



THE KUBERNETES PLATFORM FOR BIG IDEAS

ABOUT THIS PRESENTATION

CUSTOMIZE TO FIT YOUR NEED & PRESENTATION STYLE

WHO IS THE TARGET

AUDIENCE

Customers interested in containers and Kubernetes

Who want to understand what OpenShift can do for them

Represent AppDev, IT Operations and Architecture teams

WHAT IS THE OVERALL

OBJECTIVE

Provide an overview of OpenShift

Explain our value prop and differentiation

Generate interest for a deeper-dive demo or workshop

HOW DOES IT FIT WITH

OTHER **CONTENT**

[Unlock Business Value with Cloud-native App Delivery](#)

▶ Overview of Red Hat OpenShift

[OpenShift Technical Deep-dive](#)

[OpenShift Roadmap](#) and [more...](#)



... so you want to do
containers and Kubernetes?

YOUR DIFFERENTIATION DEPENDS ON YOUR ABILITY TO DELIVER APPLICATIONS FASTER

Cloud-native
Applications

AI & Machine
Learning

Blockchain

Internet of
Things

Innovation
Culture



CONTAINERS, KUBERNETES, MICROSERVICES & DEVOPS ARE KEY INGREDIENTS

KUBERNETES DONE RIGHT IS HARD

INSTALL

- Templating
- Validation
- OS Setup

DEPLOY

- Identity & Security Access
- App Monitoring & Alerts
- Storage & Persistence
- Egress, Ingress & Integration
- Host Container Images
- Build/Deploy Methodology

HARDEN

- Platform Monitoring & Alerts
- Metering & Chargeback
- Platform Security Hardening
- Image Hardening
- Security Certifications
- Network Policy
- Disaster Recovery
- Resource Segmentation

OPERATE

- OS Upgrade & Patch
- Platform Upgrade & Patch
- Image Upgrade & Patch
- App Upgrade & Patch
- Security Patches
- Continuous Security Scanning
- Multi-environment Rollout
- Enterprise Container Registry
- Cluster & App Elasticity
- Monitor, Alert, Remediate
- Log Aggregation

 75%

of enterprise users identify complexity of implementation and operations as the top blocker to adoption

Source: The New Stack, The State of the Kubernetes Ecosystem, August 2017

THE KUBERNETES NEWS YOU DON'T WANT



- K8s dashboard exposed
- AWS environment with telemetry data compromised
- Tesla's infrastructure was used for crypto mining



Unnecessary Costs



- No security on K8s dashboard
- IT infrastructure credentials exposed
- Enabled access to a large part of Weight Watchers' network



Increased Risk



- K8S and etcd bug introduced to servers during update
- New features and changes deployed cause failures
- Restart backend components leading to full platform outage



Unrealized Value

OPENSHIFT IS KUBERNETES FOR THE ENTERPRISE

Kubernetes
Release



1-3 months
hardening

OpenShift
Release



Security fixes

100s of defect and performance fixes

200+ validated integrations

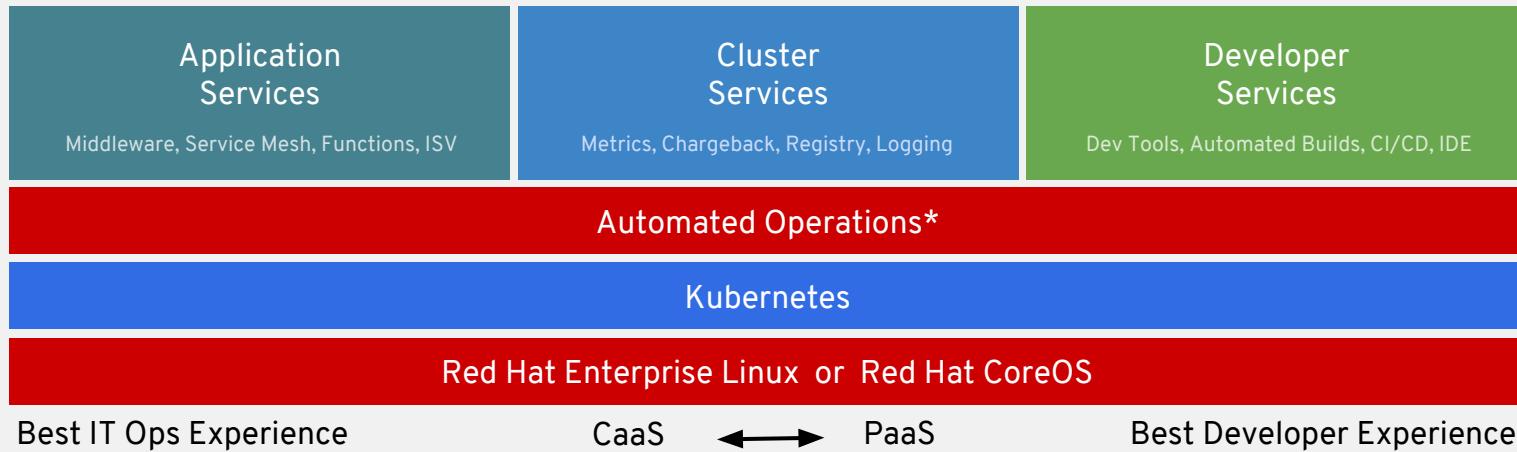
Middleware integrations

(container images, storage, networking, cloud services, etc)

9 year enterprise lifecycle management

Certified Kubernetes

REFERENCE ARCHITECTURE FOR ENTERPRISE KUBERNETES

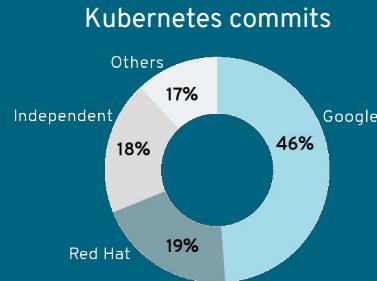


*coming soon

WHY IS RED HAT THE BEST CHOICE?

THE FOUR Cs

CODE



Red Hat is a leading Kubernetes developer & contributor with Google¹.

We make container development easy, reliable, & more secure.

CUSTOMERS



Most reference customers running in production.

We have years of experience running OpenShift Online & OpenShift Dedicated services.

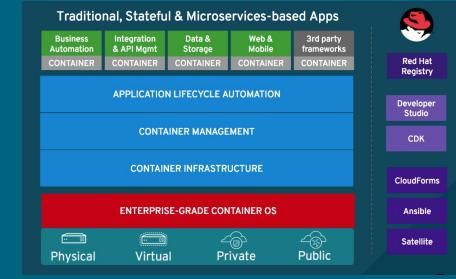
CLOUD



Strong partnerships with cloud providers, ISVs, CCSPs.

We have an extensive container catalog of certified partner images.

COMPREHENSIVE



Our comprehensive portfolio of container products and services includes developer tools, security, application services, storage, & management.



The Kubernetes platform for developers



Developers want to be **productive** and have **choice**

Choice of architectures

Choice of programming languages

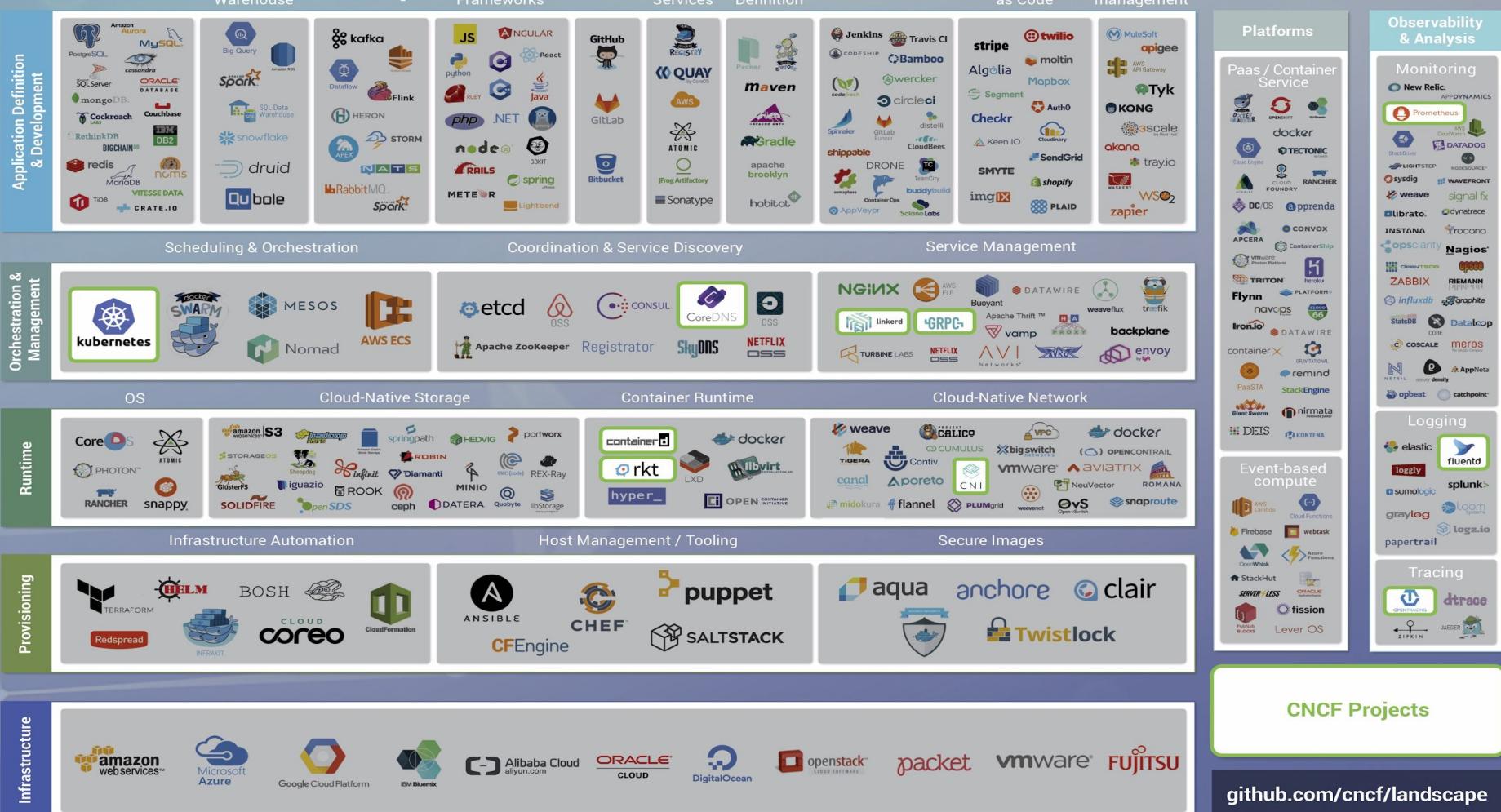
Choice of databases

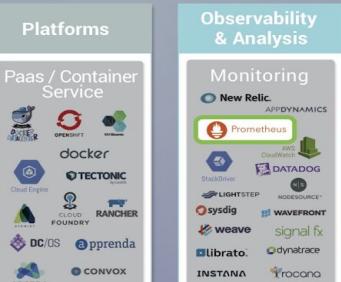
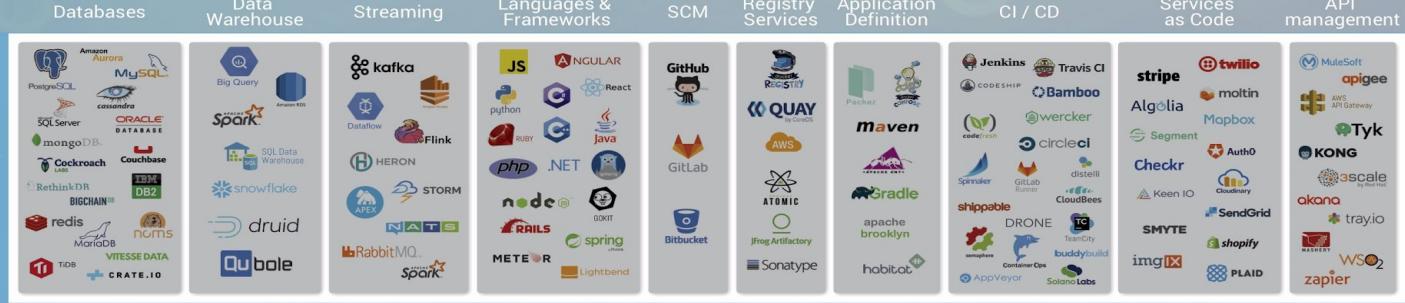
Choice of application services

Choice of development tools

Choice of build and deploy workflows

They don't want to have to worry
about the infrastructure.





THE CLOUD-NATIVE APP DEV CHALLENGE



CNCF Projects

github.com/cncf/landscape

THE POWER OF THE OPENSHIFT ECOSYSTEM

RED HAT PORTFOLIO

Optimized for Containers

RED HAT[®]
OPENSHIFT
Application Runtimes

RED HAT[®]
JBoss[®]
WEB SERVER

RED HAT[®]
JBoss[®]
ENTERPRISE
APPLICATION PLATFORM

RED HAT[®]
DATA GRID

RED HAT[®]
AMQ
RED HAT[®]
FUSE

RED HAT[®]
MOBILE

RED HAT[®]
ANSIBLE[®]
Engine

RED HAT[®]
QUAY
CONTAINER
REGISTRY

RED HAT[®]
DECISION
MANAGER

RED HAT[®]
PROCESS AUTOMATION
MANAGER

RED HAT[®]
API MANAGEMENT

RED HAT[®]
OPENSHIFT
Container Storage

THIRD-PARTY ISV

Red Hat Container Catalog (100s certified)



CLOUD SERVICES

Open Service Broker



Microsoft Azure



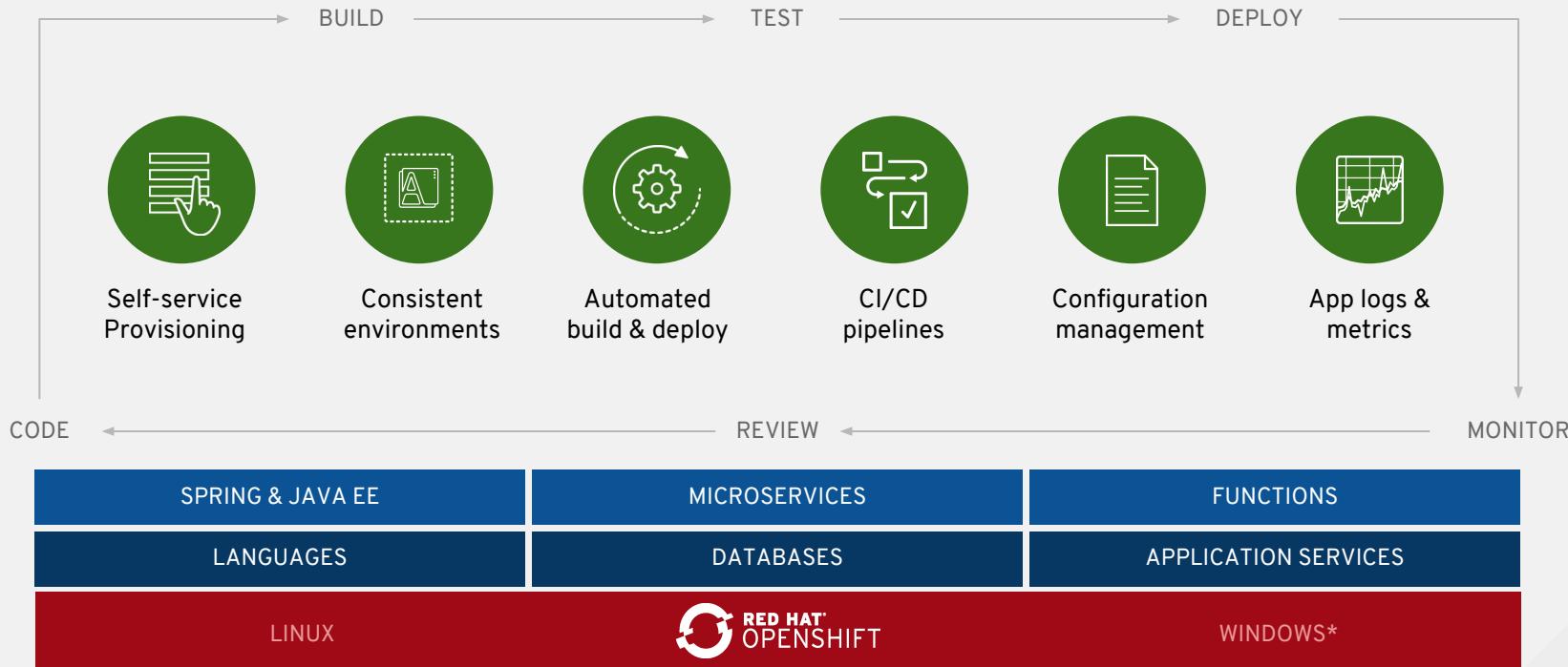
Google Cloud



RED HAT ENTERPRISE LINUX ECOSYSTEM

Hardware, Virtualization, Cloud and Service Provider Certifications

HOW OPENSHIFT ENABLES DEVELOPER PRODUCTIVITY



* coming soon

GENERAL DISTRIBUTION



A photograph of a modern skyscraper at night. The building's facade is made of glass, reflecting the surrounding city lights. The word "BARCLAYS" is prominently displayed in large, illuminated letters across the top of the building. The sky is a deep blue, suggesting it is either dusk or dawn. Some lights are visible through the windows of the building's interior.

**“Team went from dev to prod in 2 months on OpenShift,
and nobody in IT Ops knew. The friction was removed.”**

Simon Cashmore, Head of Middleware PM
Barclays

An aerial photograph of a large shipping port. The foreground and middle ground are filled with numerous shipping containers stacked in organized rows. The containers come in various colors, including white, blue, red, and green. Large yellow gantry cranes are positioned between the stacks, some with their arms extended. In the background, several large cargo ships are visible at the dock, and the water of the harbor extends to the horizon.

The Kubernetes platform for IT Operations



IT Operations needs secure, efficient and controlled processes

Automated* provisioning

Automated installations

Automated security scanning

Automated upgrades

Automated backups

And it needs to integrate with what
you already have.

*coming soon

AUTOMATED CONTAINER OPERATIONS

Fully automated day-1 and day-2 operations

INSTALL

DEPLOY

HARDEN

OPERATE

AUTOMATED OPERATIONS

Infra provisioning

Full-stack deployment

Secure defaults

Multi-cluster aware

Embedded OS

On-premises and cloud

Network isolation

Monitoring and alerts

Unified experience

Audit and logs

Full-stack patch & upgrade

Signing and policies

Zero downtime upgrades

Vulnerability scanning

A CONSISTENT CONTAINER APPLICATION PLATFORM

FROM YOUR DATACENTER TO THE CLOUD



Automated
operations



Multi-tenant



Secure by
default



Network
traffic control



Over-the-air
updates



Monitoring
& chargeback



Pluggable
architecture



BARE METAL, VSPHERE, RHV, OPENSTACK, AWS, AZURE, GOOGLE

COMPREHENSIVE CONTAINER SECURITY



CONTROL

Application
Security

Container Content

CI/CD Pipeline

Container Registry

Deployment Policies



DEFEND

Infrastructure

Container Platform

Container Host Multi-tenancy

Network Isolation

Storage

Audit & Logging

API Management



EXTEND

Security Ecosystem

KUBERNETES OPERATOR FRAMEWORK

AN INNOVATIVE, MORE EFFICIENT WAY TO MANAGE CONTAINERIZED APPLICATIONS AT SCALE

AUTOMATED LIFECYCLE MANAGEMENT



Operators codify operational knowledge and workflows to automate lifecycle management of containerized applications with Kubernetes

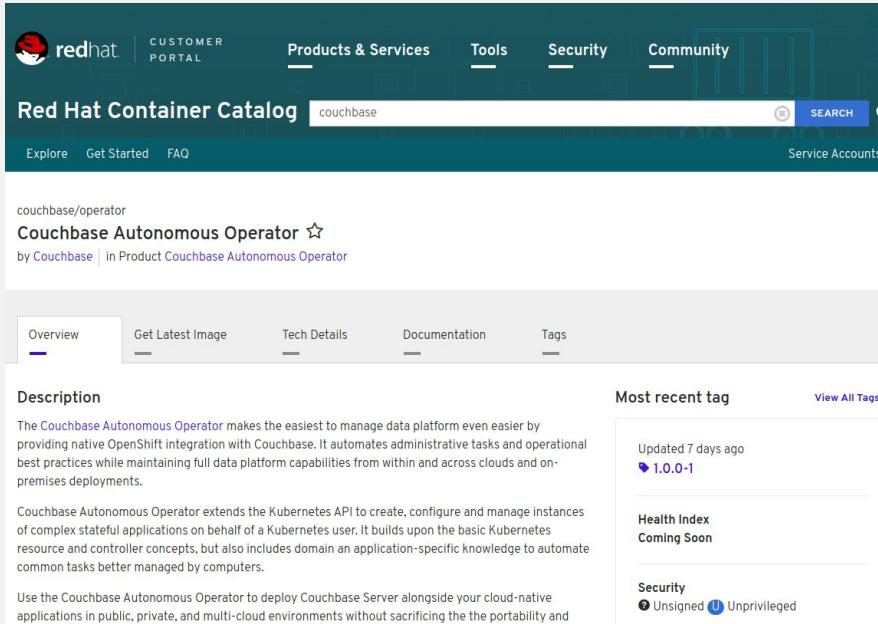
THE INDUSTRY IS ALIGNING BEHIND THE KUBERNETES OPERATOR FRAMEWORK



60+ Certified ISV Operators in Red Hat Early Access Program

COUCHBASE AUTONOMOUS OPERATOR

The Couchbase Autonomous Operator deploys Couchbase Server alongside your cloud-native applications in public, private, and multi-cloud environments without sacrificing the portability and manageability of your data.



The screenshot shows the Red Hat Container Catalog interface. At the top, there's a navigation bar with the Red Hat logo, 'CUSTOMER PORTAL', and links for 'Products & Services', 'Tools', 'Security', and 'Community'. Below the navigation is a search bar with the term 'couchbase' and a 'SEARCH' button. The main content area displays a card for the 'Couchbase Autonomous Operator'. The card includes the repository name 'couchbase/operator', the product name 'Couchbase Autonomous Operator' with a star icon, and a note that it's by 'Couchbase' in the 'Product Couchbase Autonomous Operator'. Below the card, there are tabs for 'Overview' (which is selected), 'Get Latest Image', 'Tech Details', 'Documentation', and 'Tags'. The 'Description' section contains text about the operator's purpose of making management easier through native OpenShift integration and automating tasks. The 'Most recent tag' section shows '1.0.0-1' was updated 7 days ago. The 'Health Index' section says 'Coming Soon'. The 'Security' section indicates the status is 'Unsigned Unprivileged'.

couchbase/operator

Couchbase Autonomous Operator ☆

by [Couchbase](#) | in Product [Couchbase Autonomous Operator](#)

Overview Get Latest Image Tech Details Documentation Tags

Description

The Couchbase Autonomous Operator makes the easiest to manage data platform even easier by providing native OpenShift integration with Couchbase. It automates administrative tasks and operational best practices while maintaining full data platform capabilities from within and across clouds and on-premises deployments.

Couchbase Autonomous Operator extends the Kubernetes API to create, configure and manage instances of complex stateful applications on behalf of a Kubernetes user. It builds upon the basic Kubernetes resource and controller concepts, but also includes domain and application-specific knowledge to automate common tasks better managed by computers.

Use the Couchbase Autonomous Operator to deploy Couchbase Server alongside your cloud-native applications in public, private, and multi-cloud environments without sacrificing the portability and

Most recent tag [View All Tags](#)

Updated 7 days ago
1.0.0-1

Health Index
Coming Soon

Security
Unsigned Unprivileged

MORE THAN JUST A KUBERNETES PLATFORM

RED HAT® QUAY CONTAINER REGISTRY

Enterprise image registry with geo-replication, time machine and security scanning

RED HAT® OPENSHIFT Container Storage

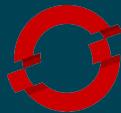
Container-optimized software-defined storage on OpenShift

CONTAINER-NATIVE VIRTUALIZATION*

Single workflow for containers and virtual machines running on OpenShift

* coming soon

ONE PLATFORM FLEXIBLE CONSUMPTION MODELS



**RED HAT®
OPENSHIFT**
Online

SaaS offering to build, deploy,
and scale container applications
in the cloud



**RED HAT®
OPENSHIFT**
Dedicated

Managed service offering on
your choice of AWS, Azure* or
Google



**RED HAT®
OPENSHIFT**
Container Platform

Manage your own secure,
enterprise-grade Kubernetes
platform

* announced for general availability in late 2018

RED HAT SERVICES FOR OPENSHIFT ADOPTION

RED HAT OPEN INNOVATION LABS



EXPERIMENT

Rapidly build prototypes, do DevOps, and be agile.



CATALYZE INNOVATION

Bring modern application development back to your team.



IMMERSE YOUR TEAM

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

TO SHOW YOUR TEAMS HOW OPENSHIFT AND MODERN DEVELOPMENT PRACTICES CAN DRIVE INNOVATION: START WITH A 4- TO 12-WEEK LABS RESIDENCY

RED HAT CONTAINER ADOPTION PROGRAM



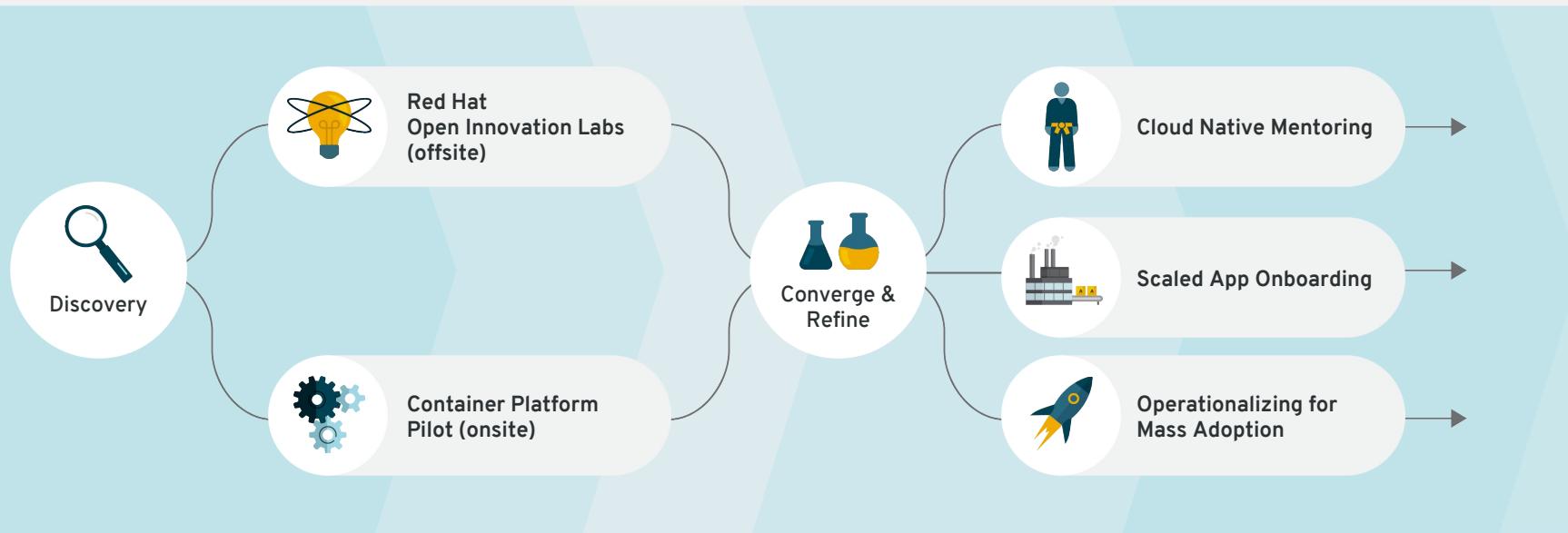
FRAMEWORK FOR SUCCESSFUL CONTAINER ADOPTION AND IT TRANSFORMATION:

Mentoring, training, and side-by-side collaboration to:

- Create a production platform and team to run it
- Create end-to-end container-driven deployment automation
- Scale application onboarding expertise
- Guide new Kubernetes-native development
- Align business with IT through included Red Hat Open Innovation Labs

TO BEGIN A COMPREHENSIVE PROGRAM (INCLUDING OPEN INNOVATION LABS): START WITH THE [12-WEEK RED HAT CONSULTING CONTAINER PLATFORM PILOT](#)

CONTAINER ADOPTION PROGRAM



ESTIMATED PAYBACK TIME: **17 months** [1]
TOTAL THREE-YEAR BENEFITS NPV: **\$10.1 M (USD)** [1]

[1] [The Total Economic Impact of Red Hat Consulting's Container Adoption Program and Open Innovation Labs](#), Forrester, 2018.



Lufthansa Technik

The Kubernetes platform for your business

“The moment we have an idea, we can start building.”

Tobias Mohr, Head of Technology and Infrastructure, Lufthansa Technik

NEW APPS NEED NEW DATA PARADIGMS



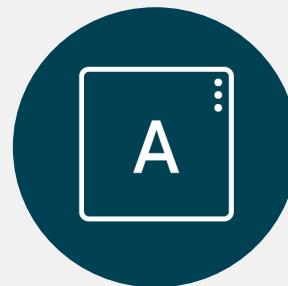
Optimize existing IT



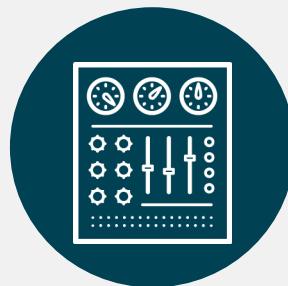
Auto-Recovery



Add and manage
hybrid cloud
infrastructure



Geo-Distribution



Centralized
Management



Couchbase

GENERAL DISTRIBUTION



**RED HAT®
OPENSHIFT®**

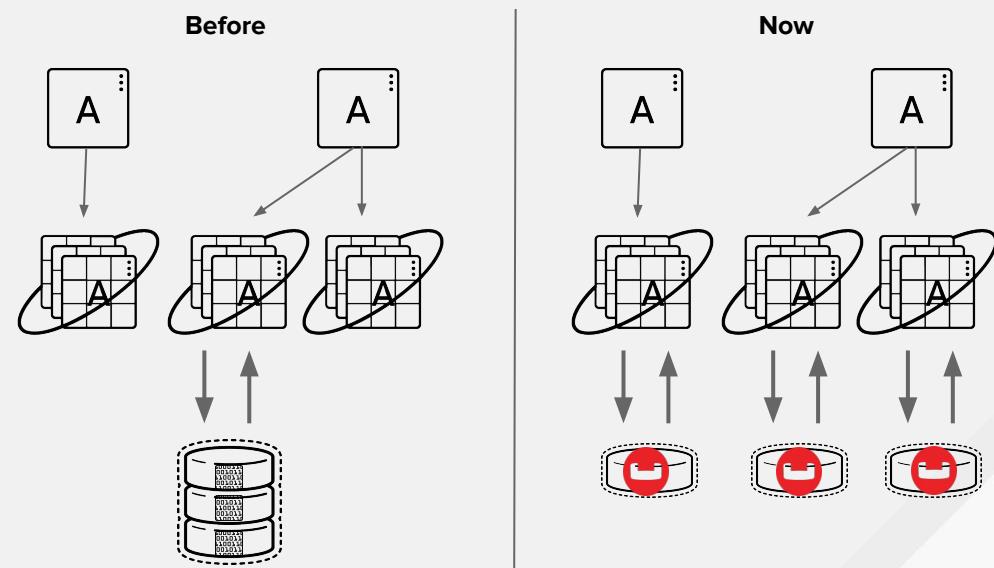


COUCHBASE ENABLED TRANSFORMATION

Couchbase offers a performant and scalable, distributed database optimized for diverse use cases. The Couchbase Autonomous Operator simplifies deployment and manageability of your data services for microservices applications.

Couchbase offers:

- Caching
- Key Value
- Document Store (JSON)
- Full Text Search
- Analytics
- Eventing (FaaS)
- Mobile



SOME OF OUR OPENSHIFT CUSTOMERS



Deutsche Bank



FINANCIAL SERVICES



INSURANCE

DAIMLER



AUTOMOTIVE

KOHL'S



RETAIL

Lufthansa Technik



LOGISTICS

Schiphol
Amsterdam Airport

SBB

amADEUS

Hilton

Marriott
HOTELS & RESORTS

TRAVEL

HOSPITALITY



40+ COUNTRIES

RED HAT OPENSHIFT BUSINESS VALUE



531%
5 Year ROI

66%

Faster development
lifecycle

36%

More applications
per year

8 MONTHS

Payback
period

\$1.29M

Average annual
benefits per 100
developers

The Business Value of Red Hat OpenShift, IDC #US41845816, October 2017
<https://www.redhat.com/en/resources/The-Business-Value-of-Red-Hat-OpenShift>



“Speed to Value” is one of our new business metrics. We’re now delivering application updates monthly or weekly. It’s about changing the operating model.”

John Hodgson, Senior Director
UHG Optum

THANK YOU

APPENDICES

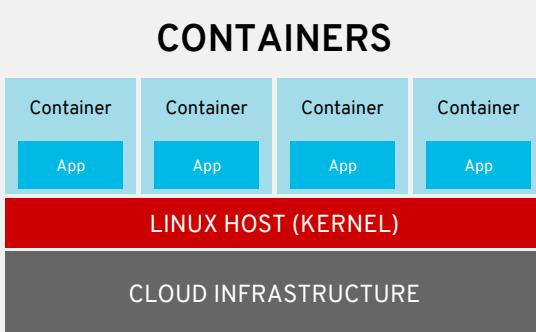
Included appendices

- [What are containers, and why do you need them](#)
- [OpenShift momentum](#)
- [Comparing OpenShift vs Community Projects](#)
- [What's included with an OpenShift subscription](#)
- [Key Red Hat alliances and partnerships](#)
- [Getting started with Red Hat OpenShift](#)
- [Press and analyst coverage](#)

Appendix: What are containers & why do you need them?

WHAT ARE CONTAINERS?

CONTAINER BENEFITS FOR MULTIPLE TEAMS



Package all app dependencies
Integrated in Linux OS
Fully Open Source
Secure Isolation of Applications
Eliminates need for VM Hypervisor
Runs on Any Cloud Platform

DEVELOPERS

- CLOUD-NATIVE APPS
- SIMPLIFY PACKAGING
- SIMPLIFY TESTING

IT OPERATIONS

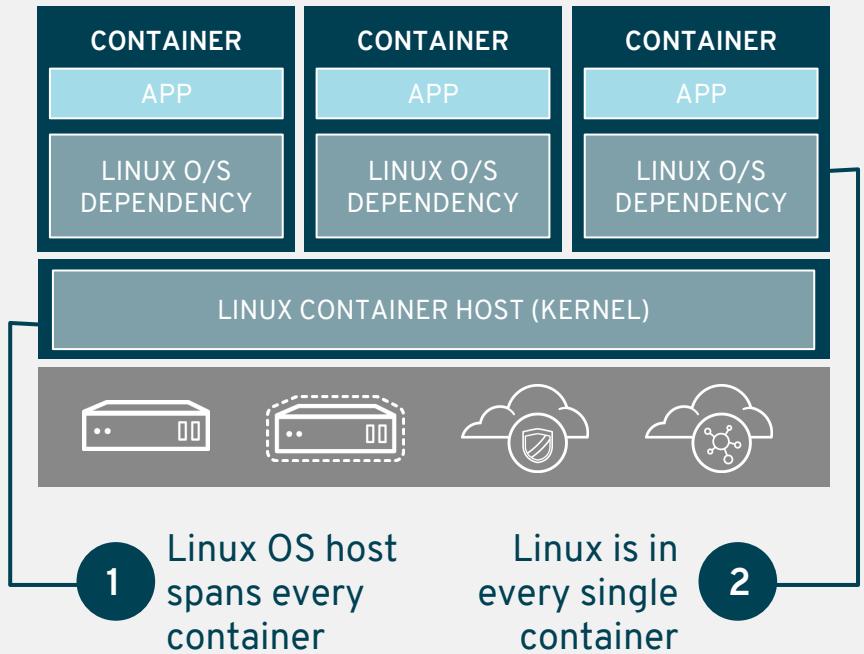
- CONSISTENT APP DEPLOYS
- AUTOMATED APP DEPLOYS
- IMPROVED APP PERFORMANCE
- MULTI-CLOUD CONSISTENCY

BUSINESS LEADERS

- ENABLE DEVOPS CULTURE
- ENABLE HYBRID CLOUD
- REDUCE VM LICENSING COSTS
- ACCELERATE APP-DEV CYCLES

CONTAINER INFRASTRUCTURE

WITH CONTAINERS, THE OS MATTERS MORE THAN EVER

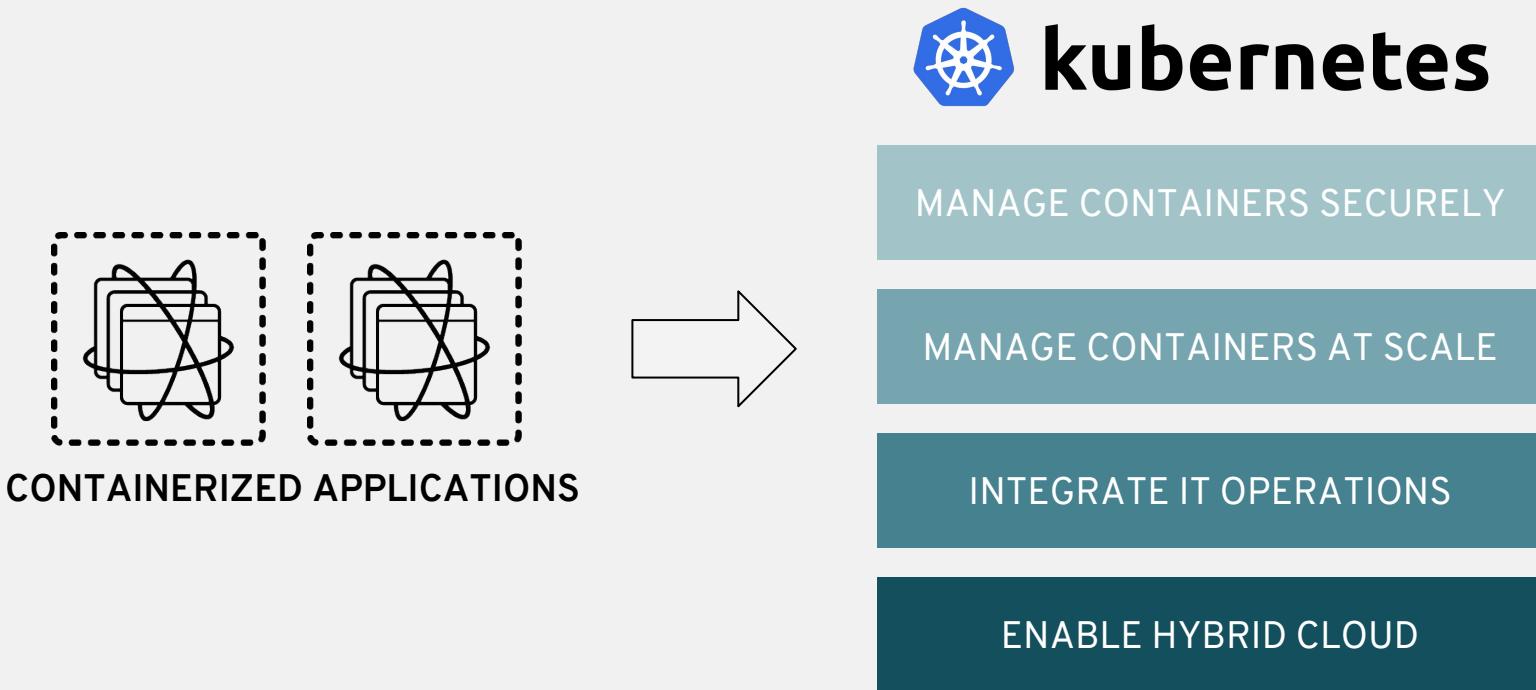


CONTAINERS ARE LINUX

Red Hat
Enterprise Linux
is a leader in paid
Linux

70%
CY2016 paid
Linux share

WHY DO CONTAINERS NEED KUBERNETES?



KUBERNETES IS THE CONTAINER ORCHESTRATION STANDARD

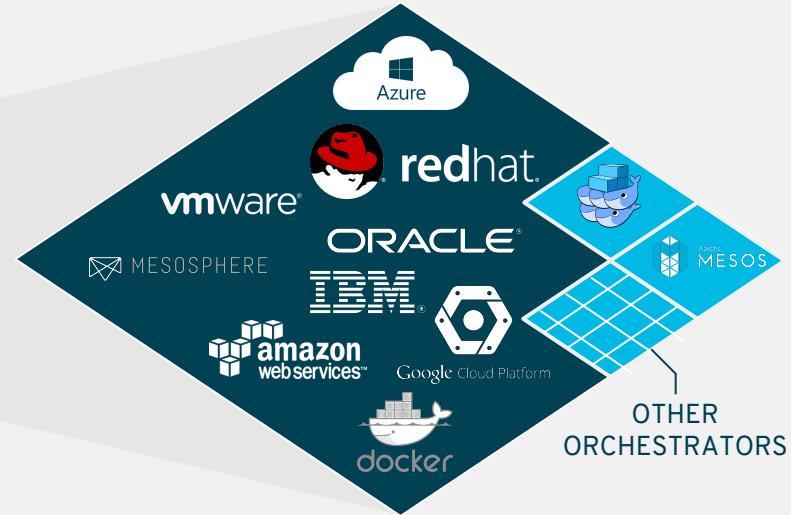
2 YEARS AGO

Fragmented landscape



TODAY

Kubernetes consolidation



Red Hat bet early on Kubernetes. It has now become the dominant orchestration ecosystem

RED HAT HAS BEEN A KUBERNETES LEADER SINCE DAY 1



K8S 1.0



K8S 1.0



Microsoft
Azure

K8S 1.6



amazon
web services



docker



MESOSPHERE

K8S 1.8

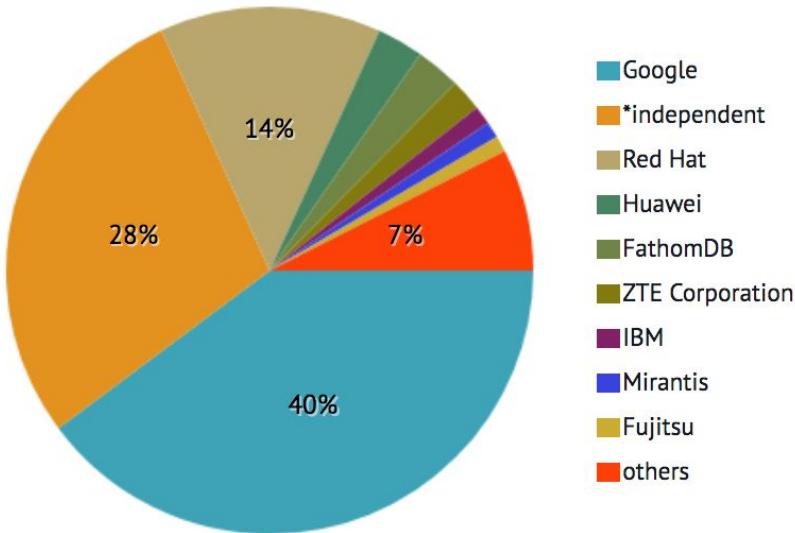
Pivotal vmware®

K8S 1.9

..... 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9

KUBERNETES PROJECT CONTRIBUTIONS

Contribution by companies



- #1 - Google - 41,649
- #2 - Red Hat - 14,410**
- #6 - IBM - 1230
- #9 - CoreOS - 964***
- #10 - Microsoft - 728
- #13 - VMware - 433
- #15 - Intel - 400
- #23 - Cisco - 192
- #26 - Pivotal - 141
- #41 - Oracle - 36
- #56 - Docker - 14
- Amazon/AWS - ?

* Most CoreOS commits were done using personal email addresses (Independent)

RED HAT CONTRIBUTIONS TO KUBERNETES



Operators Framework | ClusterRole Aggregation |
RBAC Authorization | StatefulSets | Init Containers |
Rolling Update Status | Pod Security Policy Limits |
Memory based Pod Eviction | Quota Controlled Services |
1,000+ Nodes | Dynamic PV Provisioning | Multiple
Schedulers | SECCOMP | Audit | Job Scheduler | Access
Review API | Whitelisting Sysctls | Secure Cluster Policy |
Evict Pods Disk IO | Storage Classes | Azure Data Disk |
etcdv3 | RBAC API | Auth to kubelet API | Pod-level
cGroups QoS | Kublet Eviction Model | RBAC | Storage
Class | CustomResourceDefinitions | API Aggregation |
Encrypted secrets in etcd | Limit Node Access | HPA |
Status Conditions | Network Policy | CRI Validation Test
Suite | Local Persistent Storage | Audit Logging |



OPENSHIFT

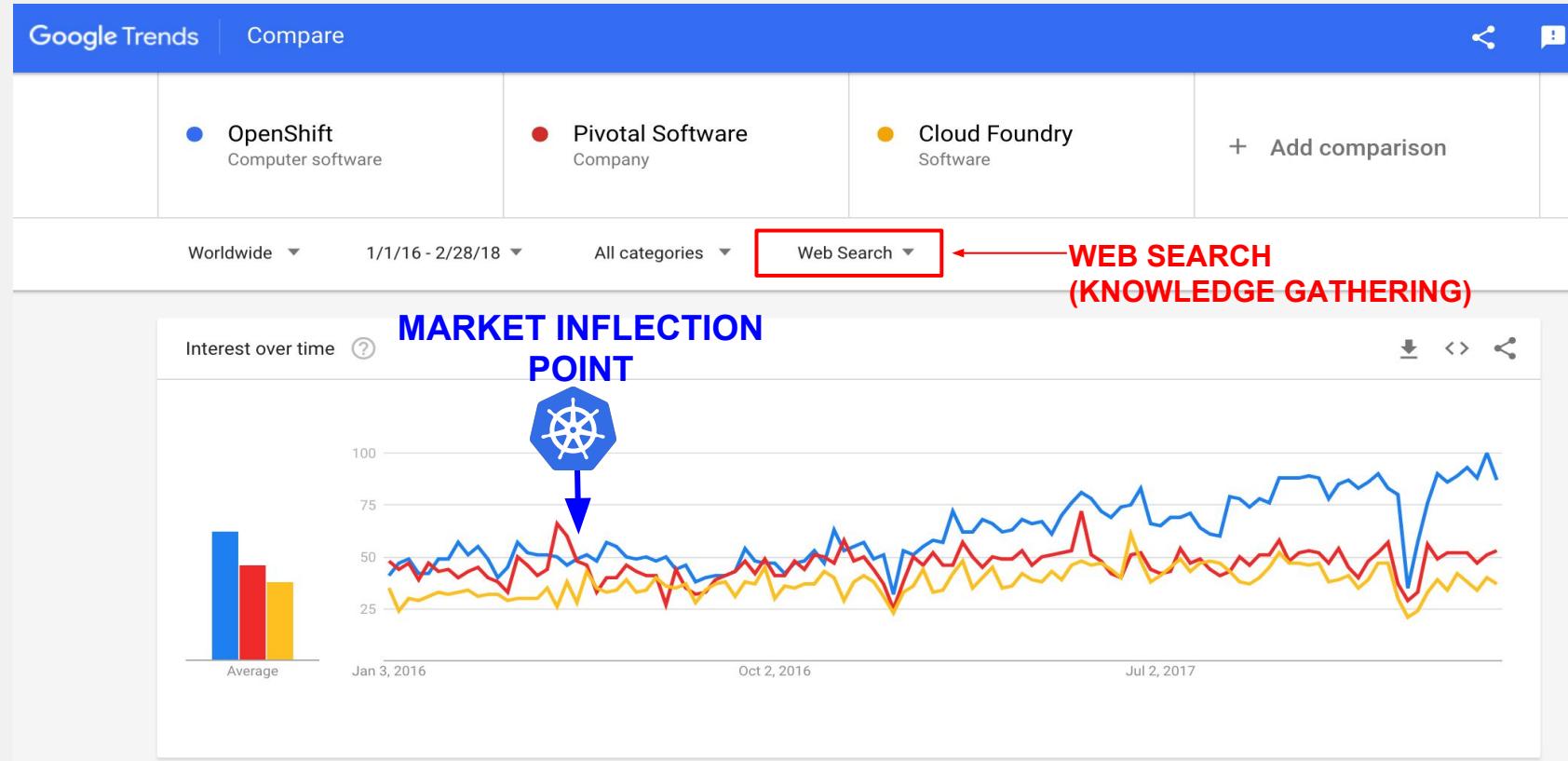
RED HAT-LED KUBERNETES SIGs & WGs

17 of 40
GROUPS

API MACHINERY	AWS	APPS	ARCHITECTURE	AUTH	AUTO SCALING
AZURE	BIG DATA	CLI	CLUSTER LIFECYCLE	CLUSTER OPS	CONTRIBUTOR EXPERIENCE
DOCS	INSTRUMENTATION	MULTI CLUSTER	NETWORK	NODE	ON-PREM
OPENSTACK	PRODUCT MANAGEMENT	RELEASE	SCALABILITY	SCHEDULING	SERVICE CATALOG
STORAGE	TESTING	UI	WINDOWS	APP DEF	CLUSTER API
CONTAINER IDENTITY	KUBEADM ADOPTION	RESOURCE MANAGEMENT	IOT EDGE	POLICY	

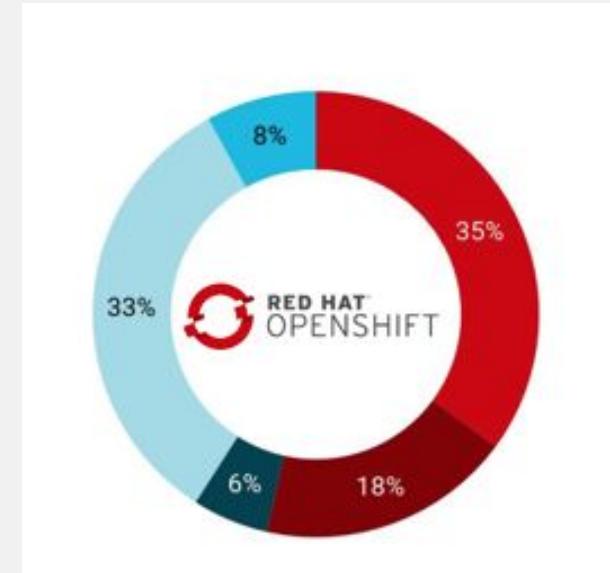
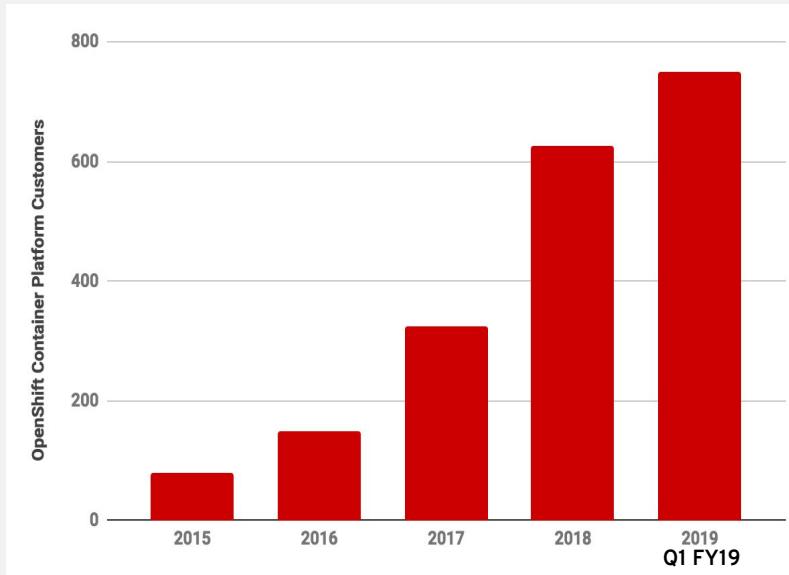
Appendix: Red Hat OpenShift Momentum

INTEREST IN OPENSHIFT IS GROWING



OPENSIFT IS GAINING MOMENTUM

CUSTOMER GROWTH IS ACCELERATING



Financial services

Government

Telco

Media/technology

Other

GENERAL DISTRIBUTION

OPENSHIFT COMMONS

400+ member organizations

55+ countries

70+
Code Contributors

Organizations actively
contributing to OpenShift
open source code

11
Special Interest Groups

Operators, Machine Learning,
Gov, EDU, OpenStack, Ops,
and more

**Peer-to-peer network
and knowledge sharing**

Weekly live virtual briefings,
global face-to-face gatherings,
and a vibrant Slack community

Participants
include:



Over 400
more

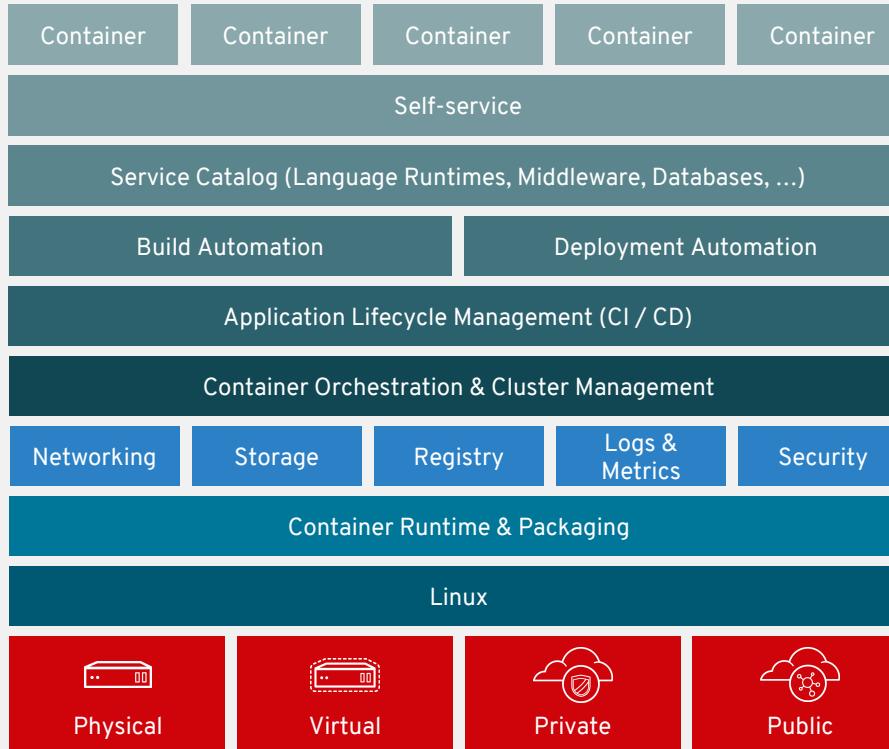
Appendix

Community projects vs enterprise software products

DIY CONTAINER STACK CHALLENGES

Bring your own middleware, data & other services. Build out a service catalog / interface to enable self-service deployment.

Pull Kubernetes or other orchestration (Mesos, Swarm) from rapidly moving upstream & support / maintain yourself. Do all the work required to integrate it into your enterprise IT environment (networking, storage, registry, security, logging, metrics, etc.)



Take existing application build/CI & deployment tools and evolve to add container image build & mgt., continuous deployment, etc.

Pull Docker container runtime from rapidly moving upstream and support, secure and maintain it yourself.

Support and manage your own Linux community distro or build on existing RHEL or 3rd party commercial Linux offerings.

CONTAINER INFRASTRUCTURE AND MANAGEMENT

	Kubernetes	OKD*	OpenShift
Multi-host container scheduling	✓	✓	✓
Self-service provisioning	✓	✓	✓
Service discovery	✓	✓	✓
Enterprise Linux operating system			✓
Image registry		✓	✓
Validated storage plugins		✓	✓
Networking and validated networking plugins		✓	✓
Log aggregation and monitoring		✓	✓
Multi-tenancy		✓	✓
Metering and chargeback			✓

* OKD is the open source project [formerly known as OpenShift Origin](#)

DEVELOPER EXPERIENCE

	Kubernetes	OKD*	OpenShift
Automated image builds		✓	✓
CI/CD workflows and pipelines		✓	✓
Certified application services	No developer or application services		✓
Certified middleware			✓
Certified databases			✓
200+ certified ISV solutions			✓

* OKD is the open source project [formerly known as OpenShift Origin](#)

ENTERPRISE SUPPORT AND COMMUNITY

	Kubernetes	OKD	OpenShift
Community forums and resources	✓	✓	✓
Zero downtime patching and upgrades			✓
Enterprise 24/7 support			✓
9 year support lifecycle			✓
Security response team			✓

External review: [10 most important differences between OpenShift and Kubernetes](#)

Appendix

What's included with a subscription?

Based on Red Hat OpenShift Container Platform 3.10

INCLUDED WITH OPENSIFT CONTAINER PLATFORM

Everything needed to set up, run, and manage containers in production

CONTAINER INFRASTRUCTURE

- A subscription to run OpenShift application nodes; additional no-charge subscriptions for your master and infrastructure nodes
- RHEL entitlements for your host machines running OpenShift
- Private container registry
- Supported Docker and CRI-O container runtimes

VALIDATED CONTAINER IMAGES

- Unlimited use of JBoss Web Server (Tomcat) as container images on OpenShift
- Container images that form part of [Red Hat Software Collections](#)
- [Red Hat Single Sign-On](#) deployed as a container inside OpenShift - for use by any application

INCLUDED WITH OPENSHIFT CONTAINER PLATFORM

Everything needed to set up, run, and manage containers in production

ADDITIONAL RED HAT PRODUCTS AND TECHNOLOGIES

- [Red Hat CloudForms](#) to access and manage OpenShift environment and underlying infrastructure.

OPERATIONAL TOOLING

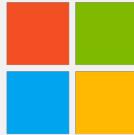
- Log aggregation with Elasticsearch, Kibana, and Fluentd
- Metrics aggregation using Hawkular, Heapster, and Cassandra
- Metrics, monitoring, and alerting with Prometheus, AlertManager and Kibana (tech preview)
- Supported software-defined networking (SDN) using Open vSwitch
- Setup, upgrades, and reference architectures with Ansible playbooks
- Service brokers and Ansible playbook bundles

Appendix

Key OpenShift Alliances and Partnerships



redhat



Microsoft

HYBRID CLOUD CONTAINER MANAGEMENT AND DEVELOPER PRODUCTIVITY

- MANAGED OPENSHIFT on MICROSOFT AZURE (jointly managed)
- RED HAT OPENSHIFT on MICROSOFT AZURE STACK (on-premises)
- LINUX CONTAINERS and WINDOWS CONTAINERS managed by OPENSHIFT
- EXPANDED SUPPORT for MICROSOFT SQL SERVER on OPENSHIFT

[Watch the Red Hat Summit Keynote and Demo](#)



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HYBRID CLOUD CONTAINER MANAGEMENT AND DEVELOPER PRODUCTIVITY

- IBM will extend IBM Cloud Private Middleware (Websphere, DB2, MQ) to Red Hat OpenShift
- Containerized offering of IBM Middleware available for Openshift
- Red Hat OpenShift on IBM Cloud, jointly supported by both companies
- Increased developer productivity through OpenShift access to IBM Cloud Private Services, including IoT, Blockchain, and AI capabilities

[Watch the Red Hat Summit Keynote and Demo](#)

AMAZON AWS SERVICES IN OPENSHIFT

The screenshot shows the OpenShift Origin console. At the top, there's a search bar and a navigation bar with links like 'Browse Catalog', 'Languages', and 'Amazon'. Below the navigation is a grid of icons representing various AWS services: Amazon CloudFront, Amazon ElastiCache, Amazon ELB, Amazon EMR, Amazon RDS - Aurora, Amazon RDS - MySQL, Amazon RDS - PostgreSQL, Amazon Redshift, Amazon Route53, Node.js, Perl, and PHP. To the right of the grid, there's a sidebar titled 'My Projects' listing several projects: 'aws-demo' (created by admin 23 minutes ago), 'aws-service-broker' (created by admin 24 minutes ago), 'service-catalog' (created by admin 25 minutes ago), 'my-project' (created by developer 27 minutes ago), and 'openshift-infra' (created 27 minutes ago). Below the sidebar is a modal window for provisioning an 'Amazon RDS - PostgreSQL' service. The modal has tabs for 'Plans', 'Configuration' (which is selected and shows fields for 'Add to Project' (aws-demo), 'Secret' (aws-demo-secret), 'AWS Region' (US East (Virginia)), 'DB Instance Class' (db.m3.medium — 1 vCPU, 3.75 GB RAM), 'DB Instance Name' (postgres), and 'Allocated Storage' (5 GB)), and 'Results'. At the bottom of the modal are 'Cancel', '< Back', and 'Create' buttons.



- Native integration of AWS services in OpenShift via Open Service Broker API
- Reduces complexity of provisioning, security model, and resource consumption of AWS services
- Users can bind their containerized apps running in OpenShift, to services running on AWS, directly from the OpenShift Console
- OpenShift configures all project dependencies, runtime configurations, and automates deployments
- Joint support path for applications using OpenShift integration with AWS
- More details: [Press release](#), [Andy Jassy's video](#), [blog](#), [demo video](#)

EXPANDING ECOSYSTEM OF GLOBAL SI AND STRATEGIC PARTNERSHIPS



Appendix

Getting started with Red Hat OpenShift

LEARN.OPENSIFT.COM

Foundations of
OpenShift

START COURSE

Building
Applications On
OpenShift

START COURSE

Subsystems,
Components, and
Internals

START COURSE

OpenShift
Playgrounds

START COURSE

Service Mesh
workshop with Istio

START COURSE

Serverless scenarios
with OpenShift
Cloud Functions

START COURSE

Interactive Learning Scenarios provide you with a pre-configured OpenShift instance, accessible from your browser without any downloads or configuration.

CONTAINER PLATFORM DISCOVERY SESSION

A one day, no-cost planning session



GOAL:

To understand the customer's business drivers and technical use cases to propose a solution architecture.



DETAIL:

Discussion guided by Red Hat Consulting Architect

Attendees from both Infrastructure Operations and Application Development

Red Hat will provide tailored proposal for services



RED HAT PROVIDES:

Our vision for container platforms

Guided assessment of organizational readiness for containers and DevOps using Red Hat Consulting's "Ready to Innovate" framework

Application delivery modernization goals

High-level recommendations

Red Hat container platform service offerings

CONTAINER PLATFORM PILOT

12 weeks



GOAL:

Design and Implement a Minimum Viable Product that proves that we can meet business objectives through new technologies (OpenShift, Containers) and processes (CI/CD, Automation, Infrastructure as Code)



TASKS:

- Design and planning workshops for container adoption
- Container platform foundations and architecture workshops
- Cluster installations
- Operationalizing of the platform
- Pipeline integration
- Pilot application onboarding
- Environment stabilization and next phase planning



ENVIRONMENTS:



Lab cluster for infrastructure testing

Non-production cluster for development and testing of containerized applications prior to their production release

MVP production OpenShift environment

BUILD SOFTWARE THE RED HAT WAY IN OPEN INNOVATION LABS



EXPERIMENT

Rapidly build prototypes,
do DevOps, and be agile.



IMMERSE YOUR TEAM

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



CATALYZE INNOVATION

Bring modern application
development back to your team.

OPTIONS FOR GETTING STARTED

Option A
Sequential
Pilot and Labs



Option B
Parallel Effort



Option C
Pause for Technology
Evaluation



Appendix

Press and analyst coverage

TOP INDUSTRY ANALYST FEEDBACK

OVER 70 INDUSTRY ANALYSTS IN ATTENDANCE - THE MOST FOR ANY RED HAT SUMMIT.
MANY POSITIVE ANALYST REPORTS.

- **AI Gillen, IDC:** “You’re knocking it out of the park.”
- **Dennis Smith, Gartner:** “What you’re doing with OpenShift is great. It’s a true multi-cloud offering.”
- **Carl Lehmann, 451 Research:** “I’ve been to five of these and this has been the best one yet.”
- **Stephen O’Grady, RedMonk:** “Red Hat is Red Hat because it can do the difficult things so well.”
- **Dave Bartoletti, Forrester:** “What I’m seeing is the whole middleware conversation is really becoming huge. You can teach it new-new, but you also need to expand the footprint. Pivotal can’t do that. I like what Red Hat is doing in that area.”
- **Ovum:** “This makes Red Hat the kingmaker in the move and puts Red Hat in a very strong position re the future placement of these workloads.”
- **Torsten Volk, EMA:** [12 Key Lessons from Red Hat Summit](#)

PUBLISHED INDUSTRY ANALYST REPORTS

- ESG: "[Red Hat Leading the \(Open\)Shift to the Cloud](#)",
Edwin Yuen
- GlobalData: "[Red Hat Summit: Modern Components for the Next OSS DevOps Phase](#)" and "[Red Hat Summit: New Tools Strengthen Red Hat's DevOps Arsenal](#)", Charlotte Dunlap
- 451 Research: "[Red Hat OpenShifts to Microsoft Azure and IBM cloud](#)", Al Sadowski
- Ovum: "[IBM Cloud Private and Red Hat OpenShift integrate to simplify enterprise application modernization](#)", Michael Azoff
- PAC: "[Red Hat Summit 2018](#)", Simon Abrahams
- Hurwitz: "[Navigating Red Hat's Open Commercial Enterprise Strategy](#)", Judith Hurwitz

Reports are currently being authored by:

- Hurwitz: Jean Bozman
- GlobalData: Chris Drake
- IDC: Al Gillen (et al); Chris Zhang; Stephen Belanger, Ashish Nadkarni
- 451: Brian Partridge
- Ovum: Roy Illsley

"Red Hat is right to bang on the hybrid/multi cloud drum, as this will be the way that many organizations look to manage changing infrastructure requirements...The build-out of the hybrid cloud ecosystem becomes critical- with OpenShift a potential game changer for the big platform players, as it shifts the balance of power back to the end customer."

- Al Gillen et al, IDC

INDUSTRY ANALYST ENDORSEMENTS

"Red Hat is unique in many ways. It is well liked by developers who appreciate the openness of the Linux platform. Community support has always been at the core of Red Hat's DNA. Being able to maintain this attractive persona while remaining competitive in a cutthroat enterprise cloud environment is not easy for any vendor [...] Red Hat management seems to understand this challenge while at the same time staying true to Red Hat's commitment to openness.."

- Judith Hurwitz, Hurwitz Group ([Analyst Blog](#))

"Red Hat Summit 2018 seemed to cement Red Hat's determination to win in the cloud-native / container / Kubernetes space, as well as in hybrid space that will be the reality for enterprise IT for many years to come. It is hard to judge whether Red Hat's early commitment to Kubernetes was by luck or by judgement, but now that Kubernetes has "won the war", there's no doubting that Red Hat is exceptionally well placed to capitalise on the opportunity."

- Simon Abrahams, PAC ([Analyst Blog](#))

"Red Hat is really trying to set up OpenShift as the preferred application platform and container management platform," Yuen said. "For companies working with OpenShift, they have an easy, preferred option to deploy on Azure and on IBM Cloud Private."

- Edwin Yuen, ESG
([SearchCloudComputing](#))

"Quay was certainly a big draw of business for CoreOS," Lyman said. "Red Hat is certainly looking to take advantage of that drive by enterprises to maintain their own registries and connect with public registries that are out there."

- Jay Lyman, 451 Research
([TechTarget](#))