



main

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Kartiki19 Added Report draft and restructered

5 days ago



64 lines (44 loc) · 2.38 KB

Preview

Code

Blame

Raw



Check System Architecture

```
arch
OR
uname -m
```

```
kartikidindorkar@Kartikis-MacBook-Pro QMEU % uname -m
arm64
kartikidindorkar@Kartikis-MacBook-Pro QMEU % arch
arm64
```

Check whether ROSETTA terminal is running

```
sysctl -n sysctl.proc_translated
```

if output = 0, then ROSETTA terminal is not running

```
kartikidindorkar@Kartikis-MacBook-Pro QMEU % sysctl -n sysctl.proc_translated
0
```

Download Ubuntu server ISO image for Apple MAC with M2 chip

<https://cdimage.ubuntu.com/releases/20.04/release/ubuntu-20.04.5-live-server-arm64.iso>

Install homebrew

```
/bin/bash -c "$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

Install QEMU

```
brew install qemu
```

```
kartikidindorkar@Kartikis-MacBook-Pro QMEU % brew install qemu
Running `brew update --auto-update`...
==> Auto-updated Homebrew!
Updated 2 taps (homebrew/core and homebrew/cask).
==> New Formulae
libspelling
==> New Casks
domzilla-caffeine
limesuite
insomnium

You have 8 outdated formulae installed.
Warning: qemu 8.2.0 is already installed and up-to-date.
```

Check QEMU Version

```
qemu-system-aarch64 --version
```

```
kartikidindorkar@Kartikis-MacBook-Pro QMEU % qemu-system-aarch64 --version
QEMU emulator version 8.2.0
Copyright (c) 2003-2023 Fabrice Bellard and the QEMU Project developers
```

Check available QEMU packages

```
ls /opt/homebrew/bin/qemu-*
```

```
kartikidindorkar@Kartikis-MacBook-Pro QMEU % ls /opt/homebrew/bin/qemu-*
/opt/homebrew/bin/qemu-edid          /opt/homebrew/bin/qemu-system-avr
/opt/homebrew/bin/qemu-img           /opt/homebrew/bin/qemu-system-cris
/opt/homebrew/bin/qemu-io            /opt/homebrew/bin/qemu-system-hppa
/opt/homebrew/bin/qemu-nbd           /opt/homebrew/bin/qemu-system-i386
/opt/homebrew/bin/qemu-storage-daemon /opt/homebrew/bin/qemu-system-loongarch64
/opt/homebrew/bin/qemu-system-aarch64 /opt/homebrew/bin/qemu-system-m68k
/opt/homebrew/bin/qemu-system-alpha  /opt/homebrew/bin/qemu-system-microblaze
/opt/homebrew/bin/qemu-system-arm     /opt/homebrew/bin/qemu-system-microblazeel
```

Create QEMU Raw format Image

```
sudo qemu-img create -f raw ubuntuimg.raw 40G
```

```
kartikidindorkar@Kartikis-MacBook-Pro QMEU % qemu-img create -f raw ubuntuimg.raw 40G
Formatting 'ubuntuimg.raw', fmt=raw size=42949672960
```

Running Options

qemu-system-aarch64 [machine opts]

[cpu opts]

[accelerator opts]

[device opts]

[backend opts]

[interface opts]

[boot opts]

Demo

```
kartikidindorkar@Kartikis-MacBook-Pro QMEU % sudo qemu-system-aarch64 \
-nofaults -accel hvf -cpu cortex-a57 -M virt,highmem=off -m 2048 -smp 2 \
-drive file=/opt/homebrew/Cellar/qemu/8.2.0/share/qemu/edk2-aarch64-code.fd,if=pflash,format=raw,readonly=on \
-drive if=none,file=ubuntulatest.img,format=raw,id=hd0 \
-device virtio-blk-device,drive=hd0,serial="dummyserial" \
-device virtio-net-device,netdev=net0 \
-netdev user,id=net0 \
-vga none -device ramfb \
-cdrom ubuntu-20.04.5-live-server-arm64.iso \
-device usb-ehci -device usb-kbd -device usb-mouse -usb
```

```
sudo qemu-system-aarch64 \
-nofaults -accel hvf -cpu cortex-a57 -M virt,highmem=off -m 2048 -smp 2 \
-drive file=/opt/homebrew/Cellar/qemu/8.2.0/share/qemu/edk2-aarch64-
code.fd,if=pflash,format=raw,readonly=on \
-drive if=none,file=ubuntulatest.img,format=raw,id=hd0 \
-device virtio-blk-device,drive=hd0,serial="dummyserial" \
-device virtio-net-device,netdev=net0 \
-netdev user,id=net0 \
-vga none -device ramfb \
-cdrom ubuntu-20.04.5-live-server-arm64.iso \
-device usb-ehci -device usb-kbd -device usb-mouse -usb ````
```

