

Red Hat
Summit

Connect

3 rzeczy o których dostawca chmury Wam nie powiedział

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THERE MUST BE
A BETTER WAY OF
CHOOSING CLOUD
PROVIDERS!







ERROR Error: Error waiting for instance to create: The zone 'projects/testapp-300013/zones/europe-central2-c' does not have enough resources available to fulfill the request. Try a different zone, or try again later.

ERROR

ERROR

ERROR on ../../../../tmp/openshift-install-863634371/master/main.tf line 36, in resource [REDACTED]_compute_instance "master":

ERROR 36: resource [REDACTED]_compute_instance "master" {

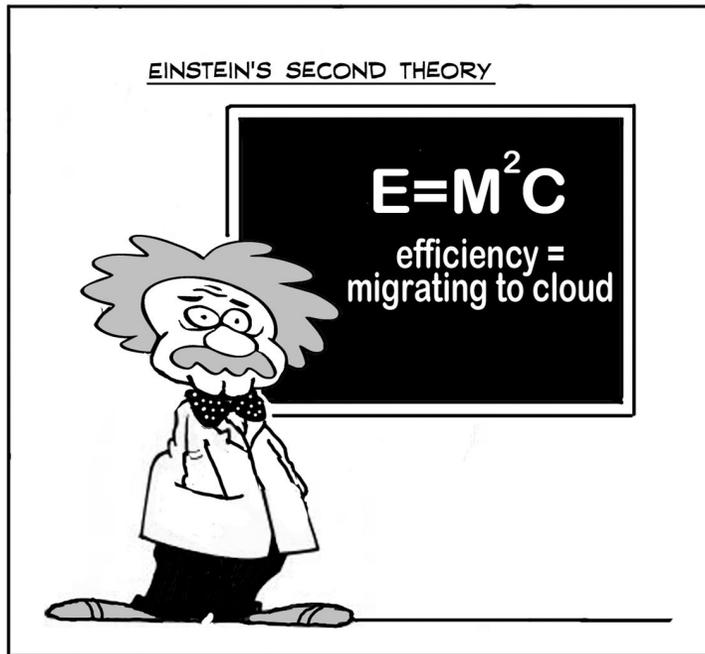
ERROR

ERROR

FATAL failed to fetch Cluster: failed to generate asset "Cluster": failed to create cluster: failed to apply Terraform: failed to complete the change



Managed App Services

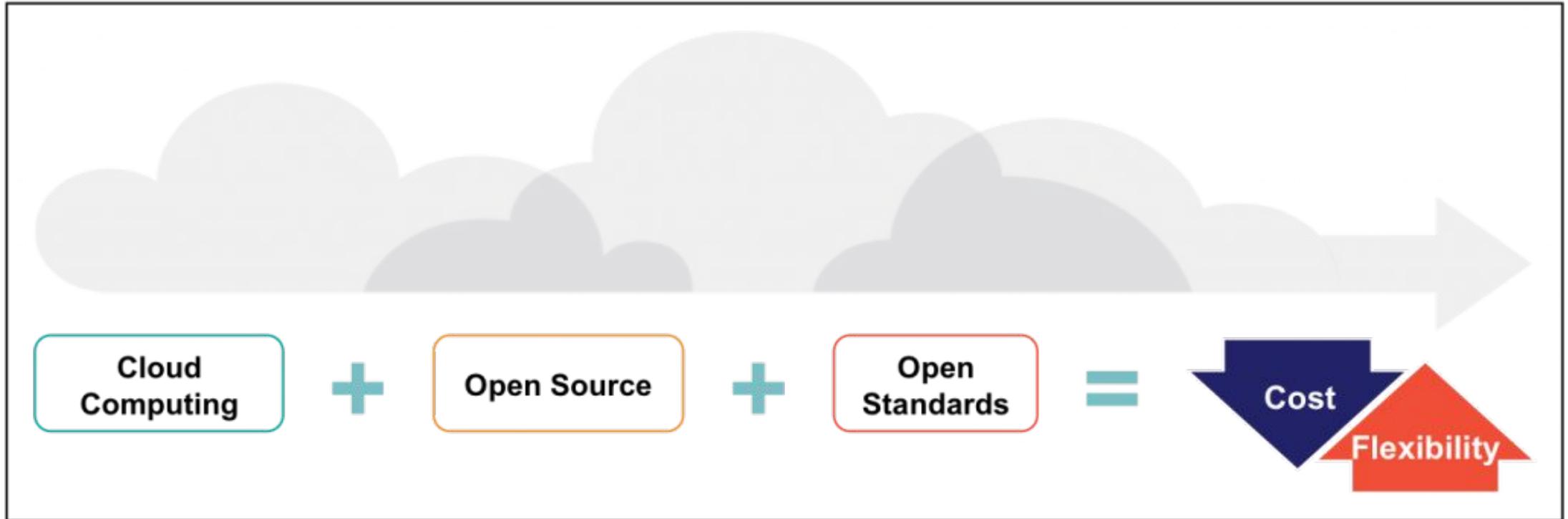


Managed App Services in the cloud



© izmocar

Managed App Services based on Open Source



Managed App Services based on Open Source

30 lines (23 sloc) | 706 Bytes

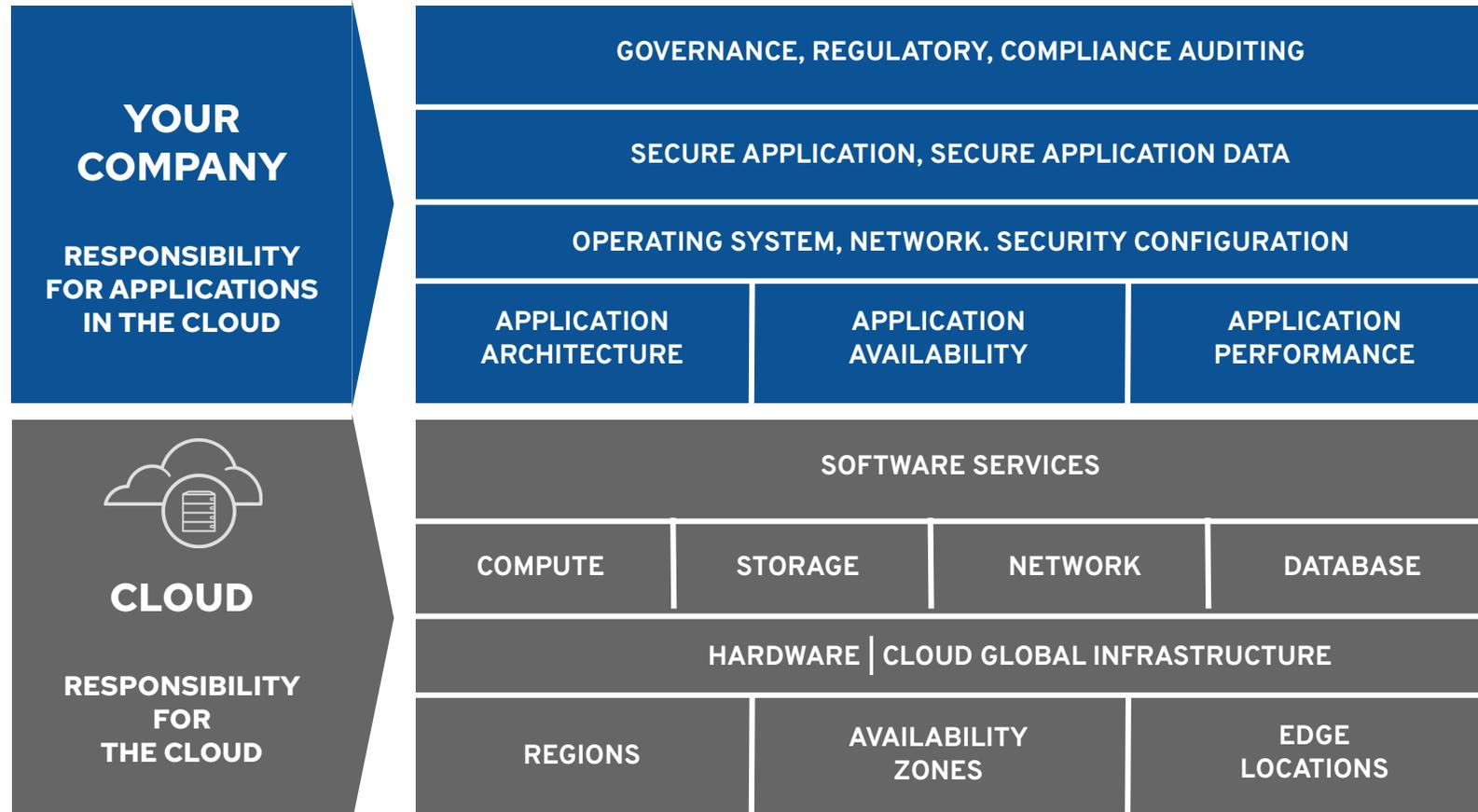
Raw

Blame



```
1  #!/usr/bin/env bash
2
3  set -e
4
5  RELEASE_DIR=${1}
6  echo ${RELEASE_DIR}
7
8  # Istio versions that need to be supported in the image for airgap installation.
9  istio_version_array=(1.7.1 1.7.3 1.8.3 1.8.5 1.8.6 1.9.3 1.9.5 1.9.6 1.9.8 1.10.4 1.11.4 1.11.7 1.12.6 1.13.3 1.14.1)
10
11  if [ -z "${RELEASE_DIR}" ]; then
12      echo "No directory given"
13      exit 1
14  fi
15
16  if [ -d "${RELEASE_DIR}" ]; then
17      cd ${RELEASE_DIR}
18
19      for v in "${istio_version_array[@]"; do
20          curl -sOL https://github.com/istio/istio/releases/download/$v/istio-$v-linux-amd64.tar.gz
21      done
22
23      for f in *.tar.gz; do
24          if [ -f "$f" ]; then
25              version=$(echo $f | grep -Eo '[0-9\.]+' | head -1)
26              mkdir $version
27              mv $f $version
28          fi
29      done
30  fi
```

Cloud is a Shared Responsibility Model



Managed OpenShift Matrix vs xKS

Who's Responsible? OpenShift Managed Environment

Resource	Incident & operations management	Change Management	Identity & access management	Security & regulation compliance	Disaster Recovery
Middleware	Red Hat*	Red Hat*	Red Hat*	Red Hat*	Red Hat*
Platform Monitoring	Red Hat	Red Hat	Red Hat	Red Hat	Red Hat
Logging	Red Hat	Shared	Shared	Shared	Red Hat
App Networking	Shared	Shared	Shared	Red Hat	Red Hat
Cluster Networking	Shared	Shared	Shared	Red Hat	Red Hat
Virtual Networking	Shared	Shared	Shared	Shared	Shared
Master & Infra. Nodes	Red Hat	Red Hat	Red Hat	Red Hat	Red Hat
Worker Nodes	Red Hat	Red Hat	Red Hat	Red Hat	Red Hat
Cluster Version	Red Hat	Shared	Red Hat	Red Hat	Red Hat
Capacity Management	Red Hat	Shared	Red Hat	Red Hat	Red Hat

Who's Responsible? xKS Environment

Resource	Incident & operations management	Change Management	Identity & access management	Security & regulation compliance	Disaster Recovery
Middleware	Customer	Customer	Customer	Customer	Customer
Platform Monitoring	Shared	Shared	Shared	Shared	Shared
Logging	Customer	Shared	Shared	Shared	Shared
App Networking	Shared	Shared	Shared	Customer	Customer
Cluster Networking	Shared	Shared	Shared	Customer	Customer
Virtual Networking	Shared	Shared	Shared	Shared	Shared
Master & Infra. Nodes	CSP	CSP	CSP	CSP	CSP
Worker Nodes	Customer	Customer	Customer	Customer	Customer
Cluster Version	Customer	Shared	Customer	Customer	Customer
Capacity Management	Customer	Shared	Customer	Customer	Customer

VS

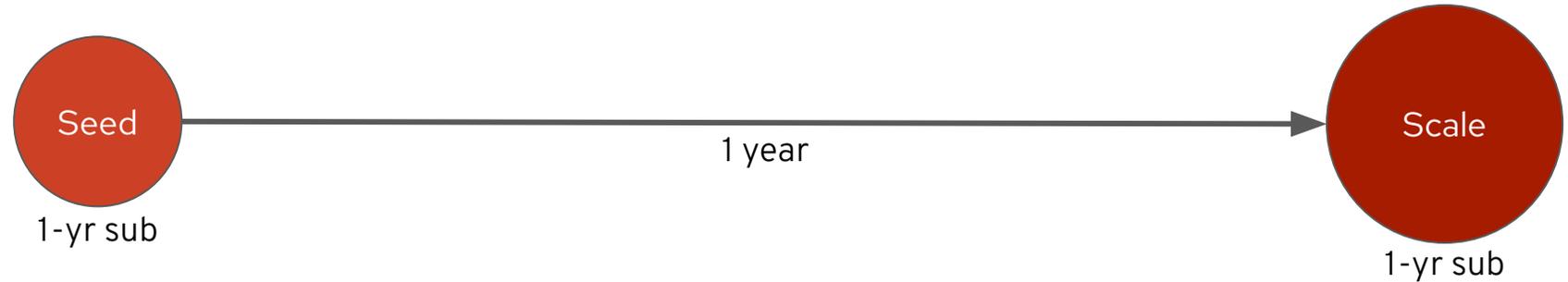
* for Red Hat products, otherwise Customer will be responsible

Costs

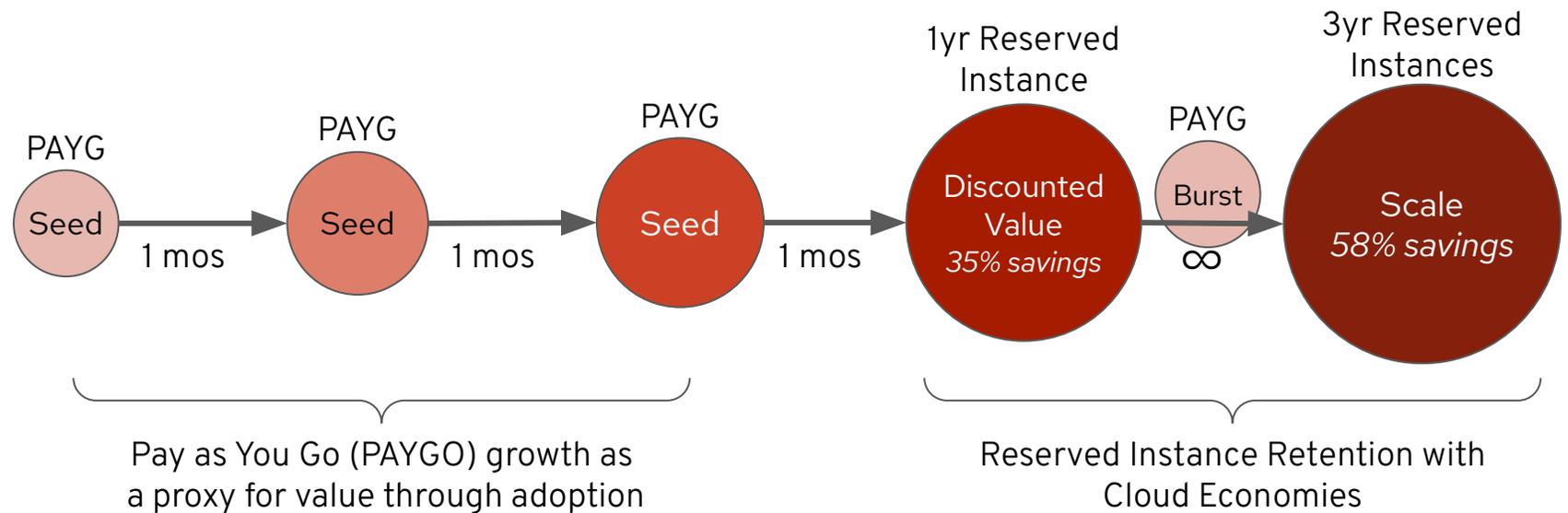


Consumption based pricing

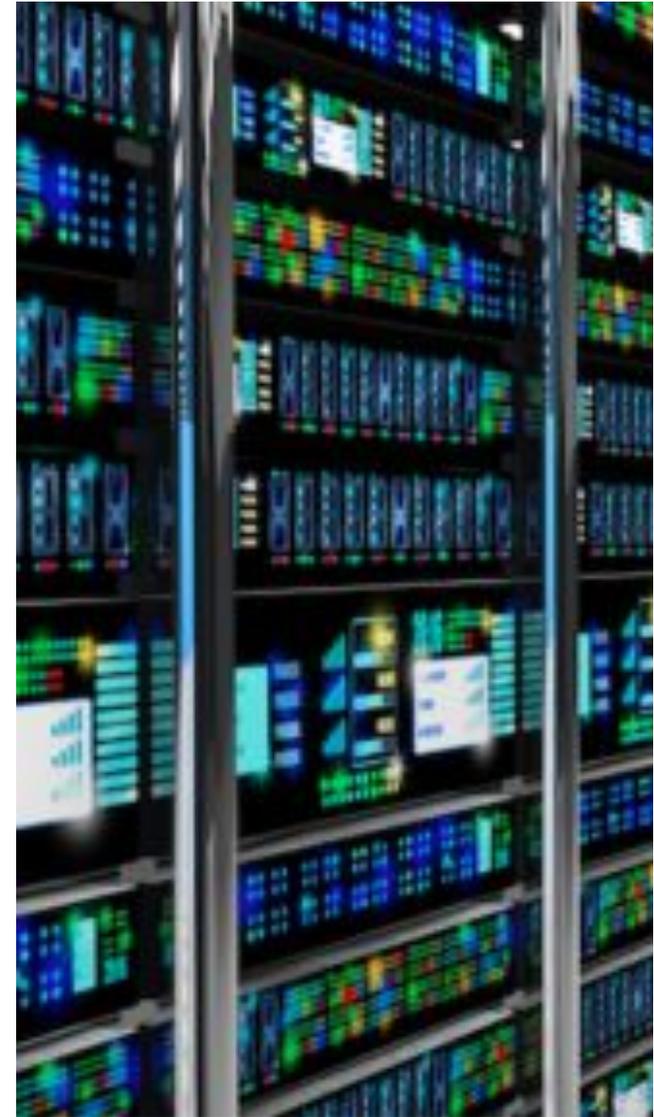
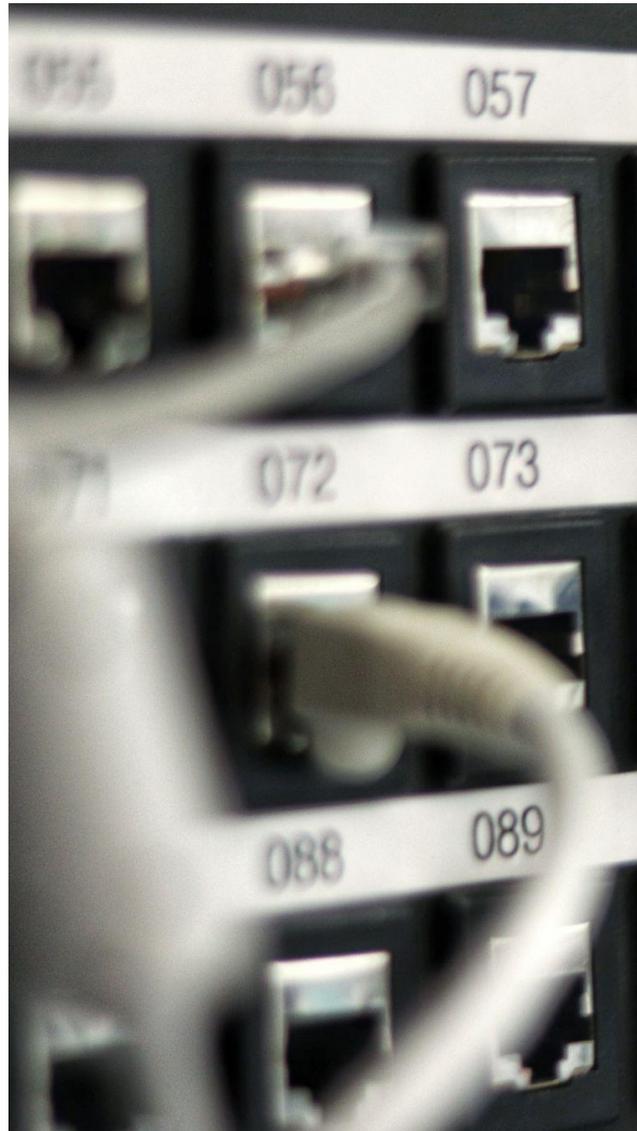
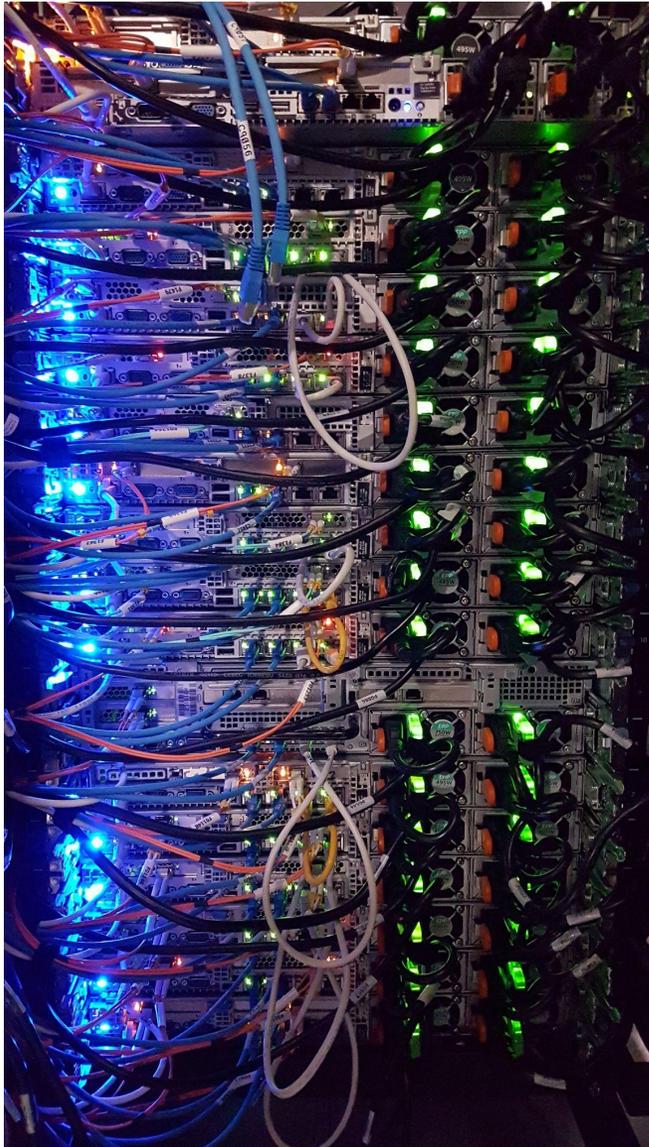
Self-managed



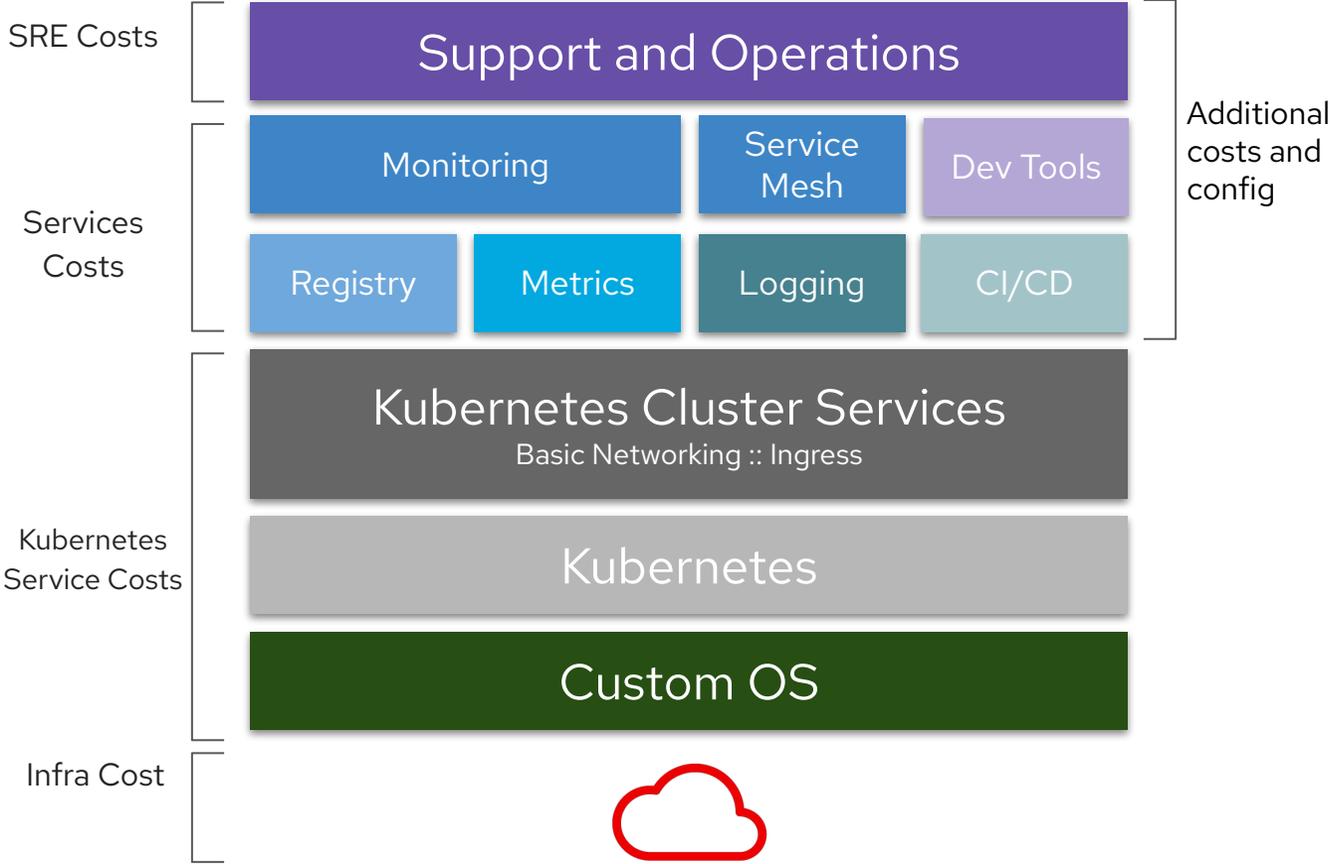
Cloud Services



Hidden costs



Managed services integration costs

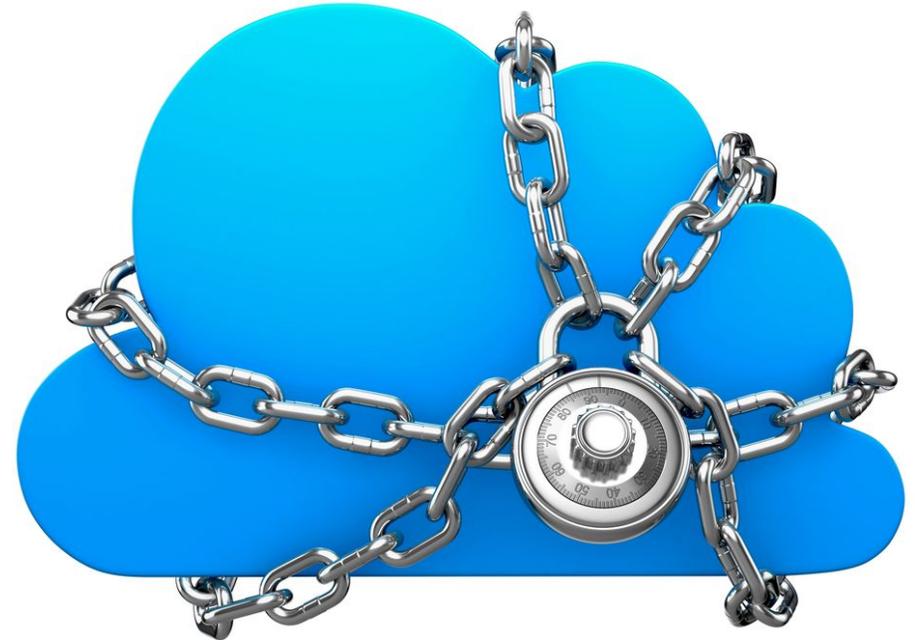


Lock-in



Public cloud lock-in?

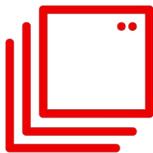
- Application portability
- Exit costs
- Multi cloud interoperability
- On premise integration
- External (Managed) App Services integration
- Cost model



Our Vision



Open Hybrid Cloud



**Traditional
N-Tier Apps & VMs**



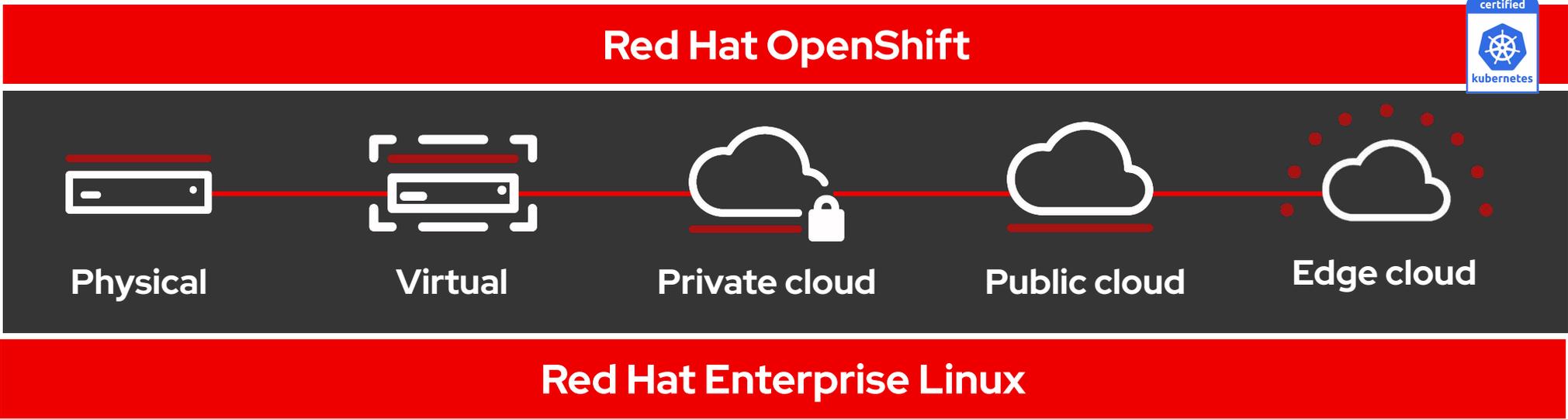
**Cloud Native
Microservices**



**Data, Analytics
& AI/ML**



**ISV Apps &
Cloud Services**



Cloud Agnostic / Multi / Hybrid Cloud



Kubernetes API



Managed service

or

Customer self manage



Managed service

or

Customer self manage



Google Cloud Platform

Managed service

or

Customer self manage



IBM Cloud

Managed service

or

Customer self manage

On-premises



RED HAT
OPENSTACK
PLATFORM

RED HAT
VIRTUALIZATION



Bare Metal

IBM Z/POWER

Customer
Managed

Edge

RED HAT
OPENSTACK
PLATFORM

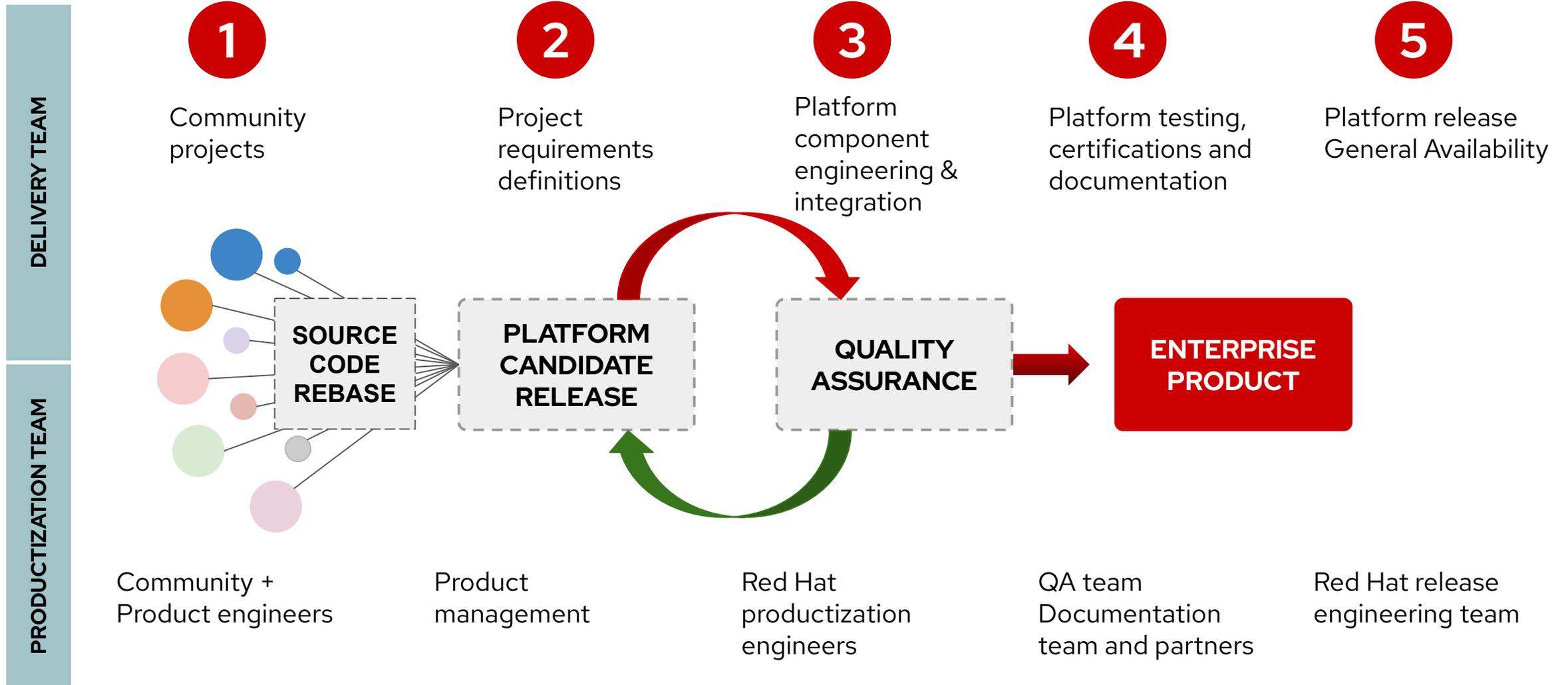


Bare Metal

Customer
Managed

Identical API; consistent developer and operator experience, Seamless migration

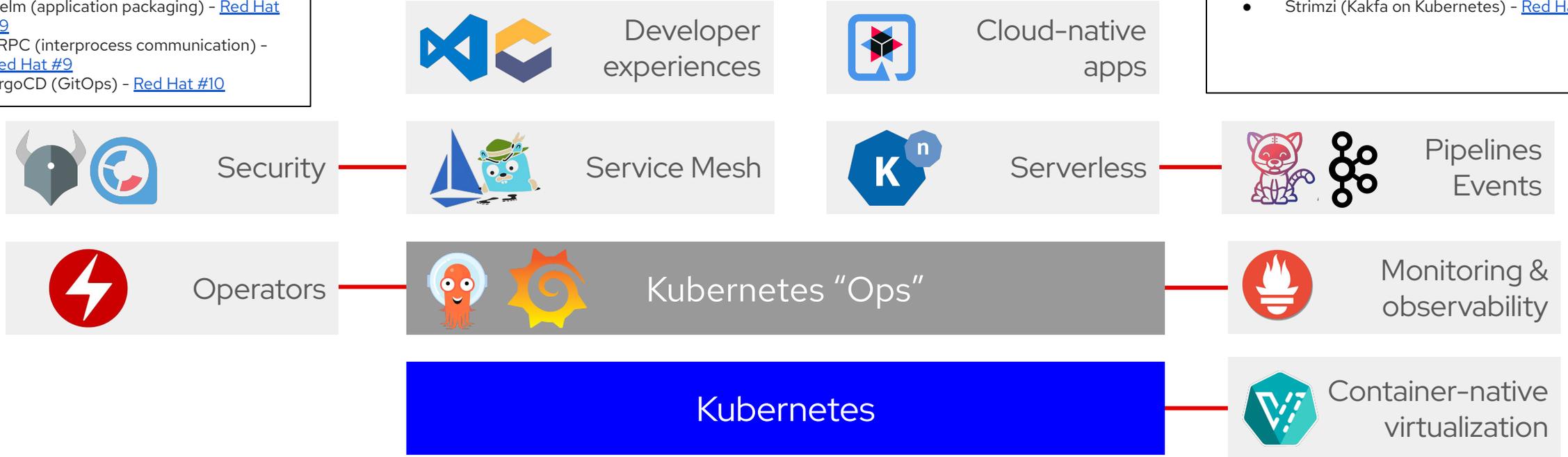
From Open Source Community Project To Enterprise Product



Red Hat open source projects contributions

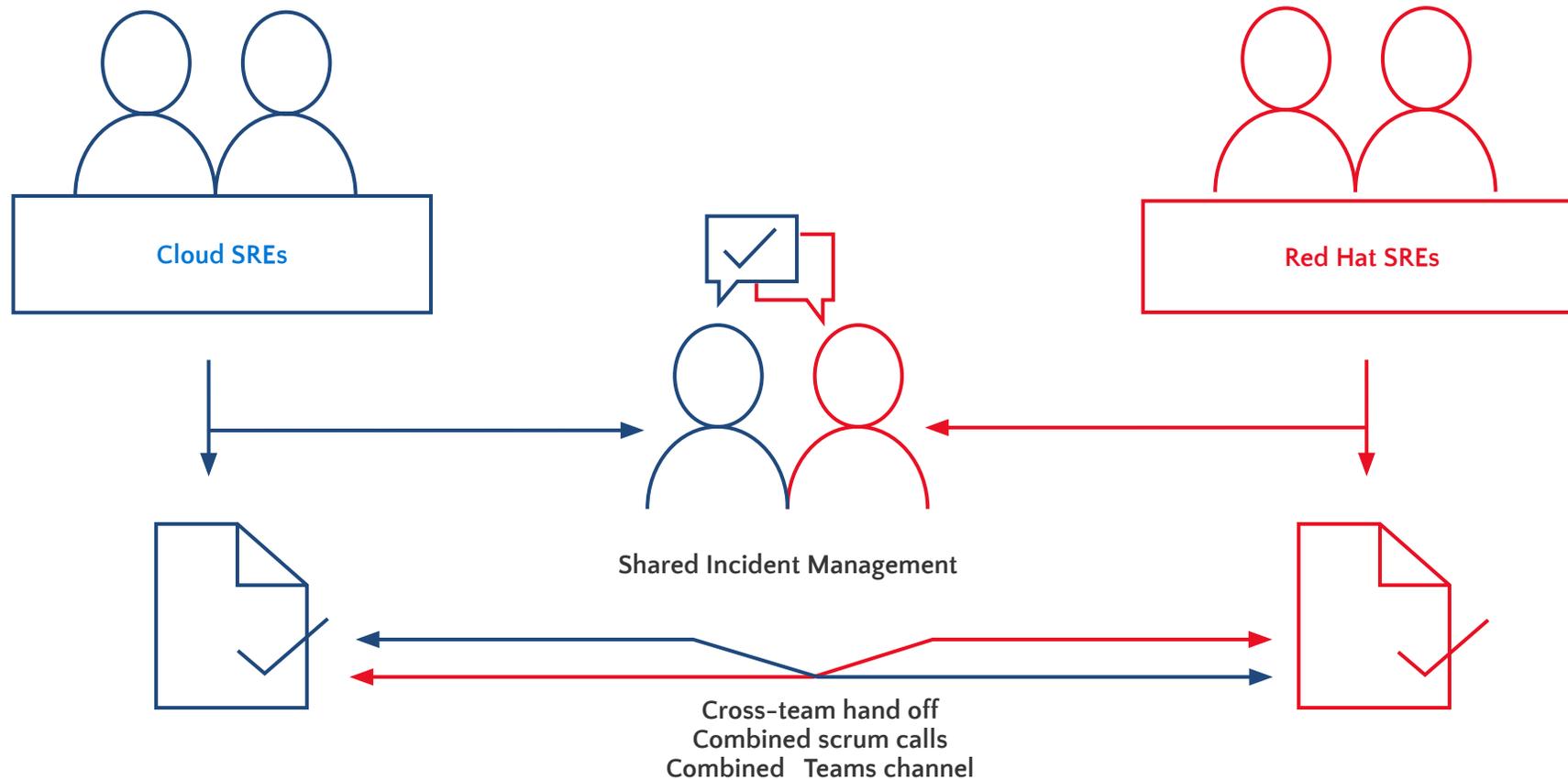
- Metal-3 (bare-metal Kubernetes) - [Red Hat #2](#)
- Prometheus (monitoring) - [Red Hat #3](#)
- OPA (security policy-agent) - [Red Hat #7](#)
- Fluentd (part of logging stack) - [Red Hat #8](#)
- Jaeger (application tracing, service-mesh tracing) - [Red Hat #2](#)
- Helm (application packaging) - [Red Hat #9](#)
- gRPC (interprocess communication) - [Red Hat #9](#)
- ArgoCD (GitOps) - [Red Hat #10](#)

- Operator framework (platform & application automation/lifecycle) - [Red Hat #1](#)
- etcd (key-value database, control plane of Kubernetes) - [Red Hat #1](#)
- CRI-O (secure container runtime) - [Red Hat #1](#)
- Rook (storage mgmt) - [Red Hat #1](#)
- CNI (networking plugins) - [Red Hat #1](#)
- KubeVirt (VMs with Kubernetes) - [Red Hat #1](#)
- Strimzi (Kafka on Kubernetes) - [Red Hat #1](#)

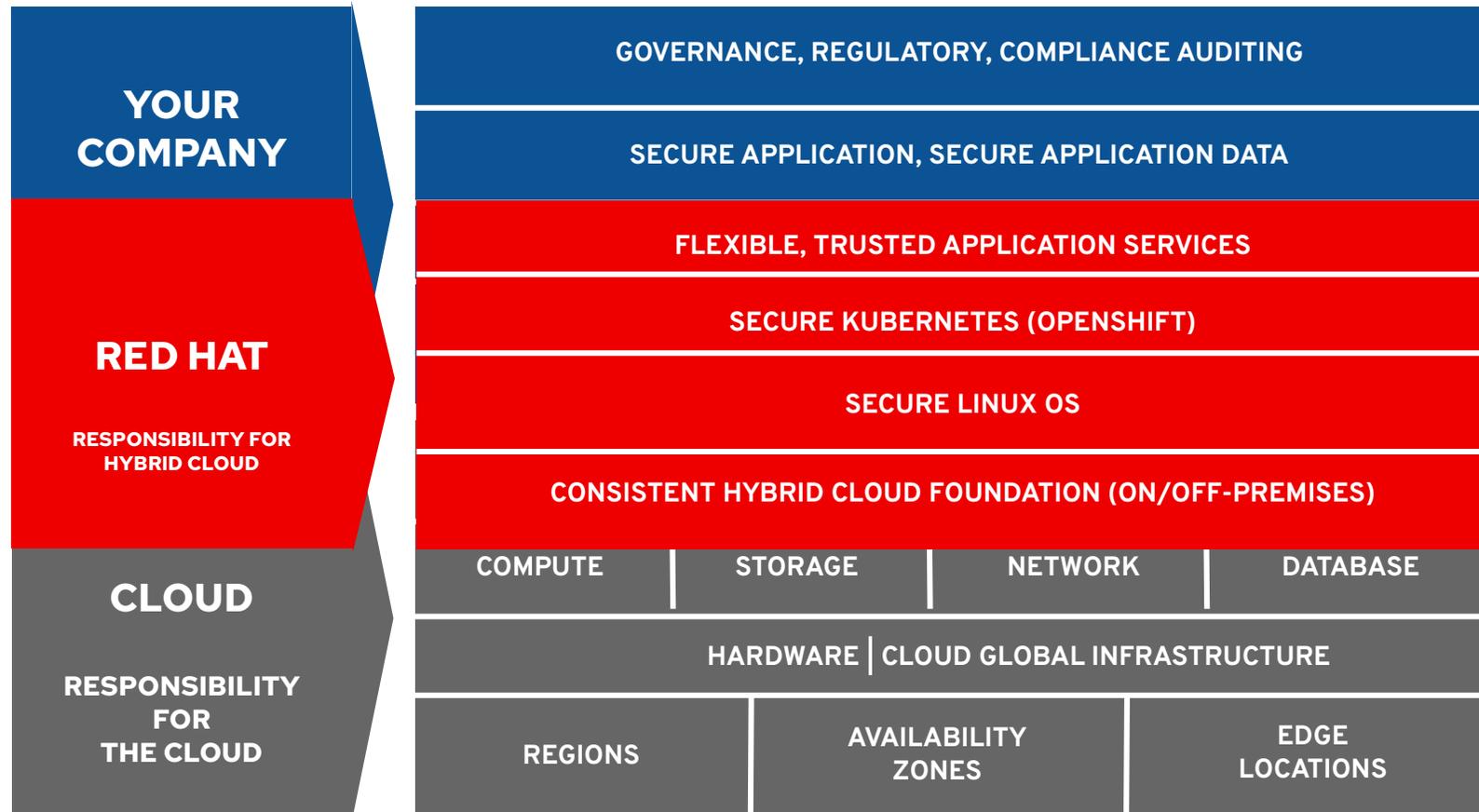


SRE processes & cross team collaboration

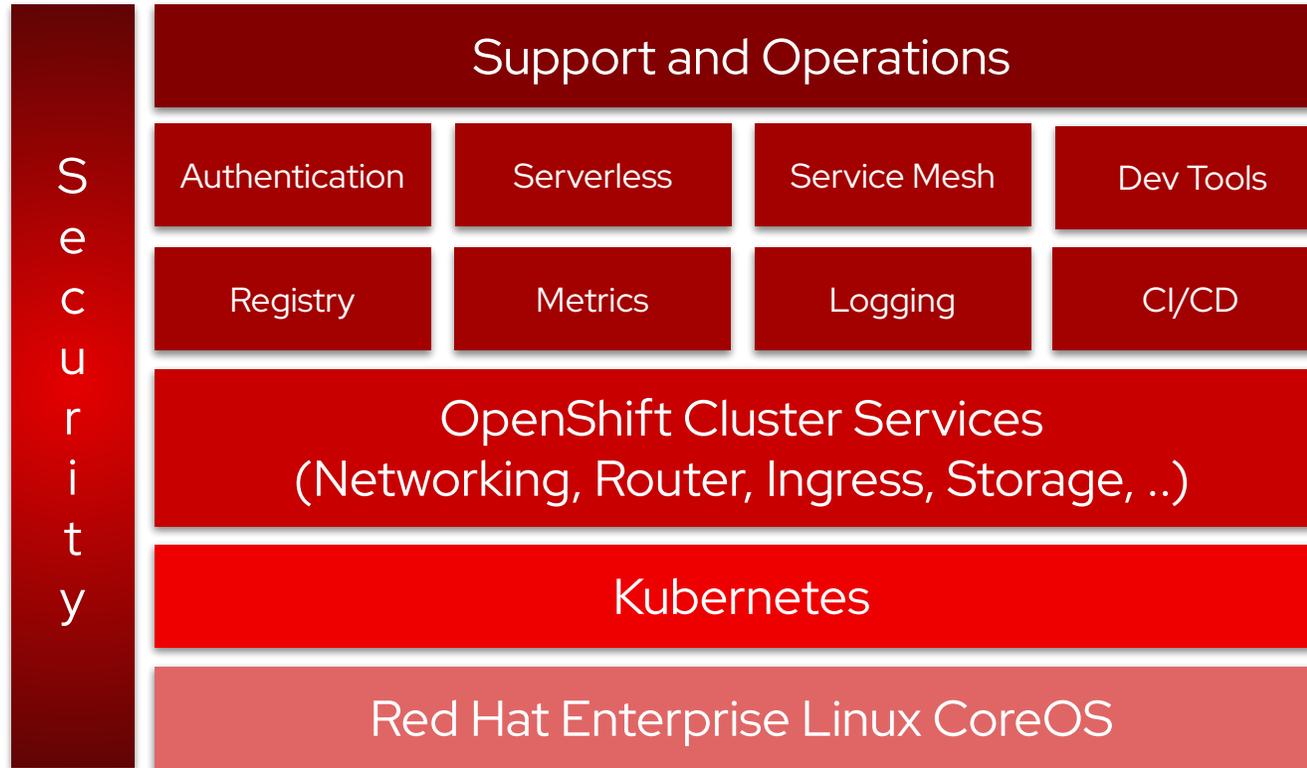
24 x 7 follow the sun model



Red Hat can help ease the Cloud transition



Complete Managed Apps Platform



99.95% SLA, 24x7 SRE

Red Hat Cloud Services



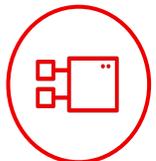
Full stack management and unified experience



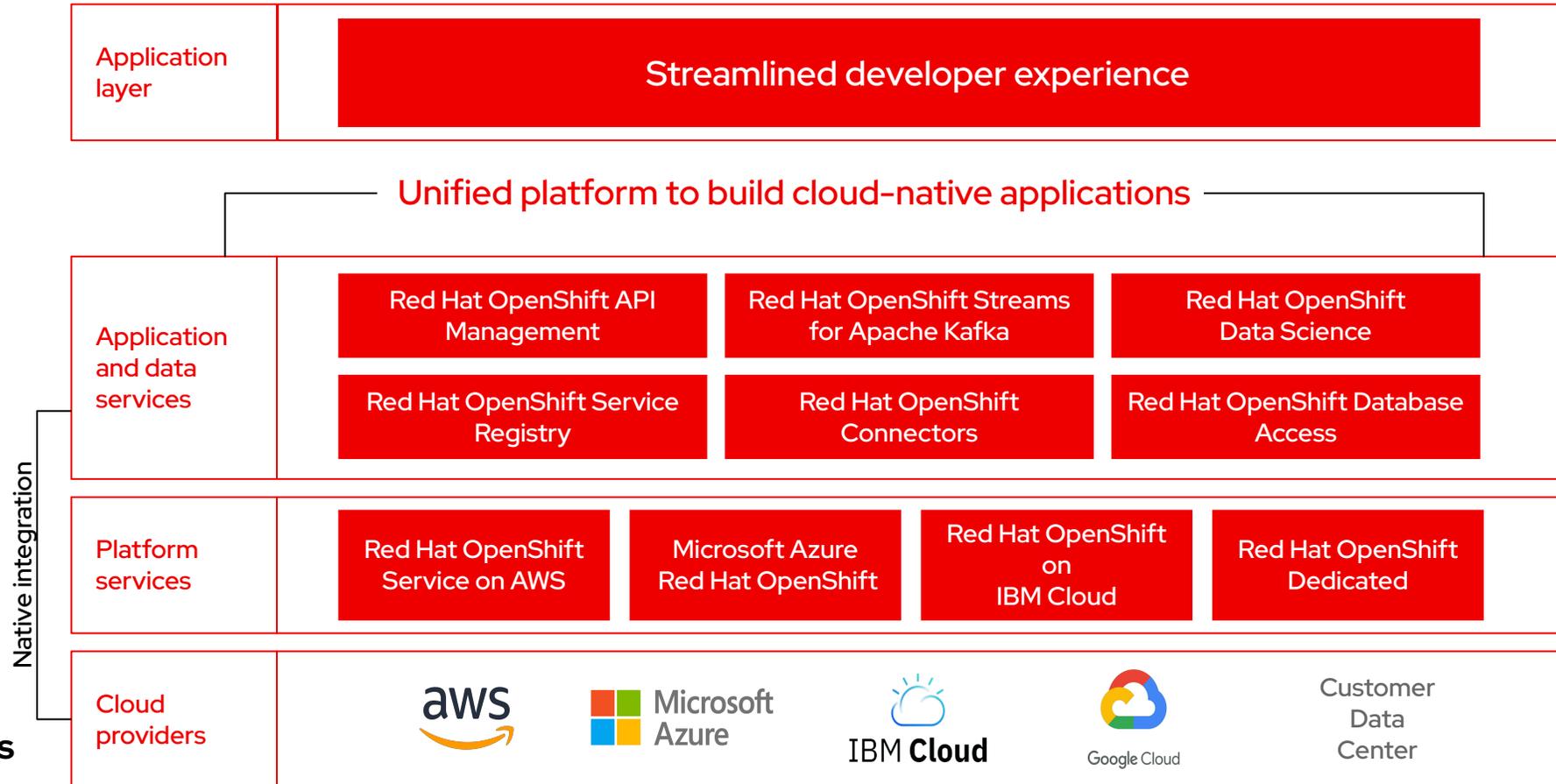
Maximize full value of Red Hat OpenShift



Hybrid cloud flexibility



Consume hyperscaler native and partner services



New Cloud Service areas

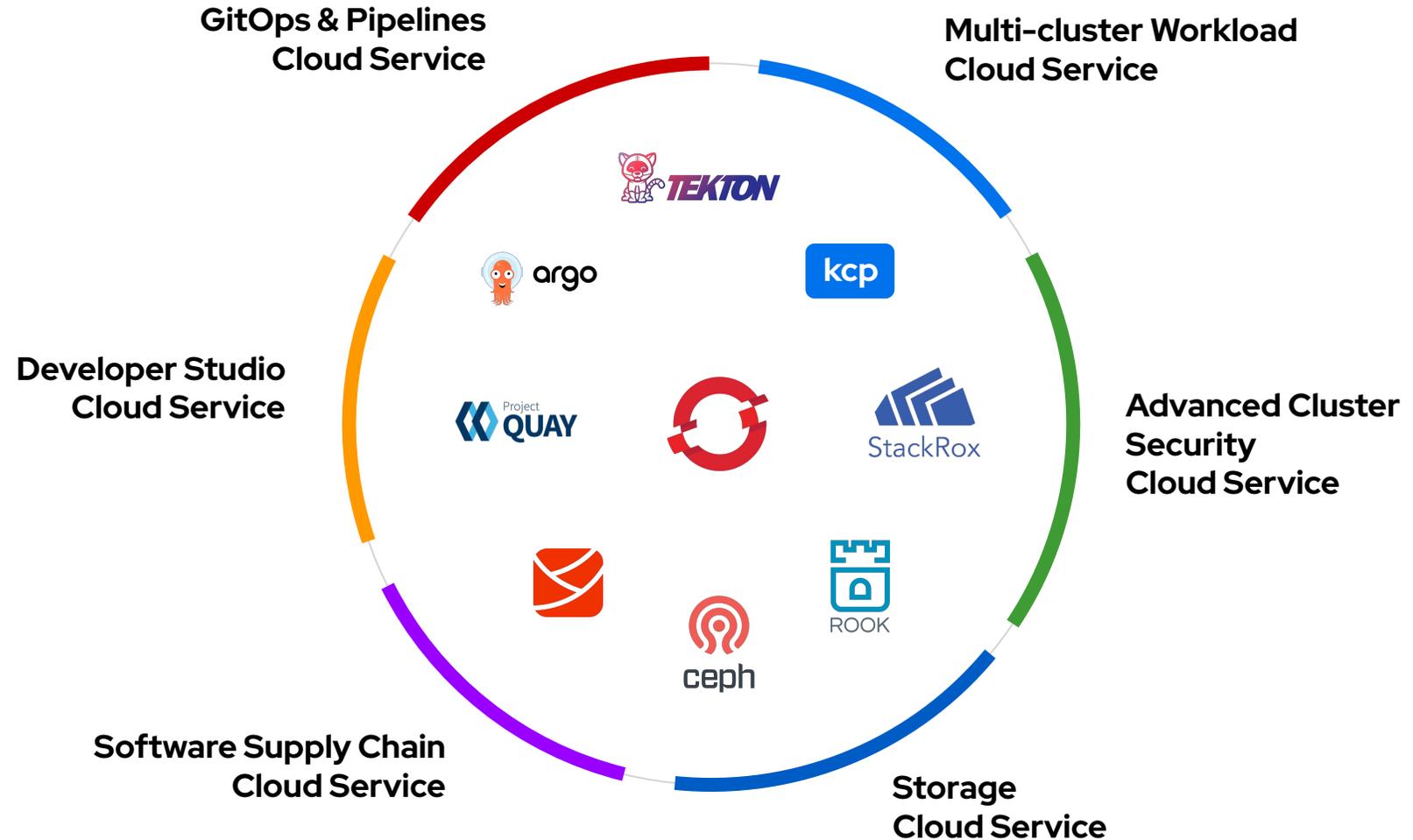
Platform Consistency

Complement our "cluster" Cloud Services with new "app" services.

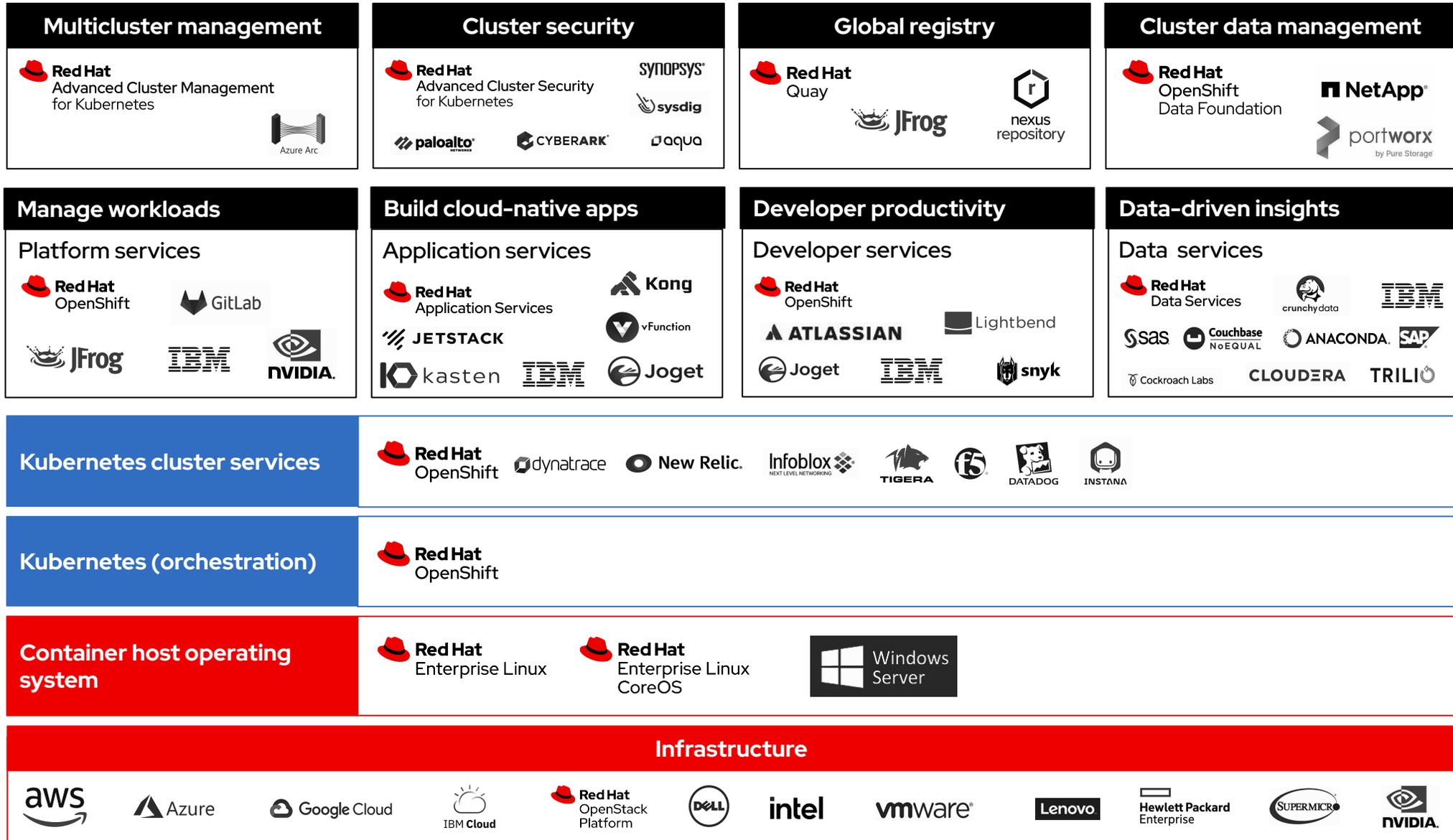
Cloud services that share the same technology in use within OpenShift for seamless integration



Developer access to multi-cluster aware tools without toil



OpenShift Partner Ecosystem



Red Hat
Summit

Connect

Thank you



[linkedin.com/company/red-hat](https://www.linkedin.com/company/red-hat)



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