In VY14, campus spend was over \$400K/year, and still not compliant
- Significant risk – recall CU Denver audit result costing ~\$1m/yr.

A New Model to Consider

- Opportunity to license Office for all fac/staff
 - Part of our move to Office 365
- Simplifies: Licensing & Office 365 deployment
- MS License renewal was due June 30, 2014
 - So needed to act very quickly

Benefits

- Covered faculty & staff, and all students would be eligible to download 5 copies of MS Office
 - For any device (Mac, PC, iPad, phone)
 - Very significant costs savings here
- Guaranteed 99.9% uptime SLA
- Unlimited email archiving and legal hold capabilities
- Ensures compliance because it is FTE-based
- Greatly simplifies the annual licensing exercise

FY14 EES (formerly Campus Agreement) Licensing

- Most areas license Windows Upgrade / CALs / Office via EES on formula-based FTE count
- FY15 EES Enrollment numbers:

Desktop Core Bundle (\$53.98):	3,935 Desktop
Enterprise Bundle (\$67.47):	1,771 Office Only
(\$25.60):	738
- FTE formula under EES:
Full Time Faculty + Full Time Staff + (Part Time Faculty / 3) + (Part Time Staff / 2)
- Only "Information Workers" are included in counts

FY14 EES (cont.)

- Desktop Core Bundle includes:
 - Core CAL Suite
 - Windows Server CAL
 - SharePoint Server CAL Standard
 - Exchange Server CAL Standard
 - System Center Configuration Manager CML
 - Lync Server CAL Standard
 - System Center Endpoint Protection (AV)
 - Microsoft Office Pro Plus
 - Windows Enterprise Upgrade
- Desktop Enterprise Bundle includes:
 - Desktop Core Bundle (i.e., all of the above)
 - Enterprise CAL versions for Exchange, SharePoint, Lync
- Office Only includes Office Pro Plus – no CALs or Windows Upgrade rights

Proposed Licensing Model

- Hybrid on-premises (EES) + Office 365 cloud model
- New model pricing (guaranteed for 3 years, includes a 45% discount from Microsoft) per FTE:

EES Core CAL Suite:	\$9.98
EES Enterprise CAL Suite:	\$16.59
EES Windows Enterprise Upgrade:	\$16.42
Office 365 A3 SKU:	\$24.31

(i.e., license Office Pro Plus via Office 365 A3)
- With proposed supplemental funding from Telecom, UTFAB, and ASCSU, Office 365 A3 drops to \$15-\$16/Person (fairest way to distribute savings).

Proposed model (cont.)

- For current Desktop Bundle customers:
 - Purchase appropriate CAL Suite (Core or Enterprise) plus Windows Enterprise Upgrade under EES; FTE formula applies
 - Purchase Office 365 A3 SKU; no FTE formula applies
- For current Office Only and not-currently-EES areas:
 - Purchase Core CAL Suite under EES; FTE formula applies
 - Purchase Office 365 A3 SKU; no FTE formula applies
- Office 365 A3 SKU is licensed by head count (full and part time faculty/staff), no FTE formula is allowed.

Proposal for getting there

- ASCSU and UTFAB have committed to funding @ \$1 per student FTE per year => \$54K
- Telecom contribution
 - Total contribution: \$40k/yr. for Unified Messaging
 - An additional \$20k/yr. above current costs
- At the campus level, budget neutral, but
 - Redistribution of expenses at the unit level

Costs

	Current MS EES	Proposed EES+A3	Difference	Proposed+Telecom	Difference	Proposed+Telecom+Student	Difference
College of Agricultural Sciences	\$ 19,162.90	\$ 21,745.79	\$ 2,582.89	\$ 19,777.12	\$ 614.22	\$ 17,119.41	\$ (2,043.49)
Ag Experiment Station	\$ 5,398.00	\$ 6,797.01	\$ 1,399.01	\$ 6,135.63	\$ 737.63	\$ 5,242.77	\$ (155.23)
College of Business	\$ 9,393.56	\$ 14,147.59	\$ 4,754.03	\$ 12,673.99	\$ 3,280.43	\$ 10,684.62	\$ 1,291.06
College of Natural Resources	\$ 3,227.88	\$ 38,089.00	\$ 34,861.12	\$ 33,366.51	\$ 30,138.63	\$ 26,991.14	\$ 23,763.26
College of Veterinary Medicine	\$ 60,106.09	\$ 63,811.56	\$ 3,705.47	\$ 58,632.68	\$ (1,473.41)	\$ 51,641.19	\$ (8,464.90)
College of Liberal Arts	\$ 36,976.30	\$ 41,859.18	\$ 4,882.88	\$ 38,076.55	\$ 1,100.25	\$ 32,969.99	\$ (4,006.31)
College of Natural Sciences	\$ 18,457.60	\$ 40,840.65	\$ 22,383.05	\$ 36,226.46	\$ 17,768.86	\$ 29,997.29	\$ 11,539.69
College of Engineering	\$ 41,456.64	\$ 44,269.17	\$ 2,812.53	\$ 40,451.73	\$ (1,004.91)	\$ 35,298.18	\$ (6,158.46)
College of Health & Human Sciences	\$ 22,293.74	\$ 27,117.97	\$ 4,824.23	\$ 24,538.20	\$ 2,244.46	\$ 21,055.51	\$ (1,238.23)
Colorado State Forest Service	\$ 6,981.70	\$ 4,457.64	\$ (2,524.06)	\$ 4,326.14	\$ (2,655.56)	\$ 4,148.61	\$ (2,833.09)
CSU Extension	\$ 3,022.88	\$ 8,698.47	\$ 5,675.59	\$ 7,549.76	\$ 4,526.88	\$ 5,998.99	\$ 2,976.11
President	\$ 6,801.48	\$ 9,622.69	\$ 2,821.21	\$ 8,620.95	\$ 1,819.47	\$ 7,268.60	\$ 467.12
Provost	\$ 34,007.40	\$ 35,229.15	\$ 1,221.75	\$ 32,270.34	\$ (1,737.06)	\$ 28,275.95	\$ (5,731.45)
VP Operations	\$ 6,153.72	\$ 11,688.27	\$ 5,534.55	\$ 10,307.49	\$ 4,153.77	\$ 8,443.44	\$ 2,289.72
VP Research	\$ 8,906.70	\$ 8,342.84	\$ (563.86)	\$ 7,708.53	\$ (1,198.17)	\$ 6,852.22	\$ (2,054.48)
VP Student Affairs	\$ 54,831.30	\$ 50,841.28	\$ (3,990.02)	\$ 47,182.41	\$ (7,648.89)	\$ 42,242.94	\$ (12,588.36)
VP University Advancement	\$ 5,128.10	\$ 4,234.01	\$ (894.09)	\$ 3,959.40	\$ (1,168.70)	\$ 3,588.68	\$ (1,539.42)
BoG/General General Counsel/IA	\$ 1,403.48	\$ 759.33	\$ (644.15)	\$ 747.73	\$ (655.75)	\$ 732.06	\$ (671.42)
Totals	\$ 343,709.47	\$ 432,551.60	\$ 88,842.13	\$ 392,551.60	\$ 48,842.13	\$ 338,551.60	\$ (5,157.87)

Example

- Today, licenses Desktop Core Bundle, formula-based FTE count is 100; head count is 150:
 - $100 * \$53.98 = \$5,398.00$
- Proposed, license Core CAL Suite+Windows Enterprise Upgrade+Office 365:
 - Base: $(100 * (\$9.98 + \$16.42) + (150 * \$24.31)) = \$6,286.50$
 - With Telecom supplement:
 $(100 * (\$9.98 + \$16.42) + (150 * \$20.44)) = \$5,706.00$
 - With Telecom and UTFAB/ASCSU supplements:
 $(100 * (\$9.98 + \$16.42) + (150 * \$15.22)) = \$4,923.00$
- Areas that don't currently utilize EES will pay more (but some utilize MS Select, so must consider annualized Microsoft expenditures)

Office 365 eventually includes...

- E-mail (Exchange hosted in O365)
- OneDrive for Business (1 TB of cloud storage)
- Lync (Instant Messaging, Audio/Video Chat, Desktop sharing)
- “Free” Microsoft Office for students and qualifying faculty and staff
 - Up to 5 full installs of Office for personal use

Office 365 currently includes...

- OneDrive for Business (1 TB of cloud storage)
- Lync (Instant Messaging, Audio/Video Chat, Desktop sharing)
- Office Install – Available to students and CSU Info Workers
 - Up to 5 full installs of Office for personal use

Note: Primary end user support must be provided by dept/units

Who is eligible for O365 Services?

	Lync	OneDrive for Business	Office ProPlus or Student Advantage
Undergrad Students	Yes	Yes	Yes
Graduate Students	Yes	Yes	Yes
CSU Faculty and Staff Classified as Info Workers	Yes	Yes	Yes
CSU Faculty and Staff Not Classified as Info Workers	Yes	Yes	*No
Associate eID Accounts	Yes	Yes	No

* Exception process to allow non-qualifying employees to purchase Office ProPlus subscription in the works

O365 Lync, OneDrive, and Office Available to...

- Today: Members of Subnet Managers listserv
- Next week: Rest of campus (faculty, staff, and students)

Notables

- Office 365 Portal: <https://portal.office.com>
- Login to o365 portal and all O365 services with eID in the format of ename@colostate.edu
 - It is your CSU eID – just a new format!
- O365 Office subscription service/status does not change how Microsoft Office is installed on campus/lab PCs!!

Exchange migration (e-mail and voice mail)

- Sept-Dec 2014
 - Plan/test migration processes
 - Migrate early adopters
- Jan-March 2015
 - Migrate Exchange to Office 365

Next steps

- Review O365 content posted at <http://help.mail.colostate.edu>
- Login and use the O365 services
- Attend O365 Q&A:
 - Date: Thursday/August 14 2:00-3:00pm
 - Location: Anyone have a room we can use?
- Send questions to exchangehelp@colostate.edu

Innova EVS

Scott Baily,
ACNS

- An electric car will be available through motor pool.



DNS Server Update

Mike Willard, ACNS

- Currently CSU has 2 DNS servers:
 - Rush, Hasty
 - Virtual machines
- Need more robust DNS
 - Move to physical machines.
 - Add two more DNS servers for campus.
 - Need to add new servers to client machines.
- Mike will send group names and IP address of new servers when available.

Globus

Jeremiah Baughman, ACNS

globuscolostate#Colostate01

- A system for transferring and sharing
Your files in the World of Research
and Big Data.

What is Globus

- Globus tool designed for large scale high throughput file transfers and file sharing.
- Very high throughput system, uses Grid FTP to transfer files to other Globus Endpoint sites and systems.
- Joint project between the University of Chicago and Argon National Labs.
- Widespread use at many research facilities around the country and world.
- In a way you can think of it as Dropbox for HPC, Research, and Big Data.

What do we have and want from Globus at CSU?

- Have set up an initial endpoint server to provide high performance storage and network connectivity to the larger Globus community of endpoints and servers.
- Have set up a CSU contract with Globus and have sponsored Globus Accounts that allow for sharing.
- Its purpose is to meet the needs of our researchers.

What do we have and want from Globus at CSU?

- We are analyzing our use cases for this tool and how it can fit into our plans for research computing going forward.

- To get set up or for questions please send email to:

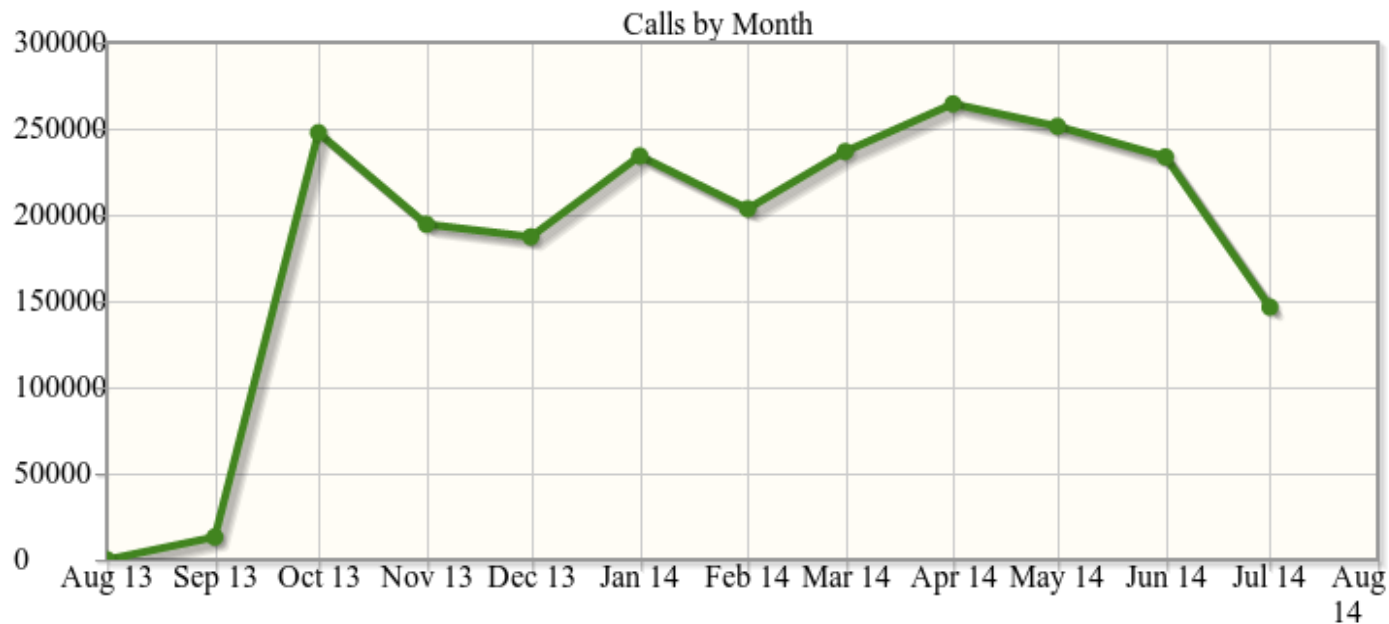
globus-csu@colostate.edu

- Questions?

VoIP

- Kyle Haefner, ACNS
- 4578 Phones
- 1,501,477 calls in 2014

Monthly ▾



Recently Completed Buildings

- MRB
- Environmental Health
- AIDL
- Aylesworth

Upcoming Buildings

- Plant Science
- Animal Science
- Laurel Village
- Gifford

Upgrades

- Standardized on biannual versions
 - December Break
- Phone Firmware
 - Rolling upgrade
 - Headsets

Reminders

- Moving Phones – Don't!
 - Telecom will move them for FREE



CSU Moves to Canvas – Kevin Nolan

UNIZIN Consortium and Instructure

- Strategic move.
- 10 schools to start.
- Use Canvas as LMS.
- Work with Instructure to build Analytics and Content Repository.



See Pat Burn's presentation:

http://mediasite.colostate.edu/Unizin/Unizin,_a_Collaborative_for_Next_Generation_Learning_2014-05-01.html

CSU to Canvas - TimeLine

2014

- Pilot – fall semester
 - Approx. 40 instructors, 60 courses, 2,000 students.
- Publicize to campus.
- Sept – plan to migrate RamCT courses for faculty
- Oct 2014 – request spring courses
 - Will be created in both RamCT and Canvas.
- Encourage faculty to begin to move.

RamCT to Canvas

2015

- Spring/Summer - Encourage faculty to move.
- Fall – expected to have course in Canvas.
 - Need exception to teach in RamCT

2016

- Spring
 - Clean up, Incompletes, Make RamCT backups.
- June 30 – contract with Bb ends.

RamCT to Canvas

- Training
 - Hands on Workshops
 - Canvas Guides and Videos
 - Set up 1:1 time with College Coordinator or central Canvas support.
- Support
 - Propose to have Canvas Help Center in Morgan.
 - Stop to learn about project and for answers to quick questions.
 - Major web browsers.
 - No long need Java JRE.

Security

- Enhanced network blocking and scanning
- Symantec Endpoint Protection
- Windows Server 2003 end-of-life
- Juniper Secure Access
- PCI changes coming
- Protecting eID credentials
- Duo two-factor auth

Enhanced network blocking and scanning

- Adding the Spamhaus EDROP list to our border firewall
- Have begun scanning from outside the firewall (Gloves off)
- Cleaning up insecure protocols from the internet (Die, TELNET!)
- Moving toward scanning of ALL subnets from inside (safe scan, do-not-scan list)

Symantec

- One-year renewal under new licensing model (FTE-based, rather than per device)
- Request for payment will come through RamTech
- Clients via ACNS
- Committee will be doing a careful comparison this fall
 - Symantec vs Microsoft (performance, resources, management, reporting)
 - Recommendation by January for next fiscal year

Windows Server 2003 end-of-life

- First, thanks for all the work on getting XP retired this year
- Next summer (July 14), the axe falls on 2003... FYI
- Target: 2012 R2 if you can, 2008 R2 with older hardware
- I sent a survey in June (almost every group responded)
 - Among those responding, we have 55 of these servers
 - All of these folks are aware of the issue and have a plan. Do you?

Juniper Secure Access

- Upgrading to new major release (8.0) of gateway (later this week)
- Current support for Mac OSX 10.9 (Mavericks) and Windows 8.1
- Junos Pulse Desktop replaces Network Connect (except for Linux)
- Pulse client distribution options
 - a) same as before, dynamic
 - b) manual distribution, then visit the URL and it'll config
 - c) manual distribution with a config file
- End-user documentation on ACNS web site
- Network Connect/Pulse can be installed together, but can't run concurrently

PCI changes coming

- Keep using analog communication for stand-alone terminals
- If you have a firewall protecting a stand-alone IP terminal, keep using that
- Risk Assessment Tool
 - If you have credit card merchants in your unit, do the RAT *each* year
 - Has your unit ever completed one of these?
- E-commerce servers:
 - Expansion of PCI scope (web servers now in-scope)
 - Need to move servers (physical/virtual) to ENGR e7 datacenter
 - Separate, dedicated firewall
 - Physical, environmental, access controls
 - Considering the longer-term approach

Protecting eID credentials

- We've passed the 1-year mark, eID password renewal emails should be expected
- We've been updating our policies & procedures as part of preparing for InCommon Silver
- NO use of eID password for authentication over cleartext channel
 - Must use HTTPS for eID WebAuth or Shibboleth
 - No TELNET or FTP with eID (use SSH, SFTP or FTP/S)
 - Check your WordPress, etc...
 - Back-end authentication over **secure** LDAP only (or other encrypted protocol)

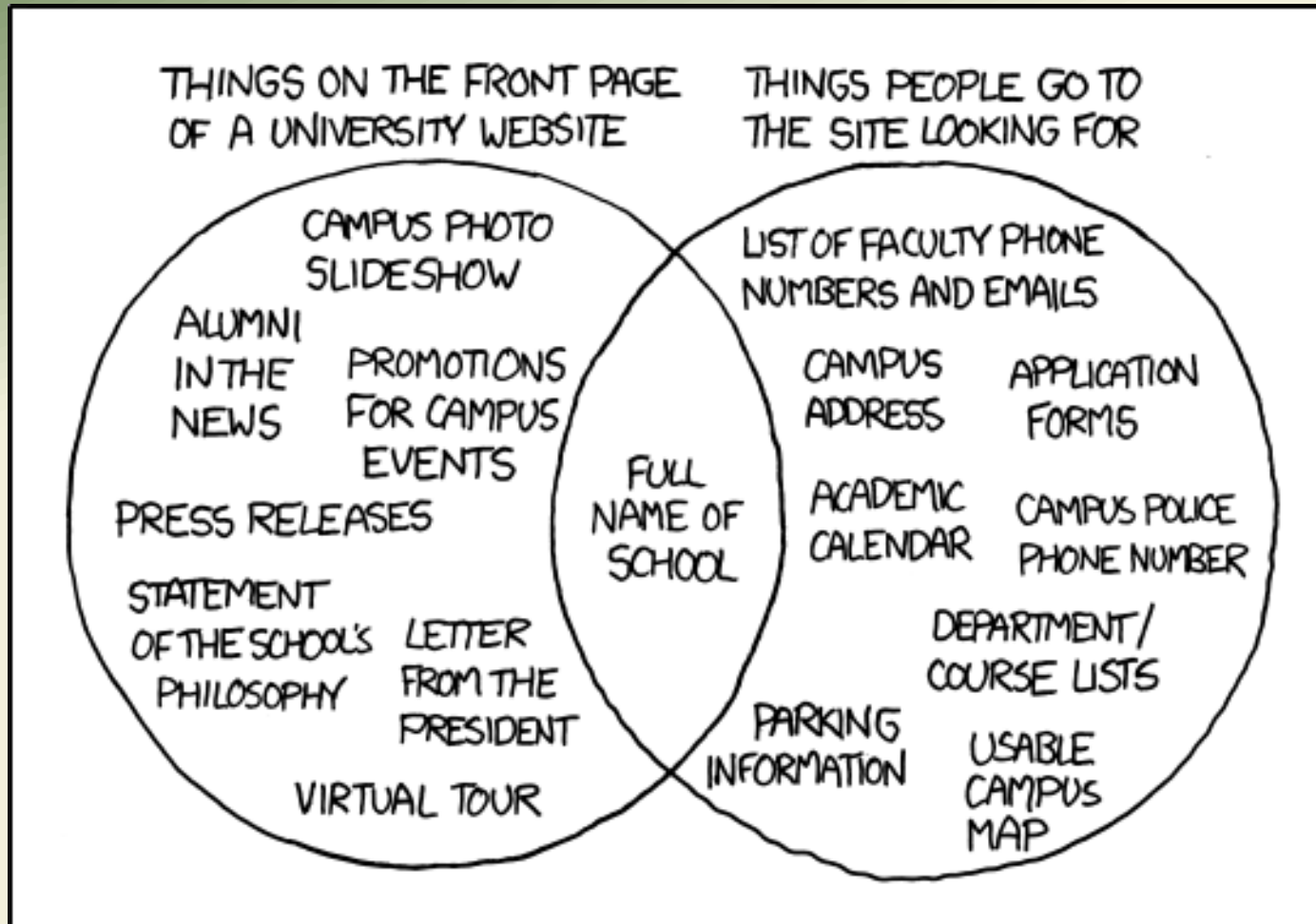
Duo two-factor auth

- Partner with InCommon
- Uses smart phone as 2nd factor
- Easy to use, simple interface
- Testing in ACNS, replacing CryptoCard?
- Supports integration with Shibboleth

NOC

(Network Operations Center)

Greg Redder



Agenda

- Campus Infrastructure Committee Update – 10Gig and beyond!
- IP “reorg.” process
- Research LAN status
- Wireless, Wireless, Wireless
- How to handle stolen laptops
- Misc. and fun errata!

IP “reorg.” process

IP space per building

- Can't span Vlans across campus any longer.
- Will provide public and private IP space per building.
- Will need to “clean up” a building before moving to dual 10G links.
- Started in Wagar, Clark C, BSB, Yates and Chemistry, Animal Sciences, Engineering.

Research LAN status

- Added dedicated 10G to Front Range GigaPop (FRGP)
- Working on policies, routing, final configuration.
- Globus

Wireless, Wireless, Wireless!

Recent upgrades:

- Morgan – all new APs, 80211.ac capable
- GA Classroom refresh to 802.11ac

Coming soon!

- Transition to “csu-guest” from “csu”
- Transition to “csu-eid” and away from “csu-net” and “csu-net5”
- Eduroam

Note: All others will be **hidden!**

Wireless, Wireless, Wireless!

Conference room screen mirroring:

\$ Apple AirPlay

\$\$ Crestron AirMedia

\$\$\$\$ Mersive

Wireless, Wireless, Wireless!

Relay issues though:

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

How to handle stolen laptops

Step 1:

- Open a case with CSUPD and get a case#.

Step 2:

- Provide CSUPD with a username that typically logs into the device and the device's MAC address.

Step 3:

- Ask CSUPD to contact noc@colostate.edu with a request to have us "look" for the device with the MAC and username you provided them.

How to handle stolen laptops

Notes:

- NOC must have CSUPD case#. Otherwise, we are not allowed to “look” for the device.
- NOC can **only** look for stolen devices or login information upon request from **CSUPD** or **General Counsel**.

Misc. and fun errata!

- Construction Updates
 - LSC
 - Animal Sciences
 - Breweries (LSC and Gifford)
 - Laurel Village
 - Eddy remodel
- New core routers (round 2)

Misc. and fun errata!

Electric cars



Thank you.

noc@colostate.edu