

Run a linux/riscv64 image in docker (docker running in linux/amd64)

```
1 docker run --privileged --rm tonistiigi/binfmt --install all
```

This installs the QEMU binaries and registers them with binfmt_misc, enabling QEMU to execute non-native file formats for emulation.

Once QEMU is installed and the executable types are registered on the host OS, they work transparently inside containers. You can verify your registration by checking if F is among the flags in /proc/sys/fs/binfmt_misc/qemu-.*.

```
1 docker run --rm --platform linux/riscv64 -it drujensen/riscv-ubuntu bash
```

The docker image supports VNC.

```
1 docker run --platform linux/riscv64 -it drujensen/riscv-ubuntu
```

You can connect to vnc://localhost:5900 with a VNC client. The default password is 1234.

This image comes with gcc (gcc running on riscv64 that compiles for risc64). It also has make, git, cmake, etc.

Resources:

1. <https://docs.docker.com/build/building/multi-platform/#install-qemu-manually>
2. <https://github.com/drujensen/riscv-ubuntu/tree/main>