

Campus Network Design and Security

Introduction and Logistics

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Instructor Team

Name	Organization (country)
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Sponsors

- Tanzania Education and Research Network (TERNET)
- Network Startup Resource Center
- Dar Es Salaam Institute of Technology (DIT)
- USA National Science Foundation
- Cisco Systems
- Google
- O'Reilly (books)
- University of Oregon
- The Open University of Tanzania
- CTV Broadband

Logistics

- Local Workshop Server
 - <http://noc.ws.nsrc.org>
- Final workshop documentation
 - <http://nsrc.org/workshops/2012/ternet-nsrc/>
- Wireless Network
 - SSID for this **workshop** is NSRC-CND, and the key is “8888888888” – ten times the number 8



Week Schedule

Day	Topic
Monday	Introduction & Campus Network Design
Tuesday	In-building layer 2 networks + Labs
Wednesday	IP/IPv6, Campus routing + Labs
Thursday	Network Security + Labs
Friday	Network Security + Labs Wrap up and close



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Day Schedule

Time	Activity
0830-1030	Morning Session 1
1030-1100	Break
1100-1300	Morning Session 2
1300-1400	Lunch
1400-1530	Afternoon Session 1
1530-1600	Break
1600-1800	Afternoon Session 2

Switching/Routing Practice

- We will have 5 groups of students, with:
 - 4 HP 4100gl switches, 1 HP 4000M
 - 3 Cisco 2800 routers
 - Ethernet and serial cables
- We will first build a redundant layer2 (building) network
- We will then connect that building network to a core routed network

Network Security Practice

- We will have 6 groups of students, using our virtual network kit, with:
 - 1 router per group
 - 4 virtual Linux PCs running Ubuntu 10.04
- We will install and test security tools on the virtual Linux PCs

Key for Success

- Remember, this workshop is for you!
 - If you don't 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”



Introductions

- Let's introduce ourselves to the group

Questions

- Do you have any questions?