



# BECOMING A DIGITAL LEADER THROUGH CULTURE, PROCESS & TECHNOLOGY

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# THE PATH TO DIGITAL LEADERSHIP

IT TAKES MORE THAN JUST TECHNOLOGY TO MOVE THE BUSINESS FORWARD



## CULTURE

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Collaborative  
Transparent  
Open



## PROCESS

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Agile  
Continuous  
Iterative



## TECHNOLOGY

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Open source  
Hybrid  
Connected

# PROCESS CHANGES & IMPROVEMENT

AS YOU CHANGE CULTURE, UPDATE THE WAYS YOUR TEAMS CONNECT

AGILE

CONTINUOUS

ITERATIVE

AUTOMATED

“The moral is that it is necessary to innovate, to predict the needs of the customer, give him more.”

W. EDWARDS DEMING

# LOOK AT PROCESSES ACROSS THE BUSINESS

DEVELOPMENT, BUSINESS, AUTOMATION, & SECURITY PROCESSES



DEVELOPMENT  
PROCESSES



BUSINESS  
PROCESSES



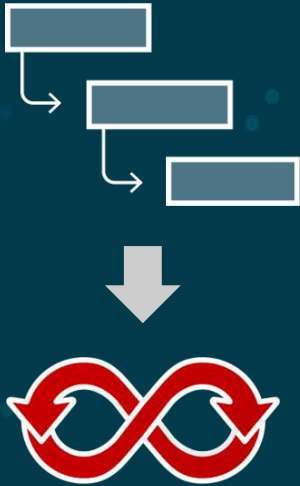
AUTOMATION  
PROCESSES



SECURITY  
PROCESSES

# CHANGE YOUR DEVELOPMENT PROCESSES

AGILE, SCRUM, DEVOPs, CI/CD, & THE MODERN APP LIFE CYCLE



1. **Open your culture.** Transparency, collaboration, & consistency are requirements.
2. **Automate as much as you can.** Eliminating manual tasks gives you time to innovate.
3. **Get the right platform.** Containers are the best way to package apps for DevOps, & container platforms provide the needed automation.

# DEVOPS WORKS BETTER WITH CONTAINERS

BRING TOGETHER CULTURE, DEVELOPMENT PROCESS, & MODERN TECHNOLOGY

## DEVOPS

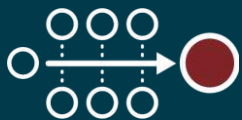
- ✓ Culture centered on collaboration & openness
- ✓ Uses automation to deliver applications faster
- ✓ Requires a dynamic, programmable platform

## CONTAINERS

- ✓ Technology to package & isolate apps with the files they need to run
- ✓ Reduces conflict by separating areas of responsibility
- ✓ Open source way to orchestrate app development & deployment

# BENEFITS OF MODERN BUSINESS PROCESSES

THEY BRING CONSISTENCY, COLLABORATION, & BETTER DECISIONS



## IMPROVED ORCHESTRATION

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Between systems of engagement & systems of record to help knowledge workers collaborate



## INCREASED AUTOMATION

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Centralize & control processes to make manual tasks & decisions consistent



## ENABLED LOB

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Let line of business (LoB) users participate in app development directly



## DEEPER ANALYSIS

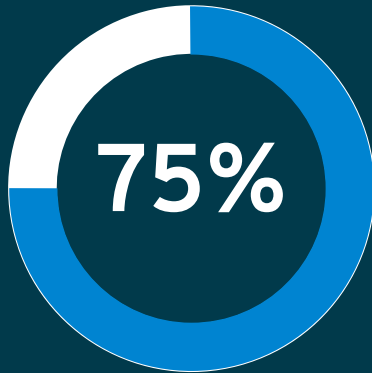
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Collect & analyze data so you can present business metrics & recommended actions

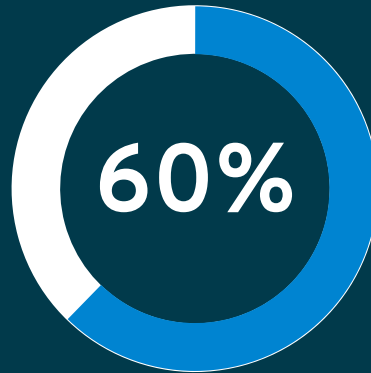
# IMPROVING YOUR PROCESSES HAS REAL ROI

ONE CUSTOMER'S RETURN ON INVESTMENT AFTER UPDATING BUSINESS PROCESSES

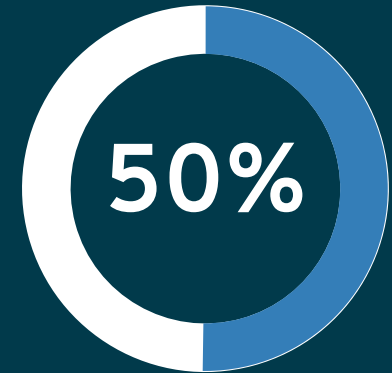
Reduced  
development  
life cycle by



Lowered  
development  
costs



Increased  
market  
reach by





# BARCLAYS ADOPTS AGILE CULTURE

PROCESS STORY: BUILDING MODERN APPS IN A MODERN ORG



A DevOps approach & a modern, self-service aPaaS environment

“We want to become the bank of the future. We want to be more dynamic in the way we produce applications & make better use of our underlying hardware & software, as well as our staff.”

**SIMON CASHMORE**

Head of PaaS Middleware Engineering, Barclays  
May 2017

# BARCLAYS ADOPTS DEVOPS

MODERN APPLICATIONS & AGILE PROCESSES



**OUR VISION:  
TECHNOLOGY**

# MOVING TO OPEN TECHNOLOGY

GIVES YOU THE FLEXIBILITY YOU NEED FOR THE FUTURE

INTEGRATED

HYBRID

OPEN

INTEROPERABLE

Everything must work together.

# BRINGING OPEN SOURCE INNOVATION TO THE ENTERPRISE



# OUR TECHNOLOGY VISION IS OPEN, HYBRID CLOUD

APPS & ENVIRONMENTS ARE INTEROPERABLE & FLEXIBLE

DEVELOPER TOOLING

APPLICATION PLATFORMS



BARE METAL



VIRTUALIZED

INFRASTRUCTURE PLATFORMS



PRIVATE CLOUD

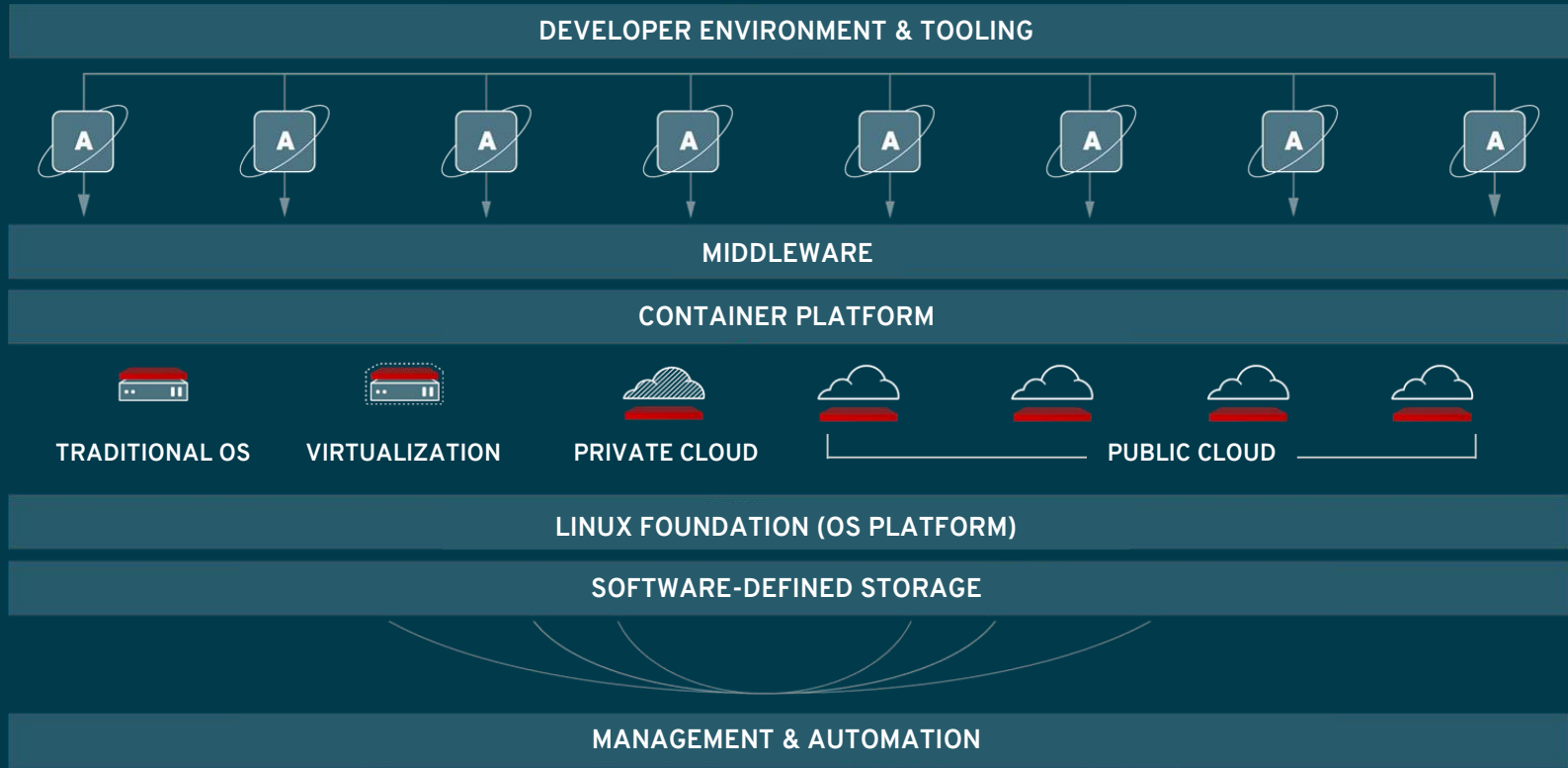


PUBLIC CLOUD

SOFTWARE-DEFINED STORAGE

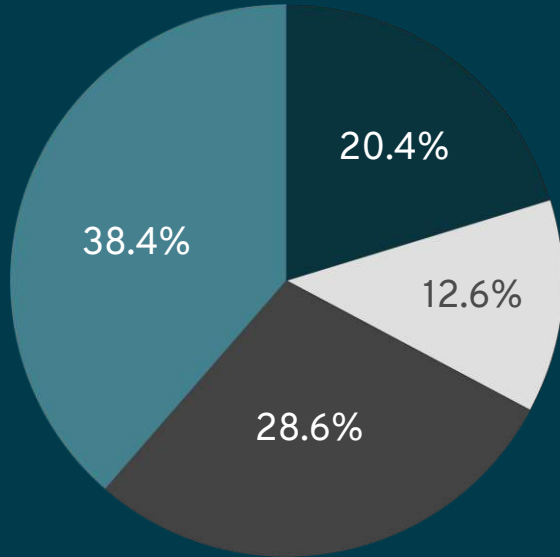
MANAGEMENT & AUTOMATION

# THE FUTURE IS HYBRID & MULTICLOUD



# 62% OF ORGS WILL BE MULTICLOUD

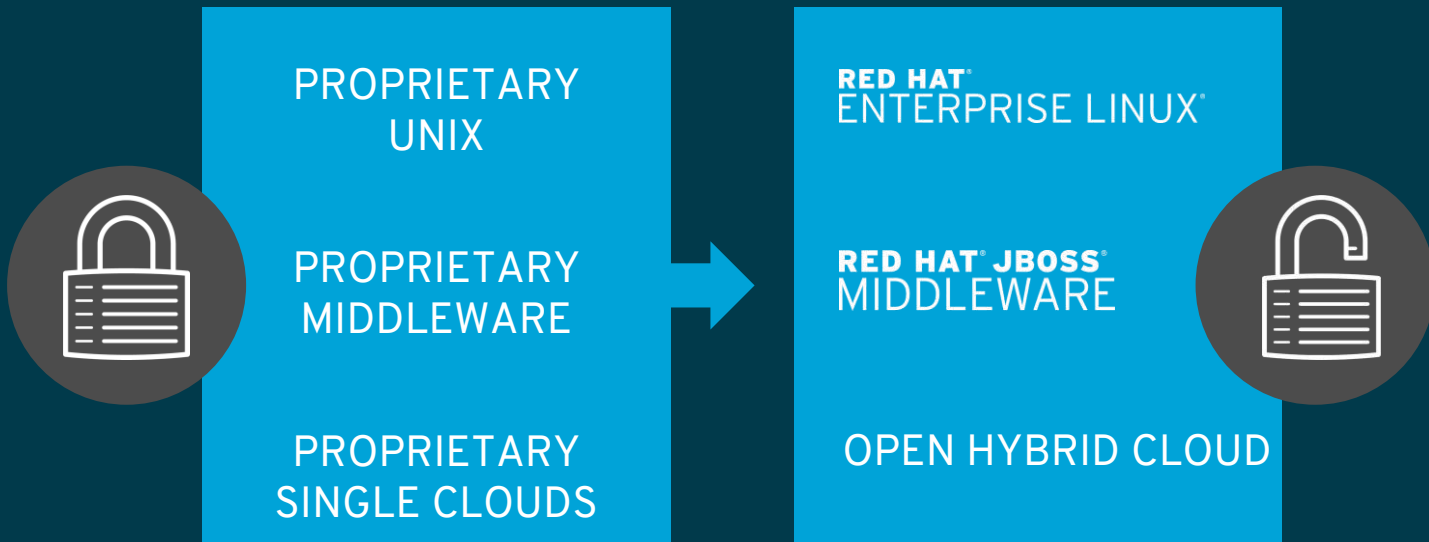
## BUT INTEGRATION LEVELS VARY



- Will focus primarily on a single cloud environment
- Will have multiple different cloud environments, but little to no interoperability between the environments
- Will have multiple cloud environments to migrate workloads or data between cloud environments
- Will have multiple cloud environments where the delivery of a single business function across the different cloud environments is seamless



# WE'VE MADE THIS MOVE TO OPEN BEFORE



# BMW GROUP LOOKS TO SERVICES FOR SPEED

TECHNOLOGY STORY: HYBRID CLOUD WITH MICROSERVICES, CONTAINERS, DEVOPS



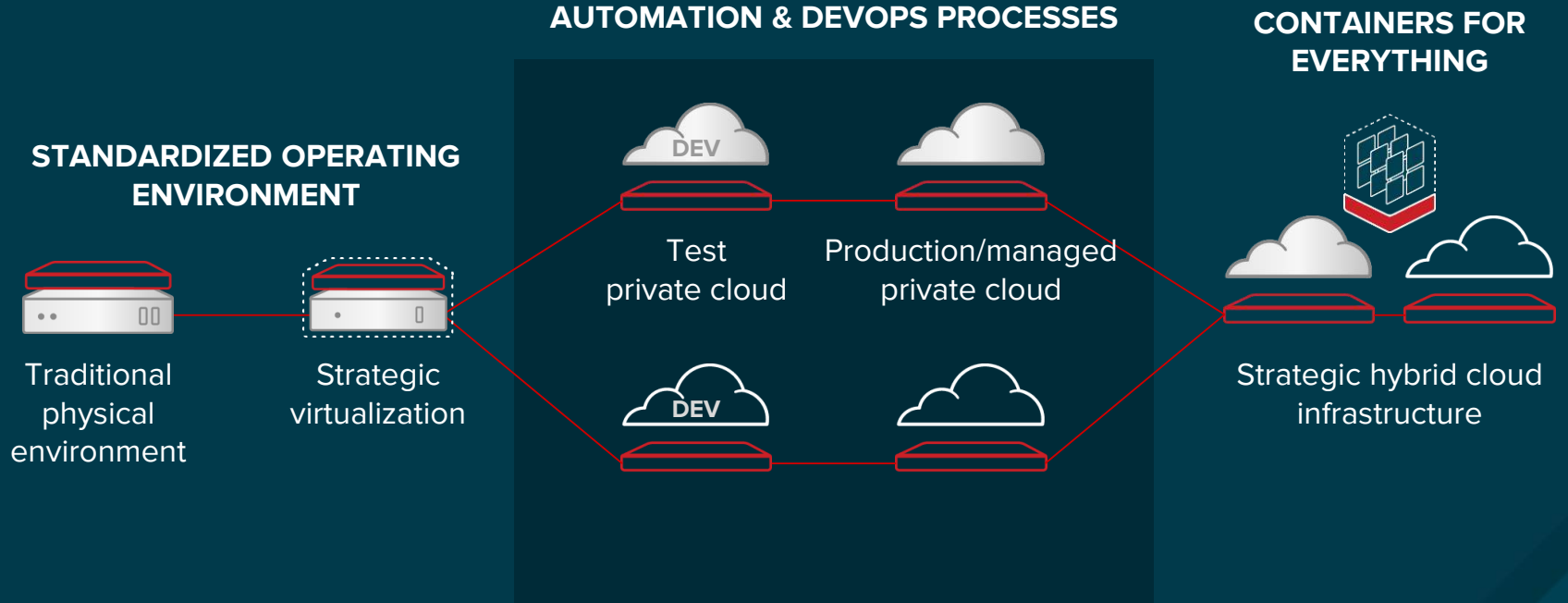
Built a container-centric hybrid cloud platform using agile DevOps methodologies

- Point scaling handles fluctuating demand for BMW ConnectedDrive
- Reliable, continuous service for drivers

# THE JOURNEY TO OPEN HYBRID CLOUD

# IT'S A DIFFERENT JOURNEY FOR EVERYONE

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



# HOW WE GET THERE



LINUX FOUNDATION  
ACROSS ALL  
ENVIRONMENTS



HYBRID CLOUD  
INFRASTRUCTURE &  
MANAGEMENT



CONTAINERS &  
CLOUD-NATIVE  
APP PLATFORMS

# COMMON OPERATING PLATFORM



RED HAT  
ENTERPRISE LINUX

- A common foundation for Red Hat platforms
- The first step toward cloud-based infrastructure, platforms, and applications
- Part of traditional OS, virtualization, private cloud, and all public clouds

# OPEN HYBRID CLOUD INFRASTRUCTURE



HYBRID CLOUD  
INFRASTRUCTURE

- The best approach to cloud computing
- A secure environment, managed across multiple footprints
- Presence of multiple vendors prevents public cloud lock-in

# CONTAINERS ARE LINUX



CONTAINERS

- Next-generation application platform for existing and new apps
- Portable across the hybrid cloud
- Container companies must be Linux companies



# ARCHITECTURAL “FABRIC” CONSIDERATIONS



STANDARD OPERATING  
PLATFORMS &  
PROCESSES



HYBRID CLOUD  
INFRASTRUCTURE &  
MANAGEMENT



CONTAINERS &  
CLOUD-NATIVE  
APP PLATFORMS

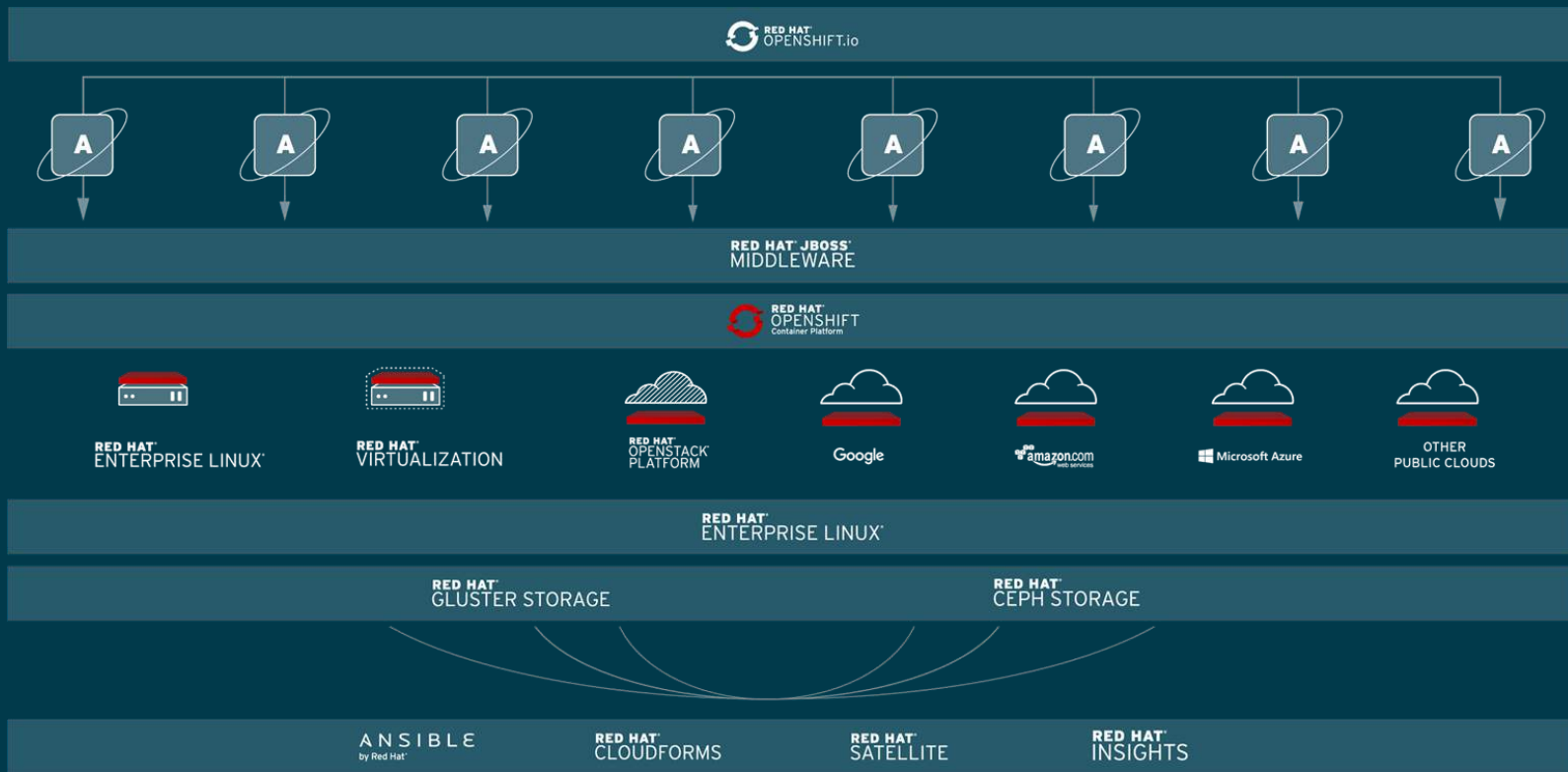
AUTOMATION / ANSIBLE

ORCHESTRATION / KUBERNETES

CONTAINERS / LINUX

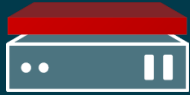
VIRTUALIZATION / KVM

# THE RED HAT PORTFOLIO



# INFRASTRUCTURE

STANDARDS-BASED, OPEN SOURCE SOLUTIONS



## RED HAT ENTERPRISE LINUX

Operating system  
(OS) foundation for  
infrastructure and  
apps



## RED HAT VIRTUALIZATION

Flexible  
virtualization built  
on Linux



## RED HAT OPENSTACK PLATFORM

Datacenter  
software for  
building private  
cloud



## RED HAT OPENSIFT

Container platform  
for developing,  
hosting cloud-native  
applications



## RED HAT STORAGE

Scale-out,  
software-defined  
storage spanning  
the hybrid cloud

# APPLICATION PLATFORMS

MODERNIZE, BUILD, & MANAGE WHAT USERS NEED



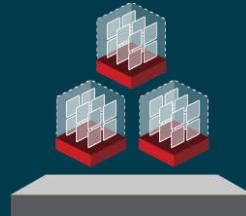
## RED HAT JBOSS EAP

Modernize & build applications using Java EE™ tools & frameworks



## RED HAT OPENSIFT CONTAINER PLATFORM

Develop, test, & host enterprise cloud applications consistently



## OPENSIFT.io

Plan & build cloud services in a complete development environment (IDE) with a hosted, integrated toolchain

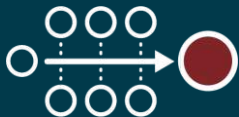


## RED HAT MOBILE PLATFORM

Develop & deploy mobile apps using open, standard toolkits—while centralizing control over security, integration, & policy

# MIDDLEWARE

INTEGRATE, AUTOMATE, & ACCELERATE DATA, APPLICATIONS, & PROCESSES



## INTEGRATION

Red Hat JBoss® Fuse

Red Hat JBoss AMQ

Red Hat 3scale  
API Management



## AUTOMATION

Red Hat JBoss BPM Suite

Red Hat JBoss BRMS



## DATA MANAGEMENT

Red Hat JBoss Data Grid

Red Hat JBoss  
Data Virtualization



## APPLICATION SERVICES

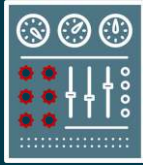
Red Hat JBoss Enterprise  
Application Platform

Red Hat JBoss  
Developer Studio

Red Hat OpenShift  
Application Runtimes

# MANAGEMENT & AUTOMATION

FOR THE MODERN ENTERPRISE



## RED HAT CLOUDFORMS

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Deliver services  
across hybrid cloud  
environments



## RED HAT INSIGHTS

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Proactively identify  
problems & prevent  
critical issues



## RED HAT SATELLITE

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Easily maintain &  
update your Red Hat  
environment



## RED HAT ANSIBLE AUTOMATION

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Automate IT  
processes &  
centralize governance

# COMPREHENSIVE SERVICES

WE CAN HELP YOU, NO MATTER WHERE YOU ARE (OR WHAT YOU NEED)



## TRAINING & CERTIFICATION

Hands-on certifications & exams for 40+ courses, including automation & containers



## SUPPORT

Tools, planning, & support are available 24x7 through our award-winning Customer Portal



## CONSULTING

Design through project management to align process & IT, with on-site or remote delivery



## HARDWARE, SOFTWARE, & CLOUD CERTIFICATION

Certified public cloud providers, hardware platforms, apps, & containers

# OPEN INNOVATION LABS

A HANDS-ON ENVIRONMENT FOR RAPID INNOVATION & REAL BUSINESS RESULTS



## EXPERIMENT

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Rapidly build prototypes,  
do DevOps, & be agile



## IMMERSE YOUR TEAM

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Work side-by-side with experts  
in a residency-style engagement



## INNOVATE

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Bring modern application  
development back to your team



# easiER AG CREATES BETTER PATIENT EXPERIENCE

USING OPEN SOURCE CULTURE FOR FAST INNOVATION





**ANY APPLICATION.  
ANY ENVIRONMENT.  
NO LOCK-IN.**



# THANK YOU



[plus.google.com/+RedHat](https://plus.google.com/+RedHat)



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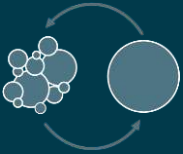
[twitter.com/RedHatNews](https://twitter.com/RedHatNews)



[youtube.com/user/RedHatVideos](https://youtube.com/user/RedHatVideos)

# OUR SUBSCRIPTION MODEL

DELIVERS CONTINUOUS VALUE



## CUSTOMER PORTAL

Award-winning knowledgebase of solutions, docs, & technical guidance



## KNOWLEDGE

Our expertise, plus the knowledge of customers, partners, & communities



## WORLD WIDE

We have support centers & offices across the globe, & materials in multiple languages



## CERTIFICATION

Employers recognize the value of Red Hat training & certification



## PRODUCT SECURITY

Dedicated teams of experts monitor, identify, & remediate potential threats



## EXTENDED LIFE CYCLE

Extended life phase or extended life-cycle support subscriptions may be available