

Setup a Raspberry Pi Zero W to run a Web Browser in Kiosk Mode

with Dakboard



Download Raspbian Buster Lite and write it to the SD card

<https://www.raspberrypi.org/downloads/raspbian/>

First login

u:pi

p:raspberrypi

Configuration

```
sudo raspi-config
```

1. change pi password
2. change hostname
3. set wifi ssid and pass
4. set timezone
5. interface opt -> SSH enable
6. Boot Options -> Desktop / CLI -> Console Autologin
7. finish -> reboot

Applying latest versions

```
sudo apt-get update && sudo apt-get upgrade -y
```

Creating a Minimum X Server Environment for the Chromium Browser

```
sudo apt-get install --no-install-recommends xserver-xorg x11-xserver-utils xinit openbox -y
```

```
sudo apt-get install --no-install-recommends chromium-browser -y
```

Remove Rainbow Screen (OPTIONAL)

```
sudo nano /boot/config.txt
```

```
# Disable rainbow image at boot
```

```
disable_splash=1
```

Create an free account on Dakboard and get your custom board url

<https://www.dakboard.com/>

Configure Openbox.

```
sudo nano /etc/xdg/openbox/autostart
```

```
# Disable any form of screen saver / screen blanking / power management

xset s off

xset s noblank

xset -dpms
```

```
# Allow quitting the X server with CTRL-ATL-Backspace

setxkbmap -option terminate:ctrl_alt_bksp
```

```
# Start Chromium in kiosk mode

sed -i 's/"exited_cleanly":false/"exited_cleanly":true/' ~/.config/chromium/'Local State'

sed -i 's/"exited_cleanly":false/"exited_cleanly":true;/
s/"exit_type":"[^"]\+"/"exit_type":"Normal"/' ~/.config/chromium/Default/Preferences

chromium-browser --disable-infobars --noerrdialogs --incognito --check-for-update-interval=1
--simulate-critical-update --kiosk '[https://DAKBOARD-CUSTOM-URL-HERE]'
```

Start X automatically on boot

```
sudo nano .profile
```

```
[[ -z $DISPLAY && $XDG_VTNR -eq 1 ]] && startx -- -nocursor
```

Vertical screen (OPTIONAL)

```
sudo nano /boot/config.txt
```

```
display_rotate=1
```

Refreshes

```
sudo apt-get install xdotool -y
```

```
sudo nano keyF5
```

```
export display=:0,0

xdotool keydown F5; xdotool keyup F5 &

exit
```

```
sudo chmod +x keyF5
```

```
sudo chown pi:pi keyF5
```

crontab -e

```
#Refresh every 30 min

0 */30 * * * /home/pi/keyF5

#Shutdown at 11PM (OPTIONAL)

* 23 * * * sudo shutdown -h
```

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