

High-speed Networks, Cybersecurity, and Software-defined Networking Workshop

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Western Academy Support and Training Center (WASTC)
2020 Summer Conference
June 15 – June 19



National Science Foundation (NSF), Office of Advanced Cyberinfrastructure (OAC) and Advanced Technological Education (ATE)

Workshop Overview

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- The University of South Carolina (USC) has developed custom labs for topics related to networks and cybersecurity
- The topics complement other programs (for example, CCNA)
- Emphasis on open source software
 - Linux
 - Mininet
 - Zeek Intrusion Detection Systems (IDS)
 - Open source routers
 - Open source Software-defined Networking devices (ONOS controller, SDN switches)

Workshop Overview

- These labs will be available for NETLAB+ customers (Fall 2020)
- Material is posted in the following webpage:
 - http://ce.sc.edu/cyberinfra/workshop_2020_2.html
- For the workshop, we will use UofSC's NETLAB system
 - URL: <https://netlab.cec.sc.edu/>
 - Username: email used for registration
 - Password: wastc2020

If you registered to the workshop and are not able to access the NETLAB system, please contact Jose Gomez in the chat window (or via email at gomezgaj@email.sc.edu)

Workshop Overview

- The workshop is from Monday June 15 to Friday June 19
- Morning 9:00 – 12:00 PDT
 - Discussion of topics, labs
- Afternoon 13:00 – 14:00 PDT
 - Office hours

Agenda

- Wednesday June 17: SDN

DAY 3: Wednesday, June 17		
Time (PDT)	Topic	Presenter
09:00 - 09:10	Review NTP Lab Series [PDF, PPT]	Jorge Crichigno
09:10 - 09:40	Introduction to Software Defined Networking (SDN) [PDF, PPT]	Jorge Crichigno
09:40 - 09:50	Overview SDN Lab Series [PDF, PPT]	Jorge Crichigno
09:50 - 10:00	Break	
10:00 - 10:45	Lab 2: Legacy Networks, BGP Routing [PDF, PPT]	Jorge Crichigno, Ali Alsabeh
10:45 - 10:55	Break	
10:55 - 11:35	Lab 4: SDN Concepts, Controllers, Flow Tables [PDF, PPT]	Jorge Crichigno, Ali Alsabeh
11:35 - 12:00	Discussion and Summary of Day 3	Jorge Crichigno
12:00 - 13:00	Lunch	
13:00 - 14:00	Office hours	Jorge Crichigno