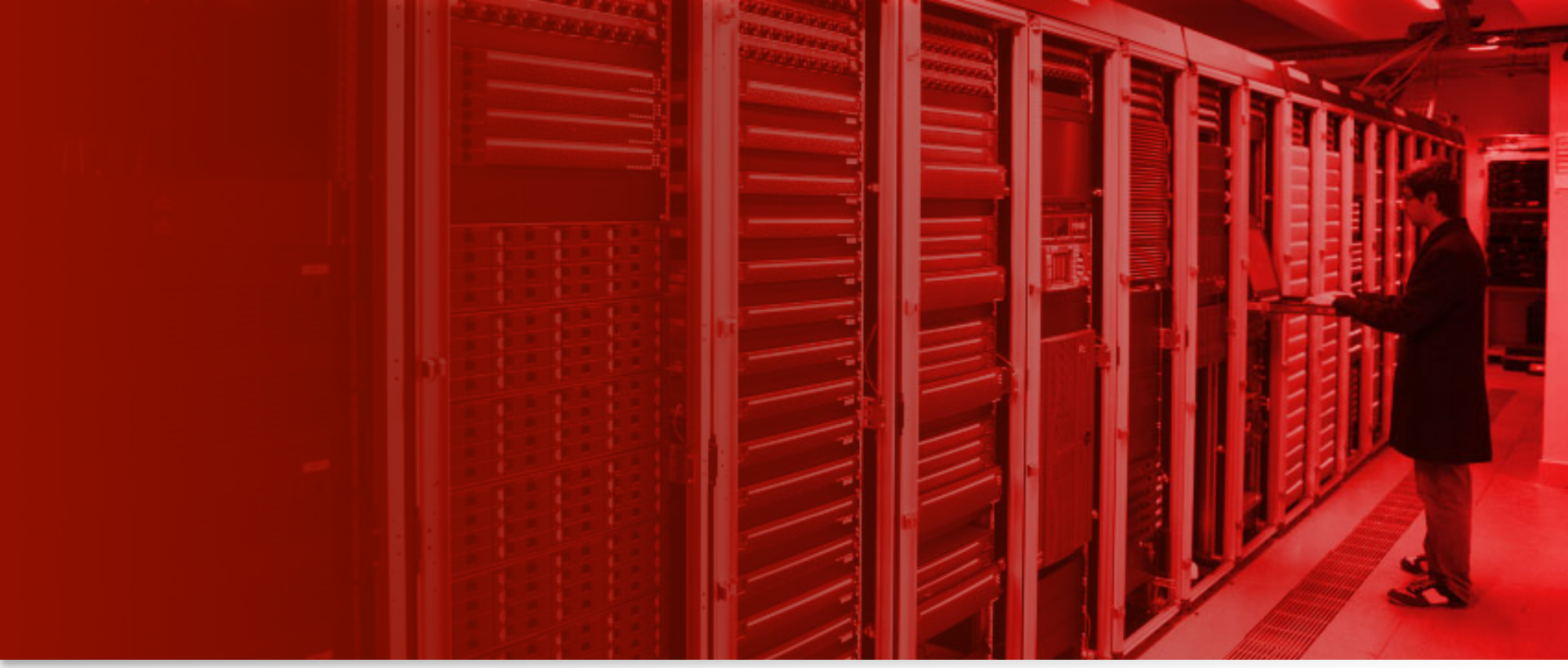


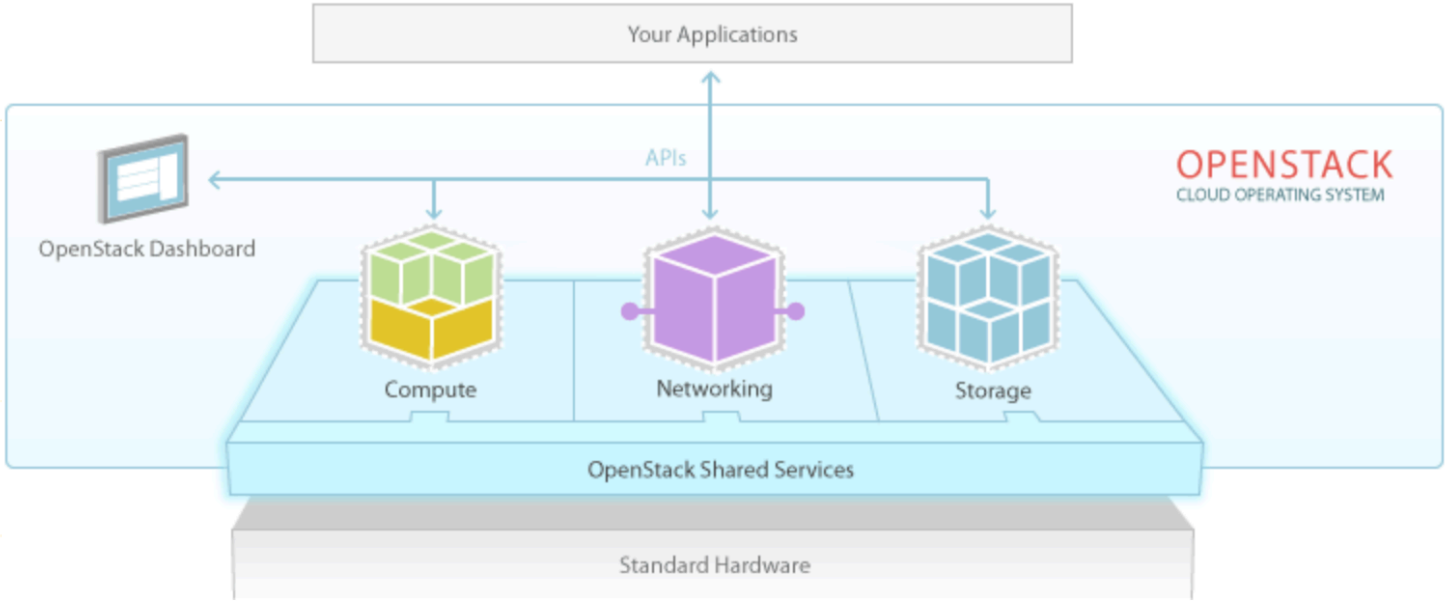
April 24, 2014

Bringing OpenStack into the Enterprise

Randy Bias, Founder & CEO
@randybias

What is OpenStack ?

- **Kernel** for a cloud operating system that virtualizes and controls pools of compute, storage and network resources
- Programmatic, agile, open source IaaS with a web-based API
- Fastest growing and rapidly adopted open source community



Broad Industry Support

The top 3 vendors in every major IT category support OpenStack

Top 3 x86 Vendors

DELL IBM

Top 3 Router Vendors

Alcatel·Lucent

JUNIPER NETWORKS

Top 3 Blade Vendors

IBM

Top 3 Linux Vendors

CANONICAL

Top 3 Switch Vendors

JUNIPER NETWORKS

Top 3 Storage Vendors

EMC²

IBM

NetApp

Top 3 Hypervisors

vmware

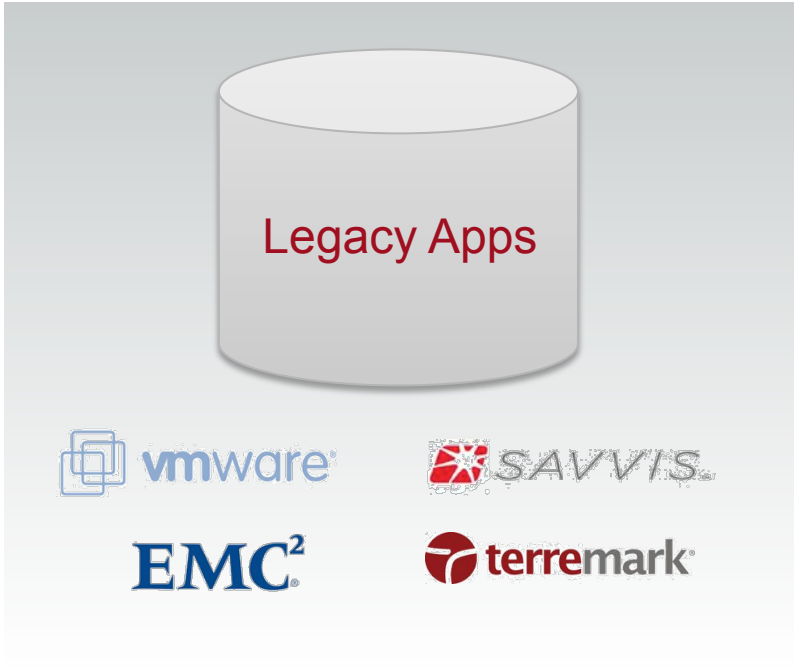
KVM

Xen

cloudscaling

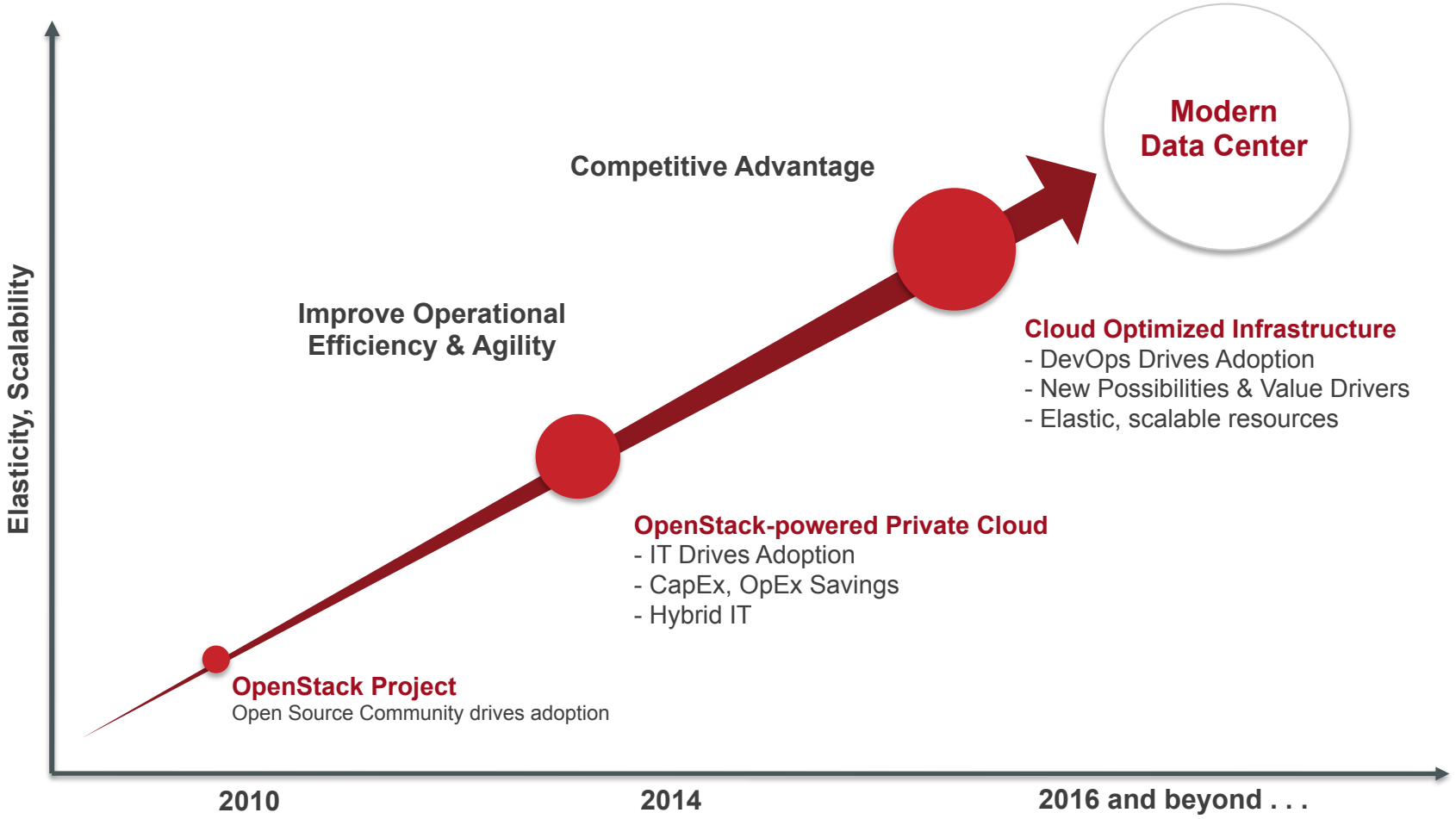
A Tale of 2 Clouds: VMware vs. OpenStack

Enterprise-scale IT
(inelastic)



Web-scale IT
(elastic)

Evolving OpenStack for the Enterprise



State of the Stack: What Needs Work ?

1. Deployability - getting OpenStack up and running
2. Minimizing disruptions between upgrades
3. Management and monitoring tools
4. Education & understanding re: kernel vs. cloud OS

The Change in IT

Today's IT environment not designed for a **social, mobile, big data** world

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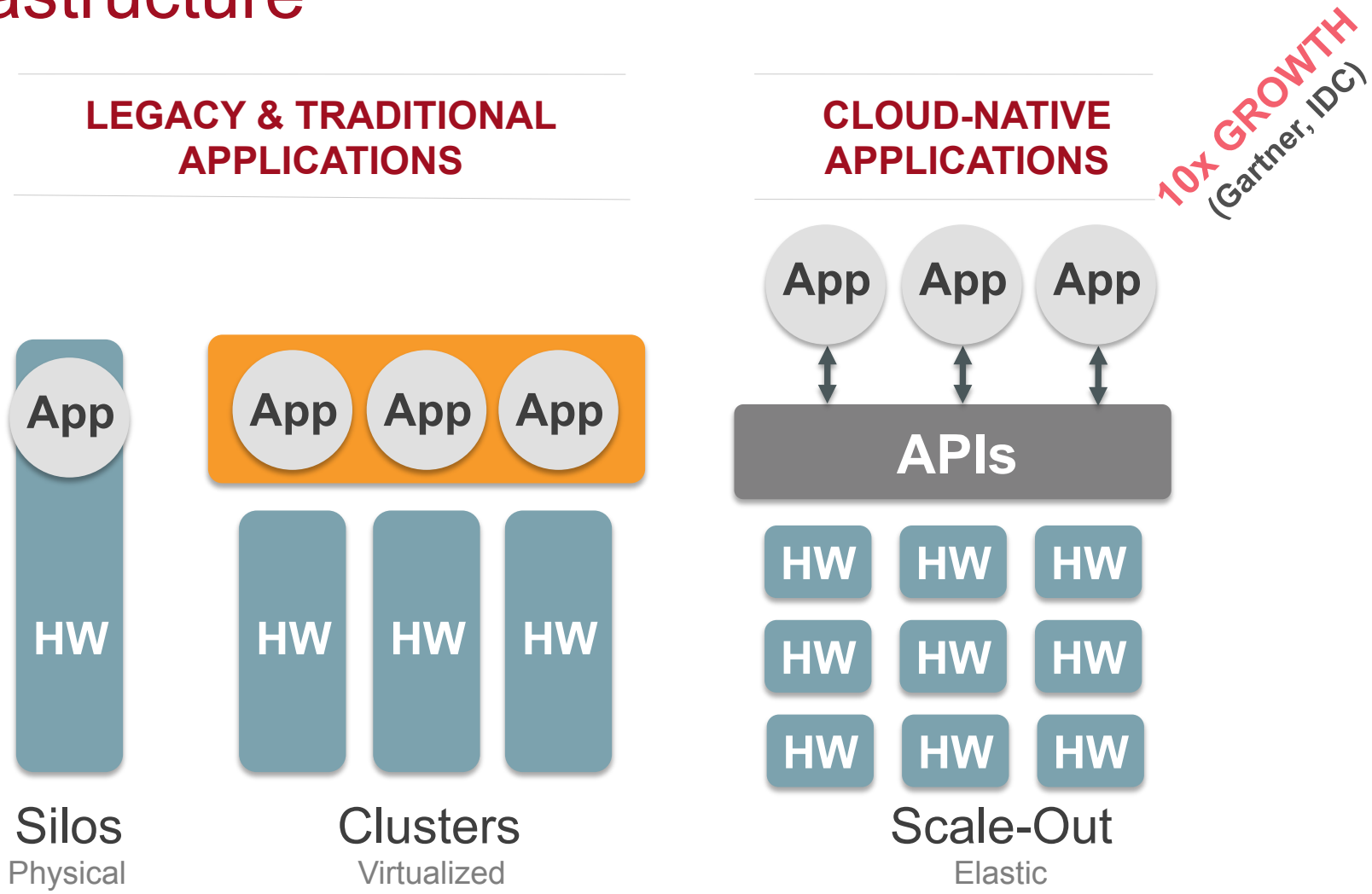
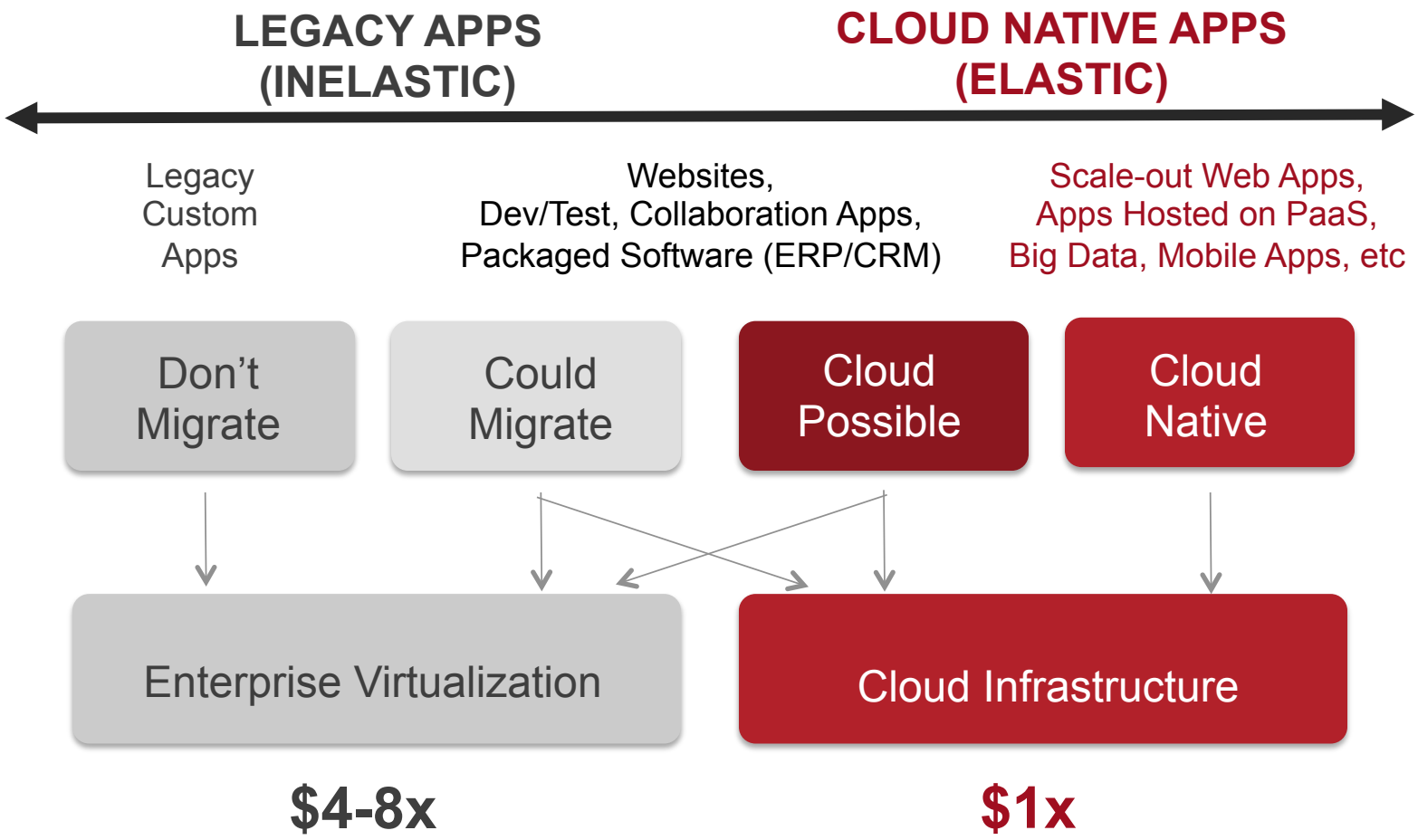
DevOps culture and supporting of
new IT service delivery model

Seamless interoperability between
private and public clouds

A New Generation of Apps Requires New Infrastructure

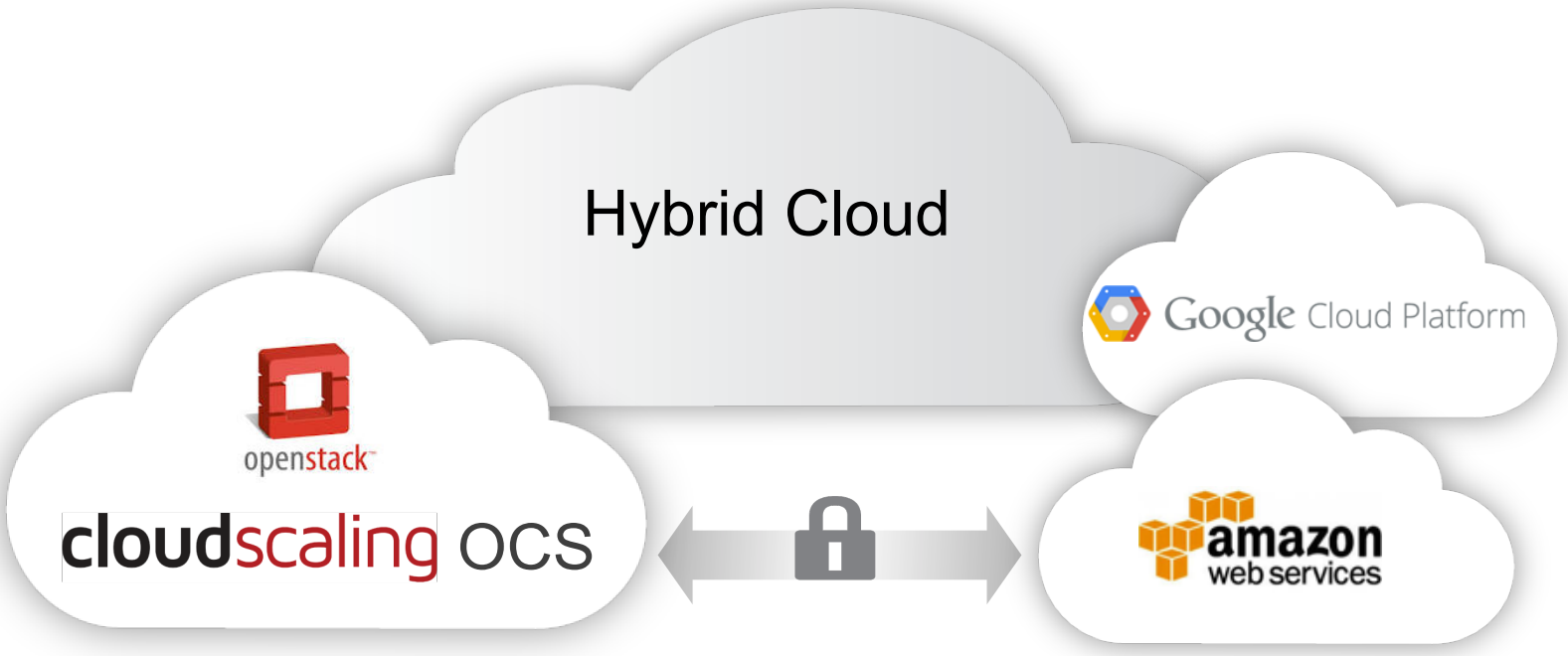


Match Apps to Best-fit Infrastructure



Hybrid Cloud Interoperability

Interoperability = SLAs, QoS, Feature Parity, Same Behavior, TCO



Private Clouds must be Architected like Leading Public Clouds

3 Leading Use Cases for OpenStack

DEVOPS DRIVEN APPS

- Increase Agility
- Improved TCO
- Data Center Modernization

CLOUD NATIVE HYBRID APPS

- AWS Compatibility
- Repatriation
- Cloud Bursting
- Cost

BIG DATA & SCALE-OUT APPS

- Big Data Analytics
- Self-managing & self-replicating Apps
- New Value Creation

6 Requirements of Enterprise-grade OpenStack

1 99.9999% UPTIME CONTROL PLANE
THERE IS NO DOWNTIME. YOUR CLOUD IS ALWAYS AVAILABLE

2 ROBUST MANAGEMENT
ACHIEVE OPTIMAL PERFORMANCE VIA CENTRALIZED ADMINISTRATION

3 OPEN ARCHITECTURE
USE THE COMPONENTS YOU WANT

4 HYBRID CLOUD INTEROPERABILITY
COMMON ARCHITECTURE FOR HYBRID CLOUD

5 SCALABLE AND ELASTIC
SUPPORTS DYNAMIC WORKLOADS AND WEB-SCALE IT

6 GLOBAL SUPPORT AND SERVICES
ACHIEVE SLAs AND ADHERE TO EXISTING IT POLICIES

The Perils of DIY OpenStack

Time-to-Value and Risk

Manage Component Versions & Interoperability

Deployment & Configuration of Services

Ongoing Configuration & Management

Support & Meeting SLA's

Creating Cloud Silos

Ensuring Repeatable Success

Using OpenStack with Confidence

openstack™

Cloud OS Kernel & Technology Pieces

cloudscaling

OCS - Cloud Operating System

"The transformation in enterprise infrastructure has happened because a **new generation of apps requires a new generation of infrastructure** …

What is the next set of apps that you need to build infrastructure for? **How do compute, storage, and network come together at scale to support these apps**?"

— Microsoft CEO, Satya Nadella
TIRB Spring 2014 report

Bringing OpenStack into YOUR Enterprise

1. Focus on next gen apps that create new value
2. Build a DevOps culture to cut down the IT log jam
3. Interoperability: deploy private with hybrid in mind

Thank You

To learn more about Cloudscaling visit our resource page at:
www.cloudscaling.com/resources