

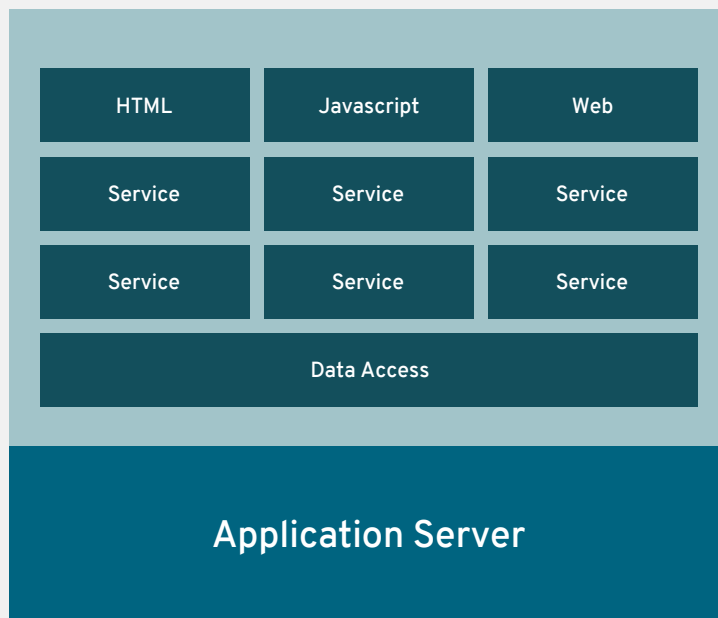


CLOUD-NATIVE ROADSHOW

DEVELOPER TRACK



MONOLITHIC ARCHITECTURE





CLOUD-NATIVE APPS

BUILDING APPLICATIONS

FOR THE CLOUD

WHY CLOUD-NATIVE APPS?



**FASTER
SERVICE DELIVERY**

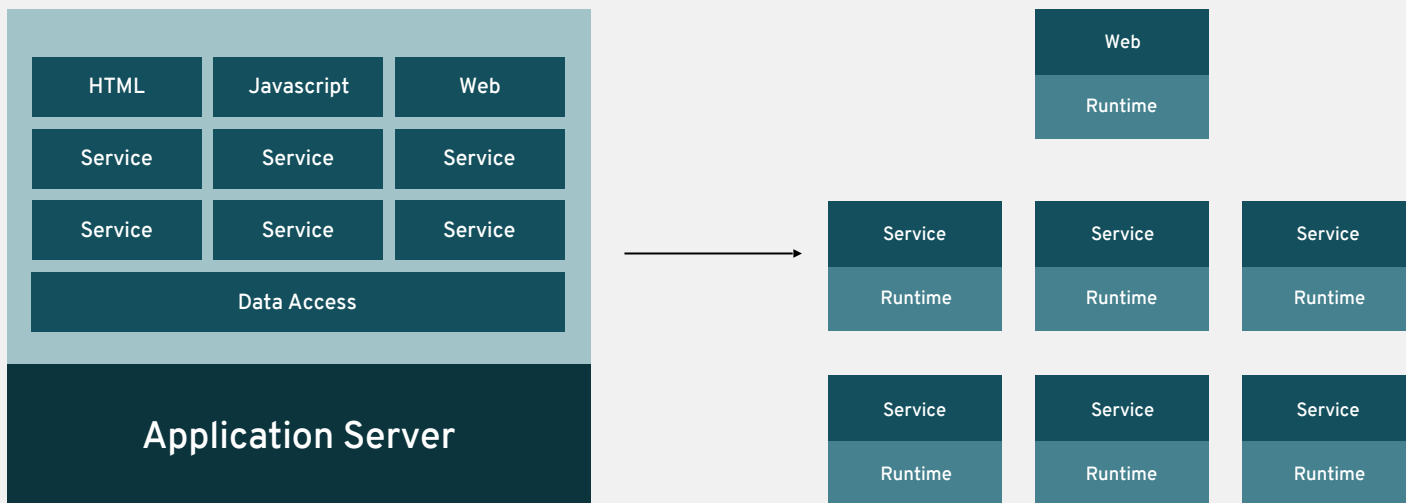


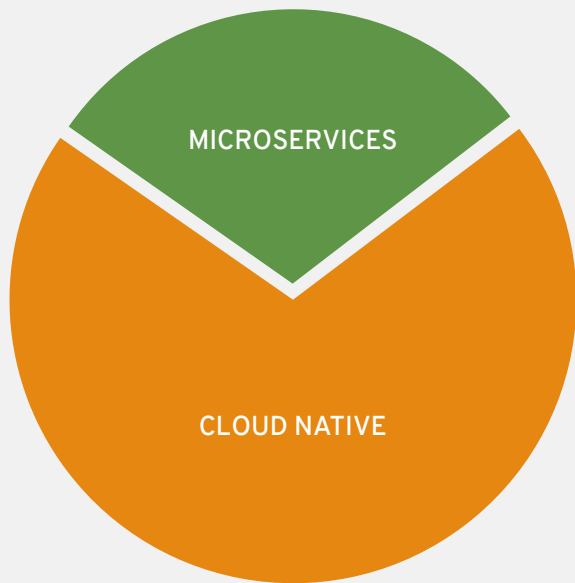
**INCREASE
SERVICE QUALITY**



**REDUCE
RISK OF DELIVERY**

MICROSERVICES ARCHITECTURE





**CLOUD-NATIVE IS
MUCH MORE THAN
YOUR APPLICATION
ARCHITECTURE**

CLOUD-NATIVE APPLICATIONS



Service-based
Architecture



API



Containers



DevOps

THE PATH TO CLOUD-NATIVE APPS

A DIGITAL DARWINISM

RE-ORG TO
DEVOPS

SELF-SERVICE
ON-DEMAND
INFRA

AUTOMATION

CONTINUOUS
DELIVERY

ADVANCED
DEPLOYMENT
TECHNIQUES

MICROSERVICES

AND ONLY
THEN!

THE PATH TO CLOUD-NATIVE APPS

A DIGITAL DARWINISM



THE FAST MONOLITH

- Refactored to REST and JavaScript
- Adopted Container on Red Hat OpenShift
- Automated Testing
- Redefined Dev and Ops Boundaries
- Continuous Deployment Pipeline
- Zero Downtime Release to Production
- Release Cycles From 3 months to 1 Week



THE PATH TO CLOUD-NATIVE APPS

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MICROSERVICES
.....
FAST
MONOLITH

BUT CLOUD NATIVE ISN'T JUST TECHNOLOGY

“ Cloud Native is structuring
teams, culture, and technology
to utilize automation and architectures to
manage complexity and unlock velocity ”

- Joe Beda, CTO of Heptio

THE PATH TO CLOUD-NATIVE APPS

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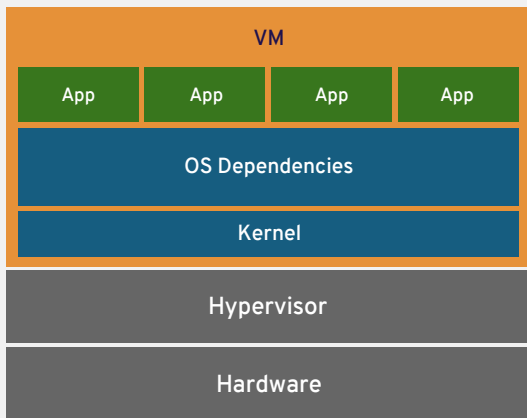
.....
FAST
MONOLITH



A secure and enterprise-grade container application platform based on **Kubernetes** for traditional and cloud-native applications

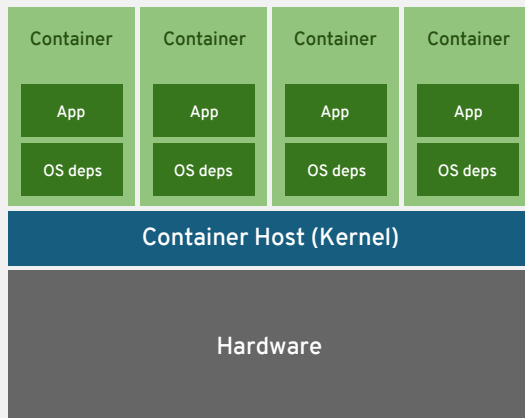
WHAT IS A CONTAINER?

VIRTUAL MACHINES



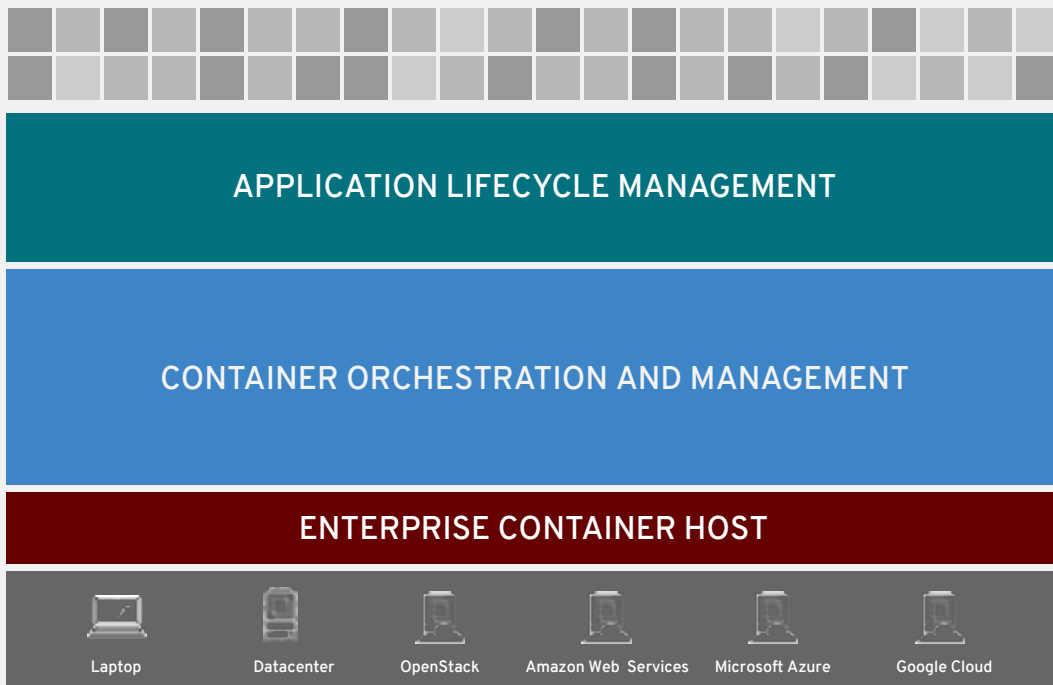
virtual machines are isolated
apps are not

CONTAINERS



containers are isolated
so are the apps

CLOUD-NATIVE CAPABILITIES WITH RED HAT OPENS SHIFT

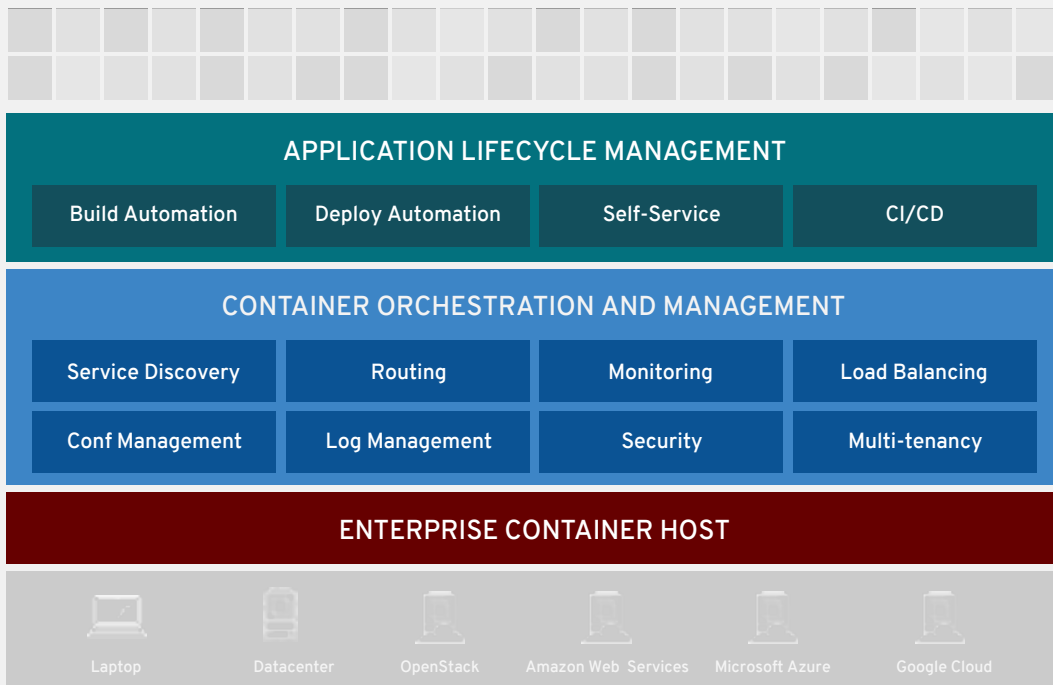


ANY
CONTAINER



ANY
INFRASTRUCTURE

CLOUD-NATIVE CAPABILITIES WITH RED HAT OPENSIFT



ANY
CONTAINER



ANY
INFRASTRUCTURE

COMMUNITY-POWERED INNOVATION



RED HAT[®]
OPENSIFT
Container Platform

Build and host apps anywhere
you want: laptop, datacenter,
cloud



RED HAT[®]
OPENSIFT
Dedicated

Build apps in a dedicated public
cloud managed by Red Hat



RED HAT[®]
OPENSIFT
Online

Focus on your apps, Red Hat
manages the rest in public cloud





OPENSIFT COMMONS

An interactive community for all OpenShift Users, Customers, Contributors, Partners, Service Providers and Developers to share ideas, code, best practices, and experiences

More at <http://commons.openshift.org>

BUILD AND DEPLOY CONTAINER IMAGES ON OPENSSHIFT



**DEPLOY YOUR
SOURCE CODE**

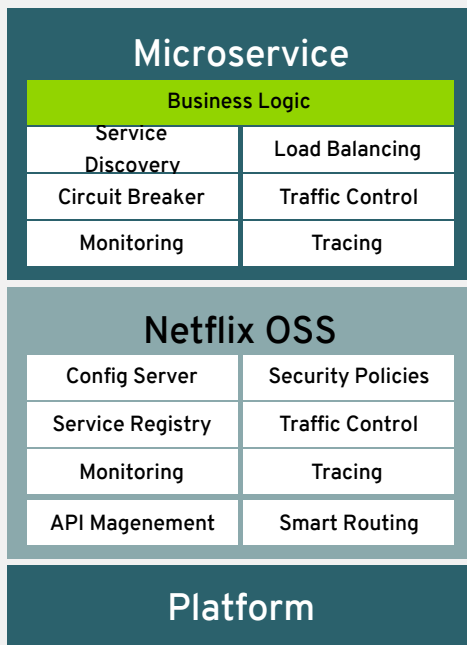


**DEPLOY YOUR
APP BINARY**



**DEPLOY YOUR
CONTAINER IMAGE**

CLOUD-NATIVE EVOLUTION



2012

Connect, Manage, and
Secure Microservices
with Istio on OpenShift

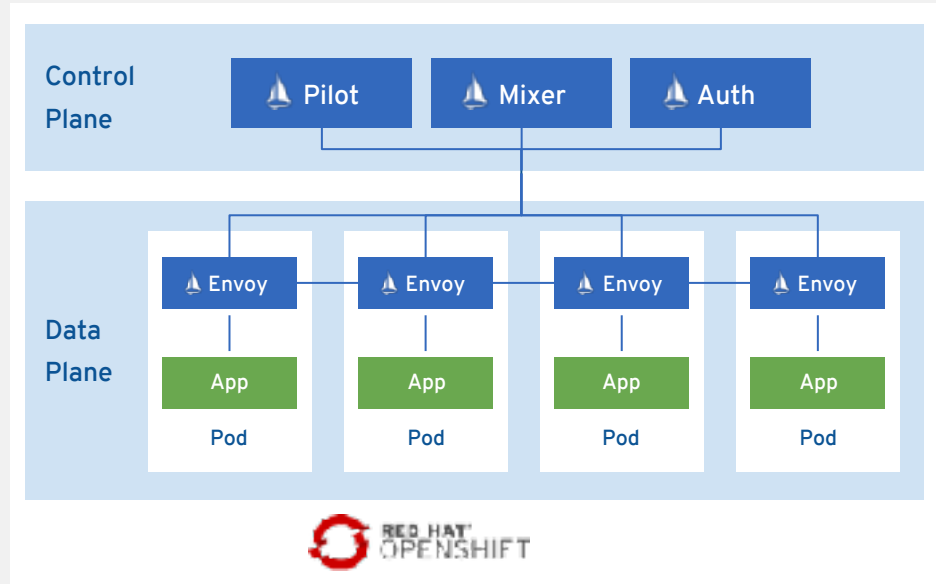


2018

ISTIO SERVICE MESH

A Service Mesh to Connect, Manage, and Secure Microservices, transparently

- Intelligent Routing
- Load Balancing
- Service Resilience
- Telemetry and Reporting
- Policy Enforcement



THE PATH TO CLOUD-NATIVE APPS

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.....
FAST
MONOLITH

CLOUD-NATIVE RUNTIMES





LAUNCH

SUPPORTED RUNTIMES

Eclipse Vert.x

WildFly Swarm

Node.js

Spring Boot

JBoss EAP

ISTIO SERVICE MESH*

OPENSIFT

**Modern, Cloud-Native Application Runtimes and
an Opinionated Developer Experience**

* coming soon



**An immersive residency for teams of 3 -6 people
to rapidly build applications,
experience Devops,
and learn how to develop cloud native apps**

OUR PROCESS



PICTURE YOURSELF AT LABS

APPLY DEVOPS TO A REAL
BUSINESS NEED



DECIDE WHICH JOURNEY



DESIGN THE PLAN



BEGIN DEVELOPMENT



EVALUATE PROGRESS



DEMO THE RESULTS



PLAN THE STRATEGIC ROADMAP



BE THE CATALYST FOR INNOVATION

DRIVE A CULTURE OF INNOVATION

THROUGH A SPACE THAT FOSTERS COLLABORATION



INNOVATE ANYWHERE

- Purpose-driven
- Collaborate and make
- Network and share
- Flex and adapt
- Rejuvenate and connect



THANK YOU



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youtube.com/user/RedHatVideos



ACCESS VIA WEB, CLI, IDE AND API

