Administrivia

- Information about projects coming soon.

Slide 1

DNS (Domain Name Service)

- Basic idea — map hostnames to IP addresses, and vice versa, by means of a distributed database. (Example — Exhibit A on p. 408.)

- DNS client — configuration in `/etc/resolv.conf`.

- DNS server — configuration in `/etc/named.conf`.

- `named` process runs on server. (For Linux, can use `chkconfig` to query/set which system services are running.)

- Useful commands — `nslookup`, `dig`.

- How to set up DNS on a Linux system — "DNS HOWTO" at `http://www.tldp.org/HOWTO/DNS-HOWTO.html`.

Slide 2

Slide 3

NFS (Network File System)

- Basic idea — share files among machines.

- Server — configured in `/etc/exports`.

- Client — configured in `/etc/fstab` (or with `mount` command).

- `nfsd` process(es).

- UIDs and GIDs should match on client, server machines.

- Many security issues; best not to export to machines with possibly untrustworthy root access.

- Large/complex systems may benefit from "automounter" (automatically mount NFS filesystems when needed, unmount when not in use).

Slide 4

Sharing System Files

- One approach — copy of key system files on each machine, kept in synch via `rdist`, `rsync`, or scripts using `expect`.

- Another approach — NIS (Network Information Service, formerly known as "yellow pages"). Specify what info is to be obtained this way in `/etc/nsswitch.conf`.

  Clients run `ypbind`, `yppasswdd` processes. Server also runs `ypserv` process.

  Other configuration details are system-specific. (For Linux, clients configured in `/etc/yp.conf`, `/etc/sysconfig/network`.)

- More alternatives — NIS+, LDAP (Lightweight Directory Access Protocol).

Minute Essay

- None — sign in.

Slide 5