

Xen on Debian Etch

Packages to install

From stable:

- `xen-docs-3.0`
- `xen-linux-system-2.6.18-6-xen-686` (ignore the `-vserver` variant)
- `xen-utils-3.0.3-1` (for `xm` etc)
- `libc6-xen`
- `grub` (LILO won't cut it)
- `xen-ioemu-3.0.3-1` (only for HVM, which my CPU doesn't support)

From unstable:

- `xen-tools` (for `xen-create-image` etc)
- `debootstrap`

Don't install `bridge-utils`. The Xen kernels are built with PAE enabled so you need the PAE hypervisor, but the dependency package does this automatically.

Configuration

Modules

Make sure `loop` is in `/etc/modules` and is loaded.

Grub

`update-grub` knows how to set up Xen lines. Make sure it still lists your non-Xen kernel!

Networking

Enable forwarding and proxy ARP in `/etc/sysctl.conf`:

- `net.ipv4.conf.default.forwarding=1`
- `net.ipv4.conf.all.proxy_arp=1`
- `net.ipv4.conf.default.proxy_arp=1`

Make sure they are set in the running kernel.

Your firewall will also need to allow the packets through. It might be easier to leave `watch iptables -L -v -n -x` running and see what counters go up. This works on my system:

```
iptables -I INPUT -j ACCEPT -i vif+
```

Edit `/etc/xen/xend-config.sxp`:

- comment out `(network-script network-dummy)` and `(vif-script vif-bridge)`
- enable `(network-script network-route)` and `(vif-script vif-route)`

Restart it:

```
/etc/init.d/xend restart
```

xen-tools.conf

Edit `/etc/xen-tools/xen-tools.conf` to set some defaults. Example:

```
dir = /xen
install-method = debootstrap
size = 4Gb      # Disk image size.
memory = 96Mb   # Memory size
swap = 512Mb   # Swap size
fs = ext3      # use the EXT3 filesystem for the disk image.
dist = gutsy
image = sparse  # Specify sparse vs. full disk images.
gateway = 172.17.207.1
netmask = 255.255.255.0
cache = yes
passwd = 1
accounts = 1
kernel = /boot/vmlinuz-`uname -r`
initrd = /boot/initrd.img-`uname -r`
mirror = http://gb.archive.ubuntu.com/ubuntu/
ext3_options = noatime,nodiratime,errors=remount-ro
ext2_options = noatime,nodiratime,errors=remount-ro
xfs_options = defaults
reiser_options = defaults
boot = 1
```

Creating A VM

```
really xen-create-image --dist sid --debootstrap --ip 172.17.207.12 --hostname deodand
```

The result looks like this for me:

```
kernel = '/boot/vmlinuz-2.6.18-5-xen-686'
ramdisk = '/boot/initrd.img-2.6.18-5-xen-686'
memory = '256'
root = '/dev/sda1 ro'
disk = [ 'file:/xen/domains/deodand/disk.img,sda1,w', 'file:/xen/domains/deodand/swap.img,s'
name = 'deodand'
vif = [ 'ip=172.17.207.12' ]
on_poweroff = 'destroy'
on_reboot = 'restart'
on_crash = 'restart'
```

NB on `lyonesse`, per-VM firewall configuration is required.

Booting A VM

```
lyonesse$ really xm create deodand.cfg
```

Then you can attach to the console:

```
lyonesse$ really xm console deodand
```

Use `^]` to exit `xm console`.

Things To Do Inside The Vm

Debian unstable

Fix `/etc/passwd` and `/etc/group`. I had to:

- create my own group
- create the `ntp` group
- put myself in group `root`

`/etc/apt/apt.conf.d/proxy-guess` was broken as set up. Edit it and fix it. Having done so:

```
apt-get install libc6-xen locales
telinit u
/etc/init.d/syslogd restart
/etc/init.d/klogd restart
/etc/init.d/cron restart
dpkg-reconfigure locales
apt-get install openssh-server gcc libc-dev bzip2 emacs22 sudo ntpdate ntp \
python-paramiko dpkg-dev less cdbtools fakeroot debhelper dpkg-dev-el \
automake autoconf libtool libgtk2.0-dev libgc-dev libgcr-dev libpcre3-dev \
libvorbis-dev libao-dev libmad0-dev libasound2-dev libdb-dev xbase-clients \
libflac-dev
```

(Vary the install line to taste.)

Add `%root ALL=(ALL) ALL` to `/etc/sudoers.conf`.

`=sid='s` current paramiko (1.6.4) is broken. If you apply its patch to the latest upstream that works fine. See <http://bugs.debian.org/415060>.

Ubuntu gutsy

Fix my login:

- fix group ID
- add self to `root` group

```
mkdir /home/richard
chown richard:richard /home/richard
chmod 2755 /home/richard
cp /etc/skel/.[a-z]* ~richard/
chown richard:richard ~richard/.[a-z]*
```

Add `%root ALL=(ALL) ALL` to `/etc/sudoers`. Also add these lines to `/etc/profile`:

```
export LC_CTYPE=${LC_CTYPE:-en_GB.UTF-8}
export http_proxy=http://www-proxy:3128/
export ftp_proxy=http://www-proxy:3128/
```

Files to fix:

- `/etc/apt/apt.conf.d/proxy-guess` was broken as set up. Edit it and fix it.
- `/etc/hosts` needs an FQDN and tidying

```
apt-get update
apt-get install libc6-xen
telinit u
/etc/init.d/syslogd restart
/etc/init.d/klogd restart
locale-gen en_GB
locale-gen en_GB.UTF-8
```

```
apt-get install openssh-server bzip gcc python-paramiko emacs22 ntp dpkg-dev cdbtools autoconf \
  automake libtool libgtk2.0-dev libgc-dev libgcrypt-dev libpcre3-dev libvorbis-dev \
  libao-dev libmad0-dev libasound2-dev libdb-dev libflac-dev xbase-clients ncurses-term \
  wget vorbis-tools sox man strace gdb
```

Ubuntu Dapper

Fix my login:

- fix group ID
- add self to `root` group

```
mkdir /home/richard
chown richard:richard /home/richard
chmod 2755 /home/richard
cp /etc/skel/.[a-z]* ~richard/
chown richard:richard ~richard/.[a-z]*
```

Add `%root ALL=(ALL) ALL` to `/etc/sudoers`. Also add these lines to `/etc/profile`:

```
export LC_CTYPE=${LC_CTYPE:-en_GB.UTF-8}
export http_proxy=http://www-proxy:3128/
export ftp_proxy=http://www-proxy:3128/
```

Files to fix:

- `/etc/apt/apt.conf.d/proxy-guess` was broken as set up. Edit it and fix it.
- `/etc/hosts` needs an FQDN and tidying

```
apt-get update
apt-get install openssh-server
```

Now you can log in via SSH, make keys etc. Then:

```
locale-gen en_GB
locale-gen en_GB.UTF-8
apt-get install openssh-server bzip gcc python-paramiko emacs21 ntp dpkg-dev cdbtools autoconf \
  automake libtool libgtk2.0-dev libgc-dev libgcrypt-dev libpcre3-dev libvorbis-dev \
  libao-dev libmad0-dev libasound2-dev libdb4.3-dev libflac-dev xbase-clients ncurses-term \
  wget vorbis-tools sox man strace gdb
```

Revision: r1.11 - 16 Mar 2008 - 17:28 - [RichardKettlewell](#)

[Anjou](#) > XenConfiguration

Copyright © 2004 by the contributing authors. [Send](#) feedback.