



Red Hat in azione: il GitOps nell'open hybrid multcloud

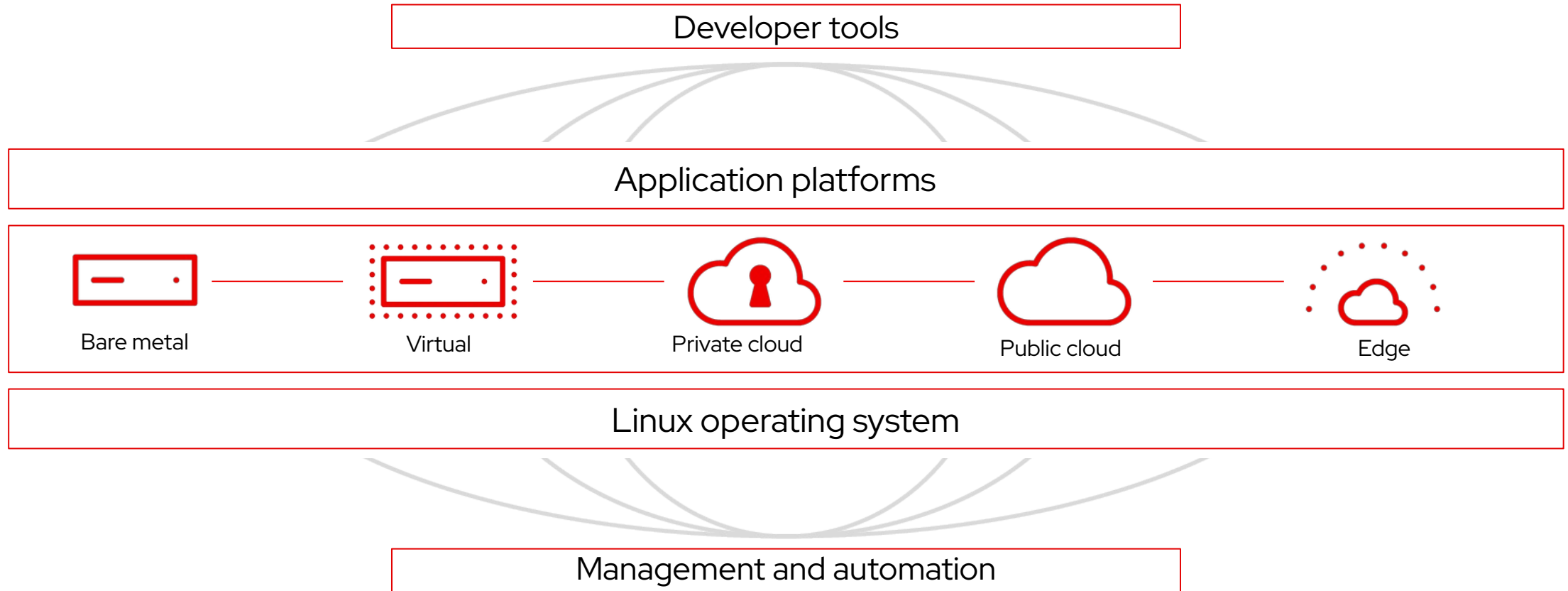
Come gestire e automatizzare le architetture ibride full ed
edge con OpenShift GitOps e Ansible

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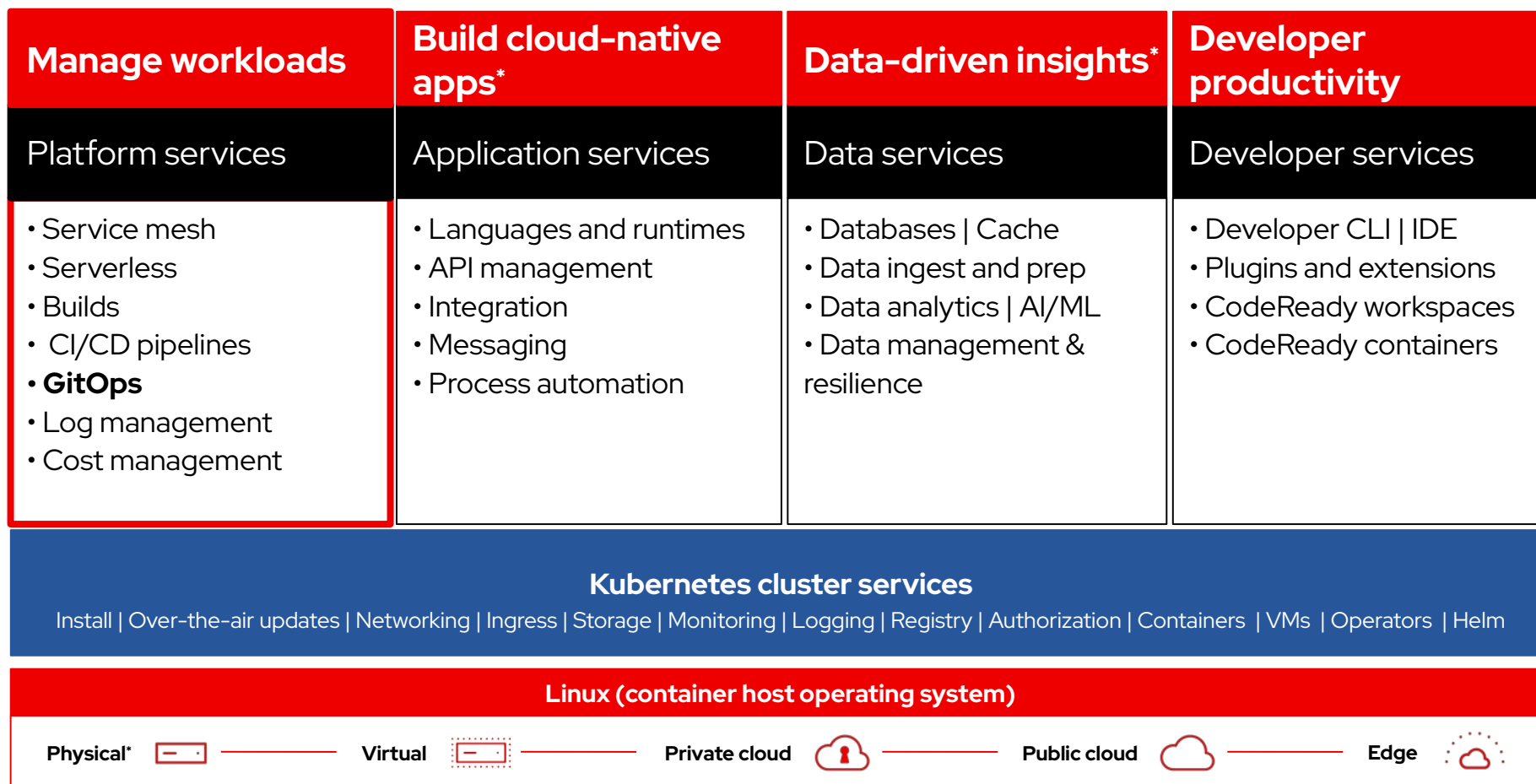
Agenda

- Accelerating multi cluster management with Advanced Cluster Management for Kubernetes
- Application lifecycle management with GitOps
- Extending GitOps with Ansible Automation

Evolution to hybrid multi cluster

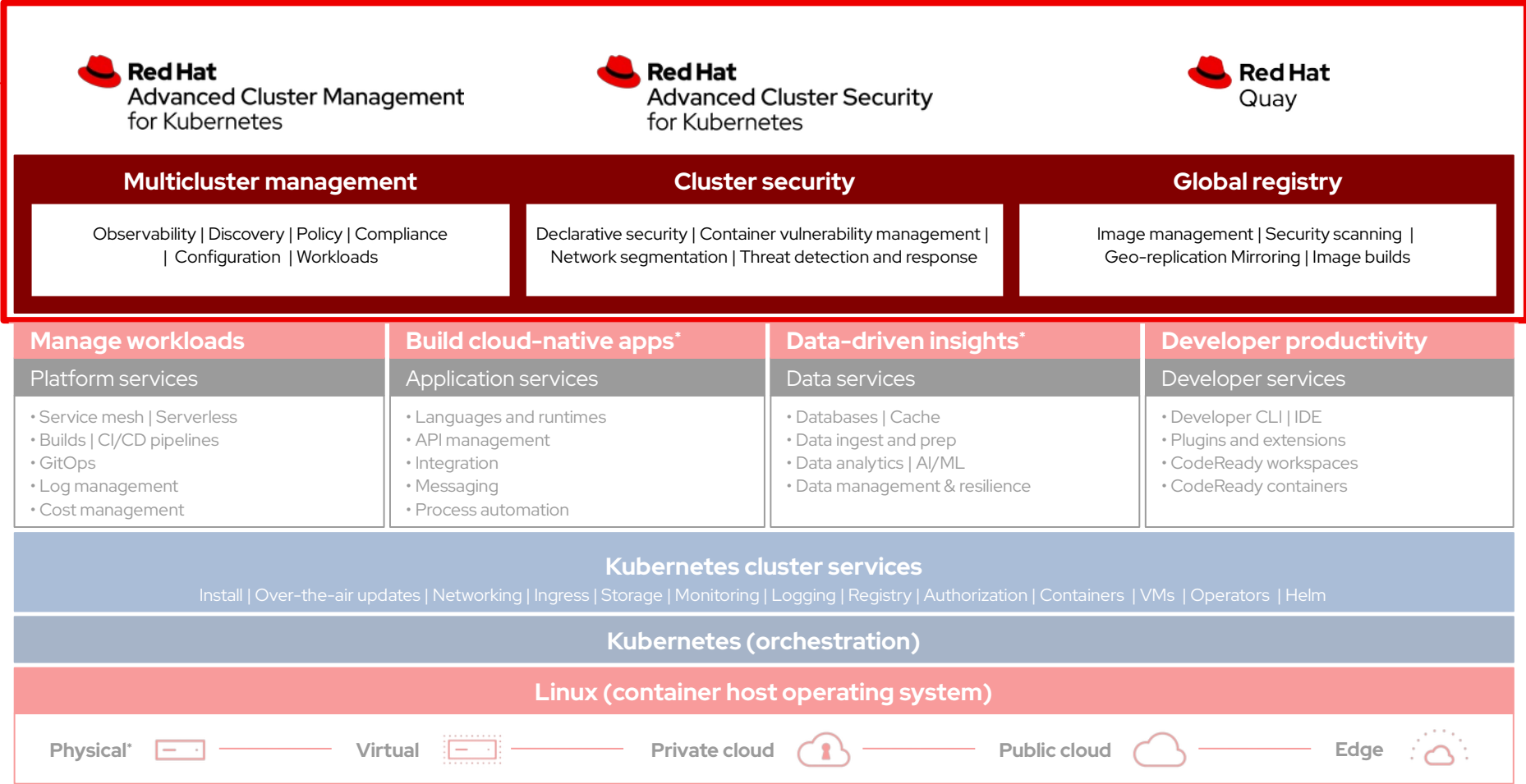


Red Hat OpenShift



* 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.

Red Hat OpenShift Platform Plus



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Red Hat Advanced Cluster Management for Kubernetes



Multicluster life-cycle management



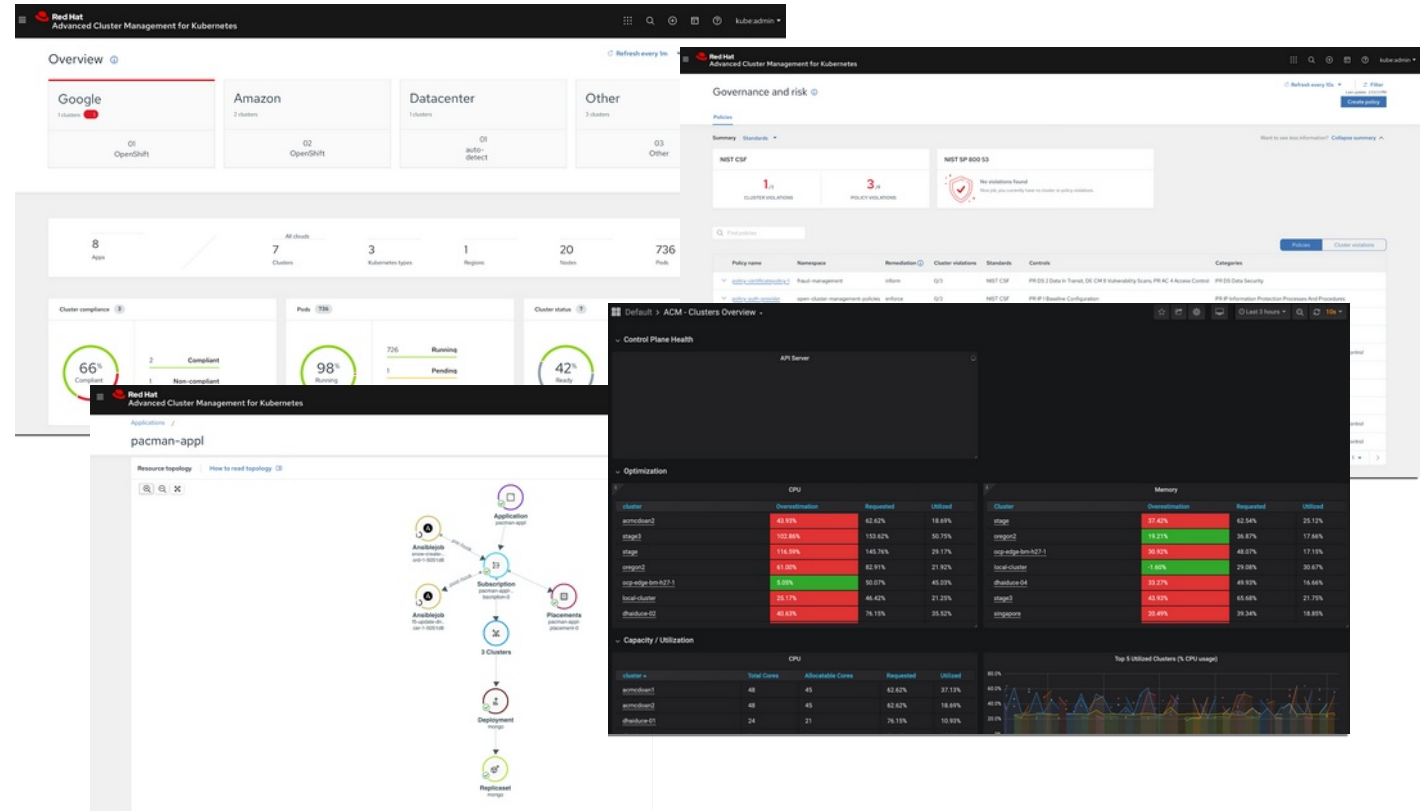
Policy-driven governance, risk, and compliance



Advanced application life-cycle management



Multicluster observability for health and optimization

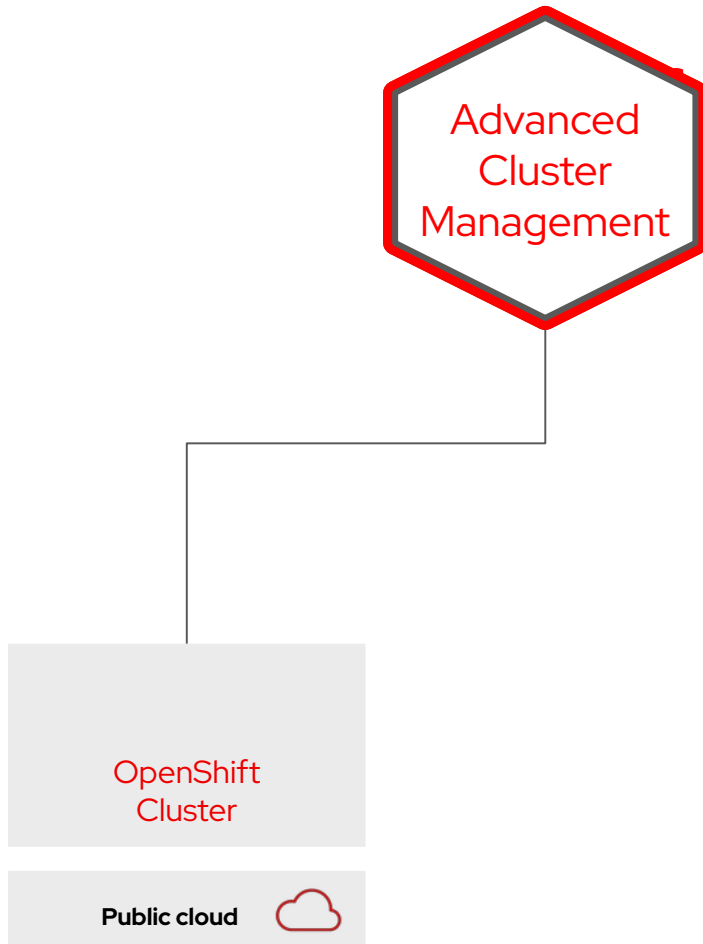


Demo Environment



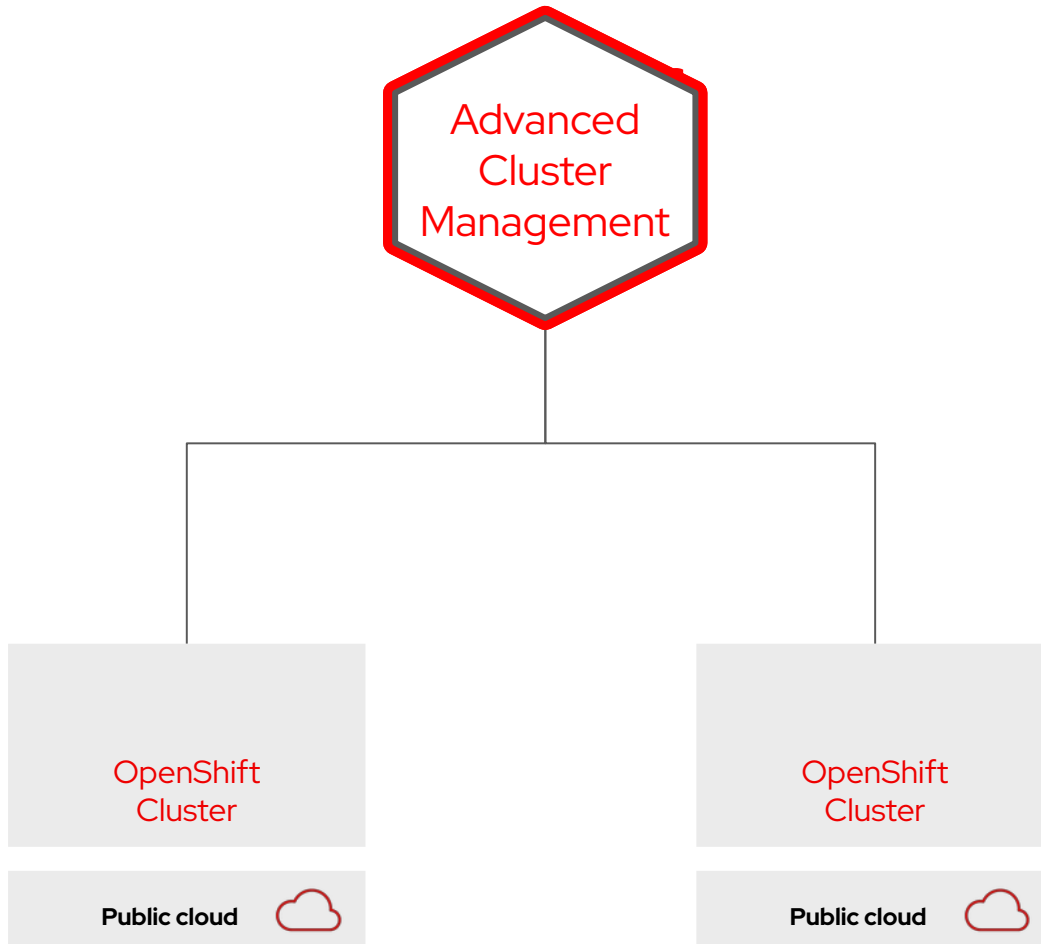
- Advanced Cluster Manager is deployed in the **Hub Cluster**
- **Multi cloud** management pattern
- **Single pane** of glass

Demo Environment



- The first managed cluster was **already deployed** on a cloud

Demo Environment

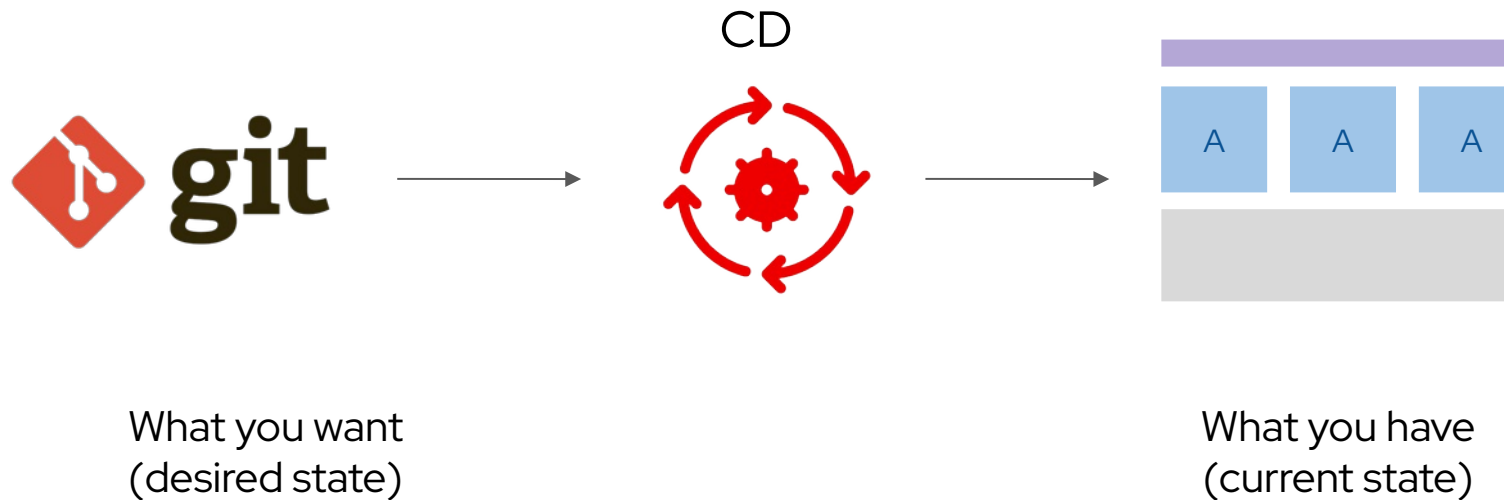


- We're adding **another** cluster
- Fully **automated** installation
- Platform of **choice** for automated installations (AWS, Azure, Google Cloud, VMware, bare metal, OpenStack)

Application lifecycle management with GitOps

GitOps Workflow

a declarative approach to application delivery



OpenShift GitOps



Hybrid - Multi-cluster config management

Enables teams to adopt GitOps principles across hybrid multi-cluster Kubernetes environments



Automated Argo CD install and upgrade

Automated install, configurations and upgrade of Argo CD through OperatorHub



Synchronizes cluster state with git repos

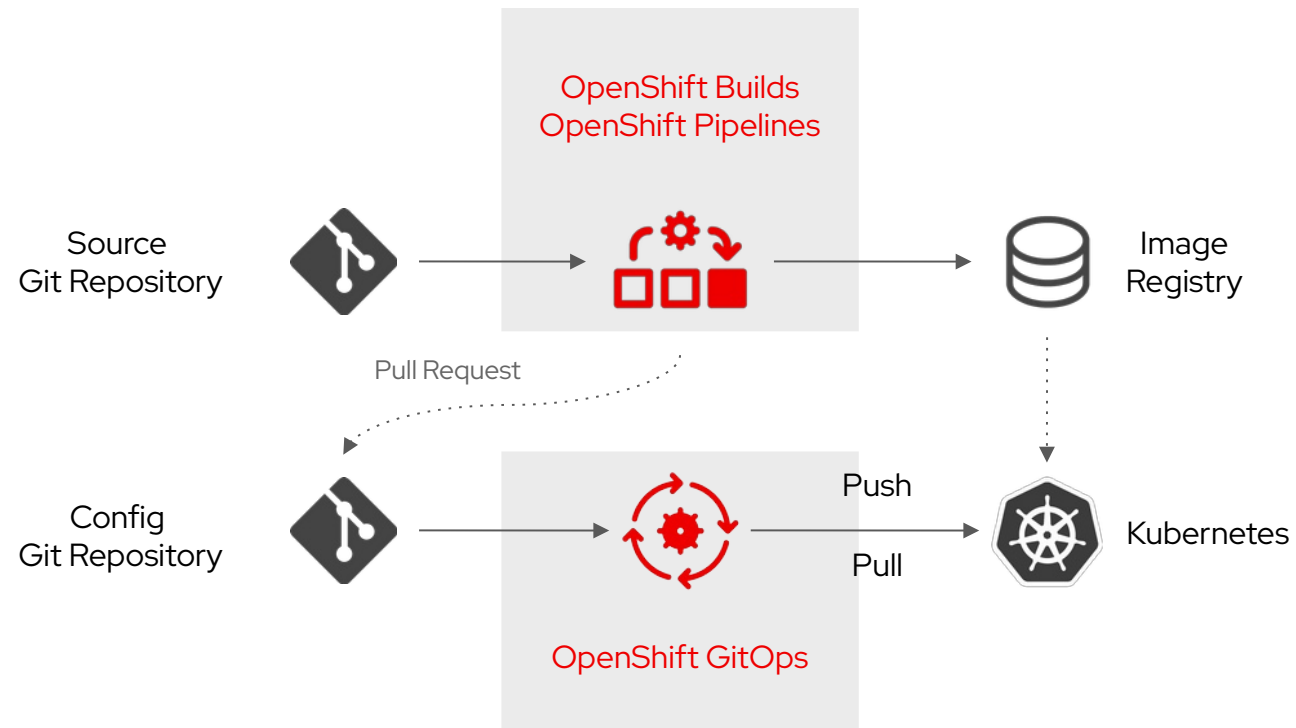
Works with a variety of Kubernetes deployment tools including: Helm, Kustomize, Directories of YAML files, Ksonnet/Jsonnet



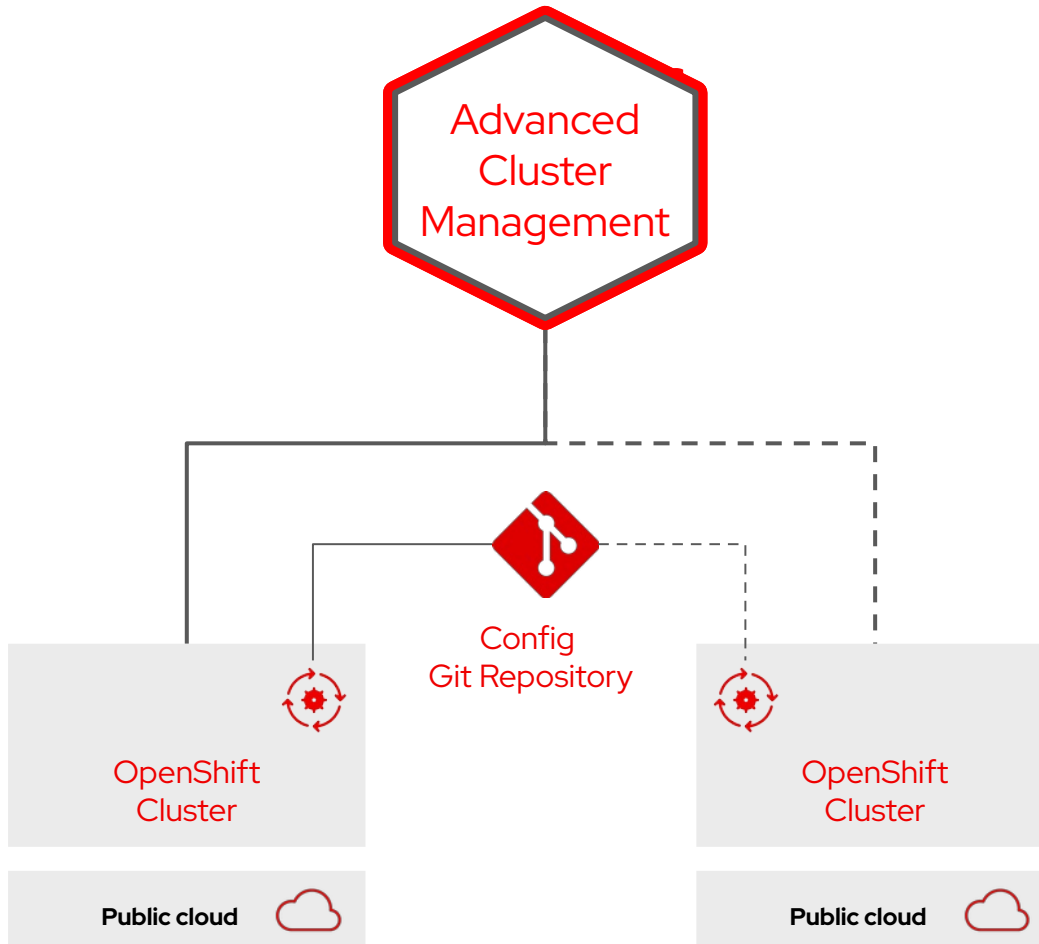
Easily deploy applications in a declarative way

Assists customers to establish an end-to-end application delivery workflow on GitOps principles

The GitOps Application Delivery Model on OpenShift



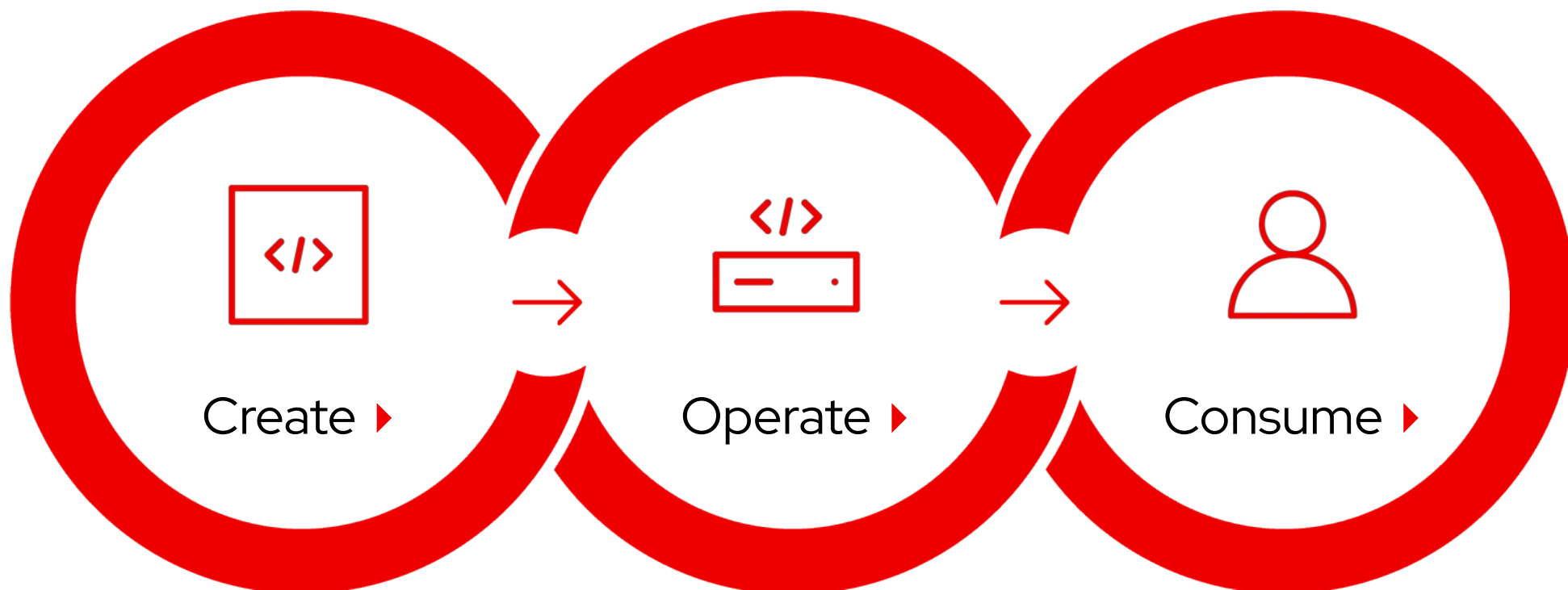
Demo Environment



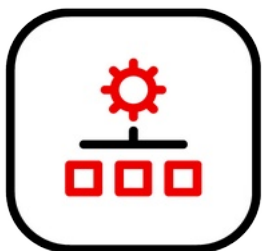
- Advanced Cluster Management performs **basic cluster configuration** and installs OpenShift GitOps via the Operator
- OpenShift GitOps **syncs the apps** on the cluster according to the Git repository

Extending GitOps with Ansible Automation

Holistic automation for your enterprise



Evolving the automation platform

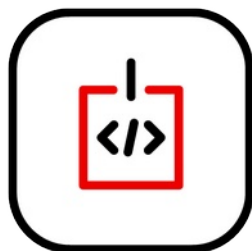


Ansible Automation Controller

Ansible Tower
Evolution

OpenShift
Ready

Multisite
automation



Automation execution environments

Containerized
automation
environments

Portable

Customizable



Ansible Content Collections

90+ certified content
collections

Jointly supported
with vendors



Private Automation Hub

Hosting of private
content collections

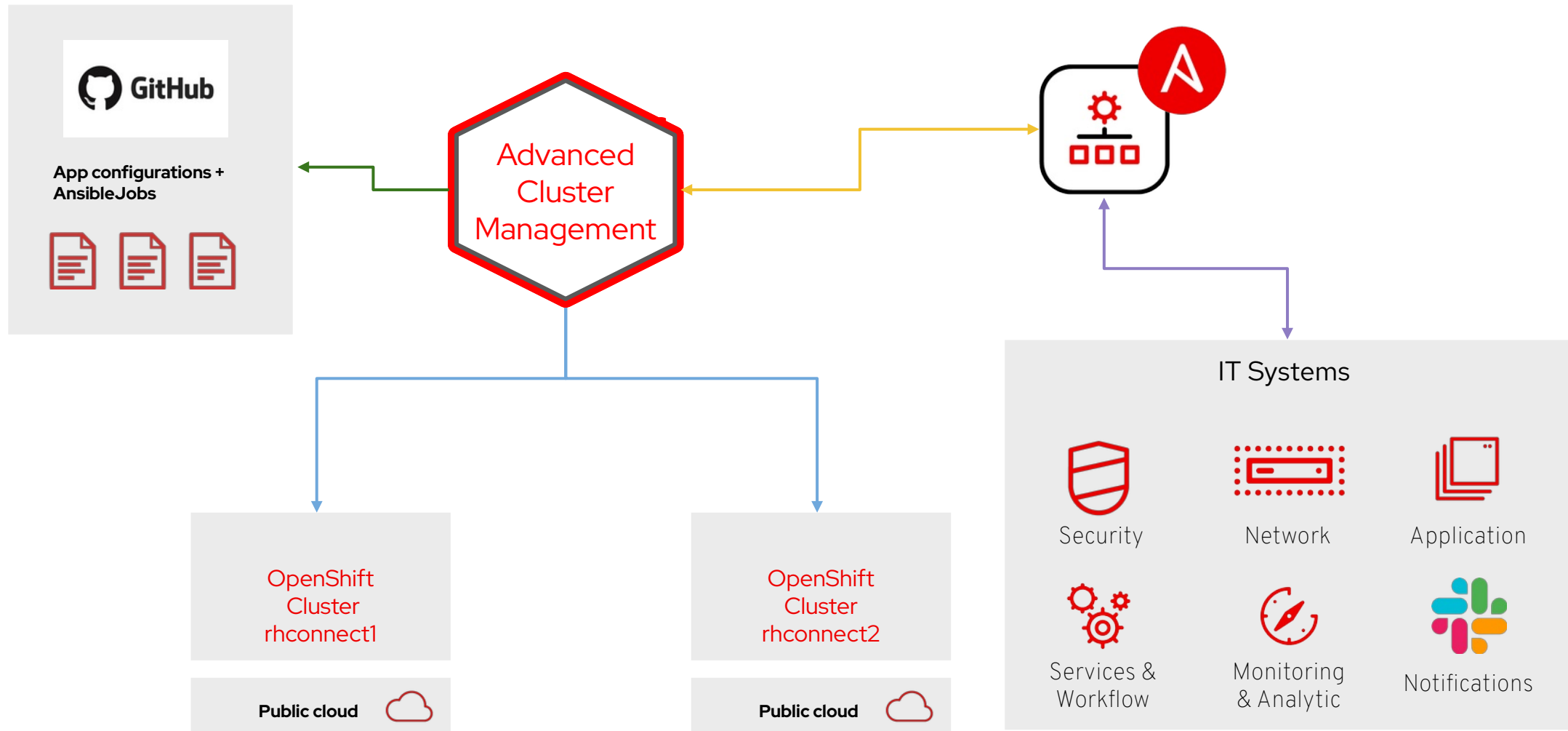
Execution
environments registry



Integration with ACM

End to end
automation
pre and post
hooks to
integrate with
systems outside
OpenShift

ACM + Ansible Automation Platform



Recap and Benefits

- ▶ E2E Automation is key to reduce **human error**
- ▶ Maximize **uptime** and provide better **SLAs**
- ▶ Speed up **recovery**
- ▶ Add **new** infrastructure **providers**
- ▶ **Reduce** lock-in
- ▶ **Single** pane of glass management
- ▶ Easily address **new** business **needs**

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