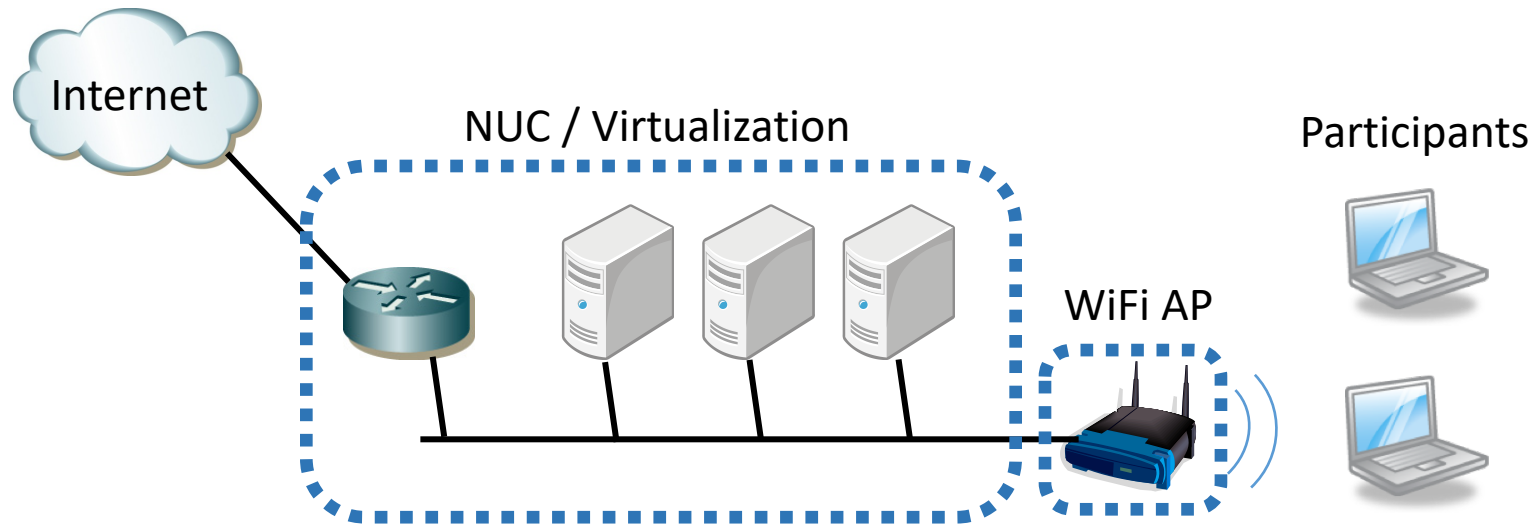


workshop setup

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Popular setup for hands-on



- ‘Touch and feel’ helps to understand
 - also satisfies participants
 - Participants have different OS and restrictions on their laptops
- Bringing in laboratory environments
 - To minimize the dependency on participants’ laptops
 - To simplify laboratory materials

Wireless Access Point (WiFi AP)

- Reasonable spec
 - 2.4GHz and 5GHz, wpa2-psk(AES)
 - Associating ~40clients
 - Simple bridging, small & light
- Yamaha WLX202
 - \$340USD, 430g
- Ubiquiti UAP-AC-PRO
 - \$140USD, 350g

Modern NUC

- NUC6i7KYK
 - 6th generation Core i7 6770HQ
- NUC6i5SYH
 - 6th generation Core i5 6260U
- Sample configuration
 - 32GB memory, 1TB M.2 SSD
 - Additional USB-Ethernet
 - Total \$1000 ~ \$1600USD



Operating System

- Ubuntu
 - 16LTS
- CentOS

Server Virtualizations

- Linux LXD/LXC
 - <https://linuxcontainers.org/>
 - lightweight but Linux only (OS level virtualization)
 - can run 200VMs easily
- KVM/QEMU/libvirt
 - hypervisor
 - can host almost of all x86 OSes

Router Virtualizations

- Dynamips
 - simulates smaller cisco routers
- Cisco XRv
 - IOS-XR, requires more memory
- Juniper vMX
 - JUNOS, requires more memory