



# KVM Forum 2013 - Keynote

Red Hat

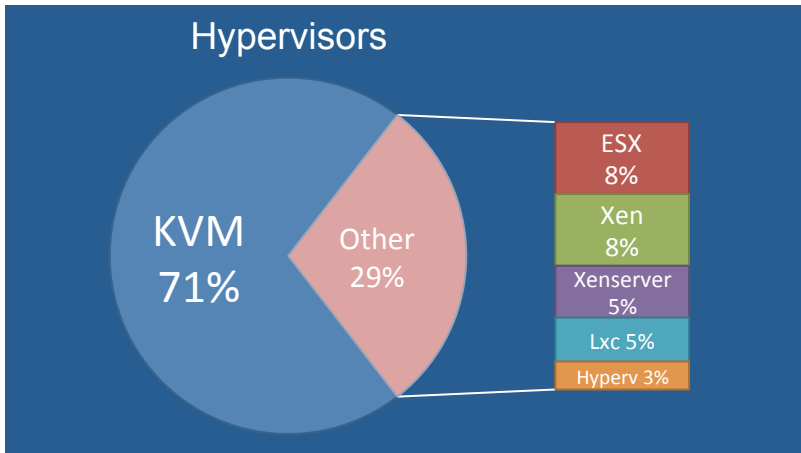
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Maturity

# OpenStack's Hypervisor of Choice

OpenStack user survey result



## Performance

### **SPECvirt\_sc2013 624.9@37 VMs tested by IBM**

- #1 two socket result
- Beats closes competitor by 32% on the same CPU

### **SPECvirt\_sc2010 12473@768 VMs tested by Bull**

- #1 overall highest SPECvirt\_sc2010 score by a large amount

# What's New

## In X86 Land

- APIC Virtualization and Virtual Interrupts
- NUMA scheduling improvements
- VDSO pvclock
- pvticketlock
- Shadow paging scalability improvements
- Nested VMX improvements
  - VMCS Shadowing
  - Nested EPT

## Architectures

- ARM 32 & 64 are merged
- MIPS trap and emulate is merged
- MIPS-VZ is being worked on
- Tile PV is being worked on

# Challenges

- Scalability
- Nested Virtualization
- Stability
- Security



# The end.

Thanks for listening.