Why Red Hat OpenShift?

IBM

Red Hat Open Hybrid Cloud
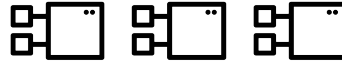
More than a strategy, reality of Enterprise IT

Applications	Infrastructure	Development, IT processes, and skills
AI/ML Data/Analytics Serverless	**63%** of organizations are already using hybrid cloud today.[1]	Developer tools
Cloud–native and microservices	**54%** of those not using hybrid cloud today plan to within 24 months.[1]	Pipeline and processes
Java™ .Net ISV	Bare metal Virtualization Private cloud Edge Public cloud	People and policies

Red Hat

Traditional apps   Cloud-native apps   AI/ML, Functions

Communities of Innovation | Ecosystems of Solutions

Red Hat OpenShift

Secure & Automated Infrastructure and Operations

Physical   Virtual   Private cloud   Public cloud   Edge

3

Red Hat OpenShift

Components of a Container Engine

Applications need a trusted platform everywhere they need to run

**Linux
Host OS**

Multi-tenant Security

Performance

Stability & Reliability

**Kubernetes
Infrastructure**

Version & Update Lifecycle

Cluster Configuration

Associated Infrastructure

**Container
Content**

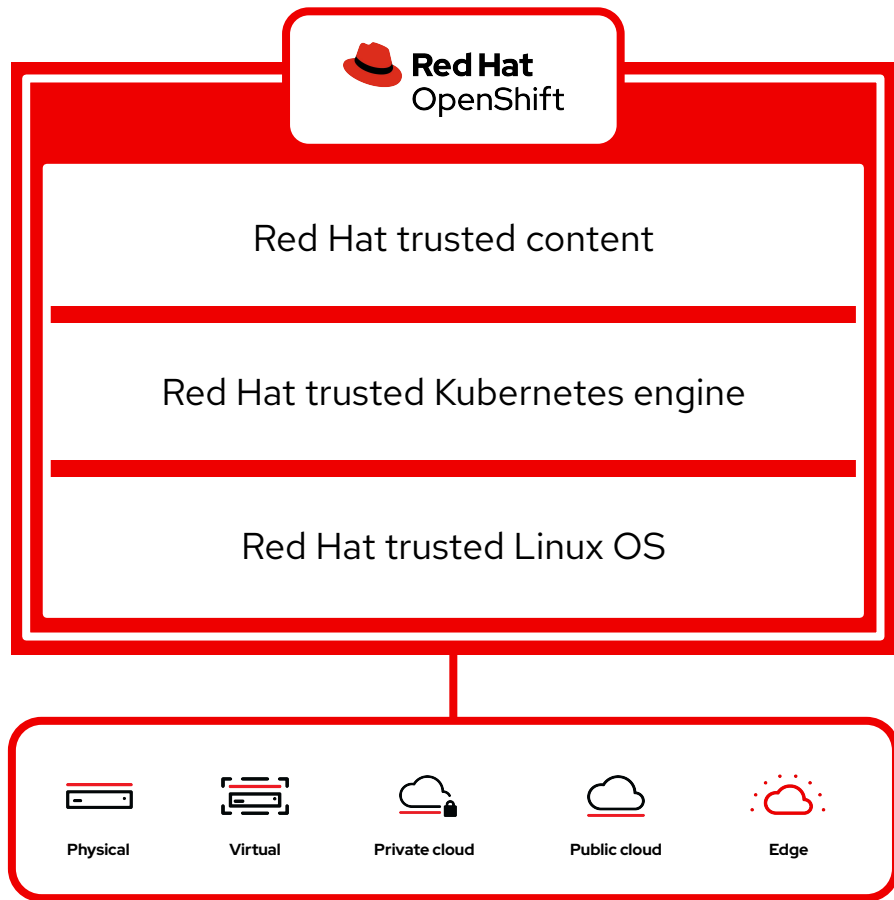Vulnerabilities

Maintenance & Updates

Provenance & Support

**Hybrid
Multi Cloud**

Datacenter

Public Clouds
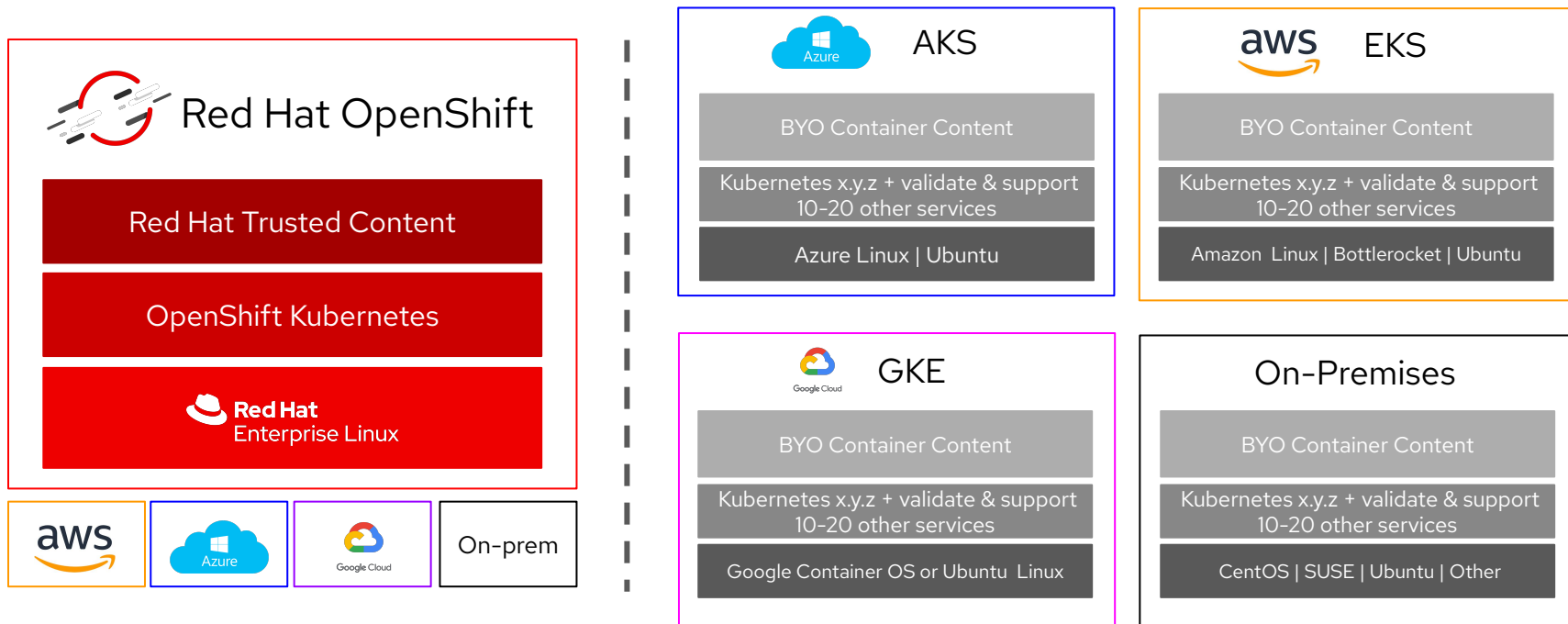
Edge

Red Hat

OpenShift built on a
Trusted
Container Engine

Red Hat OpenShift

Red Hat trusted content

Red Hat trusted Kubernetes engine

Red Hat trusted Linux OS

Physical | Virtual | Private cloud | Public cloud | Edge

Red Hat

OpenShift Trust & Consistency Across the Hybrid Cloud

Versus managing different stacks across each environment

Red Hat OpenShift

Red Hat Trusted Content

OpenShift Kubernetes

Red Hat Enterprise Linux

aws | Azure | Google Cloud | On-prem

AKS

BYO Container Content

Kubernetes x.y.z + validate & support 10-20 other services

Azure Linux | Ubuntu

EKS

BYO Container Content

Kubernetes x.y.z + validate & support 10-20 other services

Amazon Linux | Bottlerocket | Ubuntu

GKE

BYO Container Content

Kubernetes x.y.z + validate & support 10-20 other services

Google Container OS or Ubuntu Linux

On-Premises

BYO Container Content

Kubernetes x.y.z + validate & support 10-20 other services
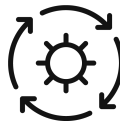
CentOS | SUSE | Ubuntu | Other

Components of an Application Platform

Application developers need more than Kubernetes to be productive
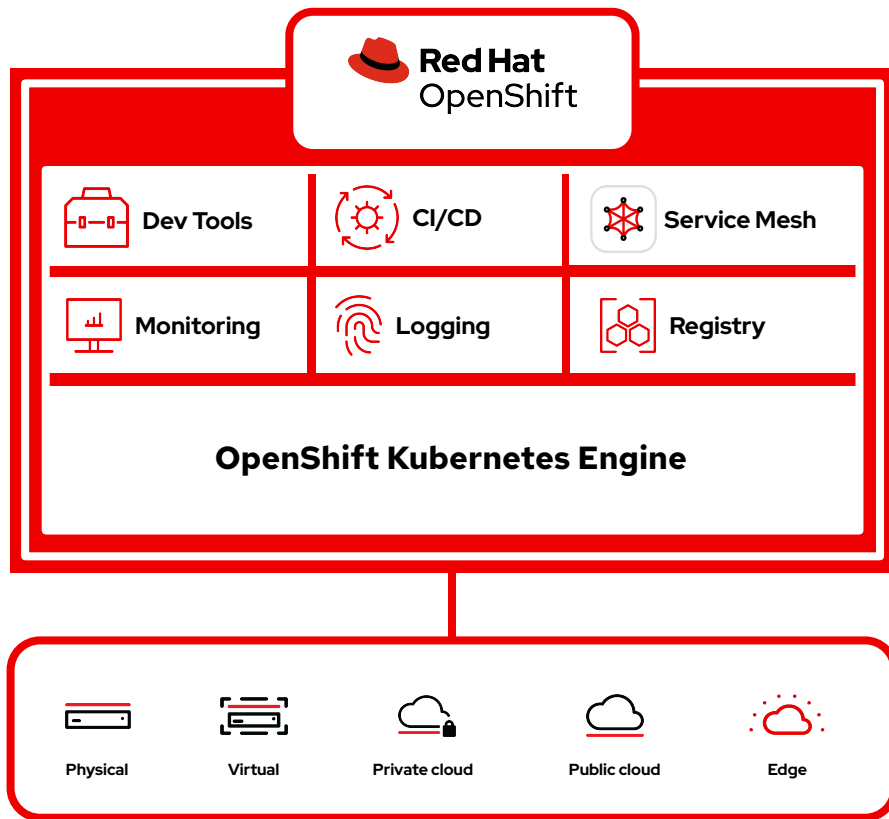
Developer Tools

CI/CD GitOps

Service mesh

Monitoring

Logging

Container Registry

This is not an exhaustive list of services in OpenShift

Red Hat

OpenShift Delivers a **Comprehensive** Application Platform

Red Hat OpenShift

Dev Tools	CI/CD	Service Mesh
Monitoring	Logging	Registry

OpenShift Kubernetes Engine

Physical · Virtual · Private cloud · Public cloud · Edge

Red Hat

OpenShift Trust & Consistency Across the Hybrid Cloud
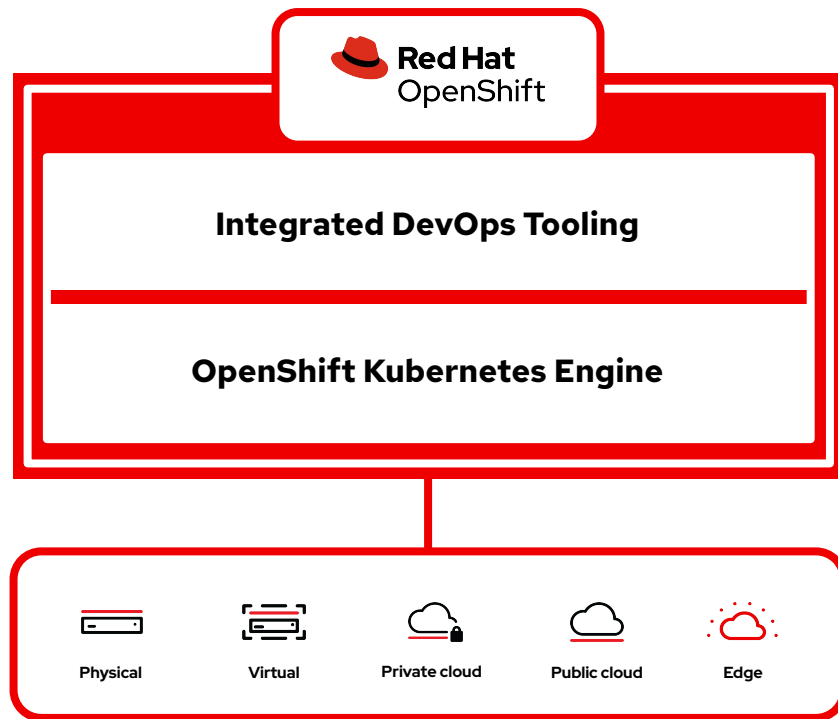
Versus managing different stacks across each environment

Red Hat OpenShift

| Dev Tools | CI/CD | Service Mesh |
| Monitoring | Logging | Registry |

OpenShift Kubernetes Engine

Physical   Virtual   Private cloud   Public cloud   Edge

Additional Cloud Services or Software Components

| Dev Tools | CI/CD | Service Mesh |
| Monitoring | Logging | Registry |

Kubernetes Managed Service or Platform

xKS

Kubernetes x.y.z

Operating System

Public cloud

OpenShift is
Consistent
Across a Hybrid Cloud environment

Red Hat
OpenShift

Integrated DevOps Tooling

OpenShift Kubernetes Engine

Physical　　　Virtual　　　Private cloud　　　Public cloud　　　Edge

Red Hat

OpenShift

A consistent experience anywhere you run

"A combination of fully managed and self-managed Red Hat OpenShift gave us the **flexibility and ease of use to deploy applications quickly, where and how we need**, so our developers can spend time creating innovation for our customers, not on operational tasks. With Red Hat OpenShift's automation capabilities and a continuous delivery approach, we're seeing features and applications getting to market five times faster."
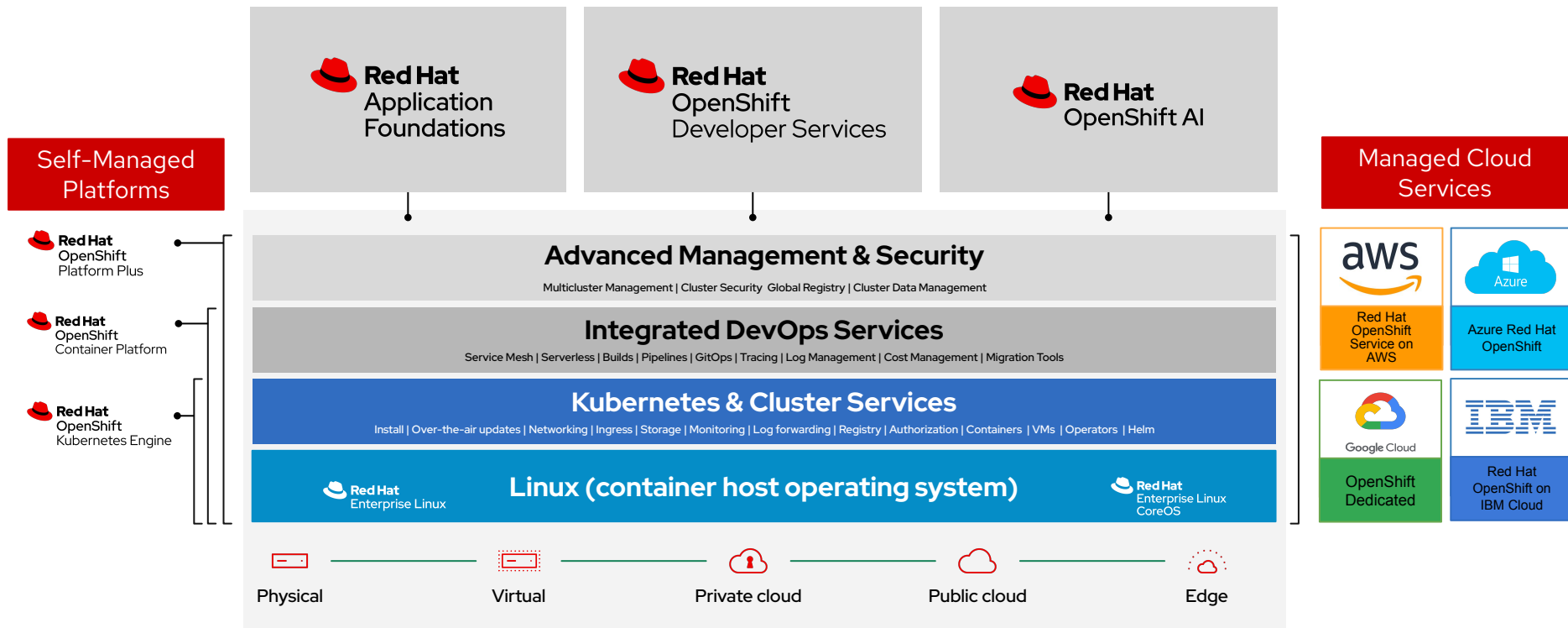
—

Clemens Utschig-Utschig
Head of IT Technology Strategy & CTO,
Boehringer Ingelheim

Red Hat

Red Hat open hybrid cloud platform

Red Hat Application Foundations

Red Hat OpenShift Developer Services

Red Hat OpenShift AI

Self-Managed Platforms

Red Hat OpenShift Platform Plus

Red Hat OpenShift Container Platform

Red Hat OpenShift Kubernetes Engine

Managed Cloud Services

Advanced Management & Security
Multicluster Management | Cluster Security Global Registry | Cluster Data Management

Integrated DevOps Services
Service Mesh | Serverless | Builds | Pipelines | GitOps | Tracing | Log Management | Cost Management | Migration Tools

Kubernetes & Cluster Services
Install | Over-the-air updates | Networking | Ingress | Storage | Monitoring | Log forwarding | Registry | Authorization | Containers | VMs | Operators | Helm

Linux (container host operating system)
Red Hat Enterprise Linux   **Red Hat** Enterprise Linux CoreOS

Physical   Virtual   Private cloud   Public cloud   Edge

aws — Red Hat OpenShift Service on AWS

Azure — Azure Red Hat OpenShift

Google Cloud — OpenShift Dedicated
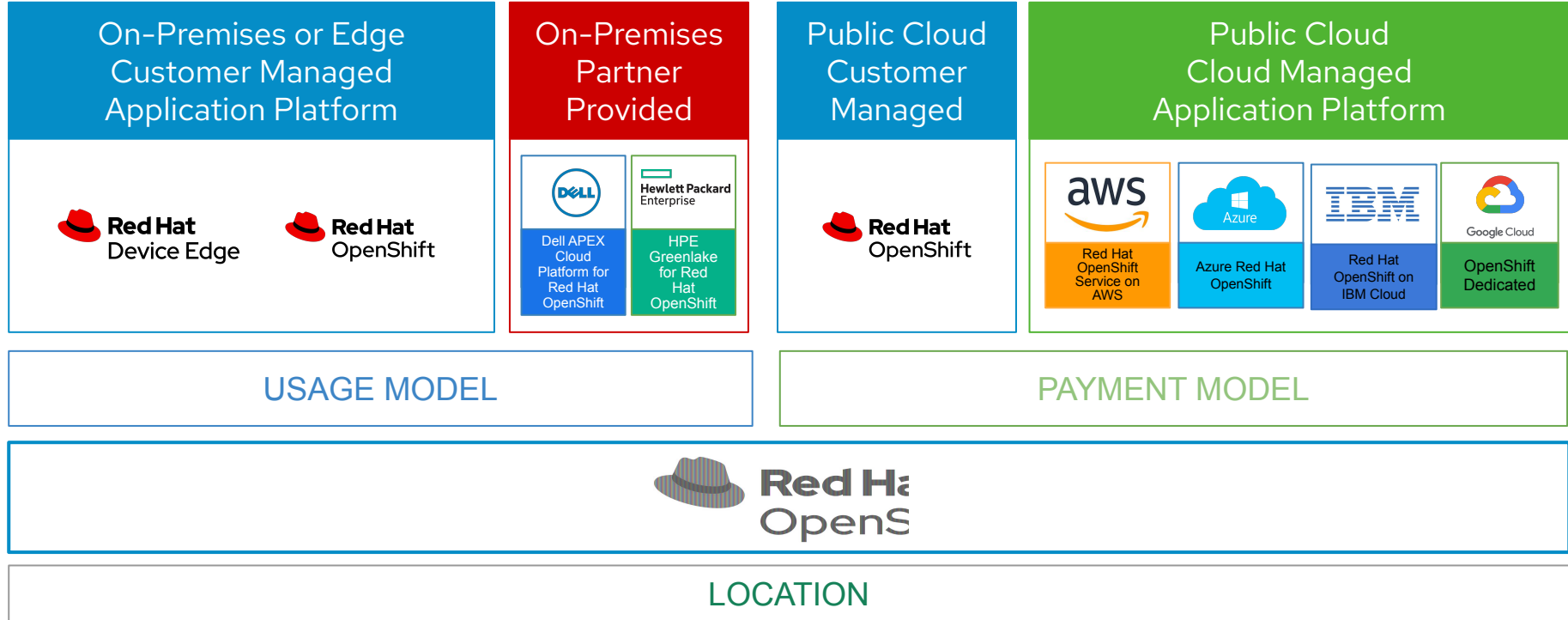
IBM — Red Hat OpenShift on IBM Cloud

*   Red Hat OpenShift® includes supported runtimes for popular languages/frameworks/databases. Additional capabilities listed are from the Red Hat Application Services and Red Hat Data Services portfolios.
** Disaster recovery, volume and multicloud encryption, key management service, and support for multiple clusters and off-cluster workloads requires OpenShift Data Foundation Advanced
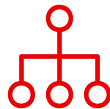*** Optional add-on

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OpenShift is available as a self-managed platform or fully managed service

Red Hat OpenShift cloud services

A turnkey application platform with managed support from Red Hat and leading cloud providers

Focus on innovation
Simplify operations so your teams can refocus on innovation, not managing infrastructure.

Accelerate time to value
Quickly build, deploy, and manage applications that scale as needed.

Hybrid cloud flexibility
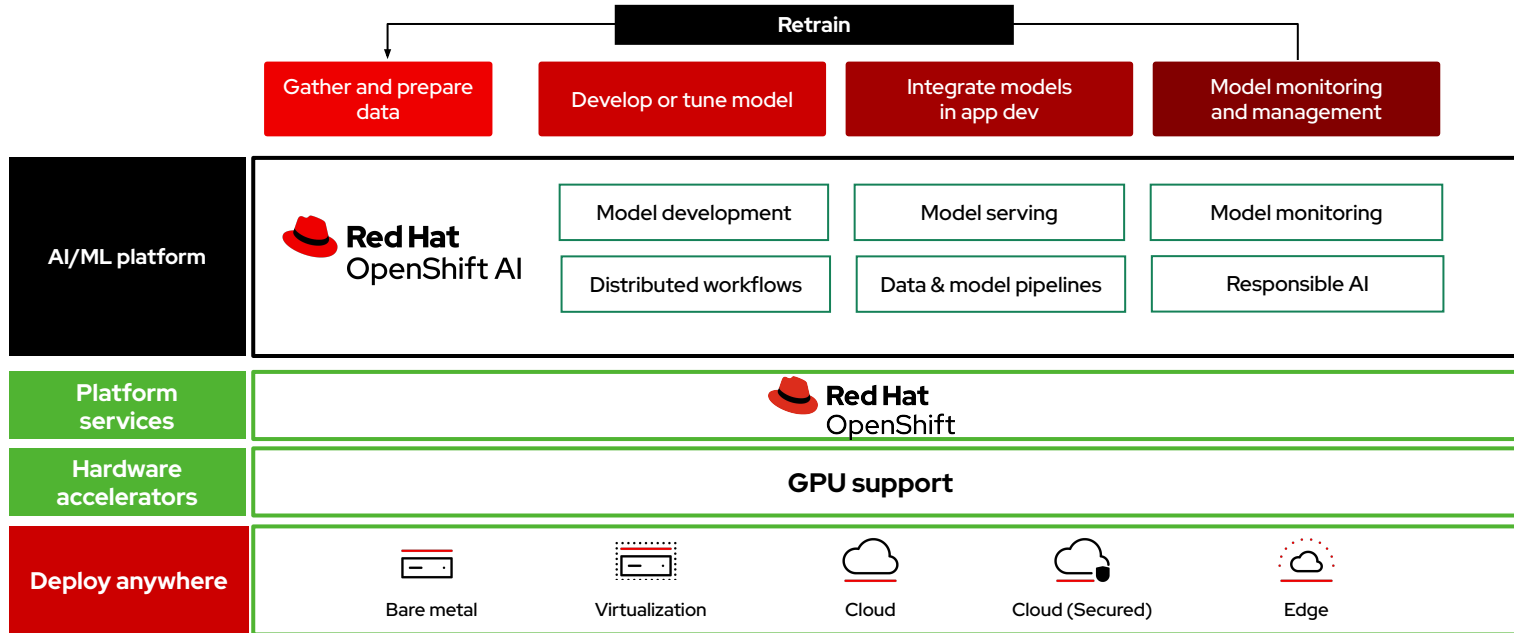Deliver a consistent experience on premises and in the cloud.
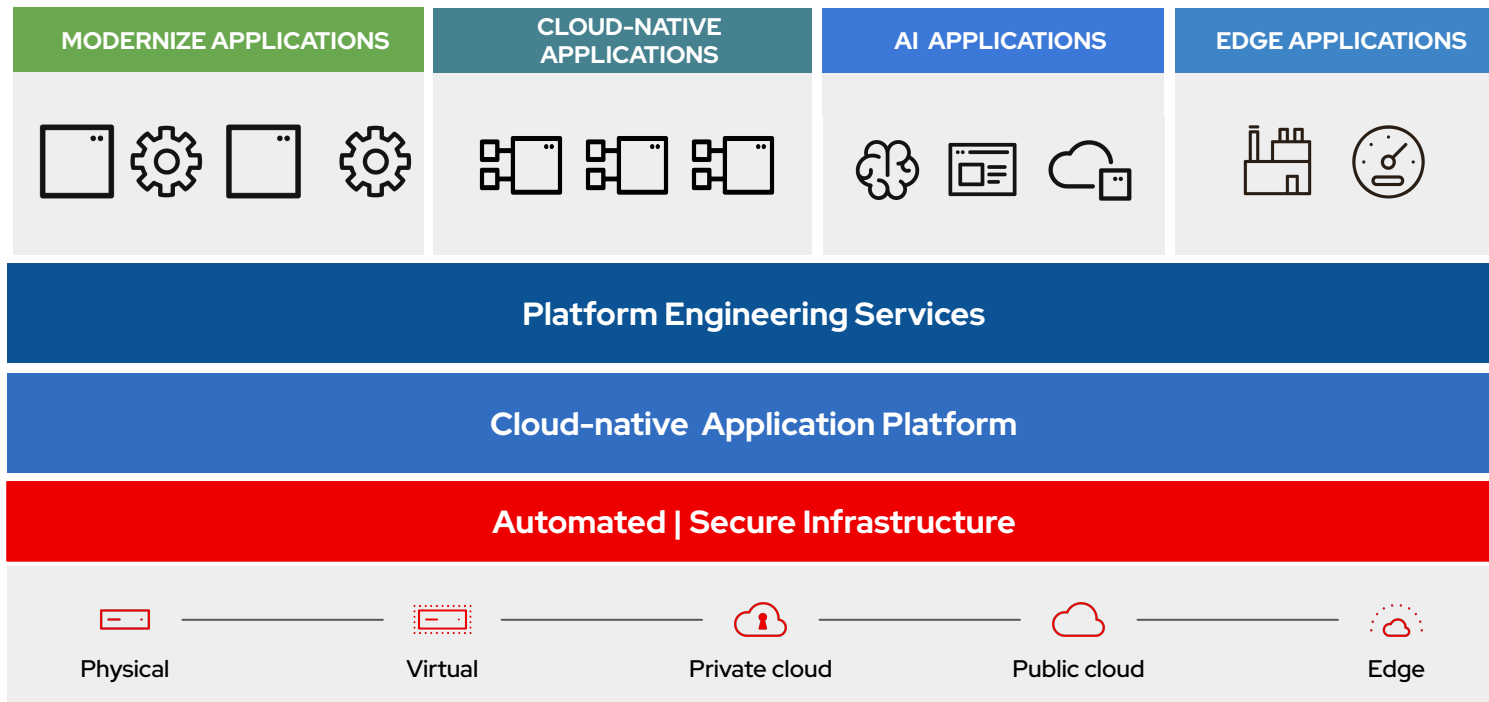
Operational efficiency
Enhance operational consistency, efficiency and security with proactive management and support.

Red Hat OpenShift AI

Red Hat's AI/ML platform for predictive and Gen AI applications

Retrain

Gather and prepare data	Develop or tune model	Integrate models in app dev	Model monitoring and management

AI/ML platform — Red Hat OpenShift AI

Model development	Model serving	Model monitoring
Distributed workflows	Data & model pipelines	Responsible AI

Platform services — Red Hat OpenShift

Hardware accelerators — GPU support

Deploy anywhere

Bare metal	Virtualization	Cloud	Cloud (Secured)	Edge

Red Hat Open Hybrid Cloud

MODERNIZE APPLICATIONS	CLOUD-NATIVE APPLICATIONS	AI APPLICATIONS	EDGE APPLICATIONS

Platform Engineering Services

Cloud-native Application Platform

Automated | Secure Infrastructure

Physical   Virtual   Private cloud   Public cloud   Edge

Red Hat

The Forrester Wave™: Multicloud Container Platforms, Q4 2023

Challengers | **Contenders** | **Strong Performers** | **Leaders**

Stronger current offering

Red Hat

Google

Huawei | VMware

SUSE

Canonical

Mirantis

D2iQ

Weaker current offering

Weaker strategy ⟶ Stronger strategy

Market presence

"**Red Hat sets the pace with enterprise IT capabilities and massive market presence.** With OpenShift's systematic innovation and development on multiple fronts, Red Hat has helped transform the MCP market segment."

"The demand for OpenShift prompted AWS and Microsoft Azure to sell OpenShift as a managed service, despite having their own Kubernetes-based container services. Red Hat's differentiated strategic vision is to up the ante on enterprise-grade open source computing."

The Forrester Wave™: Multicloud Container Platforms, Q4 2023: The Eight Providers That Matter Most and How They Stack Up
Oct 2023

Thank you

Red Hat is the world's leading provider of
enterprise open source software solutions.
Award-winning support, training, and consulting
services make
Red Hat a trusted adviser to the Fortune 500.

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