Planning, Budgeting, and Accountability

UVU Strategic Direction
2010 -2011
Network Infrastructure Team

- Senior Network Engineer/Director
  - Chad Lyman
- Network Engineer
  - Michael Simpson
- Open
- Network Technician
  - Deferred
Mission Statement

- Provide easily accessible, secure, reliable network services, through high availability, and stability.
Operational Responsibilities

- Network support
- Network architecture and implementation
- Network maintenance and upgrades
- Network Monitoring
Accomplishments
2008-2009

● Data Center Projects
  ● Banner network design, move, and install
  ● Assisted with banner remote access
  ● Network setup for DSSI VDI, ILO, backup, and Computer Science
  ● Assisted with network firewall moves in BA005n
  ● Multi-homed data center edge switches, and enabled VSS on server cores
Accomplishments Cont.. 2008-2009

- Campus Network Moves
  - Losee Center building
  - Browning Administration Building
  - Multiple smaller moves
Accomplishments Cont..
2008-2009

- Campus Projects
  - Assisted in securing dental hygiene’s network
  - Wireless System replacement
  - Add, Refresh, and replace network equipment for Losse, Browning, Woodbury, Capitol Reef.
  - Added Network equipment for the following Houses: (East, West, Rat, Alumni, ROTC)
  - Installed new Clean Access appliances
  - Added out-of-band console server access to core
Accountability for Wireless Network

- 1000 users every hour
- All legacy access point replaced
- Improved wireless redundancy
Accountability for Wired Network

- 99.999% uptime on core and distribution switches
- Completed 2/3 of campus network upgrades
- Improved redundancy on data center networks
SWOT

Strengths

- High Level of Network Stability
- Strong and quick local support with VAR’s
- Prevention of viruses due to Clean Access
- Exceptional staff and customer service
- Intrusion Prevention System offers virus protection, and prevention
SWOT Cont...

Weakness

- Limited number of security staff
- Network usage reports lack focus
- No spares for Campus Cores
- Redundancy for vital services, and a lack of disaster recovery plan
SWOT Cont...

Weakness

- Virus infested computers from a lack of updates
- No campus wide solution for authenticating every network port
- Limited time to focus efforts on reporting
- Trapeze access point radios are failing
Opportunities

- Securing ports provides the following opportunities: reporting, security, computer update/patches
- Consolidate physical location of network closets
- New position for network monitoring
- Wireless refresh
- Communication
SWOT Cont...

Threats and Trends

- Video and bandwidth intense applications on campus networks
- 10 Gig backbone uplinks to support higher bandwidth requirements
- 0 day viruses, no web filtering
- Failure to complete network buildout
PBA Requests For 2009-2010

- 2 Building Core ($120,000)
- 37 Edge switches ($111,000)
- 1 Network Security Analyst position ($80,000 with benefits)
- Life cycle funding $250,000 for network and $50,000 for security
- Redundant VPN, and VPN SSL
PBA Requests For 2009-2010 Cont...

- Web Filtering ($50,000)
- System logging & Correlation ($16,470)
- Part Time Network Specialist ($27,000)
- Campus Wide NAC ($173,049)
  - Full Time Position for Clean Access ($50,000)
Funded Requests
2009-2010

- 1 building core ($60,000)
- 34 edge switches ($102,000)
Thank You