Campus Network Design Workshop

Introduction & Logistics

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Sponsors

- Network Startup Resource Center (NSRC)
- USA National Science Foundation (NSF)
- Google
- University of Oregon
- European Union
- TEIN*CC
- National University of Laos





Instructor Team

Name	Organization (Country)
Mike Jager	NSRC (New Zealand)
Dean Pemberton	NSRC (New Zealand)
Dale Smith	NSRC (US)
Philip Smith	NSRC (Australia)





Logistics

- Wireless Network
 - SSID for this workshop is NSRC-PFS
 - The key is "88888888888" ten times the number 8
- Laptops
 - Either use your own laptop, or the laptop provided by NUOL
- Local Workshop Server
 - http://www.ws.nsrc.org
- Final workshop documentation
 - https://nsrc.org/workshops/2016/nsrc-tein-lernet





Week Schedule

Day	Topic
Monday	Campus Network Design Principles, Fiber planning, Linux refresher, Layer 1-2-3 refresher, TCP/IP
Tuesday	Cisco Essentials, L2, Spanning Tree & vLANs
Wednesday	L3, IP addressing and routing, Campus network restructuring
Thursday	OSPF, NAT, Campus Security, Measuring
Friday	Monitoring, Firewalls, Netflow & Other Tools





Day Schedule

Time	Activity
09:00-10:30	Morning Session 1
10:30-11:00	Break
11:00-13:00	Morning Session 2
13:00-14:00	Lunch (outside)
14:00-16:00	Afternoon Session 1
16:00-16:30	Break
16:30-18:00	Afternoon Session 2





Lab Exercises

- The exercise environment:
 - Virtualised PCs/servers (LXCs)
 - Virtual routers/switches (dynamips)
- You will use both ssh and telnet to access these devices from your laptop
- You will be working in six groups





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"





Questions?

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Introductions

- Find a partner someone you do not know
- Spend about five minutes talking to them with a view to giving a thumbnail sketch of him/her to the group. You might want to find out about interests, hobbies, personality, or anything else that interests you (and they are willing to tell!)
- Make notes and use them as a basis for introducing your partner to the group
- After 5 minutes, repeat with the roles reversed



