

PCInt (10.95.0.0/24)

Rebooting the PCInt

Find below descriptions of machines mentioned here, in case you don't know them already.

- master.jivepci.nfra.nl should have automatically booted just fine. default kernel @ bootup is good.
- the clusternodes will typically not have booted correctly. power them all down (not beoserv-m.jivepci.nfra.nl). if necessary wait until beoserv-m.jivepci is up and running. then, power on the nodes one by one, waiting up to a minute between powering on the next node
- all other nodes (master2.jivepci, dbserver.jivepci) are not dependant on anything for their bootup sequence
- the purple box is also described below - in case one needs to modify its configuration. it boots up just nicely, as do the other switches

Server overview

Two main servers:

- master.jivepci.nfra.nl (10.95.0.1) [rootpw=wortel2] [SuSE 7.2 Linux 2.4.19 *eeeeek*]
 - DNS, NIS, BOOTP for sbcor* SBCs (which SBCs are allowed to boot and which kernel, see /etc/dhcpd.conf, have their root-fs via NFS to 10.95.0.1:/tftpboot/<ip-address>)
- beoserv-m.jivepci.nfra.nl (10.95.0.120) [rootpw=init12] [Debian something, 2.6 kernel]
 - yp for the cluster
 - master node for the cluster (core-[12345], beo-0[1234]). The nodes boot off this machine, get kernel + basic O/S via networkboot.
 - NFS exports of /apps and /data/etc [some maint. stuff lives there]

Other servers:

- dbserver.jivepci.nfra.nl (10.95.0.4) [rootpw=wortel2] [SuSE Linux 8.2, kernel 2.4.20-64GB]
 - main mysql server for the PCInt, not quite used
 - currently hosts the "Stats" database
 - boots up nicely standalone
- core-[12345] and beo-0[1234], the cluster nodes. The /data/[012345][01] directories are automounted via NFS over the InfiniBand network.
- The backup/replacement/new server for *master.jivepci.nfra.nl*: **master2.jivepci.nfra.nl** (10.95.0.80) [rootpw=wortel2] [Ubuntu 7.10 (gutsy), server vsn, irc]
 - BOOTP for SBCs listed in /etc/dhcpd.conf
 - SBCs now get kernel + basic O/S via network
 - no NIS (if anything, it might be LDAP but I'm not quite sure it really works. logins on the SBCs are root (wortel2), jops(1\$9as/cy) and bos(<unknown, ask AB>). **/home** is NFS mounted from **master2.jivepci.nfra.nl**
 - Their initramfs source is /home/root/initramfs. The kernel sources are configured to link in the initramfs image "/home/root/initramfs.cpio.gz". In case modifications to the image are necessary:
 - go to /home/root/initramfs/ and make changes under that tree (edit files, add binaries/libs etc)
 - # need to create new compressed initramfs image
 - \$> cd /home/root/initramfs
 - \$> find . | cpio -o -H newc | gzip > ../initramfs.cpio.gz
 - # now need to link it into a new kernel
 - \$> cd /home/root/linux-2.6.24.4
 - \$> make
 - # now create the new networkbootable image
 - # note: you may want to change the "--output" name in order not to overwrite the existing (working) image. Do change /etc/dhcpd.conf + restart dhcpd to indicate which machine(s) are to receive this new image upon a BOOTP request.
 - \$> ../wraplinux-1.5/wraplinux --nbi --output=/tftpboot/vmlinuz --params="console=ttyS0,115200 panic=60 root=/dev/ram0 ip=both" arch/x86/boot/bzImage
 - # tada!

The purple box

The Extreme Summit 7i 24-port gigabit switch. In case you need to modify its settings: user=admin, pw=sum_7i. Telnet to **summit7i.jivepci.nfra.nl** (10.95.0.60) for CLI.