

IEEE CCWC 2021 IoT Workshop

Introduction and Workshop preparation

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PREPARATION FOR DISTRIBUTED COMPUTING RASPBERRY PI WORKSHOP

This is Part 1 and Part 2 of the preparation before the workshop. Parts 1 and 2 should be completed a day or two in advance of the workshop.

LIMITATIONS

No Chromebooks

No tablets (iPads, Android)

Only MacOS and Windows 10, no Linux/Unix machines

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SHOULD HAVE

Windows 10 (20H2)

MacOS BigSur

Assuming at least 15 Mb download speed

Assuming 50 GB free of SSD or free hard disk

Ideally at least 8 GB of RAM

PART 1 AND PART 2 GOALS

1. Install QEMU
2. Sanity test QEMU for ARM images
3. Download Raspberry Pi image
4. Test Raspberry Pi image on QEMU

STRATEGY

Prepare your machine for the workshop well in advance. Parts 1 and 2 should be completed one or two days in advance.

TACTICS

Part1 has the major steps

| | Windows | MacOS |
|------------------|---------------|---------------|
| Install QEMU | Video + Notes | Video + Notes |
| Sanity test QEMU | | |

Part 2 has the major steps

| | Windows | MacOS |
|---------------------------------|---------------|---------------|
| Download Raspberry Pi image | Video + Notes | Video + Notes |
| Test Raspberry Pi image on QEMU | Video + Notes | Video + Notes |