RACHEL Basic Tutorial

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Reviewed

V 3

Description: How to start with RACHEL

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Introduction

This short guide will help you to get up and running with RACHEL, but before we start it might be useful to go over what it is and what you need to get it running.

Like all computer programs RACHEL runs on an operating system. The operating system chosen for this is Linux, NOT windows. In fact RACHEL runs on a version (referred to as a distribution) of Linux called Raspbian. The Raspbian operating system was originally designed, at Cambridge University in the UK, for teaching computer science on the Raspberry Pi computer.

Rural Area Community Hotspot for Education and Learning, RACHEL, is a collection of web pages that can be accessed from any wireless device as if it were the internet. RACHEL was started by Norberto Mujica, a Systems engineer, who travelled to Ethiopia and taught classes at a university with a large number of computers, but no usable internet access. He had the idea to put together a collection of materials and store them on a server so that all students could access them.

RACHEL can be used on a stand alone PC/Laptop or on a Network. This tutorial covers both options.

The notes on how to install the Raspbian operating system on a PC or Laptop can be found at giakonda.org.uk/technical
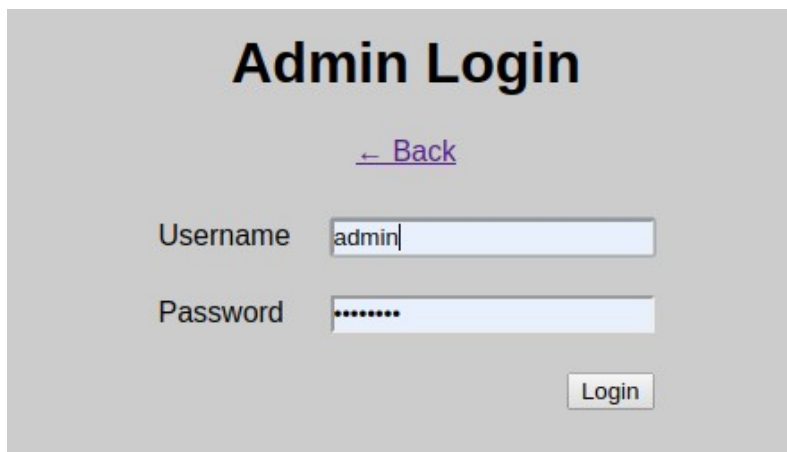
First Steps

So you are sitting at a PC or Laptop which either has RACHEL installed on it or is on a network where there is a PC or Laptop with RACHEL installed. The only difference in using these setups is the IP address you will use. The first thing you will need to do is to open a browser, just like you would to browse the internet.

Once the browser is running you will type the IP address into the URL bar. Below I have used 127.0.0.1 because the computer I was using had RACHEL installed on it. On the right of this banner you can see the 2 IP addresses you could use. If I was on another computer on the same network I could have typed 192.168.1.121 to connect to RACHEL.
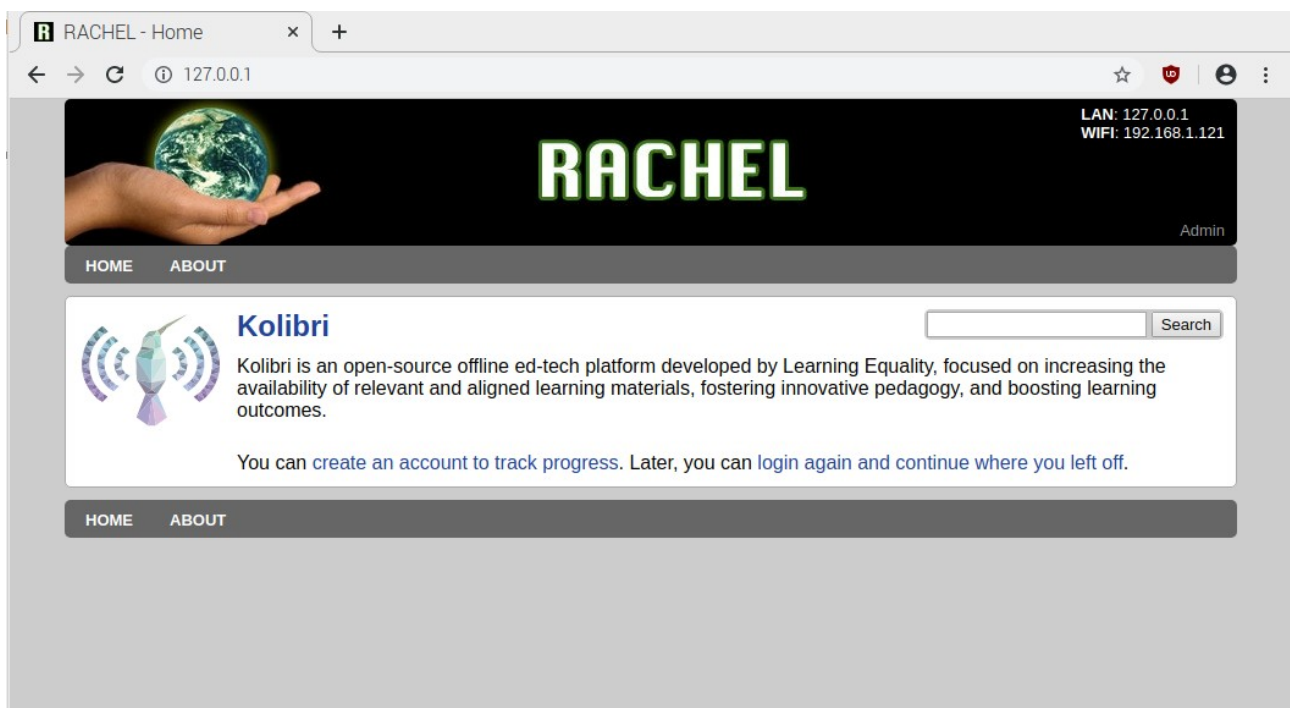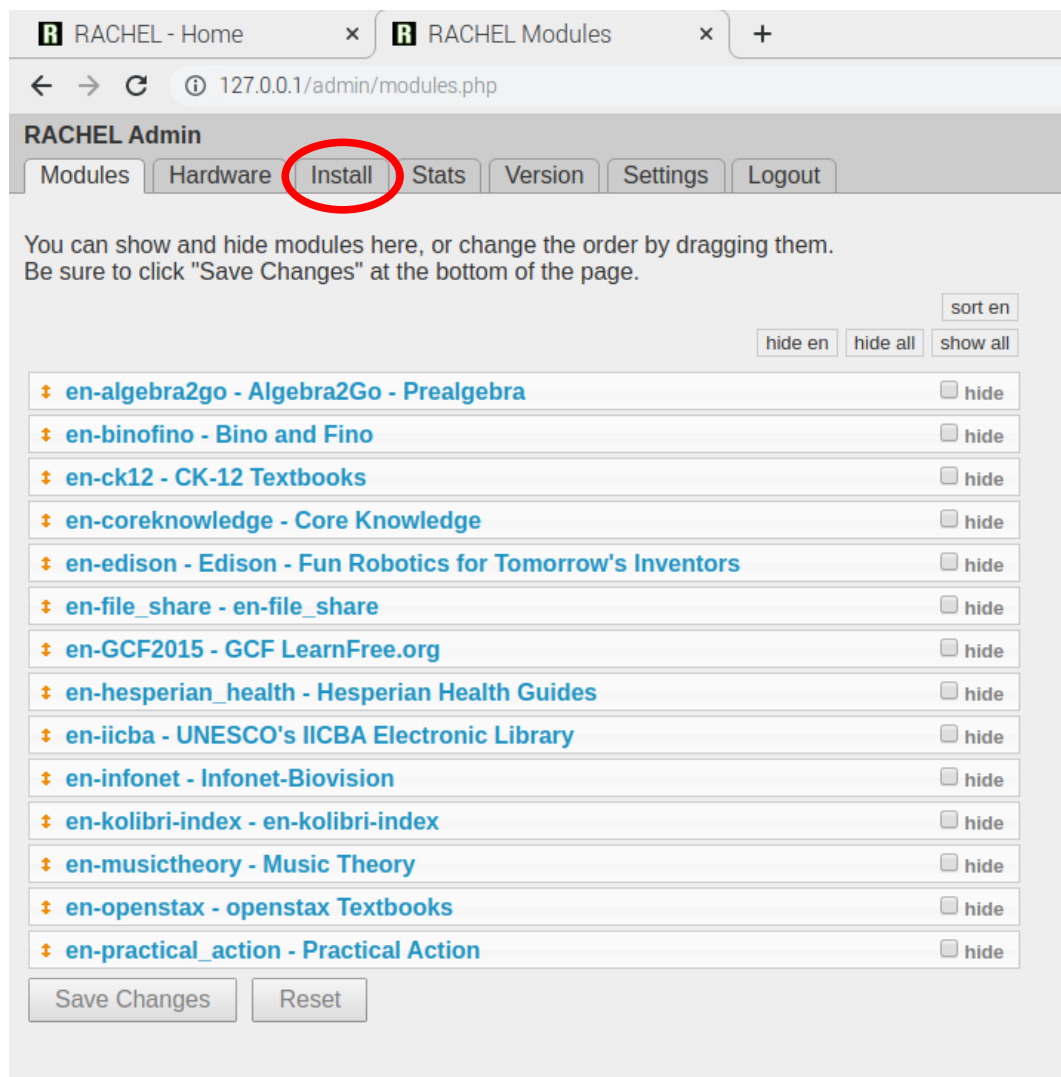

Note: If you are NOT sitting at the computer with RACHEL installed then you can NOT use the IP address 127.0.0.1

On the bottom left of the banner is the Admin button, click on this to start the installation of new modules to RACHEL. The username is **admin** and the password is **Rachel+1**

Once logged in we can see the modules installed. To install new modules first click the Install tab.

If you are connected are connected to the Internet then install tab will show you the modules available to you.

Modules that are already installed are listed on the bottom and can be removed by clicking the delete button.

Now you select the module you want to install and click Download. In the example below en-practical-action has been selected.
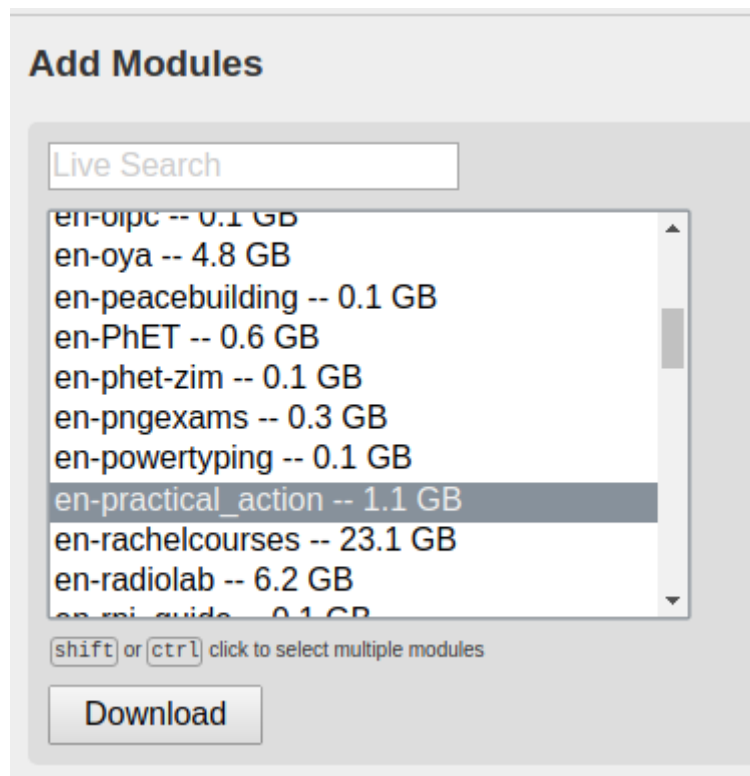
That's all there is to downloading content, the only issue you may have is the time taken to complete the download, especially if you have a poor internet connection.

Shutting Down

Shutting down properly is essential if you want to ensure smooth running of your system.

Correct shutdown is achieved by logging into the Admin area and selecting the Hardware tab.

At the bottom of the screen click the Shutdown button.

RACHEL Admin

| Modules | Hardware | Install | Stats | Version | Settings | Logout |

Storage Usage

Location	Size	Used/Available		Percentage
SD Card (RACHEL modules)	118G	86G	28G	76%
/boot	253M	53M	200M	21%

System Shutdown

Rachel-Pi

Shutdown   Restart

Shutting down here is safer for the SD/HD than simply unplugging the power.

If you shut down (as opposed to restart), you will need to unplug your system and plug it back in to restart.

Note: on this screen you can see the status of your hard drive and here you can see the SD card (RACHEL) has 28G space available so more modules could be installed on this system.