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Moving to OpenShift Cloud Services with Red Hat

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Why Red Hat for your Kubernetes Platform?

Kubernetes - Red Hat was there at the start



Google



Red Hat

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

CNCF Cloud Native Interactive Landscape

The Cloud Native Trail Map (png, pdf) is CNCF's recommended path through the cloud native landscape. The cloud native landscape (png, pdf), serverless landscape (png, pdf), and member landscape (png, pdf) are dynamically generated below. Please open a pull request to correct any issues. Greyed logos are not open source. Last Updated: 2021-04-20 12:41:38Z

You are viewing 917 cards with a total of 2,549,076 stars, market cap of \$15.12T and funding of \$16.2B.

Navigation: Landscape | Card Mode | Serverless | Members

App Definition and Development

- Database: KV, Vitess, CockroachDB, Yugabyte, Redis, Aerospike, ScyllaDB, MemSQL, InfluxDB, TimescaleDB, etc.
- Streaming & Messaging: cloudevents, NATS, Apache Kafka, Pulsar, etc.
- Application Definition & Image Build: HELM, Bullpups.io, Tekton, etc.
- Continuous Integration & Delivery: argo, flagger, flux, etc.

Orchestration & Management

- Scheduling & Orchestration: kubernetes, Nomad, etc.
- Coordination & Service Discovery: CoreDNS, etcd, etc.
- Remote Procedure Call: gRPC, etc.
- Service Proxy: envoy, etc.
- API Gateway: Kong, etc.
- Service Mesh: Linkerd, etc.

Runtime

- Cloud Native Storage: MinIO, etc.
- Container Runtime: containerd, cri-o, etc.
- Cloud Native Network: CNV, etc.

Provisioning

- Automation & Configuration: Ansible, etc.
- Container Registry: Harbor, etc.
- Security & Compliance: Falco, etc.
- Key Management: Spiffe, etc.

Special

- Kubernetes Certified Service Provider
- Kubernetes Training Partner

Platform

- Certified Kubernetes - Distribution: AWS, etc.
- Certified Kubernetes - Hosted: AWS, etc.
- Certified Kubernetes - Installer: etc.
- PaaS/Container Service: etc.

Observability and Analysis

- Monitoring: Prometheus, etc.
- Logging: Fluentd, etc.
- Tracing: Jaeger, etc.
- Chaos Engineering: etc.

Serverless

Members

CD Foundation Landscape

Cloud Native Landscape

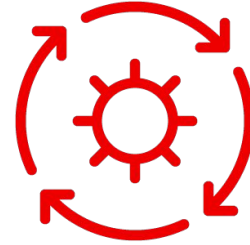
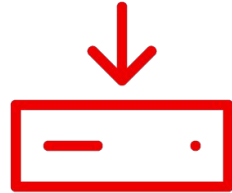
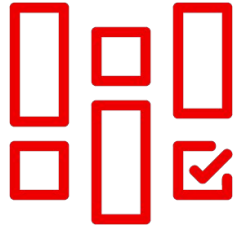
Cloud Native Computing Foundation

Red Hat | Amplify

l.cncf.io

Red Hat Openshift

Kubernetes Focused On Day 2 Operations



VALUE

DAY 0 - Plan

Innovation vs Stability

Speed vs Security

Build vs Buy

On Prem vs Cloud

DAY 1 - Build

Infrastructure

Networking

Service Integration

Adoption

SLAs

DAY 2 - RUN

OS upgrade & patch

Platform upgrade & patch

Image upgrade & patch

App upgrade & patch

Security patches

Continuous security scanning

Multi-environment rollout

Enterprise container registry

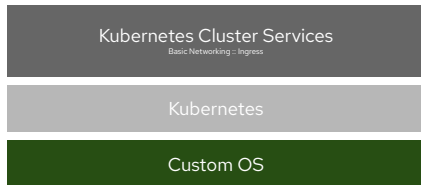
Cluster & app elasticity

Monitor, alert, remediate

Log aggregation

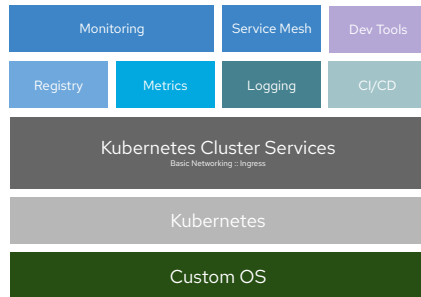
Why Red Hat Managed Openshift?

Your Choice: Make or Buy?



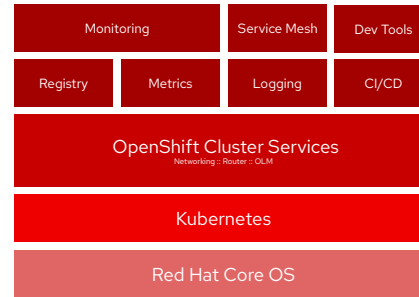
xKS

- Kubernetes Control Plane
- Easy to spin up
- Customer responsible for everything



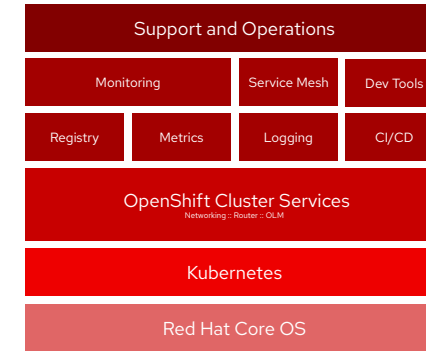
xKS PLUS "NATIVE" SERVICES

- Collection of individual services coupled together
- Requires Integration



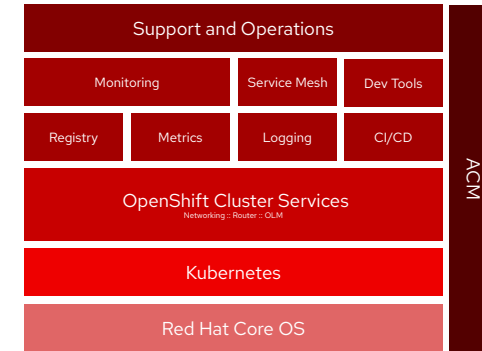
SELF-MANAGED OPENSIFT PLATFORM

- Allows for customization
- Strong bias for control
- Large IT Ops availability
- Regulatory landscape



ROSA

- Low level of customization
- Development-driven business
- IT Ops resource constraints







OPENSIFT PLATFORM PLUS

- Multi-cloud environment
- Complex landscape
- Evolved DevOps practice
- Focus on portability

Red Hat Managed Services

Day 2 Experience from the Field

Managed Red Hat OpenShift Services			
 Red Hat OpenShift Service on AWS	 Azure Red Hat OpenShift	 Red Hat OpenShift on IBM Cloud ¹	 Red Hat OSD (Deutsche Bank)

Managed Services run and operated based on Red Hat Engineering and Field Services best practice

ROSA, ARO and ROKS are purchased and delivered as native services

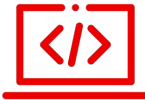
Other cloud providers on the roadmap for the future

Red Hat OpenShift Managed Services



Faster time to value

Quickly deploy clusters and applications in minutes that scale as needed, enabling a focus on innovative applications, not managing infrastructure



Reduce complexity

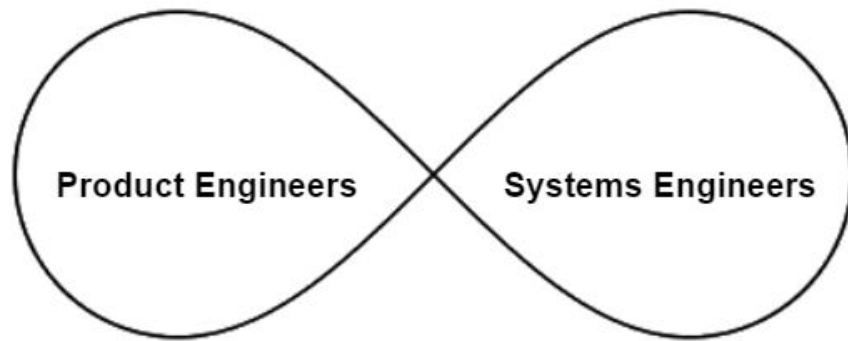
Fully-Managed OpenShift throughout the stack, 24x7 expert SRE support and an industry leading 99.95% SLA



Extensibility

Layer Add-ons, Red Hat services, Partner operators, custom operators, and public cloud services to extend the functionality of OpenShift Dedicated

Full Stack Management from a Global SRE Team



People and Skills



Process and Automation



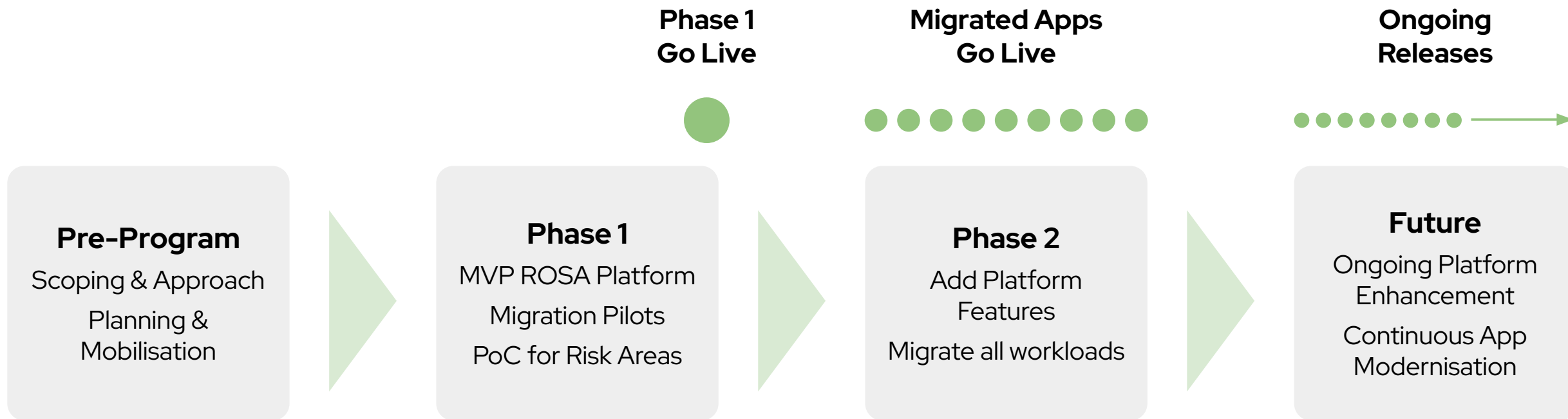
Support and Security

ROSA SREs do the undifferentiated heavy lifting while Customers on develop core competencies

Creating Success with Red Hat Services

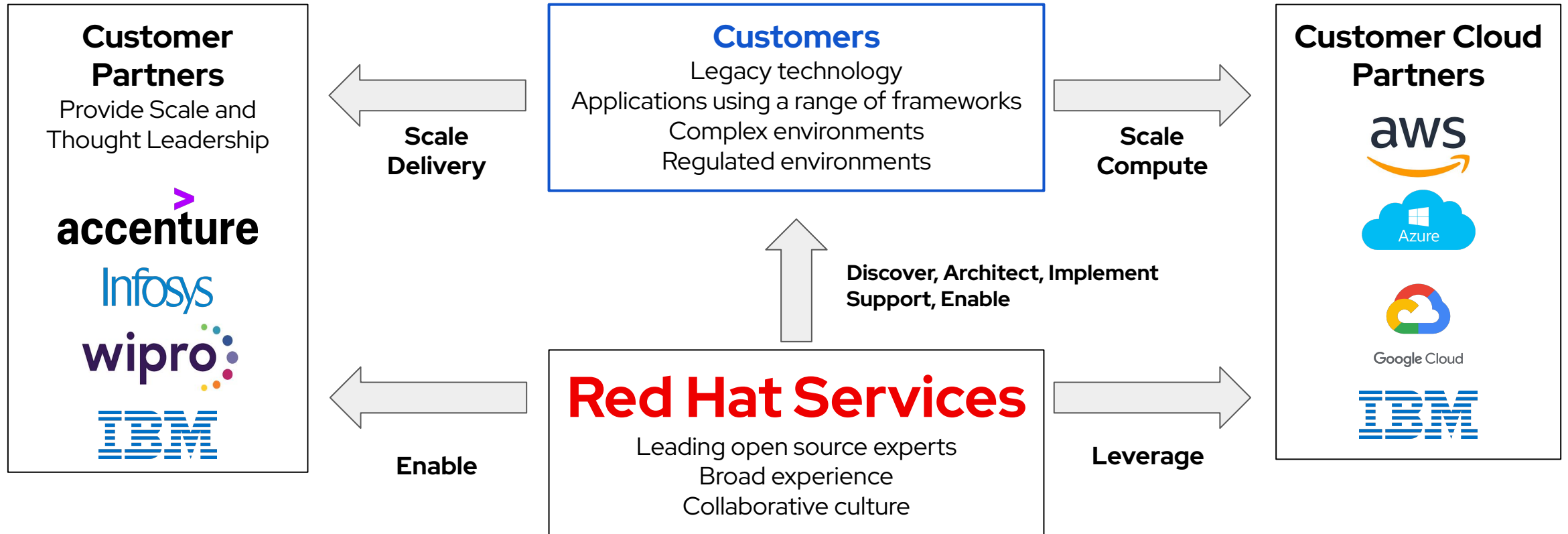
Partnering with the customer to create the plan

A recent customer success example - Moving from Openshift 3.x to ROSA

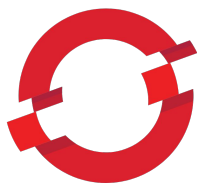


Why work with Red Hat Services?

Meeting the customer where they are, getting them where they want to be



In summary, a formula for success...



OPENSIFT

Openshift is the leading Kubernetes application platform that is designed for Day 2 operations



Red Hat OpenShift Managed Services are an easier, cost-effective way to consume OpenShift from your cloud partner



Engaging Red Hat Services is the best way to deliver a successful outcome for your business and your delivery partners

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Thank you



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