IT SECURITY

VEER SINGH

WEEK 1

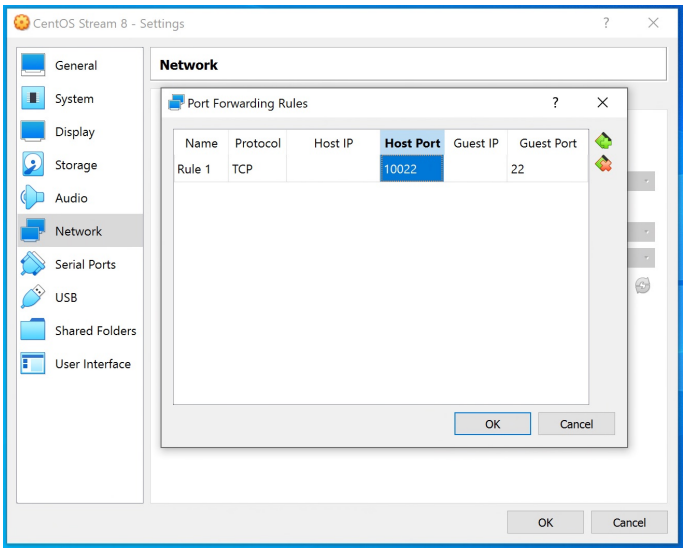
9 Feb 2021

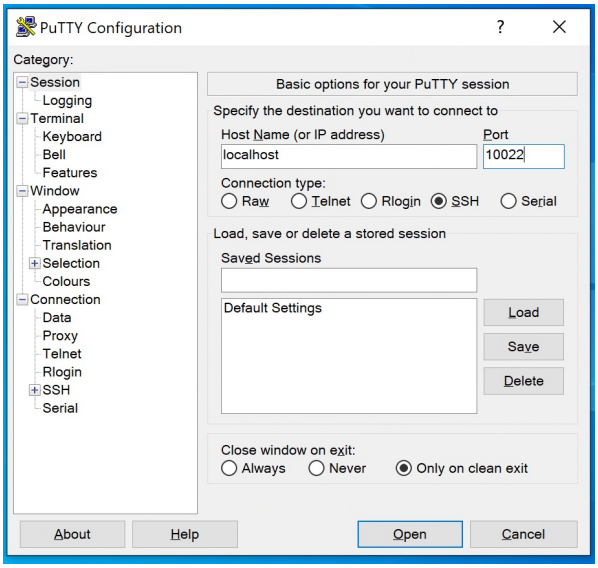
→ Virtual Box → Linux
→ Putty → Full installer
→ Centos Stream 8.ova

→ To make the virtual machine: ① Oracle VM VirtualBox
② Import
③ Choose the downloaded Centos Stream 8.ova file
④ Dont change any settings

→ Username → root
→ password → INBMA0634L

→ PuTTy to connect remotely with SSH:
① Enable network in VM
② Machine → Settings → Network
③ Advanced → Port forwarding → "Add" {Protocol = TCP}
④ Guest Port → 22
⑤ Host Port → 10022
⑥ OK → OK
⑦ Virtual Machine → Start → Headless start
⑧ In PuTTy → Host name → localhost
→ Port → 10022
⑨ Open → login using same root credentials





→ Continue with "Week1 Commands.txt"

WEEK 2

16 Feb 2021

→ make a new install
→ Configure network for ssh
→ headless start
→ Connect with PuTTy
→ Continue with " Week2 Commands .txt "

Linux File structure

.n Name	Size	Modify time
~bin	7	May 18 2020
/boot	4096	Feb 7 08:39
/dev	2960	Apr 12 04:41
/etc	8192	Apr 12 04:41
/home	6	May 18 2020
~lib	7	May 18 2020
~lib64	9	May 18 2020
/media	6	May 18 2020
/mnt	6	May 18 2020
/opt	6	May 18 2020
/proc	0	Apr 12 04:41
/root	194	Apr 12 04:48
/run	660	Apr 12 04:41
~sbin	8	May 18 2020
/srv	6	May 18 2020
/sys	0	Apr 12 04:41
/tmp	85	Apr 12 04:42
/usr	144	Feb 7 08:27
/var	278	Feb 7 08:39

① /bin → Contains essential user binaries
② /boot → files needed to boot the system
③ /dev → device files, these are not actually files but are represented as files like SATA drive
④ /etc → Configuration files that can be edited in a text editor.
⑤ /home → Contains a home folder for each user. Contains user data files and user specific configuration files. other users cant modify other users files.
⑥ /lib → Contains libraries needed by essential binaries in /bin and /sbin
⑦ /lib64 → 64 bit library files
⑧ /media → directories for removable media like USB drives are mounted here
⑨ /mnt → temporary mount points
⑩ /opt → optional packages for optional software

⑪ /proc → Special files which contain kernel and process files
⑫ /root → home directory of the root user
⑬ /run → gives applications a standard place to store transient files like sockets and process IDs
⑭ /sbin → System administration binaries
⑮ /srv → Contains data for services provided by the system
⑯ /sys → Data about the system and its components like attached hardware
⑰ /tmp → Temporary files stored by applications which are then deleted
⑱ /usr → User binaries and read only data, applications and files of a user
⑲ /var → Variable data files, writable counterpart to /usr like log files

```
[root@localhost /]# ls -ld
dr-xr-xr-x. 17 root root 224 Feb  7 08:27 .
[root@localhost /]#
```

→ first 3 after d → permissions for root user
→ middle 3 after d → permissions for users who are member of root group
→ last 3 after d → permissions for others

WEEK 3

23 Feb 2021

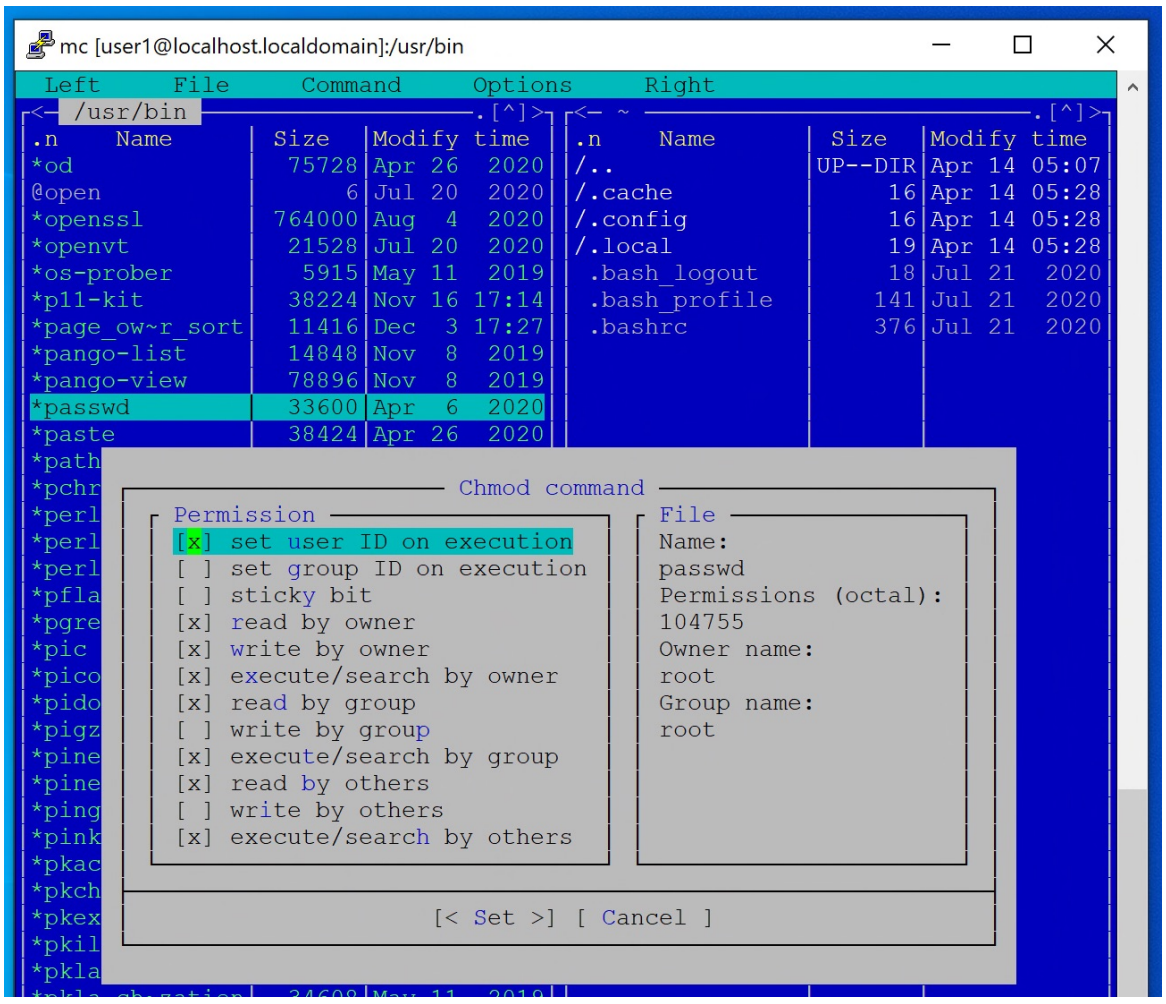
→ make a new install
→ configure network for ssh
→ headless start
→ Connect with Putty
→ Continue with " Week3 Commands .txt "

WEEK 4

2 March 2021

→ make a new install
→ configure network for ssh
→ headless start
→ Connect with Putty
→ Continue with " Week3 Commands .txt "

→ Permission vector in MC GUI

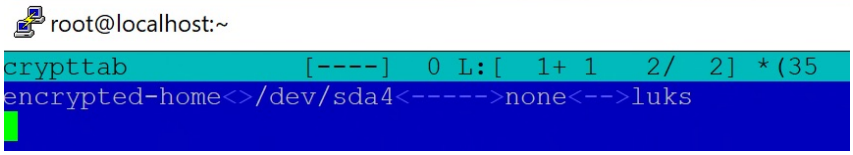


WEEK 5

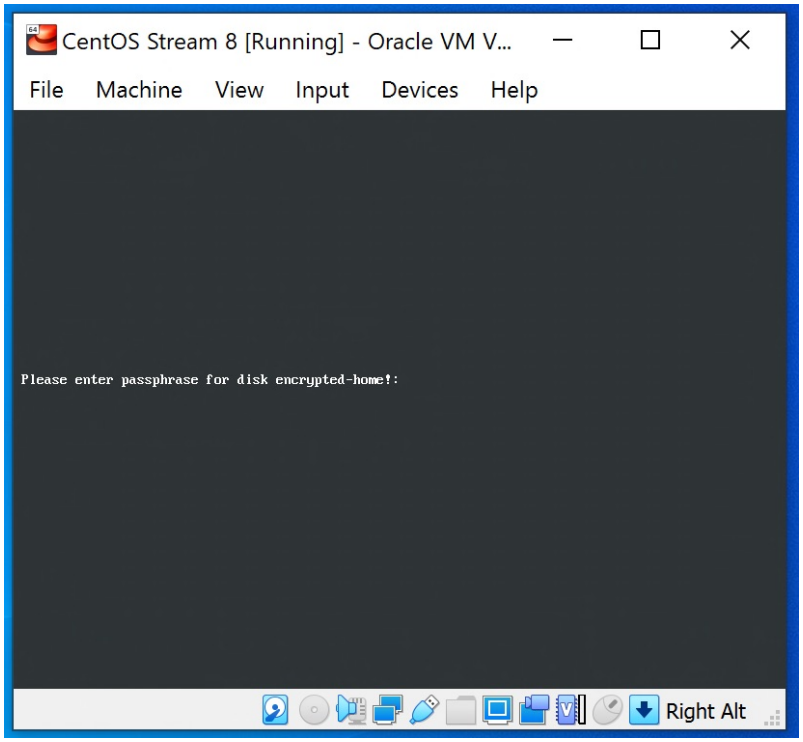
8 March 2021

→ make a new install
→ Configure network for ssh
→ headless start
→ Connect with Putty
→ Continue with " Week5 Commands .txt "

→ Edits made to the crypttab file

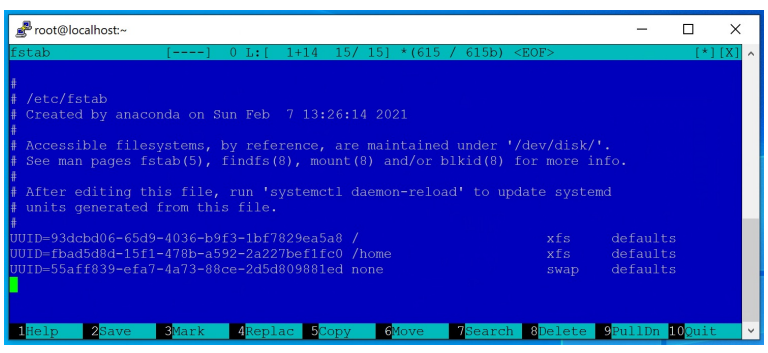


→ VM asks for password

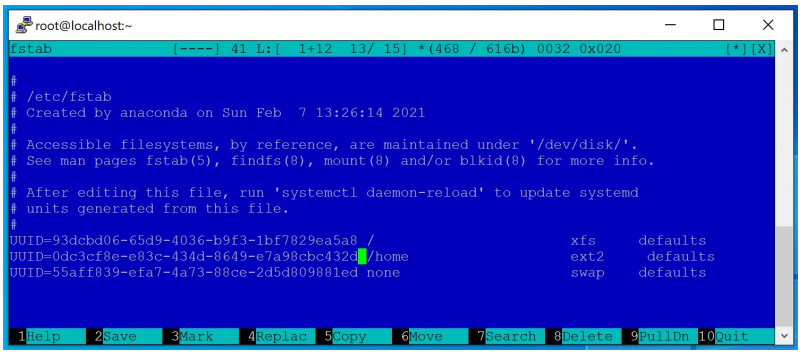


→ Edits made to the fstab file

BEFORE

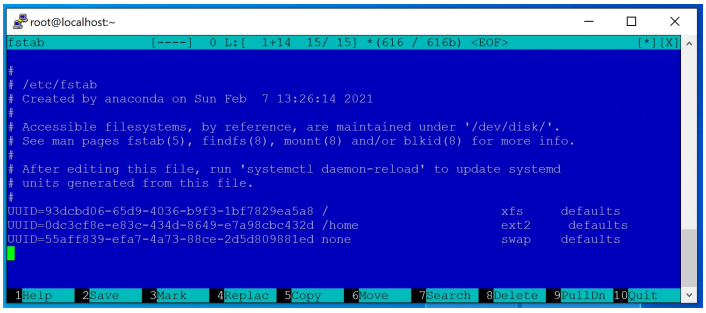


AFTER

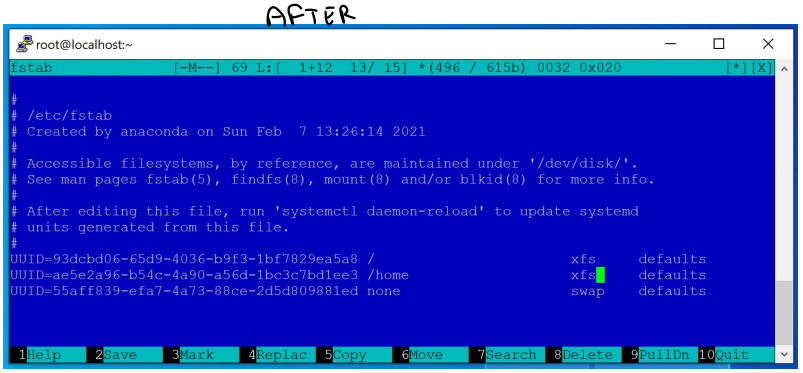


→ Edits made to the fstab file

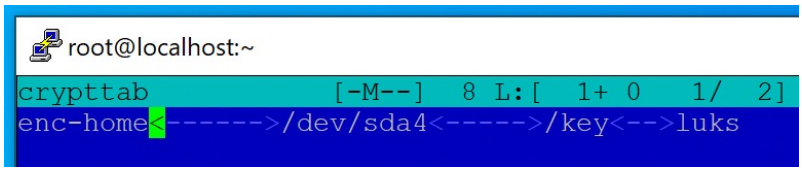
BEFORE



AFTER

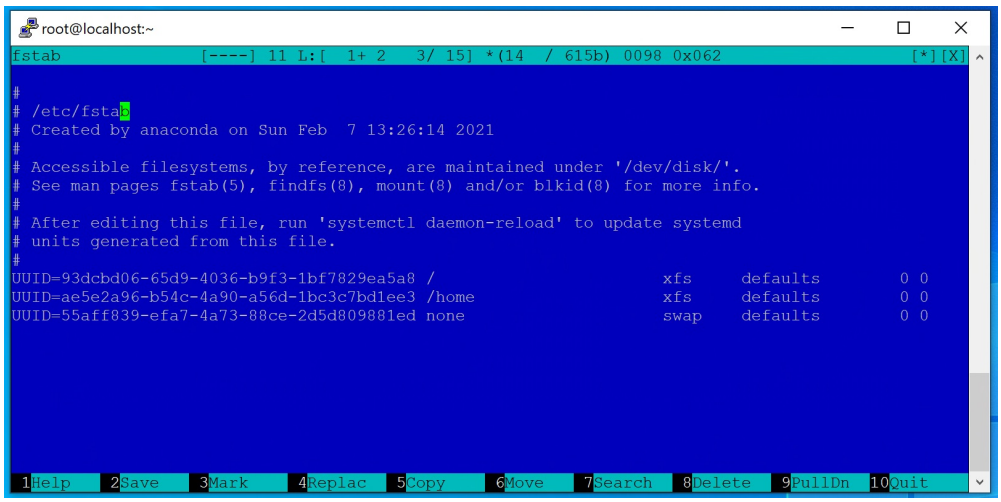


→ Edits made to the crypttab file

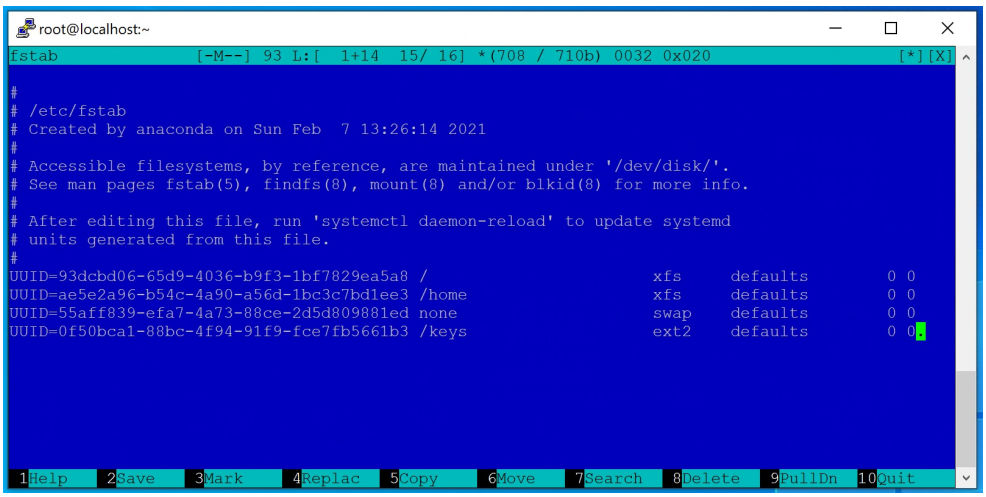


→ Additions made to the fstab file

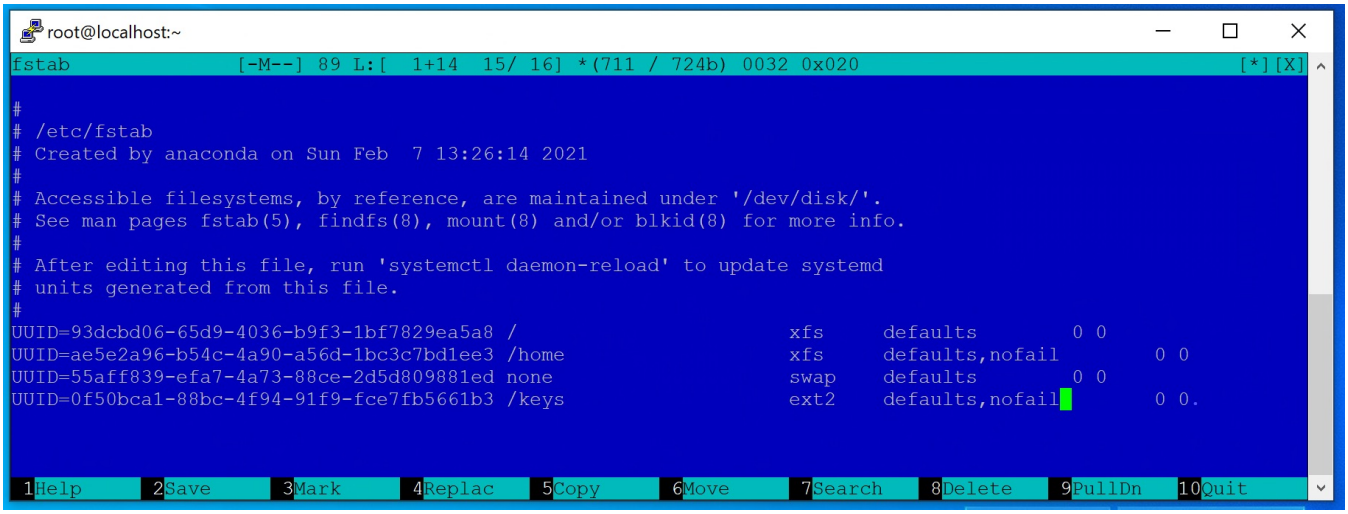
Before



After



→ Additions made to the fstab file



WEEK 6

15 March 2021

→ No class, holiday

WEEK 7

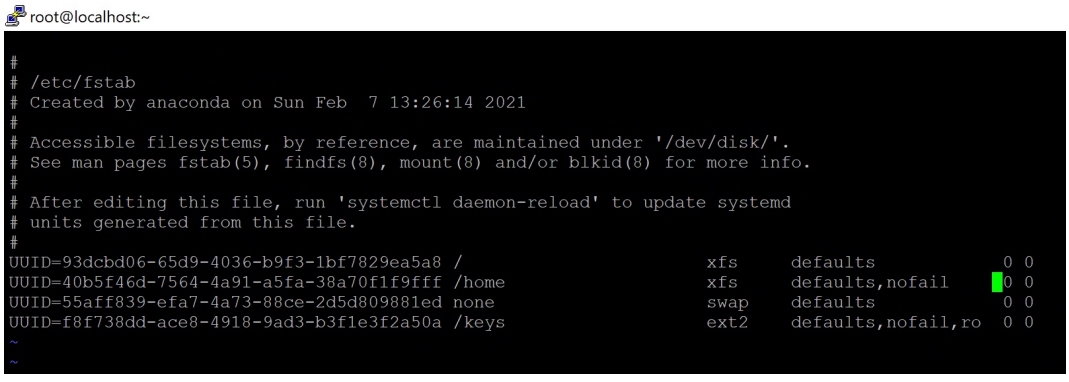
22 March 2021

→ make a new install

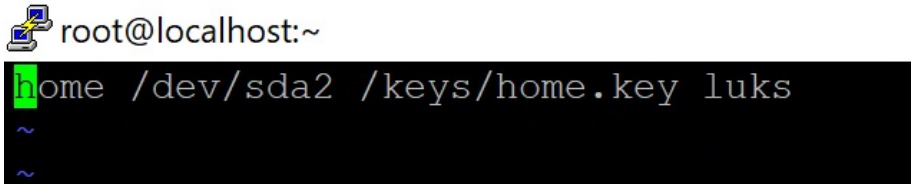
→ configure network for ssh

→ Continue with "Week7 Commands.txt"

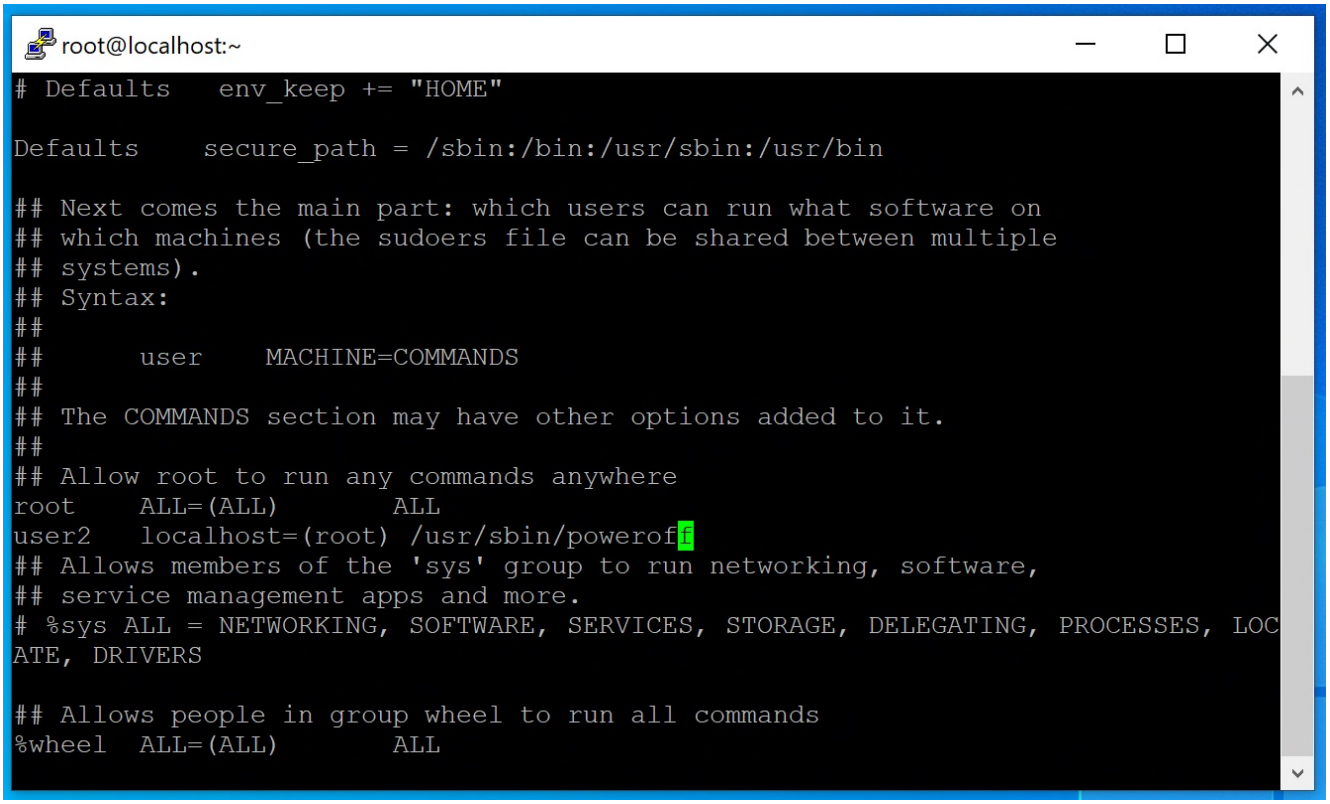
→ Changes to the fstab file



→ Additions to the crypttab file



→ Changes to visudo

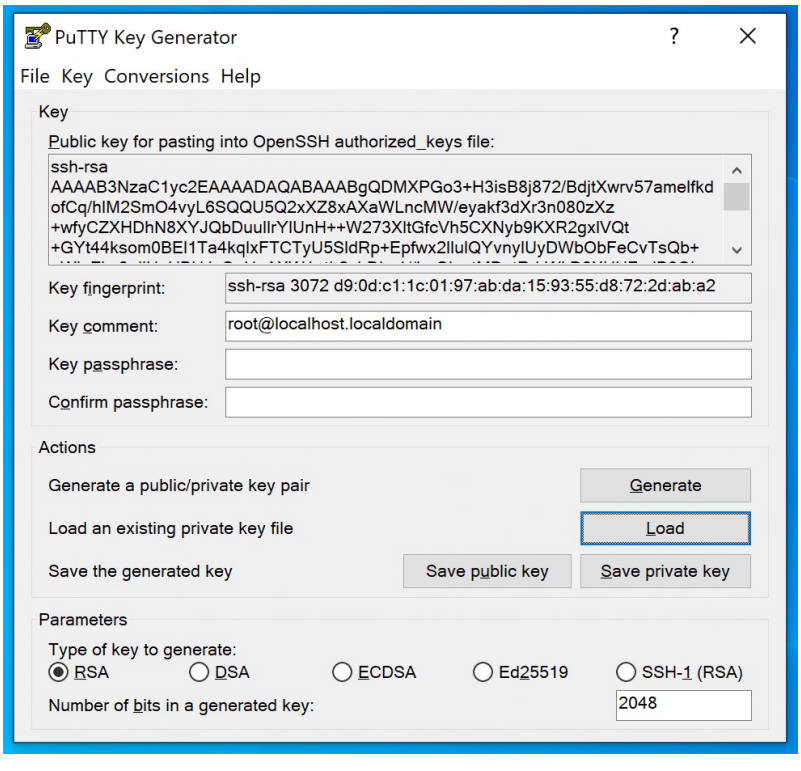


WEEK 8

29 March 2021

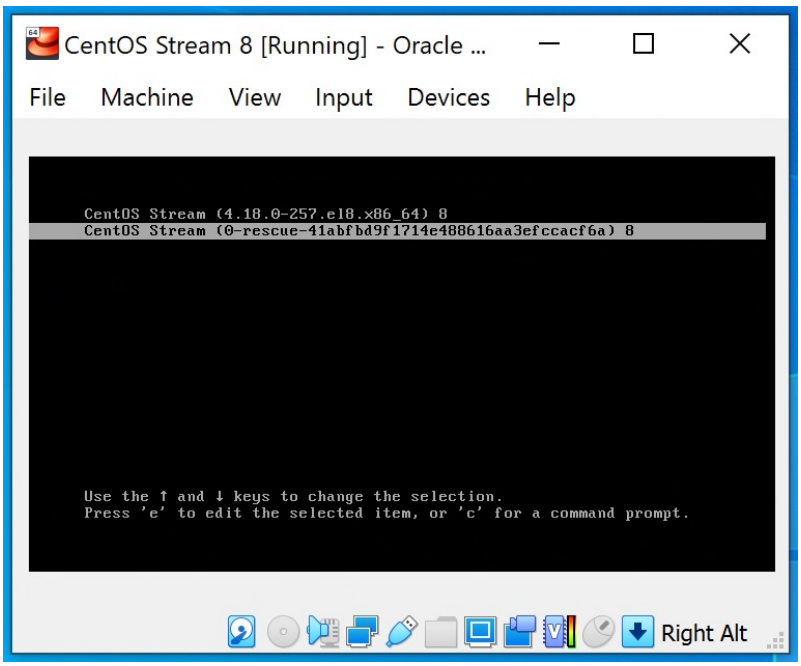
→ make a new install
→ Configure network for ssh
→ headless start
→ Connect with Putty
→ Continue with "Week 8 Commands.txt"

→ PuTTYgen

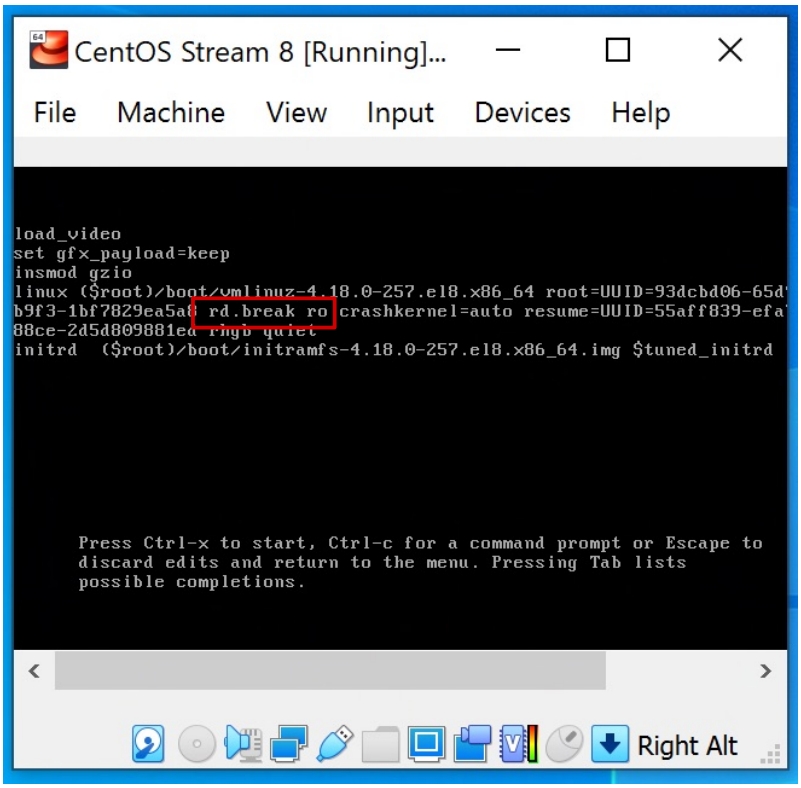


→ private key

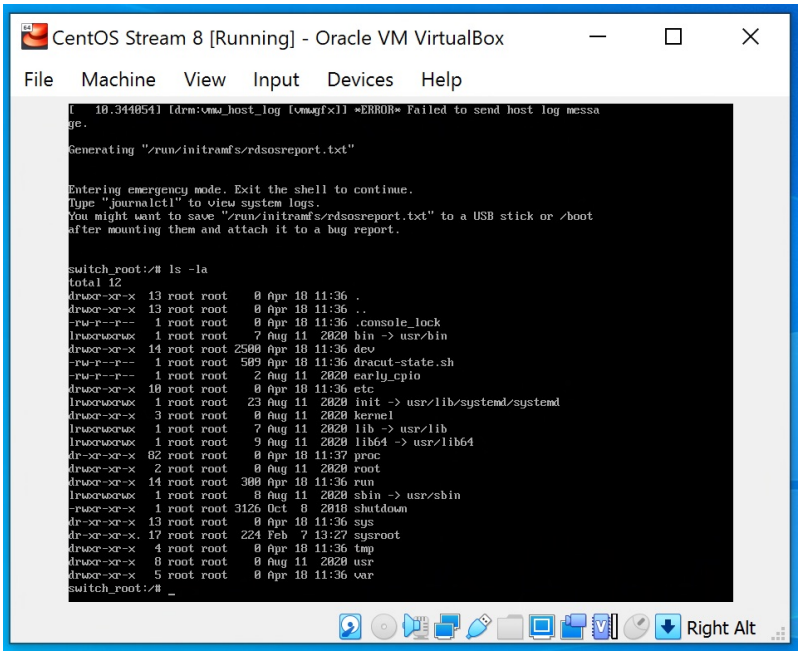
→ Options on boot up



→ Changes made to the file



→ We are able to access the machine



WEEK 9

Spring break Holiday

WEEK 10

12 April 2021

- → make a new install
- → configure network for ssh
- → headless start
- → Connect with Putty
- → Continue with " Week5 Commands .txt "