Table of Contents

BioStar 2 on Raspberry P	i	. 1
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BioStar 2 on Raspberry Pi

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 Foundataion'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)

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RASPRIAN						×
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Raspbian is the Fou	Indation's official supp wolcod the image bel	ported operating system	. You can install			
11 WITH 1100005 OF 00	wilload the image bei		lation guide.			
Raspbian comes pro	e-installed with plenty	of software for education	on, programming			
and general use. It r	nas Python, Scratch, S	onic PI, Java, Mathemat	ica and more.			
	RASPBIAN					
	Debian Wheezy					
	Version:	May 2015				
	Release date:	2015-05-05				
	Kernel version:	3.18				
	Release notes.	Link				
	Download Torrent	Download ZIP				
SHA-1: cb799af0779	930ff7cbcfaa251b4c6e25	b11483de				
Note: Raspbian and NOOR	S contain Java SE Platform F	Products, licensed to you under	he Oracle Binary Code			
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If you extract the zip file, you will have an image file as shown below:

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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/

Sf Win32 Disk Imager down
← → C 🗋 sourceforge.net/projects/win32diskimager/ 🔂 🖾 🔣 💥 ≡
Win32 Disk Imager A tool for writing images to USB sticks or SD/CF cards Brought to you by: gruemaster, tuxinator2009
Summary Files Reviews Support Wiki Feature Requests Bugs Code Mailing Lists B
 ★ 4.0 Stars (65) ↓ 76,115 Downloads (This Week) (1) Last Update: 2014-09-16 (1) Tweet 88 8+1 209 (2) Like {759 Freed 88 8+1 209
Description 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 protect information (file a new burg. NOT a review)

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

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★ Favorites	Name	Date modified	Туре	Size				
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Win22 Dick Imagor			ו					
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Image File				Device
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		10	26	
Version: 0.9.5	Cancel	Read	Write	Exit
Waiting for a task.				.4

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.

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눻 Win32 Disk Imag	er							
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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.

	1g Win32 Disk Imager			101	
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🕮 Recent Places	bcm2708-rpi-b-plus.dtb	4/27/2015 1:40 PM	DTB File	5 KB	
🝊 OneDrive	bcm2709-rpi-2-b.dtb	4/27/2015 1:40 PM	DTB File	6 KB	
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🔮 CD Drive (V:) J_ARPI_A32FREO_EN	LICENSE.oracle	9/25/2013 10:57 PM	ORACLE File	19 KB	
🖵 Share (\\192.168.1.5) (X:)	start.elf	4/27/2015 1:40 PM	ELF File	2,602 KB	
🚅 users (\\192.168.1.6) (Y:)	start_cd.elf	4/27/2015 1:40 PM	ELF File	555 KB	
🚍 share (\\192.168.1.8) (Z:)	start_db.elf	4/27/2015 1:40 PM	ELF File	4,536 KB	
	start_x.elf	4/27/2015 1:40 PM	ELF File	3,537 KB	
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6/11

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.

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biostar Raspberry.tar.gz Date	modified: 6/4/2015 10:35 AM Date cr	reated: 8/18/2015 3:34 PM					
GZ File	Size: 33.2 MB						

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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".



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.

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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



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