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