



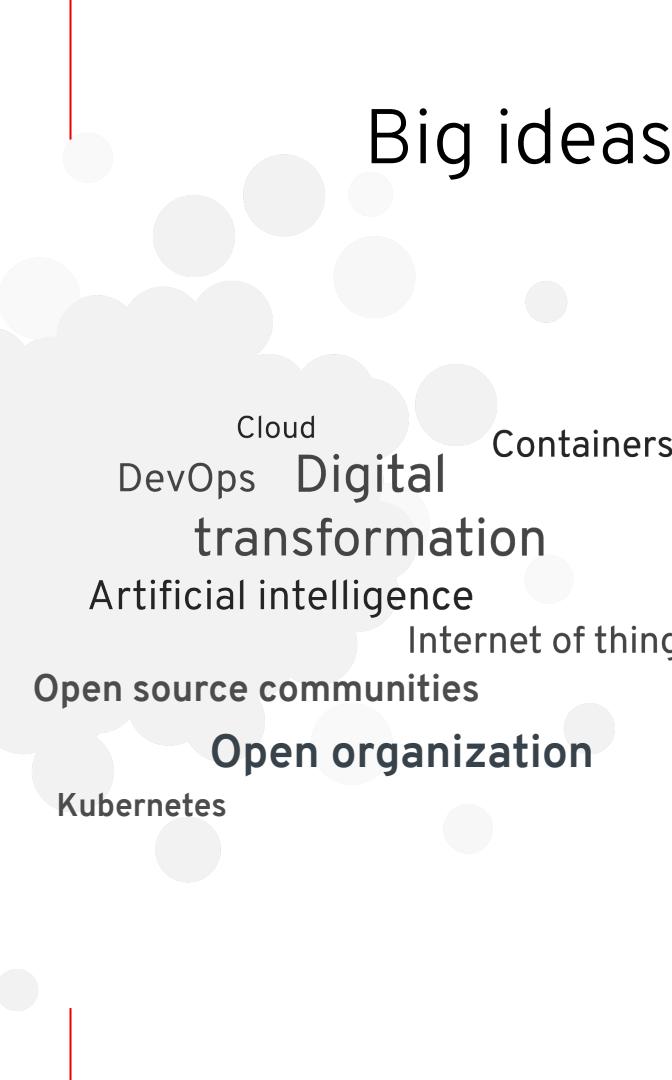
The Kubernetes platform

For big ideas (technical)

As part of the OpenShift Curriculum



Big ideas drive business innovation



Cloud
DevOps **Digital transformation** Containers

Artificial intelligence
Internet of things

Open source communities

Open organization

Kubernetes

Business innovation is all around us.

Every organization in every geography and in every industry can innovate and create more customer value and differentiation with open source technologies and an open culture.

Creating value depends on your ability to deliver applications faster

Cloud-native
applications



AI & machine
learning



Analytics



Internet of
Things

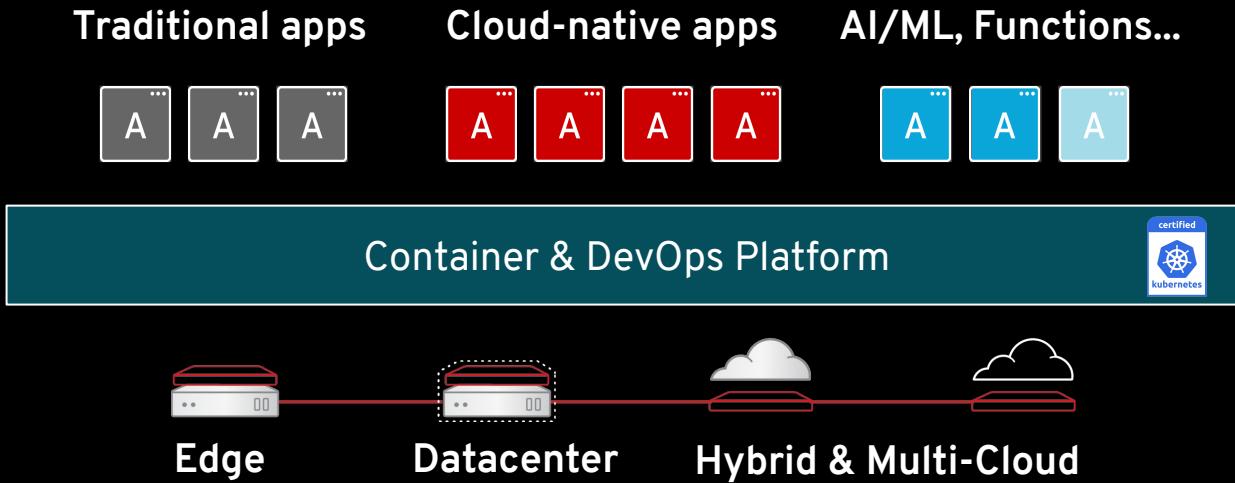


Innovation
culture



Containers, Kubernetes, and hybrid cloud are key ingredients.
OpenShift is the best platform to deliver container-based applications.

With OpenShift you can deliver all your applications in a whole new way





“ ”

We got the idea to have all these tests we do with hardware on virtual test environments, and that's why we've come to OpenShift and containers.

Michael Denecke
Head of Test Technology
Volkswagen AG

VOLKSWAGEN
Autonomous Vehicle Testing

More than 1,000 OpenShift customers



MODERNIZE APPS



WEB APPS



CLOUD NATIVE DEV



MULTI-CLOUD



MOBILE



IOT



Why customers choose Red Hat OpenShift

Trusted enterprise Kubernetes

Cloud-like experience everywhere

Empowering developers to innovate

Open source innovation

CONTAINER CHALLENGES

Container security

Image scanning, patching, and compliance

Day 2 management

Installations, upgrades, and maintenance
Integration of existing enterprise technology

Application delivery

Monitoring, metering, and management
Integration of existing developer tools



Trusted enterprise Kubernetes

Continuous security, world-class support and services, and deep expertise to confidently run any application

A cloud-like experience, everywhere

Full-stack automated operations on a consistent foundation across on-premises or hybrid cloud infrastructure

Empowerment for developers to innovate

Ability to get applications to production sooner with a wide range of technologies and streamlined workflows

Trusted enterprise Kubernetes



Trusted host, content,
platform

Full-stack automated
installation

Seamless updates

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

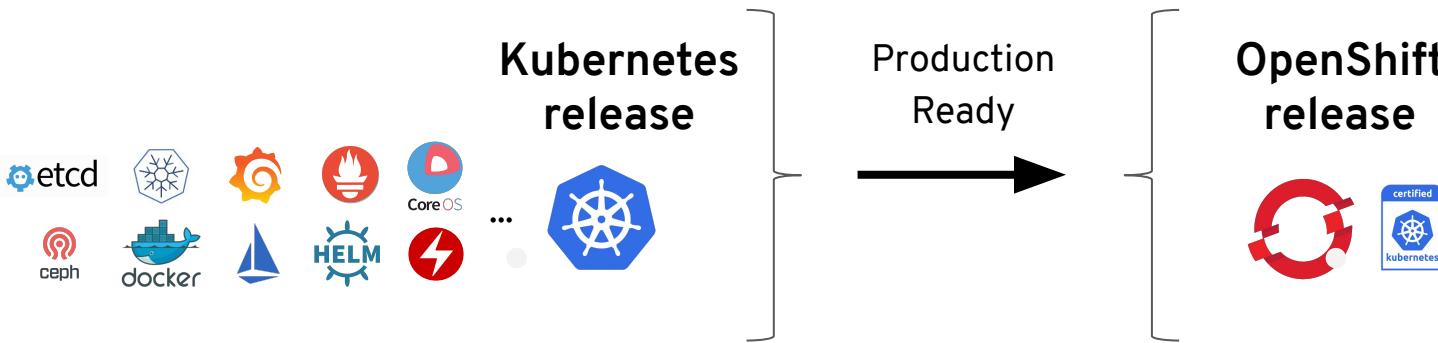
- OS upgrade & patch
- Platform upgrade & patch
- Image upgrade & patch
- App upgrade & patch
- Security patches
- Continuous security scanning
- Multi-environment rollout
- Enterprise container registry
- Cluster & app elasticity
- Monitor, alert, remediate
- Log aggregation



75%
of enterprise users identify
complexity of implementation and
operations as the top blocker to adoption

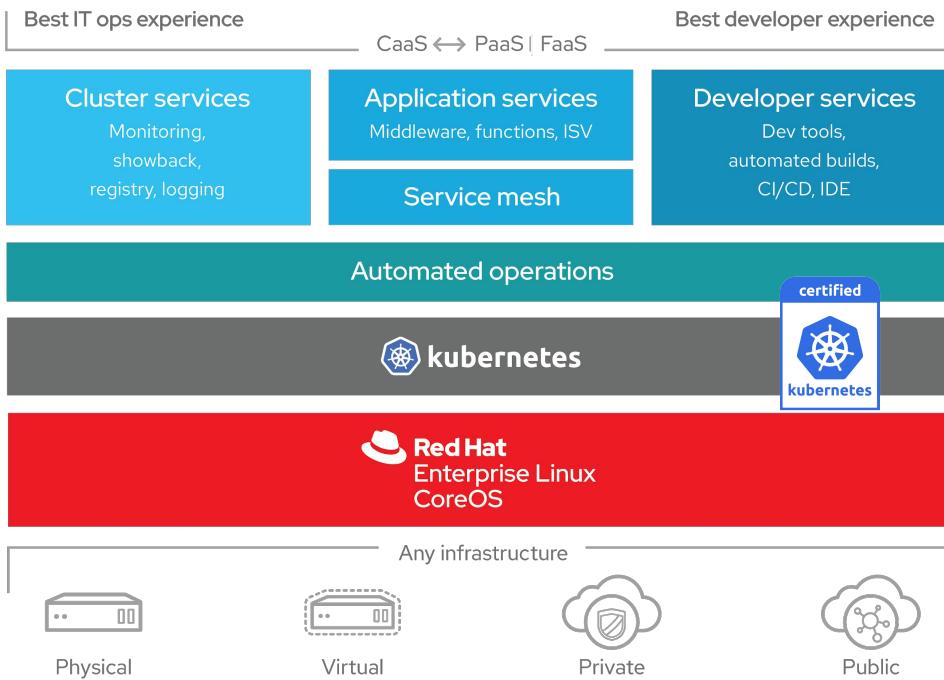
Source: The New Stack. *The State of the Kubernetes Ecosystem*, August 2017.

OpenShift is trusted enterprise Kubernetes



- Hundreds of defect and performance fixes
- 200+ validated integrations
- Certified container ecosystem
- 9-year enterprise life-cycle management
- Red Hat is a leading Kubernetes contributor since day 1

OpenShift 4 - A smarter Kubernetes platform



Automated, full-stack installation from the container host to application services

Seamless Kubernetes deployment to any cloud or on-premises environment

Autoscaling of cloud resources

One-click updates for platform, services, and applications

“”

We can localize clusters in different markets if we need to and therefore serve our customers on a worldwide scale.

Dr. Alexander Lenk
Lead Architect Connected
Vehicle, Digital Backend,
Big Data, Blockchain
BMW Group

BMW
Connected Drive



A cloud-like experience, everywhere



Operator Framework
Operator Hub &
ISV ecosystem
Multicloud
management

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, VMware vSphere, Red Hat Virtualization, Red Hat OpenStack Platform,
Amazon Web Services, Microsoft Azure, Google

Why OpenShift for hybrid and multi-cloud deployments?

IDC Research: The Business Value of OpenShift on AWS

“”

Our developers say that OpenShift on AWS is very easy to use, and they are definitely more productive as a result ... seeing **60-70 percent increases** in productivity levels.

Financial Services

“”

We have a **multi-cloud environment** and OpenShift on AWS has features that make it **easier to be agile**.

Pharmaceutical

“”

OpenShift on AWS has really helped us improve our reservation system and contributed to up to **15 percent more revenue, worth tens of millions of dollars** per year.

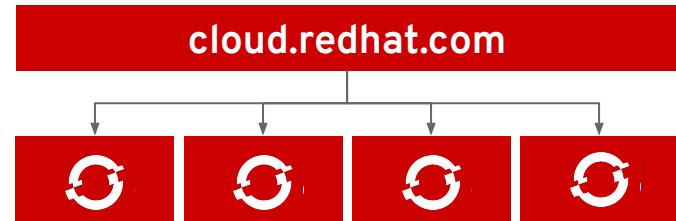
Hospitality

Delivering Kubernetes everywhere

- Manage multiple OpenShift clusters, across multiple cloud and on-premises environments
- Install and update OpenShift across all your cloud environments
- Centrally manage policy and deployments

The screenshot shows the 'Clusters' page of the OpenShift Cluster Manager. On the left is a sidebar with 'Clusters' selected, along with 'Subscriptions', 'Membership', and 'Administration'. The main area is titled 'OpenShift Clusters' with 'Register cluster' and 'Download Installer' buttons. It lists two clusters: 'Production' (AWS, 4.0.158, Security upgrade available) and 'Cloud Staging' (AWS, 4.0.163, Up to date). The table has columns for CLUSTER NAME, PLATFORM, VERSION, and MESSAGE.

CLUSTER NAME	PLATFORM	VERSION	MESSAGE
Production	AWS	4.0.158	⚠️ Security upgrade available
Cloud Staging	AWS	4.0.163	Up to date





Lufthansa Technik

The Kubernetes platform for your business

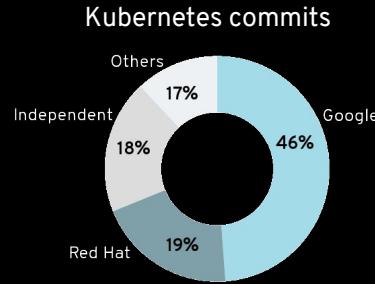
“The moment we have an idea, we can start building the product.”

Tobias Mohr, Head of Technology and Infrastructure, Lufthansa Technik

Why is Red Hat the best choice?

THE 4 C's

CODE



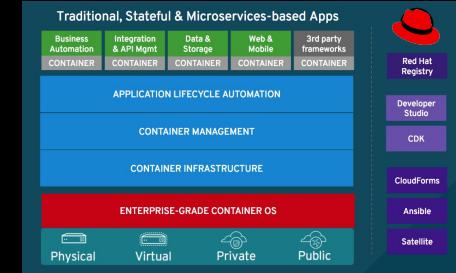
CUSTOMERS



CLOUD



COMPREHENSIVE



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

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

1,000+ customers²

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

We have strong partnerships with cloud providers, ISVs, & CCSPs.

We have an extensive container catalog of certified partner images.

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

Source: [1] Stackalytics, [Contribution by Companies](#). (Release: All, Project type: Kubernetes, Module: kubernetes, Metric: Commits)

Retrieved: March 2, 2018. [2] [More Than 1,000 Enterprises Across the Globe Adopt Red Hat OpenShift Container Platform to Power Business Applications](#)



Red Hat
OpenShift 4

Trusted enterprise Kubernetes

- Trusted host, content, platform
- Full-stack automated install
- Seamless updates & day 2 management

A cloud-like experience, everywhere

- Operator Framework
- Operator Hub & certified ISVs
- Hybrid, multicloud management

Empowering developers to innovate

- OpenShift service mesh / Istio
- OpenShift serverless / Knative
- CodeReady Workspaces / Che

Thank You



linkedin.com/company/red-hat



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