OpenStack
KVM for the Masses

Mark McLoughlin
The Narcissistic Bit.
✔ self service
✔ pay as you go
✔ illusion of infinite capacity
"Amazon style" cloud
Q: Why can't Amazon AWS migrate a live instance to new hardware when there's a hardware problem?

A: AWS doesn't support live migration internally as they are not architected to support it. Live migration requires complexity and **complexity doesn't scale**. AWS has been optimized for **massive scale** and the reduction of their own **operational costs**, which they are able to pass on to their customers as **low prices**.

Randy Bias, Cloudscaling Founder
Massive scale
Developers
Architecture
Details

- libvirt driver
- Uses libvirt's Python binding
- Relatively little development
- Fairly basic KVM user
Details

• Boot: kernel+initrd, HD or CDROM
• CPU config: host-model, custom, default
• Disks
  • root, ephemeral, swap, config drive
  • qcow2, virtio
• Volumes
  • iSCSI, RBD, Sheepdog, Netapp
• Multiple NICs
  • virtio, private network, filtering
Help OpenStack help KVM.
Fin