



redhat.



6 PATHS TO MODERN INFRASTRUCTURE

Do more now. Build what's next. We'll show you how.

AGENDA

8:30

Check-in, registration

9:30

Challenges of digital transformation

10:00

Start with an open, reliable, secure operating system

10:45

Break

11:00

Standardize your IT environment and take back control

11:30

Optimize and extend your virtualization investment

12:15

Lunch

13:15

Lay the foundation for software-defined storage

14:00

Manage IT with automation

14:45

Break

15:00

IMS - Infrastructure Migration Solution

15:45

Wrap up and Q&A

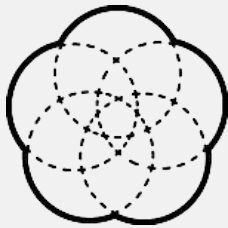


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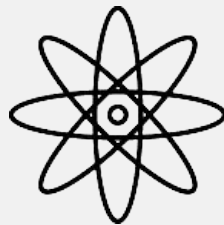


OUR HISTORY

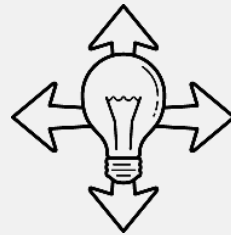
INNOVATION AND STABILITY



More than 20 years
of collaboration



Trusted innovation
engines



Common strategic
vision

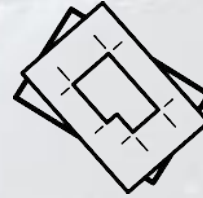
OUR COMMITMENT



Accelerate speed to market for industry-standard platforms



Actively contribute to the open source community



Deliver innovation through joint roadmaps



Develop and deliver unique technologies



Provide consistency and compatibility across platforms



Develop RAS to enhance data protection

WHY RED HAT AND INTEL?

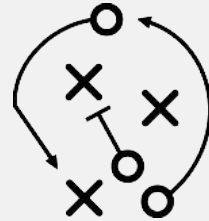
WHAT IF YOU COULD...



Efficiently engage your
IT organization?



Develop better
business solutions?



Make your company
more competitive?

With Red Hat and Intel, it's possible.

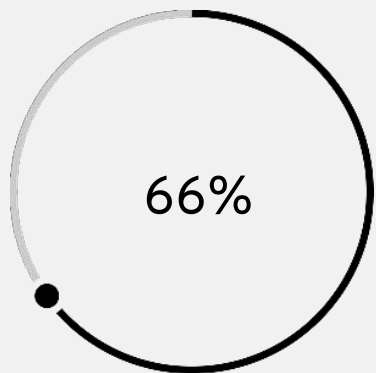


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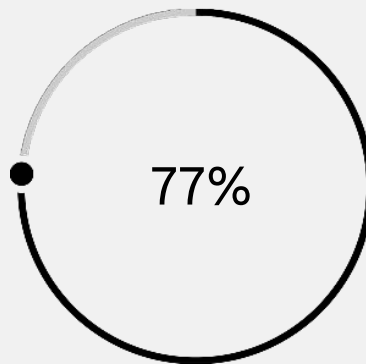


CHALLENGES OF DIGITAL TRANSFORMATION IT'S NOT JUST AN I.T. CHANGE

DIGITAL TRANSFORMATION IS ESSENTIAL

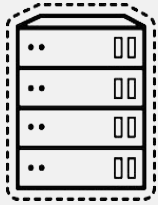


Recognize the need
to transform¹



Technological advances
transforming business
expectations²

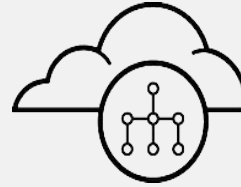
...BUT I.T. IS CHALLENGING



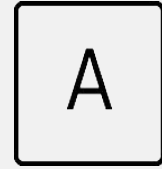
Optimize
existing IT



Integrate apps,
data, and processes



Add and manage
cloud infrastructure

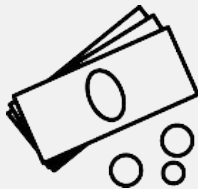


Build more
modern apps

CHALLENGE 1: EXISTING INFRASTRUCTURE



Legacy
infrastructure



Limited
innovation budget



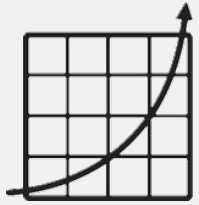
Cost-centric
approach



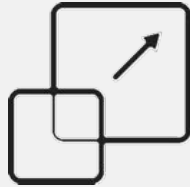
Compliance
constraints

TOP REASONS TO OPTIMIZE I.T.

GAIN EFFICIENCY WITH SCALE, SPEED, AND SELF-SERVICE CAPABILITIES



Efficiency



Scalability



Self-service



Speed

CHALLENGE 2: LACK OF INTEGRATION

FAST-GROWING TECHNOLOGY AND BUSINESS REALITIES

BIG DATA

90%
of all data
was created
in the last
2 years¹

MOBILE

77%
of Americans
own a
smartphone²

SOCIAL

85%
of customers
start online
when making
a major
purchase³

CLOUD

41%
of enterprise
workloads are
running on
the cloud⁴

IoT

29B
devices will
be connected
to the
internet by
2022⁵

API ECONOMY

\$284B
in mobile
commerce
in the U.S.
by 2020⁶

¹IBM, [10 Key Marketing Trends for 2017 and Ideas for Exceeding Customer Expectations](#), Dec 2016.

²Pew Research Center, [Mobile Fact Sheet](#), Jan 2017.

³Synchrony Financial, [2016 Major Purchase Study](#), Dec 2016.

⁴451 Research, [Voice of the Enterprise: Cloud Transformation](#), September 2016.

⁵Ericsson, [Ericsson Mobility Report on the Pulse of the Networked Society](#), Nov 2016.

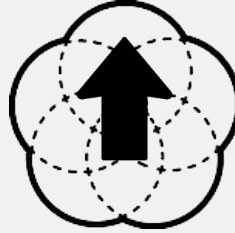
⁶Business Insider, [The Rise of M-Commerce: Mobile Shopping Stats & Trends](#), Dec 2016.

TOP REASONS TO INTEGRATE

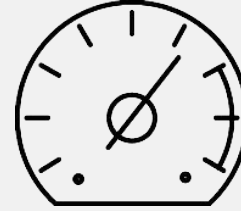
SPEED, SIMPLICITY, AND COLLABORATION EVERYWHERE FROM ANYWHERE



Easy-to-use tools
and processes



Increased
collaboration

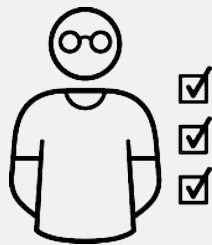


Faster
service

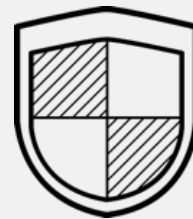
CHALLENGE 3: LACK OF CLOUD INFRASTRUCTURE



Defined cloud
strategy

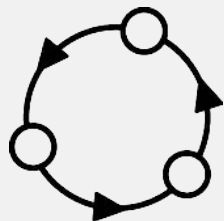


Institutional
knowledge gap



Security and
policy
constraints

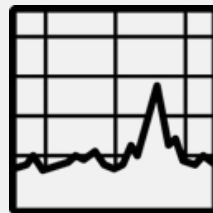
DRIVERS FOR CLOUD INFRASTRUCTURE



Agility



Cost savings



Time to market

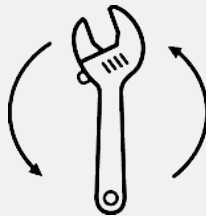


Vendor freedom

CHALLENGE 4: LACK OF MODERN APP DEVELOPMENT



Legacy
infrastructure



Maintenance
overhead



Developer
mindshare

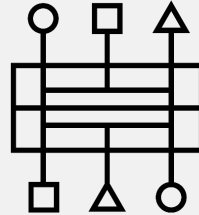


Consistency and
compliance

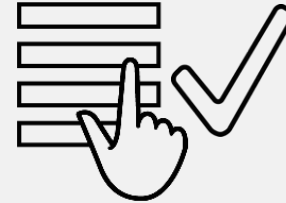
TOP REASONS TO MODERNIZE APP DEVELOPMENT



Increased pace
of business



Software
importance



Self-service
capabilities

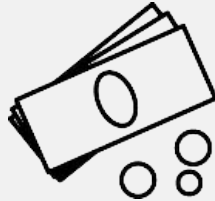


PATH 1: START WITH AN OPEN, RELIABLE, SECURE OPERATING SYSTEM

DIGITAL TRANSFORMATION: HOW TO GET THERE?



Legacy
infrastructure



Limited
innovation budget



Cost-centric
approach

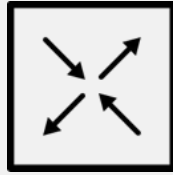


Compliance
constraints

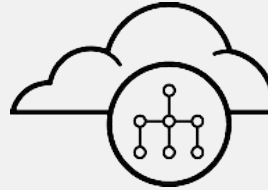
I.T. OPTIMIZATION IS A TOP PRIORITY



Optimize
existing IT



Integrate apps,
data, and processes



Add and manage
cloud infrastructure



Build more
modern apps

WHERE SHOULD YOU START?



Platform
improvements



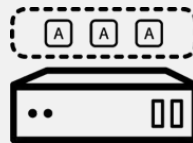
Virtualization
optimization



Storage
optimization



Better business
processes



Application migration
or updates

WHERE COULD WE START?



Platform
improvements



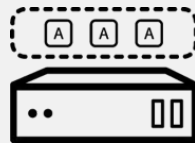
Virtualization
optimization



Storage
optimization



Better business
processes



Application migration
or updates

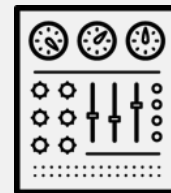
ENCOUNTERING ROADBLOCKS LIKE THESE?



Slow delivery
of services



Lack of budget



Ad hoc management
and maintenance

WHERE ONE RED HAT CUSTOMER STARTED



**TRIPLED SYSTEM
PERFORMANCE**

CASE STUDY: **RAIFFEISEN BANK**



Challenge:

- Improve performance and cost

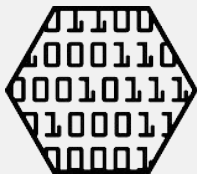
Solutions:

- Migrating to Red Hat® Enterprise Linux®
- Running on cost-effective Hitachi servers with Intel processors

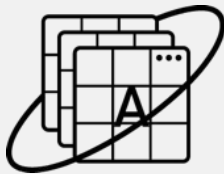
Results:

- Tripled system performance
- Maintained stability
- Cut total cost of ownership (TCO) by 50%

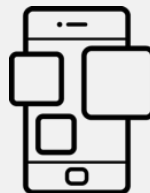
A STRONG AND STANDARD FOUNDATION



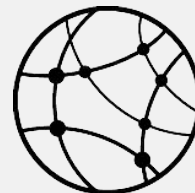
Big data



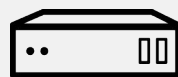
Modern apps



Mobile



IoT



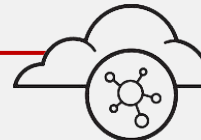
Physical



Virtual



Private cloud



Public cloud

RED HAT® ENTERPRISE LINUX®

RED HAT SOLUTIONS

RED HAT® ENTERPRISE LINUX® 7 HIGHLIGHTS

Flexible

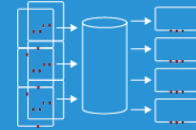
Lightweight
application isolation
(Linux® containers)



Windows
interoperability



Scalable
file systems



Stable and
efficient

Optimal performance
via profiles



Streamlined
installation and
deployment



System management

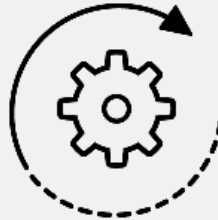


Critical reliability and military-grade security

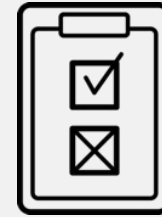
RED HAT® ENTERPRISE LINUX® 7.x HIGHLIGHTS



Defend against the
latest security threats



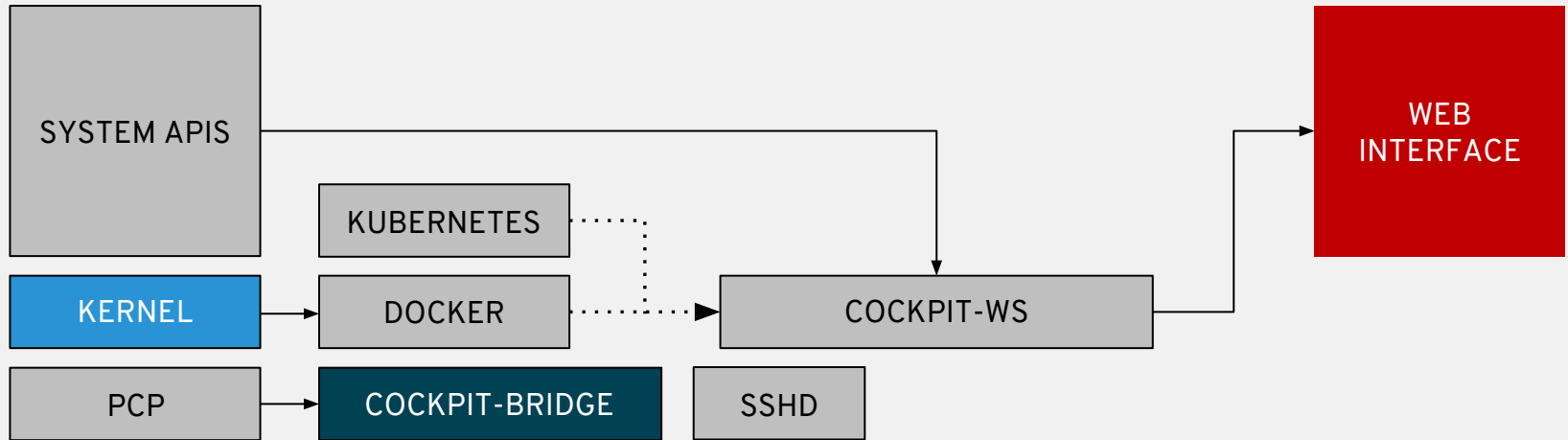
Improve performance
across all roles



Streamline systems
management

COCKPIT

EASY-TO-USE, BROWSER-BASED ADMIN INTERFACE FOR SYSTEMS MANAGEMENT



A background image showing two people, a man and a woman, working at a desk with multiple computer monitors. The man is pointing at a monitor, and the woman is looking at a tablet. The image is overlaid with a dark blue semi-transparent layer.

DEMO

Explore system management with Cockpit.

KEY TAKEAWAYS



Path 1: Start with an open, reliable, secure operating system

- Need to select stable, yet flexible platform to support both existing workloads and next generation solutions.
- Red Hat® Enterprise Linux® includes the requisite foundational tools and technologies to modernize your environment and meet tomorrow's demands.



redhat.



PATH 2: STANDARDIZE YOUR I.T. ENVIRONMENT AND TAKE BACK CONTROL

SATELLITE AND INSIGHTS DOING MORE TOGETHER

RED HAT® SATELLITE + RED HAT® INSIGHTS



RED HAT®
ENTERPRISE LINUX®

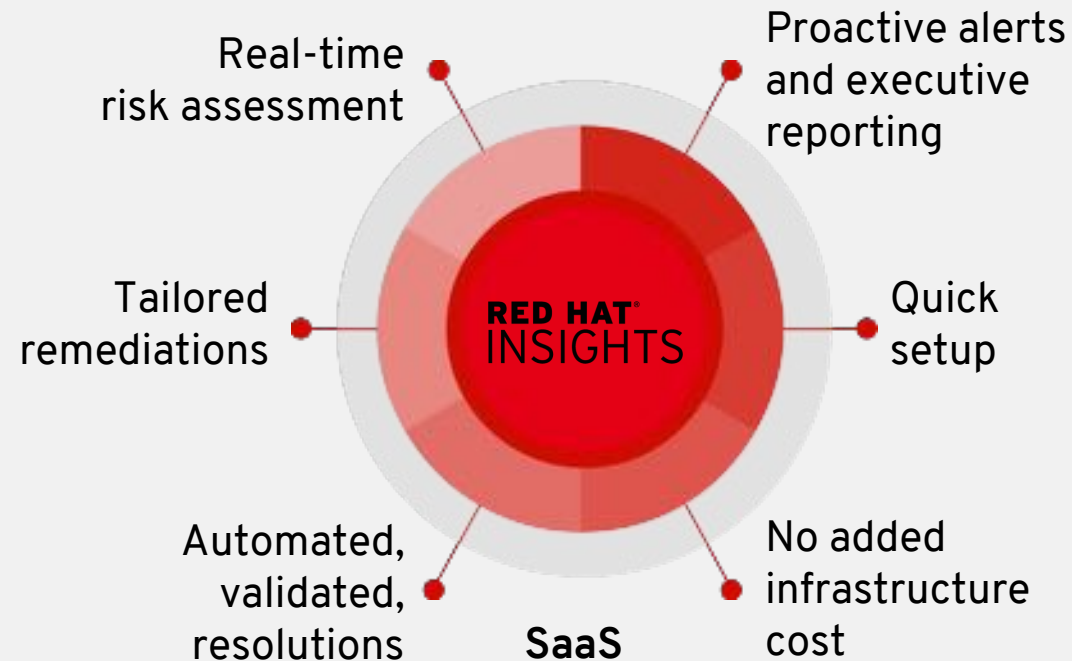
EFFICIENT SYSTEMS MANAGEMENT WITH RED HAT® SATELLITE



“ 85% of critical issues raised to Red Hat® support are already known to Red Hat or our partners.”

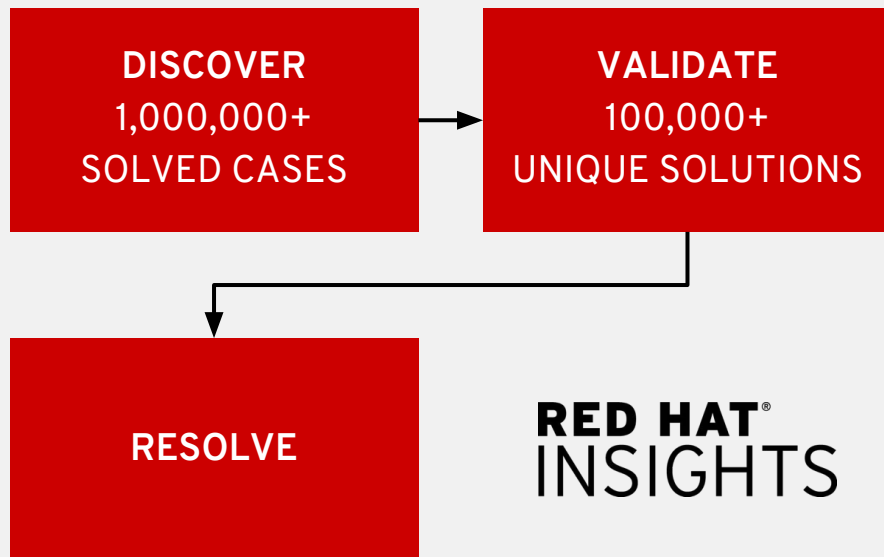
– RED HAT GLOBAL SUPPORT SERVICES

WHAT IS RED HAT® INSIGHTS ?



Red Hat Insights is a predictive IT analytics service that enables customers to proactively identify and automatically resolve infrastructure risks before they impact business operations.

PREDICTIVE, HOW ?



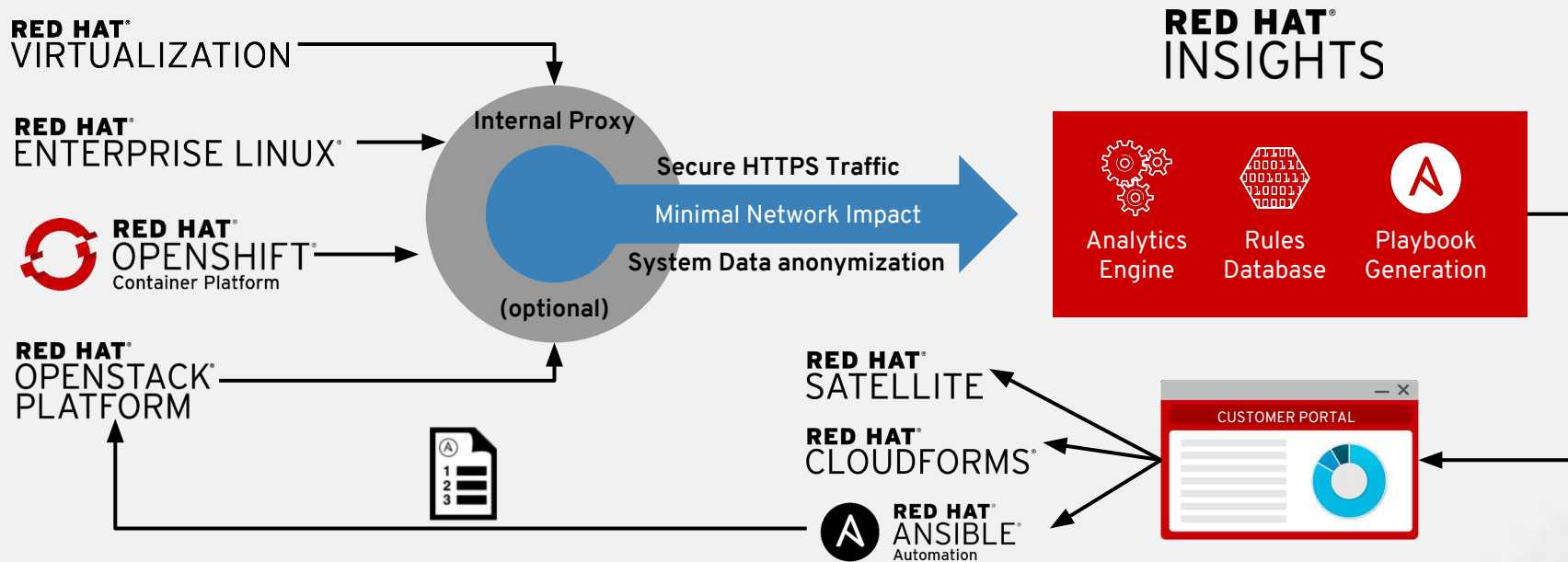
- Continuous identification of new risks.
- Based on real-world results from millions of enterprise deployments

“ 85% of critical issues raised to Red Hat® support are already known to Red Hat or our partners.”

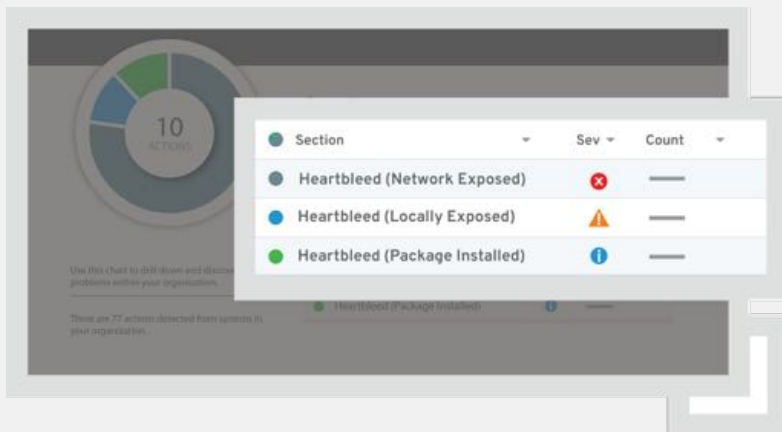
— RED HAT GLOBAL SUPPORT SERVICES

HOW DOES INSIGHTS WORK ?

INTEGRATED INTO TOOLS YOU ALREADY USE



GET AHEAD OF SECURITY RISKS



“In the first year when a vulnerability is released, it’s likely to be exploited within 40 to 60 days. However, it takes security teams between 100 to 120 days on average to remediate existing vulnerabilities.”

— KENNA SECURITY GROUP

DEMO SATELLITE 6.4 with INSIGHTS

A background image showing two IT professionals, a man and a woman, working at a desk with multiple computer monitors. The woman is pointing at a monitor, and the man is looking at it. The image is overlaid with a dark blue semi-transparent filter.

FIND IT. FIX IT. BEFORE IT BREAKS.

Satellite 6.4 with Ansible and Insights





redhat.

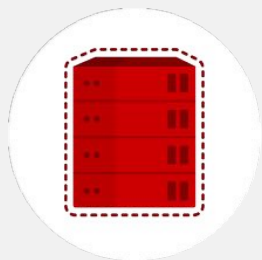


PATH 3: OPTIMIZE AND EXTEND YOUR VIRTUALIZATION INVESTMENT



DIGITAL TRANSFORMATION IS A TOP PRIORITY

Pressure to move to a modern datacenter to be competitive and relevant



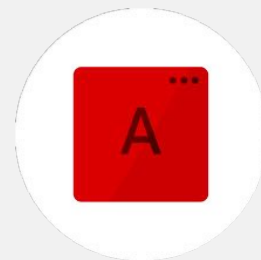
OPTIMIZE
the information
technology you have



INTEGRATE
apps, data,
and processes



ADD
and manage
cloud infrastructure

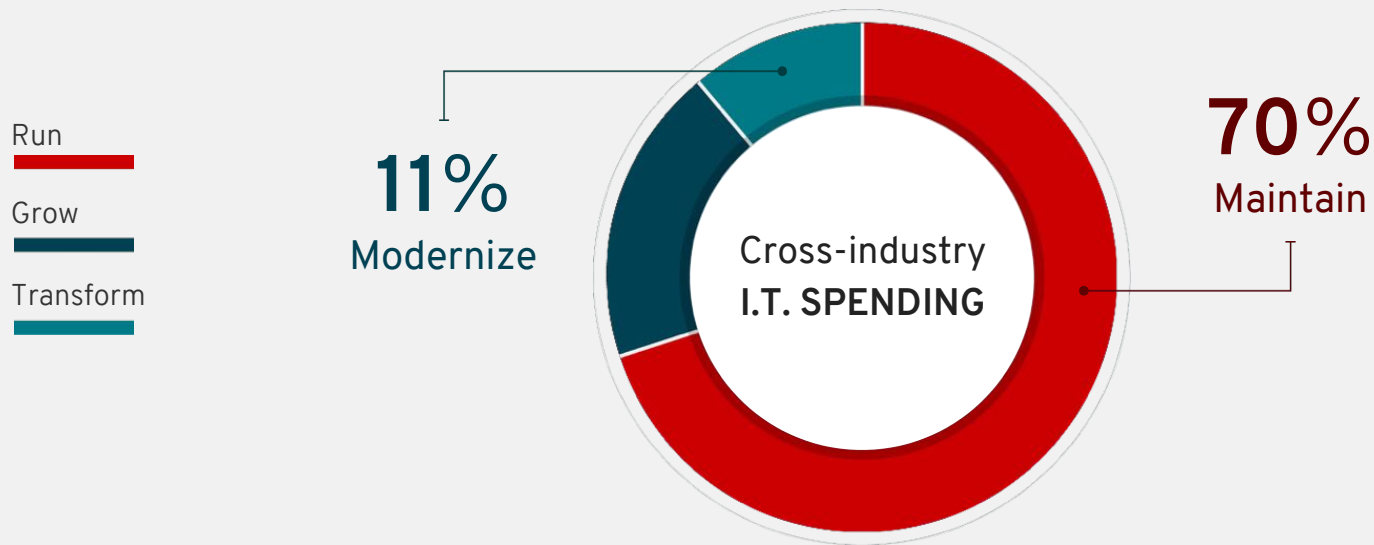


BUILD
more modern
applications

MAXIMIZE AND INTEGRATE existing investments to build future technology

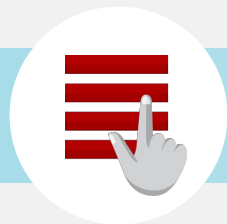
THE BUDGET TO MAINTAIN AND MODERNIZE

IT spending to run, grow, and transform the business, cross-industry



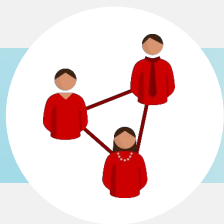
Source: Graph created by Red Hat based on Gartner research. Potter, Kurt, Sanil Solanki, and Ken McGee, Run, Grow and Transform the Business IT Spending: Approaches to Categorization and Interpretation. Gartner G00308477, 27 June 2016

VIRTUALIZATION POWERS THE MODERN DATACENTER



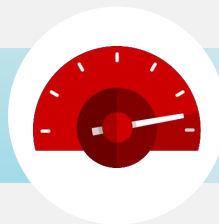
REGAIN CONTROL

- Cost
- Compliance
- Resources



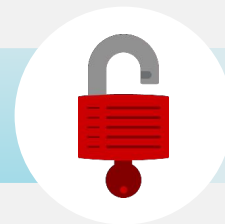
CONNECT EXISTING INVESTMENTS

- Path to the cloud
- Interoperability



ACCELERATE SERVICE DELIVERY

- Stop the need for shadow IT
- Push-button configuration

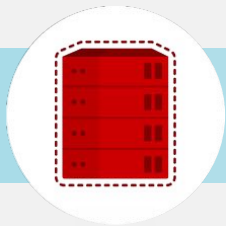


WITHOUT VENDOR LOCK-IN

- What you need when you need it
- No licenses, no capital expenditures (CapEx), no contract fine print

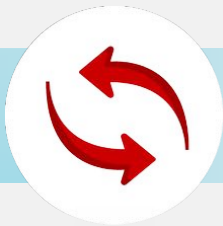
THE VALUE OF RED HAT VIRTUALIZATION

Virtualization remains a pillar in the datacenter*



OPTIMIZE
the IT you have

RED HAT
VIRTUALIZATION



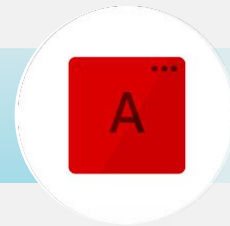
INTEGRATE
apps, data, and processes



ADD AND MANAGE
cloud infrastructure

RED HAT
OPENSTACK
PLATFORM

RED HAT
CLOUDFORMS



BUILD MORE
modern applications



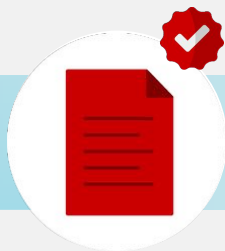
* July 2017, IDC, The Critical Role of Virtualization in Modern Datacenters, Hybrid Clouds, and Containers

THE VALUE OF RED HAT VIRTUALIZATION

Virtualization remains a pillar in the datacenter*



Foundational
technology



Use cases for today
and tomorrow



OpEx and CapEx
friendly



No vendor
lock-in

* July 2017, IDC, The Critical Role of Virtualization in Modern Datacenters, Hybrid Clouds, and Containers

MANY PATHS TO RED HAT VIRTUALIZATION



» DIRECTOR

- No vendor lock-in or 1-way contract
- Predictable operating expenses (OpEx), no CapEx
- Low total cost of ownership (TCO)

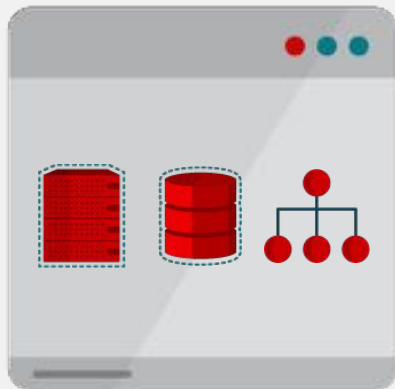
» DEVELOPER

- Fully automate and integrate
- Common tooling
- Open source

» OPERATIONS

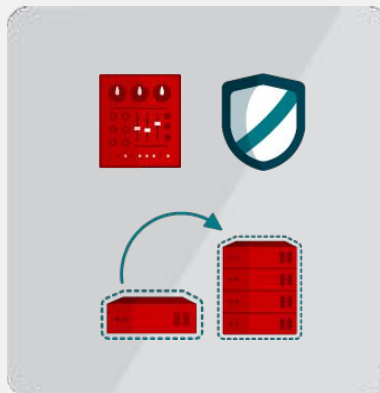
- Single support stack for Red Hat Enterprise Linux®, Red Hat Virtualization, and Red Hat OpenShift®
- Support for traditional apps, containers, path to cloud

RED HAT VIRTUALIZATION



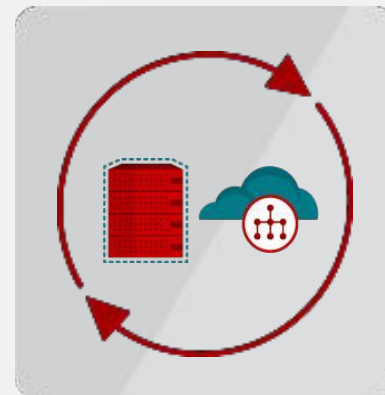
CENTRALIZED MANAGEMENT

Virtualized compute, network, and storage resources using the open source Kernel-based Virtual Machine (KVM) hypervisor



AUTOMATED WORKLOAD

Management, scalability, and security features for virtualized applications

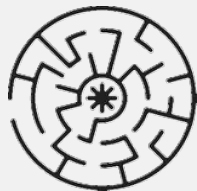


OPTIMIZES CURRENT I.T.

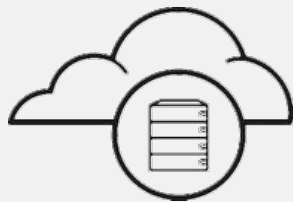
Integrates with future technologies using RESTful application programming interface (API)

EASY TO OPERATIONALIZE, EASY TO AUTOMATE, EASY ON THE BUDGET, NO VENDOR LOCK-IN

RED HAT VIRTUALIZATION USE CASES



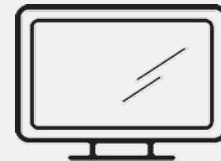
Mission-critical
virtualization



Cloud transition

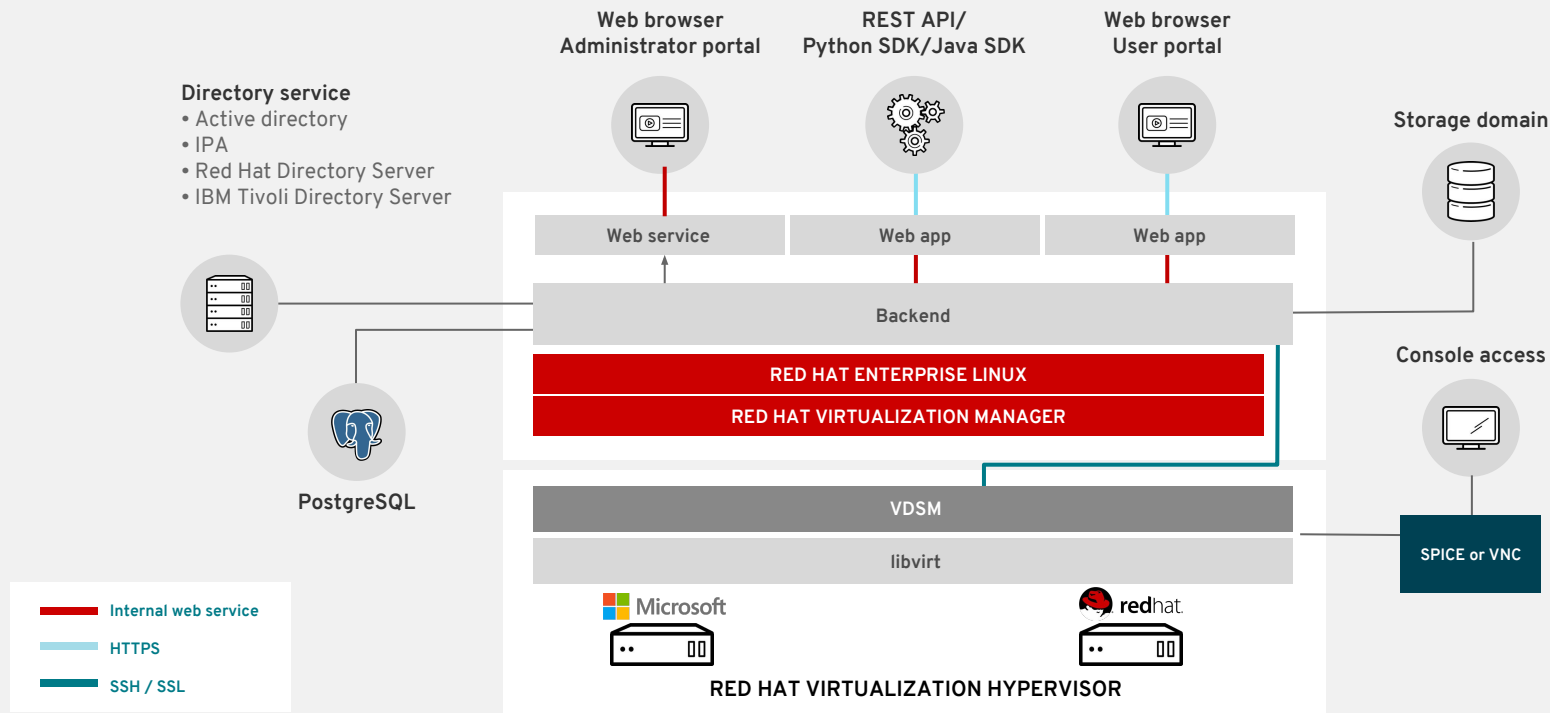


Dev/test

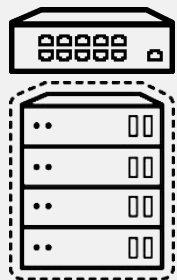
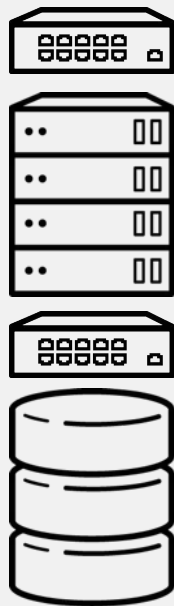


Technical
workstations

RED HAT VIRTUALIZATION OVERVIEW



RED HAT VIRTUALIZATION - PACKAGING



RED HAT™
HYPERCONVERGED
INFRASTRUCTURE

- Single budget for compute & storage
- One team to managing infrastructure
- Simplified planning & procurement
- Streamlined deployment & management
- Single support stack for compute and storage

TRADITIONAL ARCHITECTURE

A background image showing two people, a man and a woman, sitting at a desk with multiple computer monitors. The woman is pointing at one of the screens. The image is overlaid with a semi-transparent blue filter. The word "DEMO" is centered in white text.

DEMO

KEY TAKEAWAYS



Path 3: Optimize and extend your virtualization investment

- Establish familiarity with RHV-M and VM-related tasks in RHV.

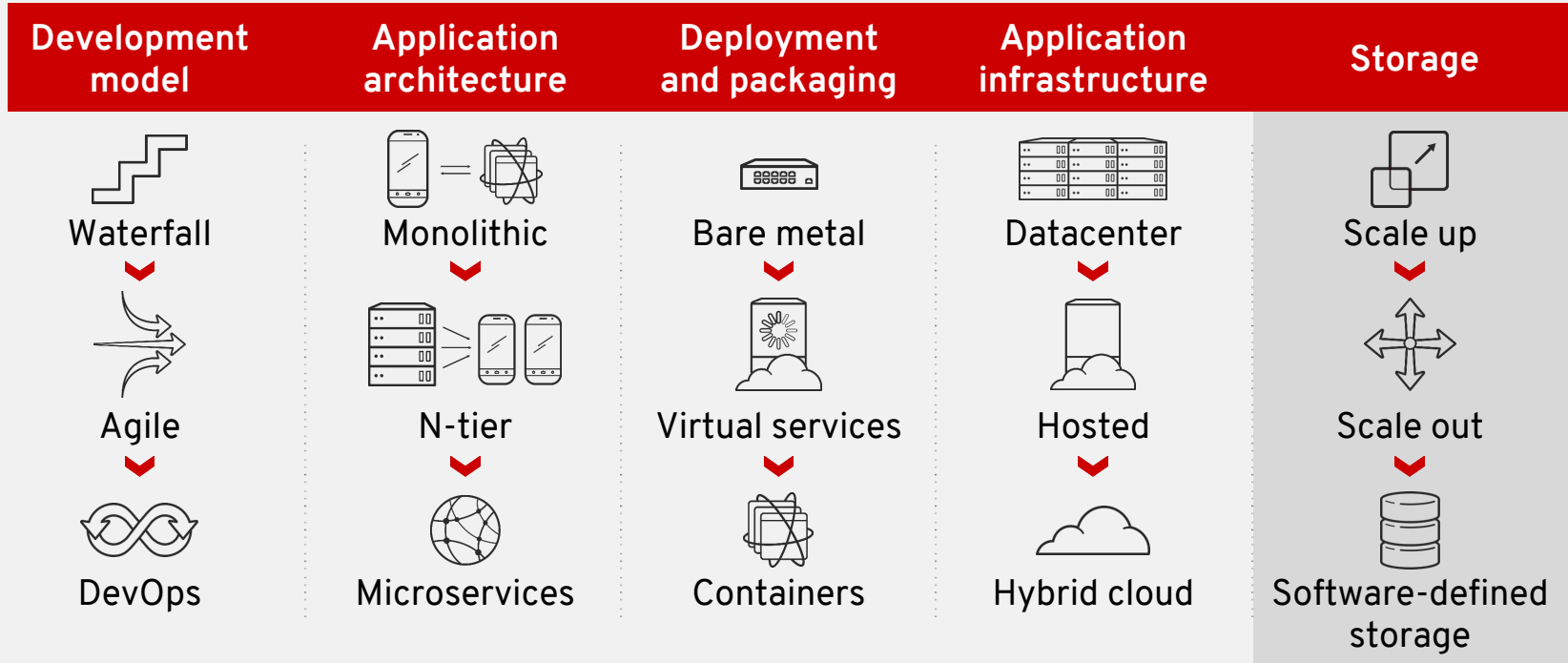


redhat.

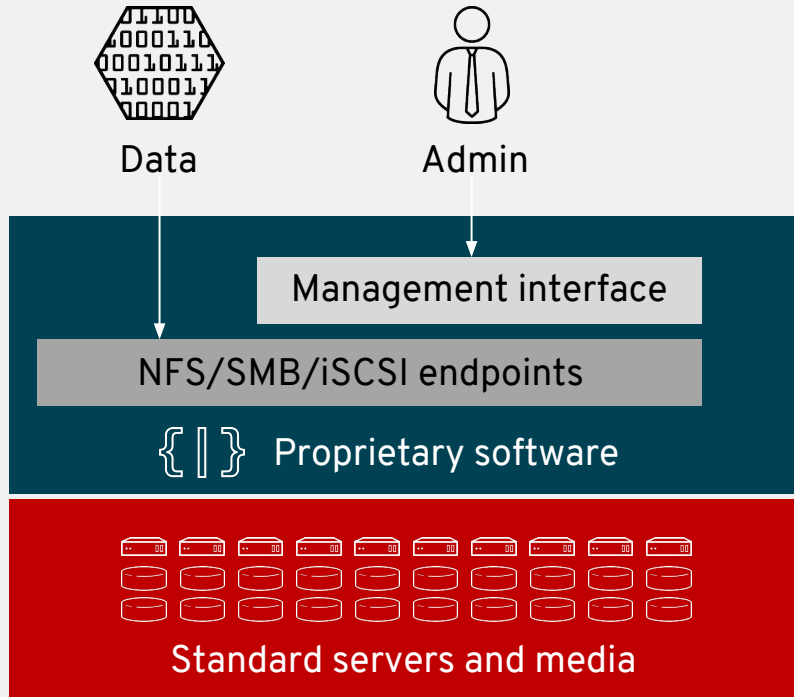


PATH 4: LAY THE FOUNDATION FOR SOFTWARE-DEFINED STORAGE

THE DATACENTER IS CHANGING



PROPRIETARY APPLIANCES AREN'T ENOUGH

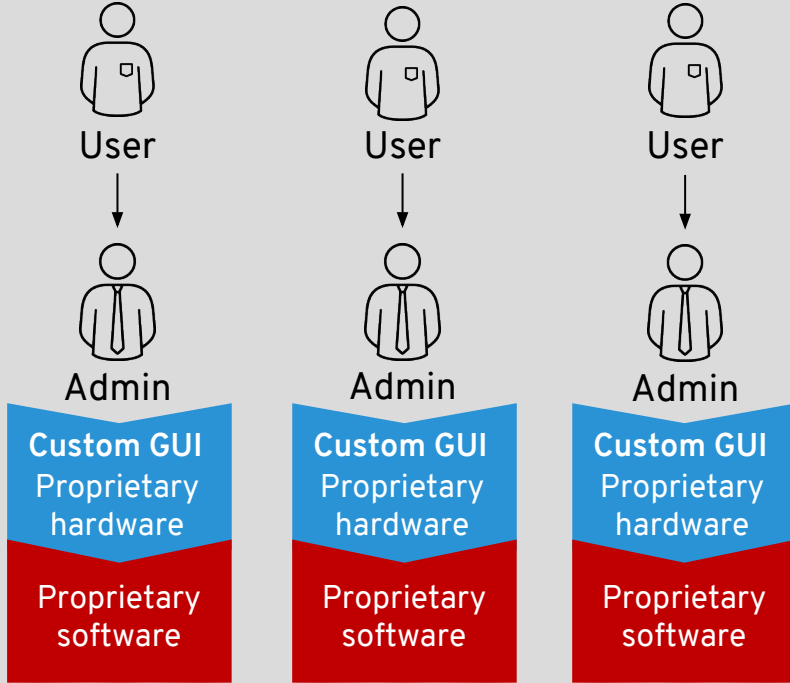


The traditional approach to storage:

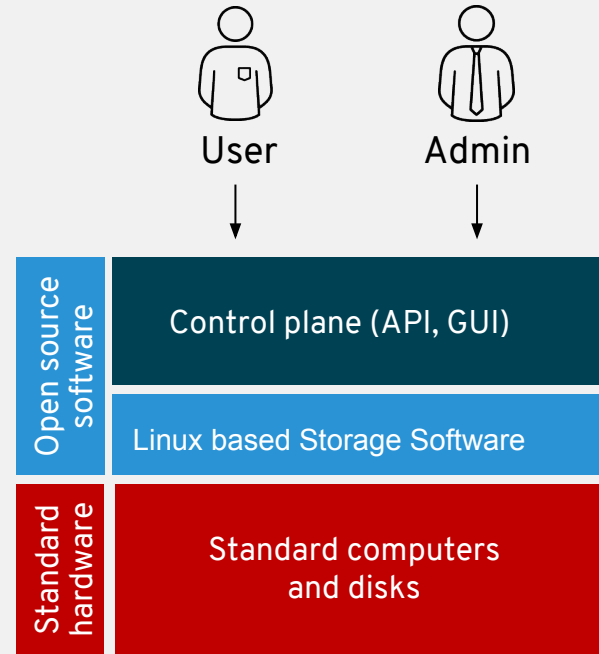
- Complexity and flexibility hidden from end users
- Vendor lock-in leads to pricing premium
- Price premium over constituent components is difficult to sustain

STORAGE IS EVOLVING

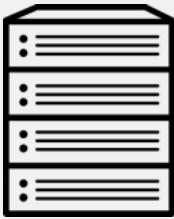
Traditional storage Complex proprietary silos



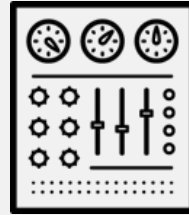
Open, software-defined storage Standardized, unified, open platforms



WHAT IS SOFTWARE-DEFINED STORAGE?



Server-based



Centralized control



Open ecosystem

WHERE ONE RED HAT CUSTOMER STARTED



Background/Issue

- Spanish television network and media production company. Largest television network in Spain
- MediaSet was using an EMC solution for remote video archiving service on external Service provider data center

Client Need

- Customer wanted an in house archive solution to speed up access .
- Scalable , flexible and performant data archive platform. Reduce cost from vendor lock-in. Acquire skills for solution management.

Ecosystem

- ORACLE DIVArchive

COMPETITION:

- EMC

Red Hat offer

- Architecture design
- PoC delivery
- Performance tuning
- Skills transfer via mentoring and documentation.

Why Red Hat?

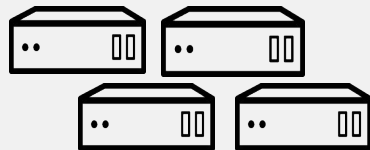
- Much lower TCO then EMC Isilon
- Future Server Hardware selection freedom
- More performance
- Positioned for future unpredictable growth
- Expertise transfer from RH consultant
- No more migrations

Future Opportunities

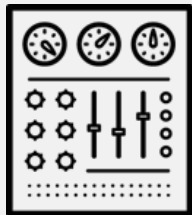
- RHGS for remote platform destination at Service Provider
- RHGS for OpenShift

RED HAT SOLUTIONS

WHAT IS RED HAT STORAGE



**Enterprise class iteration
of the open source Ceph and
Gluster projects**



All-inclusive feature set



**Reduced Infrastructure
Cost**



**Extremely resilient,
performant and secure**

PART OF RED HATS STACK



HOW STORAGE FITS

RED HAT® STORAGE

PHYSICAL

RED HAT®
CEPH STORAGE

RED HAT®
GLUSTER STORAGE

RED HAT®
ENTERPRISE LINUX®

VIRTUAL

RED HAT®
CEPH STORAGE

RED HAT®
GLUSTER STORAGE

RED HAT®
ENTERPRISE LINUX®

RED HAT®
VIRTUALIZATION

PRIVATE CLOUD

RED HAT®
CEPH STORAGE

RED HAT®
GLUSTER STORAGE

RED HAT®
OPENSTACK®
PLATFORM

CONTAINERS

RED HAT®
CEPH STORAGE

RED HAT®
GLUSTER STORAGE



PUBLIC CLOUD

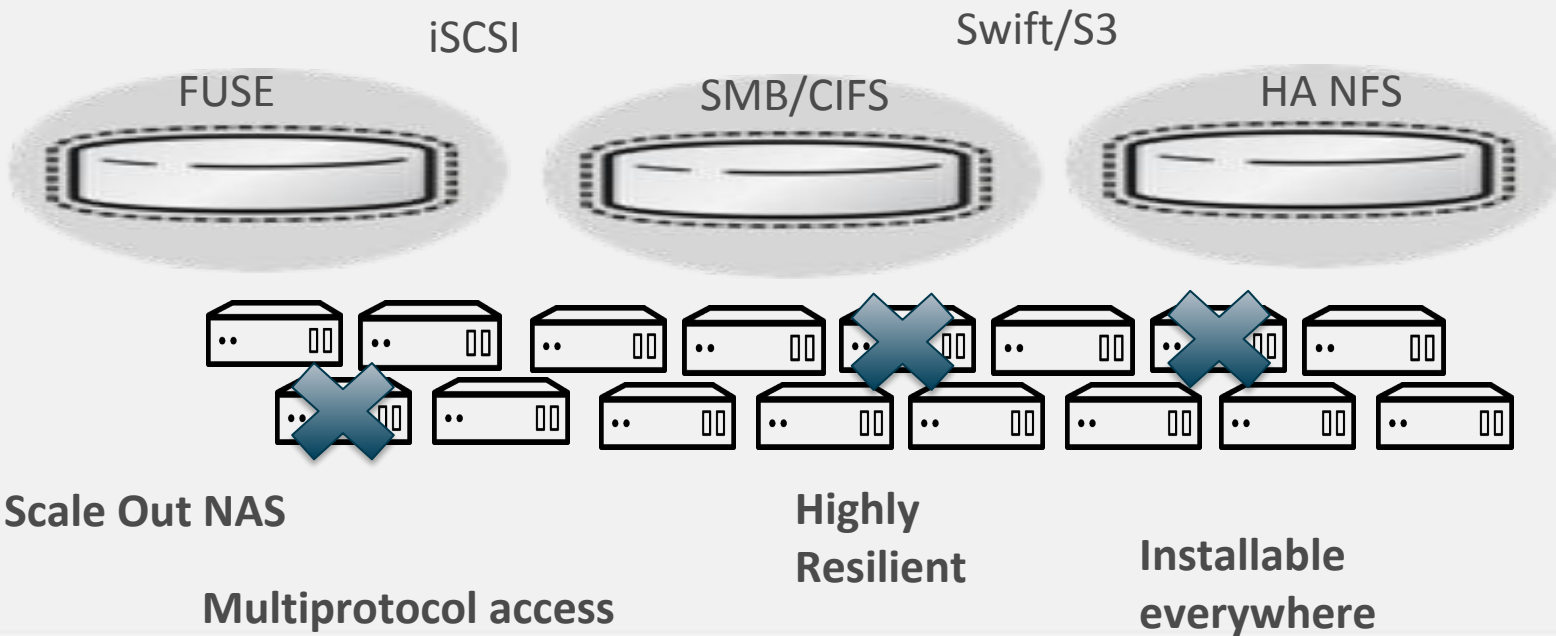
RED HAT®
CEPH STORAGE

RED HAT®
GLUSTER STORAGE

RED HAT®
ENTERPRISE LINUX®



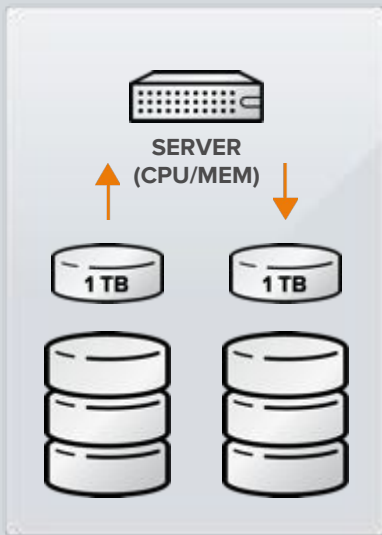
What is Red Hat Gluster Storage



WHAT IS A GLUSTER SYSTEM?

Can be physical, virtual or cloud

PHYSICAL



VIRTUAL/CONTAINER



CLOUD

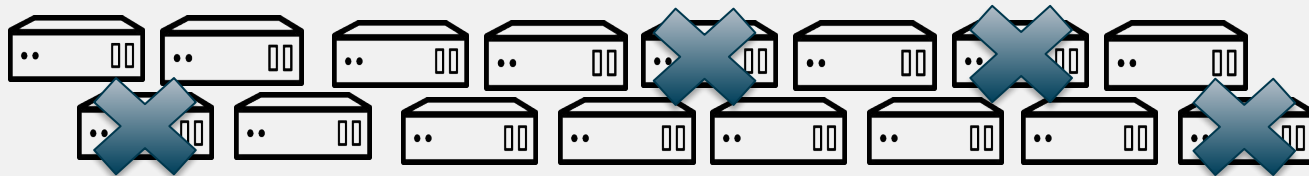


What is Red Hat Ceph Storage

S3/Swift

RBD/ISCSI

FUSE/NFS



Scale Out Object
storage

Multiprotocol access

Highly
Resilient

Extremely scalable

SDS POPULAR USE CASES

OPENSIFT CONTAINER STORAGE

Scalable, flexible persistent storage
for, and in, containers

PRIVATE CLOUD INFRASTRUCTURE

Elastic storage for OpenStack virtual
machines and tenant applications

ELASTIC DATA LAKES

Massively scalable storage enabled for
big data analytics frameworks

HYPERCONVERGENCE

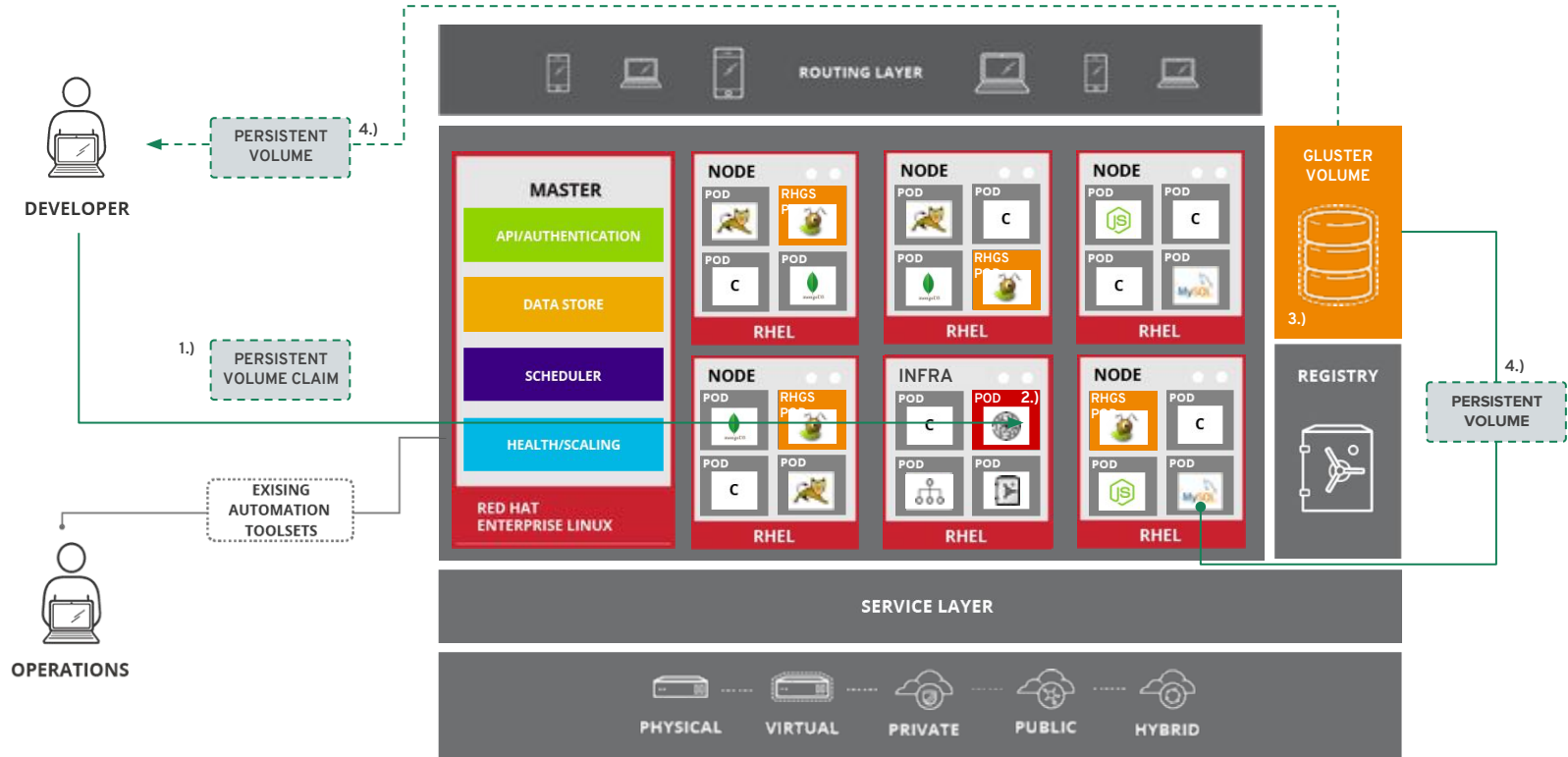
Compute and storage tightly integrated
for ROBO, edge, and IoT

UNSTRUCTURED DATA

Cost effective, scale out storage for
rich media and content delivery

Openshift Container Storage

CONTAINER-NATIVE STORAGE ON OPENSSHIFT



Private Cloud Infrastructure

Your private cloud need storage

PUBLIC CLOUD : AWS



Compute

EC2

Storage

EBS

(Block)

S3

(Object)

EFS

(File)

PRIVATE CLOUD : OpenStack



Compute

Nova

(KVM)

Storage

Cinder

(Block)

Swift

(Object)

Manila

(File)



ceph

RBD



ceph

RBD



ceph

RGW



ceph

CephFS

Unified Storage Inside

Elastic Shared Data Lakes

The Evolution of Big Data Analytics - the new way

Analytics vendors focus on analytics, Red Hat on infrastructure.

They do
analytics
software



Red Hat does
infrastructure
software



redhat.

OpenStack or OpenShift Provisioned Compute Pool

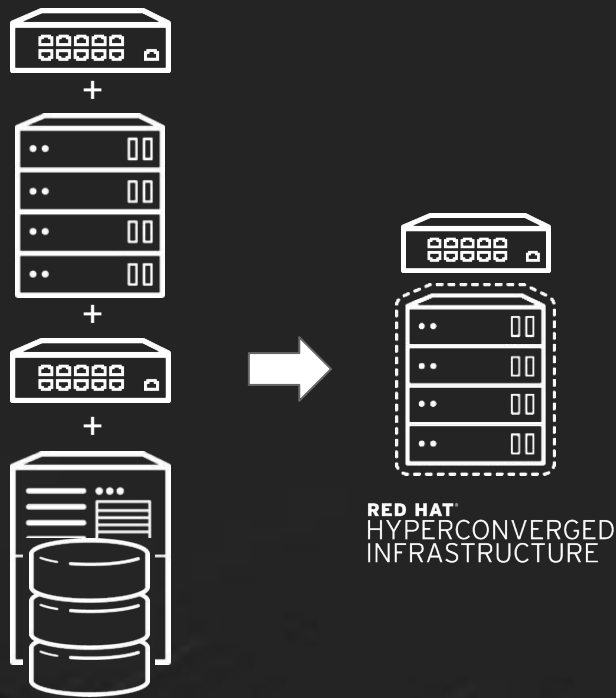


redhat.

Shared Datasets on Ceph Object Store

Hyperconvergence

RHHI: INFRA CONSOLIDATION & OPERATIONAL EFFICIENCY



Traditional Architecture

- Single budget for compute & storage
- One team to manage infrastructure
- Simplified planning & procurement
- Streamlined deployment & management
- Single support stack for compute and storage

Red Hat Hyperconverged Infra 4C

- Red Hat Openstack +Red Hat Ceph
- Multiple hardware configurations possible, minimum 6 nodes
- Possible to build storage only nodes
- Scales to 30 nodes (and beyond)
- Possible through containerisation of services within OSP and Ceph.
- One common life cycle



Unstructured Data

UNSTRUCTURED DATA

Massively-scalable, flexible, and cost-effective storage for image, video, and audio content

Unstructured image, video, and audio content

Red Hat Gluster Storage Cluster

Red Hat Ceph Storage Cluster

FEATURES

- Support for multi-petabyte storage clusters on commodity hardware
- Erasure coding and replication for capacity-optimized or performance-optimized pools
- Support for standard file & object protocols
- Snapshots and replication capabilities for high availability and disaster recovery

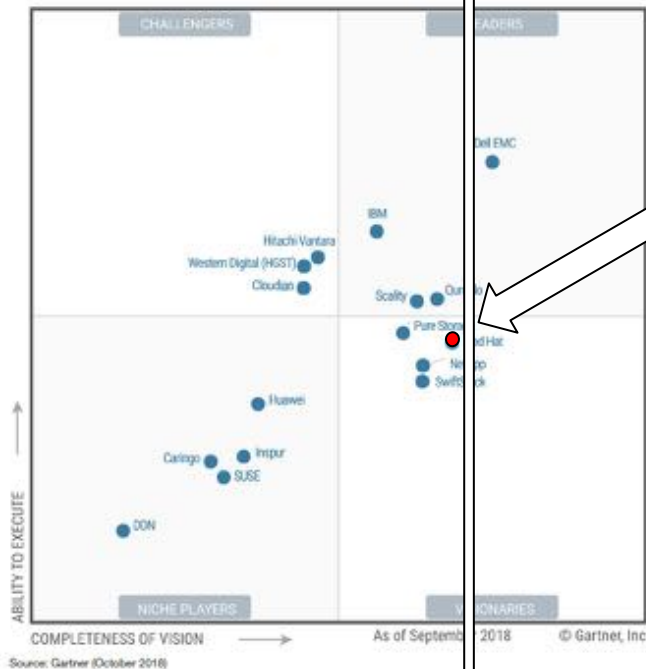
BENEFITS

- Provides massive and linear scalability in on-premise or cloud environments
- Offers robust data protection with an optimal blend of price & performance
- Standard protocols allow access to broadcast content anywhere, on any device
- Cost-effective, high performance storage for on-demand rich media content

GARTNER MAGIC QUADRANT



Figure 1. Magic Quadrant for Distributed File Systems and Object Storage



This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from <https://www.gartner.com/doc/3891780/magic-quadrant-distributed-file-systems>.

Visionary in the Magic Quadrant for Distributed File Systems and Object Storage

Red Hat Storage ranked as a Visionary
three years in a row.

Positioned well in completeness of vision and ability to execute.

Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

KEY TAKEAWAYS



Path 4: Lay the foundation for software-defined storage

- Storage is changing and becoming software-defined.
- Red Hat® Storage is open, community-based, software-defined storage for the enterprise.
- Red Hat® Gluster Storage is ideal for container-native storage and enterprise file sharing.
- Red Hat® Hyperconverged Infrastructure is a tight integration of Red Hat Gluster Storage and Red Hat® Virtualization
- Red Hat® Ceph Storage is a tightly integrated with Red Hat® OpenStack, enabling customers to build private clouds and Storage as a Service at scale.



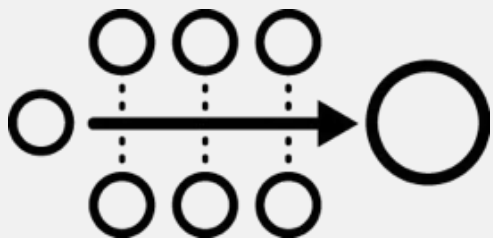
redhat.



PATH 5: MANAGE I.T. WITH AUTOMATION

TYPICAL SERVICE PROVISIONING

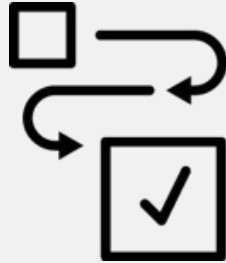
MANUAL PROCESSES RESULT IN LONG LEAD TIMES



- Process requests for IT resource
- Clarify request and collect needed information
- VM creation from template
- Configuration to desired state
- Security and compliance process
- Non-work time for weekends, emergencies, etc.

IMPROVING THE PROCESS

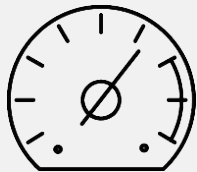
WHAT IF YOU COULD...



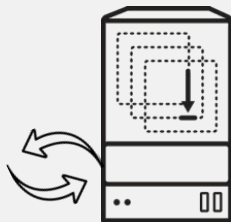
- Self-serve
- Automate
- Eliminate downtime

BENEFITS OF SERVICE AUTOMATION

MANUAL PROCESSES RESULT IN LONG LEAD TIMES



Faster service
delivery



Deploy
consistently



Ops control



Policy control

REAL ECONOMIC IMPACT

20x

more service requests
fulfilled

55%

less staff time discovering
and optimizing IT resources

\$11,937

in annual benefits
per 100 users

92%

less staff time
per delivery of service
requests

37%

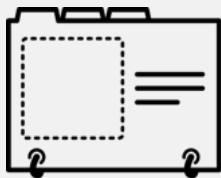
faster app development
life cycle

436%

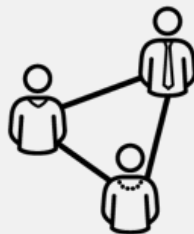
5-year ROI

ACCELERATING SERVICE DELIVERY

DELIVER SERVICES IN MINUTES WITH AUTOMATED SERVICE PROVISIONING



Self-service
catalog



Automated
approval workflow



No downtime
for weekends,
emergencies, etc.

WHERE ONE RED HAT CUSTOMER STARTED

10 years of time saved



CASE STUDY: COX AUTOMOTIVE



Challenge:

- Provide IT systems quickly to developers and business units
- Standardize deployed systems to meet all corporate security policies

Solutions:

- Red Hat® Ansible Automation (on OpenStack® infrastructure)

Results:

- Provide in minutes what used to take weeks
- Ensure systems provided meet corporate security requirements

RED HAT SOLUTIONS

INTEGRATION AND AUTOMATION



Fast, repeatable
configuration for
virtual resources

RED HAT®
CLOUDFORMS

Automation,
orchestration,
and self-service

RED HAT®
SATELLITE

Provision and update
hosts and VMs

RED HAT SERVICE PROVISIONING

HYBRID CLOUD MANAGEMENT AND AUTOMATION

RED HAT® CLOUDFORMS

Deliver services across your hybrid cloud

- Hybrid cloud management
- Self-service provisioning
- Policy-driven compliance

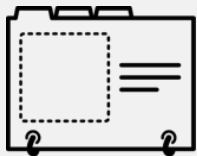


Centralize automation governance

- Centralized control
- Team and user delegation
- Audit trail

RED HAT® CLOUDFORMS & RED HAT® ANSIBLE AUTOMATION

COMPLETE SELF-SERVICE AND AUTOMATION FOR I.T. PROCESSES



Visibility, efficiency, and optimization

Improve resource utilization
and operational efficiency



Self-service and service management

Automate and delegate
service delivery processes,
saving time and money



Compliance and governance

Responsibly enable users
and developers, without
being in the way

A background image showing two people, a man and a woman, working at a desk with multiple computer monitors. The image is overlaid with a semi-transparent blue filter. The woman is pointing at a monitor, and the man is looking at it. There are papers, a keyboard, and a calculator on the desk.

DEMO

Accelerate service delivery through self-service
and automate IT processes.

KEY TAKEAWAYS



Path 5: Manage IT with automation

- IT services can be delivered rapidly via a self-service portal.
- Automating IT processes, like service provisioning or problem identification and remediation, saves time.



redhat.



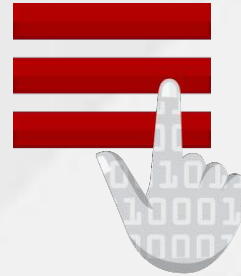
PATH 6: IMS - Infrastructure Migration Solution

TRENDS IN DIGITAL TRANSFORMATION



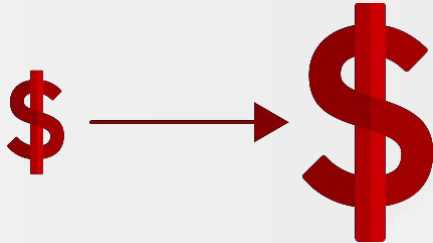
87%

anticipate that their industries
will be disrupted by
digital trends to a great or
moderate extent.¹



77%

say that **technology is one of
the top 3 influencers**
transforming stakeholder
expectations for the business.²



16% to 37%

CIOs expect digital revenue to grow from 16 to 37 percent
in the next 5 years.³

Source 1: MIT Sloan Management Review and Deloitte, Aligning the Organization for Its Digital Future, July 2016. <http://sloanreview.mit.edu/projects/aligning-for-digital-future/>

Source 2: Survey of 1,409 CEOs in 83 countries by PricewaterhouseCooper, 19th Annual Global CEO Survey, January 2016. <http://www.pwc.com/gx/en/ceo-survey/2016/landing-page/pwc-19th-annual-global-ceo-survey.pdf>

Source 3: CIO Survey (n=609), 2,944 CIOs in 84 countries. Graphic created by Red Hat based on Gartner research. Building the Digital Platform: The 2016 CIO Agenda, Published: 02 October 2015.

http://www.gartner.com/imagesrv/cio/pdf/cio_agenda_insights_2016.pdf

EXAMPLES OF DIGITAL TRANSFORMATION



Sped Up..

BBVA updated its IT systems with Red Hat to support digital transactions, ultimately delivering faster, better financial services for customers.



Maximised..

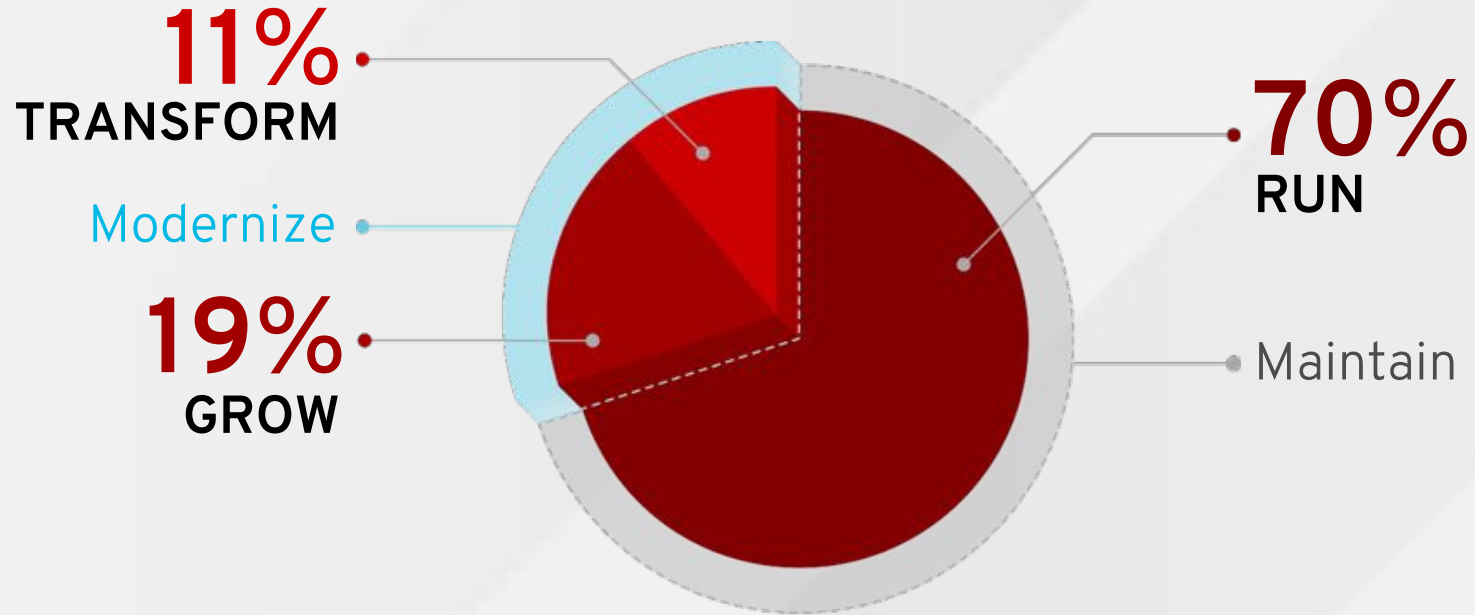
efficiency and reduced hardware footprint. High speed provisioning delivers in minutes instead of weeks, thanks to the agility of Red Hat Virtualization and unified management



Improved..

competitiveness, and customer satisfaction through improved time to market, by streamlining the flow of exciting new products

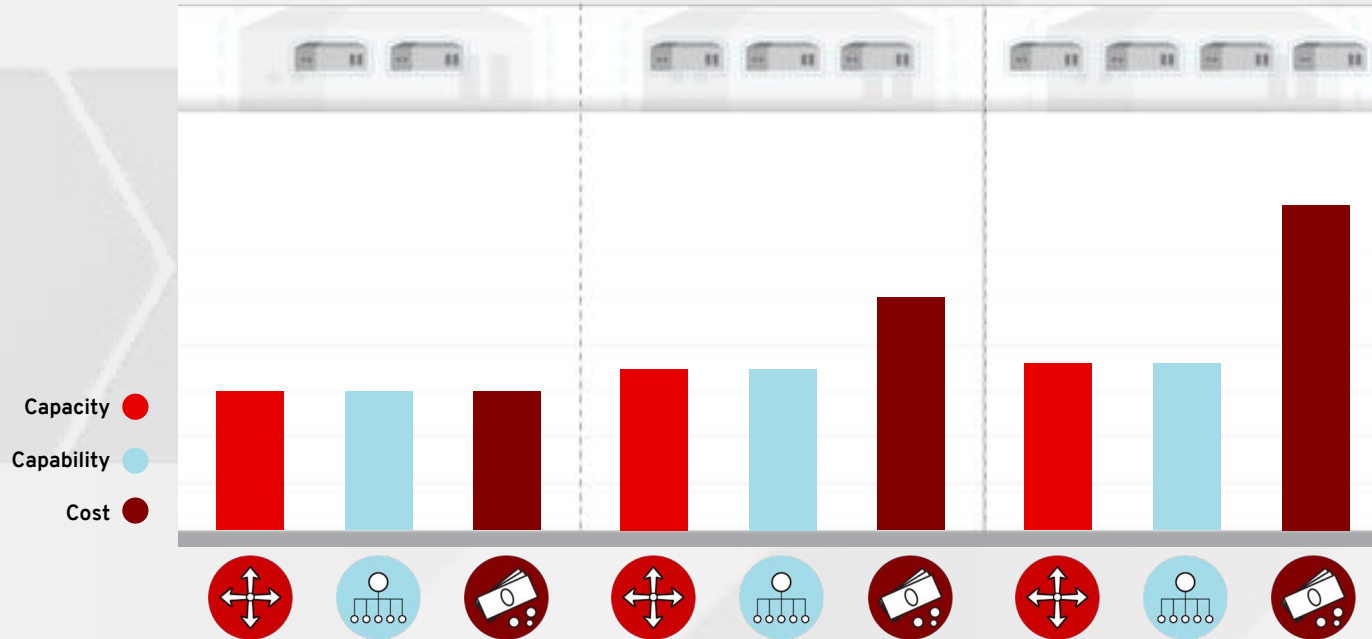
MAINTAIN AND MODERNIZE



Source: Graph created by Red Hat based on Gartner research. Potter, Kurt, Sanil Solanki, and Ken McGee, Run, Grow and Transform the Business IT Spending: Approaches to Categorization and Interpretation. Gartner G00308477, 27 June 2016

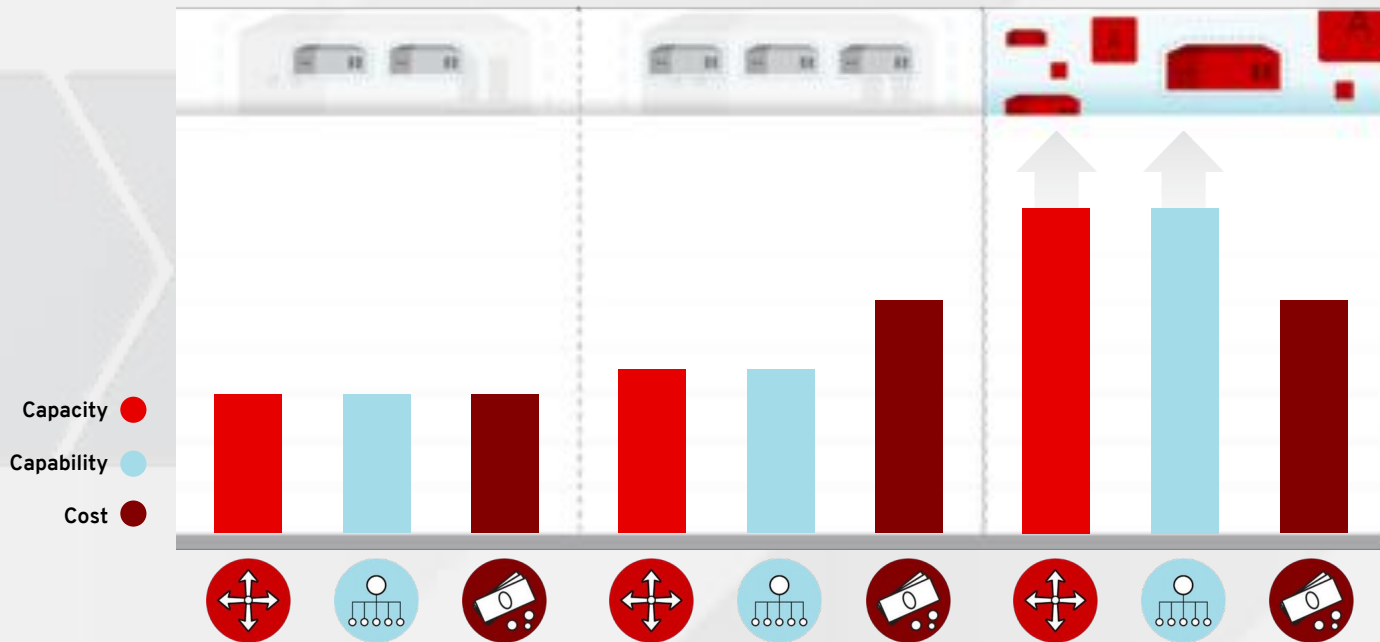
STATUS QUO

Continually increasing costs, limited capacity, virtual machine only

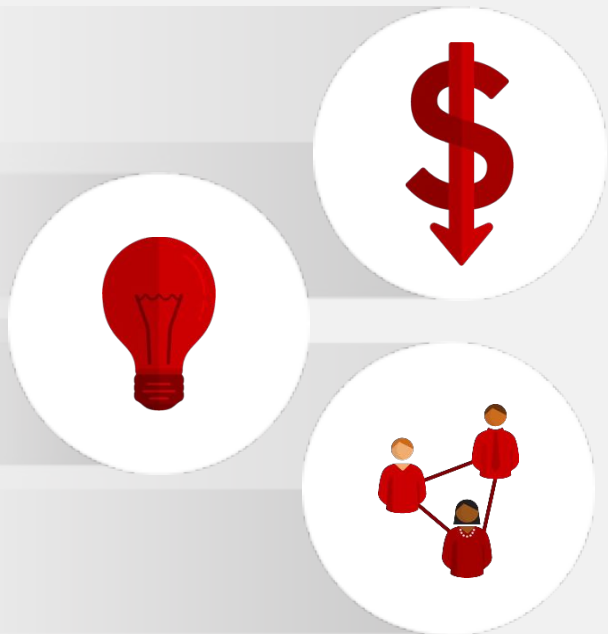


MODERNIZE AND MIGRATE

Decrease cost, increase capacity, embrace containers



INFRASTRUCTURE MIGRATION



Invest in Transformation

Re-invest savings into multi-cloud management, automation, or containers.

Cost savings

Typical cost savings of 40-50% over 3 years over long-term commitments with proprietary virtualization.

Proven methodology

Proven methodology to architect, automate, and execute large-scale, mission critical workload migrations.

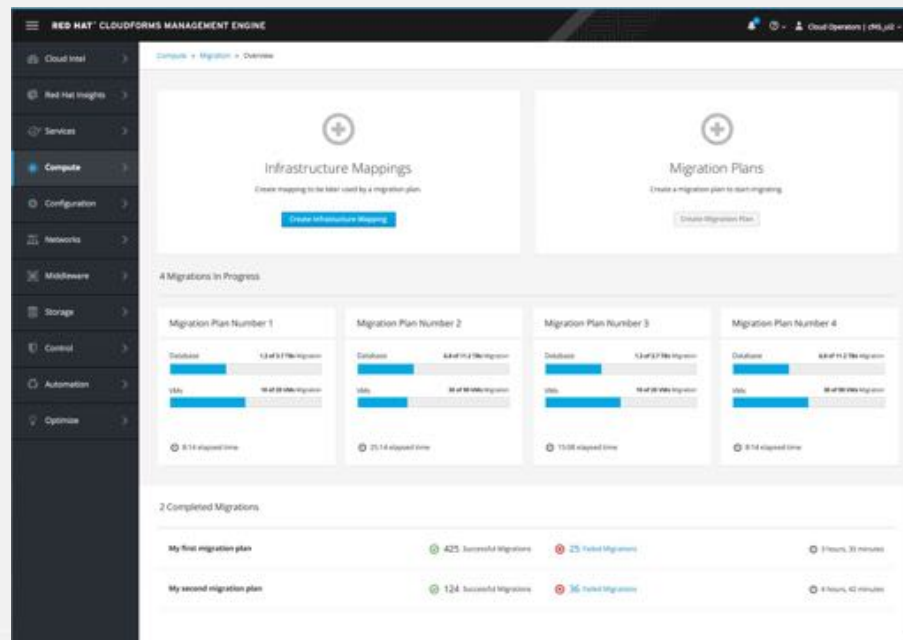
Source: Graph created by Red Hat based on Gartner research. Potter, Kurt, Sanil Solanki, and Ken McGee, Run, Grow and Transform the Business IT Spending: Approaches to Categorization and Interpretation. Gartner G00308477, 27 June 2016

ACCELERATE THE MIGRATION JOURNEY

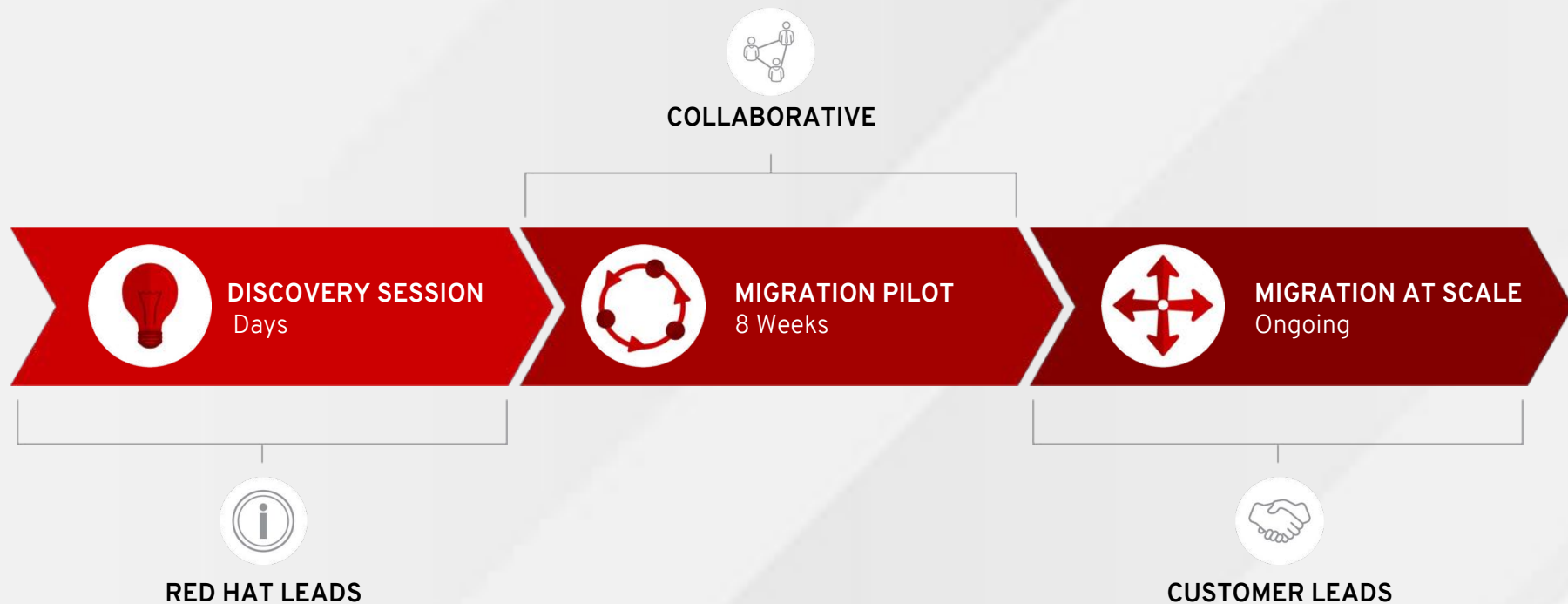
EASY TOOLING + STEP-BY-STEP PRESCRIPTIVE APPROACH



CloudForms Infrastructure Migration Capability
[Online Demo](#)



MIGRATION JOURNEY



CUSTOMER SUCCESS STORY



CRITICAL VIRTUALIZATION AND DEV/TEST

“We use Red Hat Virtualization to create our own cloud so that our developers can use it to build their own virtual machines and hence build and control environments as they wish.”

RICHARD DAWSON
UNIX and Linux infrastructure consultant
International Airlines Group

BENEFITS

- ▶ Prepare for future technologies without abandoning existing infrastructure investment
- ▶ Highly available infrastructure that can support 24/7 e-commerce traffic
- ▶ Internal cloud capabilities with a single pane of glass management console



**REDUCED COST
AND INVESTED IN
DIGITAL TRANSFORMATION**

INDUSTRY

Healthcare

SIZE

22 Hospitals and 1400 physicians
at 185 clinics.

EXISTING INFRASTRUCTURE

1700 virtual machines on
VMware vSphere

MIGRATION

CloudForms + Ansible to migrate
to Red Hat Virtualization

PROBLEM

Enterprise License Agreement (ELA) posed
significant price increases with little additional value.

“

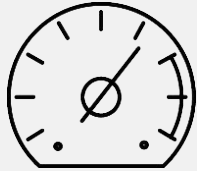
As we look to the future, it was imperative that we be able to bring IT automation to all aspects of our business, and that our infrastructure was flexible enough to do so. After many considerations, an open source environment was the best option to support our needs. Red Hat has helped us in this transition, providing solutions with an automation-centric approach in mind that have helped to streamline operations and cut costs.”

BRET LAWSON

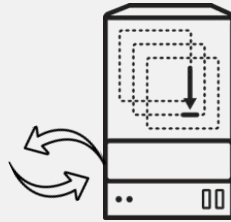
DIRECTOR
INFRASTRUCTURE & OPERATIONS INTERMOUNTAIN HEALTHCARE

BENEFITS OF IMS

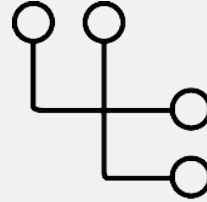
MIGRATE LARGE WORKLOADS IN A CONSISTENT WAY



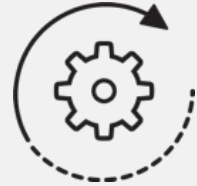
Fast migration
reduces cost



Migration at scale



Map resources



Automated
migration
reduces risk

<https://red.ht/possibilities>

A background image showing two IT professionals, a man and a woman, sitting at a desk with multiple computer monitors. The woman is pointing at a monitor while the man looks on. The image is overlaid with a semi-transparent blue filter. The text is centered in white.

DEMO

Migrate VM from vSphere to RHV with CloudForms (IMS)



redhat.



Wrap-up: 6 PATHS TO MODERN INFRASTRUCTURE

BALANCING INNOVATION AND OPTIMIZATION

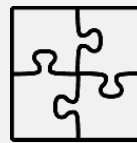
DIGITAL TRANSFORMATION CAN HELP YOUR BUSINESS SUCCEED.



Gain efficiency



Improve productivity



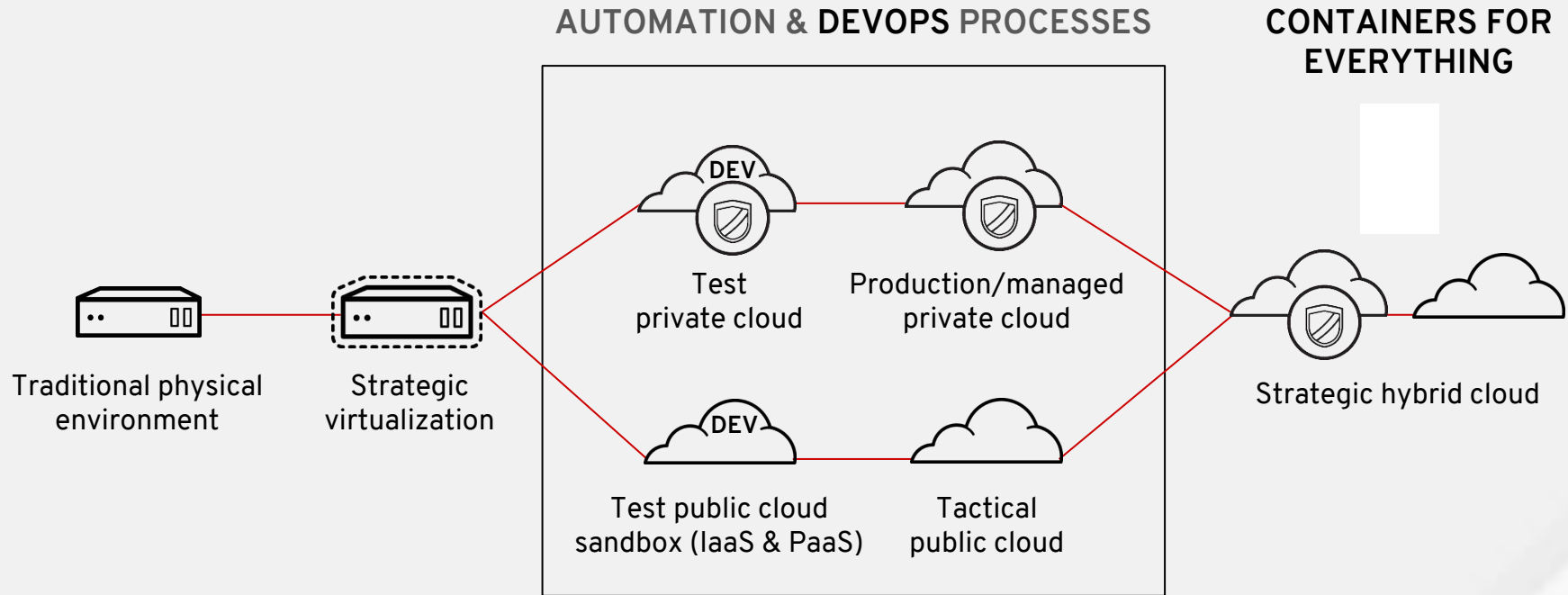
Increase agility



Move faster

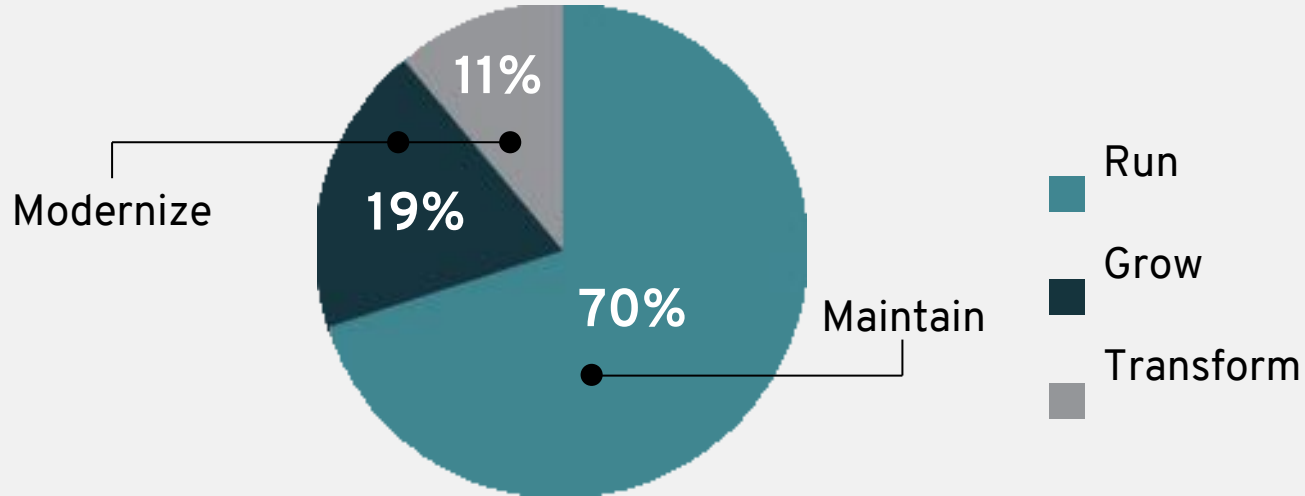
IT'S A DIFFERENT JOURNEY FOR EVERYONE

BUT HERE'S WHAT IT LOOKS LIKE FOR ONE FINANCIAL SERVICES CUSTOMER



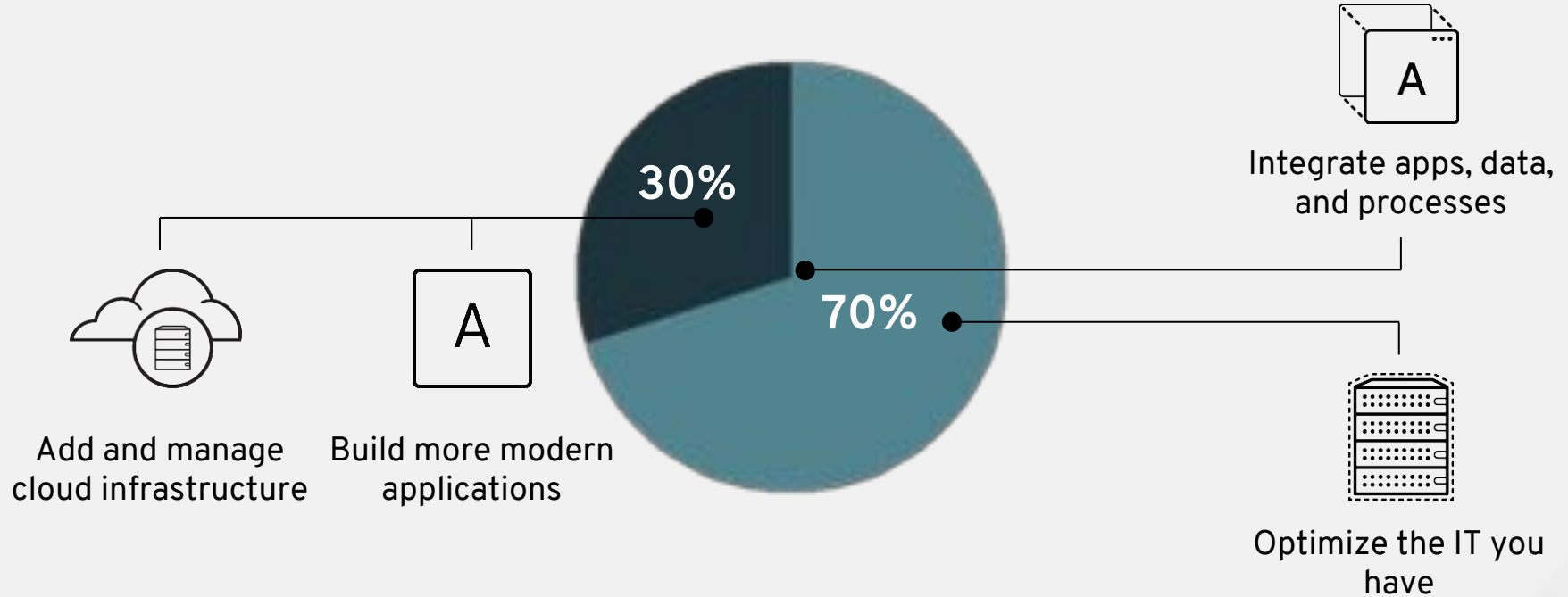
MAINTAIN AND MODERNIZE

I.T. SPENDING TO RUN, GROW, AND TRANSFORM THE BUSINESS, CROSS-INDUSTRY



INNOVATION VS. OPTIMIZATION

THIS IS THE REALITY FOR MOST ORGANIZATIONS.



WHY RED HAT?

ABOUT RED HAT

More than
90%
of the
FORTUNE
500
use
Red Hat
PRODUCTS
AND
SOLUTIONS*

~13,000
employees
85
offices
35
countries

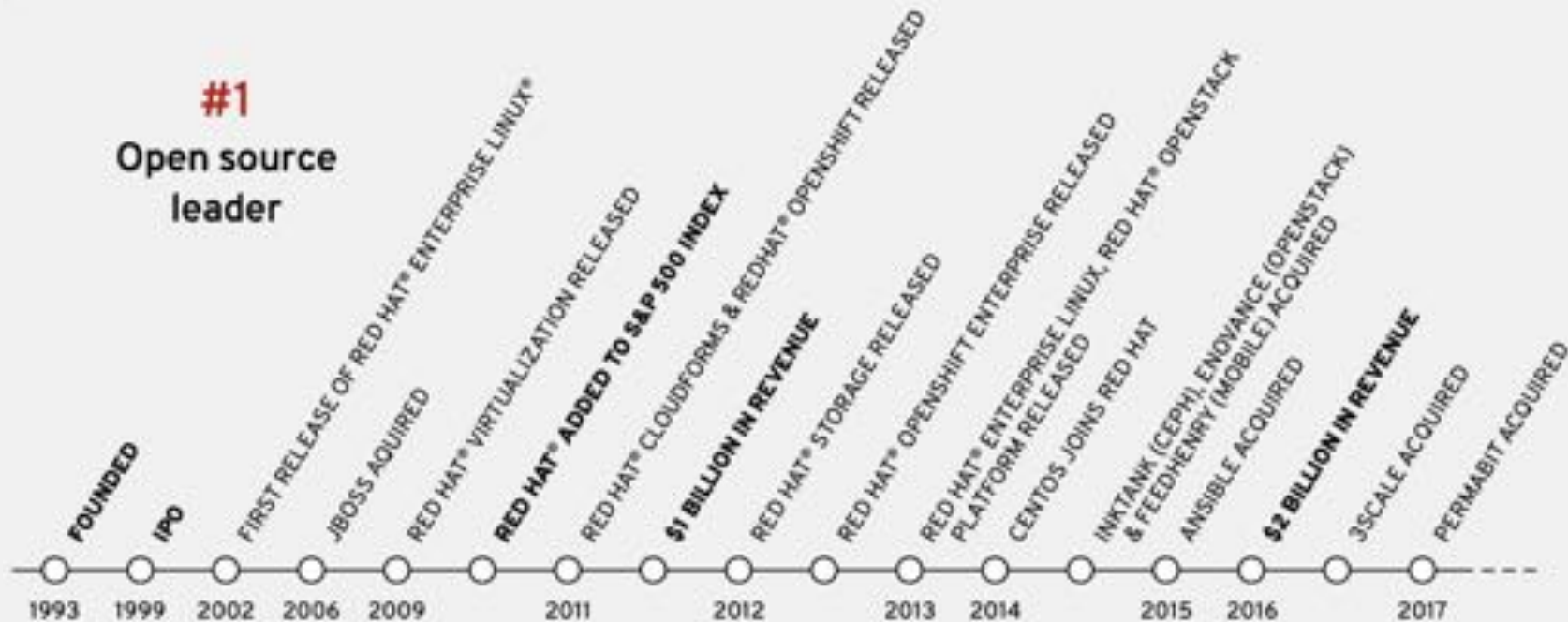
S&P
500
company

NYSE:
RHT

Award-winning **solutions**



RED HAT TIMELINE



FROM COMMUNITY TO ENTERPRISE

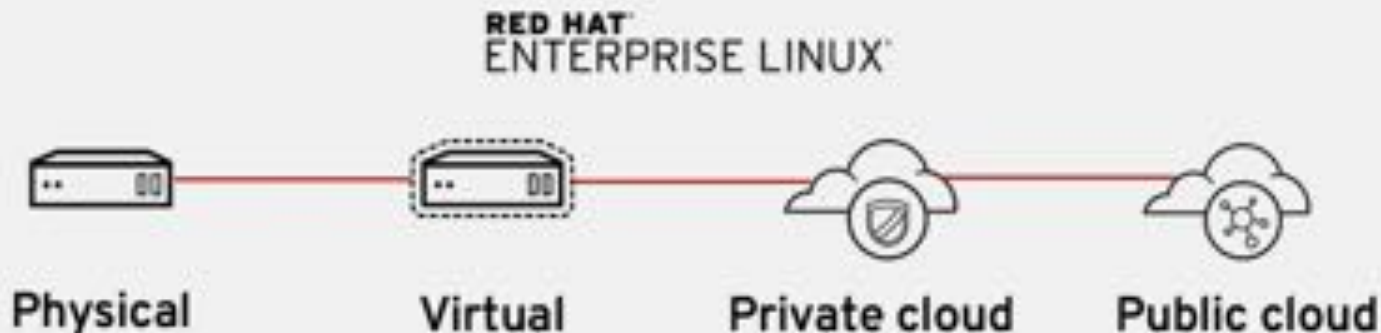


IT'S ABOUT MORE THAN OPEN SOURCE



RED HAT'S VISION: **OPEN HYBRID CLOUD**

THIS IS THE REALITY FOR MOST ORGANIZATIONS.



RED HAT'S VISION: **OPEN HYBRID CLOUD**

ALL KINDS OF APPS AND ENVIRONMENTS, INCLUDING CONTAINERS



RED HAT'S VISION: **OPEN HYBRID CLOUD**

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



A COMPLETE TECHNOLOGY STACK



IT'S ALL HERE

SERVICES

RED HAT
CONSULTING

RED HAT
TRAINING &
CERTIFICATION

RED HAT
SERVICES

DEVELOPER TOOLS

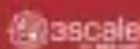
RED HAT JBOSS
DEVELOPER STUDIO



RED HAT
CONTAINER
DEVELOPMENT KIT

APPLICATIONS AND BUSINESS PROCESSES

MIDDLEWARE AND APPLICATION SERVICES



RED HAT JBOSS
BPM SUITE

RED HAT JBOSS
FUSE

RED HAT JBOSS
DATA GRID

RED HAT JBOSS
BUSINESS
APPLICATION PLATFORM

RED HAT JBOSS
BRMS

RED HAT JBOSS
AMQ

RED HAT JBOSS
DATA VIRTUALIZATION

RED HAT
JBOSS APPLICATION
PLATFORM

CONTAINER PLATFORMS



INFRASTRUCTURE SOFTWARE

RED HAT
ENTERPRISE LINUX

RED HAT
ENTERPRISE LINUX
ATOMIC HOST

RED HAT
STORAGE

RED HAT
FORESTACK
PLATFORM

RED HAT
VIRTUALIZATION

PHYSICAL AND CLOUD INFRASTRUCTURE

SECURITY AND MANAGEMENT

RED HAT
INSIGHTS

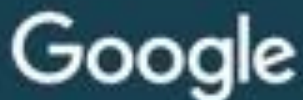


RED HAT
SATELLITE

RED HAT
CLOUDFORMS

A ROBUST PARTNER ECOSYSTEM

Cloud partners



Technology partners



System integrator partners



COMPREHENSIVE SERVICES



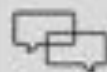
TRAINING AND CERTIFICATION

- 40+ courses
- Hands-on certifications and exams
- Automation with Ansible courses
- Container-based app dev courses
- Red Hat® Learning Subscription



SUPPORT

- Award-winning Customer Portal
- Technical support, available 24x7
- Automated, proactive support tools
- Strategic and technical roadmap planning
- Emerging technology support and guidance



CONSULTING

- Open solutions using Red Hat products
- Architect, consultant, PM expertise
- Both process and IT alignment
- On-site or remote delivery
- Hands-on mentoring



HARDWARE, SOFTWARE, AND CLOUD CERTIFICATION

- Hundreds of public cloud providers
- Thousands of hardware platforms
- Tens of thousands of applications
- Red Hat® Container Certification

THE TRANSFORMATION IS REAL

OUR CUSTOMERS REAP THE BENEFITS.



- Open architecture with OpenStack® and SDN
- Higher transaction volume and less downtime

amadeus

- Collaborative creation of cloud computing platform
- Automated, streamlined operations gets new apps to market faster

RED HAT IS EVERYWHERE

RED HAT® SOLUTIONS POWER LEADING ORGANIZATIONS.

100%

of airlines in the
Fortune Global 500
rely on Red Hat



100%

of telcos in the
Fortune Global 500
rely on Red Hat



100%

of US executive
departments rely
on Red Hat



100%

of financial data
services companies
in the
US Fortune 500
rely on Red Hat



100%

of commercial
banks in the
Fortune Global 500
rely on Red Hat



HELPING YOU ON YOUR JOURNEY

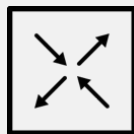
Questions & Answers

WHERE ARE YOU TODAY?

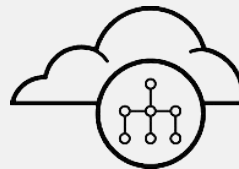
MORE IMPORTANTLY, WHERE DO YOU WANT TO BE TOMORROW?



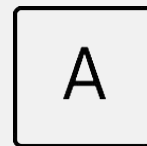
Optimize existing IT
you have



Integrate apps,
data, and processes



Add and manage
cloud infrastructure



Build more
modern applications

Complete your survey, let us help you.

THANKS FOR ATTENDING.