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# **RACHEL**

***Release 0.1***

**World Possible**

**Jun 30, 2022**



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RACHEL (Remote Area Community Hotspot for Education and Learning) is a portable, battery-powered, device that contains copies of educational websites in offline format. This means RACHEL can go anywhere in the world and wirelessly deliver free digital educational content to nearby tablets, laptops, or smartphones with no internet or data plans required. RACHEL has been taken to over 53 countries since its creation, serving students in rural villages, townships, and even prisons.

Content on RACHEL is specifically curated to serve the needs of offline populations in developing countries. RACHEL is the perfect way to connect learners with the information they need. To learn more about RACHEL go to <https://www.worldpossible.org/>





## **GETTING STARTED**

### **1.1 Kiwix**

Kiwix provides

### **1.2 Learning Management Systems**

RACHEL comes with multiple Learning Management Systems installed to give you the choice of how you want to provide lessons to your students.

#### **1.2.1 Kolibri**

Kolibri is a Learning Management System provided by Learning Equality ( <https://learningequality.org/> ). Through the installation of Kolibri channels, Kolibri provides even more ways to access and manage content such as Khan Academy on RACHEL-Plus devices. Teachers and administrators can create and manage lessons, as well as their own channels using Kolibri Studio ( [studio.learningequality.org](https://studio.learningequality.org) ).

Introducing Kolibri

For a live demonstration go to <https://kolibri-demo.learningequality.org/en/learn/#/library>.

#### **1.2.2 Moodle**

Moodle is a Learning Management System used by hundreds of millions of learners worldwide. With Moodle, teachers can easily create and manage lessons for their learners and keep track of their improvement. To learn more go to <https://moodle.com/>.

For a live demonstration of Moodle go to <https://moodle.org/demo>





## FREQUENTLY ASKED QUESTIONS

### 2.1 Buying a RACHEL-Plus

#### 2.1.1 Where can I buy a RACHEL-Plus?

The RACHEL-Plus device can be bought through the store on our website at <https://worldpossible.org/products/rachel-plus>

#### 2.1.2 Do you ship to my location?

World Possible ships anywhere in the world that are serviced by DHL or UPS. To get an accurate shipping quote, please add items to your cart and proceed to checkout. A shipping quote can only be given this way, once you have entered your address and selected your shipper.

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**Note:** In addition to shipping time, units take 7-10 days to be configured and to leave our warehouse.

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In addition to shipping cost, nearly every country charges some sort of taxes, fees, or tariffs on imported goods. The HS Tariff Code for our devices is 8517.62.0020. With this quote, you can get an estimate of import costs by reaching out to your local DHL or UPS office in the country. There is no way for World Possible to provide this information in advance. Costs can range from 15% - 40% of the purchase price of your goods.

#### 2.1.3 Do you offer discounts?

World Possible is a nonprofit organization supported by donors to make this product available at an extremely attractive price. Without the support of donors, we could never make this happen. World Possible is not a normal “business” - in all, we lose money on the work of creating, maintaining, and selling RACHEL. We rely on the generous support of donors to keep our doors open. Because of this, we do not offer any discounts on the price of RACHEL.

We understand that many of our customers are also non-profits with small budgets so we work exceptionally hard to make sure this product is as affordable as possible.

We know that RACHEL may still be unaffordable for some organizations. We offer much of our content for free download at <https://rachel.worldpossible.org> – some content providers only allow us to provide their content directly on a RACHEL-Plus device.

You can also get free assistance to create your own offline content servers on old laptops or other hardware at <http://community.rachelfriends.org>

We hope this helps in your journey.

### 2.1.4 Can I get a quote?

We are happy to prepare a quote for you when necessary, however, please note that preparing a quote takes some time on our end (up to 3 days) and requires some detailed information on your end. The quote will include only the same information you see at the last step of check-out. If you are just asking for a price, please go through the check-out process rather than requesting a quote. You will not be required to pay before seeing final costs. If you are still requesting a quote, please include:

**detailed specifications for the devices including:**

storage size requested storage type requested languages requested any warranties to be included

**detailed shipping and delivery information:**

**please provide a copy of the last page you see after selecting the “check out” button, this will show you various shipping options and which shipping method you prefer. We do not ship by local post.**

This page must have a shipping method selected so that we can verify with your preferred provider your address is available for shipment to. Please see note below on additional fees and tariffs after shipping for international orders.

your detailed delivery address included on this page a contact phone number for the delivery recipient  
a contact phone number for the ordering party (if different)

For international orders, please keep in mind the duties, taxes, fees, and tariffs that may be levied by your local, state, and national governments. The HS Tariff Code for our product is 8517.62.0020 - you can ask a local DHL, UPS, or customs broker to give you a rate quote of the fees you should expect to pay in addition to just the cost of shipping you pay to us.

## 2.2 Available Content

### 2.2.1 What Languages are Available?

RACHEL offers content in a variety of languages. The largest library of content is in English, followed by Spanish and French. We have some smaller sets of content in Swahili and Hindi. When you place an order with us through our website, you will be asked to select up to two languages. This will alert us to your language preferences when we make your device.

One of the great parts of RACHEL is the ability to add your own content in any language. RACHEL has a simple function for you to add your collections of content (music, videos, PDF files, etc). When you add your own content, you can tag that content for certain categories or ages and make it easy for your users to find the content you’ve provided. This is a great tool to supplement our initial content offering.

### 2.2.2 What Age/Grades Does RACHEL Support?

RACHEL contains content suitable for the youngest of students learning the “A” (Fantastic Phonics) to the most advanced students taking multi-variable calculus (Khan Academy).

Many of RACHELs resources are also reference materials, suitable for users of any age. Wikipedia (an encyclopedia), MedLine (health resources), etc.

That being said, because we make copies of sites as is, some sets of the content may have articles or pictures you may not want a young person to see. Anything on, Wikipedia, for instance, is available on RACHEL.

We do offer a RACHEL-Corrections, which we have attempted to censor for nudity, objectional content, or violence. This means we remove many valuable resources also, like all of Wikipedia. This is designed only for the most restrictive needs in prisons.

### 2.2.3 How do I update content?

RACHEL Content can be updated a number of ways, however, the simplest way is to connect your RACHEL device to internet access and go through the admin section on the RACHEL homepage.

## 2.3 Countries

### 2.3.1 What Countries have RACHEL deployments?

World Possible has shipped over 5,000 RACHEL devices to over 60 countries. The only information we have about those devices is the original location we shipped them to and we do not share that information (we are in fact prohibited by data-protection laws from providing that information).

We do not ask for any contact information on deployment partners and we do not wish to try to match individuals with past purchasers of the device. We do however strongly encourage users of RACHEL to make themselves known on our community forums at <https://community.worldpossible.org>

If you purchase RACHEL and do not post on the forums, we assume that you do not want us to provide your information to other potential RACHEL users. Similarly, if you ask us to introduce you to a RACHEL user in an area, our only guidance will be to check our user forums at <https://community.worldpossible.org>

World Possible recently developed and is piloting a tool called DataPost, which will allow anyone near a RACHEL to bring usage data back to the internet and our servers, but this tool is not yet widespread and will only be available on RACHEL devices shipped since June 2021.

Some RACHEL deployment partners have distributed over 150 RACHEL devices to schools or other locations. Individuals who have done so, are invited to apply to become a World Possible chapter. You can reach our existing chapters here:

Guatemala - [romeo@worldpossible.org](mailto:romeo@worldpossible.org)

Ghana - [mustapha@worldpossible.org](mailto:mustapha@worldpossible.org)

Sierra Leone - [samuel@worldpossible.org](mailto:samuel@worldpossible.org)

Tanzania - [jackline@worldpossible.org](mailto:jackline@worldpossible.org)

Kenya - [bonface@worldpossible.org](mailto:bonface@worldpossible.org)

The following countries have received RACHEL devices from us. Again, we do not know the state of the RACHEL device, if it was ever actually deployed, or in what context.

- Australia
- Autonomous Region of Bougainville
- Bahamas
- Belize
- Brazil
- Burkina Faso
- Cambodia
- Canada
- Colombia
- Cote D'Ivoire

- Democratic Republic of Congo
- Dominican Republic
- Ecuador
- Eritrea
- Eswatini
- Ethiopia
- Fiji
- Finland
- Ghana
- Guatemala
- Haiti
- Honduras
- India
- Kenya
- Kiribati
- Laos
- Lesotho
- Liberia
- Malawi
- Malaysia
- Mexico
- Micronesia
- Morocco
- Myanmar
- Namibia
- Nigeria
- Pakistan
- Papua New Guinea
- Peru
- Philippines
- Rwanda
- Samoa
- Senegal
- Sierra Leone
- South Africa
- South Korea

- South Sudan
- Sri Lanka
- Swaziland
- Tajikistan
- Tanzania
- Thailand
- Togo
- Tonga
- Tuvalu
- Uganda
- United States
- Vanuatu
- Zambia
- Zimbabwe



## RACHEL-PLUS

These guides will help teach you various uses and practices of the RACHEL-Plus Device.

### 3.1 Advanced Configuration

These Guides will help you through the process of making changes to the highly technical aspects of RACHEL such as maintaining the Firewall and Allowed MAC Addresses.

#### 3.1.1 Advanced Hardware Controls

This guide will show you how to use the Advanced Wireless Hardware Tools in the RACHEL Server.

To accomplish this task, you will need:

- A RACHEL-Plus
- A Device to access RACHEL (computer preferred)
- RACHEL Admin Credentials

To use RACHEL Server Advanced Wireless Hardware tools, follow these steps:

1. Access the RACHEL Admin Panel to view all the Admin Duty Tabs, Make sure the “Hardware” tab is selected

**RACHEL Admin**

Modules **Hardware** Version Install Stats Settings Logout

## Storage Usage

Location	Size	Used/Available	Percentage
/media/RACHEL	917G	580G / 291G	67%

## WIFI Control

Current Status: **On**

Turn On

Turn Off

WARNING: If you turn off WIFI while connected through WIFI, you will be disconnected. WIFI will turn on again when the device is restarted.

## Advanced Hardware Control

To modify advanced hardware settings (WiFi, DHCP, Firewall, etc.) please [click here](#)

**Note:** The settings in the advanced hardware control can cause your RACHEL to stop working. Do not change unless you know what you are doing.

2. Click the Advanced Hardware Control link to access the Advanced Tools



**RACHEL Admin**

ModulesHardwareVersionInstallStatsSettingsLogout

## Storage Usage

Location	Size	Used/Available	Percentage
/media/RACHEL	917G	<div><div>580G</div><div>291G</div></div>	67%

## WIFI Control

Current Status: **On**

Turn On

Turn Off

WARNING: If you turn off WIFI while connected through WIFI, you will be disconnected. WIFI will turn on again when the device is restarted.

## Advanced Hardware Control

To modify advanced hardware settings (WiFi, DHCP, Firewall, etc.) please [click here](#)

**Note:** The settings in the advanced hardware control can cause your RACHEL to stop working. Do not change unless you know what you are doing.

3. On the left is a list of different Subject Tabs, Select the Wireless Tab

c26487

Welcome, admin  
Log out

Overview

System Log

System

Guest Logins

Teacher Account

Backup / Upgrade

Interfaces

General Settings

**Wireless**

DNS & DHCP

Firewall

2.4G Wireless Settings

5G Wireless Settings

2.4G WiFi device

Wireless Mode

802.11 b/g/n mixed - 2.4GHz

Channel

Auto

Bandwidth Channel

40MHz channel

Device interfaces

SSID

RACHEL

Encryption

No encryption

User Limit

51

simultaneous users (Range: 0~51, Default:51, Enter 0 for no limit)

MAC filter

☒ No MAC filtering

☐ Prevent the following MAC addresses to connect

☐ Allow only the following MAC addresses to connect

MAC Address

+

Save & Apply

Save

4. Wireless Mode, Channel, and Bandwidth Channel settings can all be changed in the Wifi Device settings pane

c26487
Welcome, admin  
Log out

Overview

System Log

System

Guest Logins

Teacher Account

Backup / Upgrade

Interfaces

General Settings

Wireless

DNS & DHCP

Firewall

2.4G Wireless Settings
5G Wireless Settings

2.4G WiFi device

**Wireless Mode**

802.11 b/g/n mixed - 2.4GHz

**Channel**

Auto

**Bandwidth Channel**

40MHz channel

Device interfaces

**SSID**

RACHEL

**Encryption**

No encryption

**User Limit**

51

simultaneous users (Range: 0~51, Default:51, Enter 0 for no limit)

**MAC filter**

☒ No MAC filtering

☐ Prevent the following MAC addresses to connect

☐ Allow only the following MAC addresses to connect

**MAC Address**

+

Save & Apply

Save

5. SSID, Encryption method, User Limit, and MAC Address settings can all be changed in the Device Interfaces pane

c26487

Welcome, admin  
Log out

Overview

System Log

System

Guest Logins

Teacher Account

Backup / Upgrade

Interfaces

General Settings

Wireless

DNS & DHCP

Firewall

2.4G Wireless Settings

5G Wireless Settings

2.4G WiFi device

Wireless Mode

802.11 b/g/n mixed - 2.4GHz

Channel

Auto

Bandwidth Channel

40MHz channel

Device interfaces

SSID

RACHEL

Encryption

No encryption

User Limit

51

simultaneous users (Range: 0~51, Default:51, Enter 0 for no limit)

MAC filter

☒ No MAC filtering

☐ Prevent the following MAC addresses to connect

☐ Allow only the following MAC addresses to connect

MAC Address

+

Save & Apply

Save

6. After changing any settings, make sure to select the “Save & Apply” button

c26487
Welcome, admin  
Log out

Overview

System Log

System

Guest Logins

Teacher Account

Backup / Upgrade

Interfaces

General Settings

Wireless

DNS & DHCP

Firewall

2.4G Wireless Settings
5G Wireless Settings

2.4G WiFi device

**Wireless Mode** 802.11 b/g/n mixed - 2.4GHz ▼

**Channel** Auto ▼

**Bandwidth Channel** 40MHz channel ▼

Device interfaces

**SSID** RACHEL

**Encryption** No encryption ▼

**User Limit** 51  
simultaneous users (Range: 0~51, Default:51, Enter 0 for no limit)

**MAC filter** ☒ No MAC filtering  
☐ Prevent the following MAC addresses to connect  
☐ Allow only the following MAC addresses to connect

**MAC Address**  +

Save & Apply
Save

## 3.2 Basic Operations

These guides will help teach you how to properly manage the power of your RACHEL-Plus Device.

### 3.2.1 Powering On the RACHEL-Plus Device

This guide will help you learn the proper way to turn on the RACHEL-Plus Device

To accomplish this task, you will need:

- RACHEL-Plus Device

To turn on the RACHEL-Plus Device, follow these steps:

1. Push and hold down RACHEL's on button for 10 seconds or until the blue dot turns on.



2. The small blue dot will illuminate for 30 seconds until RACHEL activates.



3. When booted, RACHEL's Wi-Fi signal light will flash slowly, you can now connect to the RACHEL wireless signal from your computer. It can take 3 minutes after flashing for all content to be ready!



### 3.2.2 Shutting Off the RACHEL-Plus Device

This guide will help you learn the proper way to turn off the RACHEL-Plus Device

To accomplish this task, you will need:

- RACHEL-Plus Device

To turn off the RACHEL-Plus Device, follow these steps:

1. To properly power down the device, simply tap the power button 1 time and immediately release.



2. The RACHEL-Plus may take a few moments to fully power down but powering it down this way will ensure the longevity of the device.

## 3.3 Battery Management

These Guides will help you properly manage and protect your RACHEL-Plus device's battery.

### 3.3.1 RACHEL Battery Care

These are important Battery Care tips that you should know before and while using the RACHEL Device

- Regularly discharge the battery by disconnecting the A/C power and operating the device on battery power only.
- Do not charge the device for extended periods of time without discharging the battery. Even if the battery charge level is less than 100%, the battery must be regularly discharged.

### 3.3.2 RACHEL Safety Notices

These are important safety notices that you should know before and while using the RACHEL Device

- When turning off this device DO NOT hold the power button down.
- To safely shut down the device, and avoid potential damage, tap the power button 1 time and release, then wait 30 seconds for the device to properly shut down.
- This device contains sensitive components. You must be especially careful when shipping, carrying, or packaging this device.
- Do not operate or move the device while it is turned on.

## 3.4 Network Connectivity

These Guides will help you through connecting the RACHEL-Plus Device to a network through various methods.

## 3.5 Operating Tips

These Guides will help you through the process of making changes to the highly technical aspects of RACHEL such as maintaining the Firewall and Allowed MAC Adresses.



## SOFTWARE

These guides will help teach you how to navigate and use the many functions provided while accessing the RACHEL server.

## 4.1 Admin Duties

These guides will help teach you how to access and manage the admin duties of the RACHEL server.

### 4.1.1 Accessing Admin Panel

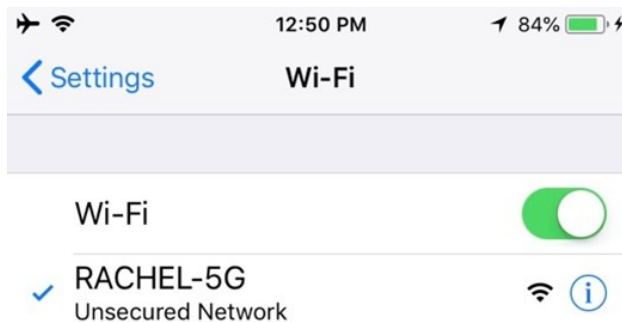
This guide will show you how to navigate to the RACHEL server and log into the Admin Panel

To accomplish this task, you will need:

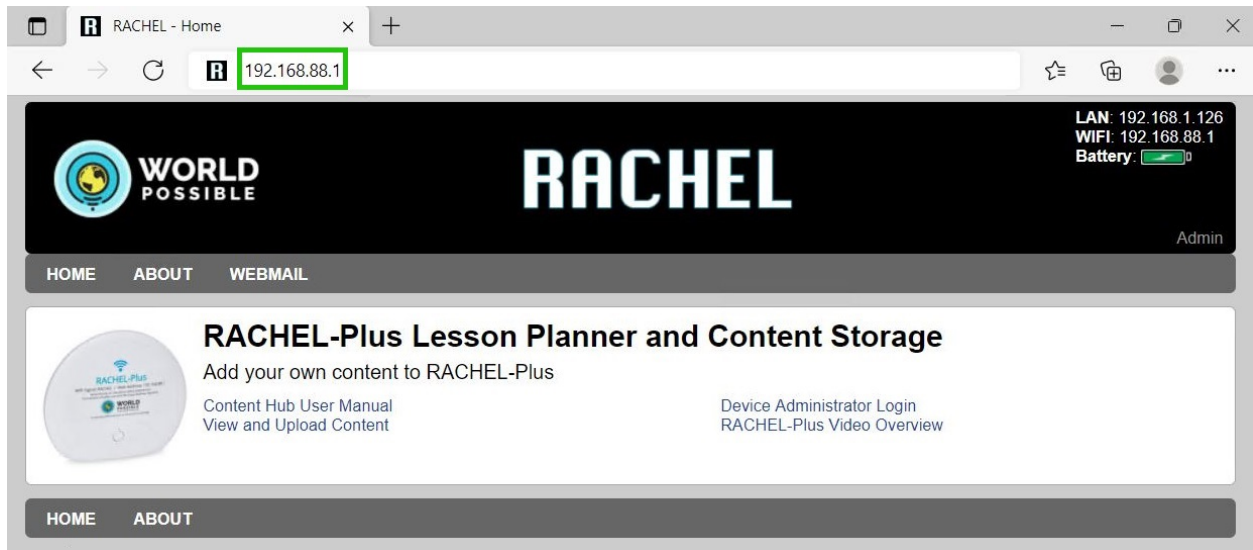
- A RACHEL-Plus
- A Device to access RACHEL (computer preferred)
- RACHEL Admin Credentials

To access the RACHEL server Admin Panel, follow these steps:

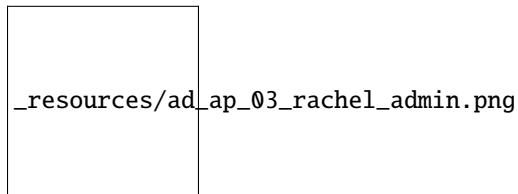
1. Power on the RACHEL-Plus device
2. Connect to the RACHEL Wi-Fi network



3. Open a web browser and navigate to the RACHEL server (192.168.88.1)



4. Select the Admin button



5. Enter the RACHEL Server Admin Credentials

A login form for the RACHEL server. It features the 'WORLD POSSIBLE' logo at the top. Below the logo are two input fields: 'Username' and 'Password'. At the bottom of the form is a dark grey button labeled 'Login'. The entire form is enclosed in a green border.

## 4.1.2 Managing RACHEL Modules

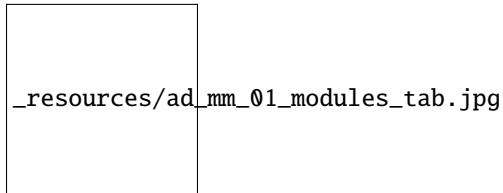
This guide will show you how to sort, hide/show, and reorder RACHEL modules

To accomplish this task, you will need:

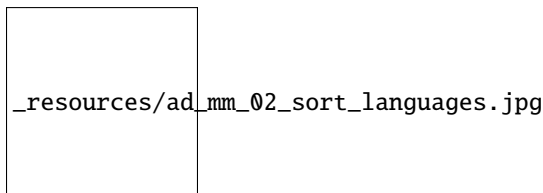
- A RACHEL-Plus
- A Device to access RACHEL (computer preferred)
- RACHEL Admin Credentials

To manage all the RACHEL modules, follow these steps:

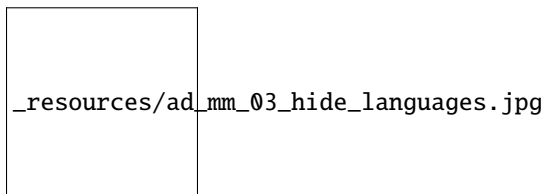
1. Access the RACHEL Admin Panel to view all the Admin Duty Tabs, Make sure the “Modules” tab is selected



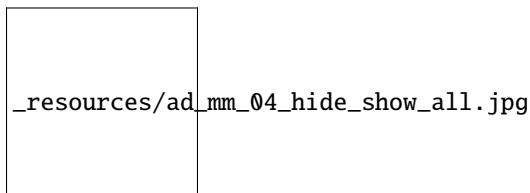
2. To Sort the Modules by Language, select the chosen language's sort button



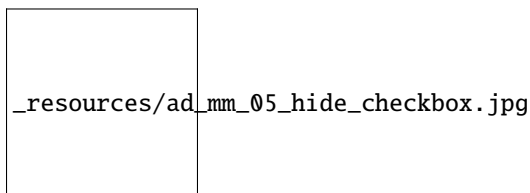
3. To Hide Modules by Language, select the language hide buttons you want to hide



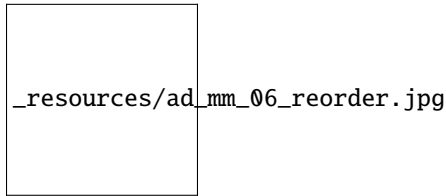
4. To Show All Modules or Hide All Modules, select the respective button



5. To Hide specific Modules, select the Checkbox to the right of the Module's name (selecting it again will un-hide it)



6. To Reorder how the Modules are displayed, click on the Arrow to the left of the Module's name and drag & drop the module in it's desired place



### 4.1.3 Managing RACHEL Hardware

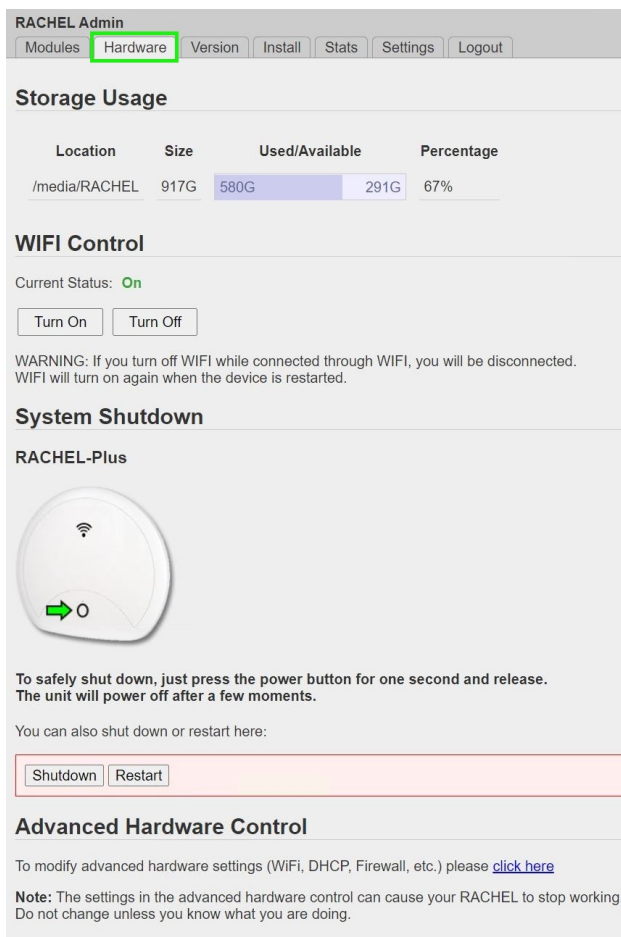
This guide will show you how to use the admin hardware tools for RACHEL

To accomplish this task, you will need:

- A RACHEL-Plus
- A Device to access RACHEL (computer preferred)
- RACHEL Admin Credentials

To use RACHEL Server Hardware tools, follow these steps:


1. Access the RACHEL Admin Panel to view all the Admin Duty Tabs, Make sure the “Hardware” tab is selected



The screenshot shows the RACHEL Admin interface with the 'Hardware' tab selected. The interface includes several sections: 'Storage Usage' with a table showing disk space, 'WIFI Control' with status and toggle buttons, 'System Shutdown' with a power button icon and shutdown/restart buttons, and 'Advanced Hardware Control' with a link to settings and a warning note.

Location	Size	Used/Available	Percentage
/media/RACHEL	917G	580G / 291G	67%

**WIFI Control**  
Current Status: On  
   
WARNING: If you turn off WIFI while connected through WIFI, you will be disconnected. WIFI will turn on again when the device is restarted.

**System Shutdown**  
RACHEL-Plus  
  
To safely shut down, just press the power button for one second and release. The unit will power off after a few moments.  
You can also shut down or restart here:

**Advanced Hardware Control**  
To modify advanced hardware settings (WiFi, DHCP, Firewall, etc.) please [click here](#)  
**Note:** The settings in the advanced hardware control can cause your RACHEL to stop working. Do not change unless you know what you are doing.

2. Storage Usage data is displayed at the top of the Hardware Tab

## Storage Usage

Location	Size	Used/Available		Percentage
/media/RACHEL	917G	580G	291G	67%

3. Below the Storage Usage data are the Wi-Fi controls which show you the RACHEL's Wi-Fi status and also provide buttons to turn it Off or On

## WIFI Control

Current Status: **On**

Turn On

Turn Off

WARNING: If you turn off WIFI while connected through WIFI, you will be disconnected. WIFI will turn on again when the device is restarted.

4. Below the Wi-Fi controls are the RACHEL power controls, from here you can Shutdown the RACHEL or Restart it

## System Shutdown

### RACHEL-Plus



To safely shut down, just press the power button for one second and release. The unit will power off after a few moments.

You can also shut down or restart here:

Shutdown

Restart

5. Below the RACHEL power controls is the link to the Advanced Controls, Click the link to access those tools.

## Advanced Hardware Control

To modify advanced hardware settings (WiFi, DHCP, Firewall, etc.) please [click here](#)

**Note:** The settings in the advanced hardware control can cause your RACHEL to stop working. Do not change unless you know what you are doing.

### 4.1.4 RACHEL Version

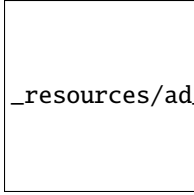
This guide will show you how to check the RACHEL version and check for RACHEL updates

To accomplish this task, you will need:

- A RACHEL-Plus
- A Device to access RACHEL (computer preferred)
- RACHEL Admin Credentials
- Internet Connection (for RACHEL updates)

To check the RACHEL Version and/or check for RACHEL updates, follow these steps:

1. Access the RACHEL Admin Panel to view all the Admin Duty Tabs, Make sure the “Version” tab is selected



\_resources/admm\_01\_version\_tab.jpg

### 4.1.5 Installing RACHEL Modules

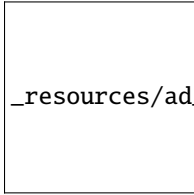
This guide will show you how to add new modules as well as delete old ones from RACHEL

To accomplish this task, you will need:

- A RACHEL-Plus
- A Device to access RACHEL (computer preferred)
- RACHEL Admin Credentials
- Internet Connection (for installing new modules)

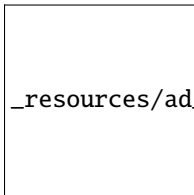
To install or delete RACHEL modules, follow these steps:

1. Access the RACHEL Admin Panel to view all the Admin Duty Tabs, Make sure the “Install” tab is selected



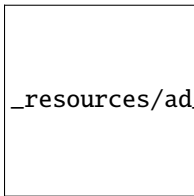
\_resources/admi\_01\_install\_tab.jpg

2. To Search for a module, type it's name in the Searchbar. Alternatively, you can also scroll through the list of available modules below the Searchbar until you find one you want to install



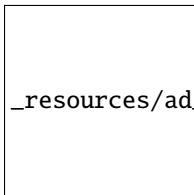
\_resources/admi\_02\_search\_modules.jpg

3. Once you have found and selected the module you wish to install, press the Download button



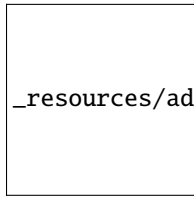
\_resources/admi\_03\_download\_module.jpg

4. Any modules that are downloading can be seen in the Currently Adding section



\_resources/admi\_04\_current\_module.jpg

5. Should you need to delete any modules, Scroll until you find the desired module and select the delete button to the right of the module's name



\_resources/ad\_mi\_05\_delete\_module.jpg

### 4.1.6 RACHEL Modules Settings

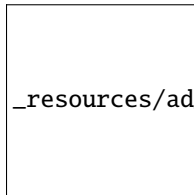
This guide will show you how to change the admin password and upload modules from .zip files

To accomplish this task, you will need:

- A RACHEL-Plus
- A Device to access RACHEL (computer preferred)
- RACHEL Admin Credentials
- RACHEL Module .zip file

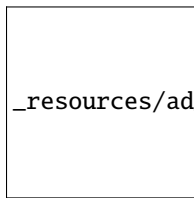
To change the admin password, follow these steps:

1. Access the RACHEL Admin Panel to view all the Admin Duty Tabs, Make sure the “Settings” tab is selected



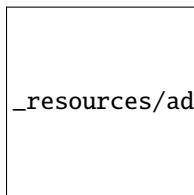
\_resources/ad\_ms\_01\_settings\_tab.jpg

2. First, enter the current admin password into the “Current Password” field



\_resources/ad\_ms\_02\_current\_pass.jpg

3. Next enter the new password in both the “New Password” and “Repeat New” fields

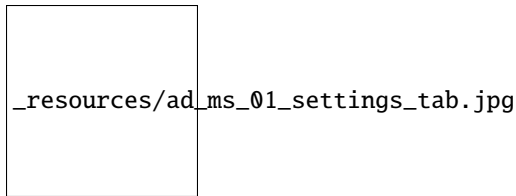


\_resources/ad\_ms\_03\_new\_pass.jpg

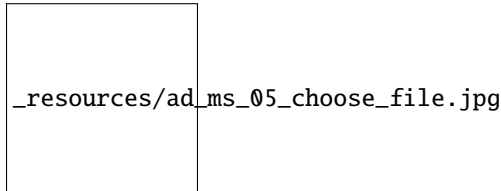
4. Now, if all the correct passwords are in place, press the “Save Changes” button

1. Access the RACHEL Admin Panel to view all the Admin Duty Tabs, Make sure the “Settings” tab is selected

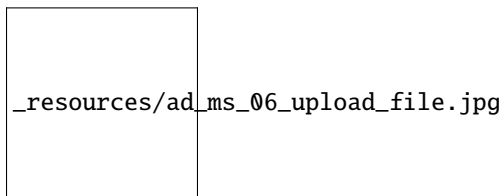




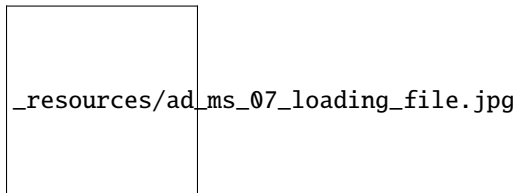
2. Select the “Choose File” button and choose the module zip file



3. Once the file is selected, press the “Upload” button



4. Now the file will be uploaded and added to the RACHEL server



## 4.2 DataPost

In 2021 World Possible released DataPost as a quick and easy way to get information to and from your RACHEL device without needing to put RACHEL on the internet. Anyone traveling to your RACHEL device with an Android Phone can serve as a digital mail courier, bringing new e-mails to RACHEL and picking up outgoing e-mails from the device. Included automatically in outgoing emails are usage logs of your RACHEL device that send to World Possible so we can analyze and display usage data.

These Guides will help you learn to install and use the DataPost Application.

### 4.2.1 How install DataPost

Following the steps in this guide will teach you to install the DataPost Application to your Android Device

To accomplish this task, you will need:

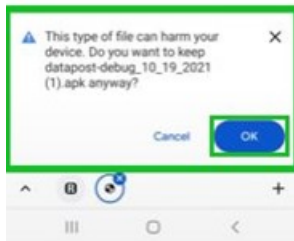
- Android Device (Android 9.x or newer)
- RACHEL-Plus Device (RACHEL OS Version 3.1.1 or Higher) with DataPost sticker

OR

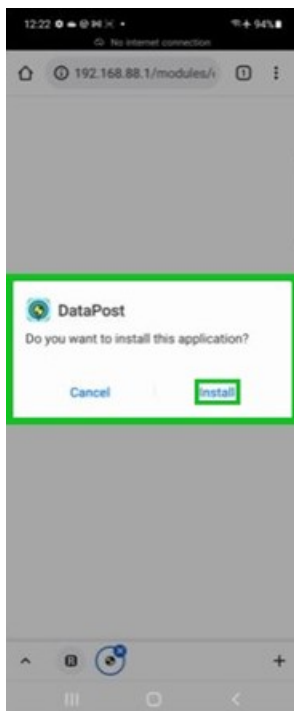
- Access to the Internet

To use DataPost, follow these steps:

1. On your Android Phone, download the DataPost App from the RACHEL Device or from this link (<http://community.worldpossible.org/t/latest-android-apk-file/1646>)
2. If prompted to keep the download, Select OK.



3. When Prompted to Install the DataPost Application to the Device, Select Install



4. The DataPost App will now be installed and ready to help you transport RACHEL data to and from offline sites that host a RACHEL device

## 4.2.2 How to Use DataPost

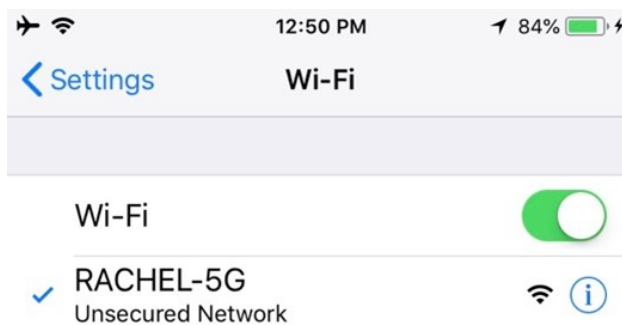
Following the steps in this guide will teach you to use the DataPost

To accomplish this task, you will need:

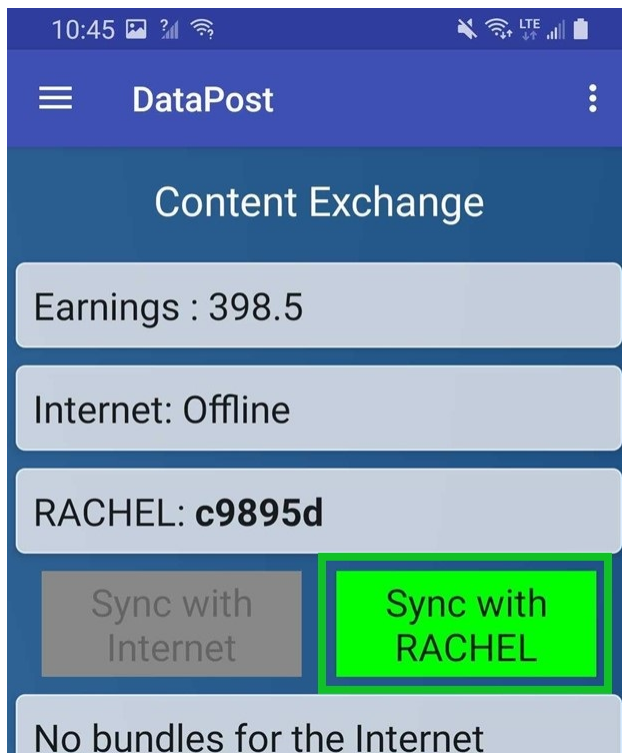
- RACHEL-Plus Device (RACHEL OS Version 3.1.1 or Higher) with DataPost sticker
- Access to the Internet
- Android Device (Android 9.x or newer)
- A means of Travel

To use DataPost, follow these steps:

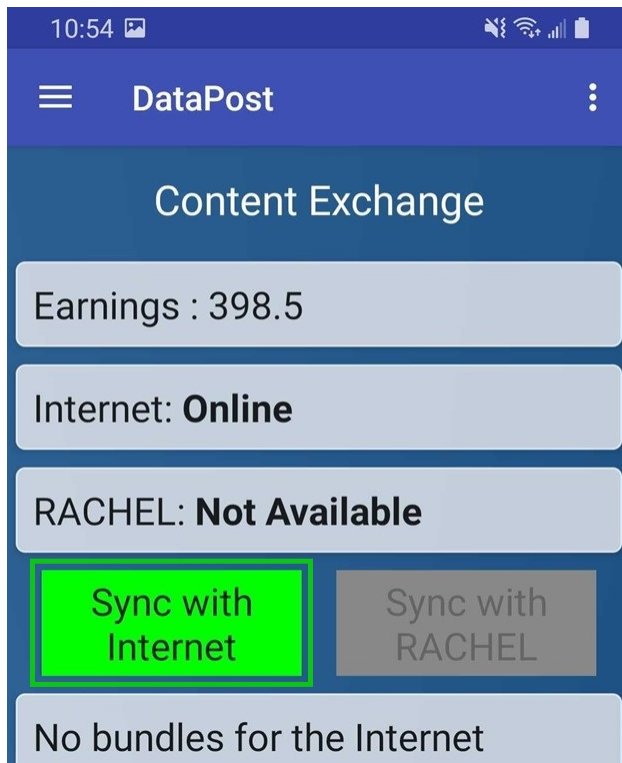
1. Connect your android phone to the RACHEL Wi-Fi Signal



2. Open the DataPost app on your android phone and press “Sync with RACHEL”



3. Return with your android phone to a place with internet or data connectivity, open the DataPost app and click Sync with Internet

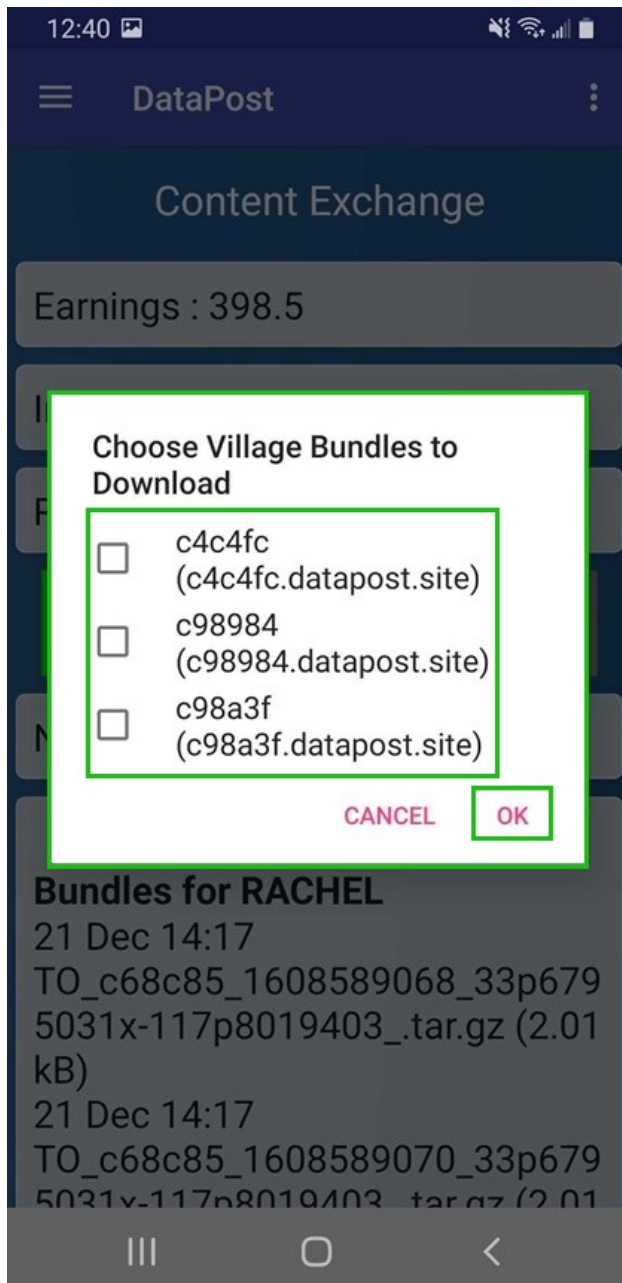


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**Note:** Your mail will now be delivered!

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4. While your android phone is connected to the internet, if you have access to any RACHEL devices that have data needs, they will appear in a list



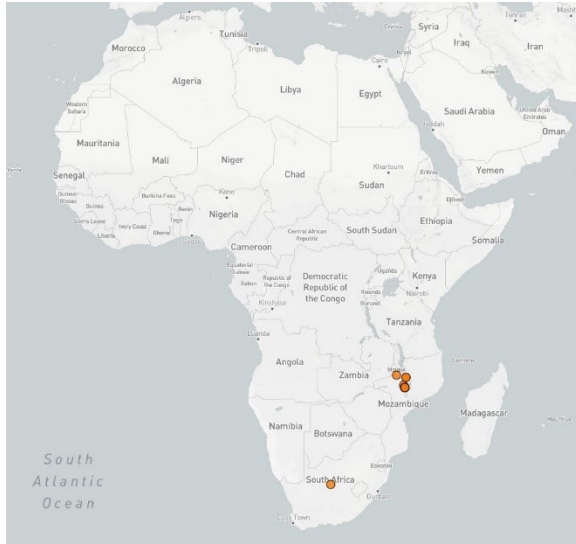
5. You can now deliver these mail bundles back to the original RACHEL-Plus device!

**Important:** PLEASE DO NOT DOWNLOAD DATA IF YOU DO NOT INTEND TO DELIVER IT TO THE CORRECT RACHEL. DATA WILL BE LOST AND WILL NOT DELIVER TO THE WRONG RACHEL.

Please note: When using the DataPost app to pick up a bundle of e-mails from the internet destined for RACHEL, the android phone user must first have picked up a bundle from RACHEL and delivered it to the Internet. This process ensures the android phone user at one point had physical access to the RACHEL device and can be trusted to carry e-mails.

DataPost will also upload usage data from your RACHEL device to a website where anyone can view key anonymous usage statistics from your device

<https://datapost.site:4001/map.html>



<http://datapost.site:3010/single?subdomain=c9895f>

### Rachel Information for c9895f

Description :

Location : 12.1518,-86.2711

---

Last Delivery : Mon Apr 04 2022 14:22:39 GMT+0000 (Coordinated Universal Time)

---

Number of unique client devices connected to this RACHEL: 246  
Mb of data shared from RACHEL to local users: 58769.153528 Mb  
Cash value of data shared (\$0.1/Mb): \$5,876.92  
Total page visits on RACHEL: 152114

---

First Delivery : Thu Nov 25 2021 19:21:35 GMT+0000 (Coordinated Universal Time)  
Number of deliveries : 5

---

[More info](#)

### 4.2.3 How to Use Webmail

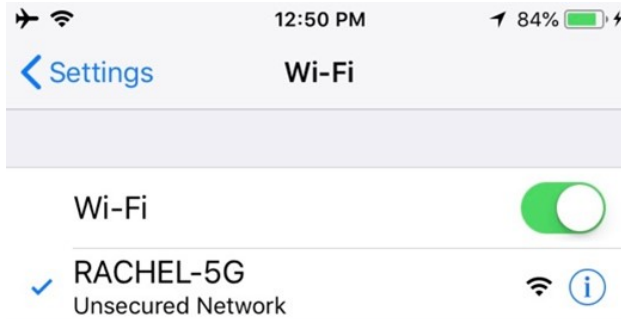
Webmail is the Email service that is accessible through the RACHEL device and is used to send emails from one of the prebuilt email addresses to any valid email address on the internet whenever a courier delivers and retrieves a DataPost bundle.

To accomplish this task, you will need:

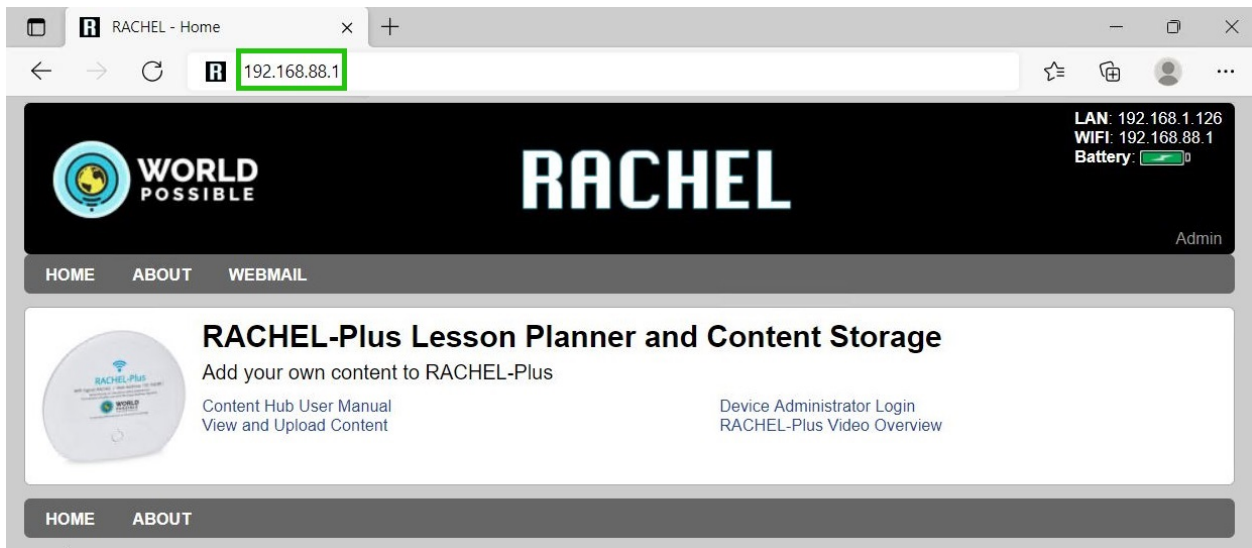
- RACHEL-Plus Device (RACHEL OS Version 3.1.1 or Higher) with DataPost sticker
- Device to Access the RACHEL Device (computer preferred)

To use RACHEL Webmail, follow these steps:

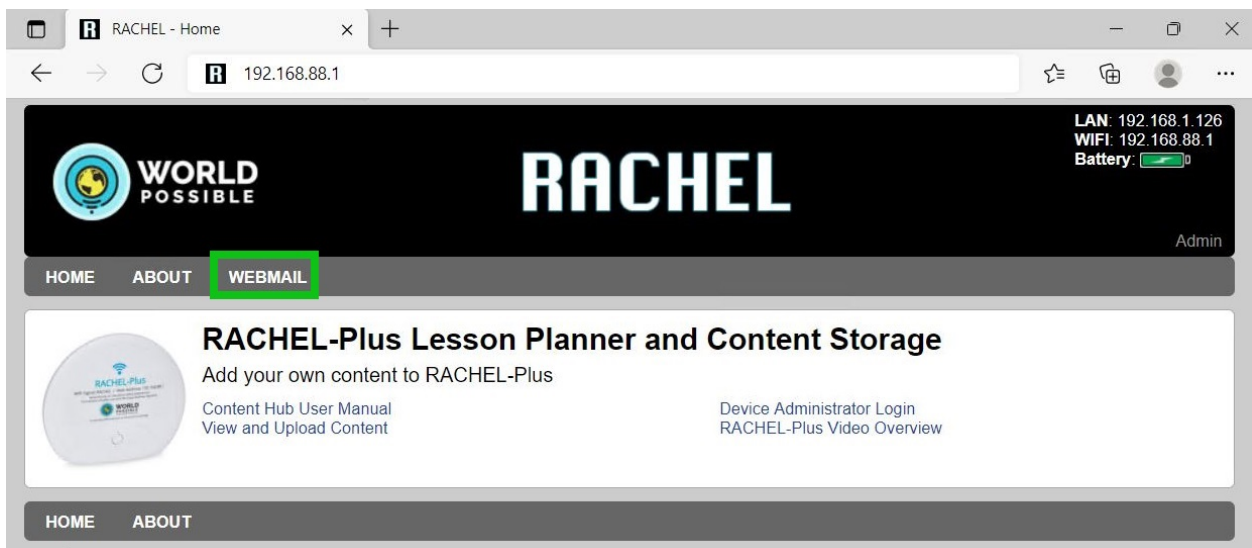
1. Connect to the RACHEL Device's Wi-Fi Network



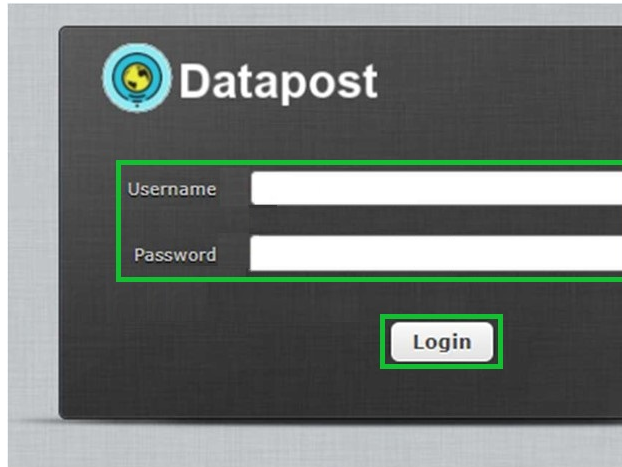
2. Open a Web browser and navigate to RACHEL (192.168.88.1)



3. Select the Webmail button



4. At the login prompt enter the username/password as user1/password and press “login”

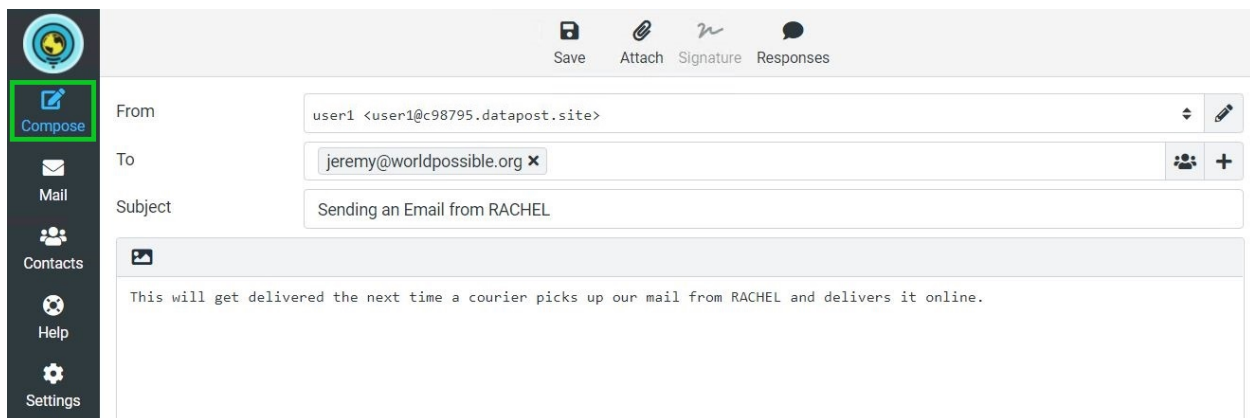


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**Note:** RACHEL is preloaded with 25 email accounts (user1, user2, ..., user25) all with the password of “password”

---

5. From DataPost webmail you can now compose and send an email to any email address on earth. If you are a project sponsor, you can send an e-mail to them from your Gmail or any other email service you use
6. The end of your email address (the domain) is assigned by RACHEL device using a six-digit code that matches the RACHEL MAC ID. For instance, [user1@AB12CD.datapost.site](mailto:user1@AB12CD.datapost.site) where AB12CD changes based on each RACHEL device
7. To compose a new email, Select the Compose button



8. Input your webmail address into the From field



Save Attach Signature Responses

From: user1 <user1@c98795.datapost.site>

To: jeremy@worldpossible.org

Subject: Sending an Email from RACHEL

This will get delivered the next time a courier picks up our mail from RACHEL and delivers it online.

9. Input the email address you are sending this message to in the To field

Save Attach Signature Responses

From: user1 <user1@c98795.datapost.site>

To: jeremy@worldpossible.org

Subject: Sending an Email from RACHEL

This will get delivered the next time a courier picks up our mail from RACHEL and delivers it online.

10. Input the subject of the email in the Subject field

Save Attach Signature Responses

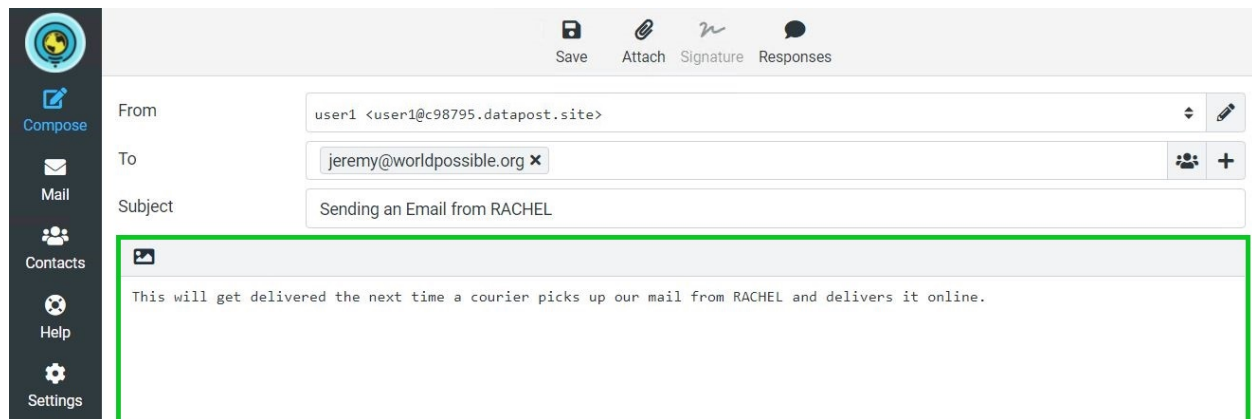
From: user1 <user1@c98795.datapost.site>

To: jeremy@worldpossible.org

Subject: Sending an Email from RACHEL

This will get delivered the next time a courier picks up our mail from RACHEL and delivers it online.

11. Write your message in the message box



12. When all the info is corrent and the message is ready to send, press the Send button and you're done!

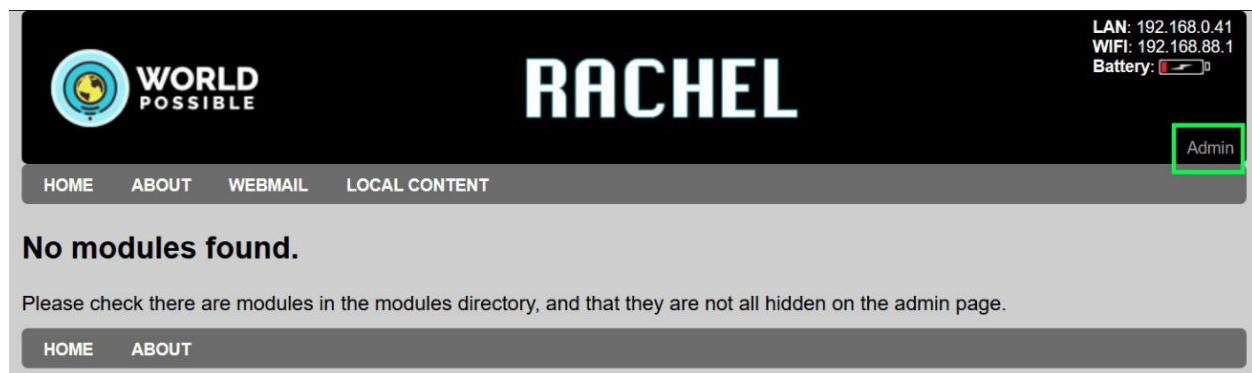
## 4.3 Modules

### 4.3.1 Sharing Files with en-file\_share

This tutorial will guide you through uploading and sharing files using the en-file\_share module

#### Installing en-file\_share

1. Click the “admin” button on the main page of RACHEL



2. The default username/password is admin/Rachel+1
3. Navigate to the “Install” tab

**RACHEL Admin**

Modules Hardware Version **Install** Stats Settings Logout

### Add Modules

Live Search

- en-afristory -- 0.2 GB
- en-algebra2go -- 1.2 GB
- en-asst\_medical -- 0.1 GB
- en-binofino -- 0.3 GB
- en-blockly-games -- 0.1 GB
- en-bookdash -- 0.3 GB
- en-boundless -- 3.8 GB
- en-boundless-static -- 3.4 GB
- en-careergirls -- 36.2 GB
- en-catdogbooks -- 0.2 GB

shift or ctrl click to select multiple modules

Download

4. Select en-file\_share and click “Download”, then wait for the module to install

**RACHEL Admin**

Modules Hardware Version **Install** Stats Settings Logout

## Add Modules

Live Search

- en-file\_share -- 0.1 GB
- en-GCF2015 -- 9.0 GB
- en-GCF2015.flv -- 11.1 GB
- en-GCF2021 -- 11.1 GB
- en-gutenberg\_2021 -- 63.0 GB
- en-hesperian\_health -- 0.9 GB
- en-iicba -- 0.1 GB
- en-infonet -- 0.4 GB
- en-kalite -- 40.3 GB
- en-kalite-eos -- 33.5 GB

shift or ctrl click to select multiple modules

**Download**

5. Refresh the main page of RACHEL and you should now see the file share module

**File Share**  
A simple place to share files

[Upload files](#)  
[View files](#)

## Uploading Files

1. Click “Upload files”

**File Share**  
A simple place to share files

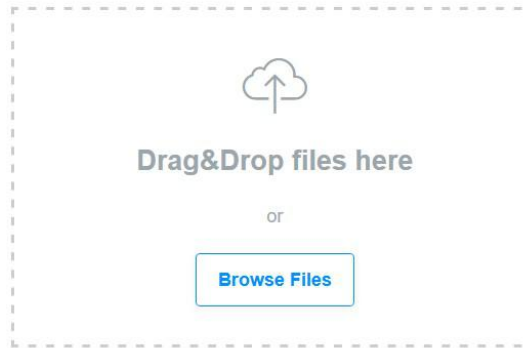
[Upload files](#)  
[View files](#)

2. On this screen you can drag and drop a file or click “Browse Files” to upload



## File Share - Upload

You can upload files here to share with other users.  
Or you can [click here view uploaded files](#).

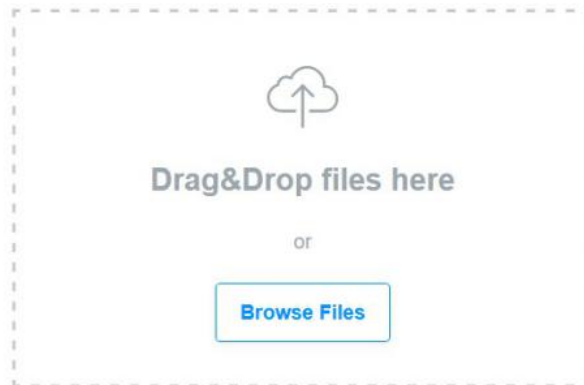


3. Once the file has been uploaded you should see your file with a green “success”

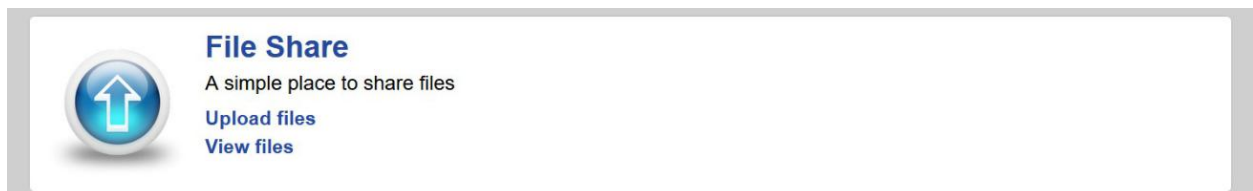


## File Share - Upload

You can upload files here to share with other users.  
Or you can [click here view uploaded files](#).



3. On the main page of RACHEL, the click “View Files” to see the uploaded files.



4. You can either right click and save the file, or click them directly and save them



## File Share - View

You can view files here that have been uploaded.  
Or you can [click here to upload files](#).

- [My Homework.t.txt](#)

5. To hide the file share module from the main page when it's not needed, First navigate to the "modules" tab in the admin interface

**RACHEL Admin**

Modules Hardware Version Install Stats Settings Logout

You can show and hide modules here, or change the order by dragging them.  
Be sure to click "Save Changes" at the bottom of the page.

sort en

hide en hide all show all

✚ en-file_share - en-file_share	<input type="checkbox"/> hide
✚ en-moodle - Moodle on RACHEL	<input checked="" type="checkbox"/> hide
✚ en-kolibri-index - en-kolibri-index	<input checked="" type="checkbox"/> hide

Save Changes Reset

6. Click the "hide" checkbox on the right hand side for en-file\_share, then click "Save Changes"

**RACHEL Admin**

Modules Hardware Version Install Stats Settings Logout

You can show and hide modules here, or change the order by dragging them.  
Be sure to click "Save Changes" at the bottom of the page.

sort en

hide en hide all show all

⚙ en-file_share - en-file_share	<input checked="" type="checkbox"/> hide
⚙ en-moodle - Moodle on RACHEL	<input checked="" type="checkbox"/> hide
⚙ en-kolibri-index - en-kolibri-index	<input checked="" type="checkbox"/> hide

Save Changes Reset

- The module will now be hidden on the main page of RACHEL. To show it again, uncheck the hide button and click Save Changes again