

VMMs today

VMs are used everywhere

- Popularized by cloud computing
- Used to solve different problems

VMMs are a hot topic in industry and academia

- Industry commitment
Software : *VMware, Xen, VirtualBox, ...*
Hardware : *Intel VT, AMD-V*
- Academia - lots of related projects and papers



Why would you do such a crazy thing?

- **Software compatibility**

VMMs can run pretty much all software (since they can pretty much all OSes)

- **Resource utilization**

Machines today are powerful, want to multiplex their hardware

- **Isolation**

Seemingly total data isolation between virtual machines

- **Encapsulation**

Virtual machines are not tied to physical machines

- **Many other cool applications**

Debugging, emulation, security, fault tolerance...