

# Logical partitioning of servers

## **Run multiple servers on same box** (e.g. Amazon EC2)

- Modern CPUs more powerful than most services need: e.g., only 10% utilization
- VMs let you give away less than one machine for running a service
- Server consolidation: N machines → 1 real machine
- Consolidation leads to cost savings (less power, cooling, management, etc.)

## **Isolation of environments**

- Safety - printer server failure doesn't take down Exchange server
- Security - compromise of one VM cannot get at data of others

## **Resource management**

- Provide service-level agreements

## **Heterogeneous environments**

- Linux, FreeBSD, Windows, etc.

# Implementation