# CS Department Network Administration

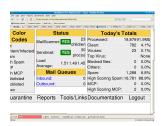
#### Randolph Langley

Department of Computer Science Florida State University

August 19, 2010 / CS Faculty Workshop



# What user services do we provide?



- Email Services
- Web Services
- File Services
- Programming Environments (Linux and Solaris)
- General Shell Access
- Database Services
- Subversion and CVS Services
- Printing Services
- Windows Terminal Services
- Desktop Support



# What infrastructure services do we provide?



- DHCP
- Backup
- Security Cameras
- Domain Controllers
- Spam Filtering
- Wireless
- Log server





# Many boxes, different environments



- 40+ servers
- Many routers and switches
- Lots of desktops
- Technology-enabled classrooms





### People



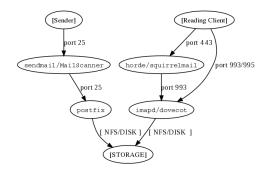
- 1 Permanent A&P
- Several OPS graduate and undergraduate students who are serve as sysadmins and as webmaster
- Numerous Lab monitors





Introduction User services Infrastructure Summary Email
Web services
File services
How to use sshfs
Database services
Subversion and CVS services
Windows Terminal Services

### Overall Structure of Email Services







# Upgrades to Email



- sendmail/MailScanner
- sendmail uses RBLs, GreetPause, and denies hosts that have no reverse-lookup record
- we don't (yet) require SPF, but the trend is clearly that way
- MailScanner calls SpamAssassin
- SpamAssassin uses DCC, Razor, and RBLs

Email
Web services
File services
How to use sshfs
Database services
Subversion and CVS services
Windows Terminal Services

#### Our webservers





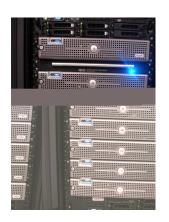
• Assign new or update existing time slots

- websrv.cs.fsu.edu, supporting many, many virtual hosts:
  - acm.cs.fsu.edu, msdnaa.cs.fsu.edu, www.cavis.fsu.edu, cybersec.cs.fsu.edu, saittest.cs.fsu.edu, fci.cs.fsu.edu, service.cs.fsu.edu, www.lens.cs.fsu.edu, fsvision.fsu.edu, system.cs.fsu.edu, www.sait.fsu.edu, lit.cs.fsu.edu, webmail.cs.fsu.edu, www.aces.cs.fsu.edu
- websrv2.cs.fsu.edu, student pages
- visitwww.cs.fsu.edu





### Our fileservices



- NFS is widely used throughout the department
- I would like to see us move toward user-directed FUSE mounting using sshfs rather than system administrators configuring NFS on an ad hoc basis
- Not only is the maintenance much simpler for everyone, it also offers users far more flexibility in what filesystems they can have mounted

### Our fileservices



• sshfs syntax is very simple:

sshfs

langley@diablo:/home/faculty/langley
mounts/diablo

• "gotchas": you likely want to set up a ssh heartbeat as a keep alive



### Our database services



- We offer MySQL on dbserv.cs.fsu.edu
- We overuse MySQL when such lightweight databases such as SQLite would probably be more than sufficient, and arguably more secure – there are no separate credentials to worry about when accessing SQLite.





### Subversion and CVS services



- We have a dedicated Subversion and CVS server,
- Please contact the systems group if you want to use it.





### Windows Terminal Services



- csterm1 for Windows Terminal Services
- You can use this from Linux with rdesktop
- This can save you from dual-booting or having two desktops.
- Of course, you can also use virtualization to also save on desktop space; for Linux and Windows, it's hard to beat VirtualBox (available for free at www.virtualbox.org)

# Bits and pieces in the background



- Perhaps the surprising thing about "infrastructure" is that we do provide some security cameras, mainly for server rooms and labs
- We also have a camera in 208 MCH since we are also in and out a good bit.
- We use Zoneminder to monitor the IP cameras
- We use Cacti for performance monitoring

# Summary



• We are in 208 MCH, across the parking lot from the Love Building



