

Operating Systems Lab 6

ITSC 200: Network Protocols and Security

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Lab Outcome(s)

* Check running daemons
* Examine open ports
* Check running processes
* Find and install software

Reading

* Linux\_cheatsheet\_1

Introduction

This lab will be a combination of the Linux labs to date. In addition to the material covered in the previous lecture, this lab will give you a chance to practice earlier material .

1.0 Build a Linux Server

1. In Virtualbox on your laptop, create a new Mint Linux server. Create user1 and user2 accounts.
2. Write a Bash shell script that will update your system and install the following software (some user input may be required but challenge yourself and see if you can automate it completely):  
   1. Wireshark
   2. Apache2
3. Your script should create a text file (<yourname>.txt)in your home directory that searches for Apache2 running daemon(s) and outputs the result to your text file.
4. It should also list all the users on the system that use /bin/bash as their shell
5. It should also check what ports are listening on the NIC address (not the loopback) and write that out to the text file as well.
6. Your script should also check the IP address and print only the IP address to the text file. (hint: use *ifconfig* and pipe it to *grep* and *cut* to isolate the IP address, or check and see if there is an appropriate option in the *ifconfig* command). It is very useful to have a shell script that can figure out the IP address.
7. Have your script check to see what processes are running that belong to the user logged in and running the script. Write out the process ID and the executable for the process to your text file.

Submit your script along with either a screen capture of the output of the file created or simply a copy of the output, to OS Lab6 Assignment in D2L (Brightspace).

References

Linux\_cheatsheet\_1

debian-handbook

The\_linux\_command\_line-16.07

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