Cloud Pack MQ
&
HA

ICP Kubernetes/WebSphere/MQ/TXseries Client Technical Professional
HGRANGE@fr.ibm.com

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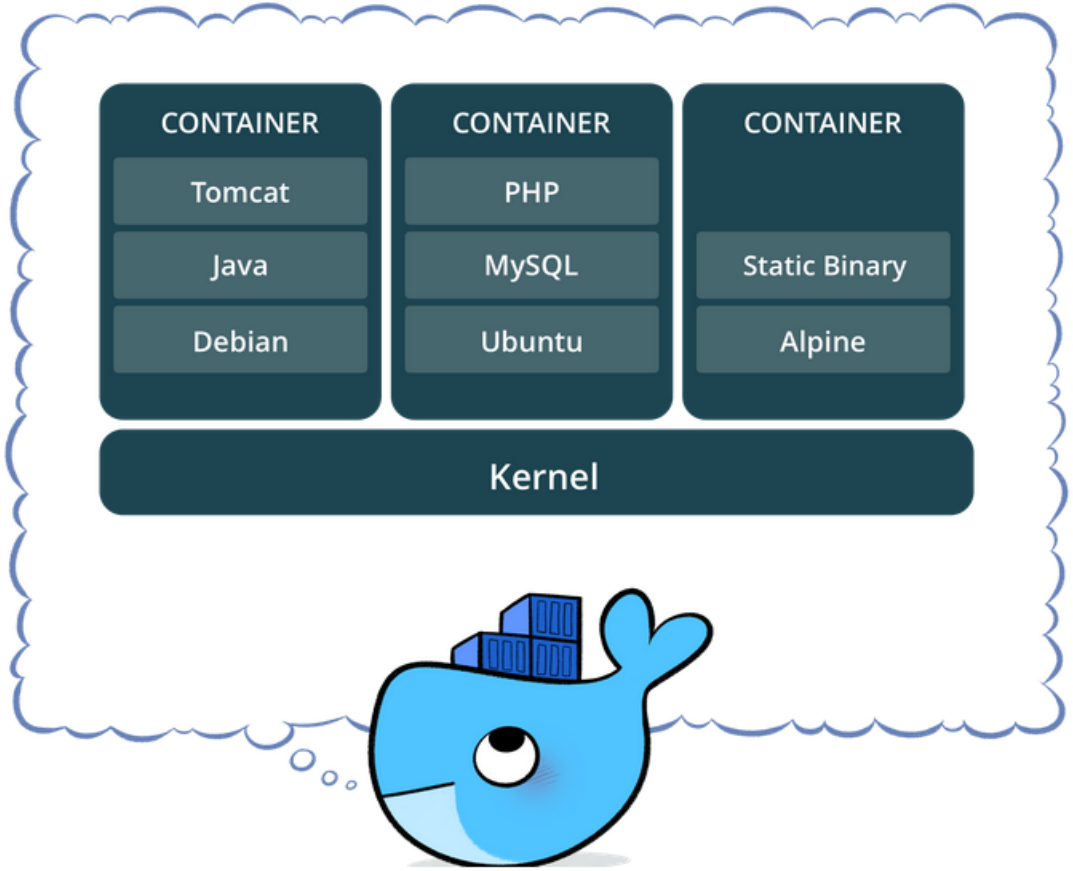
Containers ou Conteneurs

Package software into standardized units for development, shipment and deployment

A container image is a lightweight, stand-alone, executable package of a piece of software that includes everything needed to run it: code, runtime, system tools, system libraries, settings. Available for both Linux and Windows based apps, containerized software will always run the same, regardless of the environment. Containers isolate software from its surroundings, for example differences between development and staging environments and help reduce conflicts between teams running different software on the same infrastructure.



Source https://www.docker.com/what-container

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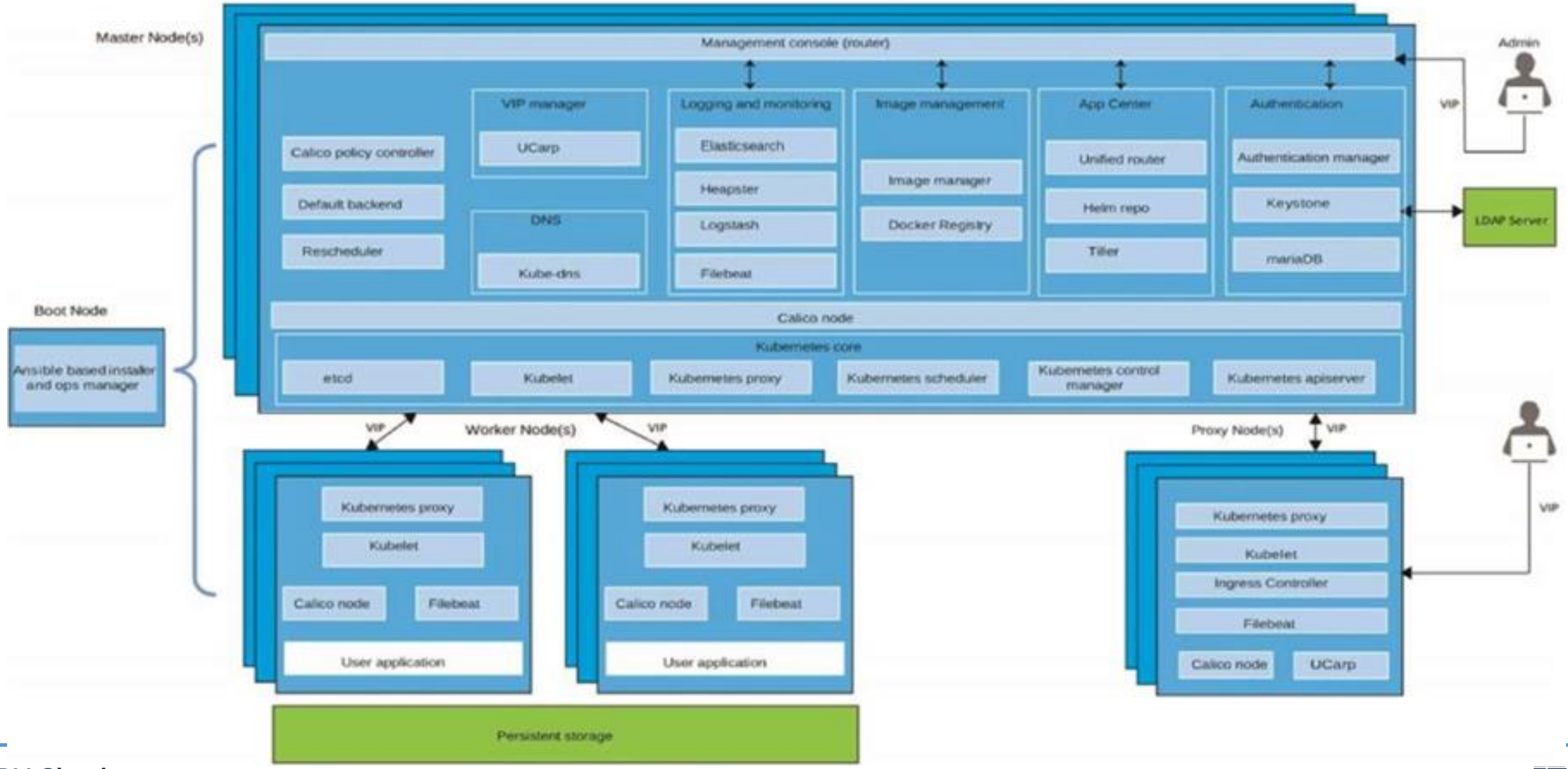
Architecture (K8S)



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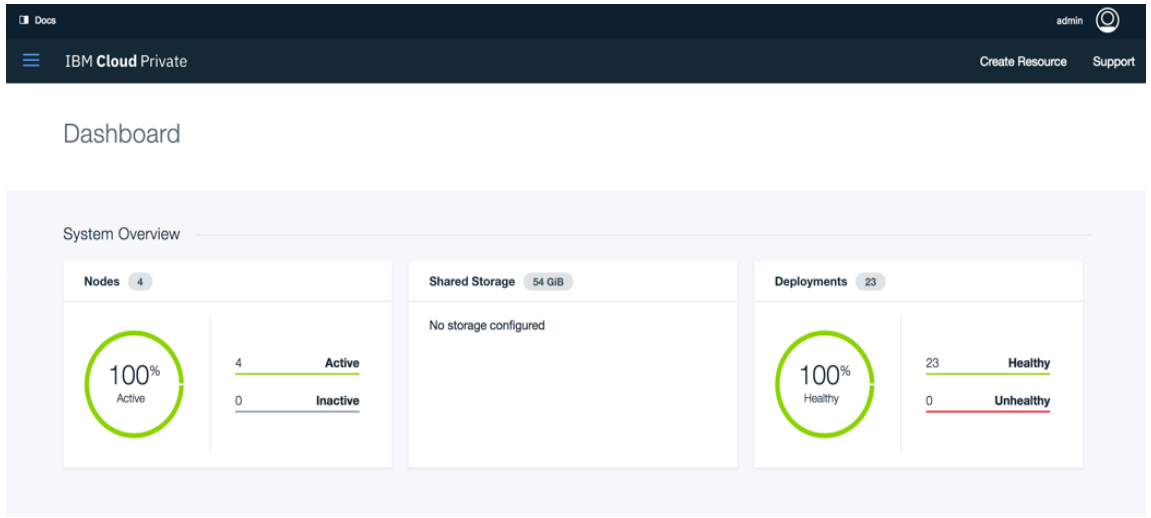
Experience from clients drove IBM Cloud private design



Time to Value Matters: Clients want to Operate an Orchestrated Container Cloud, NOT Assemble One

+ IBM Value-add for Enterprises → **IBM Cloud private**

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IBM Cloud Private

IBM Middleware, Data, Analytics and Developer Services

Cloud enabled middleware, messaging, databases, analytics, and cognitive services

IBM WebSphere

IBM DB2

IBM MQ

Core Operational Services

Simplify Operations Management, Security, and Hybrid integration

Provision infrastructure and apps across Multi-Cloud environments

Kubernetes-based Container Platform

Industry leading container orchestration platform

Cloud Foundry

For prescribed app development & deployment

CLOUDFOUNDRY

Runs on existing IaaS: vmware openstack Power Systems System z IBM Spectrum *CMS*

Third Party alliances: Dell Cisco NetApp Lenovo Canonical …

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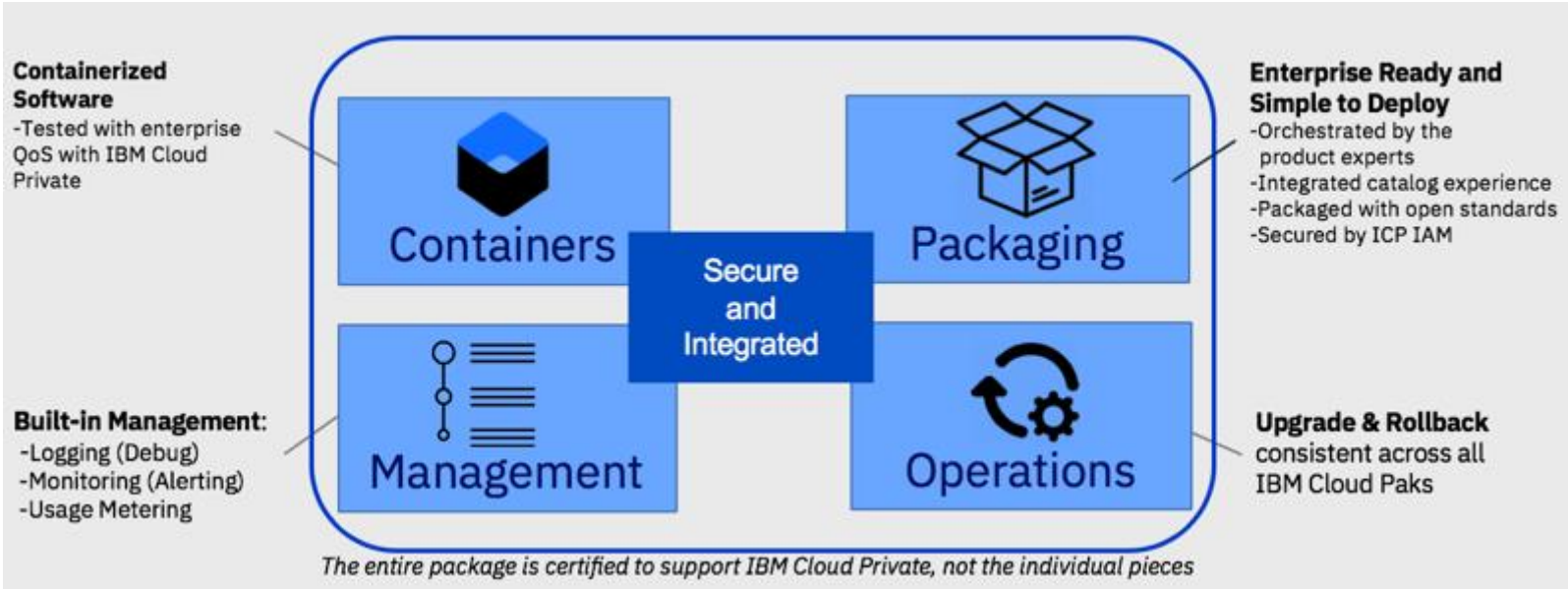
Introducing IBM Cloud Paks on IBM Cloud Private to address enterprise client needs

Providing containers is not enough for the Enterprise.

IBM Cloud Paks on ICP:

- ✓ Provide enterprise capabilities for deployment, lifecycle management, and production use cases
- ✓ Unlock the value of IBM Cloud Private, out-of-the-box integration with core operational services
- ✓ Accelerate Time to Production for Enterprise client use cases



Certified IBM Cloud Paks are the next step in our container content strategy and further differentiate us from the competition

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IBM Support on container delivery options

	Ad hoc	IBM Provided containers	Certified IBM Cloud Paks on IBM Cloud Private
Deployment/Orchestration (Helm Chart)	☐	☐ Not provided	☑ Supported by IBM
IBM Software (core product functionality)	☑ Supported	☑ Supported	☑ Supported by IBM
Base OS container image	☐	☑ Supported	☑ Supported by IBM
Platform Services (logging, monitoring, etc)	☐	☐	☑ Supported by IBM
Cloud Platform (Kubernetes+)	☐	☐	☑ Supported by IBM
Operating System & Hypervisor	☐	☐	☑ Supported by IBM for Linux on Power and Z Supported by RH when running certified content

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ibm-mqadvanced-server-prod V 2.2.0

Overview | Configuration

IBM Cloud Pak

IBM MQ queue manager

local-charts

Licenses | Release Notes | Qualification

CLOUD PAK VERSION

2.2.0

DETAILS & LINKS

IBM MQ Advanced

Introduction

This chart deploys a single IBM® MQ version 9.1.1 Advanced server (Queue Manager). IBM MQ is messaging middleware that simplifies and accelerates the integration of diverse applications and business data across multiple platforms. It uses message queues to facilitate the exchanges of information and offers a single messaging solution for cloud, mobile, Internet of Things (IoT) and on-premises environments.

Configure

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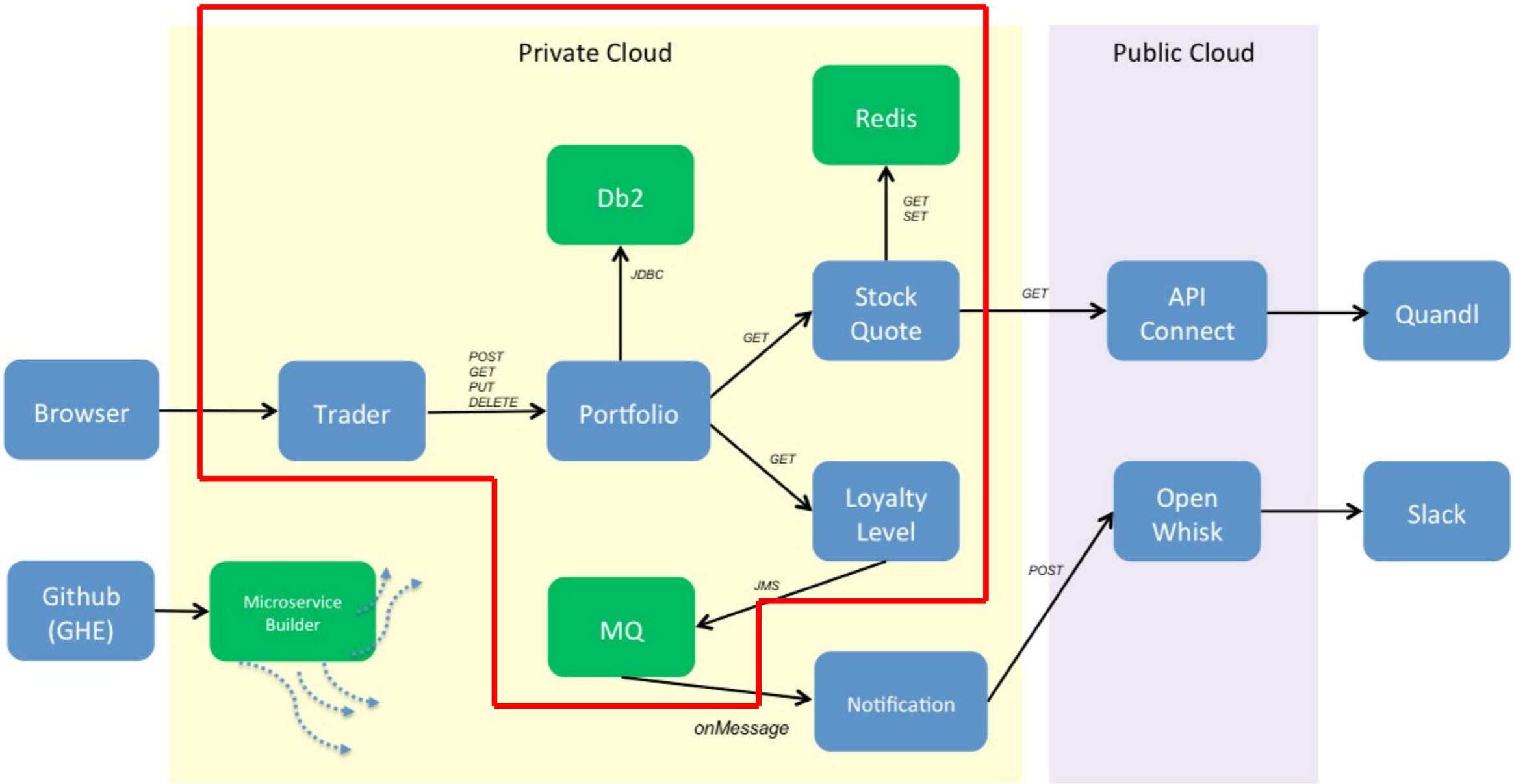
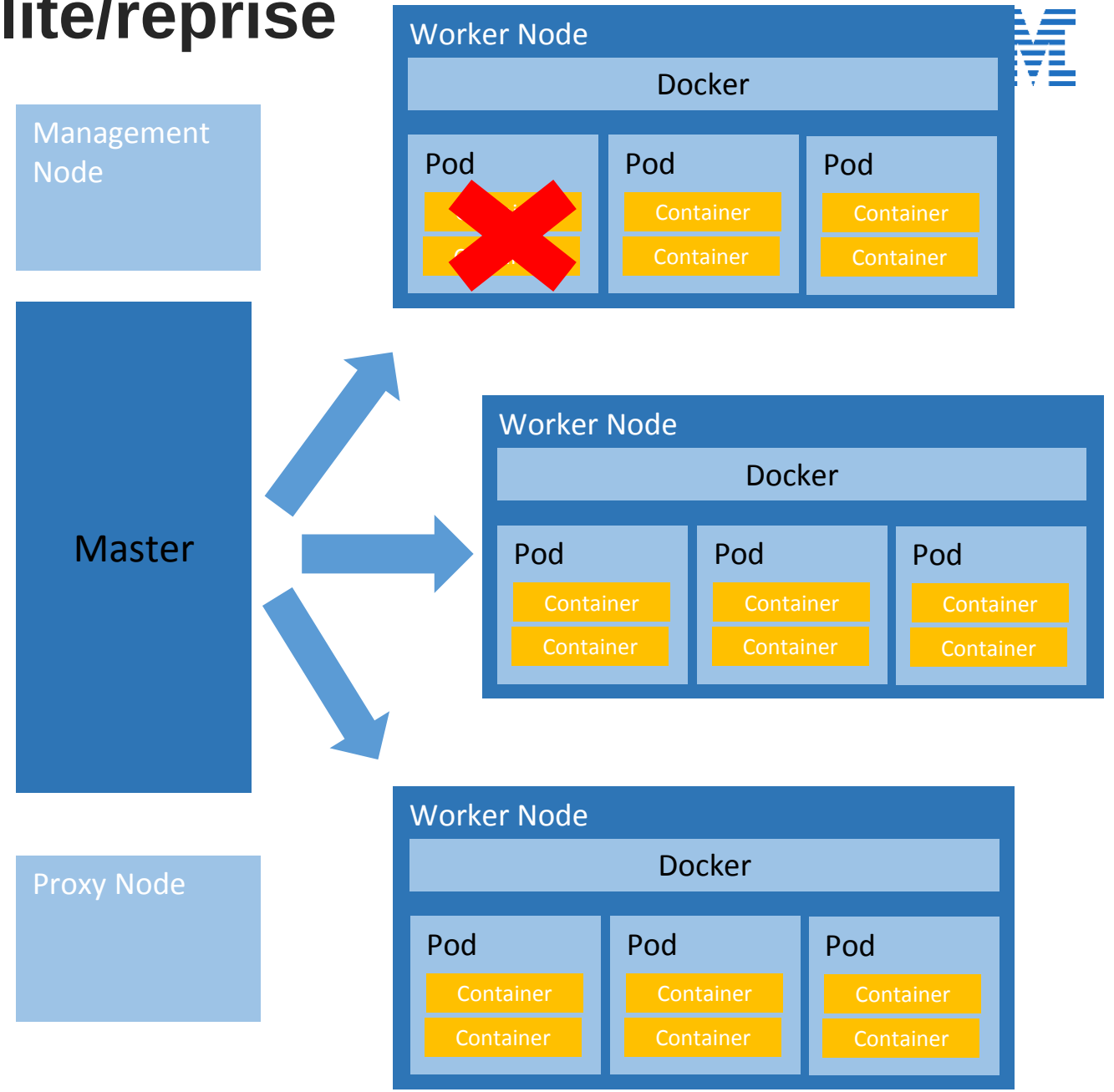
StockTrader Application Architecture



3 niveaux de Haute disponibilité/reprise

Au niveau du POD (containers)

– Redémarrage automatique du pod



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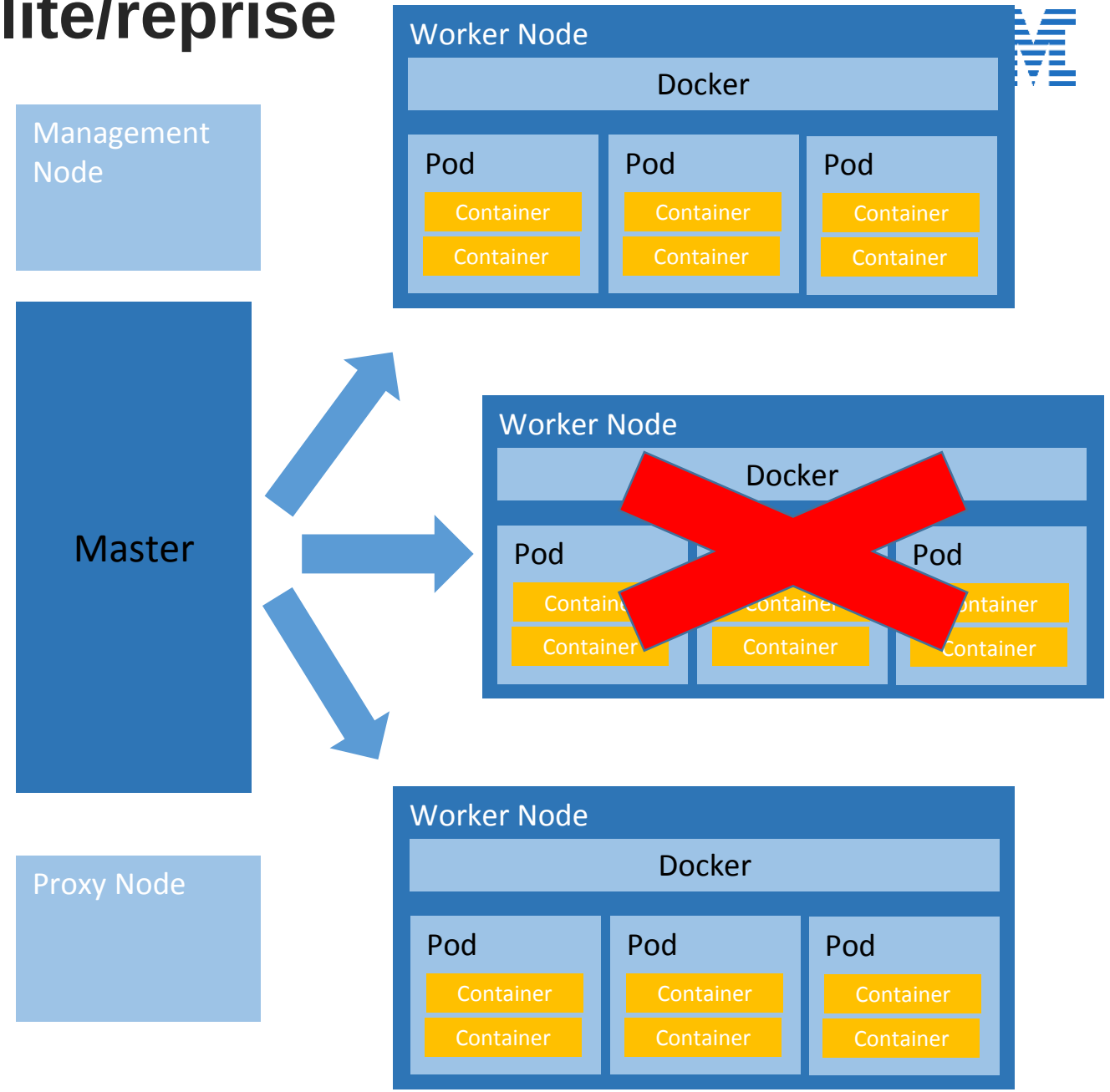
3 niveaux de Haute disponibilité/reprise

Au niveau du POD (containers)

– Redémarrage automatique du pod

Au niveau du nœud worker

- Redémarrage de tous les pods du nœud sur un autre nœud du cluster K8S



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3 niveaux de Haute disponibilité/reprise

Au niveau du POD (containers)

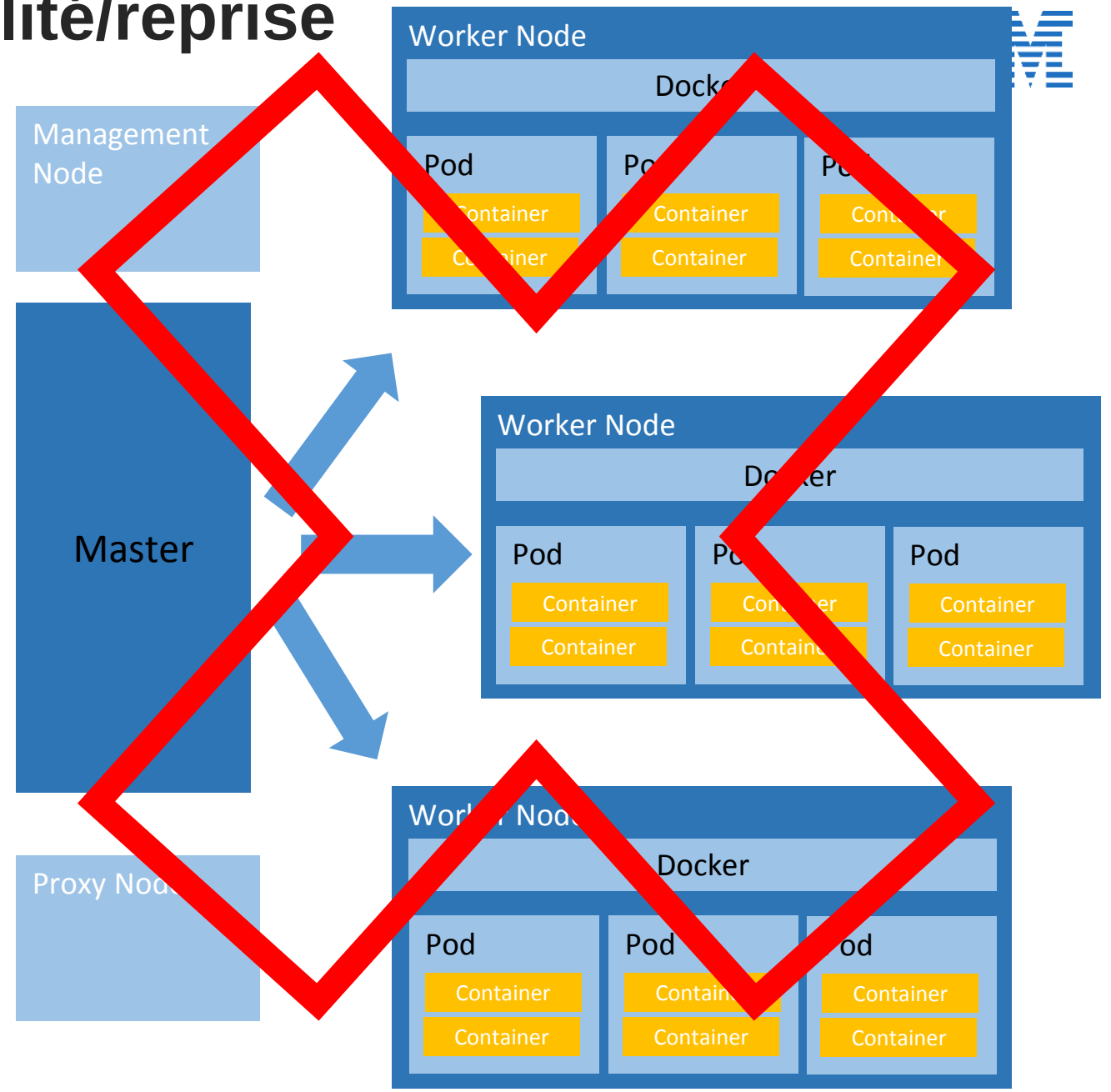
– Redémarrage automatique du pod

Au niveau du nœud worker

- Redémarrage de tous les pods du nœud sur un autre nœud du cluster K8S

Au niveau du cluster

– Transfert des workloads sur un autre cluster K8S



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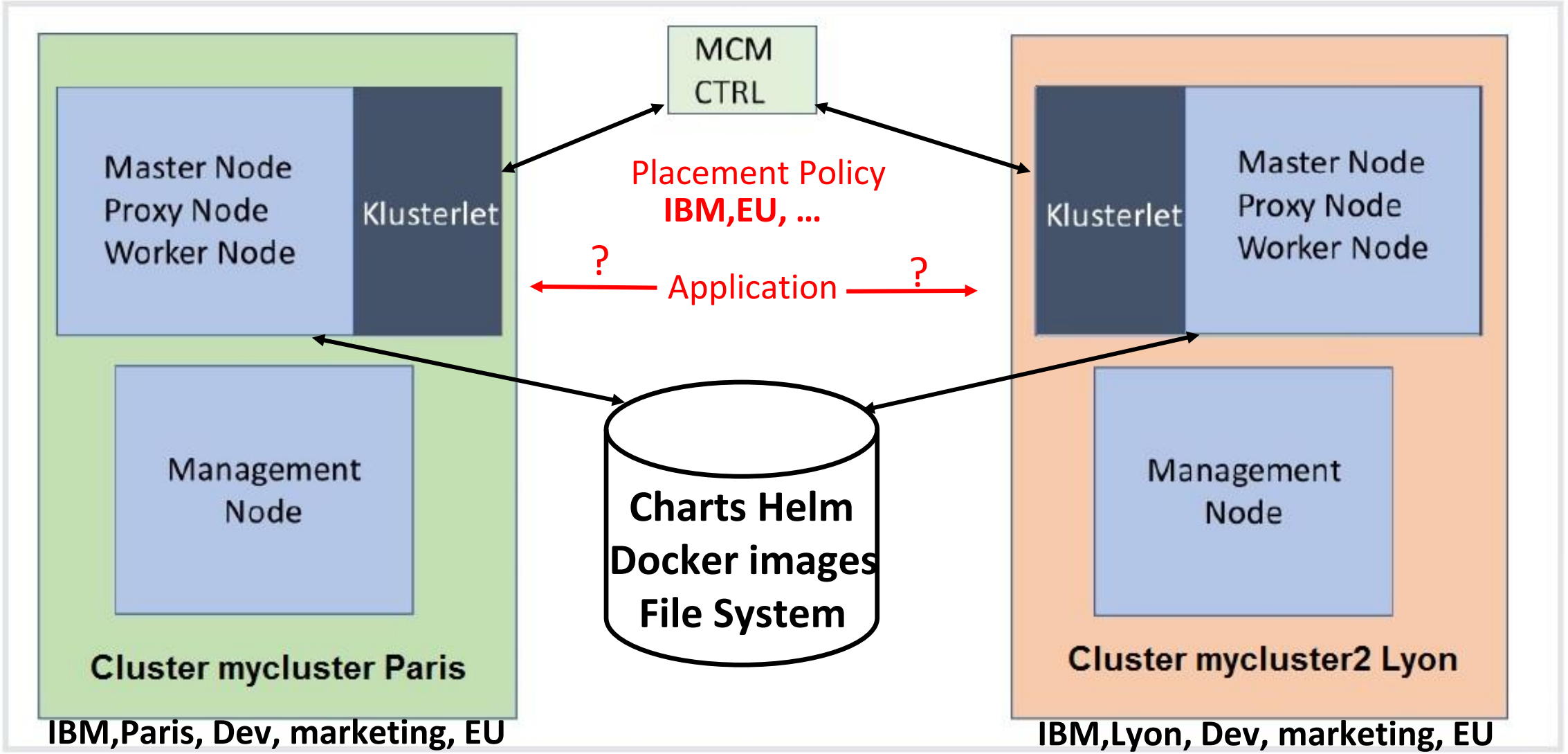
Multi Cloud Manager :

Centralized Management, Disaster Recovery between IBM Cloud Private K8S Clusters



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A single Control Plane for Multiple Clouds: IBM Multi Cloud Manager

Cloud Native development everywhere

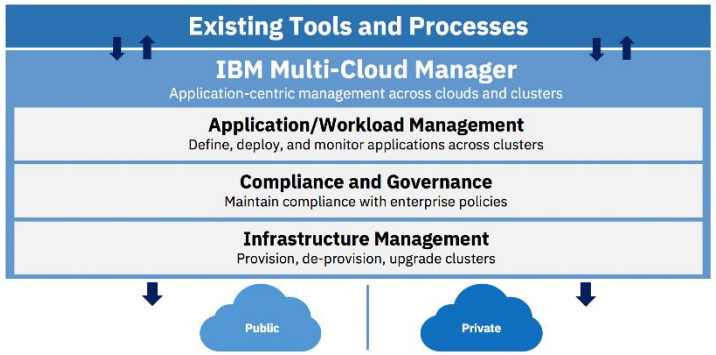
IBM Middleware, Data, Analytics and Developer Services

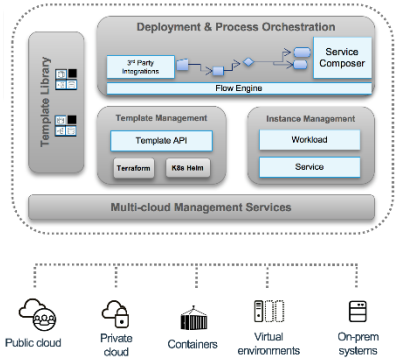
Core Operational Services

Kubernetes Container Platform

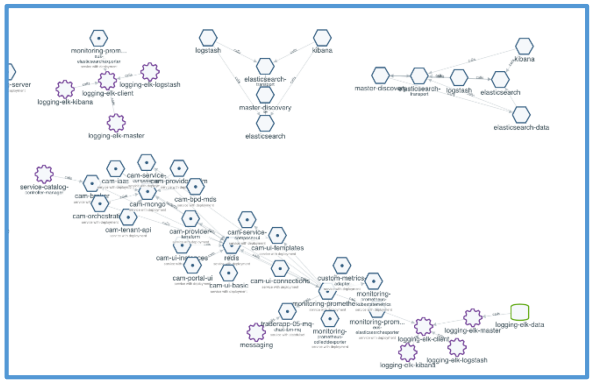
kubernetes docker

Multi Cloud Deployment

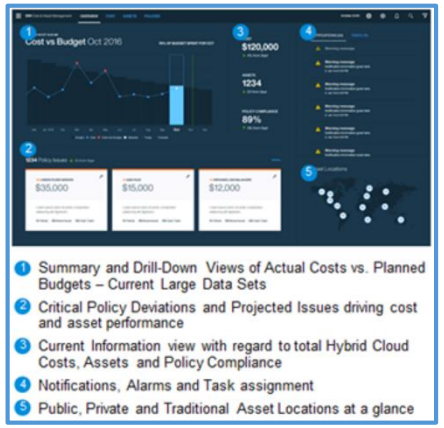




Multi Cloud Monitoring



Multi Cloud Management



1. Summary and Drill-Down Views of Actual Costs vs. Planned Budgets – Current Large Data Sets
2. Critical Policy Deviations and Projected Issues driving cost and asset performance
3. Current Information view with regard to total Hybrid Cloud Costs, Assets and Policy Compliance
4. Notifications, Alarms and Task assignment
5. Public, Private and Traditional Asset Locations at a glance

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IBM Cloud

Demonstration

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