Blockchain Technical Notes

Installing QEMU on Windows 10/11

Phillip G. Bradford[1]

SUMMARY

This document shows how to install the QEMU virtual machine system on Windows 10/11.

This is for Blockchain Tech Notes, by Phillip G. Bradford

DETAILS

This is Part **1 QEMU-Install** of the Preparation for the virtual Raspberry Pi set up.

Part 1 has several sub-steps. In most cases with 15MBit internet connections, we expect Part 1 to take several hours. Part 1 may require up to 2GB of storage.

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STEP 1: GO TO WWW.QEMU.ORG

Select Download

Download QEMU

Linux	macOS	Windows

Stefan Weil provides binaries and installers for both 32-bit and 64-bit Windows.

Version numbering

Since version 3.0.0, QEMU uses a time based version numbering scheme

major
      incremented by 1 for the first release of the year
minor
      reset to 0 with every major increment, otherwise incremented by 1 for each release from git master
micro
      always 0 for releases from git master, incremented by 1 for each stable branch release

Select Windows

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Select 64-bit or 32-bit installer
  Almost all Windows 10 machines are 64-bit machines

Download the installer (about 180MB).
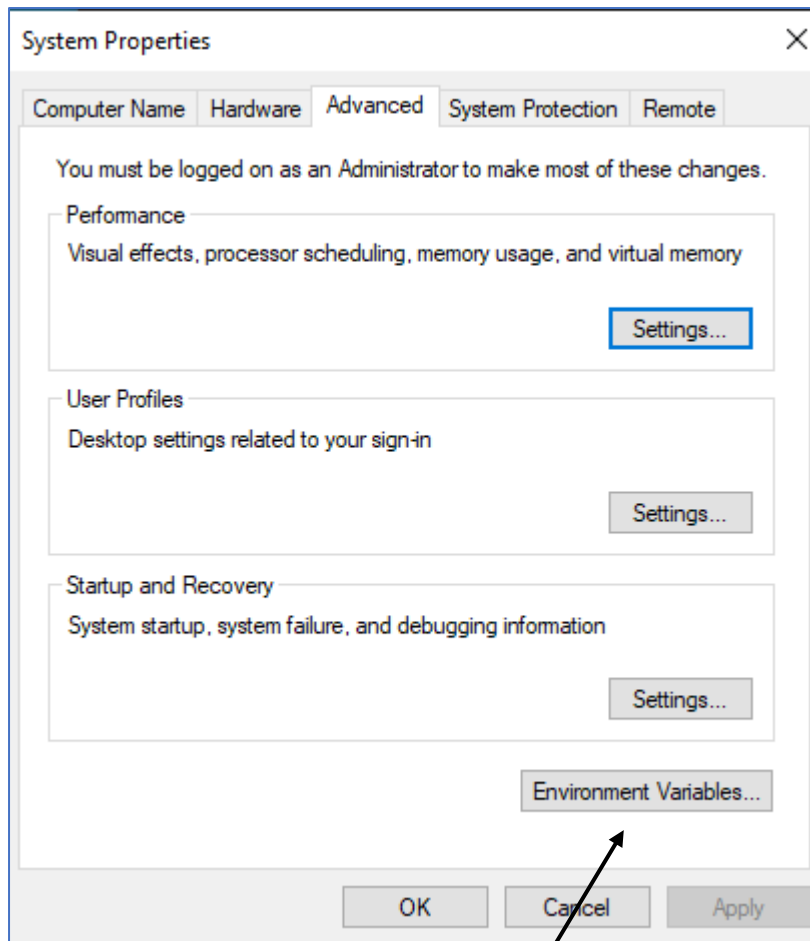
Run the installer once it is downloaded
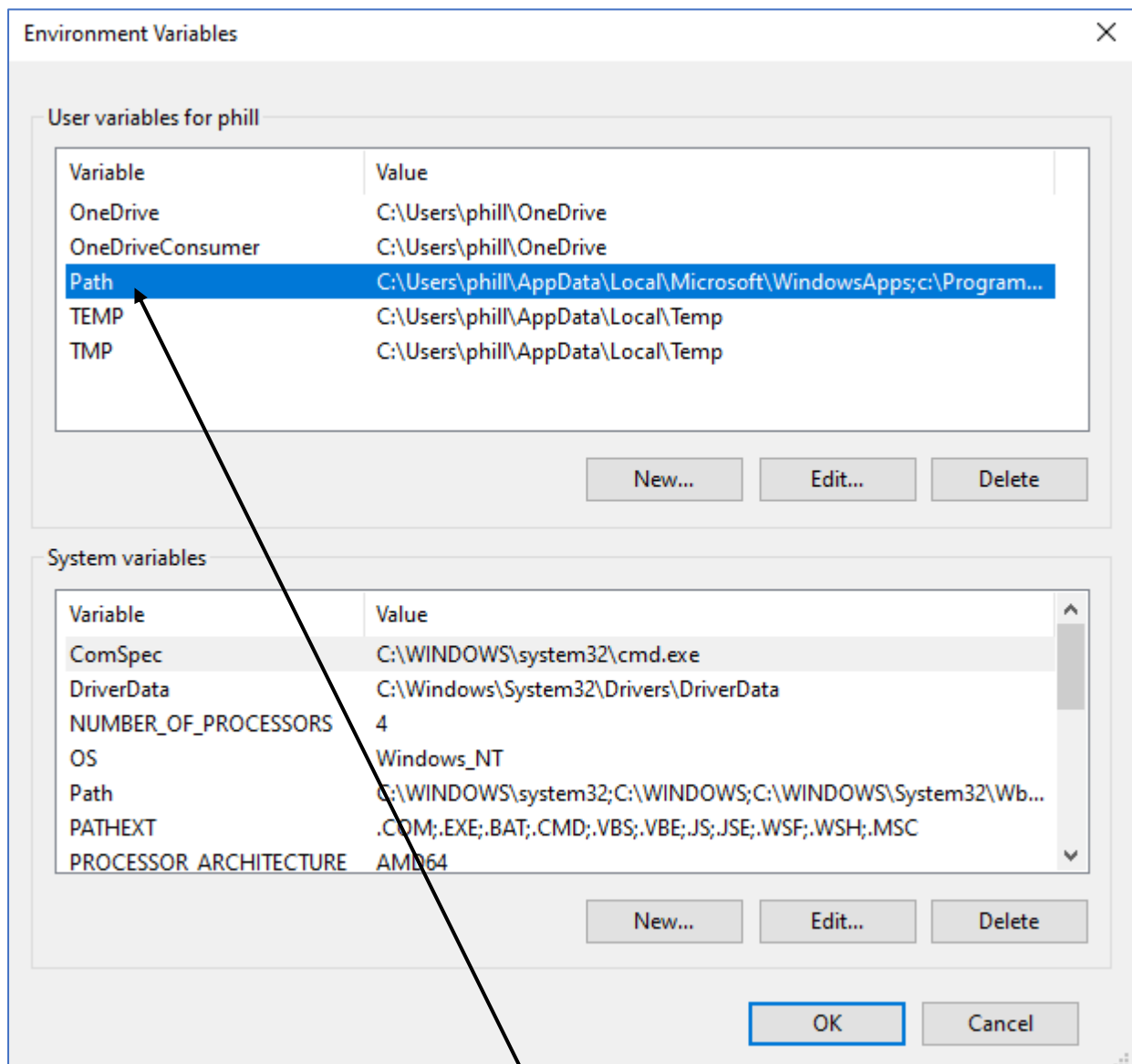 Ensure you agree with the terms-and-conditions

The standard location for installing QEMU is C:\Program Files\qemu\

This must be set up in the system properties

Select Environment Variables

Environment Variables ✕

User variables for phill

Variable	Value
OneDrive	C:\Users\phill\OneDrive
OneDriveConsumer	C:\Users\phill\OneDrive
Path	C:\Users\phill\AppData\Local\Microsoft\WindowsApps;c:\Program...
TEMP	C:\Users\phill\AppData\Local\Temp
TMP	C:\Users\phill\AppData\Local\Temp

New... Edit... Delete

System variables

Variable	Value
ComSpec	C:\WINDOWS\system32\cmd.exe
DriverData	C:\Windows\System32\Drivers\DriverData
NUMBER_OF_PROCESSORS	4
OS	Windows_NT
Path	C:\WINDOWS\system32;C:\WINDOWS;C:\WINDOWS\System32\Wb...
PATHEXT	.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
PROCESSOR_ARCHITECTURE	AMD64

New... Edit... Delete

OK   Cancel

Select the **Path** Environment Variable

6
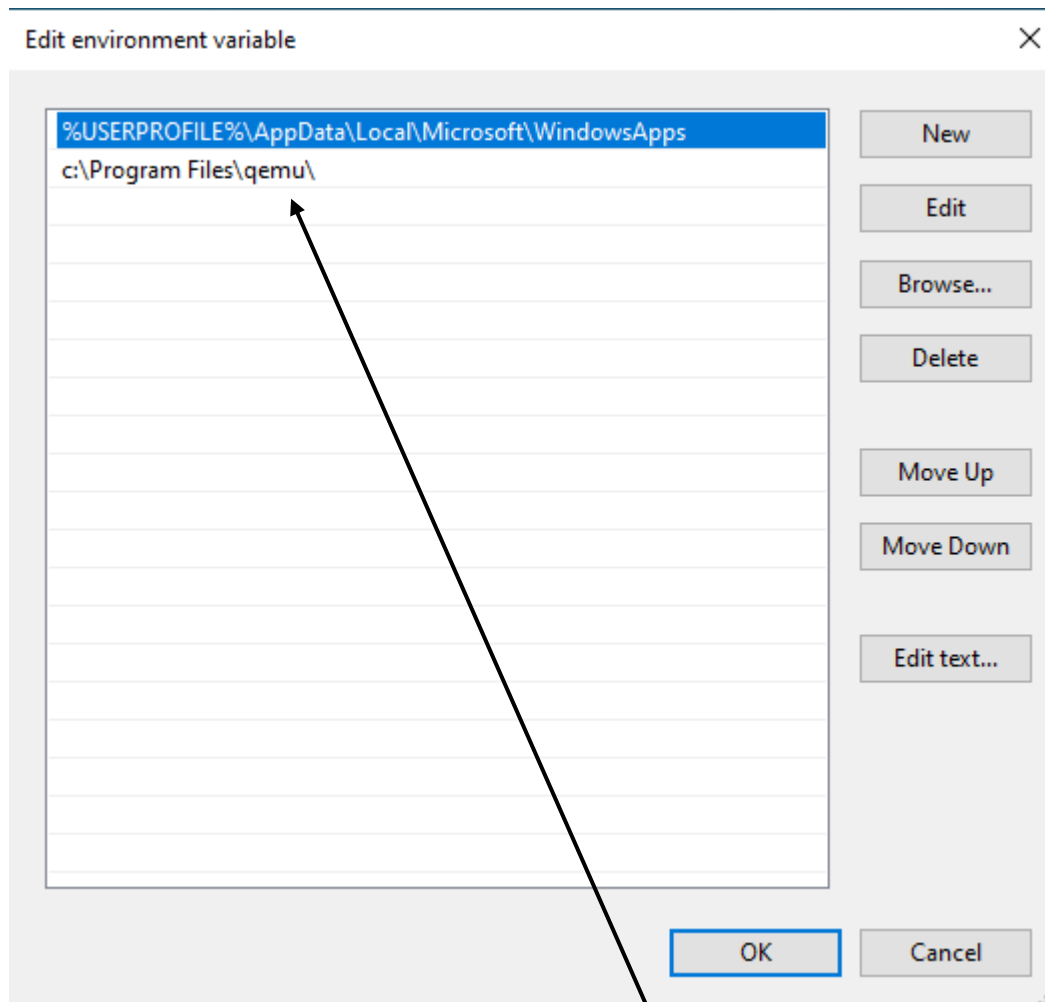
Add **C:\Program Files\qemu** to a new line
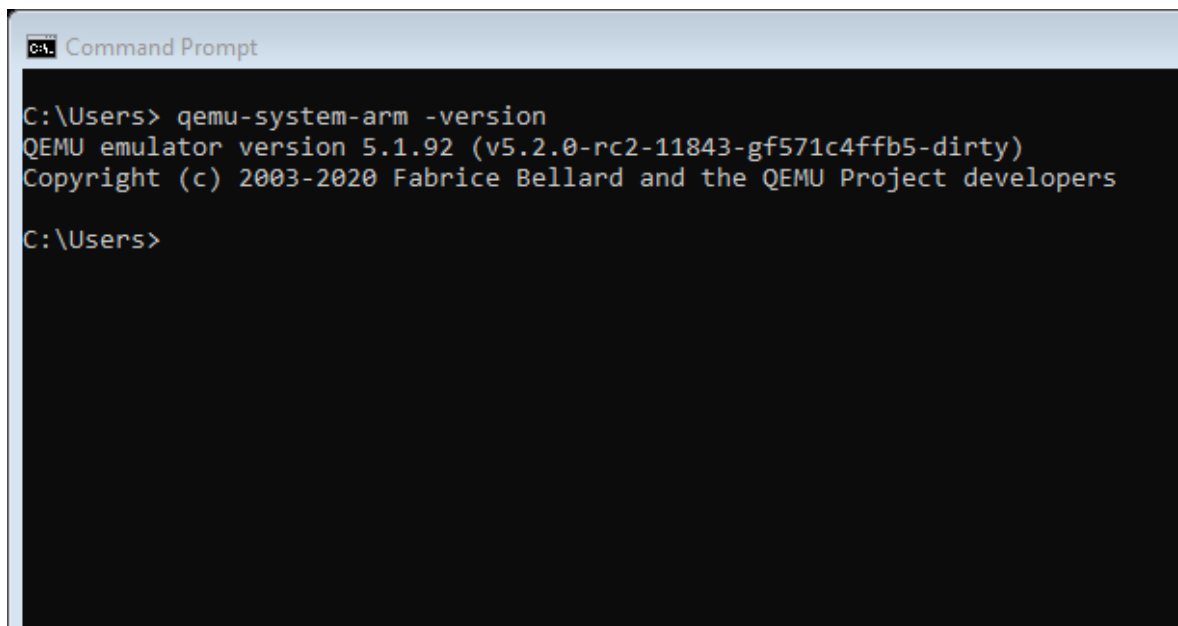
Select OK to each of the following

1. Edit Environment Variable
2. Environment Variables
3. System Properties

Open a new Terminal and verify the version of qemu-system-arm is 5.1.92:

Get a Command Prompt (a terminal)


```
C:\Users> qemu-system-arm -version
QEMU emulator version 5.1.92 (v5.2.0-rc2-11843-gf571c4ffb5-dirty)
Copyright (c) 2003-2020 Fabrice Bellard and the QEMU Project developers

C:\Users>
```

Windows 10> qemu-system-arm -version

QEMU emulator version 5.1.92
Copyright (c) 2003-2020 Fabrice Bellard and the QEMU Project developers

NOTES

The QEMU system requires under 2GB on disk.