

# Red Hat OpenShift Data Foundation

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**Applications**

The diagram features two overlapping, white, arrow-shaped banners with red outlines. The top banner is tilted upwards and contains the word "Applications". The bottom banner is tilted downwards and contains the word "Data". A vertical grey line passes through the center of both banners. The background consists of a light pink circle and a light pink triangle that together form a larger shape.

**Data**

# Data needs to be stored somewhere

That's driving the adoption of containers

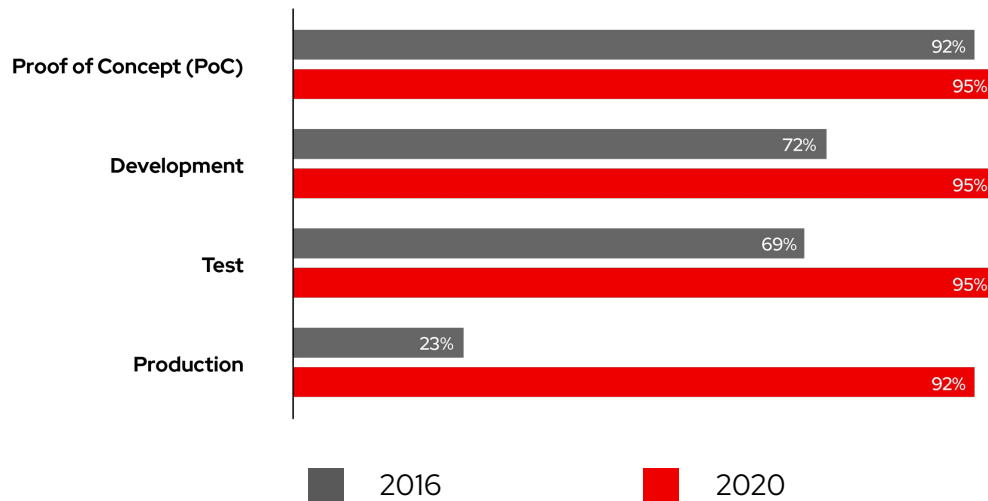
# 91%

## ARE USING KUBERNETES

Businesses are using Kubernetes to

- Drive automation
- Improve efficiencies
- Increase application agility

## Container adoption is accelerating



# The trouble with cloud-native environments

Key questions users need to address

## SECURITY

How is that data...



...secured?



...protected from loss?

## ACCESS

How is that data...



...found?

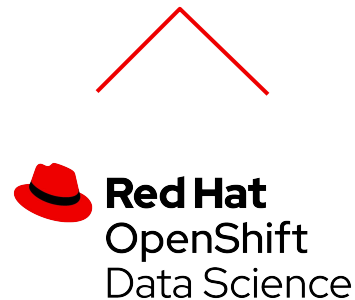
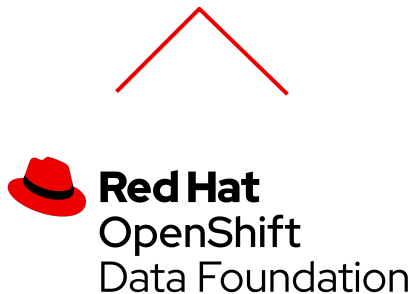


...audited?



...controlled?

# Introducing Red Hat Data Services



# Unlock the value of data



**DATA AT REST**

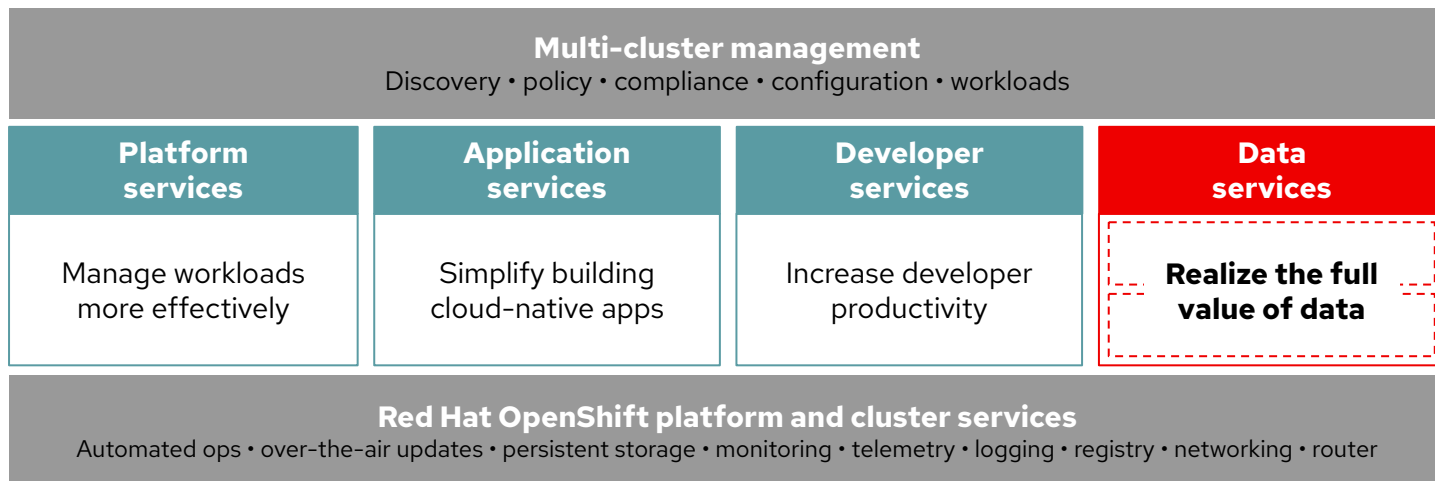


**DATA IN MOTION**



**DATA IN ACTION**

# How Red Hat Data Services fits



Physical



Virtual machines

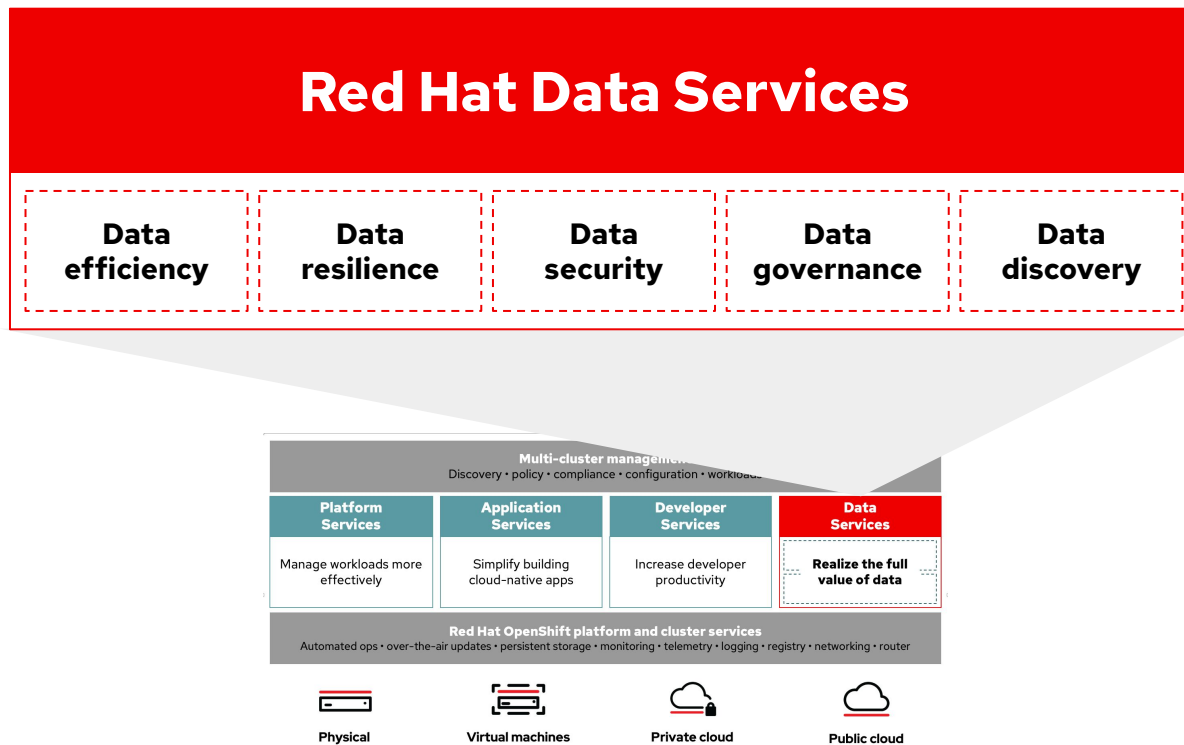


Private cloud



Public cloud

# The Red Hat Data Services opportunity





# Red Hat Data Services in a nutshell



## Data efficiency

- Erasure coding
- Compression
- Performance



## Data resilience

- Snapshots
- Clones
- Backup
- Recovery
- Business continuity
- Disaster recovery



## Data security

- At rest encryption
- In flight encryption
- Key management



## Data governance

- WORM
- Auditing
- Compliance
- SEC & FINRA
- GDPR



## Data discovery

- Cataloging
- Tagging
- Search

# Data Services: A change of mindset



## Traditional, static approach

- Focus on improving efficiency
- Infrastructure-up view
- Poor performance at scale
- Disconnected
- Manual, monolithic and rigid



## Dynamic, data services approach

- Focus on innovation
- Application-oriented view
- Highly scalable
- Always-on
- Automated, on-demand, and flexible



**Simplified**  
access

**Consistent**  
experience

**Dynamic**  
scale

Red Hat Data Services  
mission:

To make data  
accessible to  
applications across  
the hybrid cloud,  
unlocking its power  
in new and  
impactful ways

Delivering on the Red Hat  
OpenShift promise:

Innovation without  
limitation

# Data is the most significant asset in today's businesses—give it data services



- Data services focuses on infrastructure and application needs so they can run and interact with ease and efficiency
- Data services provides a foundational layer for applications to function and interact with data in a simplified, consistent and scalable manner
- Red Hat Ceph Storage is a foundational component to drive data services

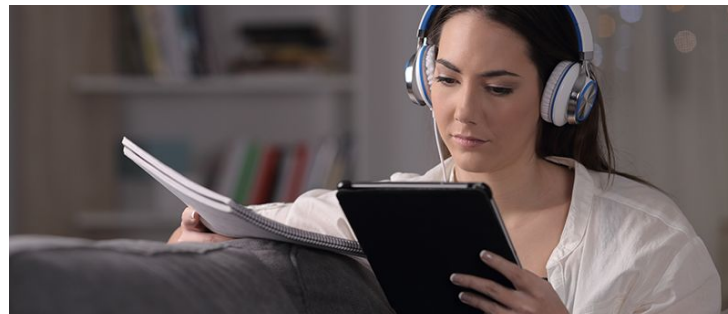
# What Data Services means for developers/data scientists

## Traditional, static approach



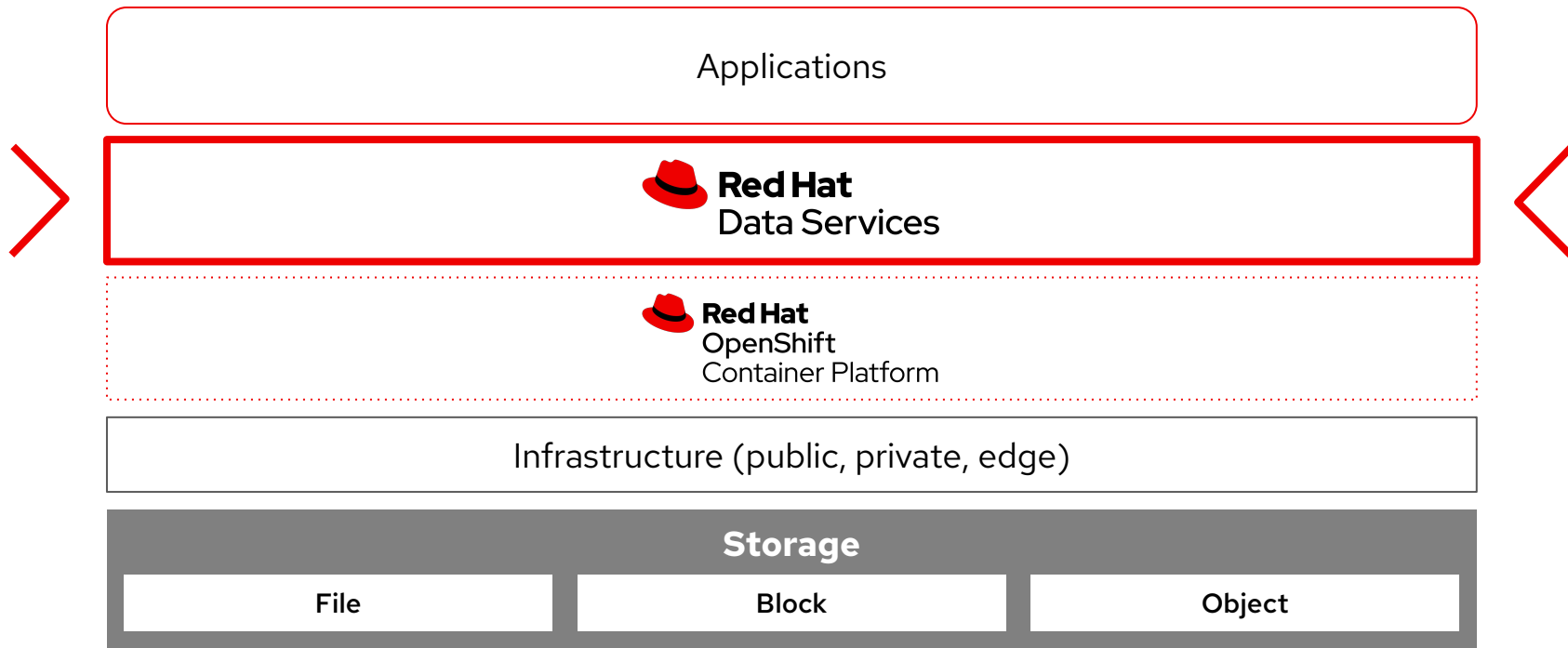
- Must visit the library, again and again
- Strictly limited usage, with limited content on offer
- Can only check out a few items at a time

## Data services approach



- Access to data from anywhere, indefinitely
- Simultaneous access to a wide range of content, and almost unlimited usage
- Self-service—no need for manual supervision

# The Red Hat Data Services stack



# What's new?

## Data resilience with Red Hat OpenShift Data Foundation

### FUNCTIONALITY

Greater control and manageability with over 15 new functionality features.



### SECURITY

Enhanced protection with data encryption and external key management by Key management service.



### PERFORMANCE

Reduced downtime with consistent experience, dynamic scale and faster handling of data.



### EFFICIENCY

Improved productivity thanks to simplified and faster access to data.



# What's new?

Data resilience with Red Hat OpenShift Data Foundation

**FUNCTIONALITY**



**SECURITY**



**PERFORMANCE**



**EFFICIENCY**





# What's new?

Data resilience with Red Hat OpenShift Data Foundation

**FUNCTIONALITY**



**SECURITY**



**PERFORMANCE**



**EFFICIENCY**



# What's new?

Data resilience with Red Hat OpenShift Data Foundation

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**SECURITY**



**PERFORMANCE**



**EFFICIENCY**



# What's new?

Data resilience with Red Hat OpenShift Data Foundation

**FUNCTIONALITY**



**SECURITY**



**PERFORMANCE**



**EFFICIENCY**



# Thank you

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