

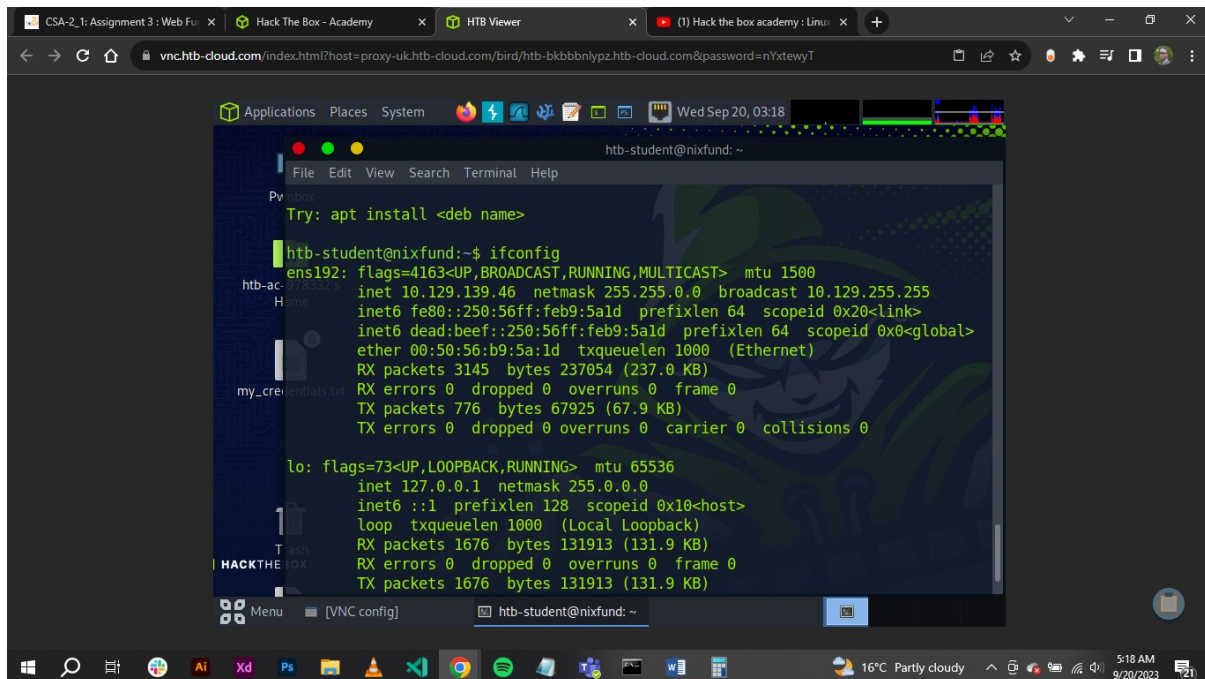
Linux Fundamentals

Introduction

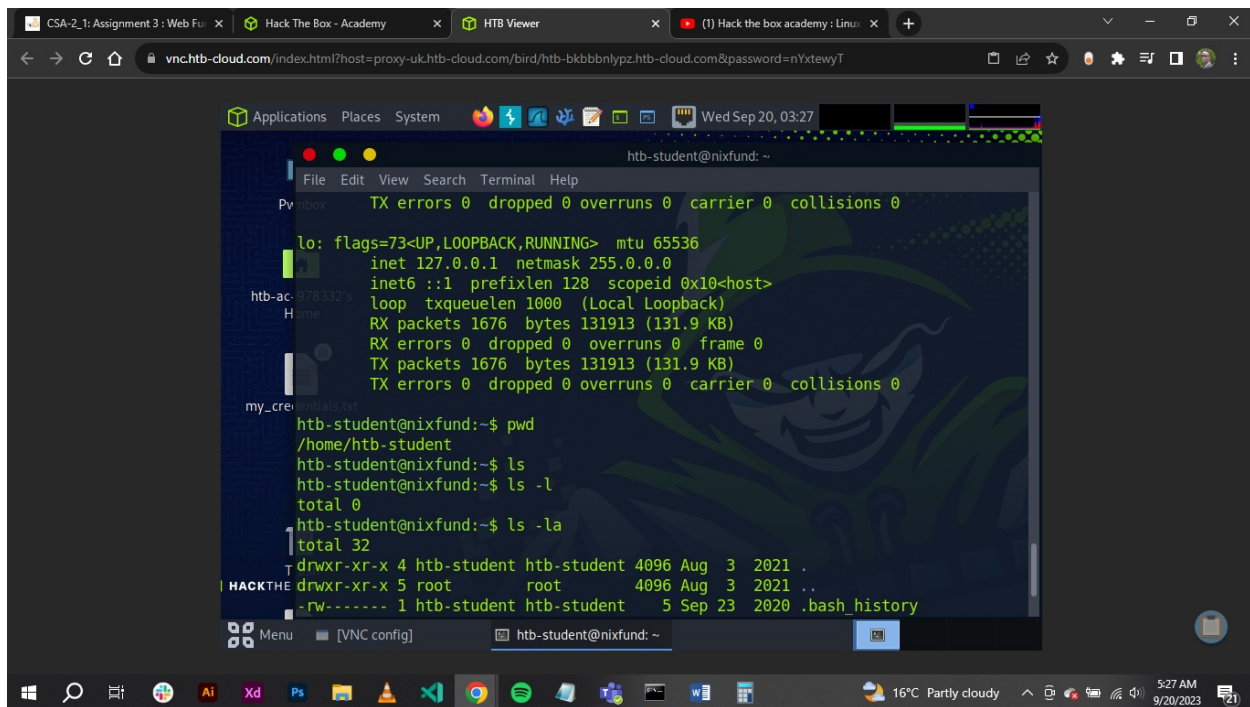
The module intends to introduce the Security Analyst enthusiast to the fundamentals of Linux-based system. Since this the tool widely used in the world of security. Among the knowledge to be acquainted with is navigating files directories, granting and revoking rights, use the Linux shell, as there are many Linux-based servers.

The goal of the learner in this module is:

- Understand the architecture and components of Linux-based operating systems.
- Learn basic file system navigation and command line usage.
- Gain familiarity with Linux security features, user accounts, and permissions.
- Configure and utilize basic networking tools and services in Linux.



```
htb-student@nixfund: ~  
Try: apt install <deb name>  
  
htb-student@nixfund:~$ ifconfig  
ens192: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
    inet 10.129.139.46 netmask 255.255.0.0 broadcast 10.129.255.255  
    inet6 fe80::250:56ff:feb9:5a1d prefixlen 64 scopeid 0x20<link>  
    inet6 dead:beef::250:56ff:feb9:5a1d prefixlen 64 scopeid 0x0<global>  
    ether 00:50:56:b9:5a:1d txqueuelen 1000 (Ethernet)  
    RX packets 3145 bytes 237054 (237.0 KB)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 776 bytes 67925 (67.9 KB)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536  
    inet 127.0.0.1 netmask 255.0.0.0  
    inet6 ::1 prefixlen 128 scopeid 0x10<host>  
    loop txqueuelen 1000 (Local Loopback)  
    RX packets 1676 bytes 131913 (131.9 KB)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 1676 bytes 131913 (131.9 KB)
```



Conclusion

- Understood the architecture and components of Linux-based operating systems.
- Learnt basic file system navigation and command line usage.
- Gained familiarity with Linux security features, user accounts, and permissions.
- Configured and utilize basic networking tools and services in Linux.