Network “simplification” – The current state of affairs

- Large networks (1000+) systems on one LAN spanning multiple buildings and campuses
  - Degraded performance due to high-level of broadcasts to 1000s of systems
  - Has caused some outages
- Complicated
  - So much so, it is delaying our ability to move to 100 Gbps
  - Complexity largely responsible for failed attempt to deploy Juniper routers in the core
  - Large networks span too many buildings with inconsistent management and configuration

Network “simplification” – Proposed Solution

- Public and private IP range per building, but not spanning buildings
  - Put systems that don’t provide a service to the global internet onto private ranges (labs and printers, but consider desktops)
  - Some very good results being seen already where this has been done
- Benefits
  - More efficient networks, less traffic (especially broadcasts)
  - Localizes any network issues to a building
  - Although still a ways out… helps set stage for IPV6
  - General best practices for campus networks
  - Simplifies things greatly

Wireless update

- Planning to change SSID names and simplify wireless environment
  - “csu-eid”: student/staff/faculty
  - “csu-guest”: guests – no username/password required, limited bandwidth and confined mostly to just web browsing.
  - “eduroam”: accessible internationally!

- Assuming UTFAB Fee Increase is approved:
  - Upgrade GA classrooms to 802.11ac
  - Cover remaining parts of GA classroom buildings at 5 GHz
  - Central funding for WiFi expansion in non-GA buildings, plus maintenance and an FTE
  - Educational campaign and signage