Red Hat OpenShift

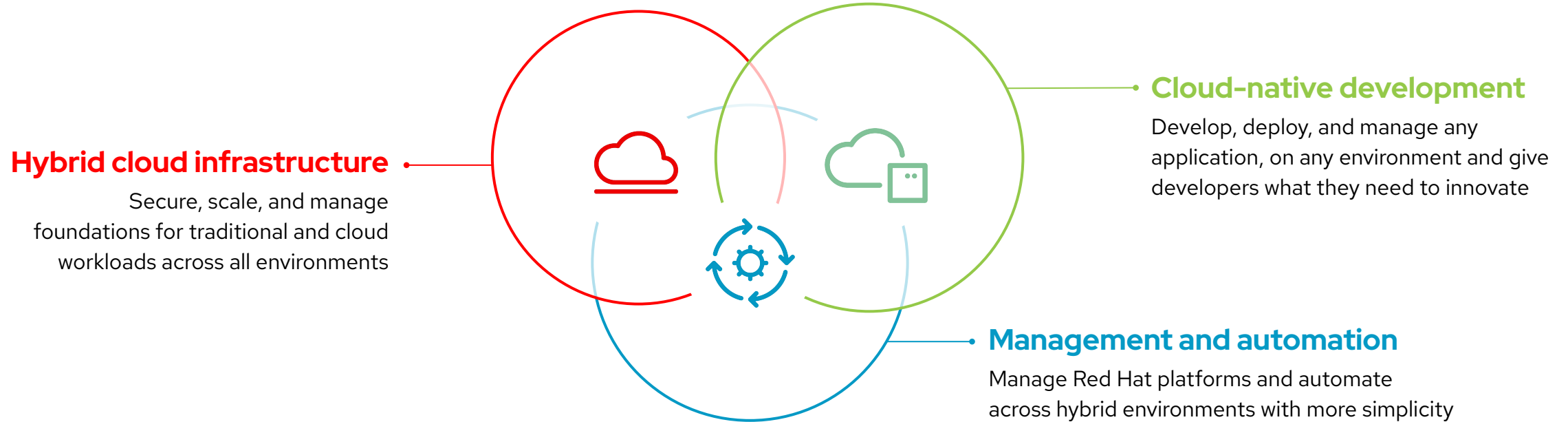# Red Hat in the Cloud(s)

Red Hat OpenShift

Pål Dragseth

Senior Specialist Solution Architect, Application Platform
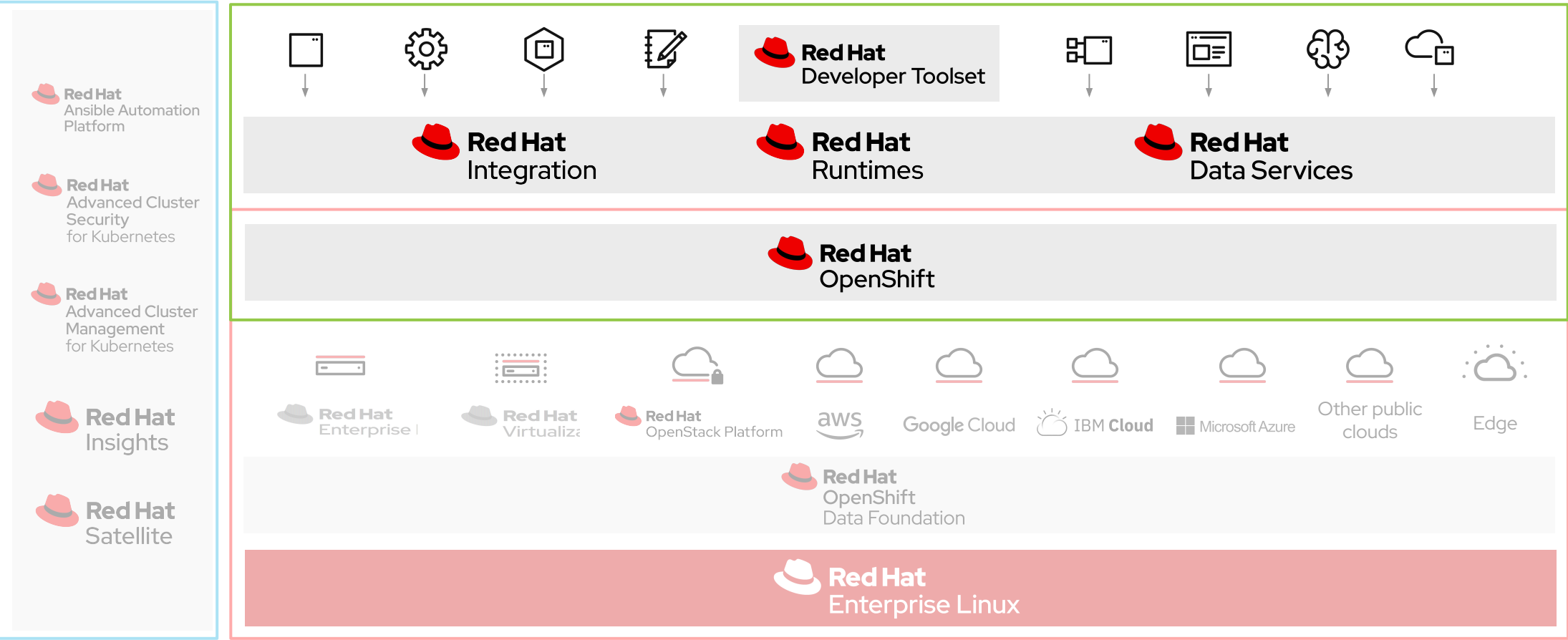
pdragset@redhat.com

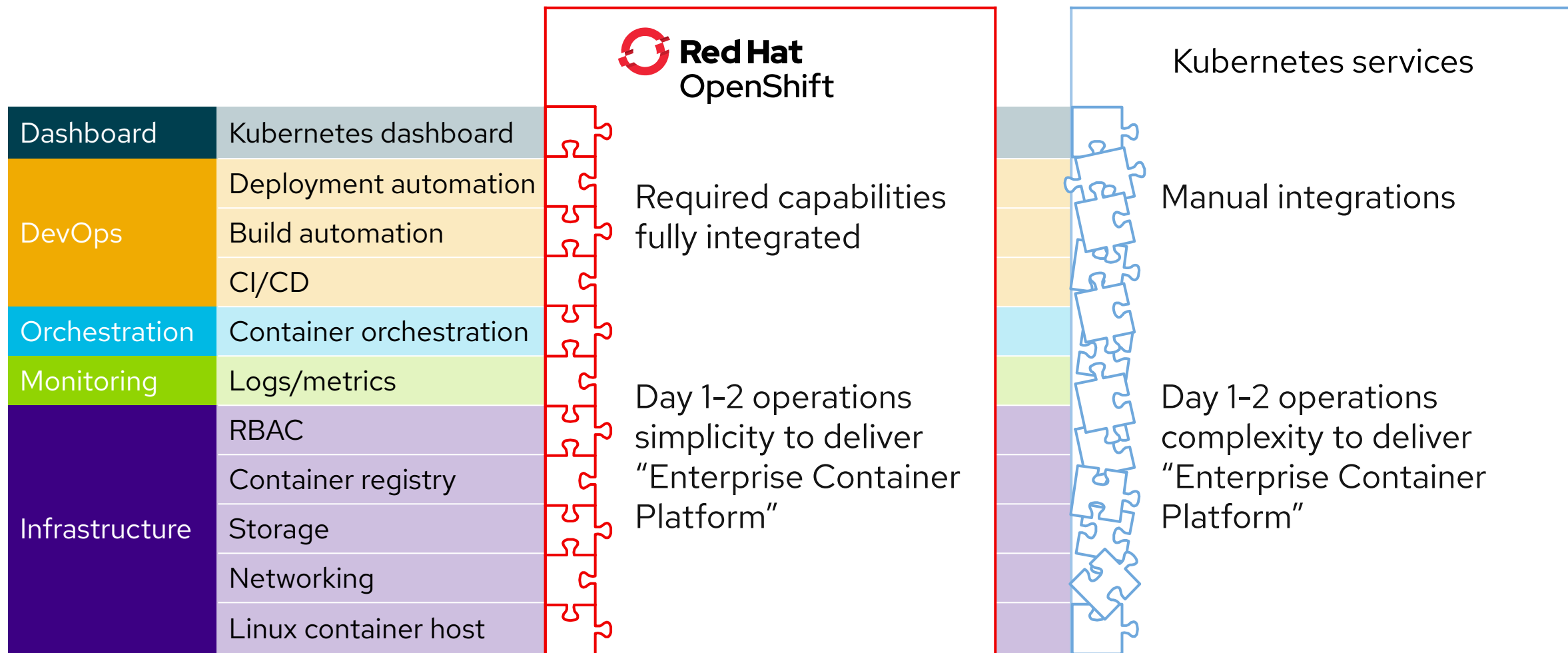# The three pillars of our business

Open hybrid cloud

Red Hat's strategy and vision for its portfolio of software, tools, and services built in the open source development model and designed for future architectures that are open, secure, and agile across hybrid, multicloud

Cloud-native development

Develop, deploy, and manage any application, on any environment and give developers what they need to innovate

Hybrid cloud infrastructure

Secure, scale, and manage foundations for traditional and cloud workloads across all environments

Management and automation

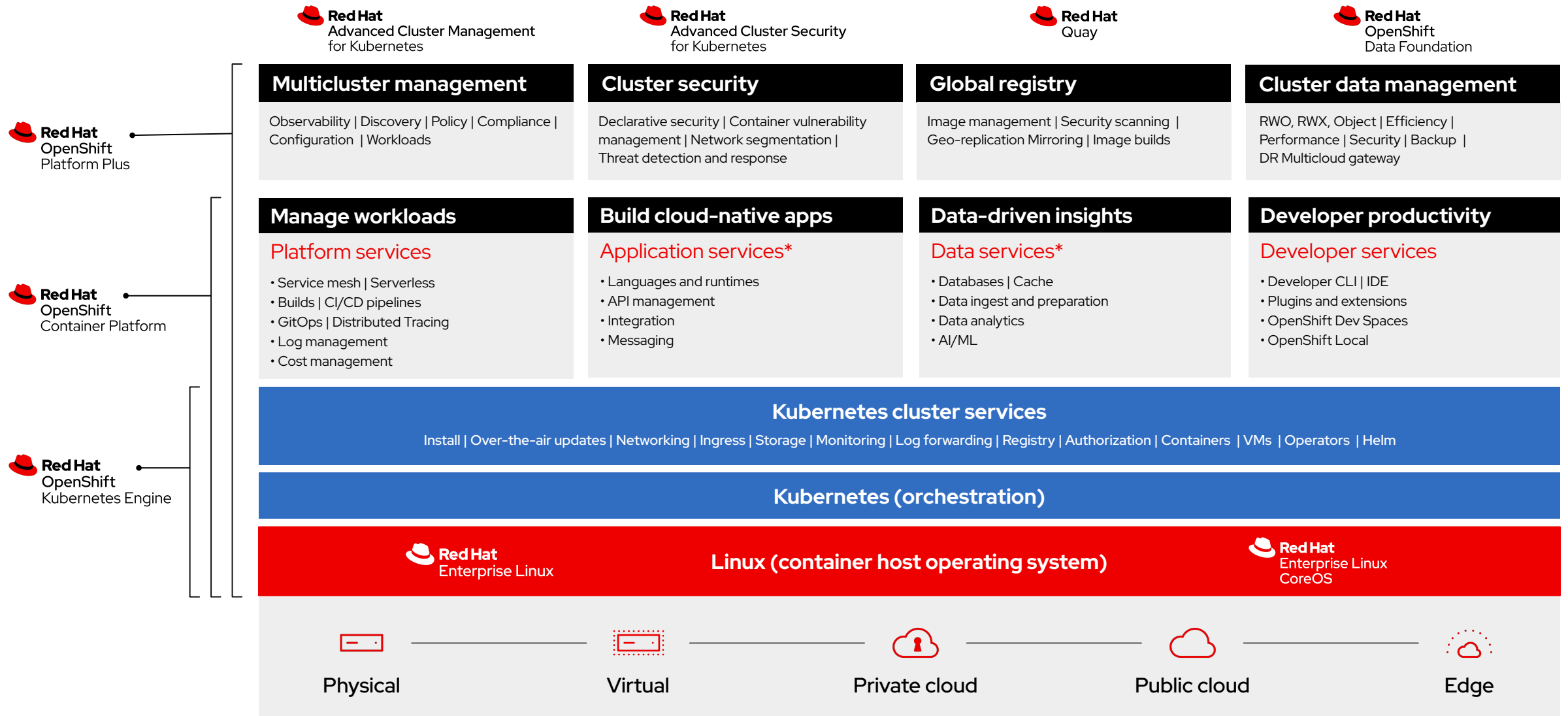Manage Red Hat platforms and automate across hybrid environments with more simplicity

Addressing these challenges with a broad portfolio

OpenShift offers functionality fully integrated

			Red Hat OpenShift	Kubernetes services
Dashboard	Kubernetes dashboard			
DevOps	Deployment automation			
	Build automation		Required capabilities fully integrated	Manual integrations
	CI/CD			
Orchestration	Container orchestration			
Monitoring	Logs/metrics			
Infrastructure	RBAC		Day 1–2 operations simplicity to deliver "Enterprise Container Platform"	Day 1–2 operations complexity to deliver "Enterprise Container Platform"
	Container registry			
	Storage			
	Networking			
	Linux container host			

Red Hat open hybrid cloud platform

Red Hat
Advanced Cluster Management
for Kubernetes

Red Hat
Advanced Cluster Security
for Kubernetes

Red Hat
Quay

Red Hat
OpenShift
Data Foundation

Red Hat
OpenShift
Platform Plus

Multicluster management	Cluster security	Global registry	Cluster data management
Observability | Discovery | Policy | Compliance | Configuration | Workloads	Declarative security | Container vulnerability management | Network segmentation | Threat detection and response	Image management | Security scanning | Geo-replication Mirroring | Image builds	RWO, RWX, Object | Efficiency | Performance | Security | Backup | DR Multicloud gateway

Red Hat
OpenShift
Container Platform

Manage workloads	Build cloud-native apps	Data-driven insights	Developer productivity
Platform services	**Application services***	**Data services***	**Developer services**
• Service mesh | Serverless • Builds | CI/CD pipelines • GitOps | Distributed Tracing • Log management • Cost management	• Languages and runtimes • API management • Integration • Messaging	• Databases | Cache • Data ingest and preparation • Data analytics • AI/ML	• Developer CLI | IDE • Plugins and extensions • OpenShift Dev Spaces • OpenShift Local

Red Hat
OpenShift
Kubernetes Engine

Kubernetes cluster services

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

Kubernetes (orchestration)

Red Hat
Enterprise Linux

Linux (container host operating system)

Red Hat
Enterprise Linux
CoreOS

Physical   Virtual   Private cloud   Public cloud   Edge

Red Hat | **intel.**

* 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

CONSISTENCY
ACROSS ANY ENVIRONMENT

A consistent platform no matter how or where you run

Developer Efficiency   **Business Productivity**   **Enterprise Ready**

Red Hat OpenShift Everywhere

Red Hat OpenShift Service on AWS	Azure Red Hat OpenShift	Red Hat OpenShift on IBM Cloud	Red Hat OpenShift Dedicated	OpenShift Container Platform

Red Hat with Cloud Provider – Natively integrated

or

OCP Customer Managed

Red Hat Managed

You manage it, for control and flexibility

DEMO
Red Hat OpenShift cloud offerings

* Using the Azure Cloud environment

Some benefits of a Cloud Approach

Load handling

Cloud and distributed infrastructure handle the load nicely. Geographical affinity improves QoS for users

Reliability

Automatic multi-zone deployments to consistently perform and provide access to data and services without interruption

Pay as you Go

Start small and scale with your business. Optimize costs with flexible pay-as-you-go pricing model

What's the reality of your IT environment?

Internal silos

Monolithic applications

Multiple generations of technology

Workloads running across different footprints

Skills gap
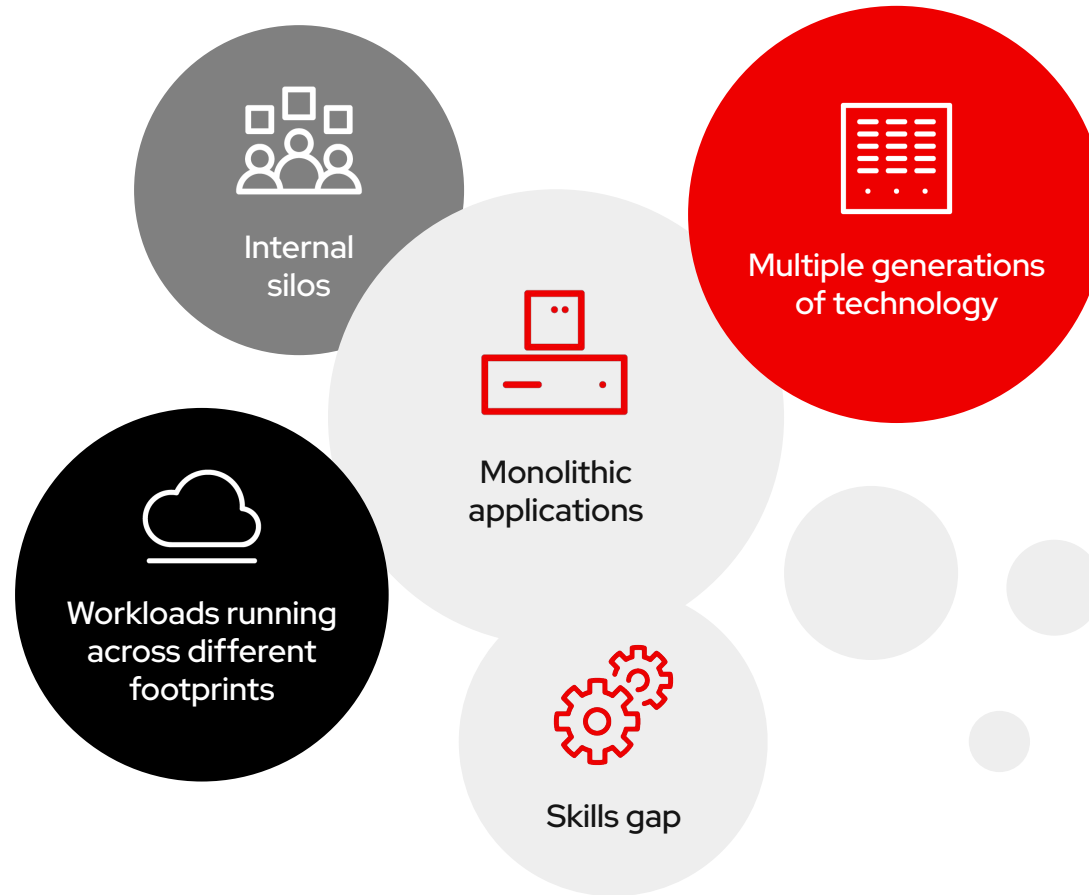
Delivering consistency and flexibility

| Traditional apps | Cloud-native apps | AI/ML, Functions |
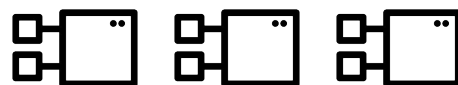
Communities of Innovation | Ecosystems of Solutions

Red Hat OpenShift

Secure & Automated Infrastructure and Operations

Physical   Virtual   Private cloud   Public cloud   Edge

Red Hat | intel

DEMO 2
Focus on your business value with Red Hat OpenShift

Your streamline application platform across all your footprints

Full stack management and unified experience

Maximize full value of Red Hat® OpenShift®

Hybrid cloud flexibility

Application layer	Streamlined developer experience			

Unified platform to build cloud-native applications

Native integration

Application and data services	Data services	Identity services	Customer services
	Integration services	Partner services	Database services

Platform services	Red Hat OpenShift Service on AWS	Microsoft Azure Red Hat OpenShift	Red Hat OpenShift on IBM Cloud	Red Hat OpenShift Dedicated

Cloud providers	aws	Microsoft Azure	IBM Cloud	Google Cloud	Customer Data Center

Red Hat | intel.

The Red Hat Developer Program

Technical developer content that educates; access to free software for development
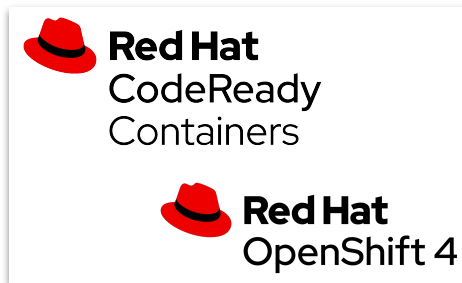
Free Products

Free access to downloadable and SaaS software for use in development and pre-production environments.
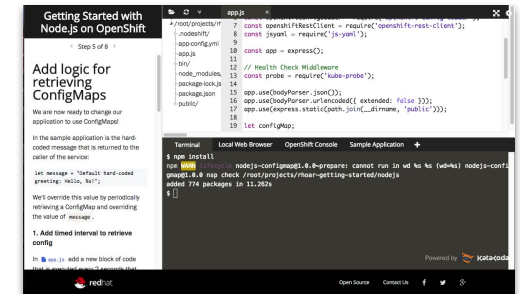

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Technical talks and hands-on labs delivered virtually and physically. Book a private session for your organization.
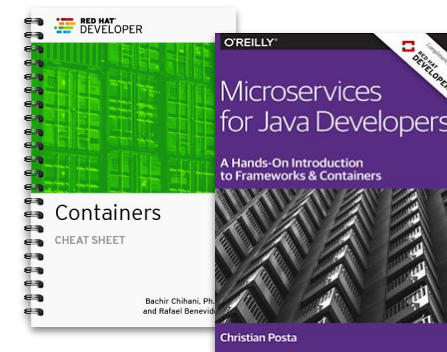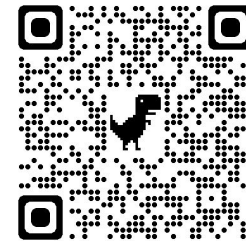

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Developer Sandbox

Get **free access** for renewable **30 days** to a self-service, cloud-hosted **Kubernetes** experience with **Developer Sandbox** for **Red Hat OpenShift**.

https://developers.redhat.com/developer-sandbox

```
[your@sandbox ~]$ lscpu
RAM: 7GB
Storage: 15GB
Time limit: 30 days
Awesome: YES
```

DEMO 3
developers.redhat.com

Upskill with our developer portal

pdragset@redhat.com

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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