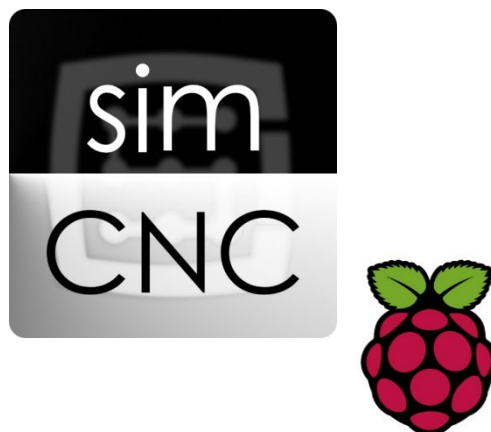


simCNC Software Installation for RaspberryPi



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1. Hardware Requirements

- RaspberryPi 4 (4GB RAM or more)
 - For more convenient operation and handling of more complex files, additional cooling and overclocking up to 2.0GHz is recommended. This clock value does not impair the work's stability or the warranty loss on the RaspberryPi.¹
- Wired network connection. WiFi connection can possibly be used for file sharing, etc., but the link to CSMIO/IP devices must be within a wired network.
- SD card with a capacity of min. 32GB.
 - The best option is an SSD connected to a USB3.0 port. Much faster transfers result in better system responsiveness, faster startup and loading of files.

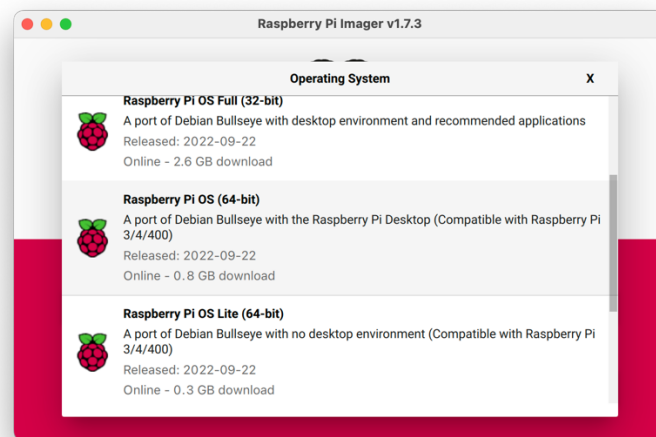
¹ <https://beebom.com/how-overclock-raspberry-pi-4/>

Parameters: over_voltage = 6
 arm_freq = 2000

2. Preparing the operating system

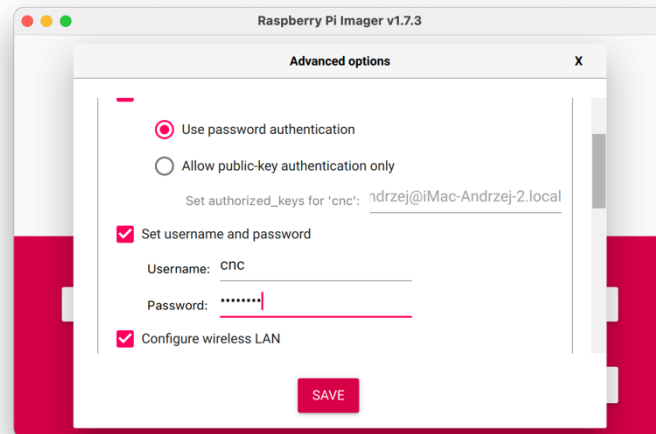
To run the RaspberryPi we need an SD card or a USB drive with an operating system. For this purpose, we need any computer with Internet access.

1. From the <https://www.raspberrypi.com/software/> page, download and install the "Raspberry Pi Imager" software.
2. We connect a USB drive or a reader with an SD card to a computer and run the "Raspberry Pi Imager".
3. We click the "Choose OS" button and select the operating system for RaspberryPi: Raspberry Pi OS (other) → Raspberry Pi OS (64-bit)

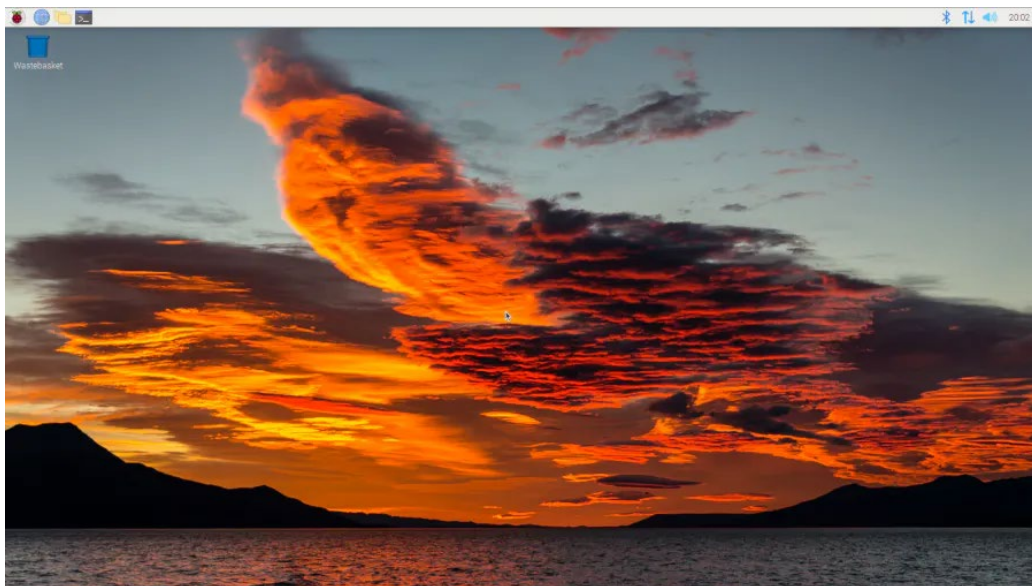


4. We click on the "Choose Storage" button and select the previously connected USB drive or SD card from the list. It is worth carefully checking the name and capacity of the selected device since its contents will be removed entirely. A mistake can result in the loss of important data.

5. (Optional) You can set the username and other parameters by clicking on the gear icon in the bottom right corner of the window.



6. We click the "Write" button and wait for the completion of the system preparation process. When the process is complete, we put the disk or SD card in the RaspberryPi and turn on the power. The first launch may take a little longer, but we should see the RaspberryPi OS desktop on a monitor after a few moments.



3. Installation of simCNC

On the RaspberryPi device, we download the simCNC installer from:

<https://en.cs-lab.eu/technical-support/download/manuals-firmware-plugin/simcnc-download/>

Please note that you download the installer for Linux-ARM64. Run the installer and follow the instructions. After the installation, simCNC and additional software will appear in the menu (raspberry icon) under the item "Other".