# Ubuntu MD July 27, 2019 Meeting

## Trouble Shooting Tips

### System Operating Issues
uname -a # to determine which kernel your system is running
df -h # to view disk partitions
free -m # free memory
lshw -a #list all system hardware
lspci # list all devices found on pci bus
lsusb # list usb connected devices.
lsmod # list modules in kernel
sudo # root like privileges
networking issues # ifconfig, network manager

### Logs
dmesg #log file for system startup
*/var/log/syslog # system log*
*/var/log/auth.log # authorization log*
*/var/log/apache2/error.log # apache2 error log*

### System Boot Startup Issues
Hold Shift key while booting
grub -e #edit command
grub -c #command line
boot from live usb # access files and view system files.
/boot sector is full # try purging old kernel files to free space
sudo add-apt-repository ppa:yannubuntu/boot-repair
sudo apt-get update
sudo apt-get install -y boot-repair && boot-repair # install and start boot-repair

| ls | Same as "dir"; lists the current directory. | ls-ll |
|---|---|---|
| cp | Copy file. | cp /dir/filename /dir/filename |
| rm | Delete file. | rm /dir/filename /dir/filename |
| mv | Move file. | mv /dir/filename /dir/filename |
| mkdir | Make a directory. | |
| cat | Concatenate files and print on the standard output. | cat /dir/logfile |
| grep | Print lines of input matching a specified pattern. | grep intel |
| apt-get | Update installer. | apt-get update, or apt-get upgrade |

| sosreport | A utility that collects configuration and diagnostic information about your system. The utility needs to be installed first using the following command line: "sudo apt-get install sosreport". It is recommended you reboot your system after the install before first running the utility. | sosreport |
|---|---|---|
| "cat" and "grep" together | Use to list all the instances of a specific search item. | cat /dir/logfile \| grep intel (the output of this command would print to the default output source any instance of the string "intel") |

Hold shift key while booting for Grub menu

# Can't Use apt i.e. /boot is 100% full

**NOTE: this is only if you can't use apt to clean up due to a 100% full /boot**

## 1. Get the list of kernel images

Get the list of kernel images and determine what you can do without. This command will show installed kernels except the currently running one

```
$ sudo dpkg --list 'linux-image*'|awk '{ if ($1=="ii") print $2}'|grep -v `uname -r`
```

You will get the list of images somethign like below:

```
linux-image-3.19.0-25-generic
linux-image-3.19.0-56-generic
linux-image-3.19.0-58-generic
linux-image-3.19.0-59-generic
linux-image-3.19.0-61-generic
linux-image-3.19.0-65-generic
linux-image-extra-3.19.0-25-generic
linux-image-extra-3.19.0-56-generic
linux-image-extra-3.19.0-58-generic
linux-image-extra-3.19.0-59-generic
linux-image-extra-3.19.0-61-generic
```

## 2. Prepare Delete

Craft a command to delete all files in /boot for kernels that don't matter to you using brace expansion to keep you sane. Remember to exclude the current and two newest kernel images. From above Example, it's

```
sudo rm -rf /boot/*-3.19.0-{25,56,58,59,61,65}-*
```

## 3. Clean up what's making apt grumpy about a partial install.

```
sudo apt-get -f install
```

## 4. Autoremove

Finally, autoremove to clear out the old kernel image packages that have been orphaned by the manual boot clean.

```
sudo apt-get autoremove
```

## 5. Update Grub

```
sudo update-grub
```

## 6. Now you can update, install packages

References
https://www.makeuseof.com/tag/fix-ubuntu-linux-pc-wont-boot/
https://www.dell.com/support/article/us/en/04/sln289410/introduction-to-basic-troubleshooting-commands-within-ubuntu-linux?lang=en