



State of the Union, OpenShift Roadmap and Vision

Reza Shafii
Vice President - Cloud Platform Services - Red Hat

Chris Wright
CTO - Red Hat

Does IT Matter? - Circa 2003

Harvard
Business
Review

COSTS

IT Doesn't Matter

by Nicholas G. Carr

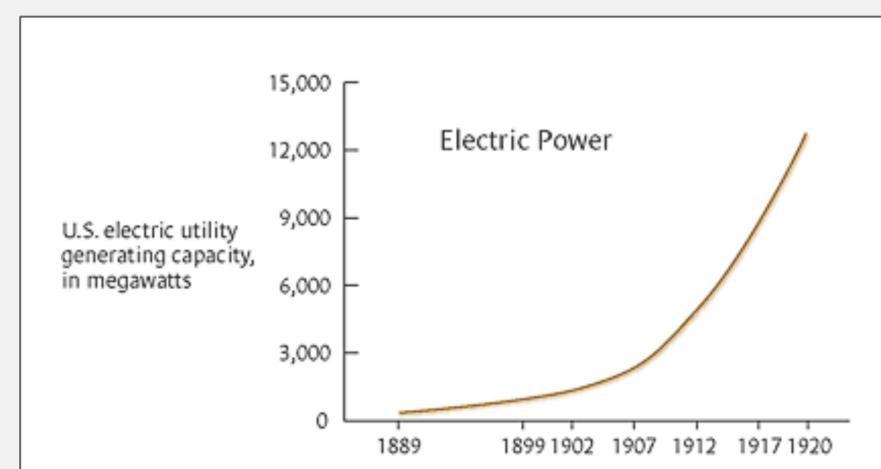
FROM THE MAY 2003 ISSUE

SAVE SHARE COMMENT TEXT SIZE PRINT \$8.95 BUY COPIES

In 1968, a young Intel engineer named Ted Hoff found a way to put the circuits necessary for computer processing onto a tiny piece of silicon. His invention of the microprocessor spurred a series of technological breakthroughs—desktop computers, local and wide area networks, enterprise software, and the Internet—that have transformed the business world. Today, no one would dispute that information technology has become the backbone of commerce. It underpins the operations of individual companies, ties together far-flung supply chains, and, increasingly, links businesses to the customers they serve. Hardly a dollar or a euro changes hands anymore without the aid of computer systems.

As IT's power and presence have expanded, companies have come to view it as a resource ever more critical to their success, a fact clearly reflected in their spending habits. In 1965, according to a study by the U.S.

Department of Commerce's Bureau of Economic Analysis, less than 5% of the capital expenditures of





Computing Applications



Computing Services



Computing Infrastructure



Forever a source of differentiation

No sign yet of commoditization

On way to “boring necessity to operations”

Electrical Applications



Forever a source of differentiation

Electrical Services

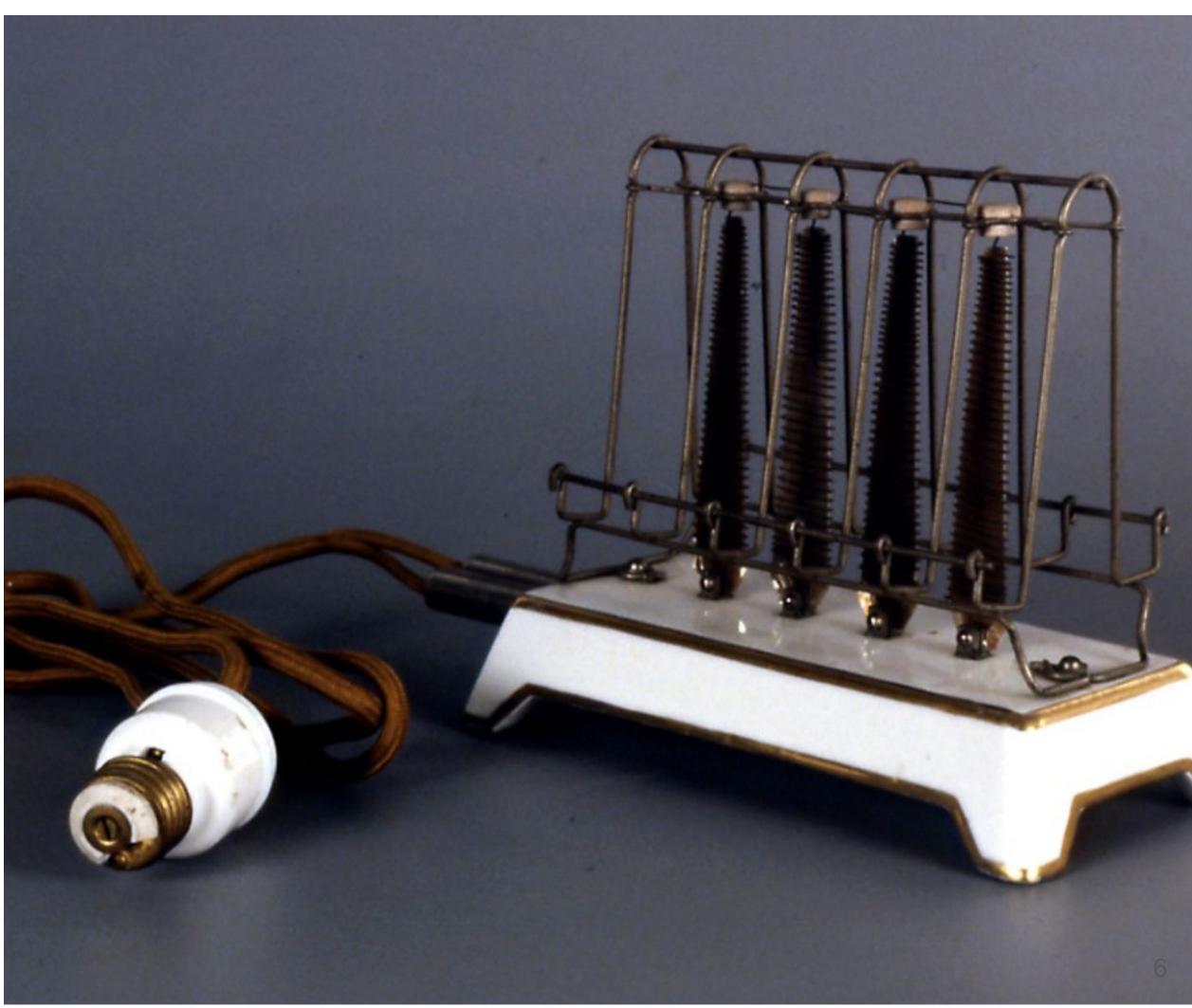


Still innovating

Electrical Infrastructure

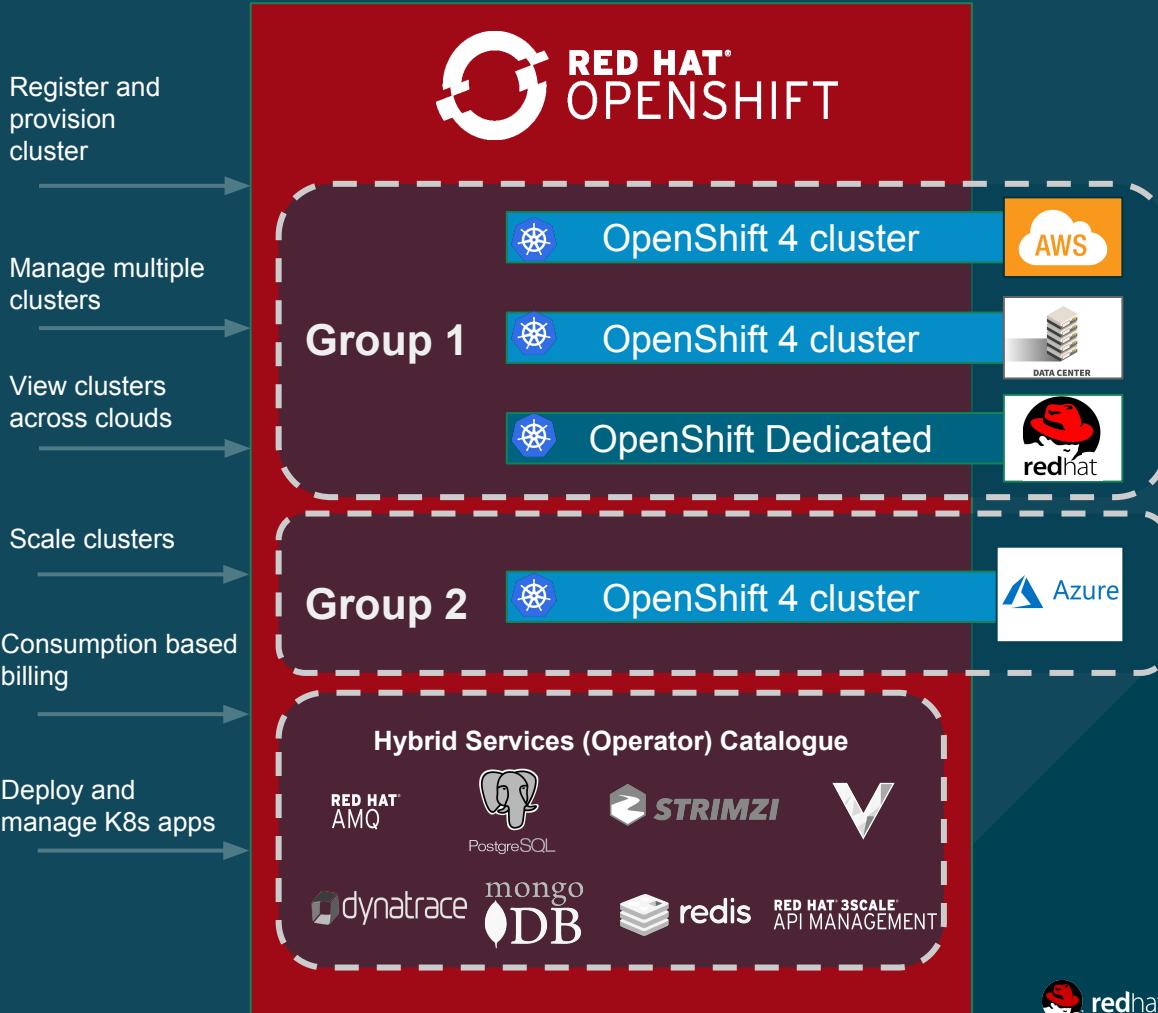


Reached “boring necessity to operations”



A true hybrid cloud experience

- Manage multiple **Kubernetes** clusters across on-prem and multiple clouds
- **Automated operations** - Simplicity of the cloud anywhere
- **True hybrid, Kubernetes native services**

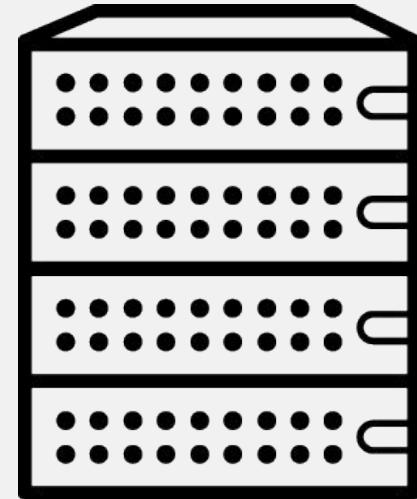


BETTING ON KUBERNETES SINCE DAY 1



Bare Metal

- OpenShift 4 brings more simplicity and automation
 - Applied to bare metal clusters, as well
- Bare metal infrastructure management that
 - Is automated
 - Works with Kubernetes native interfaces
- Vision of a converged infrastructure platform
 - including VMs with KubeVirt
- Enabling key environments and use cases
 - Performance sensitive applications
 - Edge architectures



Many smaller clusters, fewer larger clusters.

Proximity



Edge



Security



Compliance



Workload Optimized (e.g. TPU)



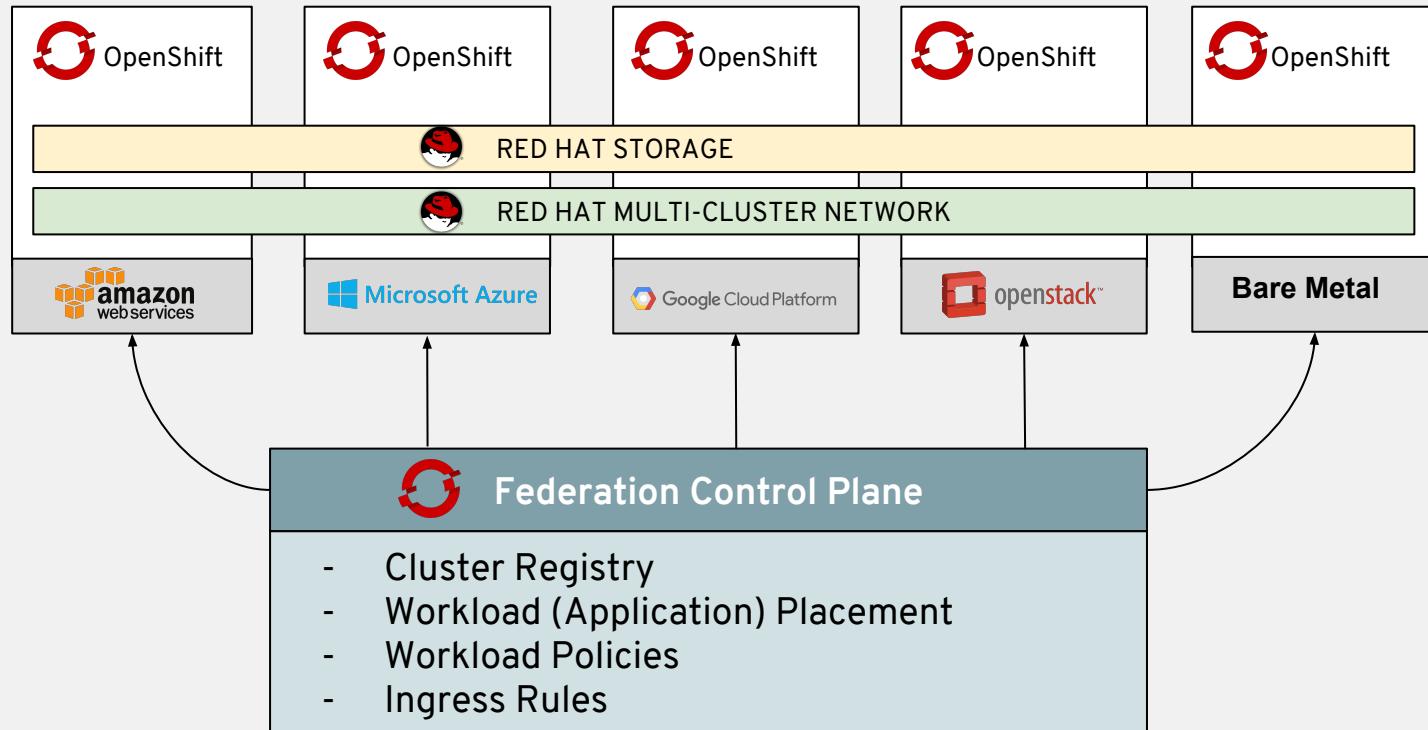
Space Conscious



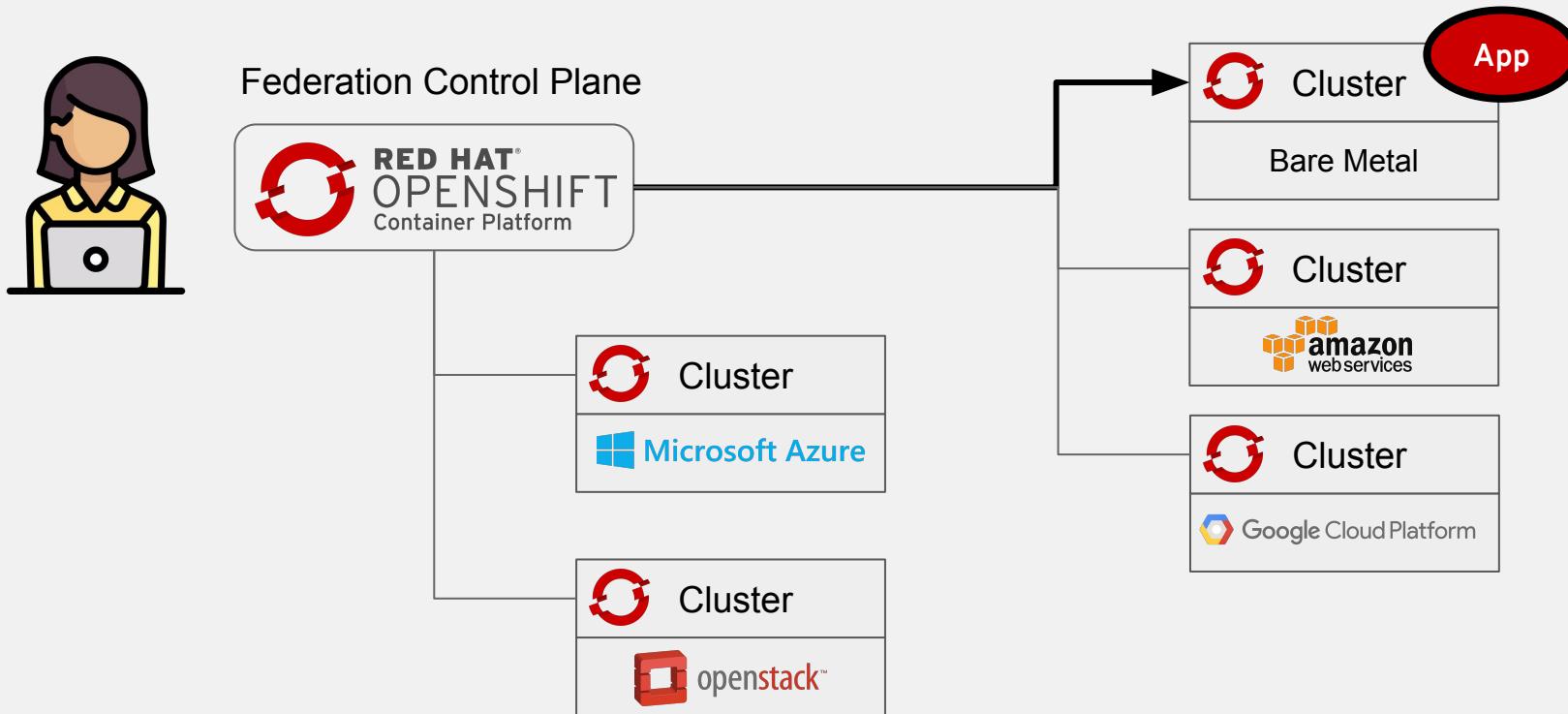
Low Power



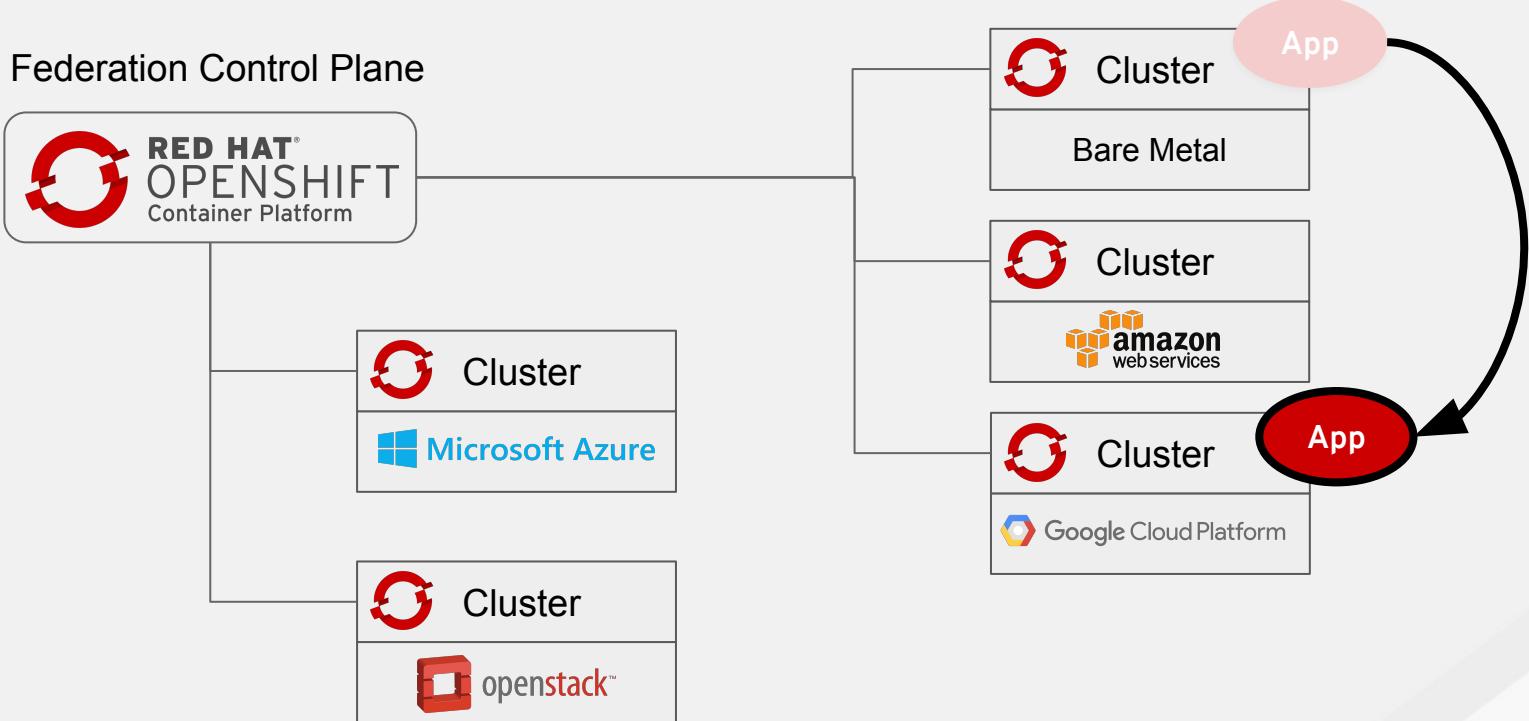
The OpenShift Federated Control Plane



Deploying directly to clusters best suited for your application



And later migrate those applications if the need arises



Come and join us

<https://github.com/oracle/kubernetes-community/tree/master/sig-federation>

Red Hat Summit PacMan Multi-Cloud Application Portability Demo

<https://www.youtube.com/watch?v=V8TnTlOAqvQ>



Paul Morie (@cheddarmint)

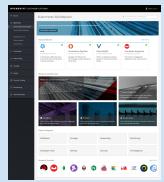


Ivan Font (@ivanmfont)



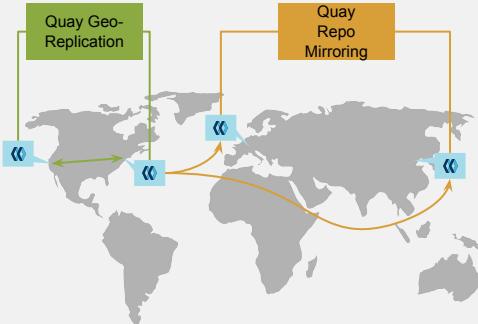
Unified Hybrid Cloud

cloud.redhat.com

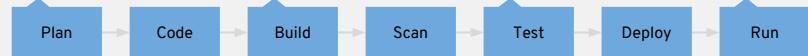


Cluster 1	AWS
Cluster 2	on-prem
Cluster 3	Dedicated

- manage clusters across all infrastructures
- browse and deploy true hybrid services from operator marketplace to clusters



- single source of truth for depl. artefacts
- centralized metadata repository (signatures, vulnerabilities, labels)
- event triggers / notifications



- provenance data across the lifecycle
- attestations stored in centralized registry

RED HAT® QUAY

- centralized content ingress & federation
- Quay Geo-Replication to serve applications from localized storage across regions
- Quay Repo Mirroring to automatically distribute content to local registries

RED HAT® OPENSHIFT®
Container Platform

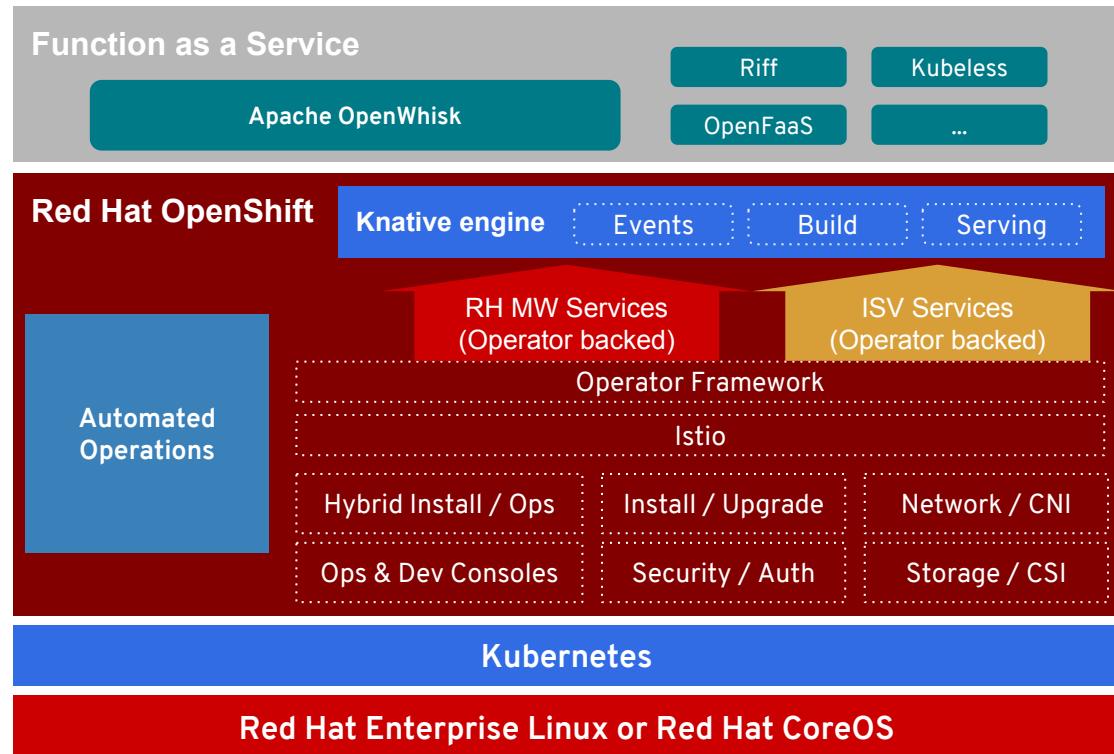
- Embedded Operator Marketplace
- Policy Management & Enforcement
- Vulnerability Dashboards
- Notifications / Alerting

Red Hat OpenShift and Serverless

Developer experience
APIs, CLI, service binding

Building blocks for serverless
Source-centric and container-based

The leading enterprise Kubernetes platform
Automated Operations
Build an run anywhere (Hybrid Cloud)





- Containerized



AWS RDS

- Containerized
- Cloud storage ready
- Replicated
- Backup
- Automated updates



- Containerized
- Container storage ready
- Replicated
- Backup
- Automated updates
- Enhanced observability
- Customization
- Local development
- Fully Open Source
- Any Kubernetes
- Certified on OpenShift



THE FACTORY OF THE FUTURE WILL HAVE ONLY TWO EMPLOYEES, A MAN AND A DOG.

THE MAN WILL BE THERE TO FEED THE DOG.

THE DOG WILL BE THERE TO KEEP THE MAN FROM TOUCHING THE EQUIPMENT.

- Warren G. Bennis

Backup Slides for Chris