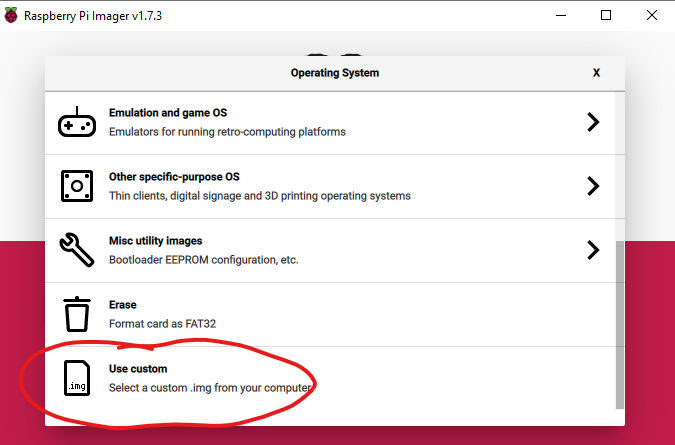
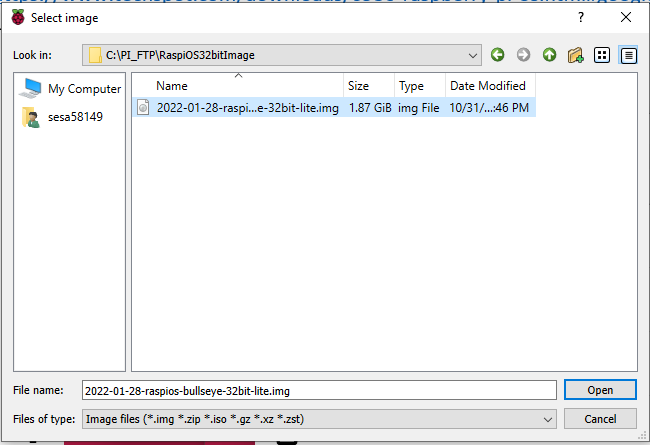
## **Raspberry PI Z W**

OS Installation

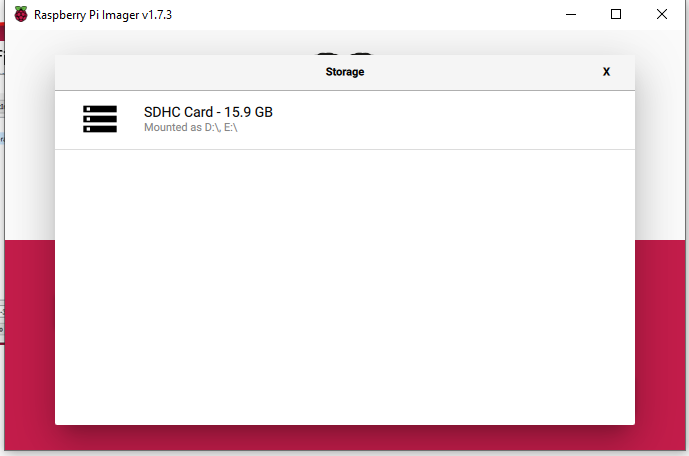
* Prerequisite
  + 8GB minimum SD card required to install the OS.
  + Download and install Raspberry PI Imager from <https://www.raspberrypi.com/software/>
  + Local copy of “**2022-01-28-raspios-bullseye-32bit-lite.img**” or latest from <https://www.techspot.com/downloads/6930-raspberry-pi-os.html#google_vignette>
  + Launch Raspberry PI Imager
    - Select customer image selector ( to select the local “.img” files)



* + - Select the img file



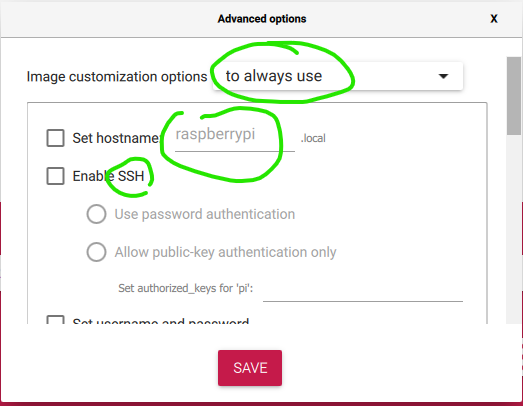
* + - Choose the memory drive (SD card inserted in the laptop)



* + - Host setting ( Host name, DHCP, SFTP, SSH, USER and password) configuration
      * Click setting button



Select the option which you want to configure



* + - Write the OS on SD card



* + - Remove the SD card from Laptop and insert into the SD card slot of the Raspberry pi board.

Software Installation

1. Paho MQQT client installation
   1. Run “sudo apt-get update” to get the latest versions
   2. Check whether **Python3** is installed by executing “python3 - - version” install the python3 in case it is not installed by command “sudo apt install python3”
   3. Install **paho-mqtt** package for mqtt client by command “sudo pip3 install paho-mqtt” make sure pip3 is installed if not then use command “sudo apt-get install python3-pip” in case pip3 is not installed.
   4. Check the paho-mqtt package installed by command “ pip3 list” it will list all the pip package installed in the device.
2. Install other missing python package using pip3 command “sudo pip3 install **pack\_name**”