Blockchain Technical Notes Raspberry Pi image setup

Virtualized Raspberry Pis

Windows: Raspberry Pi image setup and sanity check

Phillip G. Bradford

phillip.bradford@uconn.edu, phillip.g.bradford@gmail.com

Objectives

Download and setup the Raspberry Pi images on Windows 10/11

Sanity check the Raspberry Pi images using qemu-system-arm

Gain understanding of the qemu-system-arm commands

Methods and tools

Create a workshop directory on your machine

In the workshop directory git clone https://github.com/wonder-phil/RPi

Download Raspberry Pi OS Lite IMG file from: https://www.raspberrypi.org/software/operating-systems/

Convert the IMG file to a QCOW2 file

Boot the virtual Raspberry Pi using qemu-system-arm

Websites

If you do not have git on your Windows 10/11 machine, then install it: https://github.com/git-guides/install-git

Raspberry Pi OS IMG files:

https://www.raspberrypi.org/software/operating-systems/