

Subnet Managers September 2010

Agenda

- Registrar
- ACNS Director Update
- Central Services
- Windows/Exchange
- Site Licensing
- Networking/Security
- President's Address/Picnic
 - If you would like to attend.

Registrar – Jerry Becker

- Banner Update will occur on the weekend of October 16 – 17, 2010.
- All services should be available Monday, October 18, 2010.

ACNS Director Update – Scot Baily

- Next round of CSUIITE buildings to rewire
 - Review priority of buildings that need rewire work.
- New Communications Infrastructure Committee
- New IAC Advisory Groups: Mac, Linux and Windows

Central Services – Rusty Scott

Middleware staffing update

From the Libraries & ACNS integration

- Alan Crump
- Greg Vogl

- Matt Goodrich

Digital Signage

- Enable digital signs that can accept RSS feed to be used for emergency notifications
- Application development complete
- Implementation upcoming
 - CSUPD, Facilities, sign owners, ACNS

Course Survey updates

- Replacing legacy code (processing and reports)
- New survey forms – TILT will oversee
- New scanning process

CSS Video Digitization

- Replace playback over closed circuit TV system with online on-demand application
- 240 titles available
 - <http://videoplay.colostate.edu>
- Requires Silverlight 4
- Need analog video converted to digital:
 - <http://mediarequest.colostate.edu>

Lynda

- Online software training available to students, faculty and staff
 - <http://lynda.colostate.edu>
- Login with CSU eID

LMS Evaluation

- Faculty Council Committee on Teaching and Learning (CoTL)
- Evaluation includes Blackboard Learn and Sakai
- On-site demos in August, recordings available on RamCT Futures page:
<http://help.ramct.colostate.edu/ramctfutures/ramctfuturesmain.aspx>
- Test instances of both available (and surveys)

LMS Evaluation

- Expected timeline:
 - October: CoTL recommendation to Provost
 - November: Further evaluation (Faculty Council, Council of Deans)
 - December: Final decision

Windows/Exchange – Lance Baatz

- Exchange 2010 Update
 - Migration completed
 - Updated iPhone OS (4.1) addresses connection issue.
 - If you have any concerns using Exchange 2010 please contact:
 - exchangehelp@colostate.edu
 - Service Pack 1 due out later this fall.

Site Licensing – Diane Noren

- Microsoft – billing coming for Campus Agreements.
- Adobe – contract signed.
- Autodesk – working to sign 3 yr contract.
- SAS – ready for people to use.

NOC
(Network Operations Center)

Steve Lovaas

(You won't have Greg Redder to kick around this Subnet Manager meeting!)

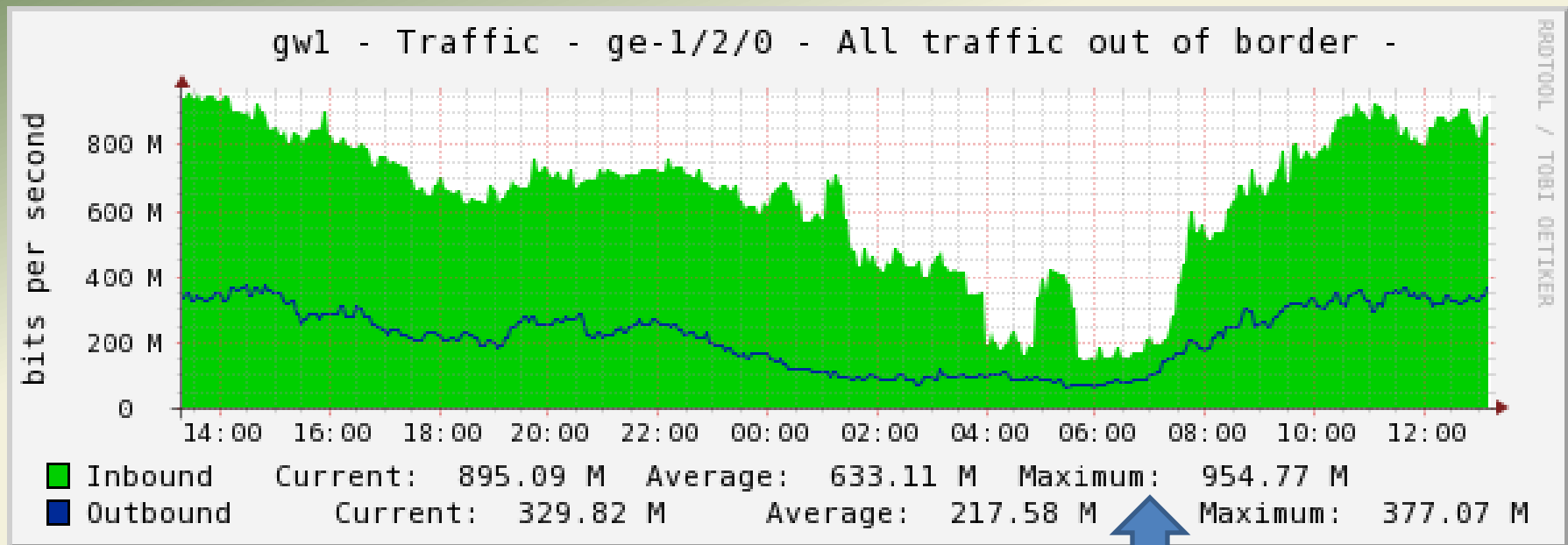
Agenda

- Network Statistics
- Core/Border upgrades status
- Wireless
- New buildings/networks
- Video Conferencing Updates
- Security
- NOC staffing
- NTP
- Communication

Network Statistics

- Traffic stats/issues
- Outages

All traffic to Internet (almost – about 150M not included on this graph.)



Note: max of 955M with about 150M not reflected here. Good thing 10G is pending!

Core/Border Outages (since last meeting)

Bad news:

There was a core outage.

July 17 – 5:30AM-5:50AM – core router failed as we walked in the door to start the E7 move.

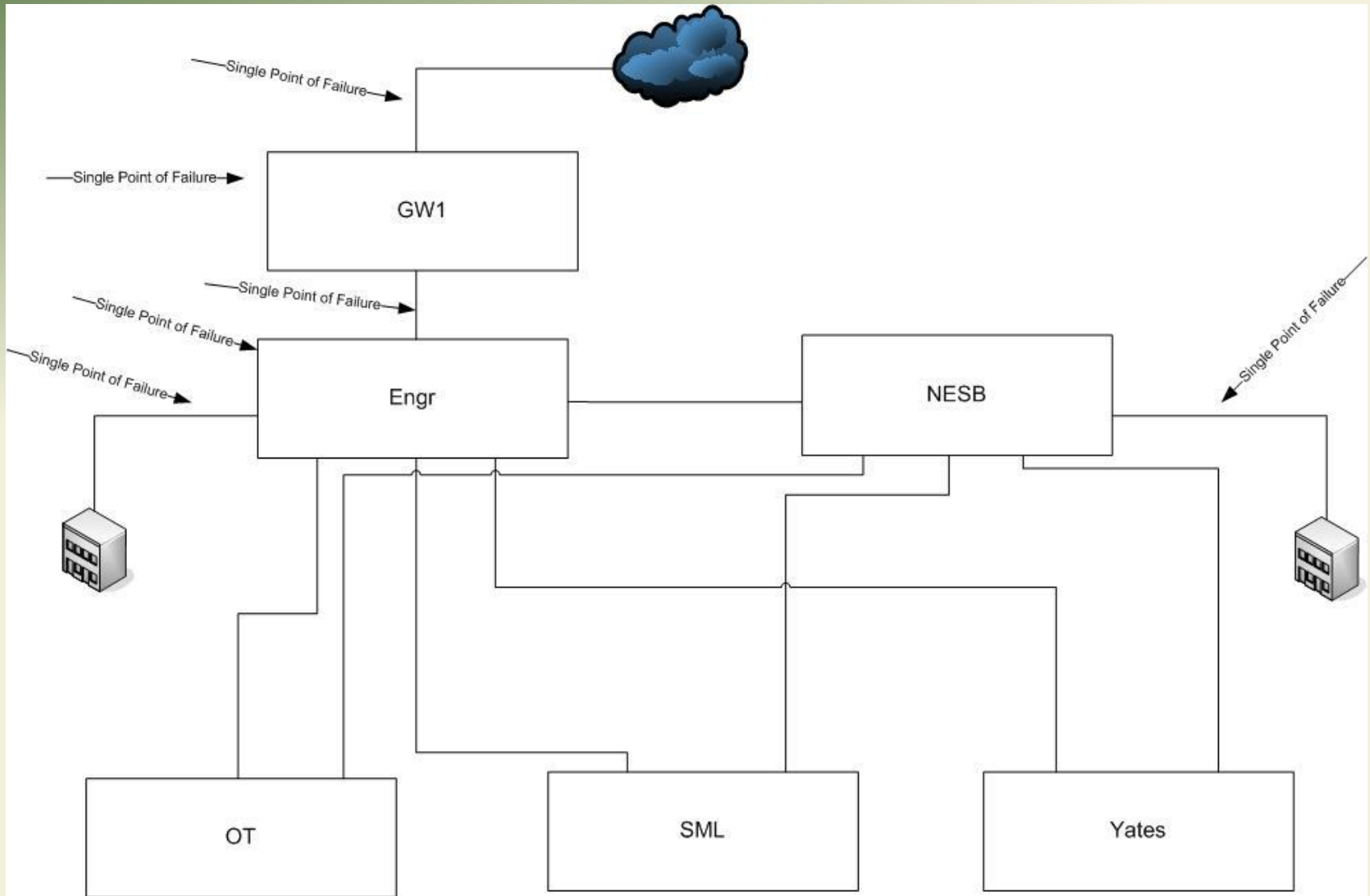
Good news:

We were there to bring it back up and running.

The remainder of the moves of core and border router links went fine with the rest of campus (except the Res. Halls) riding on backup links!

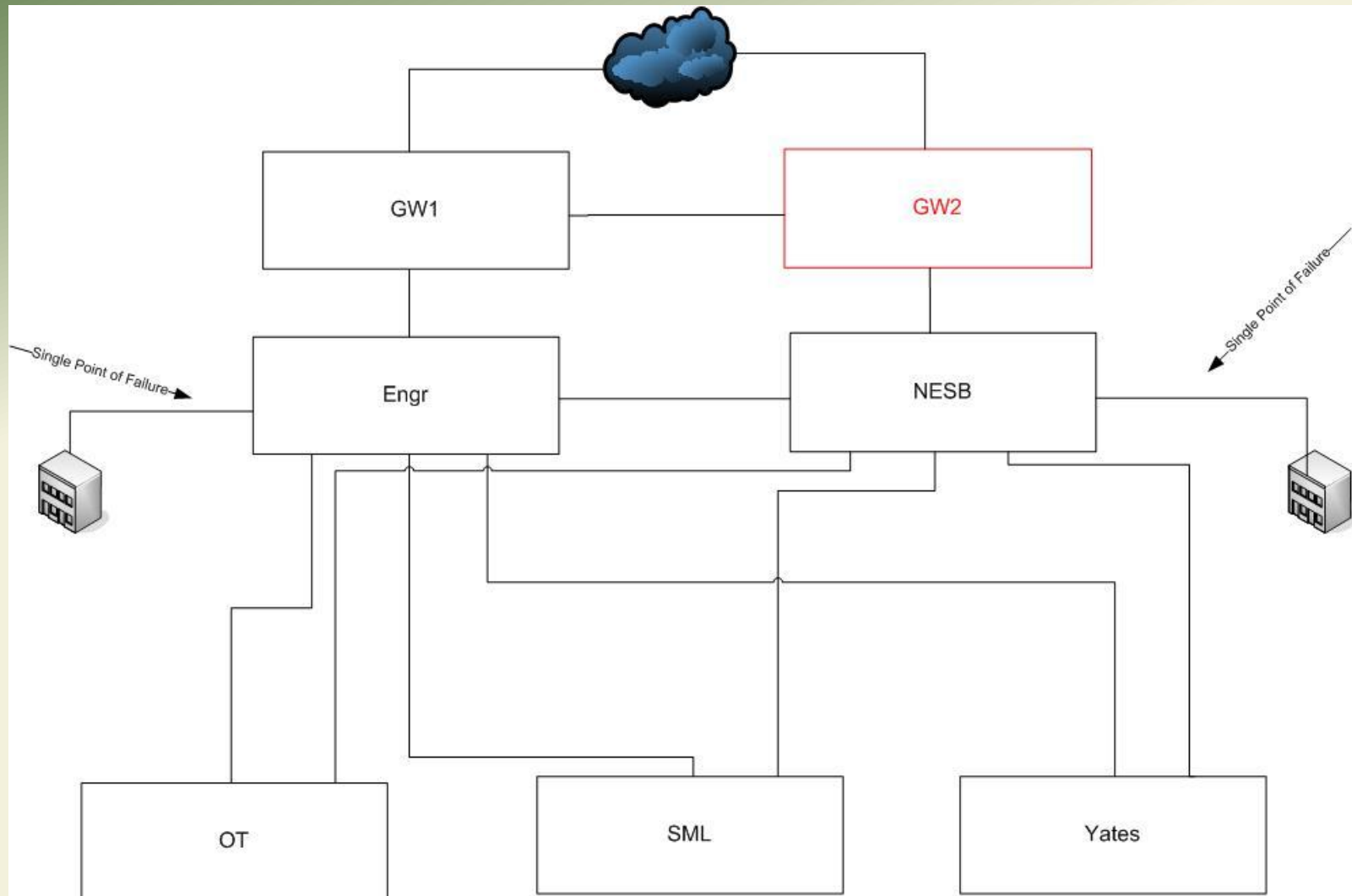
Start

(Several single points of failure with one border router!)



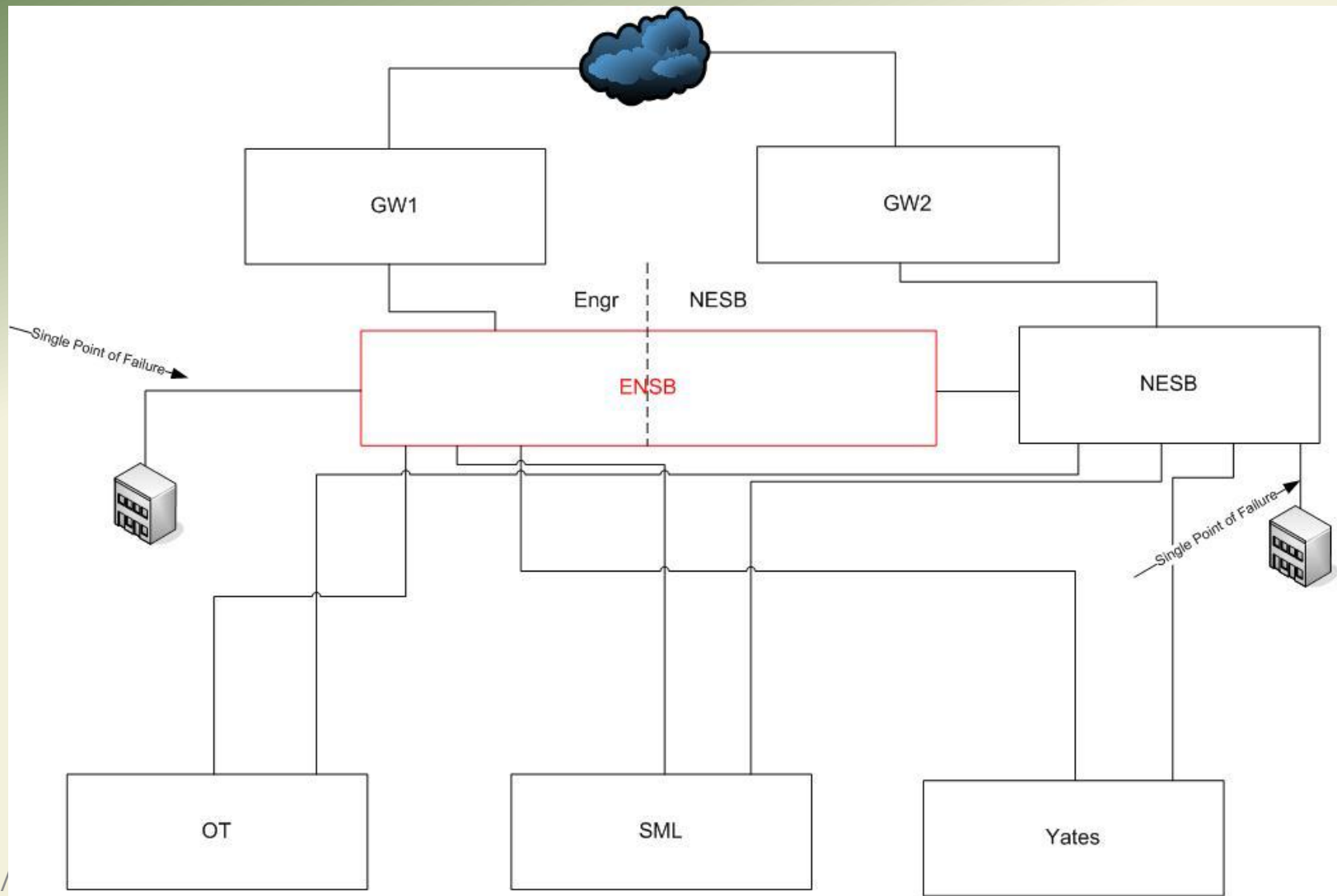
Spring, 2010

Second border router alleviates many single points of failure.



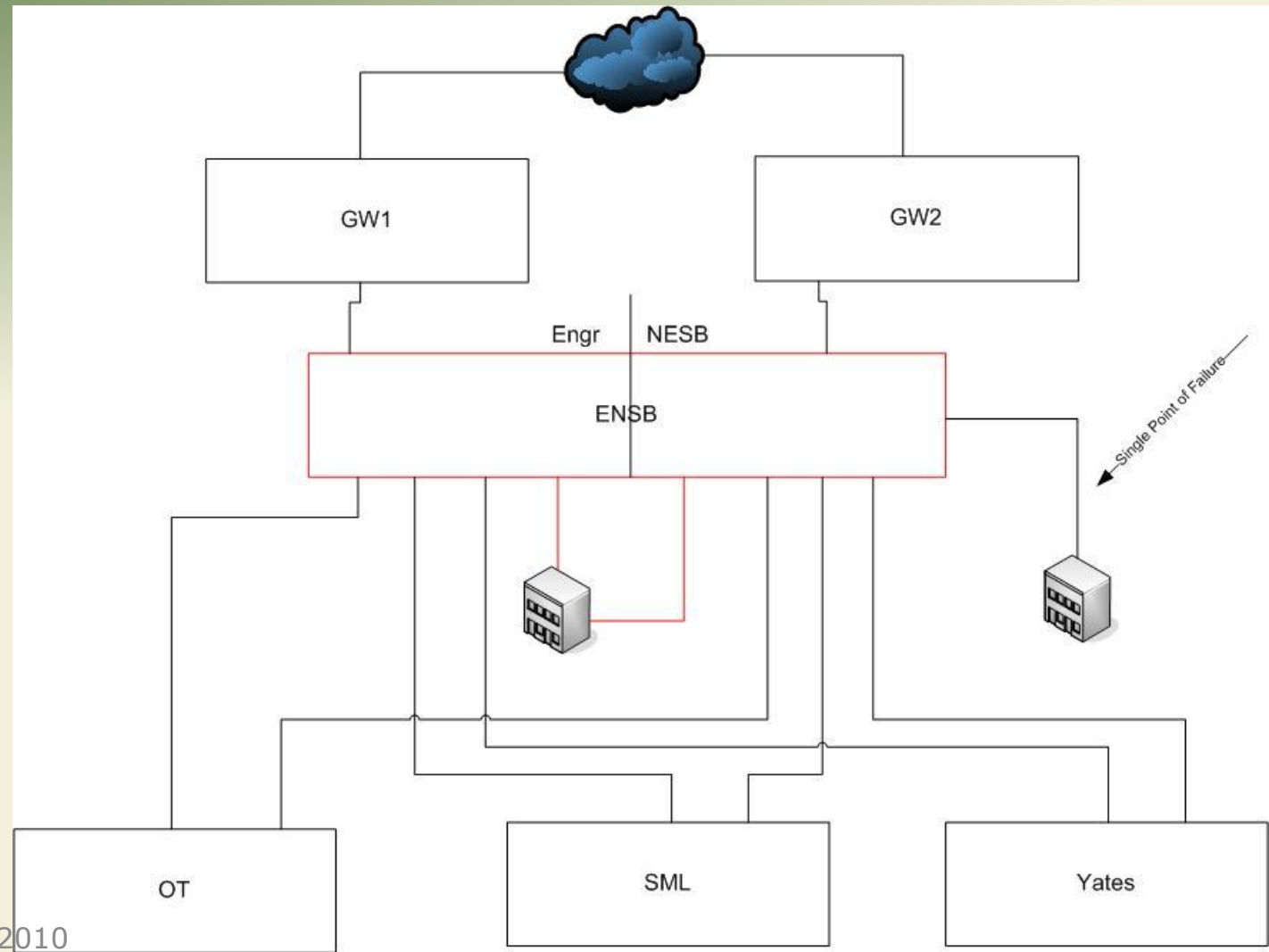
Summer, 2010

New core router is made up of two routers acting as one.



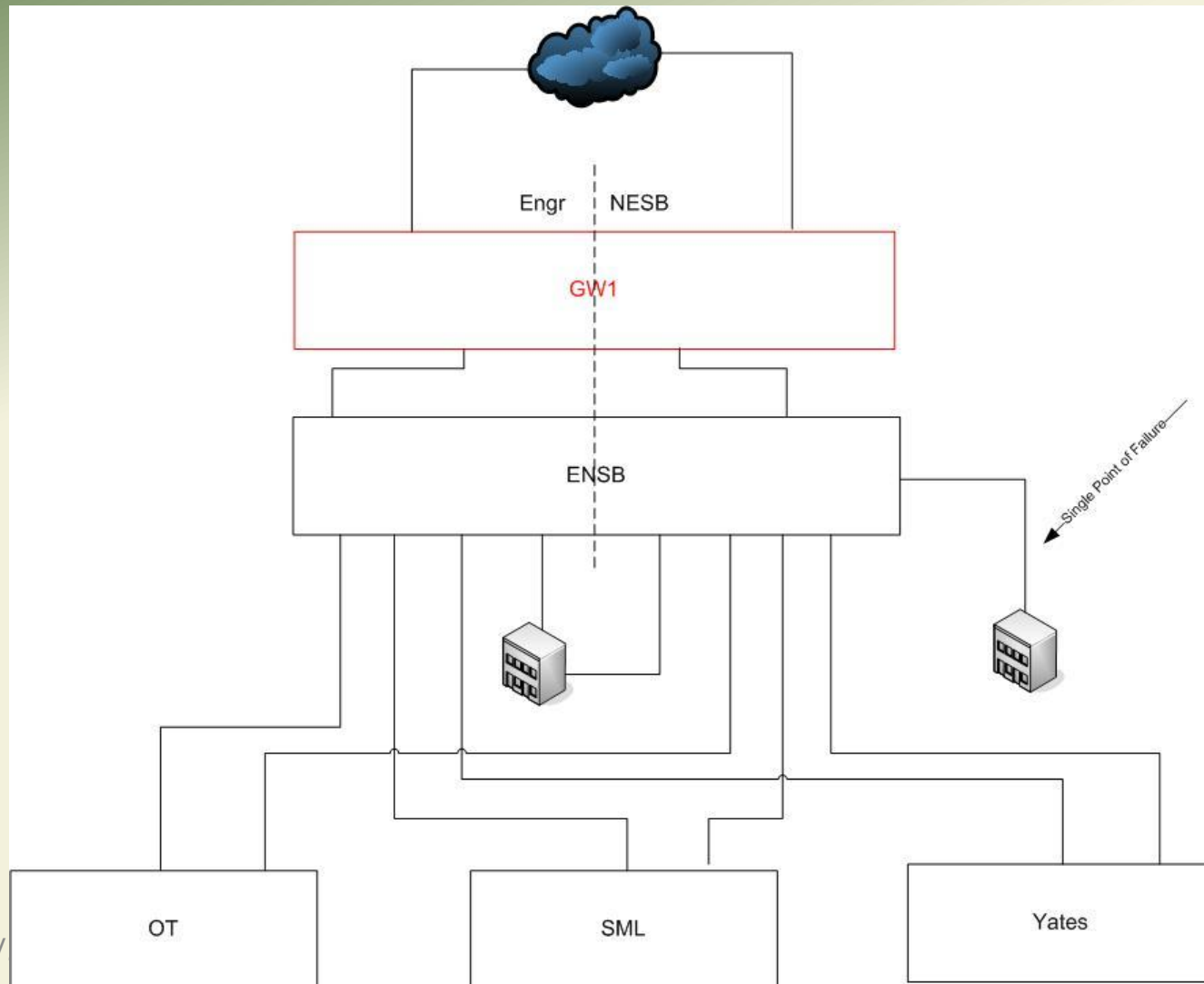
Next year

With help of Campus Infrastructure Committee (CIC), buildings will be selected for upgrades and possible dual links to core router.

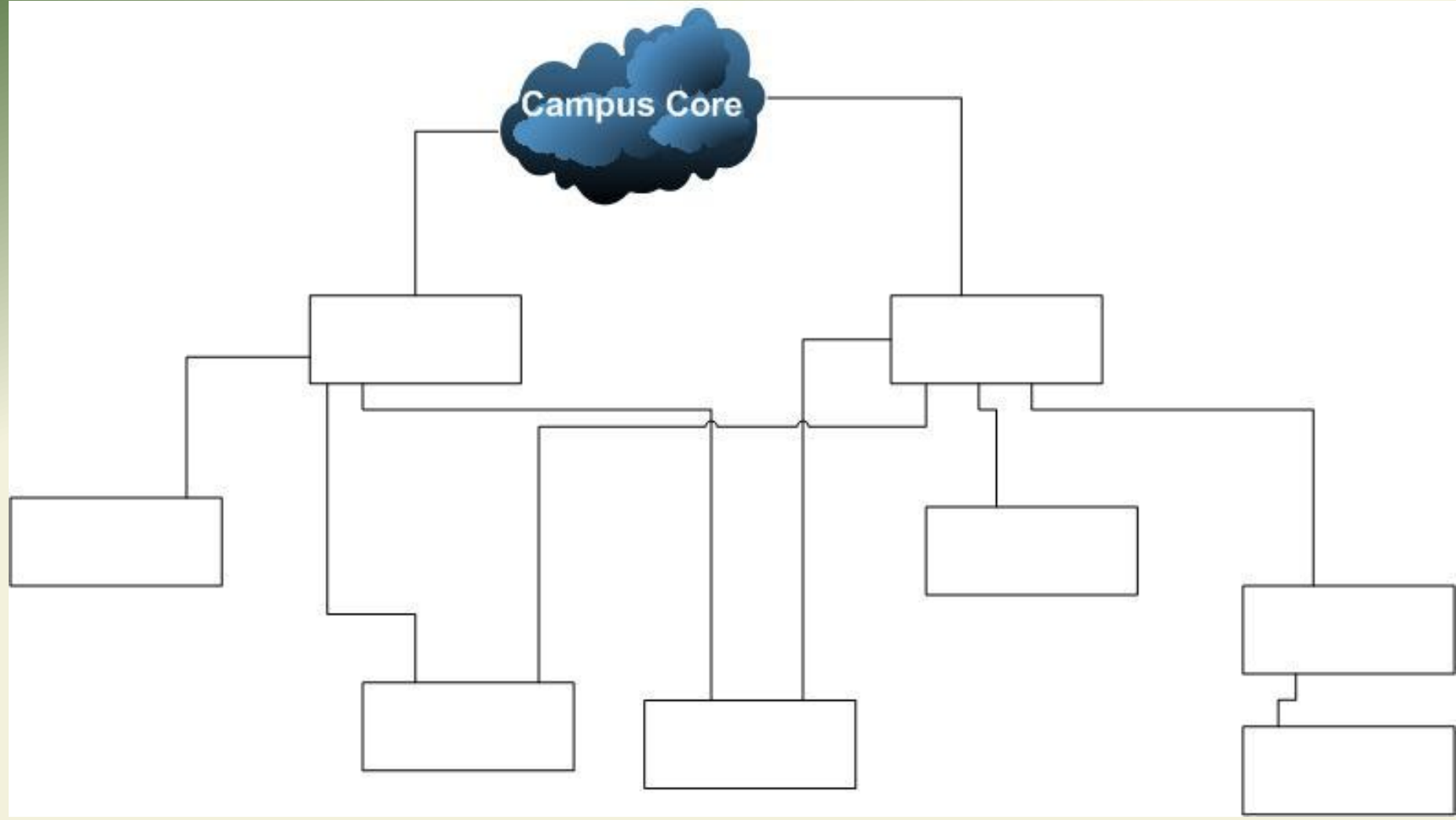


Summer, 2011

Border router "clustered" and two routers managed as one. Same functionality, but much easier to manage.



Core switching environment at E7 original grew "organically"

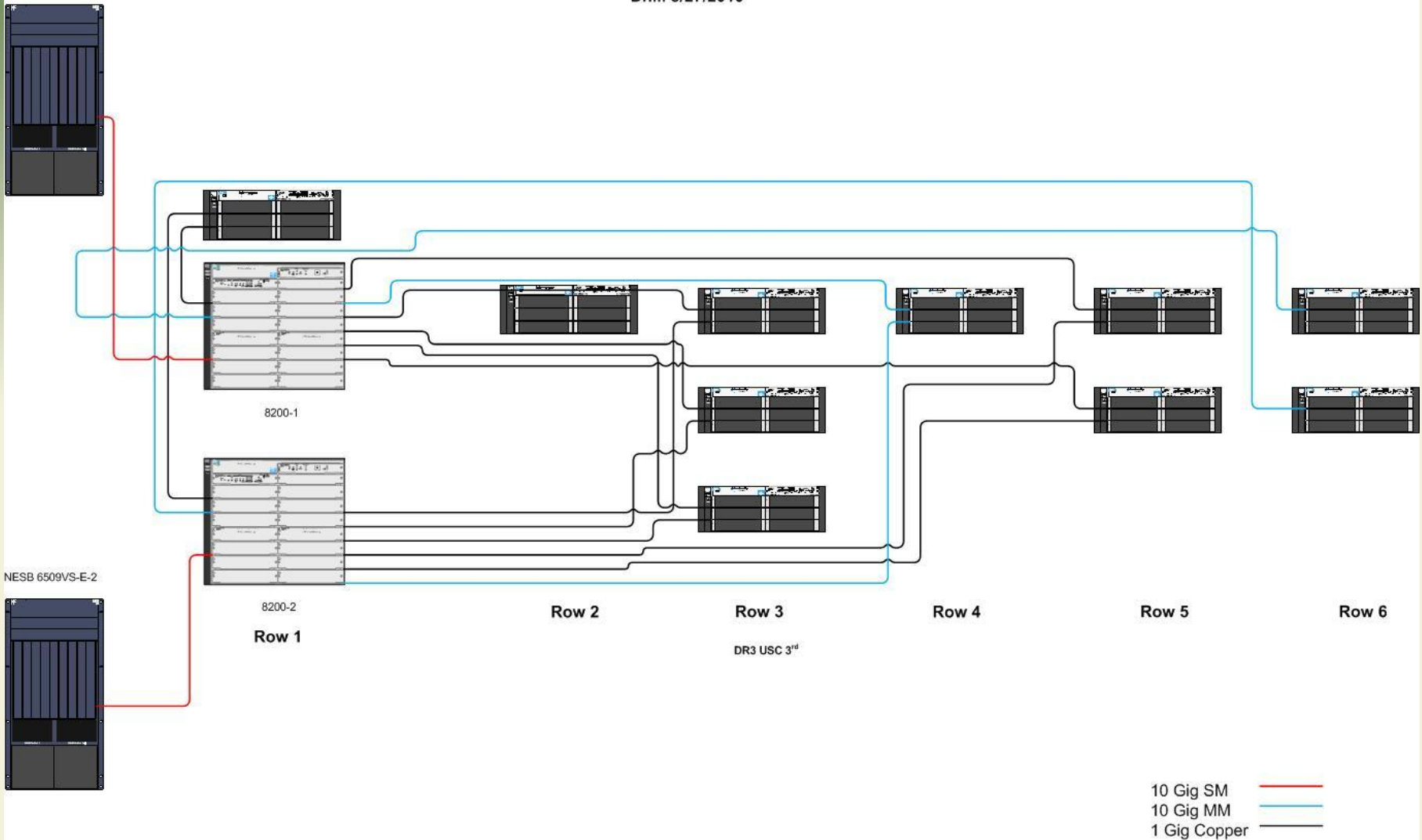


Core switching after redesign of E7

Organized rows, cabling, dual 10 gig links to rows!

E7 6509VS-E-1

E7 Engineering Overview
Dhill 8/27/2010



UTFAB Wireless Upgrades

- Finished over the summer:
 - Natural Resources
 - Shepardson
 - A/Z
- Pending:
 - Aylesworth, Micro, Gifford, Yates

Wireless Upgrades (cont.)

- Controllers:
 - “clustered” for Aruba access points.
 - Will work on clustering for Xirrus/Cisco access points next.
 - This means that if main controller fails the backup takes over. We saw about 15 second failover – some wireless clients probably won't even notice.

Wireless issues

- Ran out of private IP addresses first week of classes - Fixed that first part of second week of class!
- Ran out of public NAT addresses – Fixed that later that second week of class!

Wireless issues – con't

- Some APs (a few in BSB, 1 in RAMTech, a few in Rockwell) wouldn't provide DHCP addresses! Installed workaround on Sept. 9.
- Think we are under control, but would like to hear if you have issues.

Wireless and Mobile Devices – Question

- Mobile devices (iPad, Android phones, etc.)
- Some have WLAN capability
 - Manual configuration or auto-switchover
- A subset of these may have VPN ability
 - SSL or IPSec
- How big an issue is this?

New Buildings/Networks

- Recently Completed:
 - RIC (Foothills)
 - 475 17th street (2nd and 3rd floors)
 - Sterling
 - BSB
 - Rec Center (phase 2)
- Pending:
 - Book Storage Addition
 - 638 Sherwood
 - Engineering2

Security

- Risk Assessment process – 3 colleges and 4 admin units complete. Next volunteers?
- eID password now 8 – 30 characters. Focusing on promoting with students in October. Length > complexity!
- Wireless security – working on automating the Windows client configuration process.
- Please discontinue use of SAV v10...

NOC Staffing...

- Dick Hill has officially “left the building” after an amazing job in the E7 redesign.
- Nic Garrison is new NOC member.

NTP
(129.82.100.10)

- New stratum 1 servers available. They pull signal from cell towers in two locations on campus.
- Servers are load balanced behind an F5 load balancer at 129.82.100.10.
- Ntp.colostate.edu to have DNS changed to point to this new IP address (129.82.100.10). Message will be sent to subnet managers when this is to occur.

Data jacks...

Just a reminder:

- In new construction or remodels, all data jacks are not activated. This is a practical and financial decision.
- Before your folks move into a new area, **you must place telecom service orders to get **any** jacks activated.**

Data jacks – con't

- Because they were on the blueprints does not mean they are active – they are two entirely separate processes.

<http://telecomserviceorder.colostate.edu/>

Communication (NOC->Subnet Managers)

- Problem:

Staff/faculty say they are not aware of changes communicated by NOC, Windows group or Unix group, such as outages or Exchange issues.

- Solution

Encourage subnet managers to:

- Read outage notifications
- Rewrite so it makes sense to your clients
- Communicate this information to clients via staff/faculty mailing lists.

Communication Subnet Managers -> NOC

- This works both ways!
- What are we doing, or not doing, that we need to do better in the way of communication?
- Please remember that it's always best to e-mail noc@colostate.edu as the team can provide a quicker reply than if you mail one individual on the team.