Open Cloud Strategies for better Business Outcomes

Mohamad Baalbaki
Cloud SSP - MENA

DIGITAL TRANSFORMATION IS REQUIRED

IT LEADERS MUST BE WILLING TO CHANGE

"With everything in play, digital business will demand a far more complex technology transformation than what took place in the previous decades in areas such as e-business for online transactions."

Gartner, October 2016

[1] *Monica Basso, Gartner's IT Market Clocks for 2016: Digital Transformation Demands Rapid IT Modernization, October 2016. #G00308760*

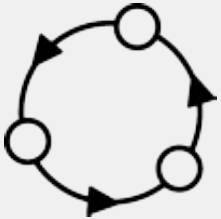
I.T. IS CHANGING

DIGITAL TRANSFORMATION IS HERE

THEN	NOW
IT is a supporting cost center	Technology creates new revenue streams
Established industry structures	
Ad-hoc decision making	Data-driven, real-time response and analytics
Multi-year product cycles	Rapid, iterative service refreshes
Focus on individual product success	Achieve ecosystem scale

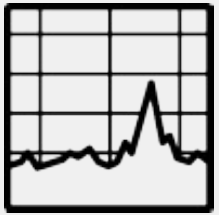
redhat.

DRIVERS FOR CLOUD ADOPTION



Agility

Cost savings



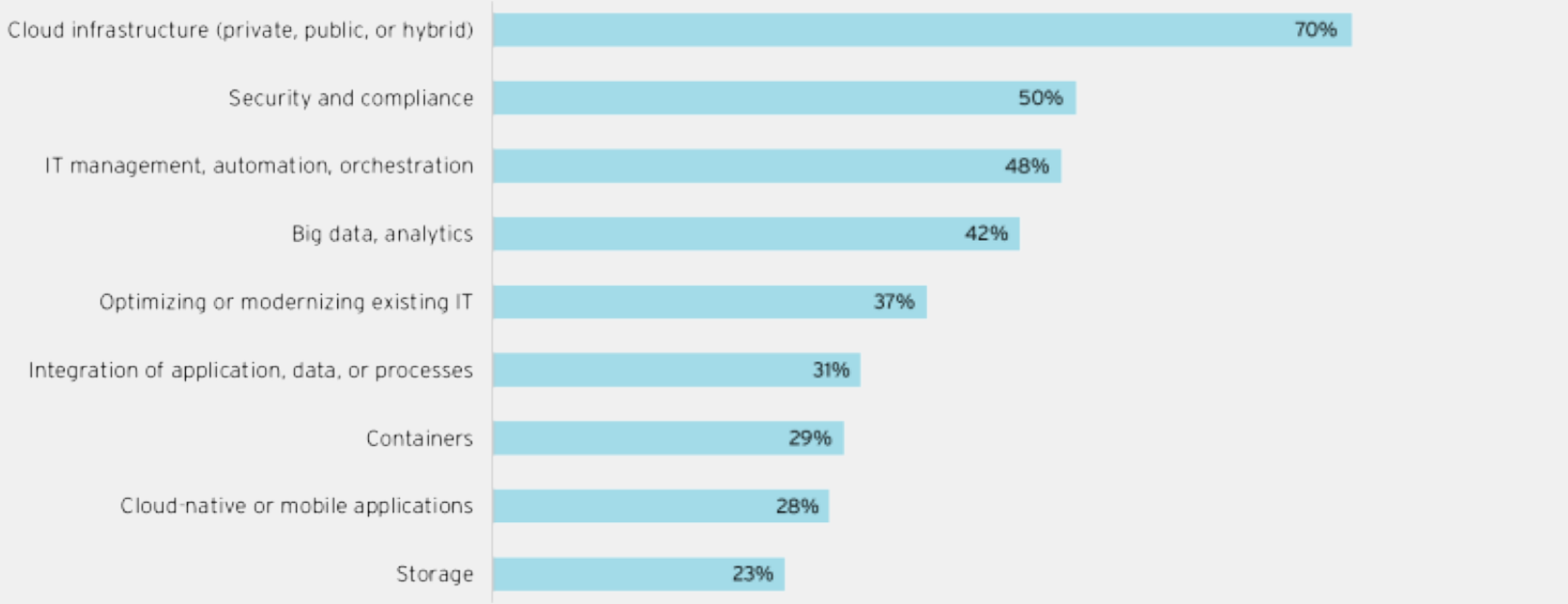
Time to market

Vendor freedom

redhat.

CLOUD IS TOP I.T. FUNDING PRIORITY

What are your organization's top IT funding priorities for 2017? (Select all that apply)



Source: Red Hat Global Customer Tech Outlook Research for 2017. Conducted Sept - Oct 2016 by TechValidate. TVID: 885-BC3-190

redhat.

CLOUD ADOPTION CHALLENGES

Defined cloud strategy

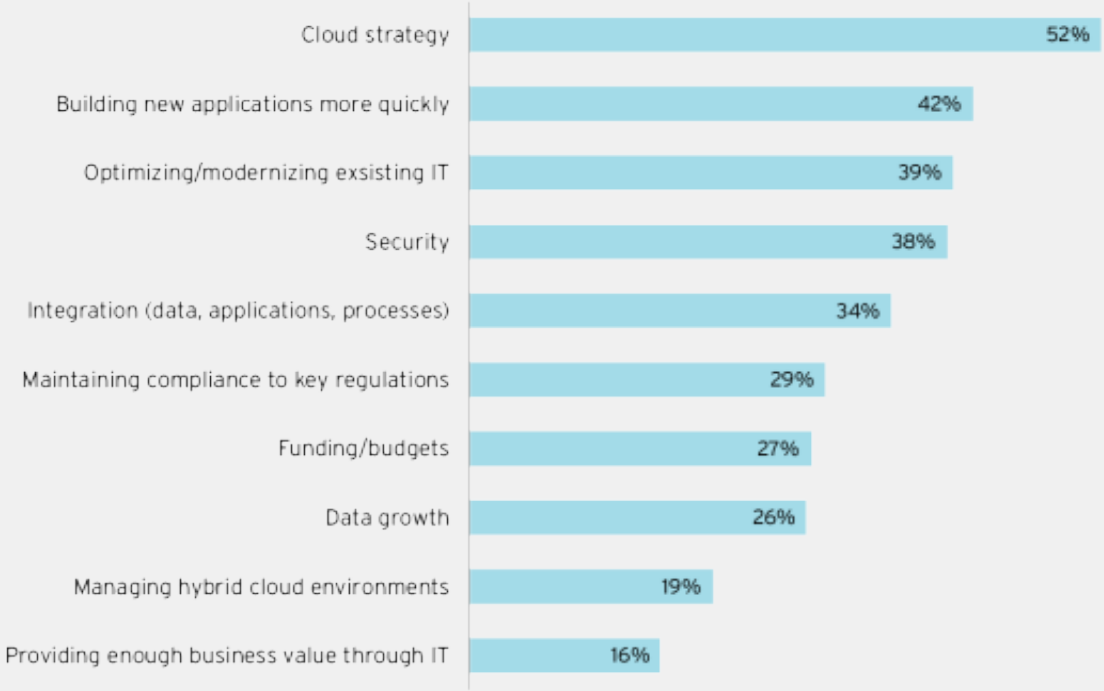
Institutional knowledge gap

Security and policy constraints

redhat.

CLOUD IS ALSO GREATEST CHALLENGE

What are your organization's greatest IT challenges for 2017? (Select all that apply)



Source: Red Hat Global Customer Tech Outlook Research for 2017. Conducted Sept - Oct 2016 by TechValidate. TVID: 885-BC3-190

redhat.

CLOUD..... Quick Recap

CLOUD TYPES

PUBLIC CLOUD

For example...

amazon web services
Google Cloud Platform
Microsoft Azure

PRIVATE CLOUD

For example...

openstack.

MULTI-CLOUD

For example...

amazon web services or Google Cloud Platform

HYBRID CLOUD

For example...

amazon web services
&
openstack.

WHAT IS MULTICLOUD?

A Red Hat perspective

MULTICLOUD

*noun • \ muhl-tee \ klaud *

Using **multiple clouds** from multiple private or public providers, for multiple workloads/tasks, **without interconnectivity** between clouds.

HYBRID CLOUD

*noun • \ hī-bred \ klaud *

A combination of **public** and **private** clouds, with some degree of workload portability, **integration**, orchestration, and unified management across said clouds.

INTERCONNECTIVITY IS THE KEY

MULTICLOUD

aws | openstack. | Microsoft Azure

VS

HYBRID CLOUD

aws ↔ openstack.

WHAT CUSTOMERS ARE SAYING...

There is no scheduled mass migration to public cloud. We'll continue to integrate where it makes sense . . . , but we're not looking to transition entirely from one model to another

Senior Business System Analyst

American Insurance Company

January 24, 2018

WHAT ANALYSTS ARE SAYING...

The future of cloud is a hybrid cloud...

LAURA NELSON

FORRESTER RESEARCH

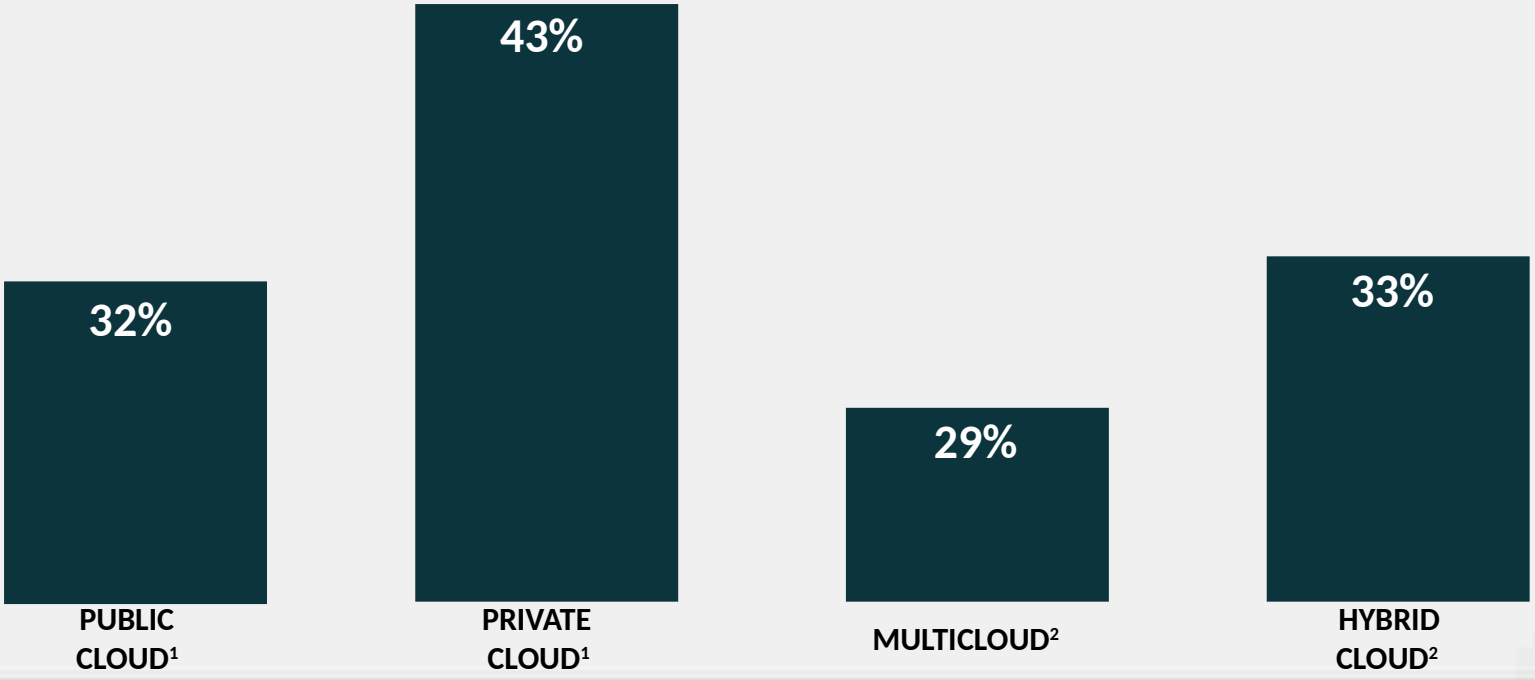
January 24, 2018

Source: The Story Of Cloud Migration: Public Is Here, But The Reality Is Hybrid, Forrester, January 2018.

redhat.

WHAT ARE CUSTOMERS DOING?

ANALYSTS AND REAL-WORLD DATA HIGHLIGHT OPPORTUNITIES



1 ***Source:*** *RightScale: State of the Cloud Report 2017*
2 ***Source:*** *451 Research Voice of the Enterprise: Cloud Transformation, Q1 2017*

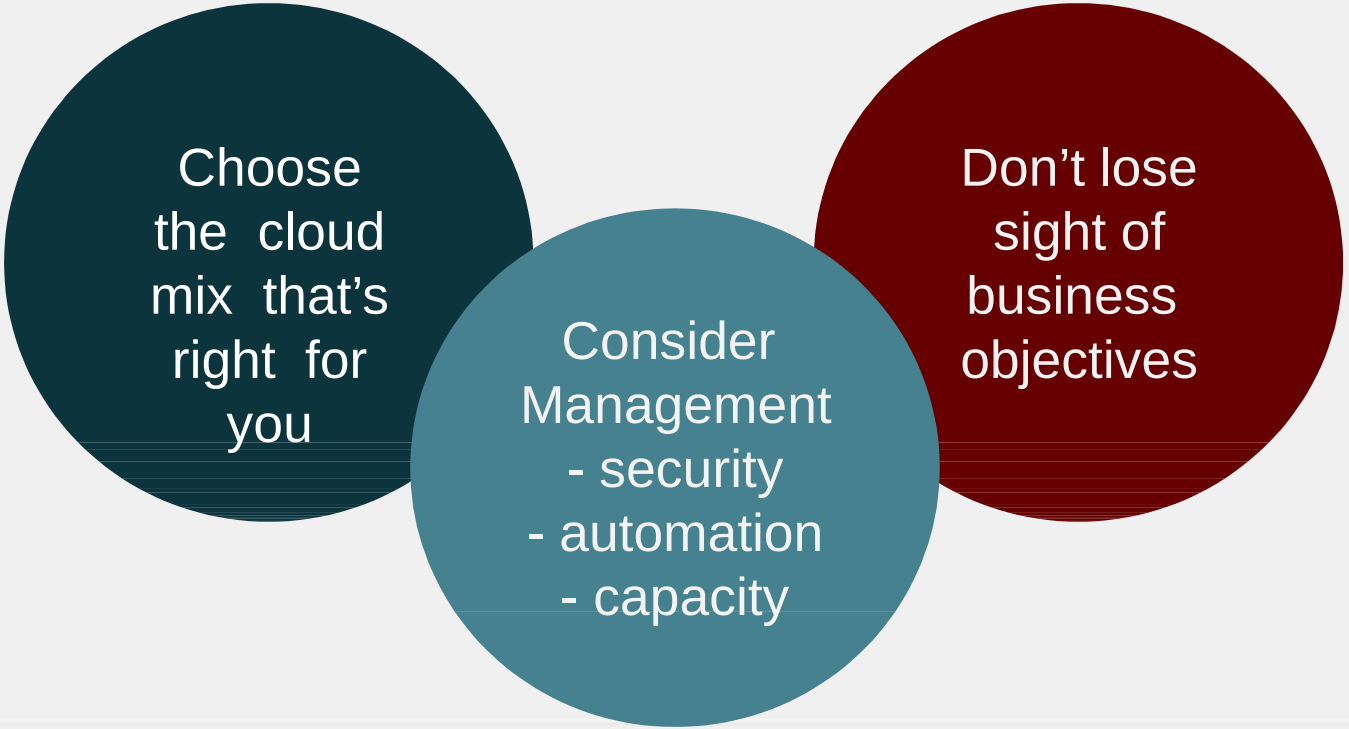
redhat.

So, Undertand your Environment and Business Objectives

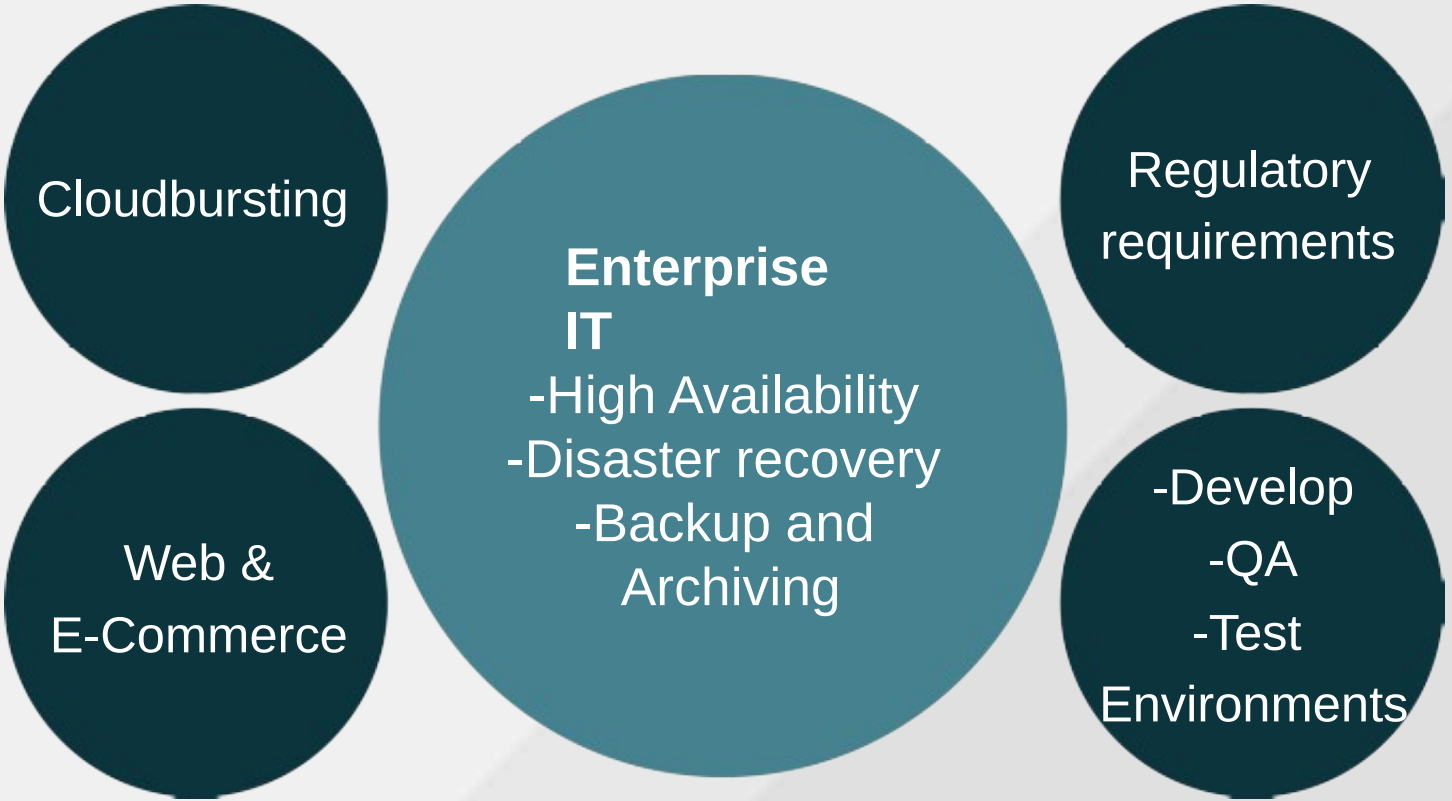
Things to consider in your current state.

Determine your best path forward

Understanding your options



Here are some uses cases for a flexible, hybrid cloud:



redhat.

What’s your Cloud Architecture Strategy?


THE MOST CRITICAL IT STRATEGY DECISION THIS DECADE.
THREE CHOICES.

THROW OUT LEGACY
START FROM SCRATCH

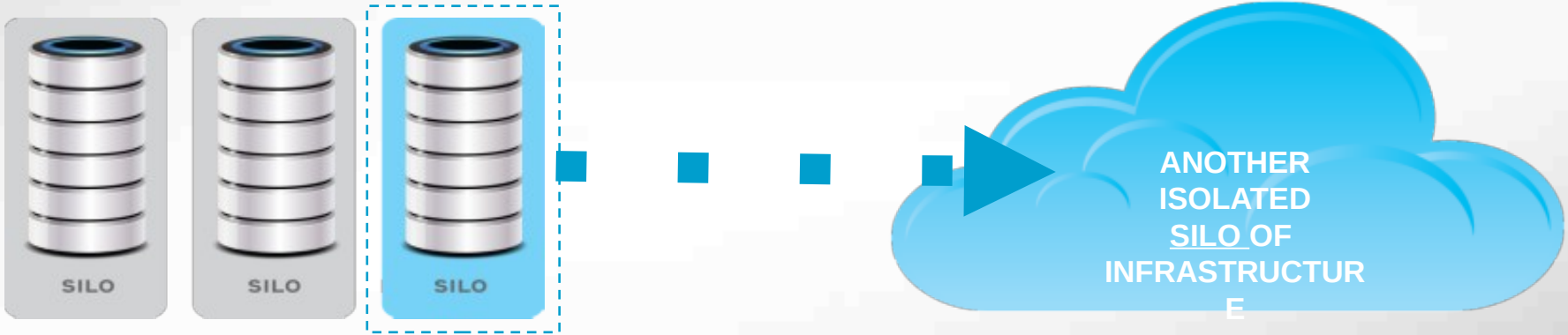
MIGRATION TO A HOMOGENEOUS INFRASTRUCTURE IS IMPRACTICAL

Naively simple for Enterprise

MAY WORK FOR SERVICE PROVIDERS, BUT IMPRACTICAL FOR ENTERPRISES

ADD A CLOUD SILO

BUILD A CLOUD FROM A SMALL PART OF YOUR INFRASTRUCTURE



A CLOSED CLOUD...
Now and forever

- ✗ Increases management complexity
- ✗ Brings cloud's benefits to a fraction of your infrastructure
- ✗ Cuts off access to innovation
- ✗ Prevents use of most emerging public clouds
- ✗ Puts vendor in charge of your infrastructure options and your economics

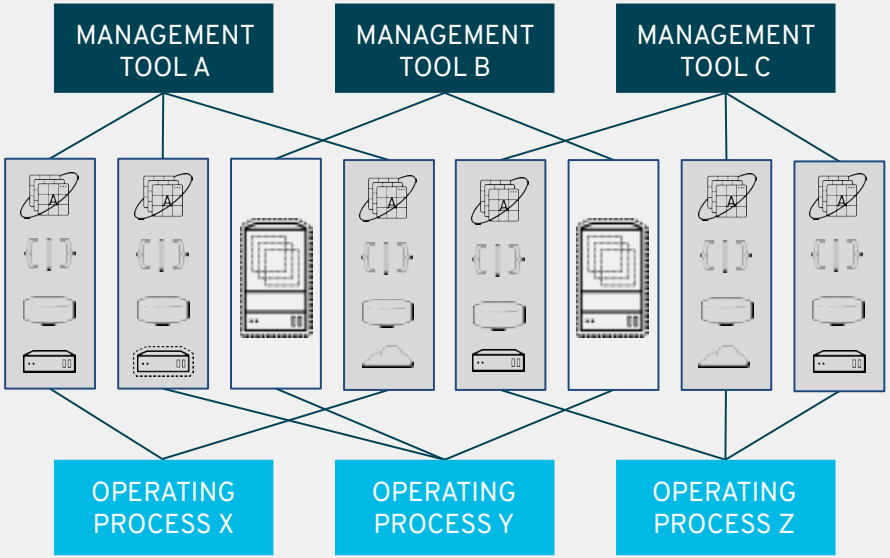
BUILD AN OPEN HYBRID CLOUD OUT OF ALL YOUR RESOURCES

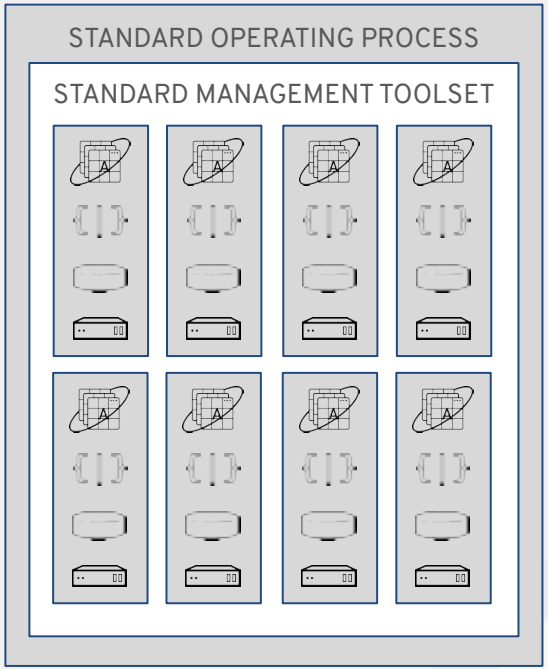
BUILD AN OPEN HYBRID CLOUD OUT OF ALL YOUR RESOURCES, INCLUDING PUBLIC OPTIONS

Make a cloud out of what you have

LEVERAGE EXISTING INVESTMENTS

Turn your Infrastructure **Silos** into **Unified** pools of Resources



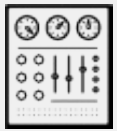


redhat.

OPEN HYBRID CLOUD MANAGEMENT

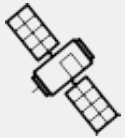
Automated Service Provisioning

SELF-SERVICE, SYSTEM DEPLOYMENT, CONFIGURATION, & REMEDIATION



Order a service in a self-service portal

Deploy instances on VMs, in a private cloud, or public cloud



Automated OS deployment, configuration, and errata updates

Proactively monitor & identify issues

Infrastructure orchestration, application deployment, & automated remediation of critical issues

Monitor progress and inform the user when actions are completed

The Key Word: OPEN…….means

- Open source and open standards / Interoperable
- Engaged with innovative open source communities
- Provides interoperability, workload portability, and strategic flexibility
- Packaged, secured, and supported for critical deployments

WHAT ANALYSTS SAY ABOUT OPEN SOURCE

Open Source is driving cloud innovation

The vast majority of **public cloud infrastructure in the market depends on open source software** for basic enablement, and especially for delivery of full functionality. We also see the use of open source software as being fundamental to a substantial portion of **private cloud infrastructure** in use, and certainly for supporting the run-time environment.

AL GILLEN

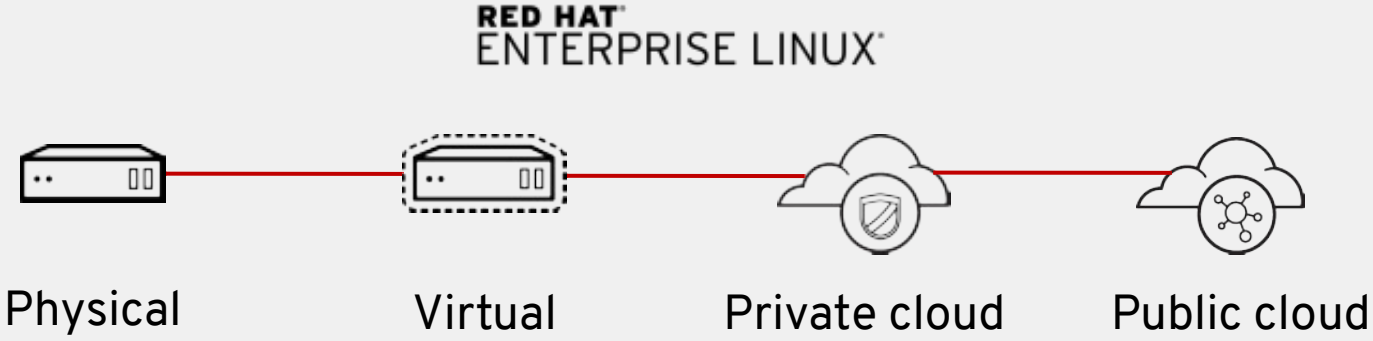
Group Vice President, Software Development & Open Source, IDC,

September 2017

Source: Approved comment from Al Gillen.

RED HAT'S VISION: OPEN HYBRID CLOUD

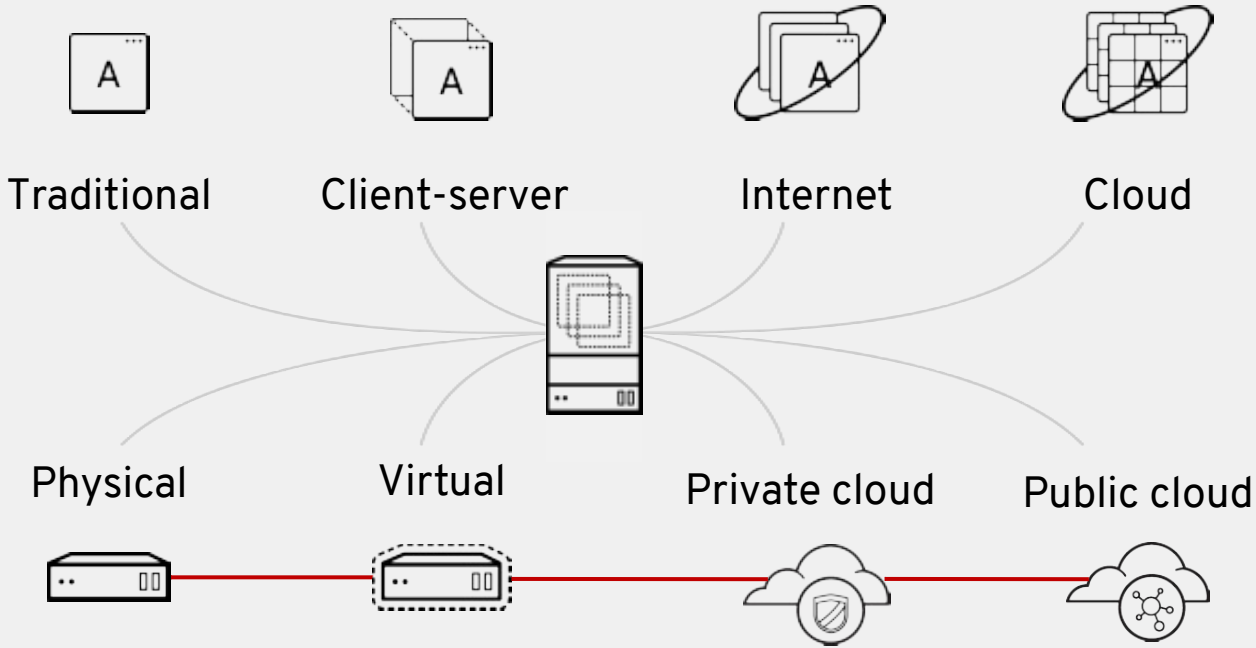
THIS IS THE REALITY FOR MOST ORGANIZATIONS.



redhat.

RED HAT'S VISION: OPEN HYBRID CLOUD

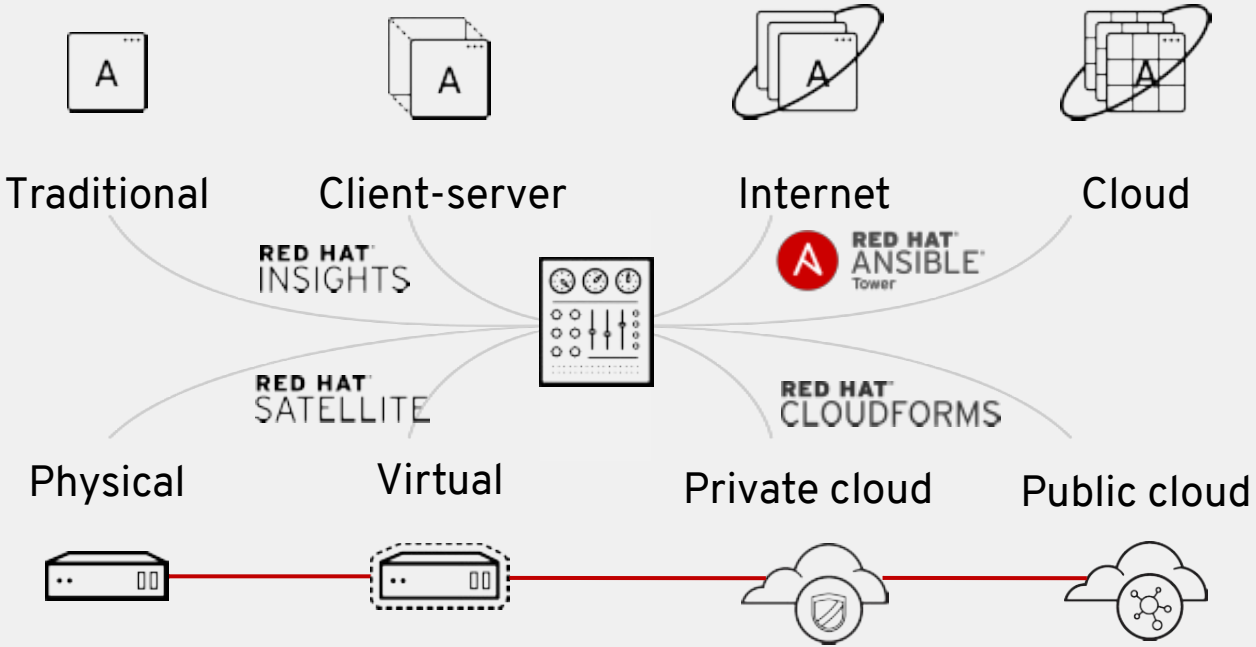
ALL KINDS OF APPS AND ENVIRONMENTS, INCLUDING CONTAINERS



redhat.

RED HAT'S VISION: OPEN HYBRID CLOUD

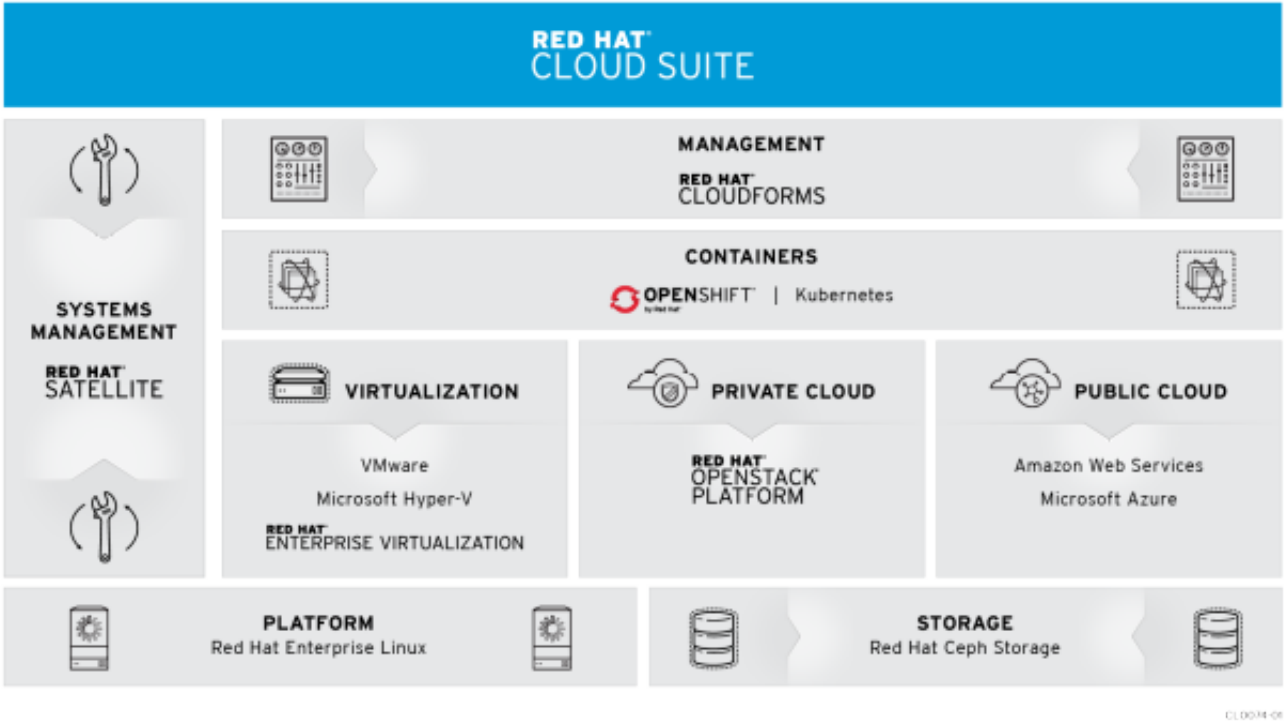
COMMON MANAGEMENT, INTEGRATION, AND AUTOMATION TO KEEP IT ALL GOING



redhat.

IT'S ALL THERE!

COMPLETE TECHNOLOGY STACK FOR THE OPEN HYBRID CLOUD



redhat.

Your Hybrid Cloud Selection Criteria:

- Flexibility: Multi-hypervisor, Containers, Openstack, etc…
- Simplicity: One Product, Virtual Appliance, Open Automation
- Scalability
- Security and Regulatory Compliance: Automate, Scan, patch, monitor and control
- Integration: With exiting tools from any vendor
- Platform Compatibility: Today and Tomorrow Technologies
- Support: Enterprise support and Professional services
- Features: Rich, All in one, enables Innovation from Infrastructure to Application development
- Automation: Open, Simple, Rich ecosystem
- Cost: Shift Spending to where it really Matters

CUSTOMER EXAMPLES

PRIVATE CLOUD INFRASTRUCTURE

PADDYPOWER betfair

Infrastructure improvements to address massive scale and uptime, making deployment take minutes or hours instead of days or weeks.

EMBL-EBI

European Bioinformatics Institute sought greater agility for advanced scientific research and gained the automation & flexibility needed at scale.

swisscom

Transitioned to open source cloud environment, gaining greater stability at scale and faster time to market, with less downtime to production.

CUSTOMERS EXAMPLES

PUBLIC & HYBRID CLOUD

Achieving increased app/dev speed and agility with RHEL on AWS. SAP scale-out; traditional IT functions like LDAP moved to achieve CAPEX and reduce OPEX.

Volvo IT is using OpenShift Container Platform on Azure for increased speed to market for global services

Using RHEL on AWS for new e-commerce apps for speed to market, reduced data center costs.

CUSTOMER EXAMPLES

HYBRID CLOUD INFRASTRUCTURE

produban
Santander

Gained a more reliable, application centric solution to bring applications faster to market across hybrid cloud, resulting in lowered costs and resources.

PENNSTATE
1855

Added public and private cloud computing resources, dynamic and virtual environments, automation and configuration, and cloud management.

FICO

Found greater flexibility with 30% lower infrastructure costs and 60% lower storage costs with open source cloud, while improving overall agility.

THANK YOU