NetGuru-8 Notes

Wednesday, February 3, 2010

Parlor A - A. Ray Olpin University Union
University of Utah
Salt Lake City, UT

Inter-institutional guest authentication (InCommon v. Eduroam)

- Solved guest access - faculty/staff can sponsor an account
- Yet another SSID to advertise
- 802.1X supplicant issues

Outsourcing guest wireless

- PSU/IU: AT&T using university infrastructure
- U of South Carolina: AT&T did everything
- also outsource dorm network?

Wifi architectures: local traffic local

- Trapeze can do it today
- Architecture that allows flexibility
- Too many enterprise players: consolidation soon?

Wireless IPv6

- prioritize RA to prevent rouge RAs
- Outdoor coverage varies
- Tuning APs for large classrooms

GENI/OpenFlow

- IU/GT/Stanford: testbed
- OpenFlow VLAN for opt in users

Residence Hall Wireless

- Mount AP in room or hallway
- No LED blink feature for in room installes
- Reduction in wired traffic

Expreience with Internet bandwidth management

- Packeteer Dynamic subpartions
- Network quota system
- Cisco microflow policing
- Rate limiting
- Ellacoya bought by Arbor Networks
- Some not shaping/limiting/policing

IPS/IDS

- Monitor only
- Distributed model with Sourcefire
- Port mirroring
- Gigamon boxes to aggregate into Sourcefire boxes
- Tap on outbound connections
- FireEye
- VLAN SPANs

Protect infrastructure

- Private IP space
- Token / Second factor
- ACL on the device
- MGMT VLAN with bastion host and firewall
- Control Plane policing
- NetFlow
- HoneyD
- ISS boxes

MPLS

- UMN: Yes
- VRF lite
- Wireless VRF

Data Center Network Architecture

- Virtualization
- Nexus: OTV - Overlay transport virtualization
- TRILL
- ISIS over L2
- http://www.nanog.org/meetings/nanog47/abstracts.php?pt=MTQ3MSZuYW5vZzQ3&nm=nanog47
- Power
- Containers to supplement data center

Low end switch

- Extreme
- Juniper
- HP

Thursday, February 4, 2010

Thoughts on deploying managed in-wall/desktop switches

- Issues with managing that many switches
- Use in special situations
- Autoconfig issues

Edge switch management tools with delegated control for department/college administrators

- UMN: Custom portal: user can change port settings and allowed VLAN assignment
- VT: View only
- InterOP: Using an opensource solution

Switch extraction

- When upgrade switches, consolidate
- Chassis vs. Stack

Experience with management tools for monitoring end-to-end VoIP Quality

- Integrate into campus monitoring tools
- Tie edge to PerfSONAR
- Veritas - SIP Blackberry
- Vocera Badges: SIP and WiFi

Data-intensive campus network architecture

- Large flows avoid firewall

IPTV

- UMich: Zattoo
- IU/UMN: Move Networks

Cable Plant

- Cat6A vs. Cat5e
- Cat6A: alien cross talk

Experience with Cisco Nexus

- GT: has early Nexus
- Using Finisar rather than Cisco SFPs
- Not doing FCoE