

OpenShift Multicloud / Multicloud Management

Optional subheading

Presenter's Name

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Installation Paradigms

OPENSIFT CONTAINER PLATFORM

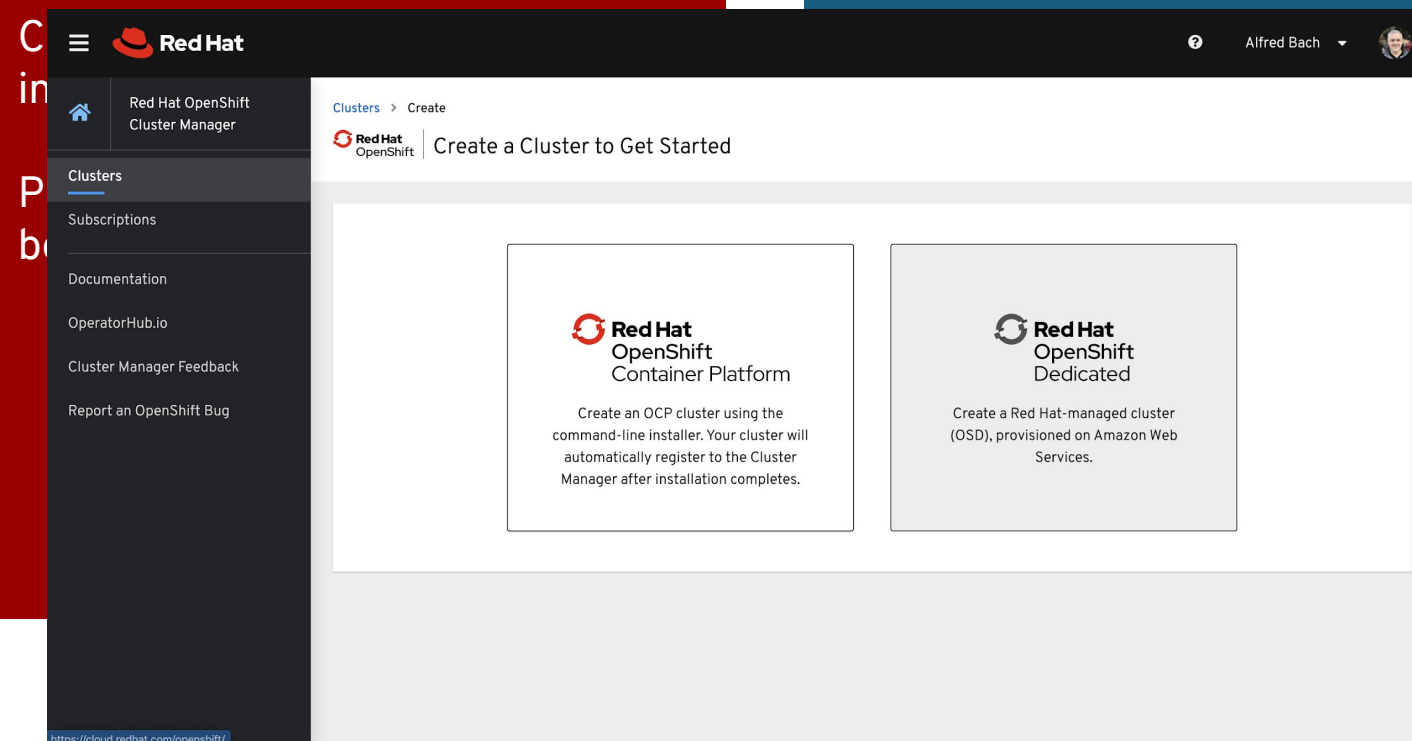
Full Stack Automated

Simplified opinionated “Best Practices” for cluster provisioning

Fully automated installation and updates including host container OS.



Pre-existing Infrastructure



Azure Red Hat OpenShift

Full-stack Automated Installation

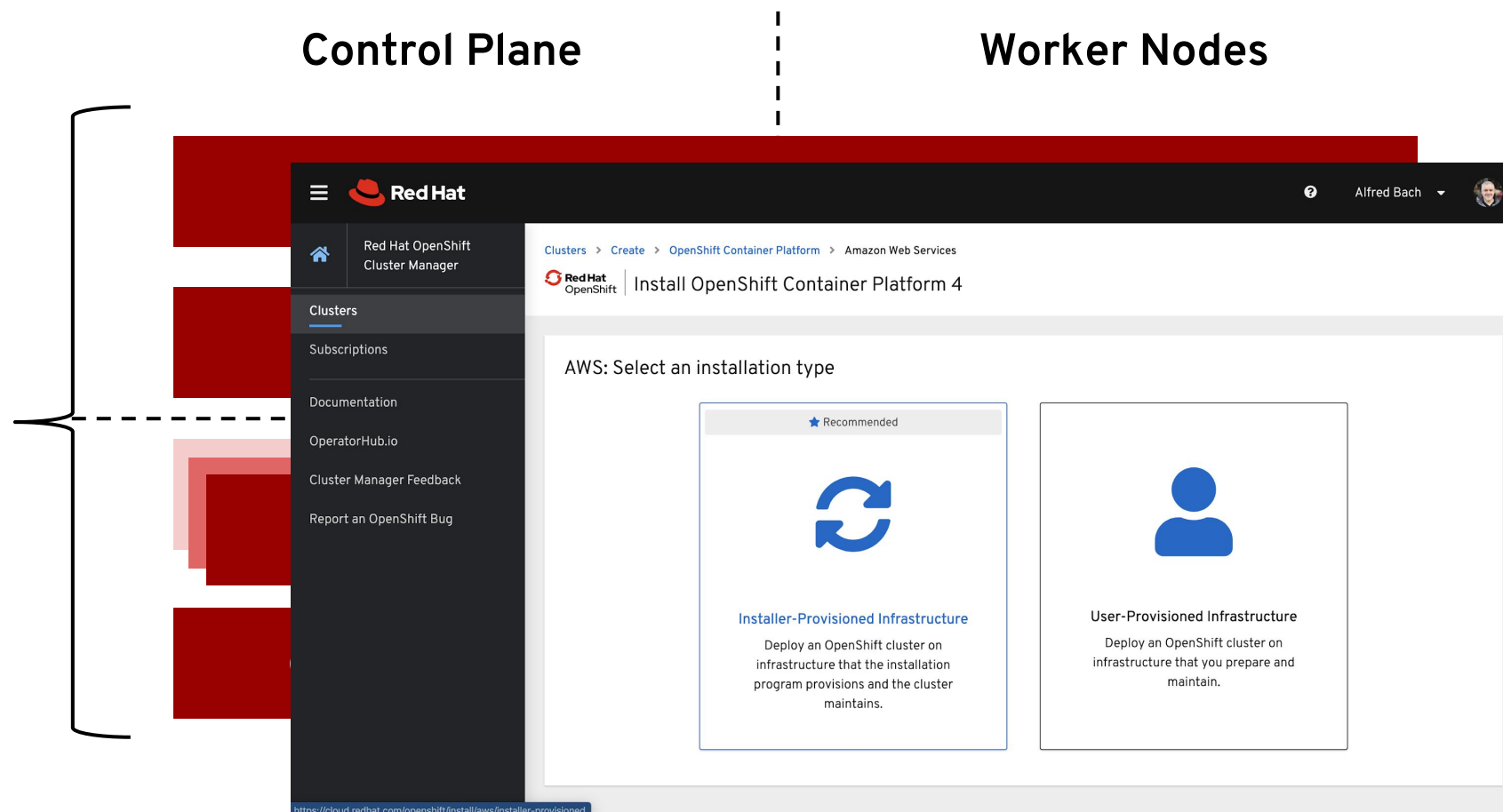
Installer Provisioned Infrastructure (IPI)

- User managed
- Operator managed

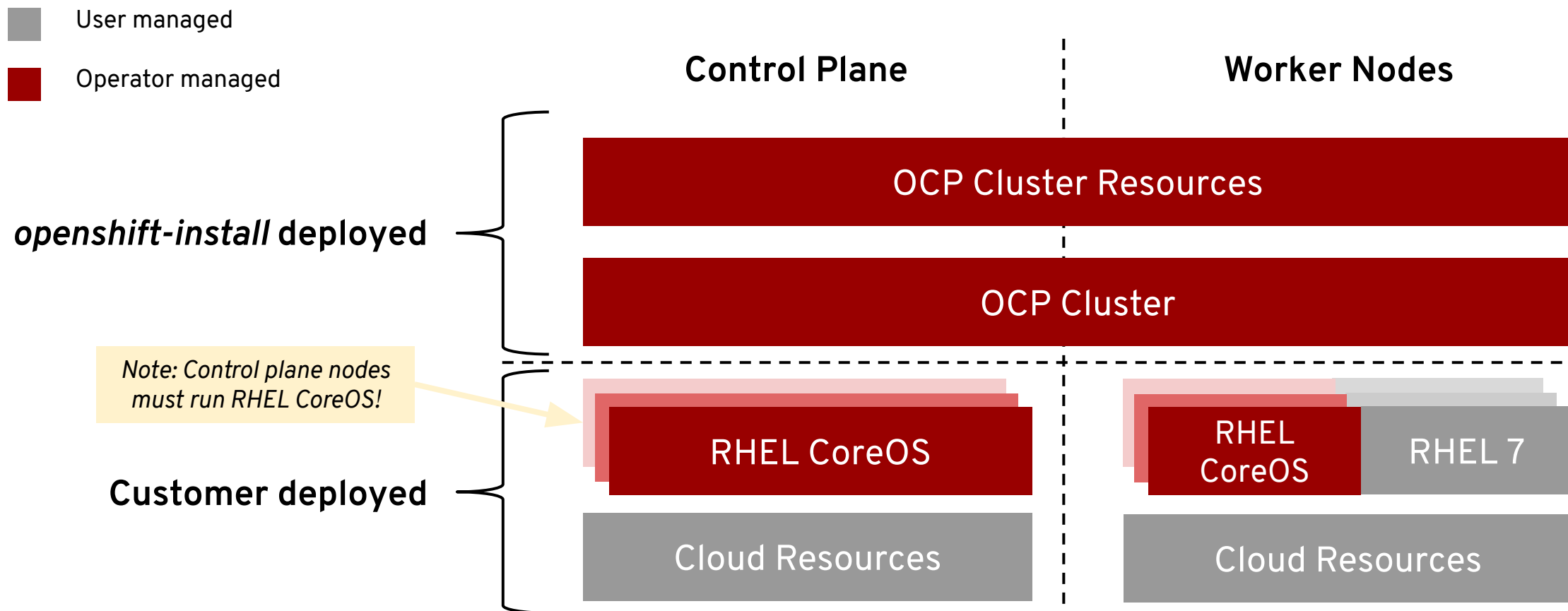
Control Plane

Worker Nodes

openshift-install deployed



Pre-existing Infrastructure Installation User Provisioned Infrastructure (UPI)












Comparison of Paradigms

	Full Stack Automation	Pre-existing Infrastructure
Build Network	Installer	User
Setup Load Balancers	Installer	User
Configure DNS	Installer	User
Hardware/VM Provisioning	Installer	User
OS Installation	Installer	User
Generate Ignition Configs	Installer	Installer
OS Support	Installer: RHEL CoreOS	User: RHEL CoreOS + RHEL 7
Node Provisioning / Autoscaling	Yes	Only for providers with OpenShift Machine API support

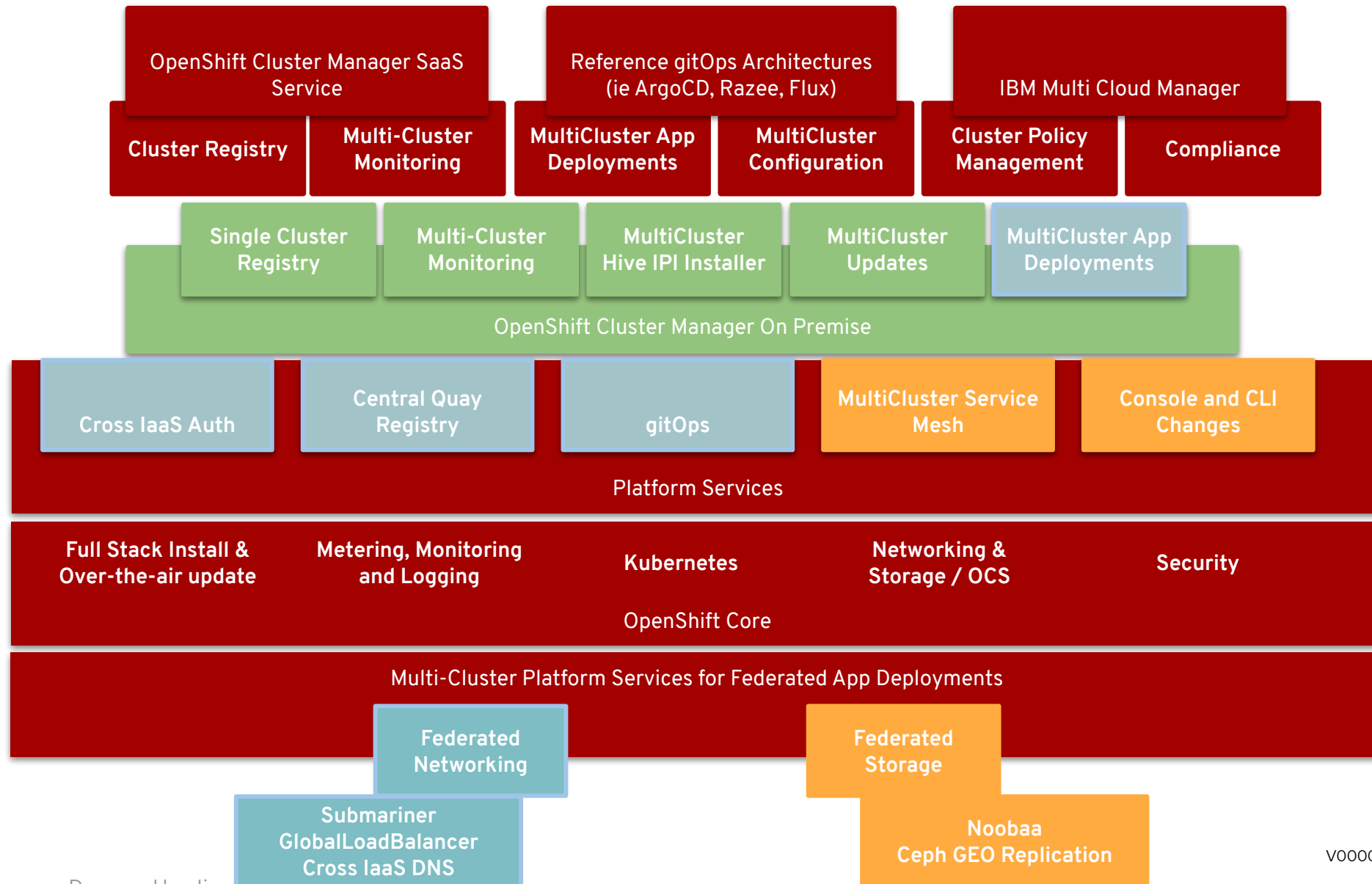
Provider Roadmap & Minimum Supported Version

CONFIDENTIAL designator

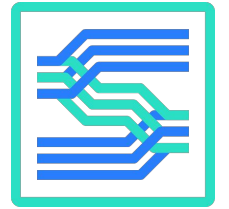
Provider	Full Stack Automation (Installer provisioned infra)	Pre-existing Infrastructure (User provisioned infra)
 amazon web services	4.1	4.1
 Microsoft Azure	4.2	4.3+ (<i>z-stream</i>)
 Bare Metal	4.4	4.1
 Google Cloud Platform	4.2	4.2
 RED HAT® OPENSTACK® PLATFORM	4.2	4.4
 RED HAT® VIRTUALIZATION	4.4	4.4
 vmware® vSphere	4.4	4.1
IBM Z	-	4.2+ (<i>z-stream</i>)
IBM Power Systems 	-	4.3+ (<i>z-stream</i>)
 Alibaba Cloud	4.5	-

Multi-Cluster Platform Services

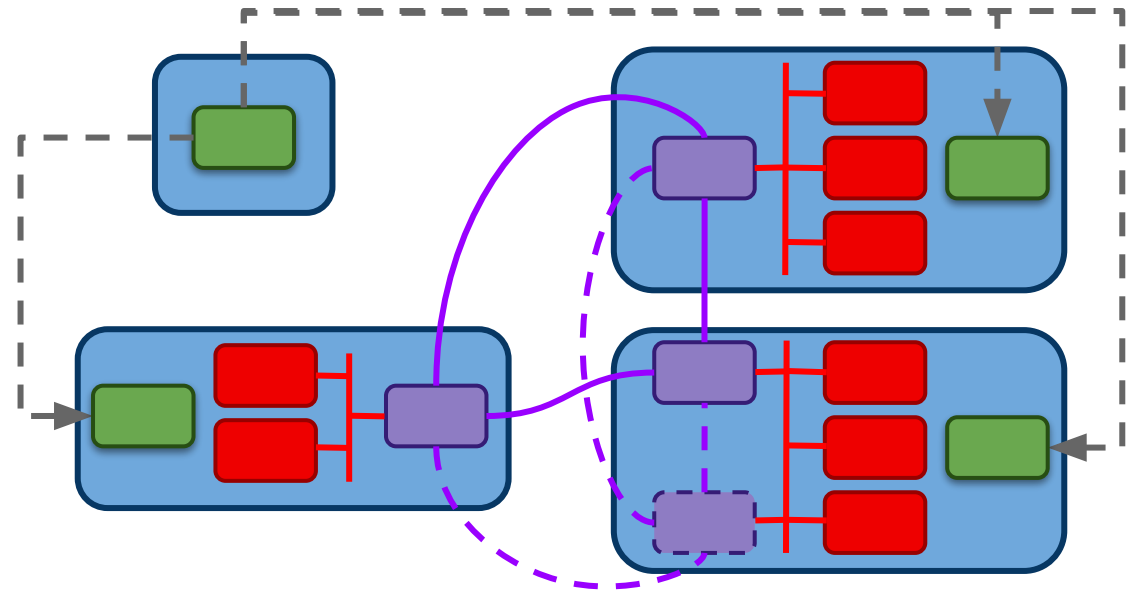
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MULTI-CLUSTER NETWORK



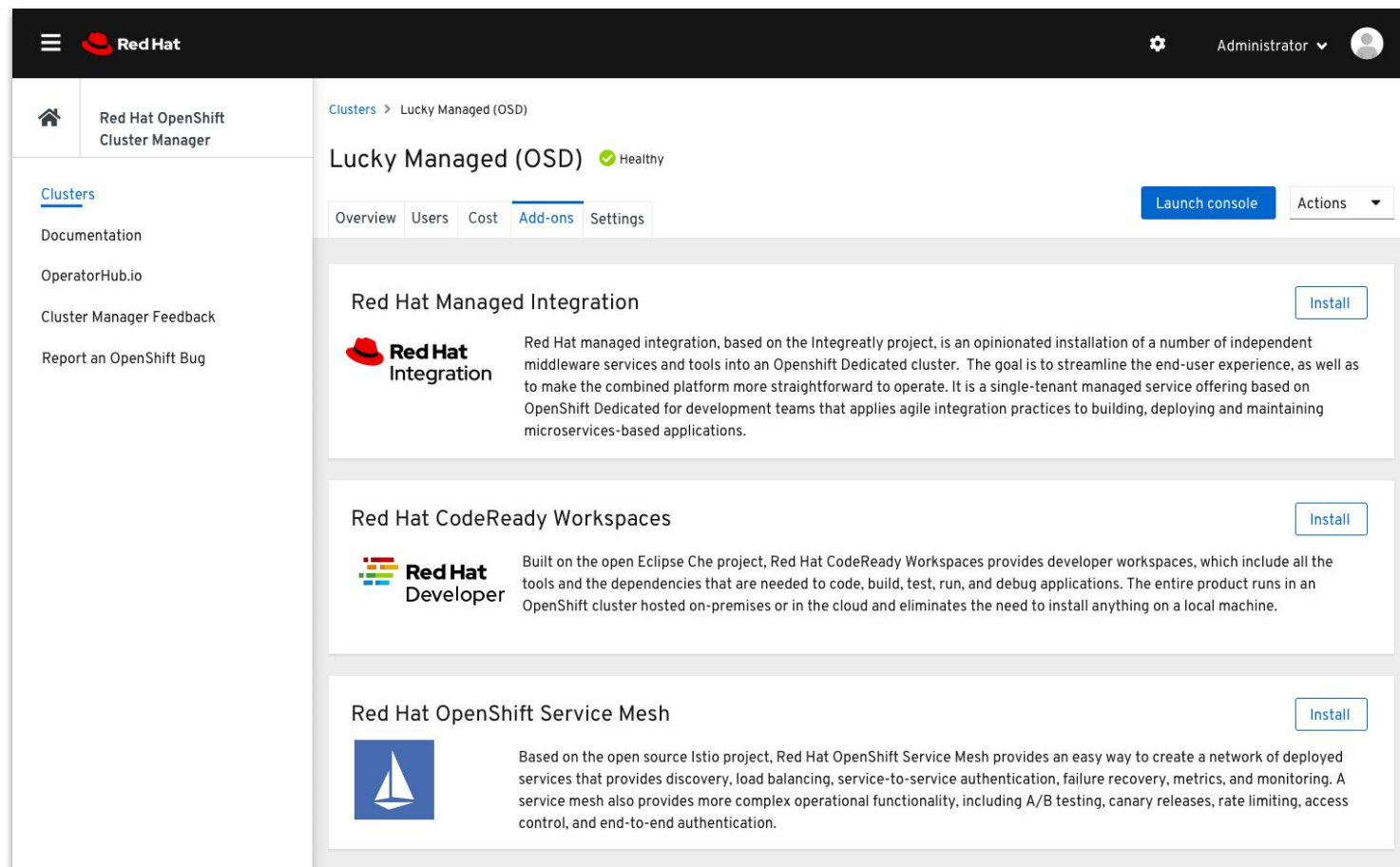
- Submariner project
 - Controlled, secure communication between clusters
 - Agents and controller run on nodes which are connected in a mesh
 - Dev preview available from OCP catalog
- Lighthouse and Coastguard are projects that provide multi cluster DNS and network policy accordingly on top of Submariner



OpenShift Cluster Manager

Enablement for OpenShift Dedicated and Red Hat services

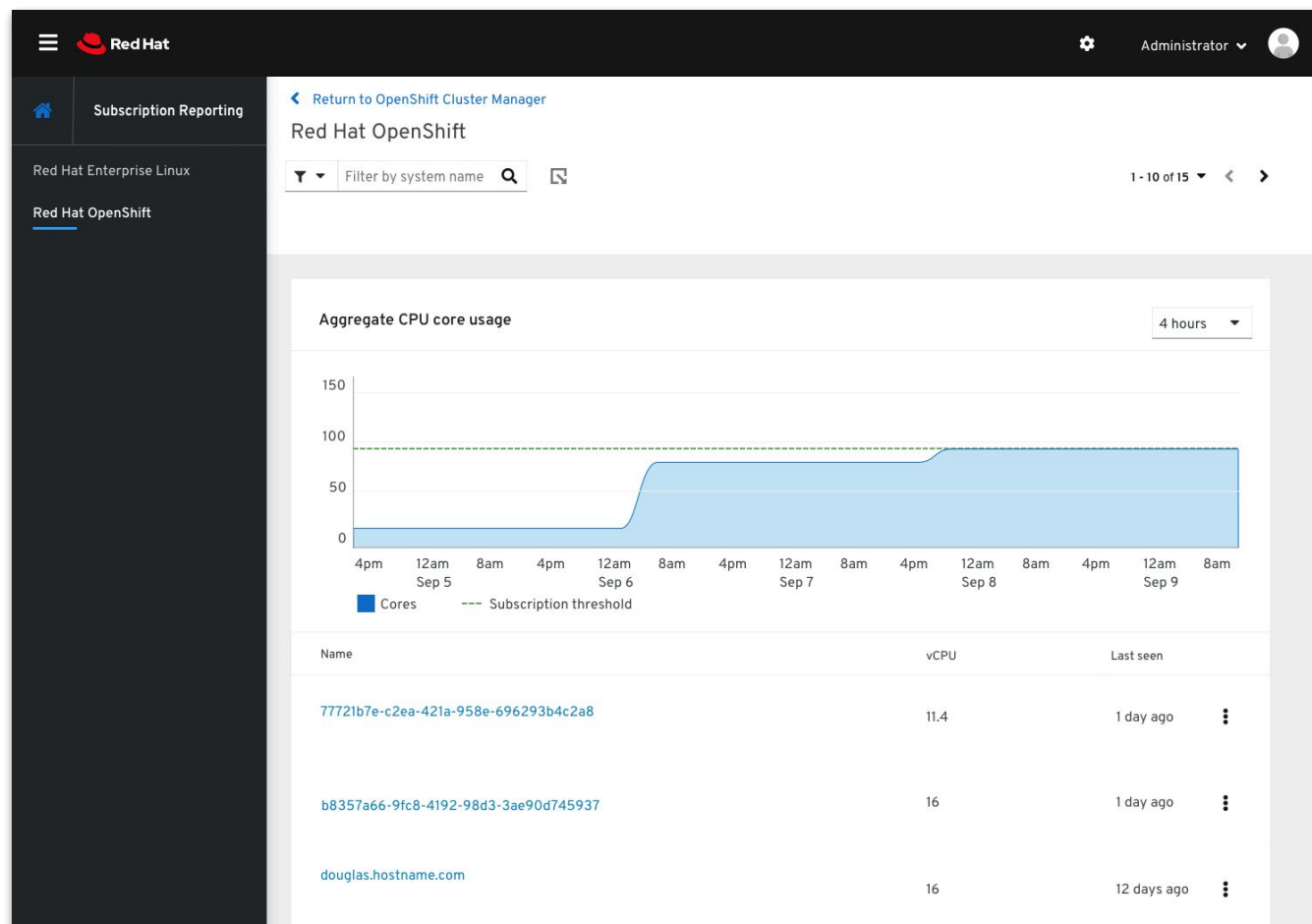
- OpenShift Dedicated support for add-on services (Service Mesh, CodeReady workspaces, and more), advanced network configuration, and bring your own cloud (BYOC)
- Data upload/import for disconnected OCP clusters
- Integration with cloud.redhat.com Cost Management service
- Core operator health status reported on monitoring tab



Subscription Management

Delivering improvements to the current system, and transitioning to the new cloud.redhat.com Subscription Watch

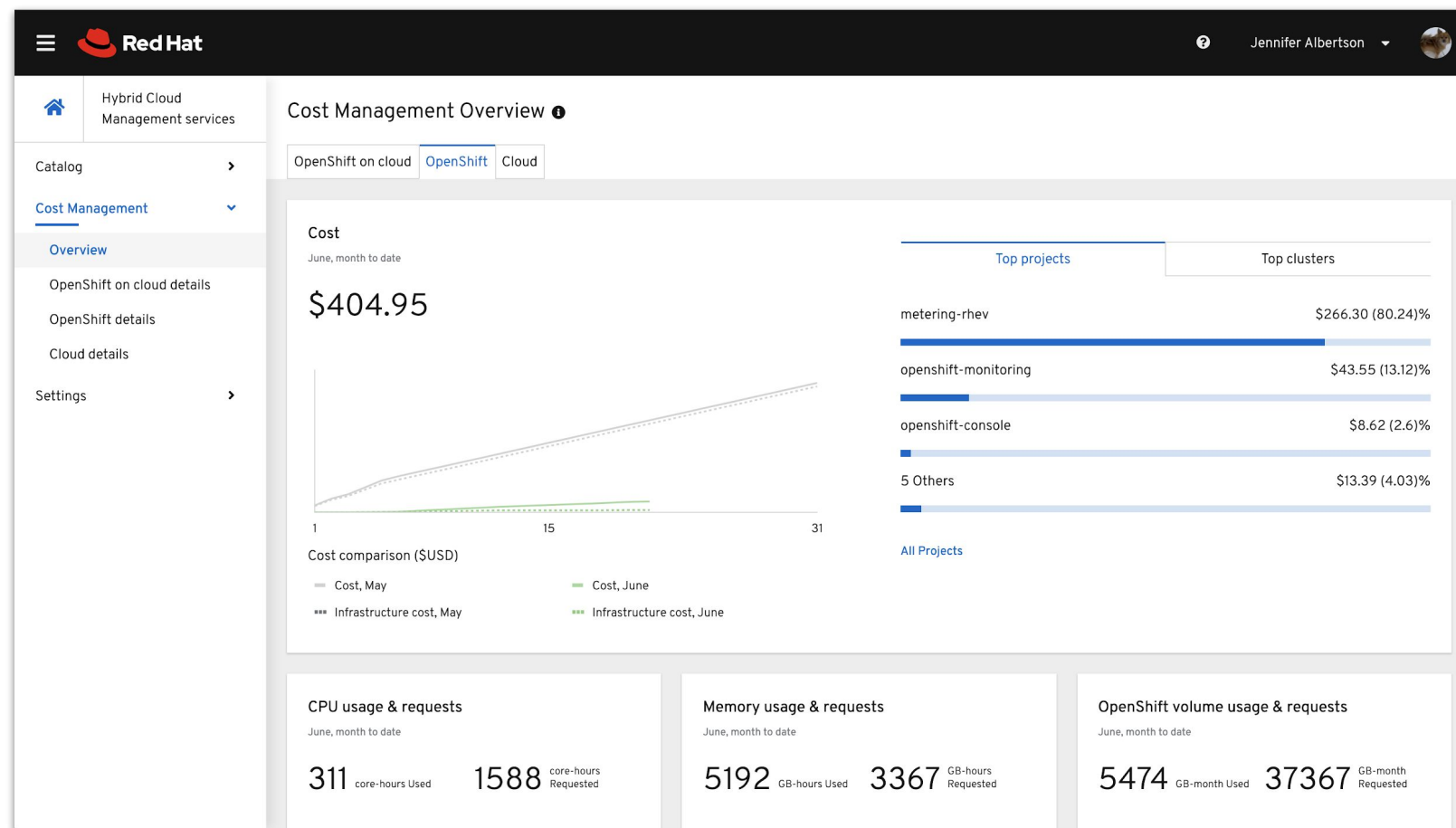
- Socket and hyperthreading data captured for all clusters through telemetry
- Improved documentation along with KCS articles highlighting current attach-based system
- Transitioning to the new cloud.redhat.com Subscription Watch service in early 2020
 - Removes need to attach subscriptions to hosts or clusters
 - Total OpenShift usage vs total subscriptions
 - Reporting includes OpenShift v3 hosts



Cost Management **Tech Preview**

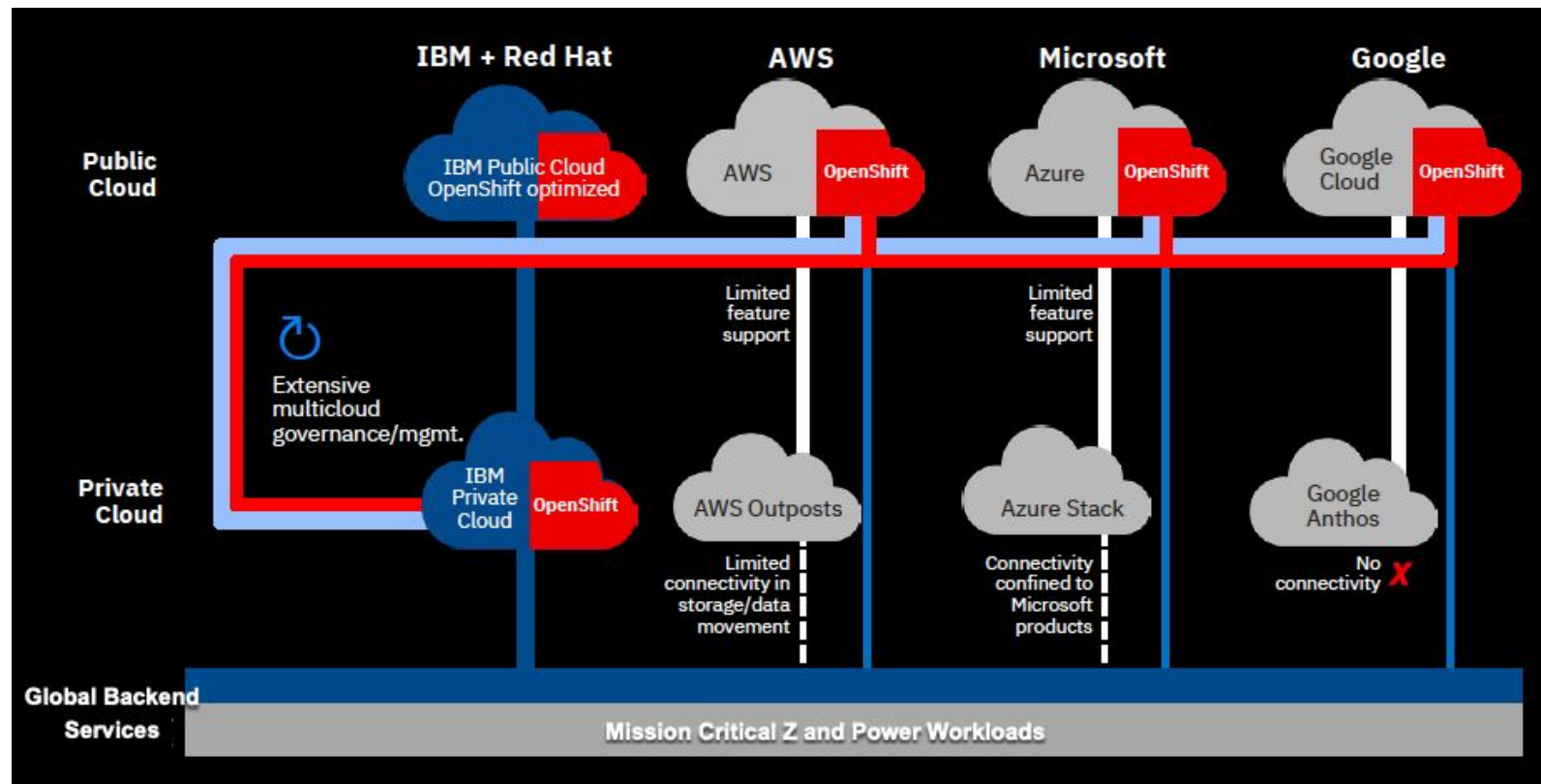
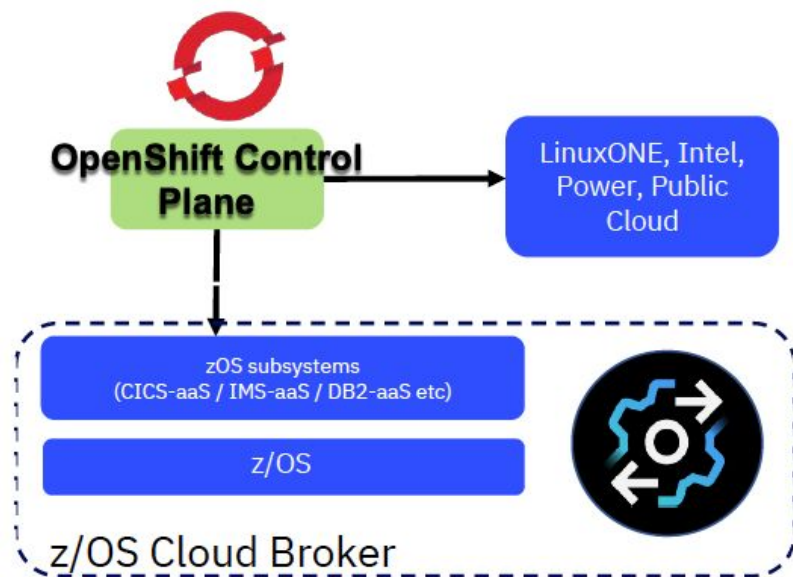
See all of your OpenShift related costs across clouds and clusters

- Break down costs and usage based on projects, clusters, nodes, AWS accounts, or use your own custom tags
- Associate the costs of AWS services, like RDS databases, with your cluster
- Add markups or discounts to your cost models, create your own custom costs, use metadata to modify charges, and more
- *Optional install for OCP 4.3+, included with OpenShift subscription*



Multi-Arch

OpenShift 4 on IBM Z and Power Deliver the Industry's Only True Hybrid Multi-Cloud Platform for all Datacenter Services



Thank you

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