

Table of Contents

BioStar 2 on Raspberry Pi 1

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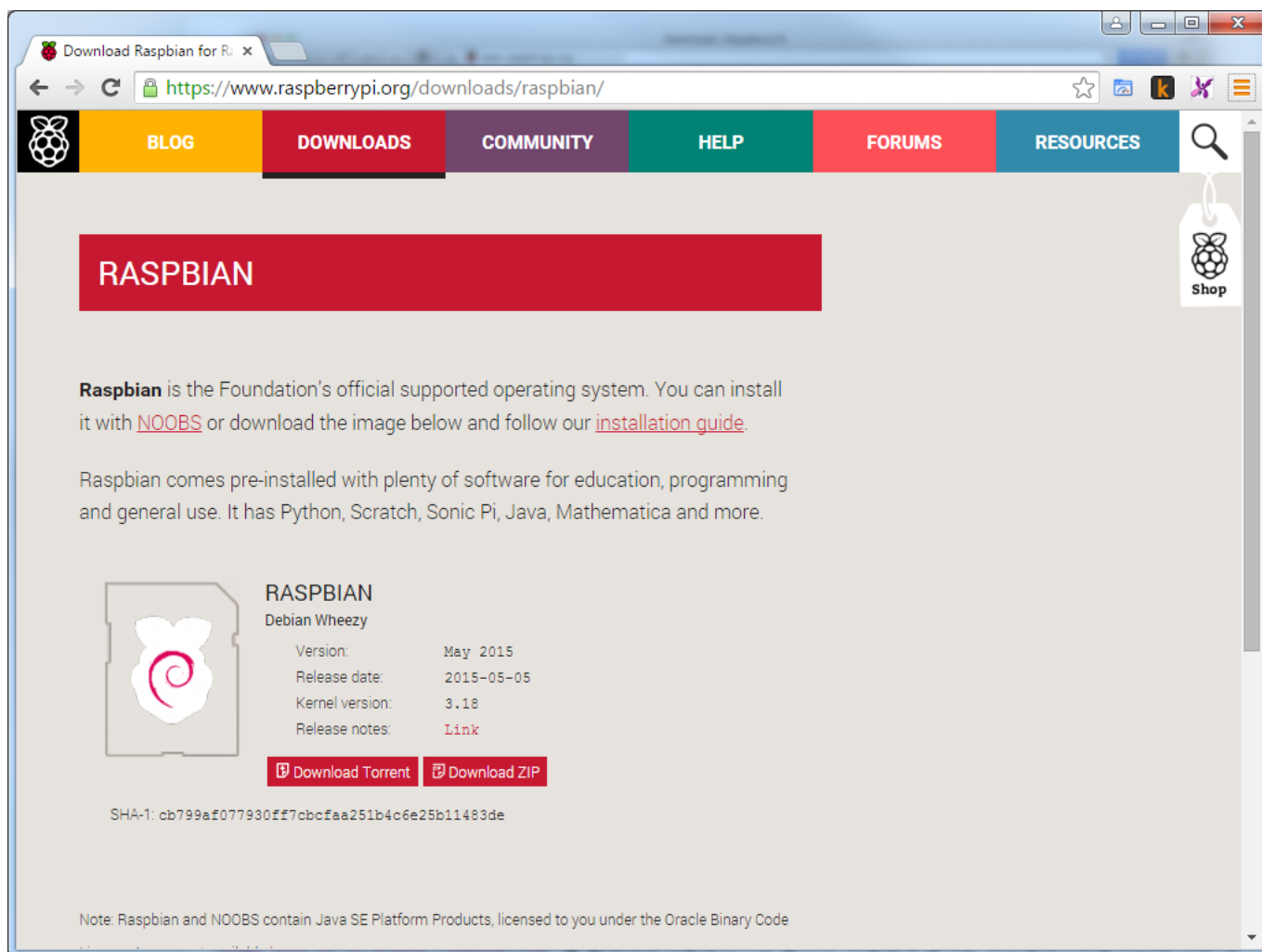
This function was tested with the earliest version of BioStar 2. This is no longer supported with recent versions of BioStar 2.

BioStar 2 is an access control management platform with specialty in biometrics. You can get more detailed information from the following link:

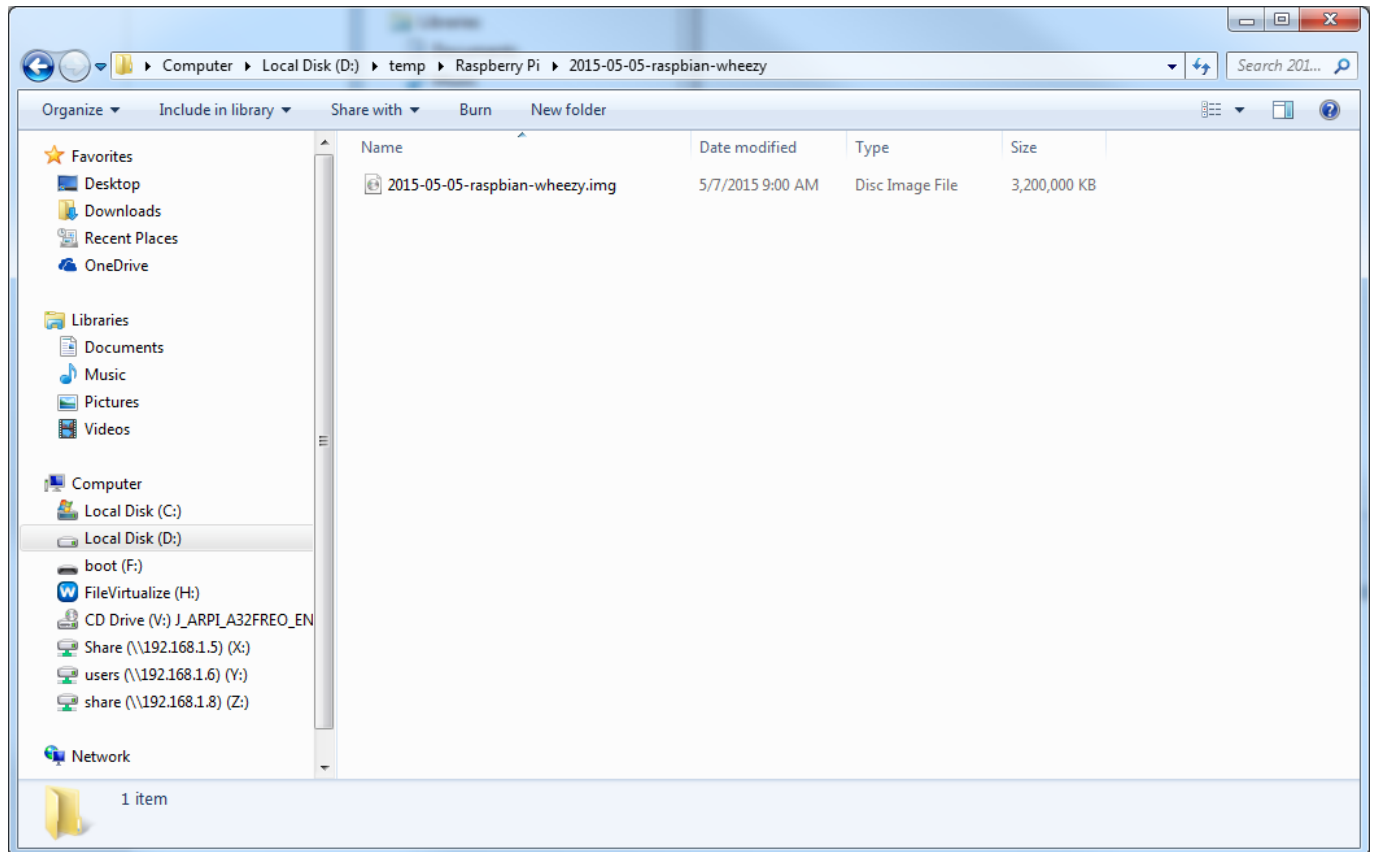
https://www.supremainc.com/en/SecurityPlatform/BioStar_2

Today I will show you how you can embed BioStar 2 into a Raspberry Pi.

First of all, I will briefly cover how to install Raspbian, Raspberry Foundation's official supported operating system based on Linux, for those who are not familiar with Raspberry Pi. You can download the latest version of Raspbian from the Raspberry official website (www.raspberrypi.org). Go to Downloads > Raspbian and you will find the latest version of Raspbian (<https://www.raspberrypi.org/downloads/raspbian>)



If you extract the zip file, you will have an image file as shown below:



You need to write the image file to the SD card. If you're using a Windows based PC, you can download an image writing tool (Win32 Disk Imager) from the following URL:

<http://sourceforge.net/projects/win32diskimager/>

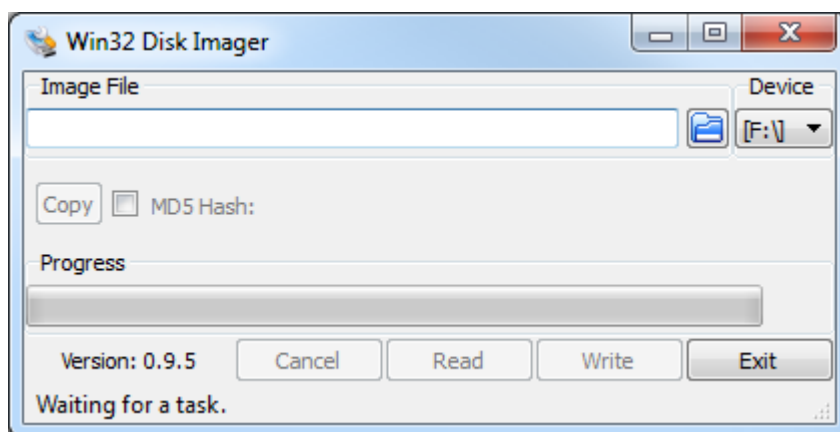
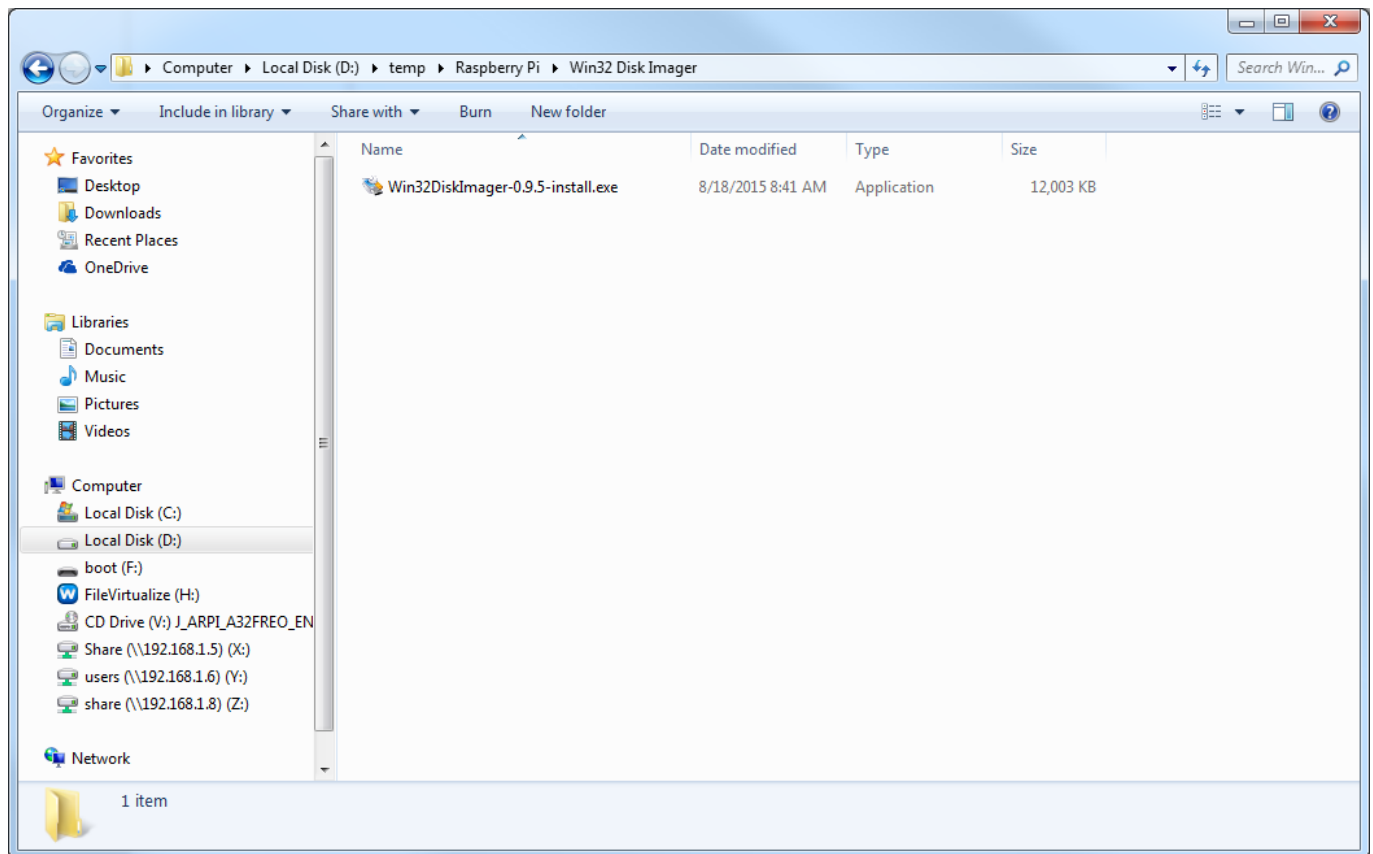


The screenshot shows a web browser window displaying the SourceForge project page for Win32 Disk Imager. The browser's address bar shows the URL `sourceforge.net/projects/win32diskimager/`. The page header includes the project name "Win32 Disk Imager" with a "Beta" badge, a description "A tool for writing images to USB sticks or SD/CF cards", and the creators "Brought to you by: gruemaster, tuxinator2009". A navigation bar contains links for Summary, Files, Reviews, Support, Wiki, Feature Requests, Bugs, Code, and Mailing Lists. The main content area displays a star rating of 4.0 (65 reviews), 76,115 downloads (This Week), and a last update date of 2014-09-16. Social media sharing buttons for Twitter (88), Google+ (209), and Facebook (759) are visible. A green "Download" button is present, with the text "Download the unnamed sequel here" below it. A "Browse All Files" link is also visible. The "Description" section contains the following text:

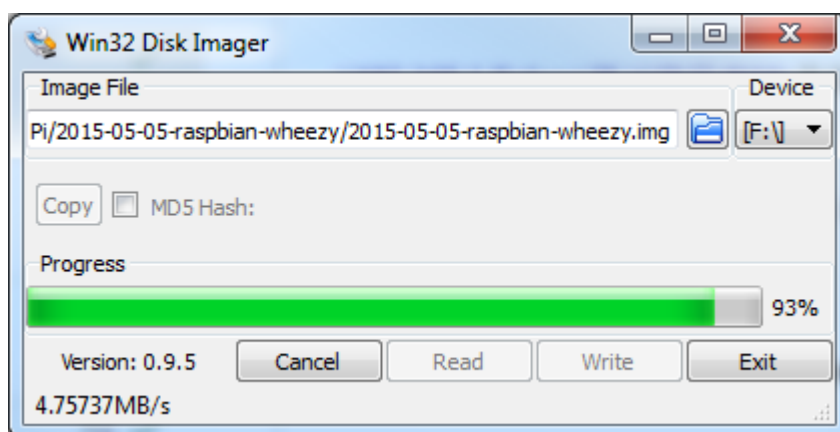
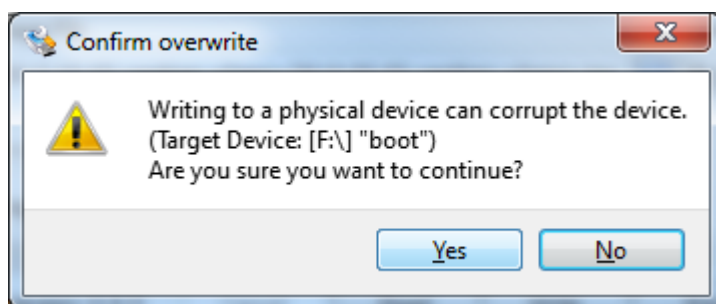
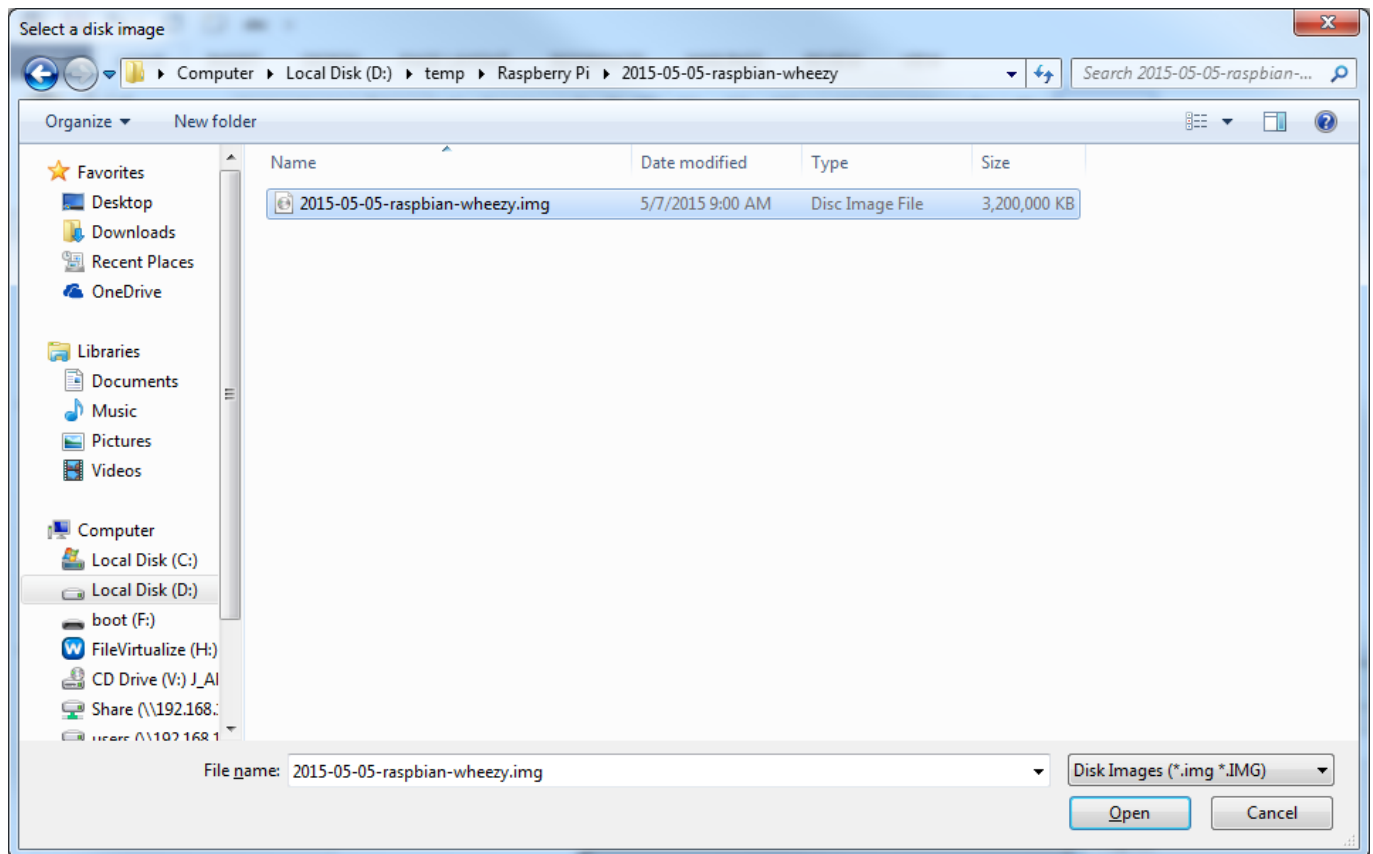
This program is designed to write a raw disk image to a removable device or backup a removable device to a raw image file. It is very useful for embedded development, namely Arm development projects (Android, Ubuntu on Arm, etc). Anyone is free to branch and modify this program. Patches are always welcome.

Warning: Issues have been reported when using to write to USB Floppy drives (and occasionally other USB devices, although very rare). It is highly recommended that before an image is written to a device, the user should do a Read to a temporary file first. If this fails, please report the failure along with your system information (file a new bug, NOT a review).

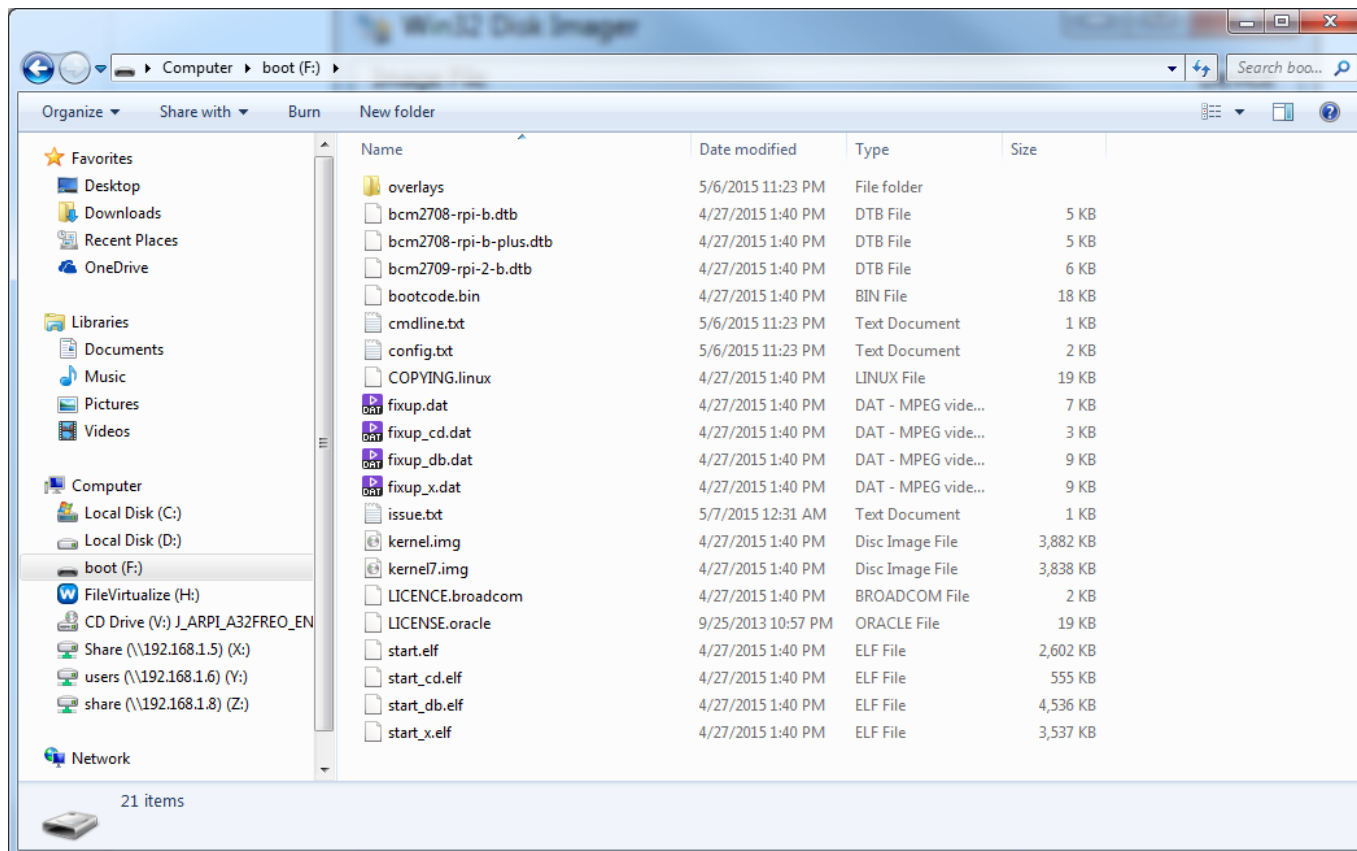
After downloading the file, you need to install the image writing tool. After the installation, run Win32 Disk Imager.



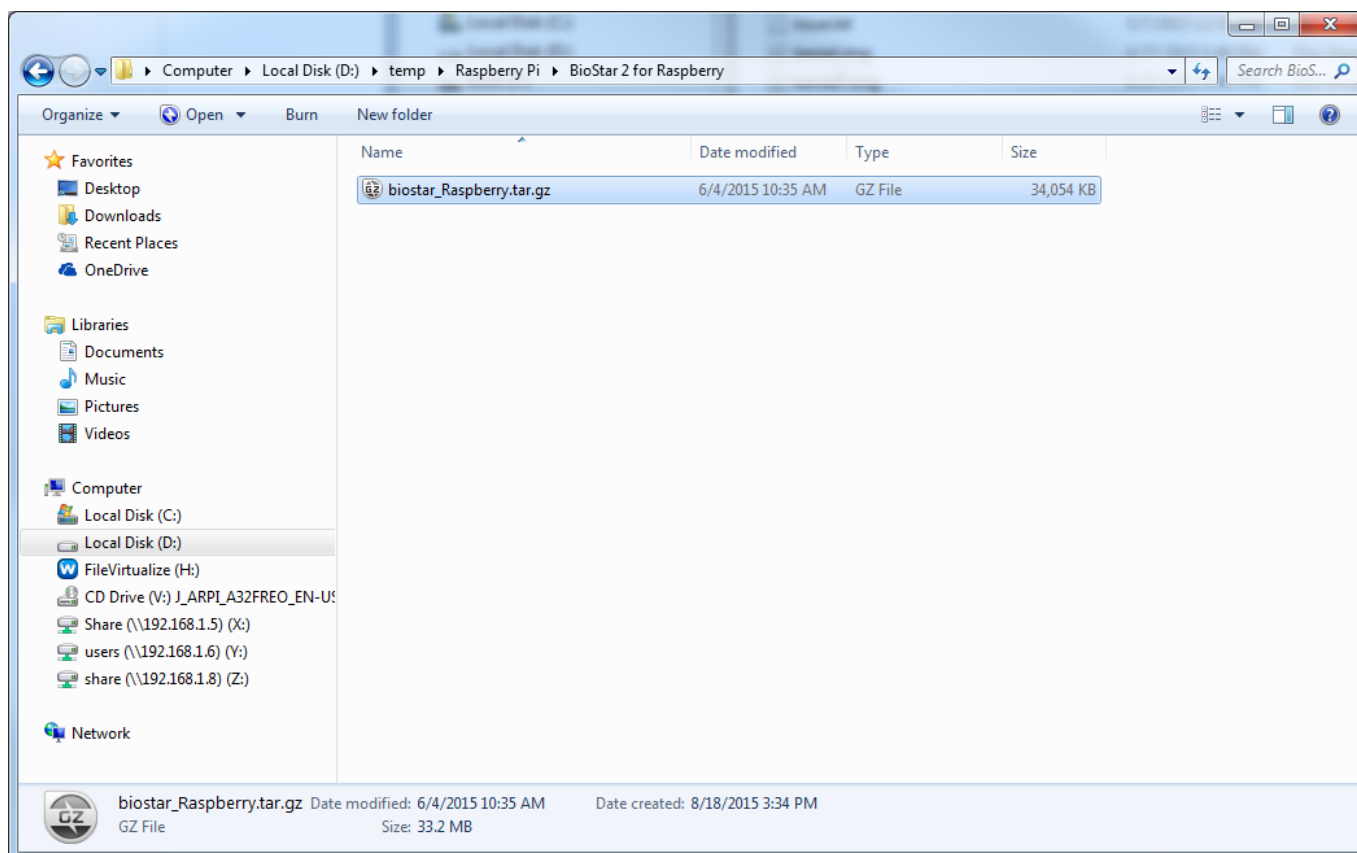
In the example above, a SD card is mounted on Drive F. Select the image file you downloaded from the Raspberry Pi website, and then click Write.

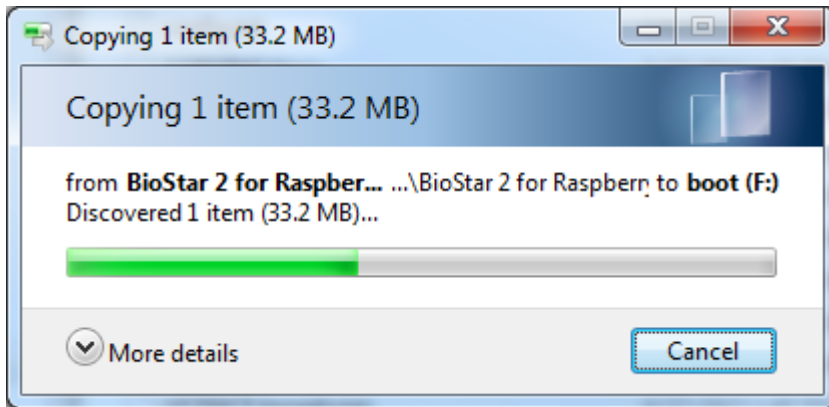


After writing the image file to the SD card, open the file explorer and go to drive F. You will find that there are dozens of files on the card.

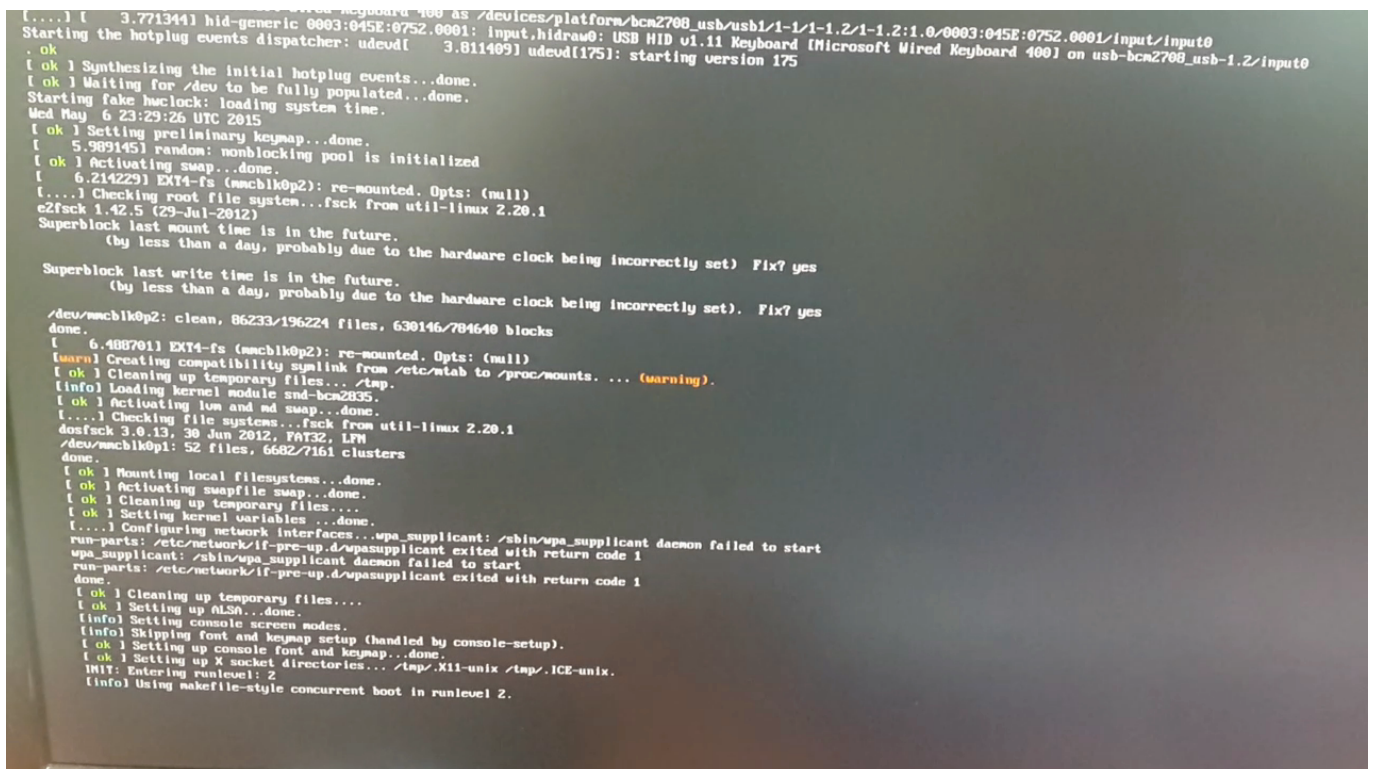


Now that you have successfully installed the operating system onto the SD card, it's time to copy BioStar 2 to the SD card. Copy and paste the file to the root directory of the SD card.

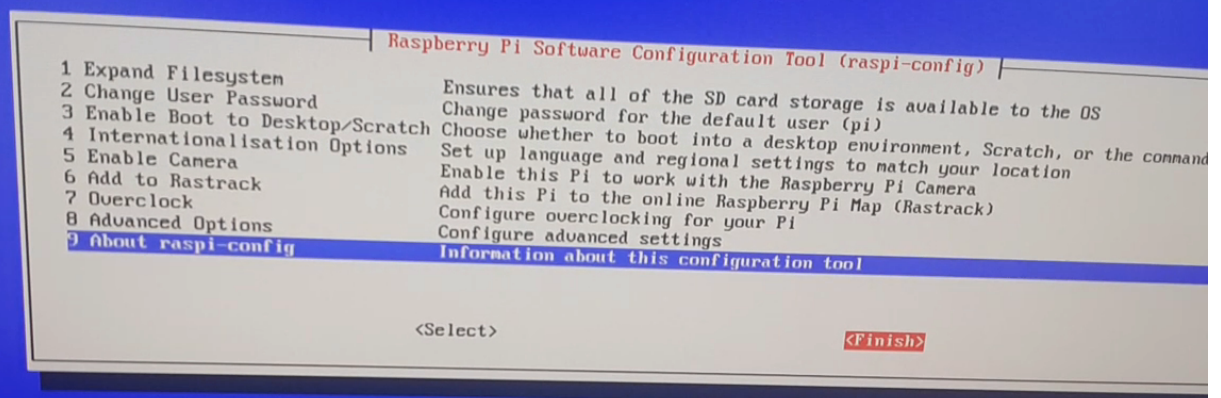
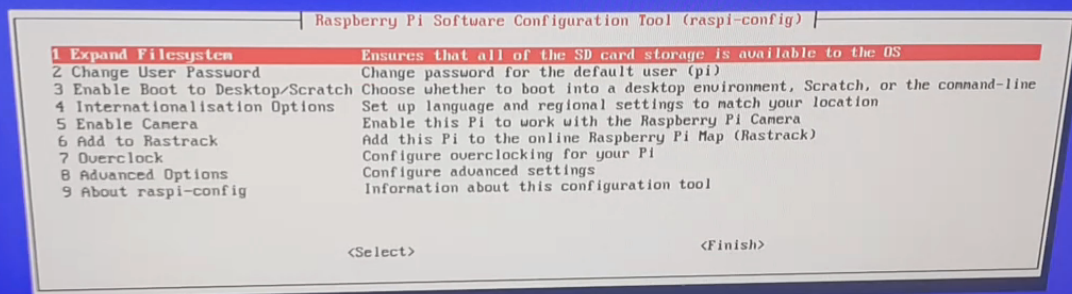


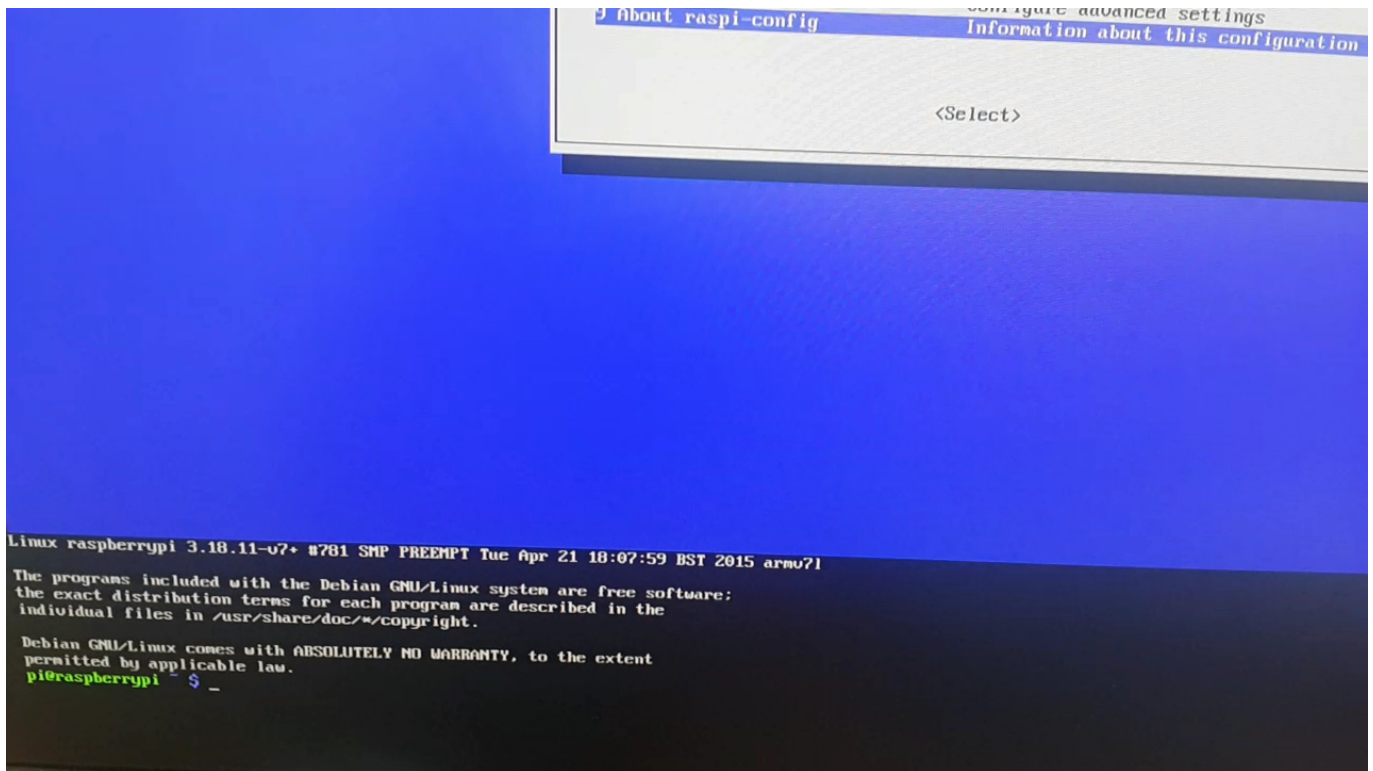


After copying the file, insert the SD card into your Raspberry Pi and boot it up.

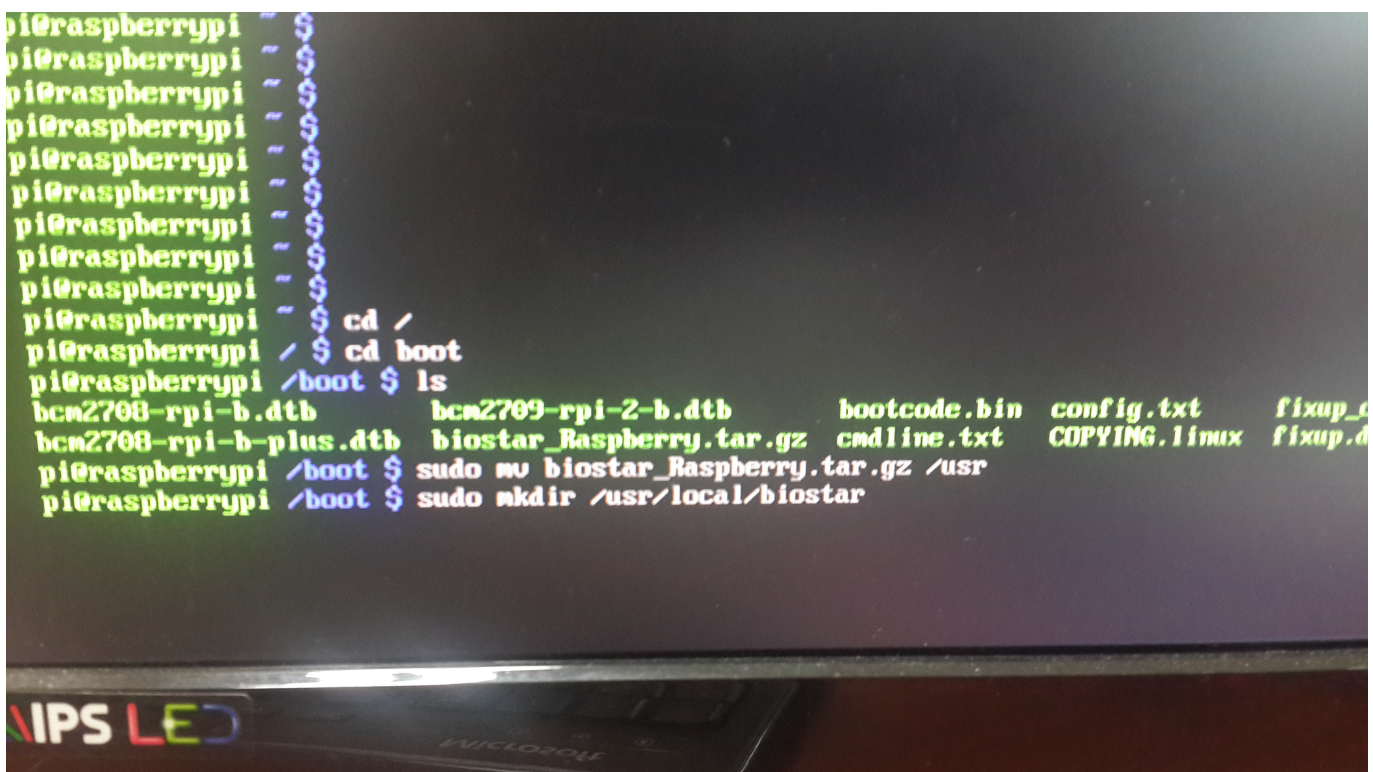


Now your Raspberry Pi is booting up. After the initial boot-up, Raspberry Pi Software Configuration Tool will show up. You can ignore the settings and choose Finish.





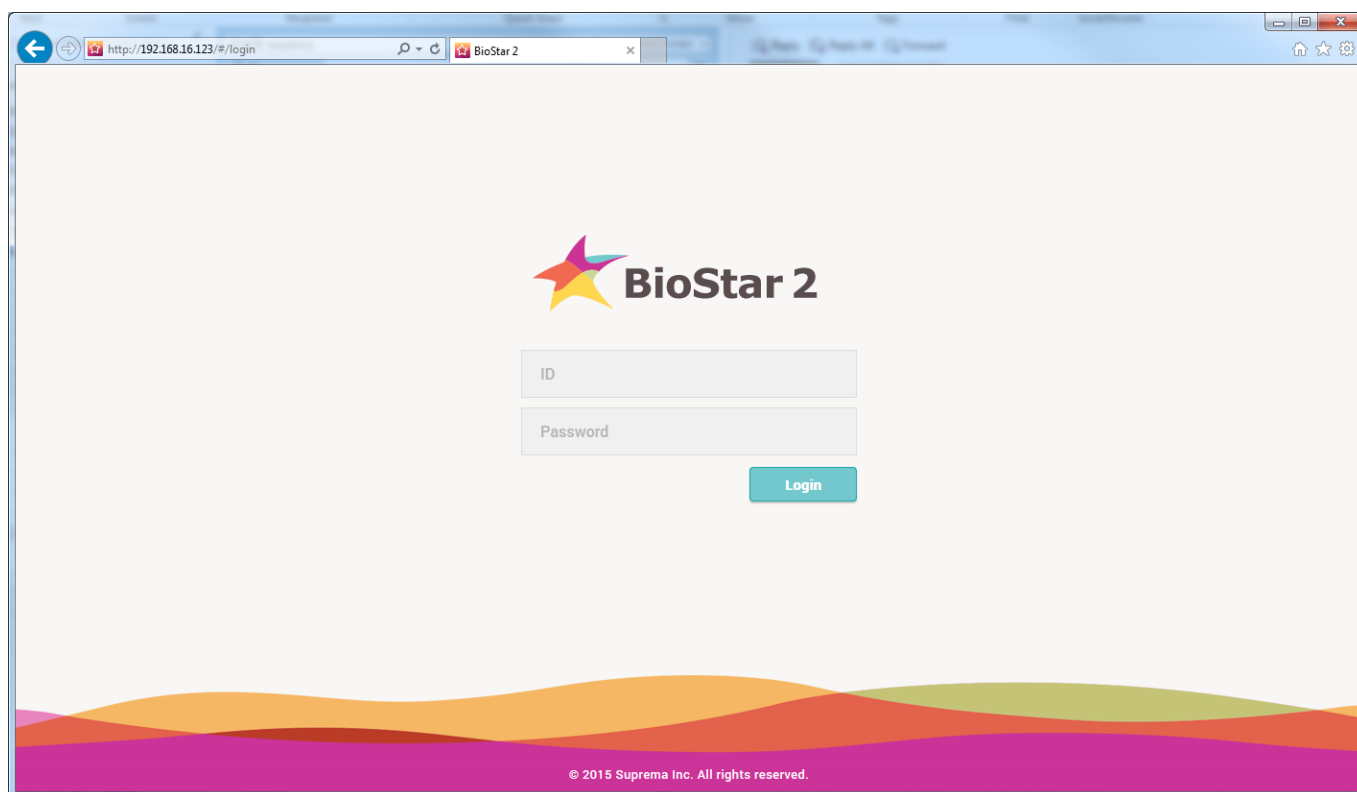
A zip file for BioStar 2 is located in the Boot directory. Type “cd /boot” and press Enter. Then, type “sudo mv biostar_Raspberry.tar.gz /usr” to move the zip file to the usr directory.

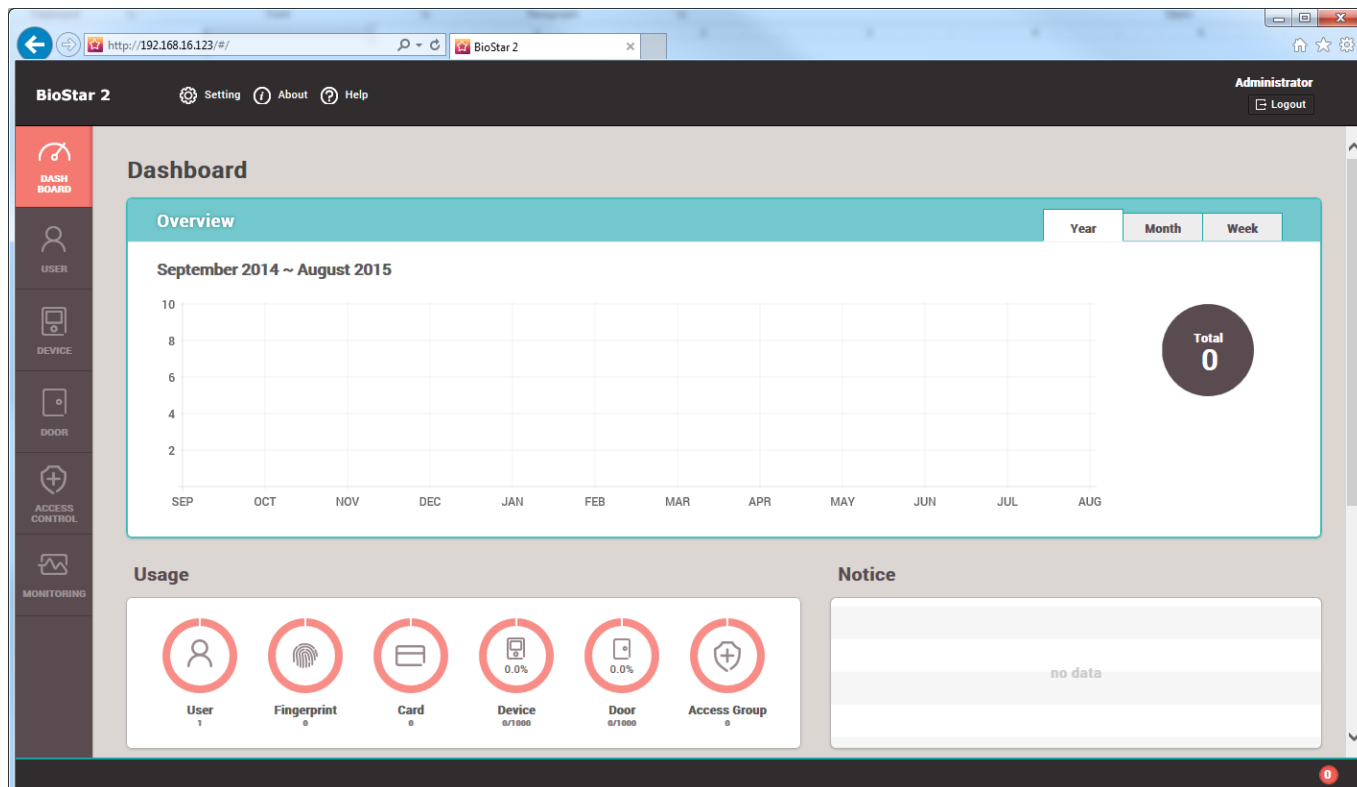


Type “sudo mkdir /usr/local/biostar” to create a folder for BioStar 2. Then, extract the zip file into the folder by typing “sudo tar -C /usr/local/biostar -xvf /usr/biostar_Raspberry.tar.gz”.


```
pi@raspberrypi /boot $  
pi@raspberrypi /boot $  
pi@raspberrypi /boot $  
pi@raspberrypi /boot $  
pi@raspberrypi /boot $  
pi@raspberrypi /boot $  
pi@raspberrypi /boot $  
pi@raspberrypi /boot $  
pi@raspberrypi /boot $  
pi@raspberrypi /boot $  
pi@raspberrypi /boot $  
pi@raspberrypi /boot $ cd /usr  
pi@raspberrypi /usr $ ls  
bin biostar_Raspberry.tar.gz games include lib local sbin share src  
pi@raspberrypi /usr $ sudo mkdir /usr/local/biostar  
pi@raspberrypi /usr $ sudo tar -C /usr/local/biostar -xvf biostar_Raspberry.tar.gz
```

Now we're ready to run BioStar 2. Before running BioStar 2 server, we need to run the nginx web server. Type "sudo /usr/local/biostar/nginx/nginx -c /usr/local/biostar/nginx/conf/nginx.conf -p /usr/local/biostar/nginx". Type "sudo /usr/local/biostar/biostar-server" to run BioStar 2 server. If you don't have any trouble running BioStar 2 server, now we're ready to connect to the BioStar 2 server we've just installed on the Raspberry Pi. Open your web browser and type the IP address of the Raspberry Pi and press Enter.





Now you can add Suprema devices to the BioStar 2 server and use your Raspberry Pi as a lightweight embedded BioStar appliance. Being able to install BioStar 2 server on a Raspberry Pi demonstrates how light and optimized our BioStar 2 server is and shows possibilities that BioStar 2 server can be embedded into any hardware like NVR, NAS and so on.

You can download BioStar 2 server for Raspberry Pi from the following link:

http://kb.supremainc.com/knowledge/biostar_Raspberry.tar.gz

From:
<http://kb.supremainc.com/knowledge/> -

Permanent link:
http://kb.supremainc.com/knowledge/doku.php?id=en:tc_technology_biostar_2_on_raspberry_pi&rev=1543537012

Last update: **2018/11/30 09:16**