Campus Network Design Workshop

Introduction & Logistics

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Network Startup Resource Center

Sponsors

- Network Startup Resource Center (NSRC)
- USA National Science Foundation (NSF)
- Google
- University of Oregon
- University of Guam

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Instructor Team

Name	Organization
Hervey Allen	NSRC (US)
Dale Smith	NSRC (US)
Philip Smith	NSRC (AU)
David Teach	NSRC (US)

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Logistics

- Wireless Network
  - SSID for this workshop is NSRC-PFS
  - Network operates at both 2.4GHz and 5GHz
  - The key is "8888888888" – ten times the number 8
- Local Workshop Server
  - http://www.ws.nsrc.org
  - Or: http://10.10.0.241/
- Final workshop documentation
  - https://nsrc.org/workshops/2016/uoguam-cnd

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Week Schedule

Day	Topic
Monday	NRENs, Campus Network Design Principles, Fibre planning, Layer 1-2-3 refresher, TCP/IP
Tuesday	IP addressing, Cisco Essentials, L2 & Spanning Tree, L2 & vLANS
Wednesday	Core Design, L3 and routing, Static & Dynamic routing, OSPF & BGP
Thursday	NAT, Campus network restructuring, Campus Security & Firewalls,
Friday	Monitoring & Measuring, Netflow

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Day Schedule

Time	Activity
09:00-10:30	Morning Session 1
10:30-11:00	Break
11:00-12:30	Morning Session 2
12:30-13:30	Lunch (outside)
13:30-15:30	Afternoon Session 1
15:30-16:00	Break
16:00-18:00	Afternoon Session 2

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Switch & Routing Practice

- There are two exercise environments
  - Virtual routers/switches (dynamips)
  - Real switches & routers
- We will be using the virtual environment
  - Routers and switches run Cisco IOS on the NSRC Virtual Training Platform
- You will use both ssh and telnet to access these devices from your laptop
- You will be working in groups

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Key for Success

- Remember, this workshop is for you!
  - If you do not understand or have questions, ask for clarification
  - Please share your thoughts and experiences. They are valuable
  - Take advantage of the event to meet your colleagues and build the "human network"

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Questions?

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