Introduction & Logistics

Campus Network Design & Operations Workshop



These materials are licensed under the Creative Commons Attribution-NonCommercial 4.0 International license (http://creativecommons.org/licenses/by-nc/4.0/)



UNIVERSITY OF OREGON

NSRC
Network Startup Resource Center

Registration



Scan QR code, or go to:

www.utg.edu.gm/registration/

Please register **every day**

WIFI: NSRC5 or NSRC24

Password: 8888888888

(number 8, ten times)

Sponsors

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



UNIVERSITY OF OREGON

NSRC
Network Startup Resource Center

Instructor Team

Name	Organization (Country)
Anna Saine	NSRC (Gambia)
Brian Candler	NSRC (UK)
Dale Smith	NSRC (USA)
Patrick Okui	NSRC (Uganda)
Sebastian Büttrich	NSRC (Denmark)

Logistics

- Wireless Network
  - SSID for this workshop is NSRC24 and NSRC5
  - Network operates at both 2.4GHz and 5GHz
  - The key is “8888888888” – ten times the number 8
- Local Workshop Server (only on this wifi network)
  - **www.ws.nsrc.org**
  - Or: 100.64.0.1
- Final workshop documentation
  - https://nsrc.org/workshops/2024/nsrc-utg-cndo/


Not Secure
ws.nsrc.org
NSRC
Network Startup Resource Center
Campus Network Design and Operations
Agenda
Downloads
NOC
Archived workshops
Campus 1
Console
SSH
Web
Campus 2
Console
SSH
Web
Campus 3
Console
SSH
Web
Campus 4
Console
SSH
Web
Campus 5
Console
SSH
Web
Campus 6
Console
SSH
Web
Transit
Console
SSH

Logistics

- This is a 3 day workshop
- Please ask questions!
  - If you don't understand something, probably many others don't either
  - There are no stupid questions!
- Help each other as well
- Mobile phones OFF or on SILENT
  - If you need to receive or make calls, please do so OUTSIDE the room

Schedule

Go to www.ws.nsrc.org and click on "Agenda"
Links for all presentations and labs

Day	Topic
One	NRENs, Layer 1-2-3 refresher, Campus Network Design Principles & Best Practices, Fiber planning, Cisco configs
Two	L2 Network Design, Spanning Tree, VLANs, IP Addressing
Three	IP routing, Layer 3 Switches, Static routes, Wireless, Campus network restructuring

Daily Schedule

Time	Activity
09:00-10:30	Morning Session 1
10:30-11:00	Break
11:00-12:30	Morning Session 2
12:30-12:40	Brief break
12:40-13:30	Afternoon Session 3 (first half)
13:30-14:30	Lunch and prayers
14:30-15:10	Afternoon Session 3 (second half)
15:10-15:20	Brief break
15:20-16:50	Session 4

Switch & Routing Practice

- The exercise environment is based on GNS3 and KVM
  - Virtual routers/switches (Cisco IOS)
  - Virtual hosts (Linux servers)
- You will access these devices via the web interface
- You will be working in 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?

This document is a result of work by the Network Startup Resource Center (NSRC at https://www.nsrc.org). This document may be freely copied, modified, and otherwise re-used on the condition that any re-use acknowledge the NSRC as the original source.