Raspberry Pi Tips / Issues

Some stuffs...

Check if Running Raspbian-Lite

To check if we are on lite version, (well one way to do it...) is to check if raspberrypi-ui-mods package is installed. The following command will return nothing if it is not installed - so, we are probably on lite then.

```
$ sudo apt list raspberrypi-ui-mods --installed
```

Setting Timezone on Pi from commandline

I run desktop-less Raspbian (Buster) and somehow the timezone got reset. To set that,

```
# sudo timedatectl set-timezone Asia/Kuala_Lumpur
```

Change hostname manually

Edit `/etc/hostname` and `/etc/hosts` - modify accordingly, and reboot immediately.

```
$ name=my1pi
$ prev=$(cat /etc/hostname)
$ sudo sed -i "s/$prev/$name/" /etc/hostname
$ sudo sed -i "s/$prev/$name/" /etc/hosts
$ sudo reboot
```

Disable Display from Sleeping

The simplest way is... install xscreensaver and disable it!

```
# sudo apt install xscreensaver
```

ePhoto Frame

Script to make Pi an e-Photo Frame.

eframe.sh

```
#!/bin/bash

SHOW_PATH="/home/pi/Pictures"
[ -d "$1" ] && SHOW_PATH=`cd $1;pwd`
SHOW_EXEC="feh"
SHOW_FULL=`which $SHOW_EXEC 2>/dev/null`
# args: delay 5s, fullscreen, recursive, randomize
SHOW_ARGS="-D5 -F -r -z"

echo "Accessing pictures in $SHOW_PATH..."
# press esc to quit?
${SHOW_FULL} ${SHOW_ARGS} ${SHOW_PATH}
```

Set Static IP

- get the following info: address, netmask, broadcast, network, gateway
  - to get address, netmask, broadcast:

```
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 10.170.7.195  netmask 255.255.255.0  broadcast
10.170.7.255
```

  - to get network, gateway:

```
$ netstat -nr
Kernel IP routing table
Destination     Gateway         Genmask         Flags   MSS Window
irtt Iface
0.0.0.0         10.170.7.1      0.0.0.0         UG        0 0
0 eth0
10.170.7.0      0.0.0.0         255.255.255.0   U         0 0
0 eth0
```

- edit `/etc/network/interfaces` and change

```
iface eth0 inet dhcp
```

to

```
iface eth0 inet static
address xxx.xxx.xxx.xxx
netmask xxx.xxx.xxx.xxx
network xxx.xxx.xxx.xxx
broadcast xxx.xxx.xxx.xxx
gateway xxx.xxx.xxx.xxx
```

note: fill in the info accordingly

Display Issues

Note *Got these from R-Pi site.*

The HDMI monitor (or HDMI adapter) may only support a limited set of formats for CEA (TV) or DMT (Monitor). To find out which formats are supported, use the following method:

- Set the output format to VGA 60Hz (hdmi_group=1 and hdmi_mode=1) and boot up your Raspberry Pi
- Enter the following command to give a list of CEA-supported modes: /opt/vc/bin/tvservice -m CEA
- Enter the following command to give a list of DMT-supported modes: /opt/vc/bin/tvservice -m DMT
- Enter the following command to show your current state: /opt/vc/bin/tvservice -s

Then edit config.txt to select:

- hdmi_group={0:EDID_auto_detect,1:CEA,2:DMT}
- hdmi_mode={select from tvservice output}

Auto-run Script/Program on Startup

Note*: This assumes a Raspbian installation with desktop environment, and username is* ***pi****.*

- create path `/home/pi/.config/autostart`
- create a desktop file in there (e.g. monitor.desktop)

monitor.desktop

```
[Desktop Entry]
Type=Application
Name=Monitor
Exec=/path/to/exec
```

Script to run browser full-screen

start_fullscreen.sh

```
#!/bin/bash

chromium-browser http://server.local:1337 --start-fullscreen
```