RACHEL-PI



What is the World Possible Project?

The world possible project is dedicated to providing open-source educational content to schools that lack internet connectivity. This is done through a device called RACHEL (Remote Area Community Hotspot for Education and Learning), a cached web server containing open-sourced content including Khan Academy videos and Wikipedia pages and books from the Gutenberg project. This device costs \$500 which hinders community access.

Why Raspberry Pi?

We are trying to recreate the RACHEL server on the Raspberry Pi which will reduce the cost of the device from \$500 to \$80. With this documentation page, we hope anyone will be able to recreate a RACHEL Pi at home.

Materials

- Raspberry Pi 3
 - Note: Current version of RACHEL does NOT work on 3B+ (Please use 3B or earlier version)
- Plastic case that fits Raspberry Pi 3
- Power supply
- 64GB Micro-SD Card with read-write speeds45 mbps
- SD Card adapter (if needed)

The materials can be found for purchase online here

Steps

- 1. Download the Rachel-PI image/server
 - Note: This is a large file that can take up to an hour to download over a home connection
 - Navigate to RachelPi-64 folder and download the latest version
- 2. Write the downloaded Raspbian image onto your SD Card
 - > Can also be done via Linux command line
- 3. Insert write SD Card into your Rachel-Pi
- 4. Connect to public WiFi network 'RPI'
- Once you're connected, enter 10.10.10.10 into your web browser (Chrome recommended)
- 6. You should now see the RACHEL content ready to use!

For more information:

Visit:

- http://rachelfriends.org/rachel-pi-howto.htm
- https://www.worldlibrarians.org/