



Openshift Anwendertreffen

Introduction to Openshift

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Solution Architect

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Technical Graduate

Speakers



Marta Blaszczyk

Technical Graduate



Tala Ismail

Junior Solution Architect

Agenda

- Let's talk about music! - Evolution of software deployment and architecture
- What is Openshift?
- Demo



Who likes music?



One-man orchestra



Small band



Orchestra

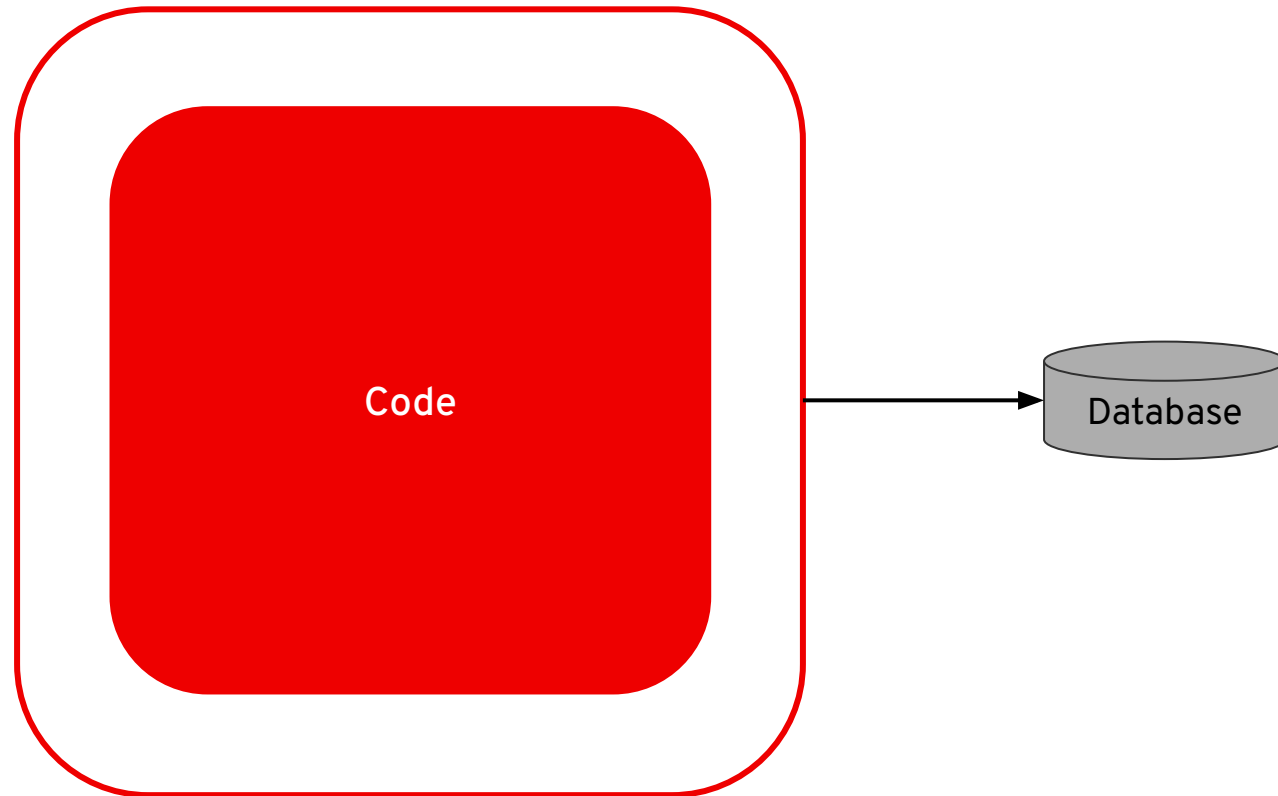


Conductor + Orchestra

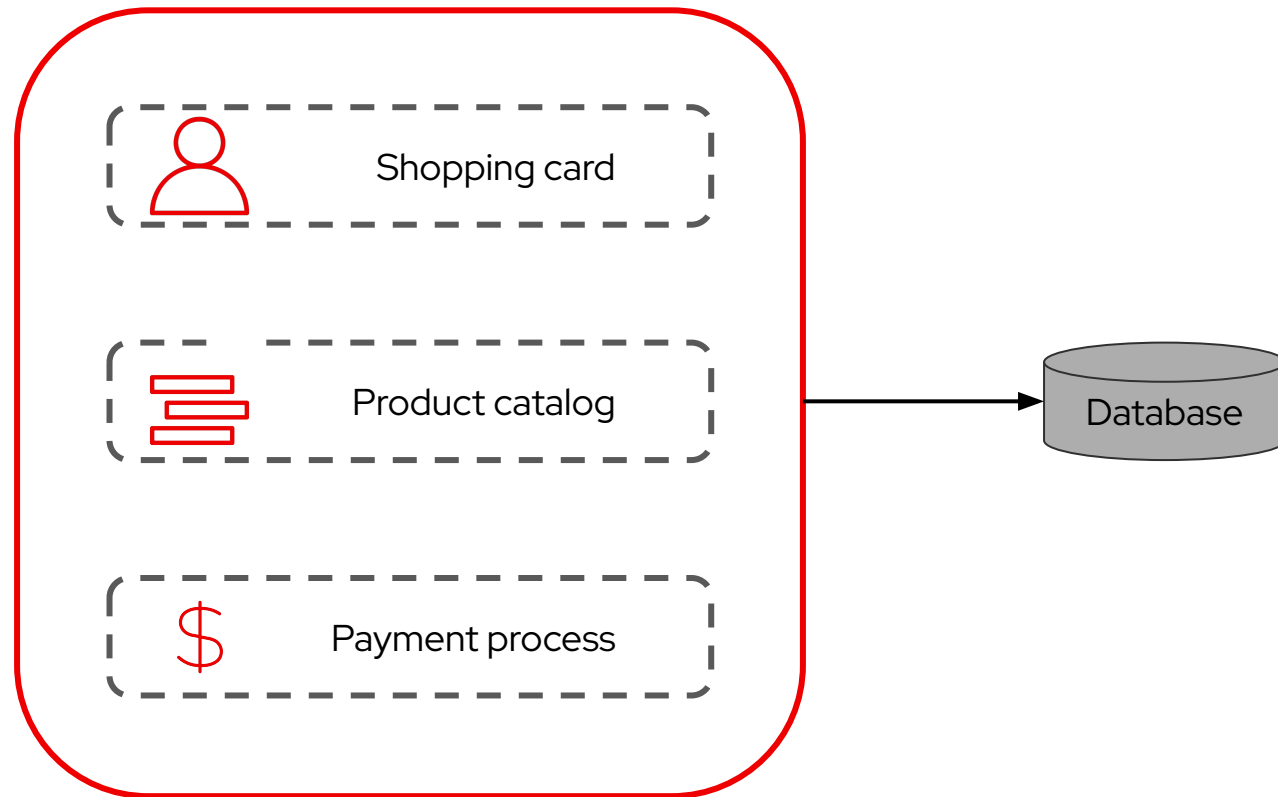
Monoliths as a one-man orchestra



Modular monolith



Example of a modular monolith

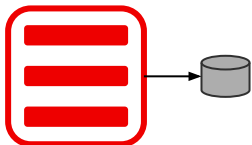




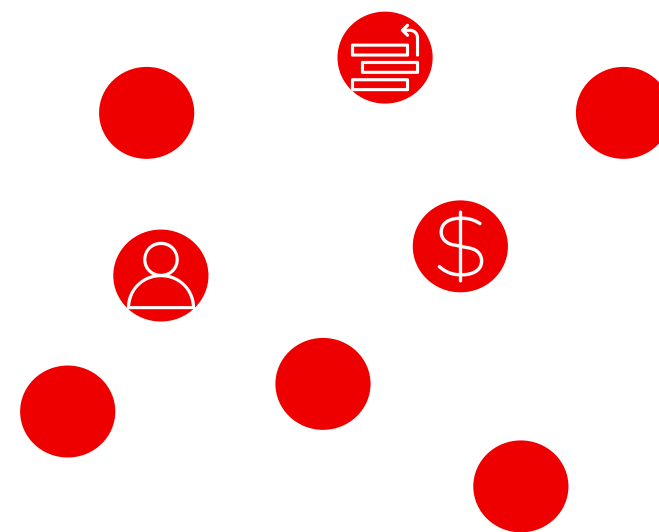
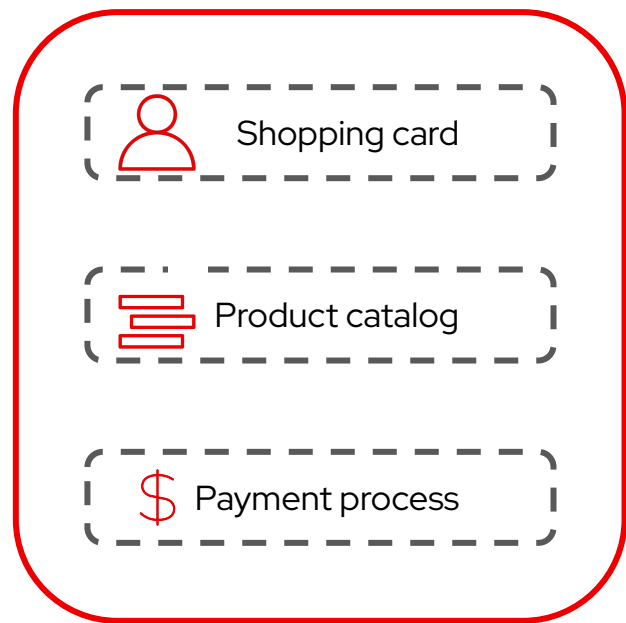
One-man orchestra



Monoliths

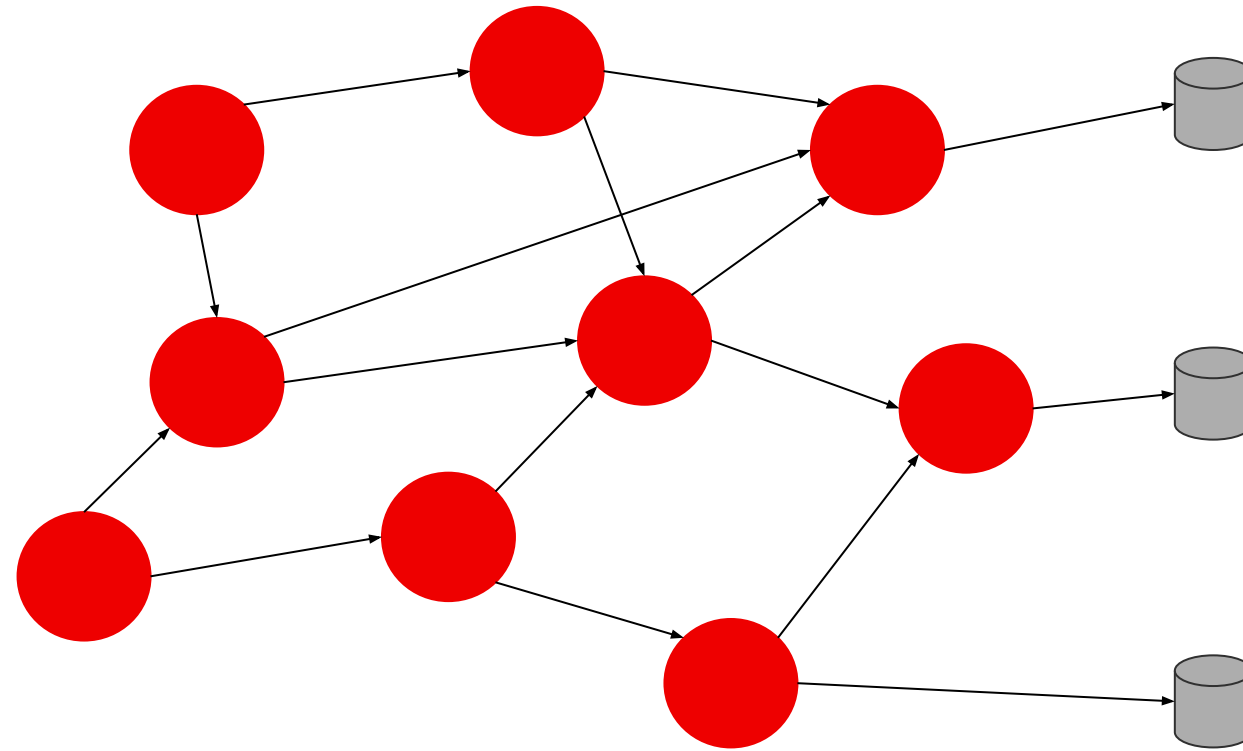




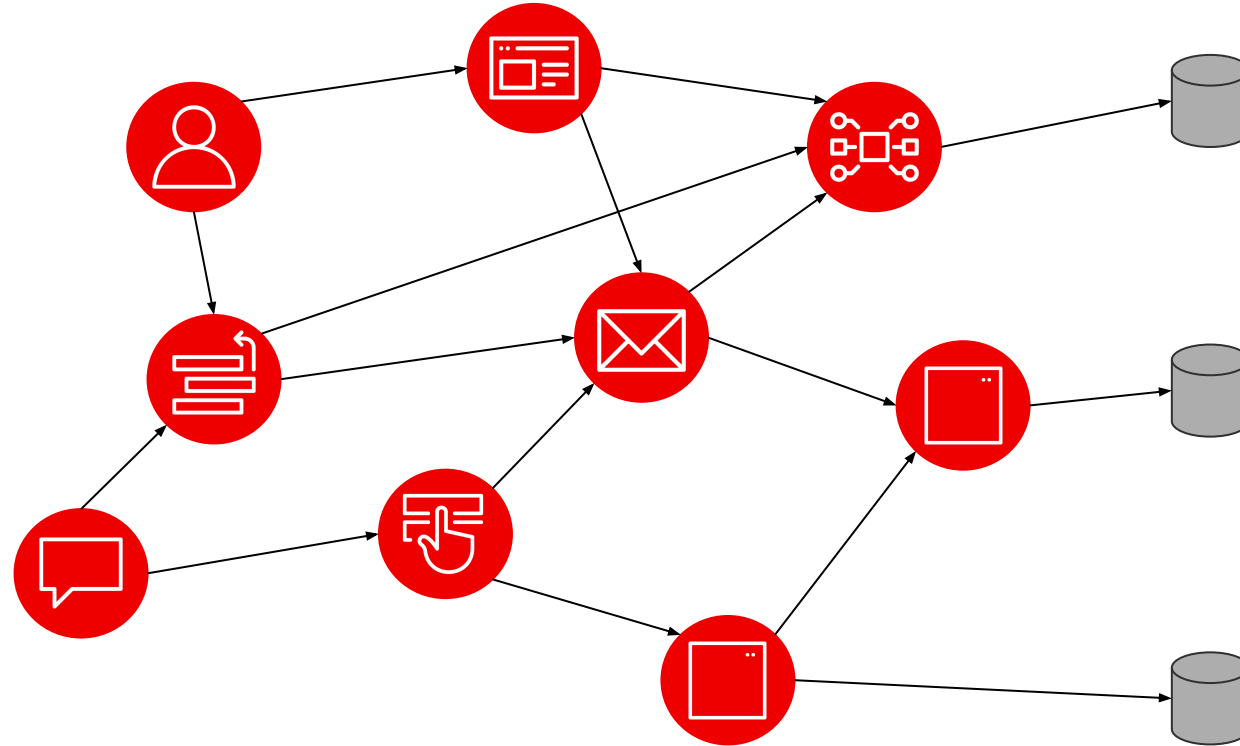


Microservices as a small band





Example of Microservices





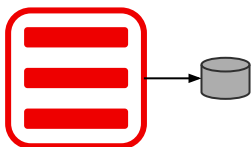
One-man orchestra



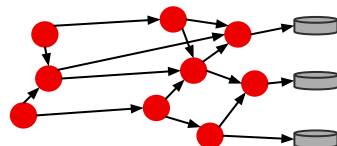
Small band



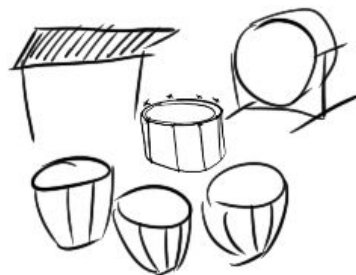
Monoliths



Microservices



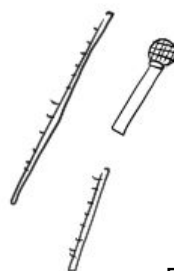
Percussion family



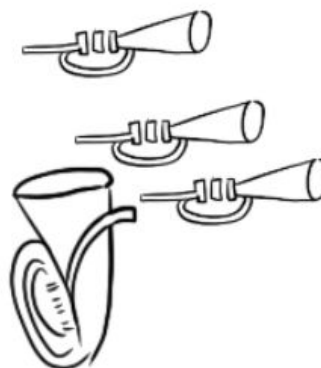
String family



Woodwind family



Brass family



Percussion family



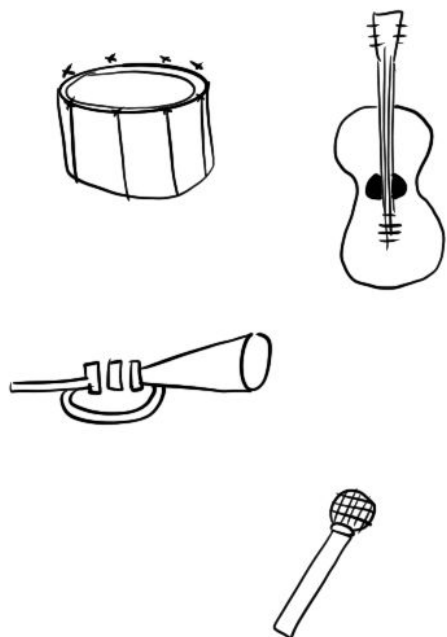
Woodwind family



Brass family



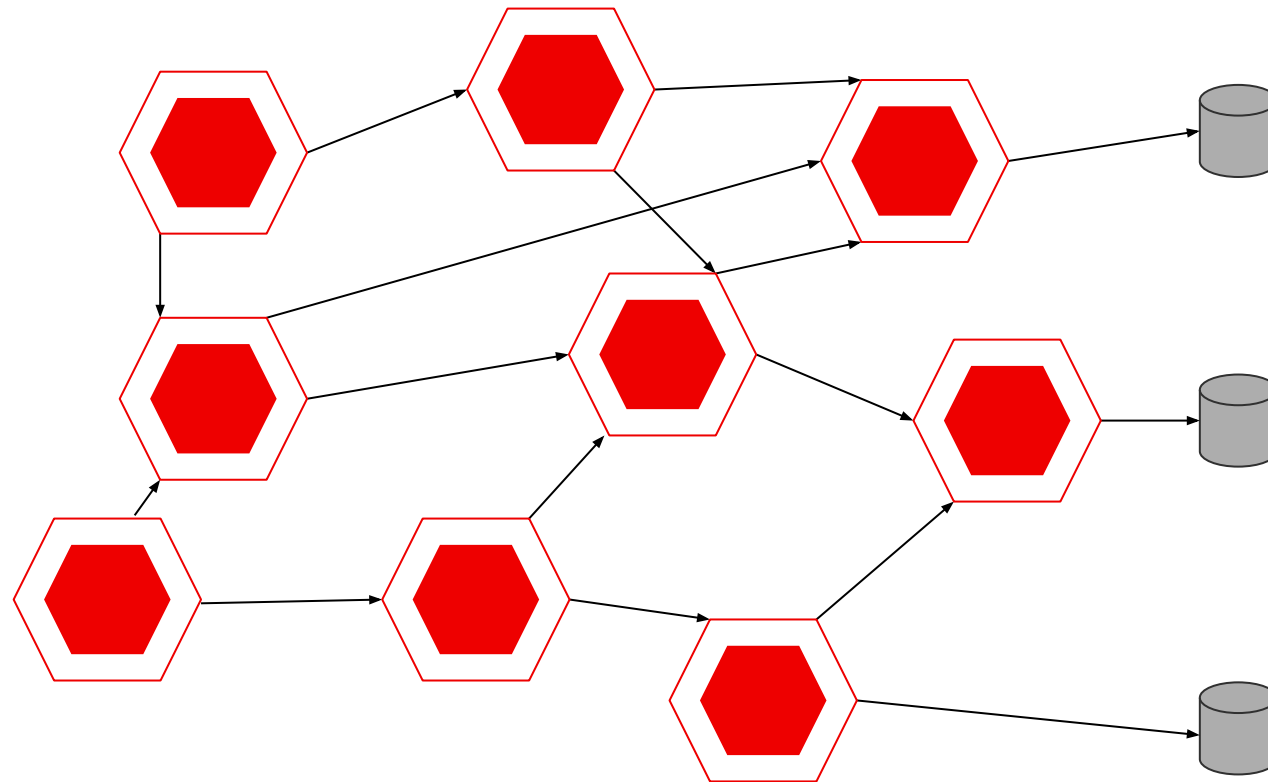
String family



Containers as an orchestra



Example of containers





One-man orchestra



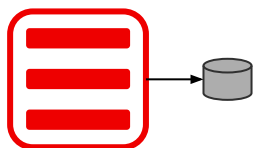
Small band



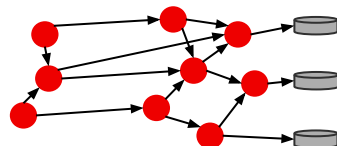
Orchestra



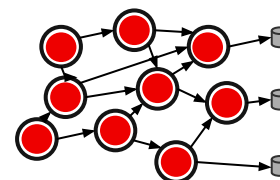
Monoliths



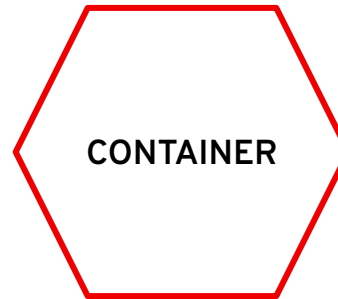
Microservices



Containers



What is a Container?



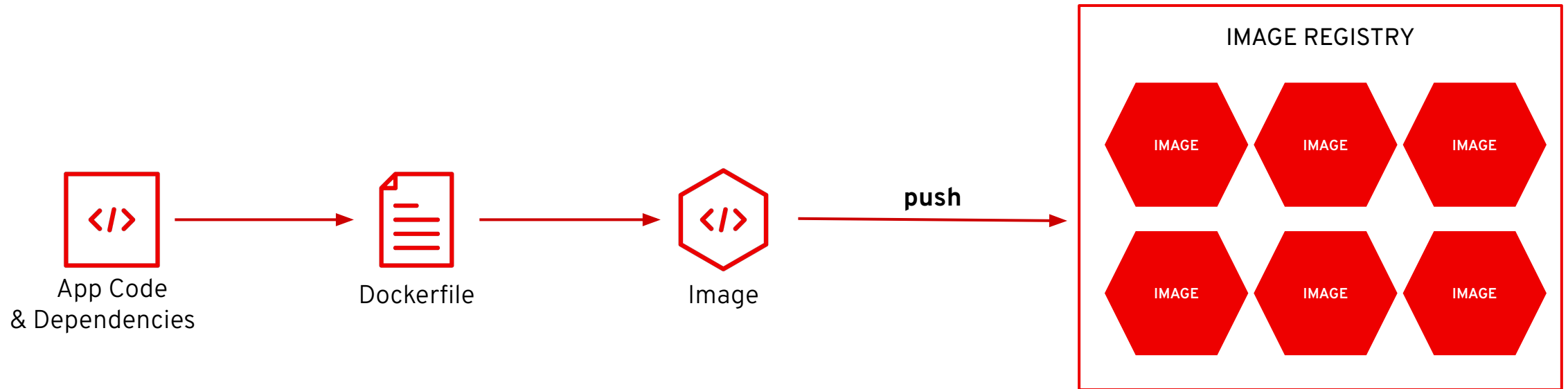
a container is the smallest compute unit



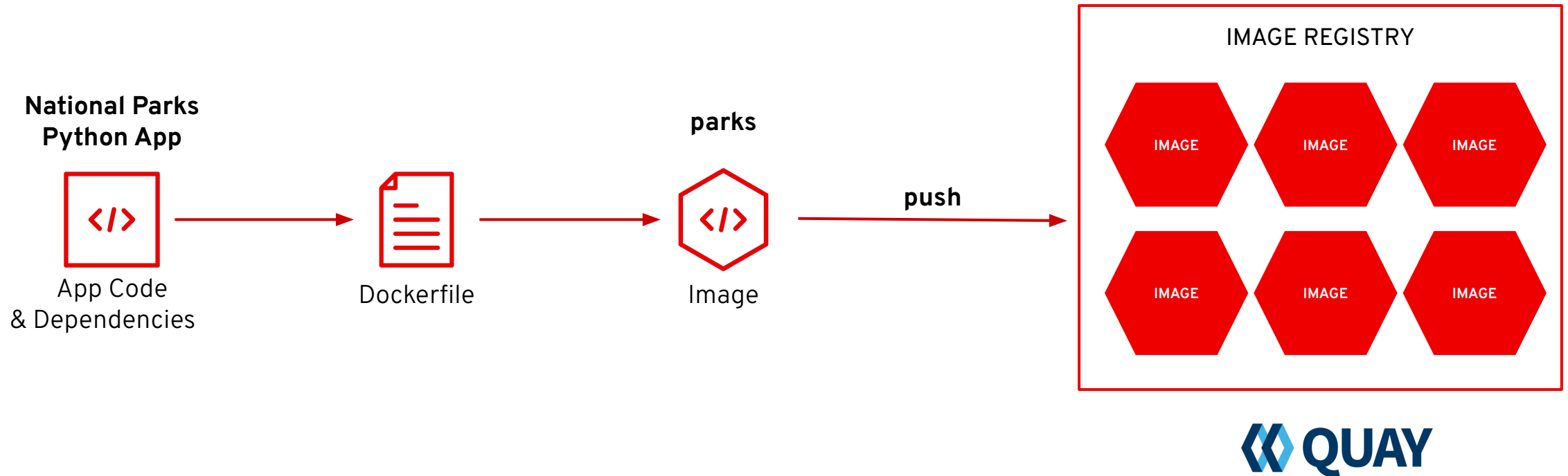
containers are created from container images



container images are stored in an image registry



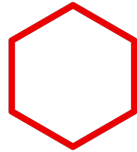
container images are stored in an image registry



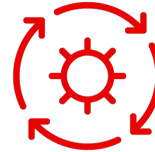
Why do we use container images and containers?



Agility and
Efficiency



Packaging and
Isolation



Easier
management



Security

Kubernetes

as a conductor + an orchestra





One-man orchestra



Small band



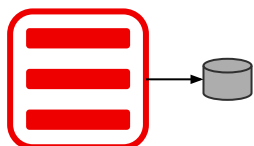
Orchestra



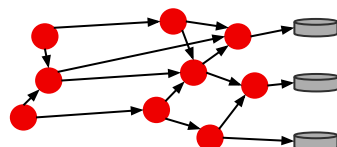
Conductor + Orchestra



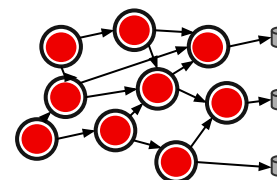
Monoliths



Microservices



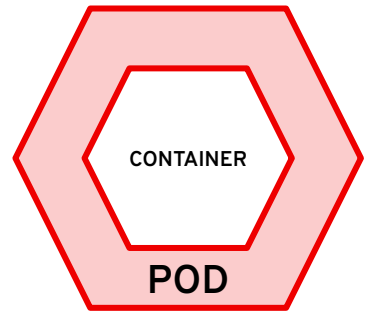
Containers



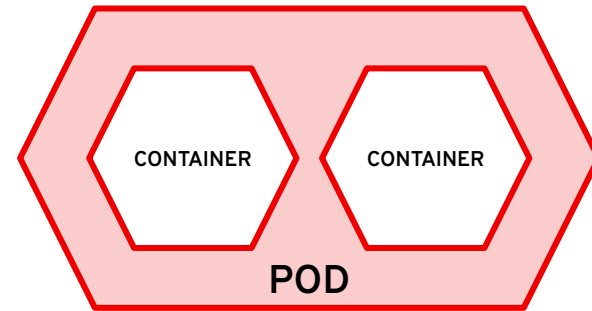
Kubernetes



containers are wrapped in pods which are units of deployment and management

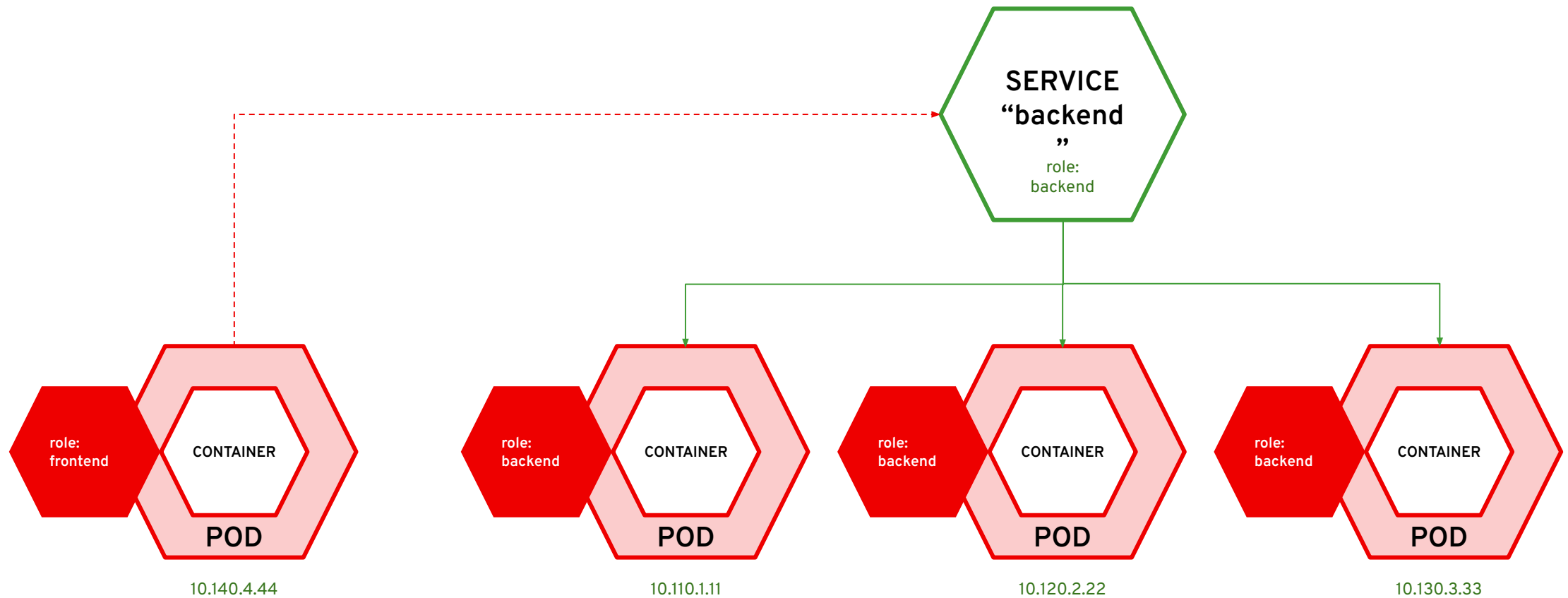


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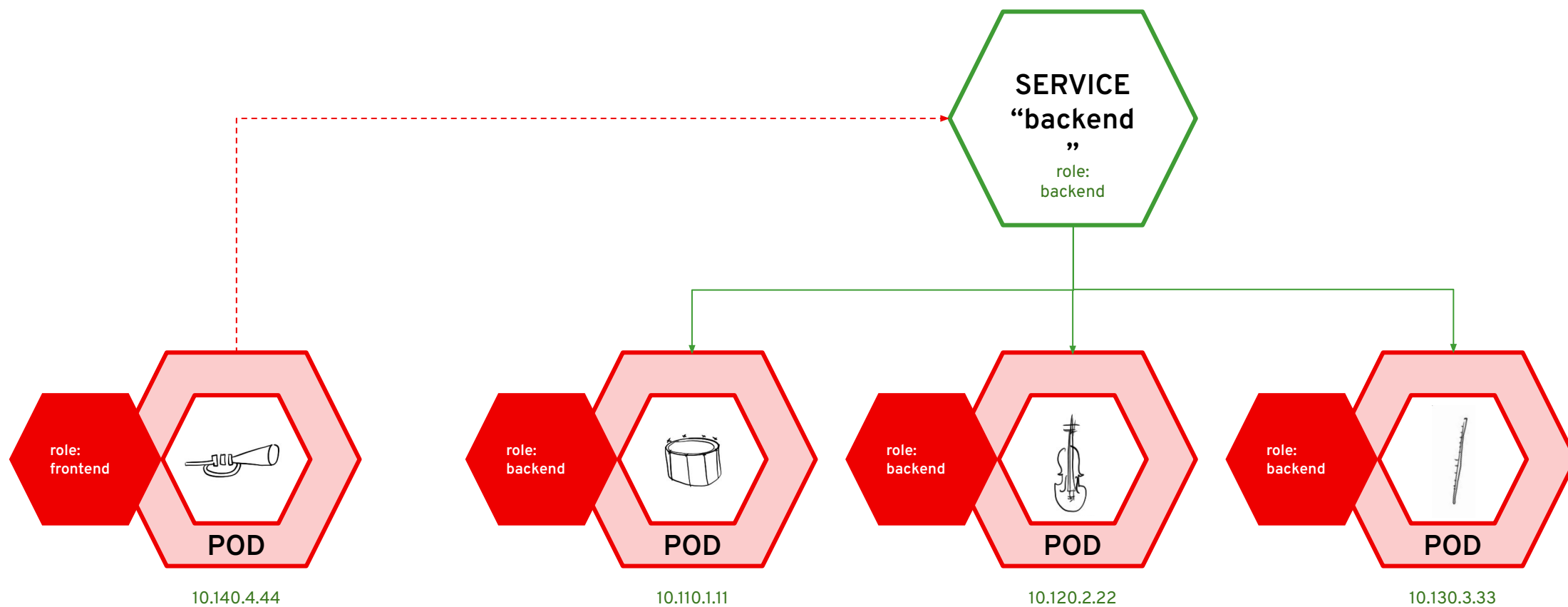


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apps can talk to each other via services



Our Orchestra

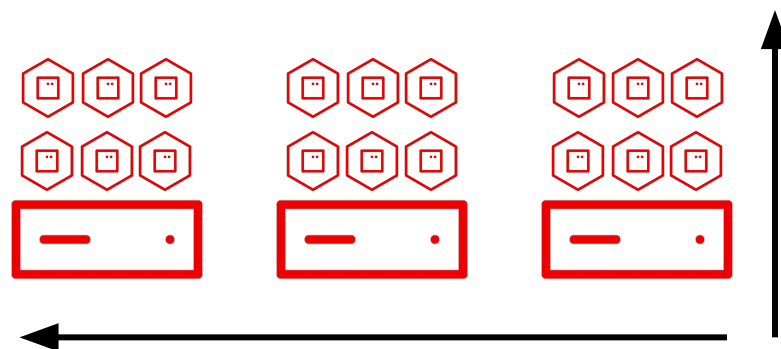


Remember him?



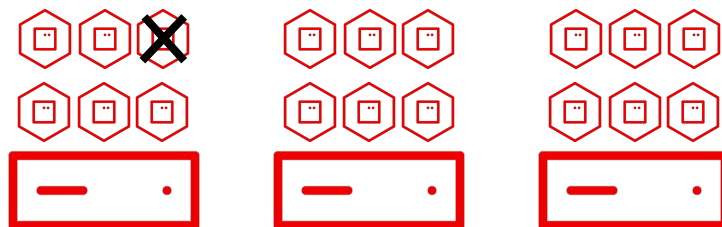
Container Orchestration

Scaling



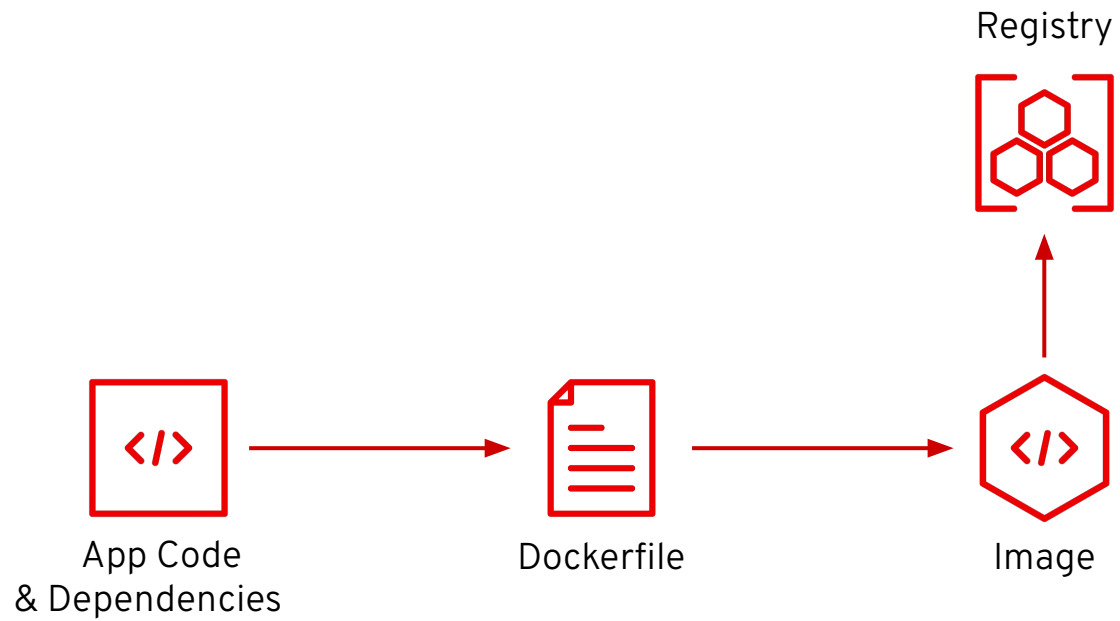
Container Orchestration

Self-Healing



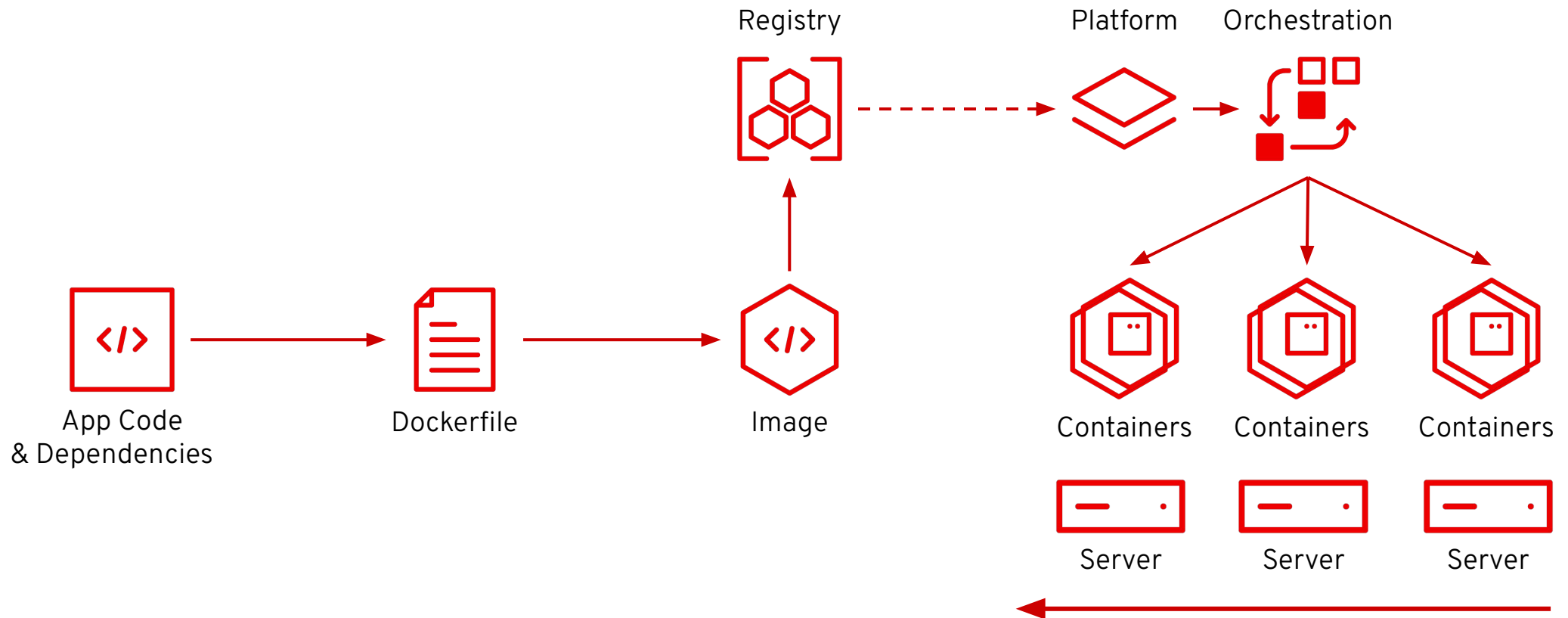
Container Orchestration

Managing Containers at Scale



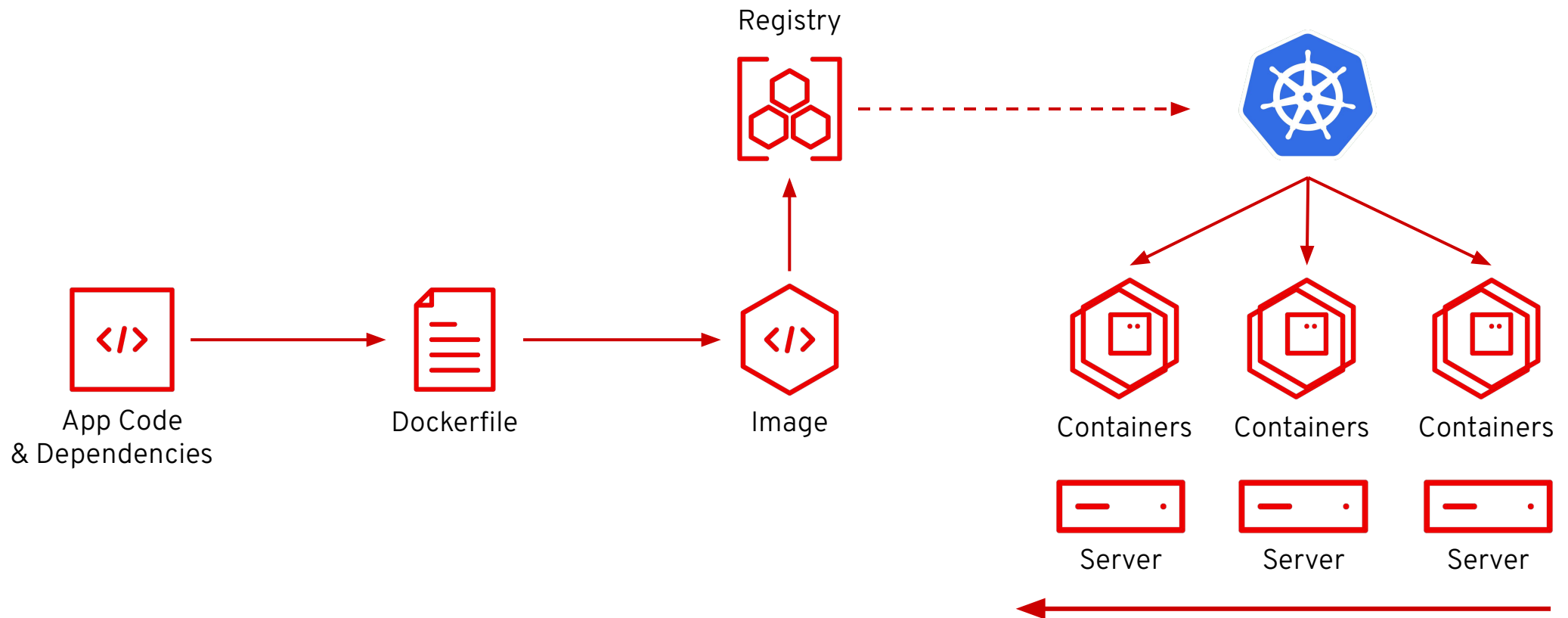
Container Orchestration

Managing Containers at Scale



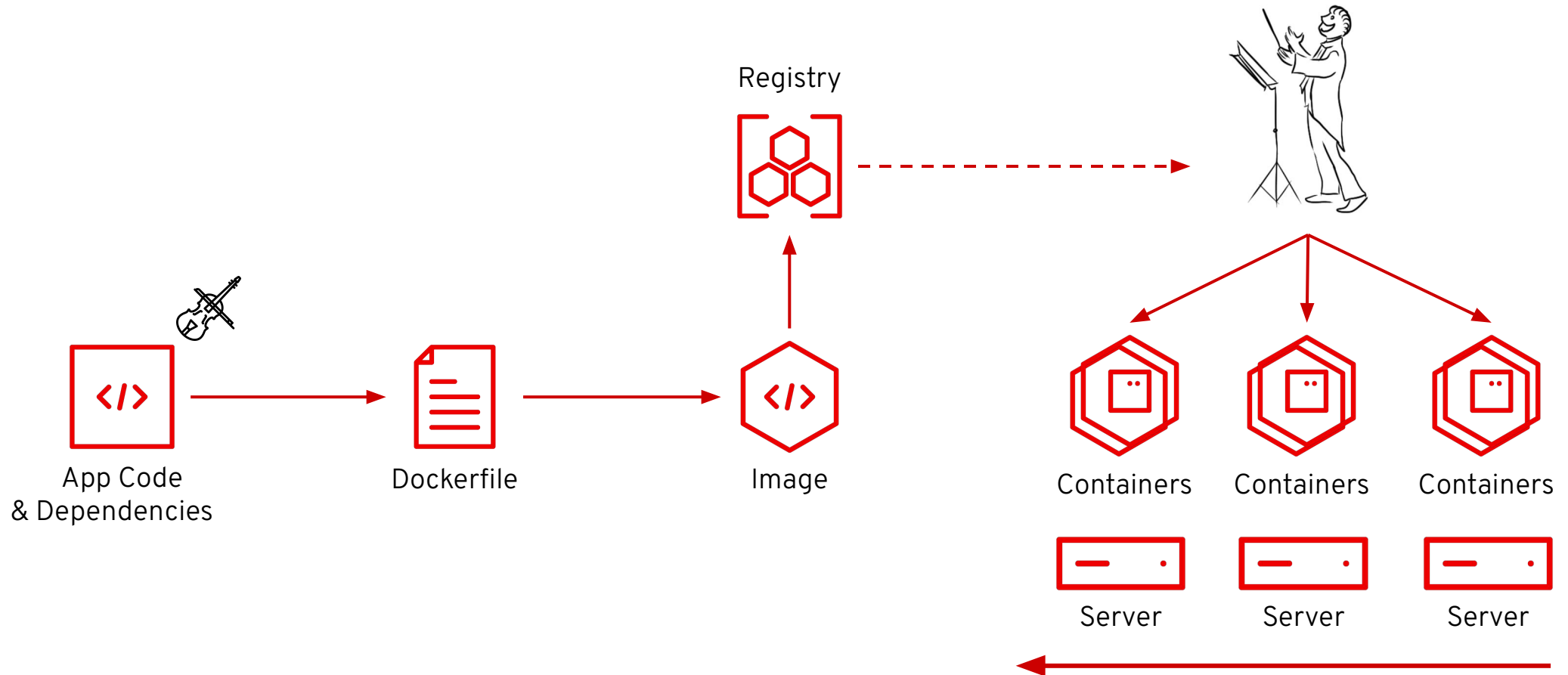
Container Orchestration

Managing Containers at Scale



Container Orchestration

Managing Containers at Scale



What is Kubernetes?

An open source orchestration system for managing containerized workloads across a cluster of nodes.

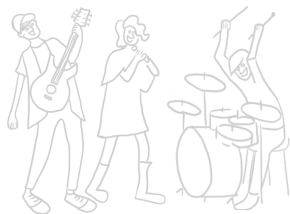
#project



So what is Openshift?



One-man orchestra



Small band



Orchestra



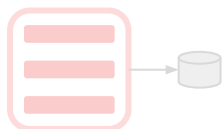
Conductor + Orchestra



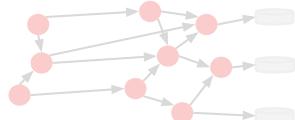
Composer



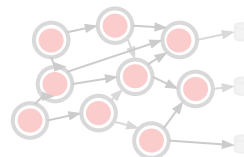
Modular monoliths



Microservices



Containers



Kubernetes



OpenShift



Reality of enterprise IT environments

Mixed infrastructure environments, diverse app portfolios, & limited automation

Infrastructure



Bare metal



Virtualization



Edge



Private cloud



Public cloud

Reality of enterprise IT environments

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Virtualization



Edge



Private cloud



Public cloud

Applications



AI/ML



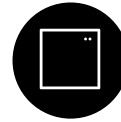
Analytics



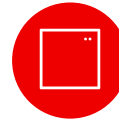
Serverless



Cloud-native and
microservices



Java™



.Net



ISV

People & Processes



Developer
tools



Pipeline
and
processes



People and
policies



The right
skills

Red Hat customers have common needs & challenges



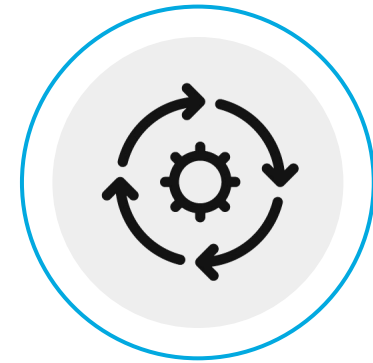
Hybrid cloud infrastructure

Build the foundation for the future, while managing costs to speed progress



Cloud-native development

Accelerate application development, innovation, & delivery



IT automation & management

Automate infrastructure & applications so you can do more without sacrificing stability

Red Hat customers have common needs & challenges



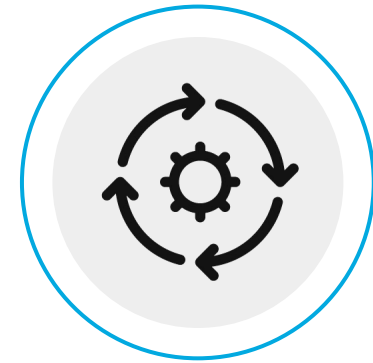
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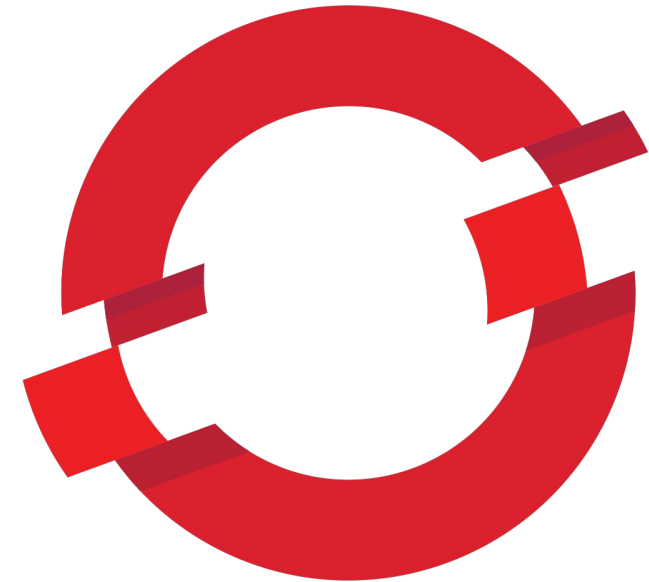
Should our customer DIY the app platform, or focus on building the best app and customer experience?



What is OpenShift?

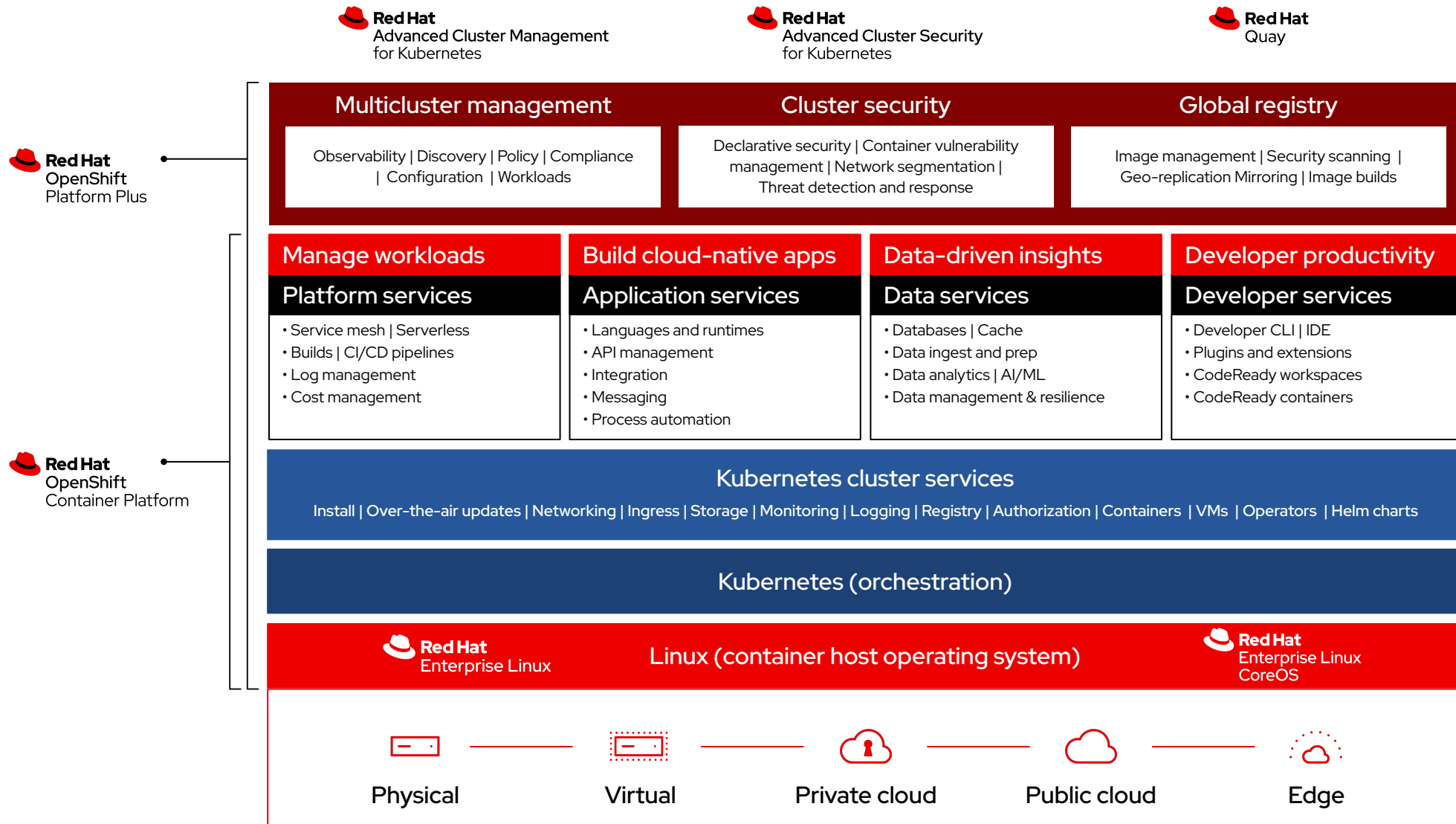
An enterprise-ready
Kubernetes container
platform with full-stack
automated operations to
manage hybrid cloud and
multicloud deployments.

#product

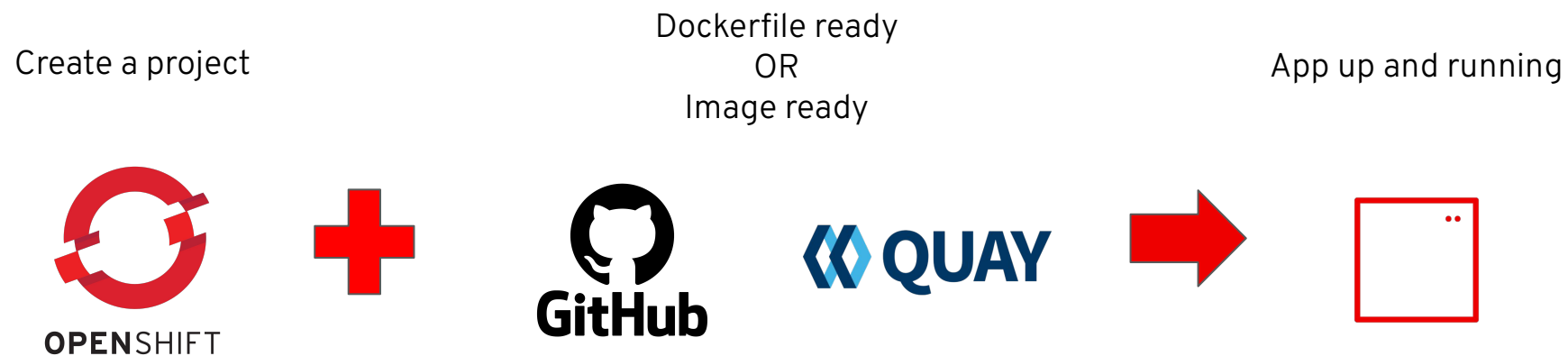


OPENSIFT

Red Hat OpenShift & more

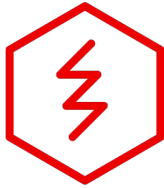


Openshift Example



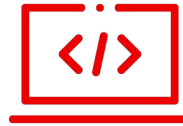
Demo

Red Hat OpenShift is for every innovator



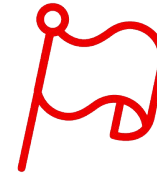
Ready for IT operators

- ▶ Automate processes. Reduce complexity.
- ▶ Operate more securely from end to end



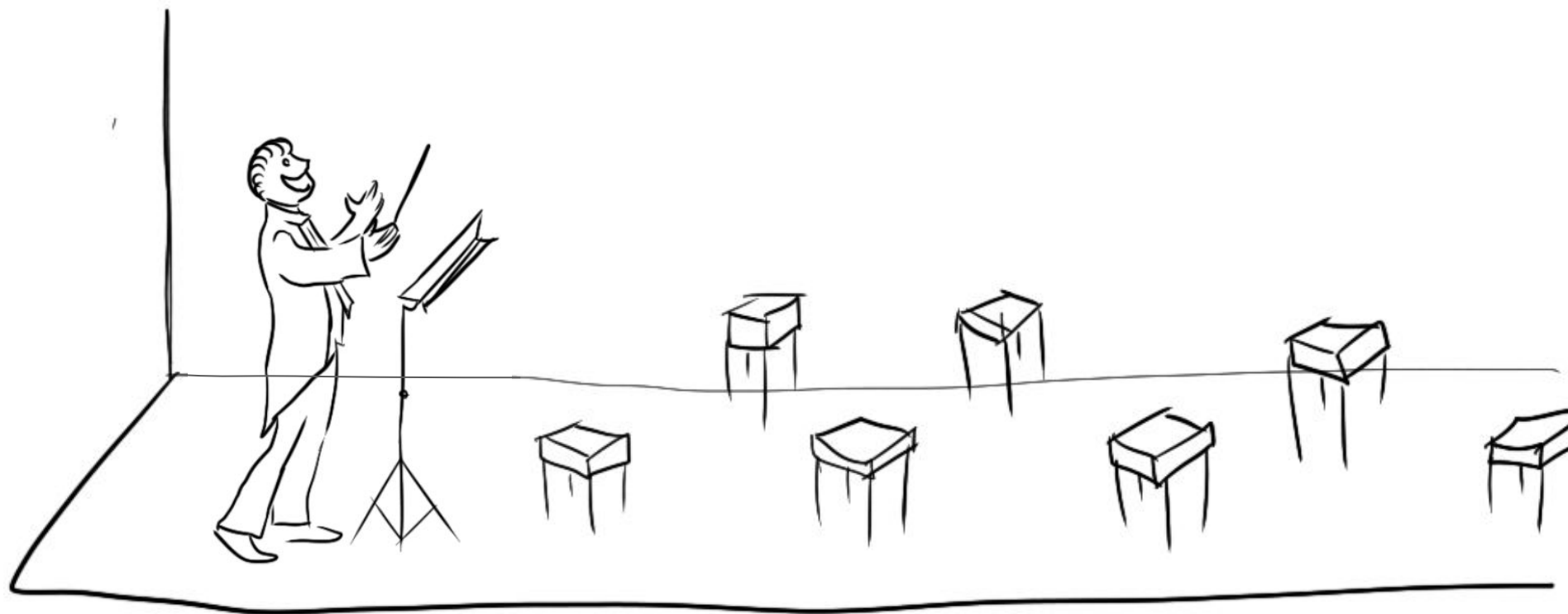
Empowering developers

- ▶ Code fast with familiar tools.
- ▶ Rapidly deliver without roadblocks.



Proven for business leaders

- ▶ Choose a platform to power business today.
- ▶ Create a cloud strategy for the future.





Next steps:

<https://developers.redhat.com/developer-sandbox/activities>

Learn containers, Kubernetes, and OpenShift in your browser

Start exploring in the OpenShift Sandbox for free

Try Red Hat's products and technologies without setup or configuration.

Get started in the sandbox



Thank you

Red Hat is the world's leading provider of enterprise open source software solutions. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500.



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