Virtual Machine (VMware)

This is a generic guide to installing CubeOS on VMware, the host can be an old PC, or a MCU.

1. Preparation:

1 **Download the** CubeOS **image**

Visit this repo ↗ to download the latest image. Please extract the image after downloading.

2 **Install VMware**

Download and install a virtual machine manager, with VMware Workstation ↗ being recommended.

> - Have other virtual machine managers? The following steps can theoretically be used as well.
> - Unfamiliar with virtual machines and owning a Raspberry Pi? You can choose to install CubeOS on a Raspberry Pi.
> - If none of these options are viable, you can purchase an iHost with built-in CubeOS from the SONOFF official website or platforms like Amazon.

3 Zigbee Adapter (Optional)

If you need to add Zigbee devices, prepare a Zigbee Dongle. Tested Zigbee Dongles include:

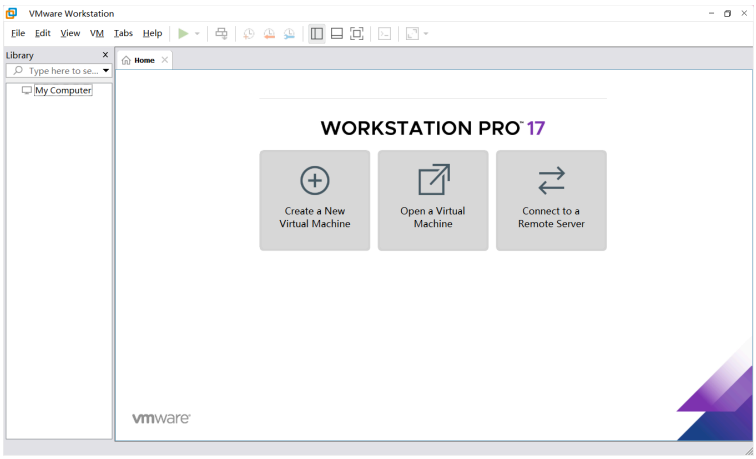
- SONOFF ZBDongle-E(Recommended)
- Easyiot ZB-GW04
- SMLIGHT SLZB-07
- SMLIGHT SLZB-06M

> Visit How to Flash Dongle Firmware ↗ for more details.

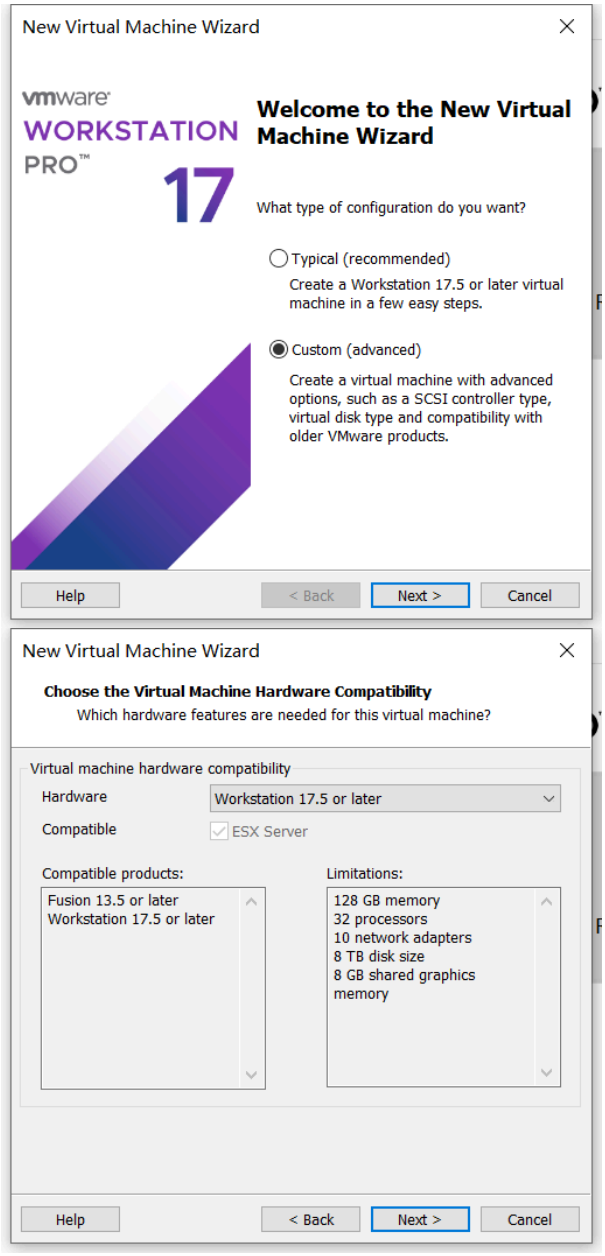
> For more information on Zigbee configurations and compatibility, please refer to this guide.

2. Create a Virtual Machine

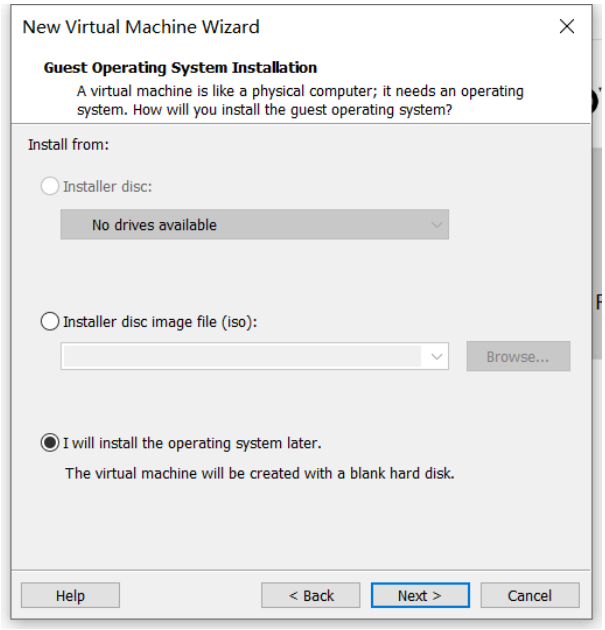
1 Launch VMware, Select “Create a New Virtual Machine” ⊕.



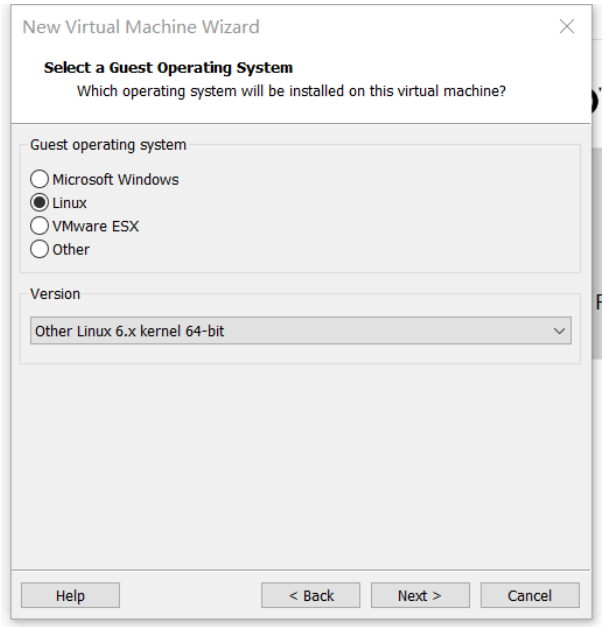
2 Choose **Custom**, click **Next**. Hardware-**Workstation 17.5 or later,** click **Next.**



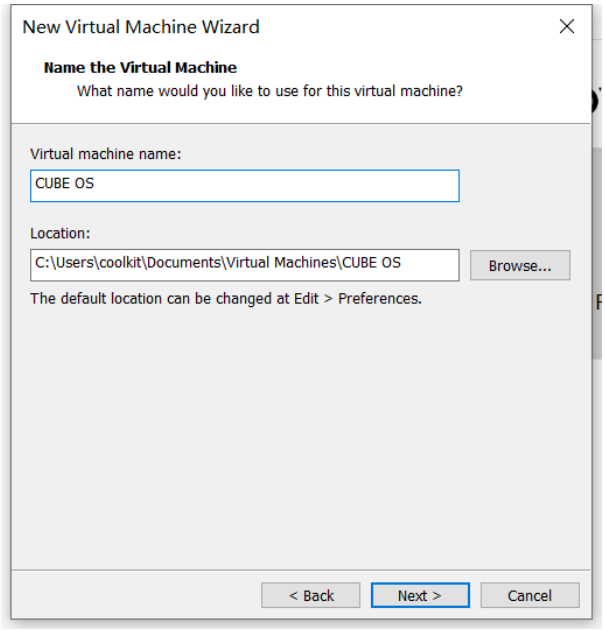
3 Choose **I will install the operating system later**, click **Next**.



4 Select **Linux > Other Linux 6.x kernel (64-bit)** as the guest operating system type.

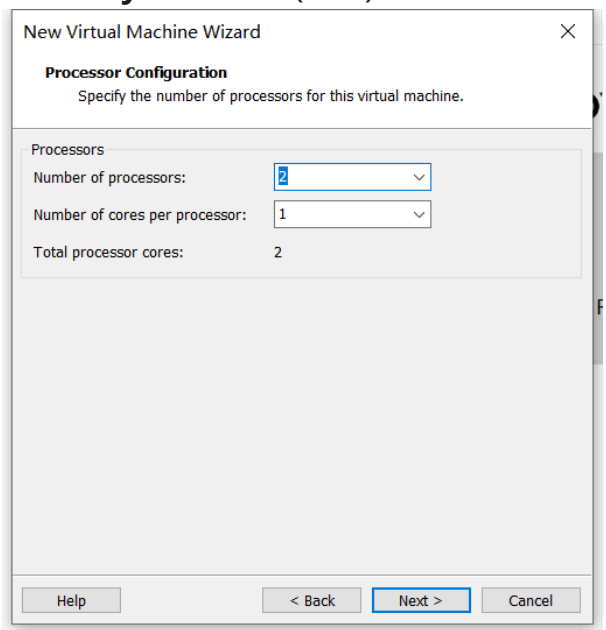


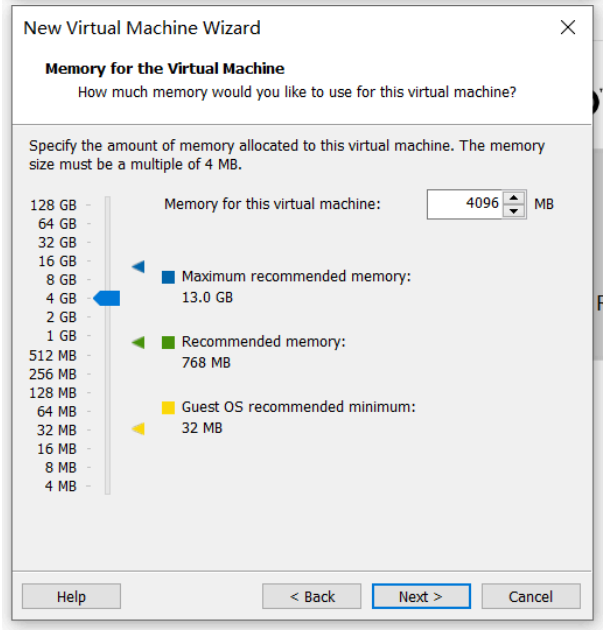
5 Name the VM as **CUBE OS** and choose a storage location.



6 System Resources:

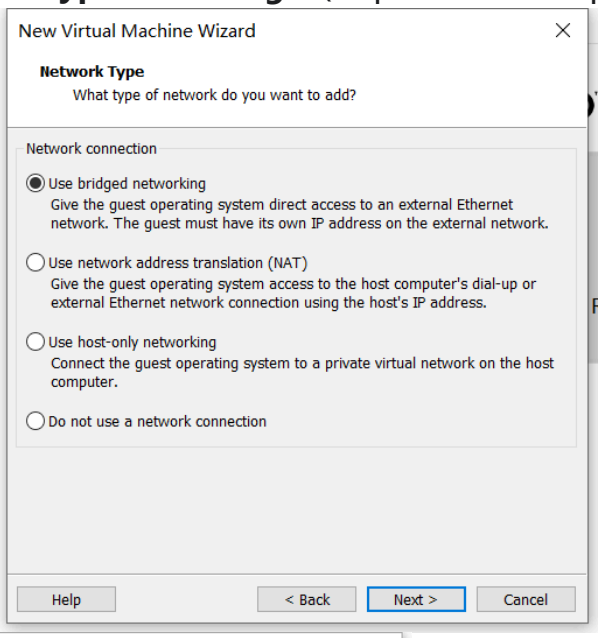
- **Processors**: 2 cores
- **Memory**: 4096MB (4GB) or more

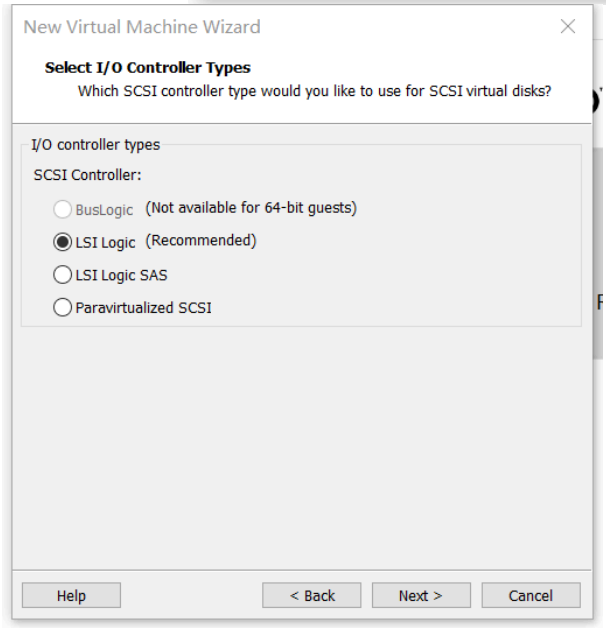




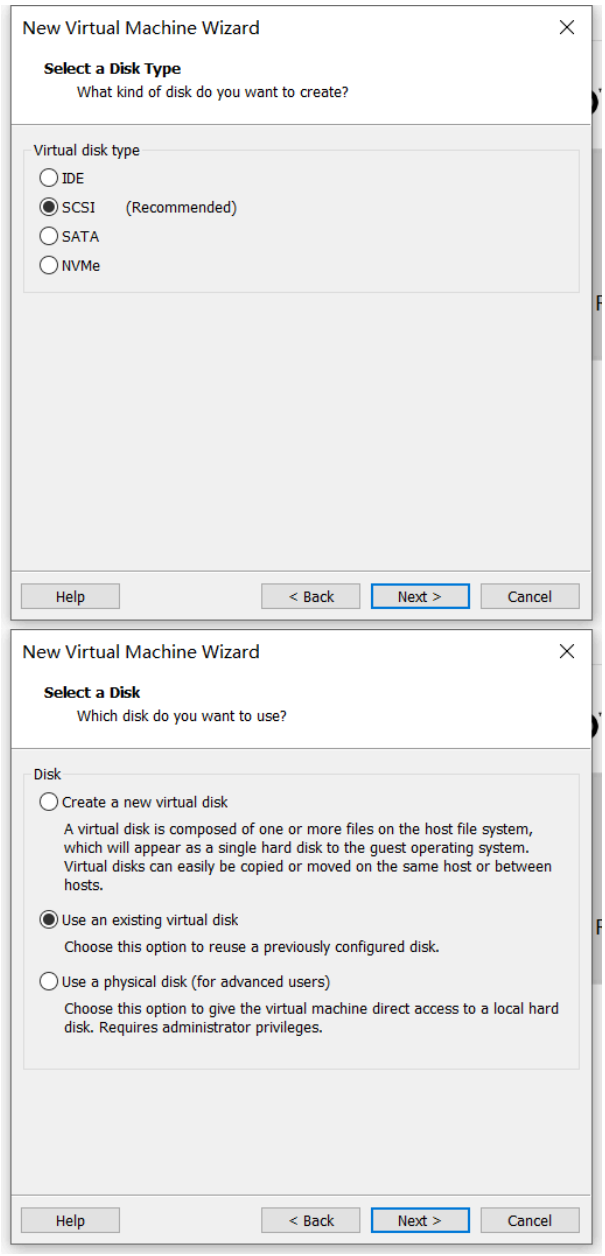
7 Network / I/O Controller Types:

- Set **Network Adapter** to **Bridged** mode (important for LAN access and discovery).
- Set **Controller Type** to **LSI Logic** (required for compatibility with the virtual disk).

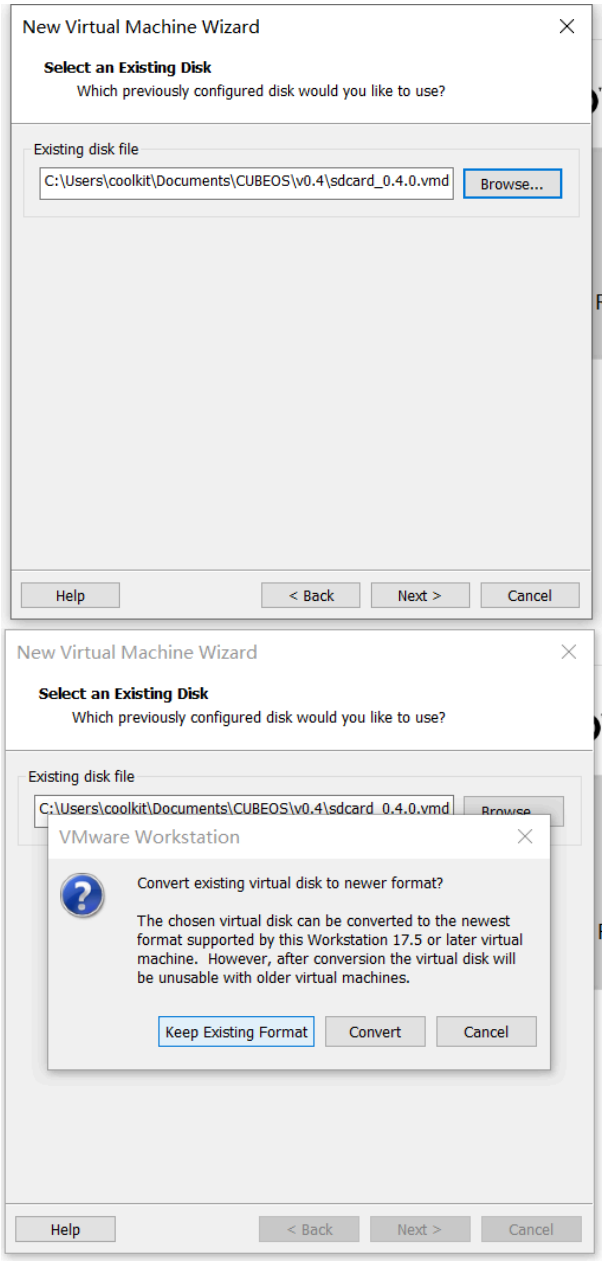




8 Select a Disk Type **SCSI(Recommended), Use an existing virtual disk**.



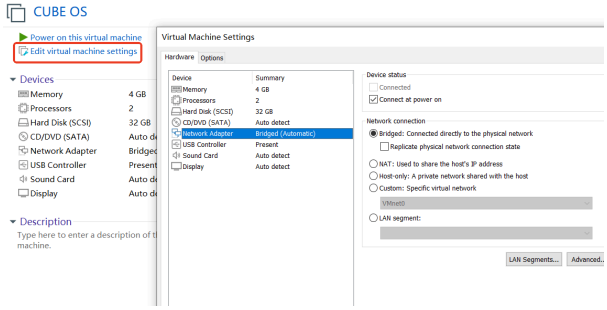
9 Click **Browse**, then select the CUBE OS `.vmdk` and **Keep Existing Format**.



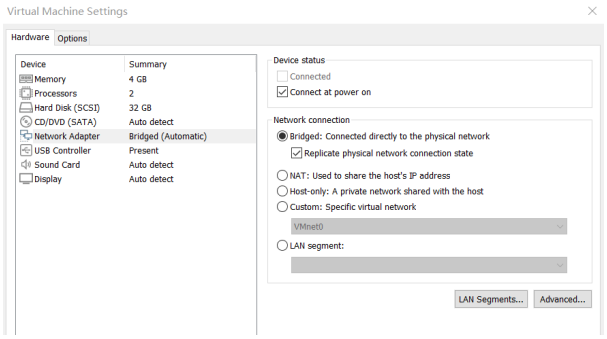
10 Click “Finish” to create the virtual machine.

3. Configure the Virtual Machine

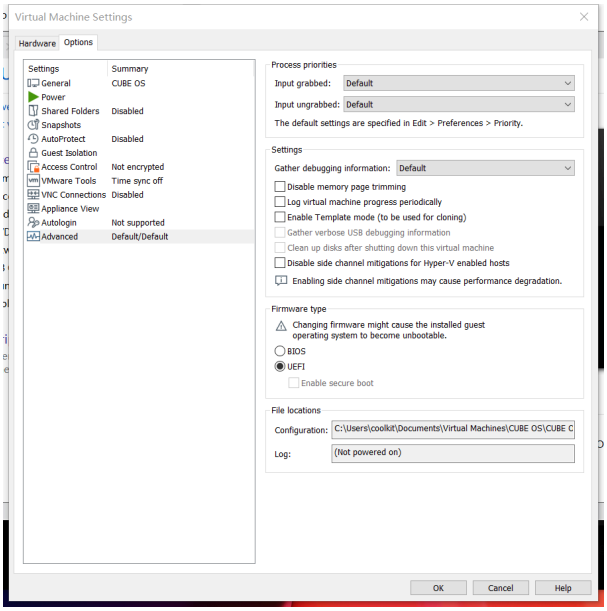
1 Select the created virtual machine and click the “Settings” button.



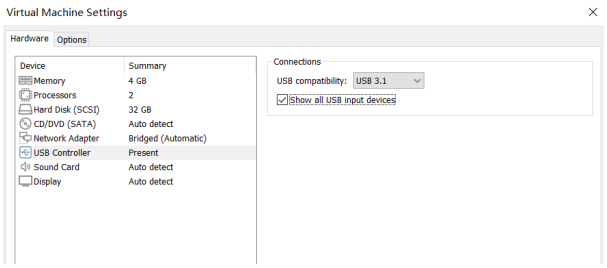
2 Under the “Network” tab, confirm the network connection as “**Bridged**” and select **Replicate physical network connection state**.



3 Under “Options”-“Advanced” tab, set **Firmware type** to **UEFI**.



4 **Optional:** If using a Zigbee USB dongle, ensure **USB Controller** is added. Under **USB Controller**, enable **Show all USB input devices.**

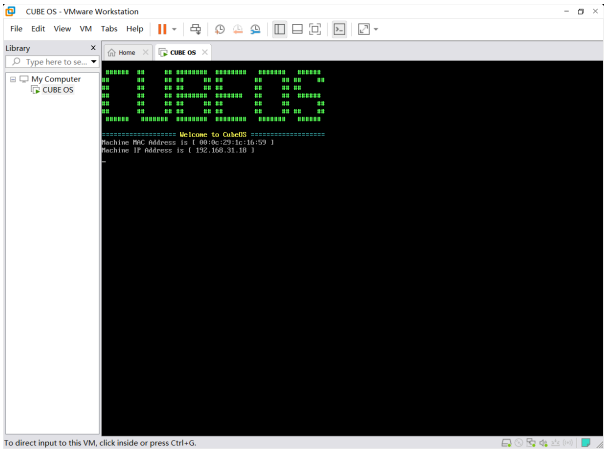


5 Click “OK” to save the configuration.

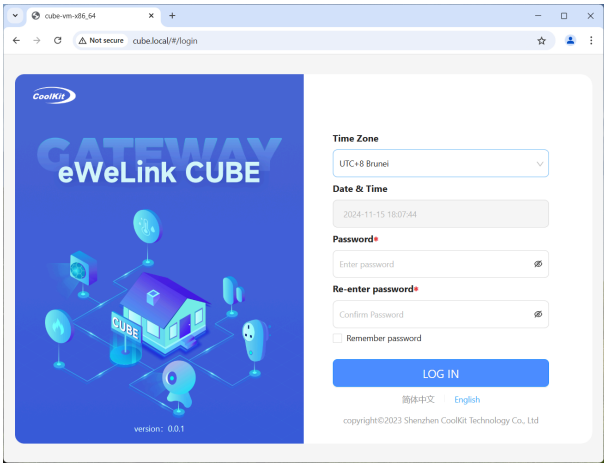
4. Boot CubeOS

1 Start the virtual machine.

2 Wait a few moments for CUBE OS to initialize. Monitor the boot screen until the boot is complete.



3 Once completed, you will hear a series of chimes and see the CubeOS' IP displayed on the screen. Use this IP address or cube.local ↗ to access the CubeOS Web management page.



4 Upon successful access, a short ID can be viewed on the settings page. Subsequently, access the CubeOS Web management page using `cube-{short id}.local`, which is useful for differentiating multiple CubeOS instances on the same local network.