

Passez à la vitesse supérieure *avec une plateforme d'entreprise Open Source.*

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BITF

#BITF25





A comprehensive portfolio of open source technologies —from the datacenter to the edge—with a robust ecosystem of partnerships that delivers flexibility across environments



Innovation
Standardization
Open Organization
GitOps
Cloud-native
DevOps
Digital transformation
Security
Internet of things
Open source communities
Artificial Intelligence
Containers
Hybrid cloud
Automation

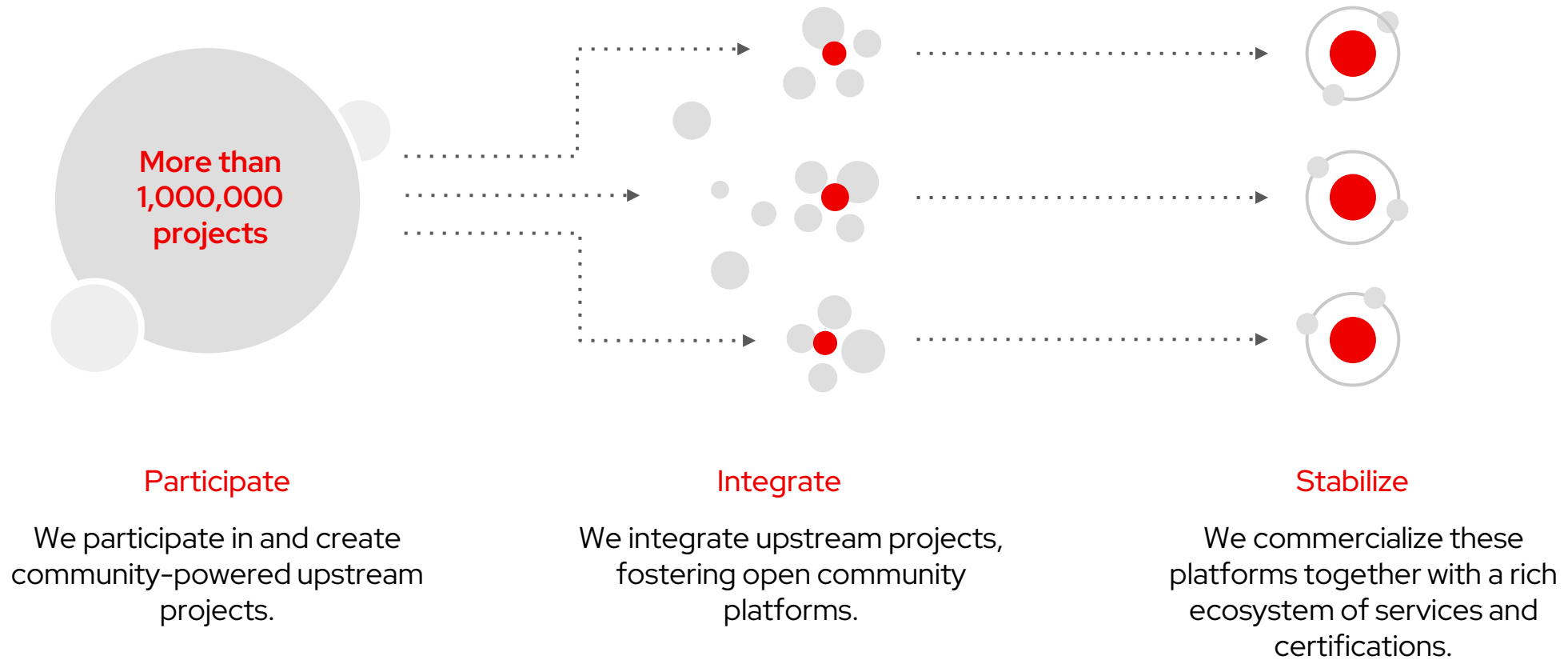
Big ideas drive...
business innovation

.....

Every organization in every geography and in every industry can innovate and create more customer value and differentiation with

open source technologies

How do community project becomes Red Hat products?



What are the benefits of using Red Hat enterprise products?



Adopt open industry standards and participate indirectly in open source communities

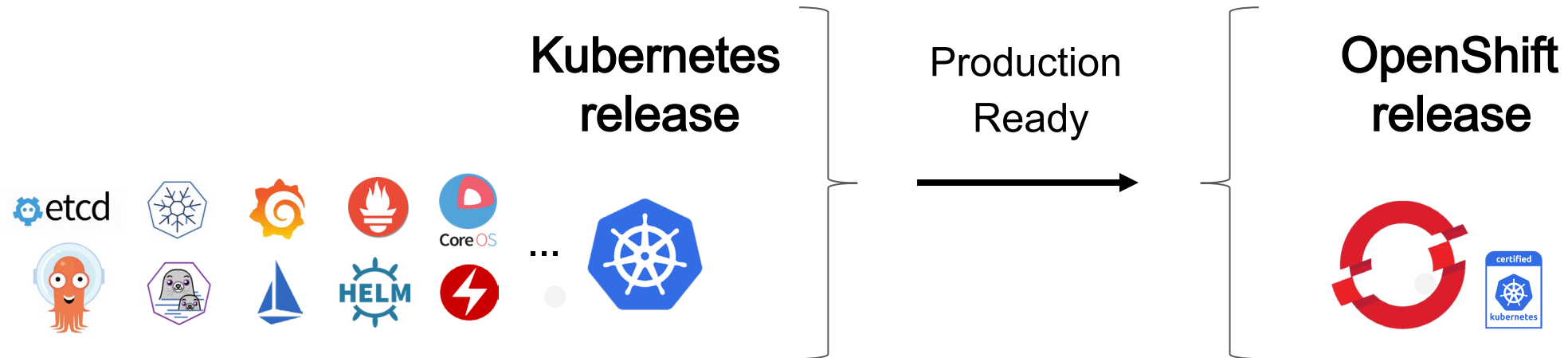


Lower time spend to integrate open source technologies



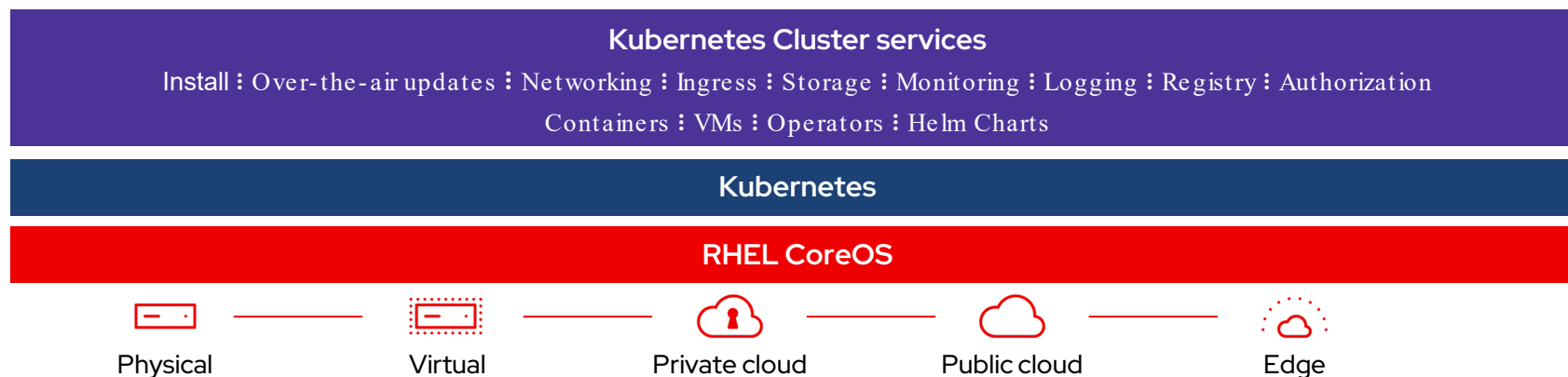
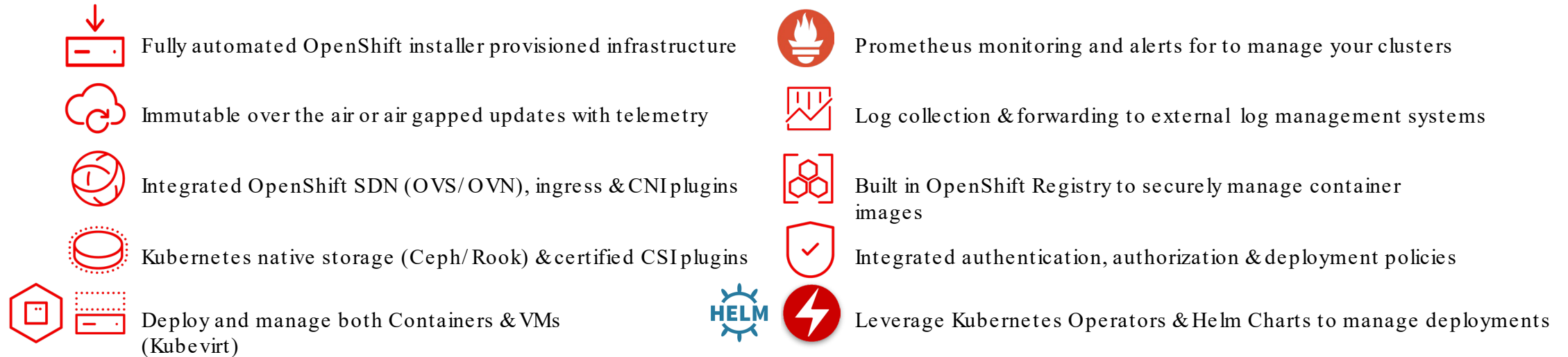
Increase security and reliability in critical environments

OpenShift – Trusted Enterprise Kubernetes



Red Hat

OpenShift – Enterprise containerization



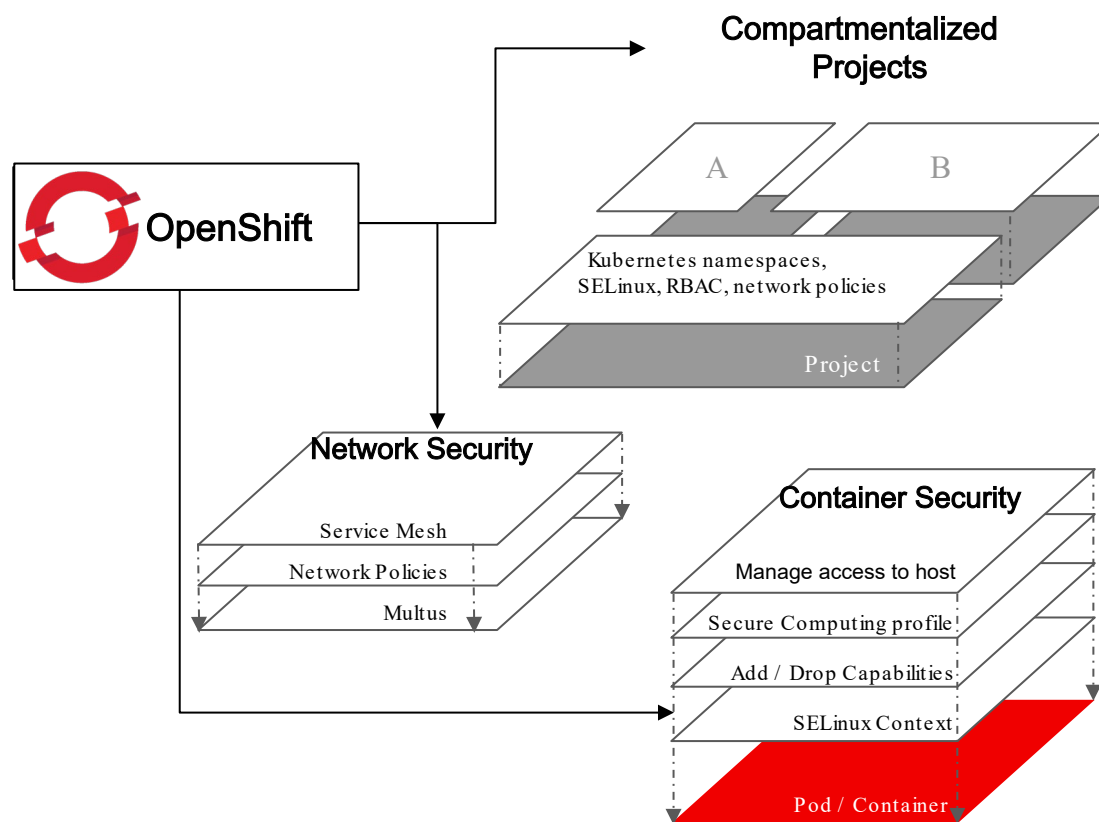
OpenShift – Developer view

The screenshot displays the OpenShift Developer view interface. On the left is a dark sidebar with the Red Hat OpenShift logo and a navigation menu containing: Developer, +Add, Topology (highlighted), Observe, Search, Builds, Pipelines, Helm, Project, ConfigMaps, and Secrets. The main area features a blue header with a login message: "You are logged in as a temporary administrative user. Update the [cluster OAuth configuration](#) to allow others to log in." Below this, filters show "Project: openshift-monitoring" and "Application: All applications". A toolbar includes "Display options", "Filter by resource", "Name", and a search field. The central part of the screen shows a topology diagram of the monitoring stack, with components like "cluste...erator", "promet...erator", "thanos-querier", "alertm...-main", "node-exporter", "prometheus-k8s", "promet...hook", "kube-s...etrics", "telemeter-client", "metrics-server", "opensh...etrics", and "monito...plugin" represented by icons. At the bottom of the main area are zoom controls and a "openshift-monitoring" label. The top right corner shows a user profile "kube:admin".



Red Hat

OpenShift – Bring Kubernetes security out of the box



OpenShift is hardened by default and provides built-in security capabilities at all layers of the platform stack

- RHEL CoreOS, a container-optimized OS, delivers a reduced attack surface and uses SELinux in enforcing mode to provide container isolation
- Out of the box, OpenShift provides fine-grained access control, auditing, logging and monitoring capabilities
- All traffic between platform components is encrypted by default.
- Network security is provided through ingress and egress controls, as well as micro-segmentation for management of east-west traffic
- In addition to SELinux protections, containerized application security is tightly managed with Security Context Constraints

OpenShift & Virtualization



HOW WE DO IT



kubernetes

Provides distribution, failover, high availability of container workloads. Manages the attachment of networking and storage.



KubeVirt

Extends Kubernetes to provide model for running Virtual Machines, taking advantage of all of the features of Kubernetes.



KVM

Serves as the hypervisor to run multiple, virtual machines (VMs), live migration, storage attachment.



Red Hat

OpenShift Virtualization



Enterprise virtualization capabilities

- ▶ **Live migration**
- ▶ Infrastructure/Application fencing
- ▶ Hot pluggable disks
- ▶ Non-disruptive upgrades
- ▶ Deduplicating memory with freePageReporting and KSM support
- ▶ **Performance, Scale, Stability of KVM**
- ▶ CPU overcommit
- ▶ VM disk resize
- ▶ GPU passthrough, vGPU
- ▶ **UI for VM admins**
- ▶ VM export
- ▶ **Microsoft Windows**, UEFI and Secure boot, Persistent vTPM
- ▶ Microsoft Windows Server Failover Cluster (WSFC)



Networking

- ▶ DPDK, **SRI-IOV**, IPv6
- ▶ Flat L2 Overlay network without the need to configure host networking
- ▶ OVN Kubernetes localnet as an alternative to the Bridge CNF
- ▶ Secondary network ipBlock policies and **micro segmentation**



Hybrid Cloud and managed services

- ▶ X86 Intel and AMD based systems
- ▶ Single Node OpenShift
- ▶ 3- node compact cluster
- ▶ **ROSA, AWS Public Cloud**
- ▶ IBM Cloud (Tech Preview)



Storage, backups, and DR

- ▶ **Storage profiles for all major storage providers - ODF, Netapp, Pure/Portworx, Dell, Hitachi, HPE, IBM**
- ▶ Virtual machine export
- ▶ **Backup / restore** with OADP
- ▶ **Portworx support for Metro-DR and Async-DR**
- ▶ GitOps-based VMs disaster recovery in **ODF Metro-DR**
- ▶ Kasten K10 by Veeam
- ▶ Trilio TVK
- ▶ Storware vProtect



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OpenShift Virtualization - Integration with your existing technology partners

Storage

Products for OpenShift Virt using CSI (container storage interface)



Backup / DR

Products for OpenShift



Networking

Products for OpenShift Virt using CNI (container networking interface)



Cloud Services

Current public cloud providers offering OpenShift virtualization



Compute

Products for OpenShift



Note: This is not an exhaustive list of ISV partners, with new partners being added all the time.

OpenShift – Accelerators support

AI workloads



VMs



containers



3rd party apps



Red Hat
OpenShift AI



Red Hat
OpenShift

Accelerators



nVIDIA
GPU

intel
Gaudi

AMD
Instinct

Google
TPU

aws
Neuron



Bare metal



Virtualization



Cloud



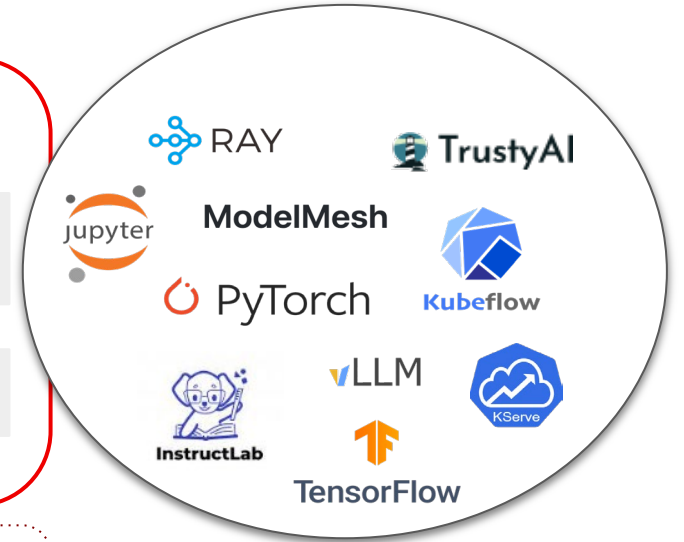
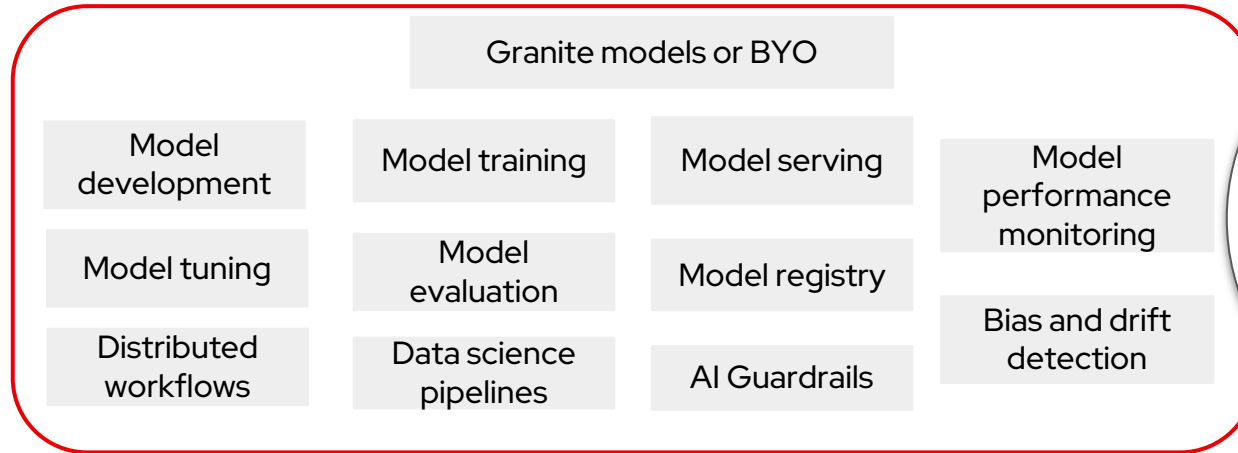
Edge



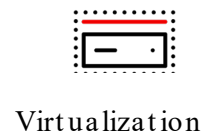
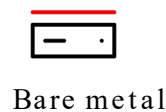
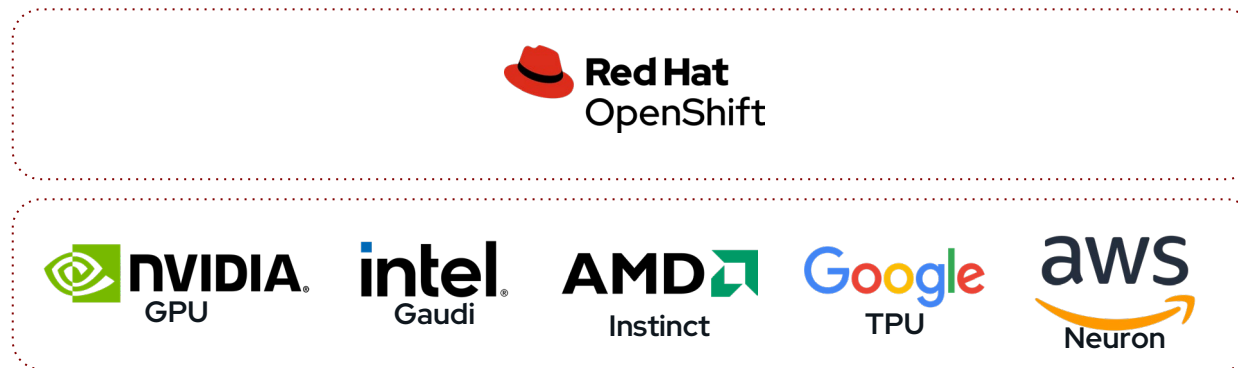
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OpenShift AI

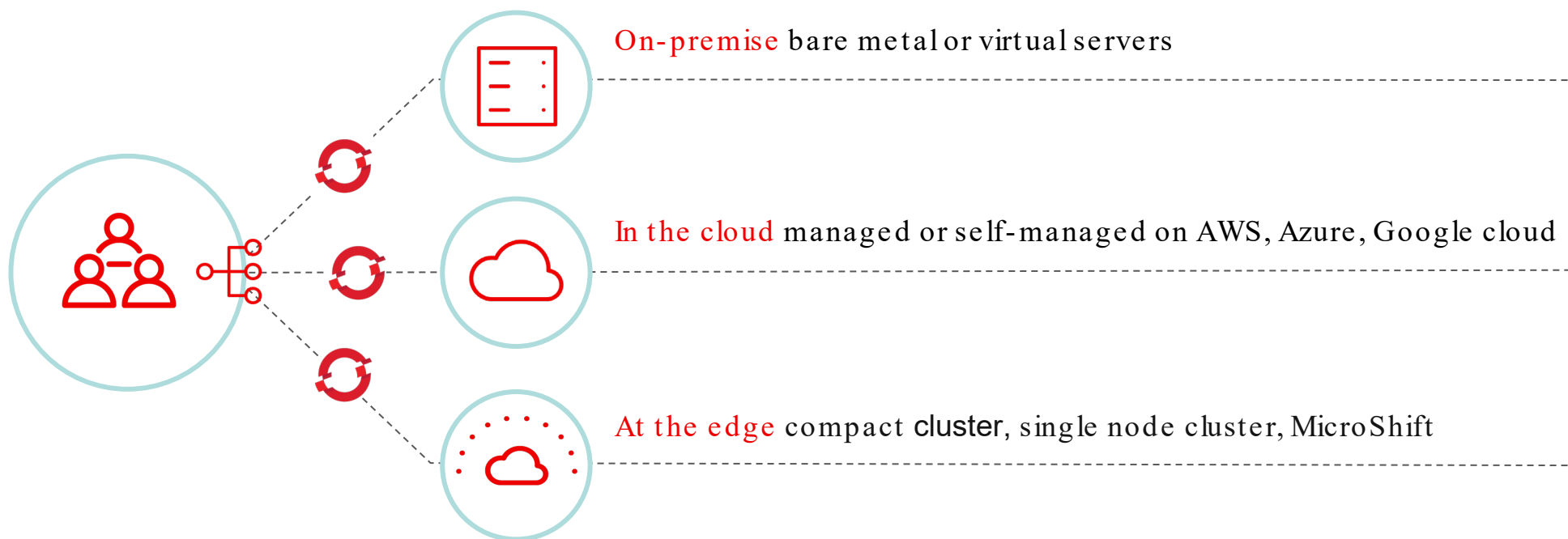
OpenShift AI



Accelerators



OpenShift – Consistency and flexibility across hybrid environments





The enterprise open source platform
for all your workloads

Trusted

to reduce risk

Comprehensive

to improve productivity

Consistent

to increase flexibility

Virtualization



Container



Application



AI



Physical



Virtual



Private cloud



Public cloud



Edge



Notre accompagnement Bechtle pour une implémentation OpenShift.

Workshop #1

Pourquoi Kubernetes et les micro-services ?

Docker et Container

Qu'est ce que c'est et pourquoi est ce autant populaire ?

Monolithic vs Microservices

Évolution et choix des infrastructures applicatives

Kubernetes et players

Fonctionnement de Kubernetes et Distribution du moteur

Workshop #2

OpenShift discovery en format virtualisé.

OpenShift Composants

Composants OpenShift Out-of-the-Box.

Management Network & Storage

Interconnexion entre les éléments et gestion du stockage

Fournir OpenShift à ses équipes

Templates et options

Workshop #3

Alternative à la virtualisation.

Solutions du marché

Environnement et Comptabilité

Fit & Gap

Comparaison globale entre les produits

Back-up



Red Hat

Thank you for joining us today! Next steps you can take!

Talk to Nicolas about
your project
at the Red Hat booth



Meet the Red Hat
team at the Red Hat
booth



Try OpenShift
using the developer
sandbox



red.ht/sandbox

Des questions?

Venez nous rendre visite sur
notre stand.

Prochaine session dans
cette salle.

Sophos.

*Le SOC 24x7 next gen compatible avec vos
solutions de cybersécurité existantes.*

