



IoT and Blockchain Networking

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Outline

What we need

Architecture sketch

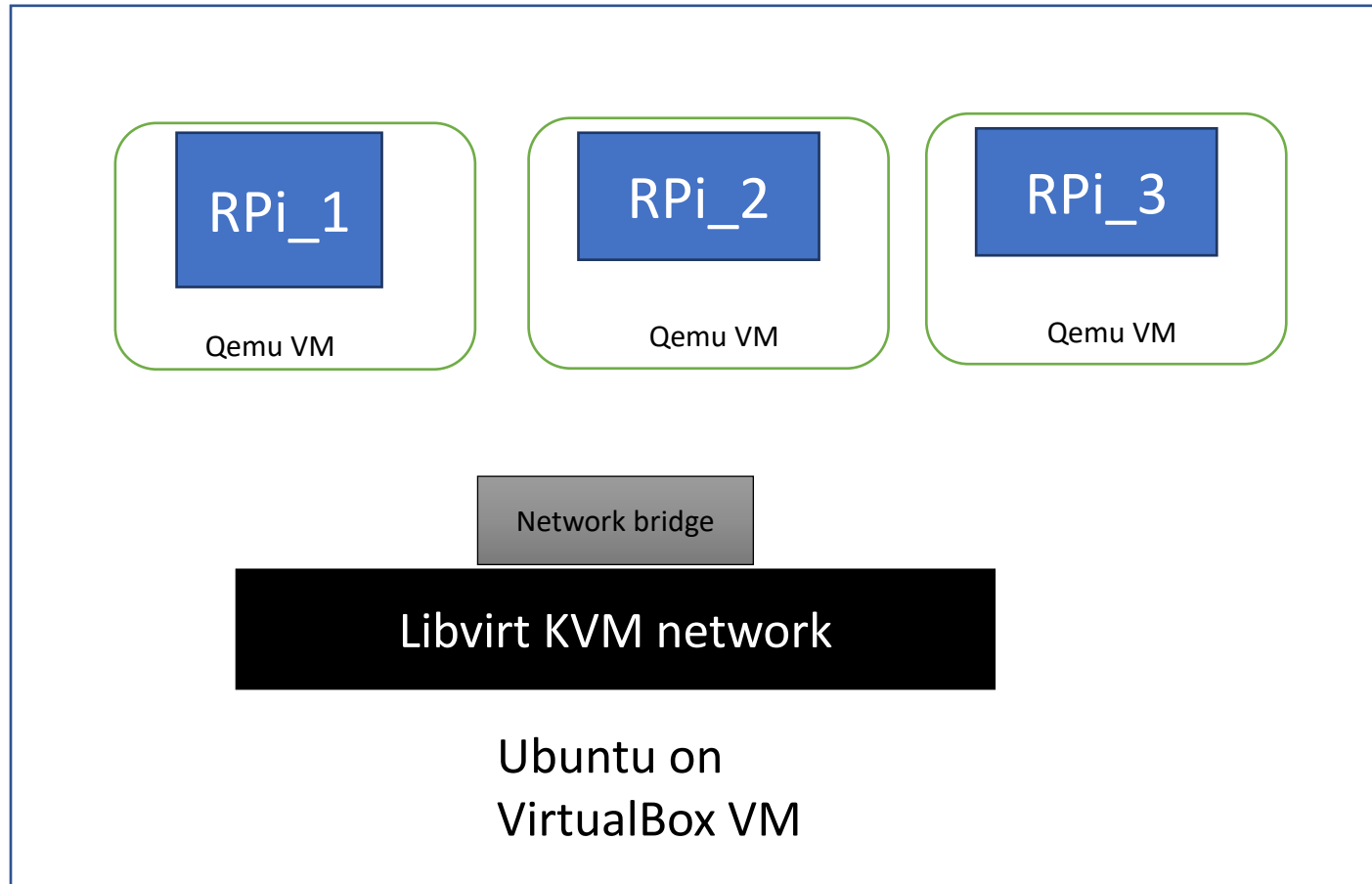
ClockChains

A look at MQTT

What we need

- Free joining of network
- Node discovery
- Computing consensus

Architecture sketch




LibVirt

```
<network>
  <name>default</name>
  <uuid>949acf87-8e26-41d3-9ead-424e10041efd</uuid>
  <forward mode='nat'>
    <nat>
      <port start='1024' end='65535' />
    </nat>
  </forward>
  <bridge name='virbr0' stp='on' delay='0' />
  <mac address='52:54:00:48:4b:65' />
  <ip address='192.168.122.1' netmask='255.255.255.0'>
    <dhcp>
      <range start='192.168.122.2' end='192.168.122.254' />
      <host mac='10:20:30:40:50:48' name='rpi48' ip='192.168.122.248' />
      <host mac='10:20:30:40:50:49' name='rpi49' ip='192.168.122.249' />
      <host mac='10:20:30:40:50:50' name='rpi50' ip='192.168.122.250' />
    </dhcp>
  </ip>
</network>
```

Raspberry Pi

```
<domain type='qemu'>
  <name>rpi0</name>
  <interface type='bridge'>
    <mac address='10:20:30:40:50:50' />
    <source bridge='virbr0' />
    <model type='virtio' />
    <address type='pci' domain='0x0000' bus='0x00' slot='0x06' function='0x0' />
  </interface>
```



Message Queue Telemetry Transport

MQTT

Telemetry is transmitting to/from hard to access places

MQTT is an ISO standard

We use the Eclipse foundation Paho Mosquitto

Thank You!

Your helping make this a success is much appreciated !