



INSTITUT PASTEUR

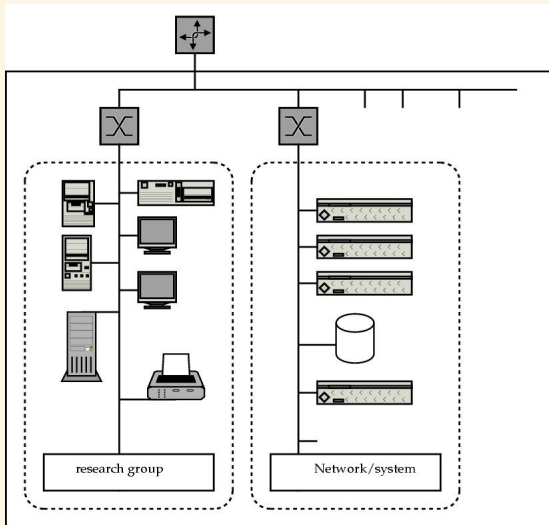
Introduction to the computing network environment at the Institut Pasteur for the EMBO 2008 course on biomolecular simulation.

Tru Huynh
Unité de bioinformatique structurale, Institut Pasteur





Computing network infrastructure on the campus.



- **2 links (Internet Service Provider) to the Internet**
 - 10 Mbits/s MCI (commercial)
 - 10 Mbits/s RENATER & 100 Mbits/s RAP (academic)
 - <http://adm.pasteur.fr/mrtg>
 - not as much bandwidth as university/gov setup
- **Reachable servers from « outside »**
 - <http://www.pasteur.fr> (“corporate” web site)
 - <ftp://ftp.pasteur.fr> (GNU/CPAN/linux..)
 - <http://bioweb2.pasteur.fr> (locally maintained databases and software for the biologists / mobile web interface)



Filtering access from outside, within the campus network

- **from outside:**
 - a single entry point ssh.pasteur.fr
 - remote imap(s).pasteur.fr
 - antivirus/spam gateway
- **within the campus**
 - not allowed: http between subnetwork (*.pasteur.fr)
 - smtp.pasteur.fr -> only one machine allowed to “spam”
 - no windows “neighbourhood”
- **MANDATORY proxy cache for surfing**
 - <http://cache.pasteur.fr:8080>



Computer usage on the campus

- **Historically, the scientists at the institute have loved Apple computers.**
- ~ 50 % Apple Macintosh's (desktop/science for scientist)
- ~ 30 % Microsoft Windows (desktop for offices)
- legacy Unix (HP/Compaq Tru64, SGI for NMR, SUN) : shared services (mail/heavy computing) -> FreeBSD, NetBSD
- **Today, there is a large shift from the commercial unices to Linux and other free (open source) operating system for scientific computing and common services.**
 - linux cluster 14x dual cpus has replace the old bioweb computing machine (dual cpus alpha - DS20/Tru64)
 - 2x quad socket single core linux for interactive jobs has replace the 2 way alpha machine (dual cpus alpha – ES40/Tru64) central.pasteur.fr



EMBO 2008 network specific setup

- **Network:**

- 100 Mbits/s switch
- 1000 Mbits/s uplink to the NFS fileserver
- **fernbach-NN.formation.depens.pasteur.fr**

- **Servers:**

- NIS nis.formation.depens.pasteur.fr (centralised user accounts)
- <http://www.formation.depens.pasteur.fr>
- <nfs://emmental.sis.pasteur.fr> (shared \$HOME), + <ntp.pasteur.fr>

- **Printers (black and white):**

- <castor.formation.depens.pasteur.fr>



EMBO 2008 computer setup (kickstart)

- **Dell Optiplex 745 with 17" TFT display (1280x1024)**
 - Single socket, dual core at 1.86 Ghz with 1 GB of RAM (Core Duo2 6300)
 - Hard drive: SATA 80 GB
 - Video card: embedded Intel Graphics Media Accelerator 950
 - additionnal Nvidia [GeForce FX 7300]
- **CentOS-5** (Red Hat Entreprise Linux 5 clone <http://www.centos.org/>)
 - AMBER 9 <http://amber.scripps.edu/>
 - VMD <http://www.ks.uiuc.edu/Research/vmd/>
 - Pymol <http://pymol.sourceforge.net>
 - MMTK <http://dirac.cnrs-orleans.fr/MMTK>
 - SwissPDBViewer <http://www.expasy.org/spdbv/>

• ...





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Questions?

computer: tru@pasteur.fr

Renée Communal: communal@pasteur.fr





Workshop starting :)

<http://www.formation.depens.pasteur.fr/>

login: **emboNN** with NN=01..33

password: **paris** <- change it with yppasswd