polntnr

Contents

1 Introduction

`polntnr` is a new server for DHCAL test bench. It is a dual boot SLC5.5 and UBUNTU LTS 10.04. It also embed a virtual WINDOWS.

2 Dual boot

2.1 Partitions

```
# fdisk -l

Disque /dev/sda: 500.1 Go, 500107862016 octets
255 têtes, 63 secteurs/piste, 60801 cylindres
Unités = cylindres de 16065 * 512 = 8225280 octets
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Identifiant de disque : 0x77e3ed41

Périphérique Amorce  Début        Fin      Blocs     Id  Système
/dev/sda1                1          5      40131   de  Dell Utility
/dev/sda2   *            6         30     194560   83  Linux
/dev/sda3               30         54     195584   83  Linux
/dev/sda4               54      35968  288474113    5  Etendue
/dev/sda5               54         79     194560   83  Linux
/dev/sda6               79        103     194560   83  Linux
/dev/sda7              103       2534   19529728   83  Linux
/dev/sda8             2534       4966   19529728   83  Linux
/dev/sda9             4966       7397   19529728   83  Linux
/dev/sda10            7397       9829   19529728   83  Linux
/dev/sda11            9829      10437    4881408   82  Linux swap / Solaris
/dev/sda12           10437      11652    9764864   83  Linux
/dev/sda13           11652      35968  195311616   83  Linux
```

sda2	Ubuntu	ext2	/boot
sda7	Ubuntu	ext3	/
sda8	unused		/
sda12	all	ext3	/tmp
sdb13	all	ext3	/opt

2.2 Grub

- Create the file */boot/boot.lst*:

```
default 0
timeout 5
color cyan/blue white/blue

title Lucid 64
configfile (hd0,2)/grub/menu.lst
```

- Tell grub to use it (you can also do it at boot):

```
# grub
> install (hd0,1)/grub/stage1 (hd1) (hd0,1)/grub/stage2 (hd0,1)/boot.lst
```

2.3 Shared partitions

/etc/fstab:

```
# /opt was on /dev/sda13 during installation
UUID=ecbd5107-be1f-464d-8056-f3792fbf14dd /opt            ext3    defaults        0       2

# cd
# tar -zcf /root/home.tgz /home
# mkdir -p /opt/ubuntu/home
# mkdir -p /opt/ubuntu/usr
# chmod 777 /opt/ubuntu/usr
# tar -zxf /root/home.tgz -C /opt/ubuntu/
# ln -s /opt/ubuntu/home /home
$ ln -s /opt/ubuntu/usr ~/usr
# mkdir /opt/pkg
# chmod 777 /opt/pkg
$ rsync -avv --progress calice@poldhcp45:/mnt/data2/pkg /opt/pkg
```

3 Ubuntu LTS 10.04

- Download the amd64's iso
- Install Grub for dual boot (insted of grub-pc):

```
# aptitude purge grub-pc
# rm /boot/grub/*
# aptitude install grub
# update-grub    (generate /boot/grub/boot.lst)
# grub-install   (install /boot/grub/stage[12])
```

- Get my documentation environment:

```
# aptitude install emacs cvs ssh
$ export CVSROOT=:ext:nroche@narval.hd.free.fr:/cvsroot
$ export CVS_RSH=/usr/bin/ssh
$ export export CVSEDITOR=vi
$ mkdir cvs && cd !$
$ cvs co calicei

# aptitude install texlive texlive-latex-extra netbpm latex2html auctex psutils
# aptitude install transfig bind9-host? (for narvali)
```

```
$ cd calicei
$ make

Unknown commands: pageTitle URIpath URIroot formatAvailability URIhost => look at
http://polntnr.in2p3.fr/narvali/outils/latex/page.html#SECTION00041000000000000000

# aptitude install apache2
# ln -s /var/www /htdocs
# chown .www-data /var/www
# chmod g+w /var/www
# adduser nroche www-data
$ ssh localhost
$ rm /var/www/index.html
$ cd cvs/calicei
$ make install
```

- VirtualBox:
- Install:

```
$ cat /proc/cpu | grep svm (tell if cpu allow virtalization)
# aptitude install virtualbox-ose (Open Source Edition)
# aptitude install virtualbox-ose-dkms (for virtualization: Debian Kernel Management System)
# aptitude install virtualbox-guest-additions (for mouse caption between Linux and Windows)
$ VirtualBox
```

- use 892MB of RAM and 10GB for HD.
- Iso are store here:

```
$ find /opt/iso
```

- *VBoxGuestAdditions.iso* should be automaticly provide into CD images.
- From VirtualBox, select the iso and run it into the virtual OS.

4 Scientific Linux Cern 5.5

Note that XDAQ recommand 32bit OS.

- Download the boot.iso.

```
$ md5sum /dev/sr0
eadcf980712389a687beb5df1230207c  /dev/sr0
```

- Hit enter at welcom page
- Choose “English” language
- Choose “FR-latin9” keyboard
- Choose “HTTP” installation method
- Disable “IPv6 support”
- Enter
  - *linuxsoft.cern.ch*
  - */cern/slc55/i386*

- Partition using default layout
- Install grub on */dev/hda*
- Choose “Europe/Paris” using UTC
- Deselect “Workstation” and select “Server”
- Install “Updates” repository
- Choose “Customize later”
- At reboot:
  - Disable “Firerwall”
  - Disable “SELinux”
- Enable kernel’s modules compilation (needed by virtualbox-guest-additions):

```
# yum install gcc kernel-devel.i686
# cd /usr/src/kernels/...
# make oldconfig && make prepare
```

5 Windows XP

- Note that the English version may not match with a French Windows system.