



OKANAGAN COLLEGE

Computer Science 328 -01

Due Date: Sunday, April 14, 2024

Project: Network Operations and Activities

With your Linux VMs, do some research work on the following suggested activities of your choice. You can work on this project by yourself (two activities required) or you can pair up with one of your fellow classmates as a group (three activities required):

a. One Ethical Hacking activity not covered in Lab 7 (OR your own Linux networking research topic)

- DNS Poisoning, Trojan Attacks, TCP/IP Hijacking, Email Hijacking, Password Hacking, Wireless Hacking, and others

https://www.tutorialspoint.com/ethical_hacking/index.htm

<https://gbhackers.com/kali-linux-tutorial-xerosploit/>

<https://www.cyberpratibha.com/kali-linux-man-in-the-middle-attack-tutorial/>

<https://www.offensive-security.com/metasploit-unleashed/>

b. One of the followings (OR your own Linux networking research topic)

- **Network Monitoring Software**

<https://www.netadmintools.com/linux-monitoring-software>

<https://www.howtoforge.com/tutorial/ubuntu-nagios/>

<https://www.howtoforge.com/how-to-setup-opennms-network-monitoring-solution-on-ubuntu-2004/>

- **Virtual Private Network**

<https://www.rosehosting.com/blog/how-to-install-openvpn-on-ubuntu-22-04/>

- **Intrusion Detection System**

<https://blog.rapid7.com/2017/06/30/how-to-install-and-configure-aide-on-ubuntu-linux/>

<https://computingforgeeks.com/install-and-configure-tripwire-on-ubuntu/>

<https://www.dnsstuff.com/intrusion-detection-system>

<https://hackertarget.com/snort-tutorial-practical-examples/>

<https://www.howtoforge.com/how-to-install-suricata-ids-on-ubuntu-22-04/>

<https://www.tecmint.com/install-tripwire-ids-intrusion-detection-system-on-linux/>

- **Email system**

http://www.linuxtopia.org/HowToGuides/linux_email_setup_guide/linux_postfix_preinstall.html

c. One of the followings (OR your own Linux networking research topic)

- Perform a task using **Webmin** and **Cockpit** Management tools
- Samba File Sharing service (<https://phoenixnap.com/kb/ubuntu-samba>)

Write up a summary report on the technical details of your chosen research topics, and specify the resources needed on the research features you chose to implement. Demonstrate how your research network activities work during the project presentation. Take screen shots to show what features work and what features do not work (if any).

Project Presentations (online via Zoom): Thursday, April 11, 2024 (12:30 pm – 4:00 pm)

Submitting your project

Submit your project report (embedded with all your screenshots) as a PDF file via our Moodle course page by **Sunday, April 14, 2024 (before midnight)**.