

```
#doas ee /usr/local/etc/pkg/repos/FreeBSD.conf
#FreeBSD: { enabled: yes }

doas pkg update
doas pkg install vm-bhyve bhyve-firmware [optional[grub2-bhyve]]

# Configure VM Repository
doas zfs create zroot/vm
doas sysrc vm_enable="YES"
doas sysrc vm_dir="zfs:zroot/vm"
doas vm init

# Configure network and templates
doas cp /usr/local/share/examples/vm-bhyve/* /zroot/vm/.templates/
doas vm switch create public
doas vm switch add public igb1

# Modify the firewall
doas ee /etc/pf.conf.d/bhf

## Add this
pass in quick on vm-public all
pass out quick on vm-public all

# Reload the rules, might also need to reload after reboot if rules are in wrong
spot
doas pfctl -f /etc/pf.conf.d/bhf

# Download the ISO
doas vm iso https://releases.ubuntu.com/jammy/ubuntu-22.04.2-live-server-amd64.iso

# Create the VM
doas vm create ubuntu-server
doas ee /zroot/vm/ubuntu-server/ubuntu-server.conf

# Overwrite everything inside the config file with below
loader="uefi"
graphics="yes"
graphics_port="5999"
graphics_listen="0.0.0.0"
graphics_res="1600x900"
graphics_wait="auto"
xhci_mouse="yes"
cpu="2"
memory="6G"
network0_type="virtio-net"
network0_switch="public"
disk0_type="virtio-blk"
disk0_name="disk0.img"
disk0_size="30G"
```

```
# Install the VM
doas vm install -f ubuntu-server ubuntu-22.04.2-live-server-amd64.iso

# Remote in with VNC, or whatever. After install you can start the machine with
doas vm start ubuntu-server

# You can have it auto-start on boot with
doas sysrc vm_list="ubuntu-server"
```

Test is out with the BHF Bootrom by overwriting the vanilla Bhyve-firmware files. Eventually vm-bhyve will allow you to specify a bootrom, but to revert you can just reinstall Bhyve-firmware.

```
doas cp /usr/local/share/uefi-firmware/BHYVE_BHF_UEFI.fd /usr/local/share/uefi-
firmware/BHYVE_UEFI.fd

doas cp /usr/local/share/uefi-firmware/BHYVE_BHF_UEFI_VARS.fd /usr/local/share/uefi-
firmware/BHYVE_UEFI_VARS.fd

doas cp /usr/local/share/uefi-firmware/BHYVE_BHF_UEFI_CODE.fd /usr/local/share/uefi-
firmware/BHYVE_UEFI_CODE.fd
```