

Commodity tools

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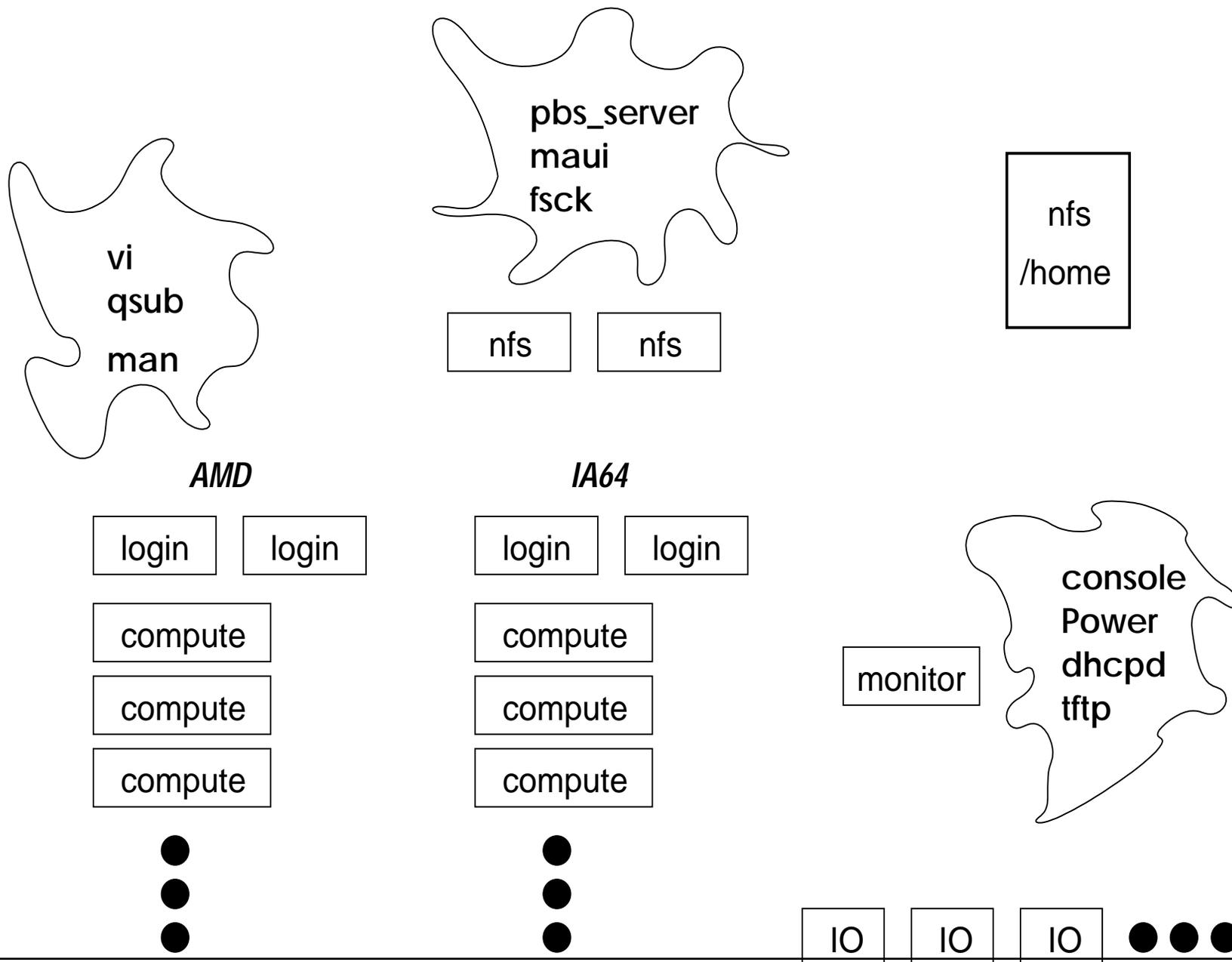
Themes

Users are clueless

Sysadmins are overworked

No time for distributions

OSC Overview



Maintenance

- Offline hardware diagnosis (only)
 - ▶ 1. reboot
 - ▶ 2. mark dead

- No hardware is critical
 - ▶ Discard compute nodes
 - ▶ Fail-over service nodes
 - ▶ No "hardened" single machines

- No node private data
 - ▶ OS install
 - ▶ /etc files
 - ▶ /var ...
 - ▶ /var/spool/pbs

Scheduling

- Users know requirements
 - ▶ No: "qsub -q bigmem ..."
 - ▶ Yes: "qsub -lmem=12g ..."
- Maui knows capabilities

Grid computing

- The grid is what?
 - Next Big Thing?
 - Pipe dream?
 - Mass funding hoax?

- Definitely not prime time

- No easy solutions

- Demand integrable independent tools

- Outreach tool

- Do not scare users

Cluster Ohio

- Spread old machines
- Encourage more PIs
- Develop "the grid"
- Statehouse dual benefit
- Central administration and support

- First Round, November 01
 - ▶ 34 applicants, 10 awards
 - (plus two more self-funded)
 - ▶ 57 nodes, 178 processors
 - ▶ P3 550 MHz

- Second Round, April 03
 - ▶ 19 applicants, 5 awards
 - ▶ 72 nodes, 144 processors
 - ▶ Itanium1 733 MHz

Evolutionary changes

- Maui/silver
 - ▶ Users hopefully never know

- Certificate-based authentication
 - ▶ Transparent to user
 - ▶ Local account proxies

- File motion
 - ▶ Global FS hard, impractical
 - ▶ Clever users taught to specify inputs, outputs
 - ▶ Return files via ftp://

Summary

Users are more important than machines