

Fun With Virtual Machines

BIOS

Options

Installing the facility

Setting Up

Installing an distro under a VM

Running the distro

BIOS

You need to have virtualisation enabled

On my machine I had to go to 'Advanced' and then 'CPU' to turn it on.

Options

You need virtual machine support

VM-Ware is a very good commercial one

KVM is a free one

You need a virtual machine manager

Virt-manager works

Reputedly better on Fedora than Ubuntu

You need a virtual machine library

Libvirt

You need a distro to install

Try whatever takes your fancy

Installation

On ubuntu:

```
sudo apt-get install kvm virt-manager libvirt
```

On Fedora

```
sudo yum install kvm virt-manager libvirt
```

On other distos, whatever is appropriate

Then restart your machine

(there are less vicious alternatives – e.g.
`/etc/init.d/libvirtd restart`)

Set Up

Run virt-manager

It is in the system menu: Virtual Machine Manager

You will see a virtual machine for 'System' and one for 'User'.

Right click one and select 'Connect'

Right click again and select 'New'

Give it any name you want

Select 'Local install media'

Click 'next'

Set Up (2)

Select where the install image is to be found.

I chose from a DVD and inserted an old LFX (Linux Format) multi-distro DVD. It installed DreamLinux.

Selecting an ISO already on your machine will generally run faster.

Select the OS type and version

Use the entry that best matches what you want to install.

Select 'Next'

Set Up (3)

Allocate some memory

I have 8GB, and gave it 2GB.

Select 'Next'

Set Up (4)

Allocate it some disk space

Select 'Enable storage' and 'Create a disk'

I gave it 20Gb

Choosing 'Allocate now' takes more time, but later steps are faster.

I also allowed it 2 of my 4 CPUs.

Select 'Finish'

Installation

At this stage you will lose all control

To get your cursor back, press Ctrl + Alt
(The task-bar of the window will remind you)
Do not hold it down!

To return to the VM, click in the window.

The install will usually proceed automatically.

Running

Installation took some minutes.

You can change settings (add CPUs, memory, disk) by selecting the 'Details' tab

You can also make additional hardware available.

I found it ran rather slowly (on my not very fast 4-core ADM machine) and at VGA resolution.

Restarting

When I tried to restart after shutting down my machine, I had some problems.

Step 1 is to 'connect' to the virtual machine

Then tell the installed OS to run.

It tried to boot from a hard drive (presumably the disk image) and said: "Not a bootable image"

I set it to boot from the CD and (after some fiddling) got it to restart but not run.

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And that is where I had to leave it. I could install and run, but not get back into it after shutting down.