



RED HAT OPENSIFT

A FOUNDATION FOR SUCCESSFUL DIGITAL TRANSFORMATION

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Product Portfolio Strategy, Application Platforms

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THE PATH TO DIGITAL LEADERSHIP

IT TAKES MORE THAN JUST TECHNOLOGY TO MOVE THE BUSINESS FORWARD



CULTURE

Collaborative
Transparent
Open



PROCESS

Agile
Continuous
Iterative



TECHNOLOGY

Open source
Hybrid
Connected

PROCESS CHANGES & IMPROVEMENT

AS YOU CHANGE CULTURE, UPDATE THE WAYS YOUR TEAMS CONNECT

AGILE

CONTINUOUS

ITERATIVE

AUTOMATED

“The moral is that it is necessary to innovate, to predict the needs of the customer, give him more.”

W. EDWARDS DEMING

DEUTSCHE BANK - Technology Transformation



“Delivering Everything as a Service. From 20% adoption to 40% in 1yr; planning to move 85% of all applications to OpenShift platform. We won the hearts and minds of developers.” -- Pat Healy, CTO, Deutsche Bank

- Macro trends are radically reshaping the banking industry
- Need to regain software expertise that was previously outsourced
- OpenShift replaced an internal, homegrown PaaS platform
- Over 300 internal projects moved to OpenShift
- 6x better efficiency of computing resources using containers and OpenShift. Driving overall utilization up via multi-tenancy.
- Leverage OpenShift across multiple public clouds.

Ideas to Production, safely in a day.

DEVOPS WORKS BETTER WITH CONTAINERS

BRING TOGETHER CULTURE, DEVELOPMENT PROCESS, & MODERN TECHNOLOGY

DEVOPS

- ✓ Culture centered on collaboration & openness
- ✓ Uses automation to deliver applications faster
- ✓ Requires a dynamic, programmable platform

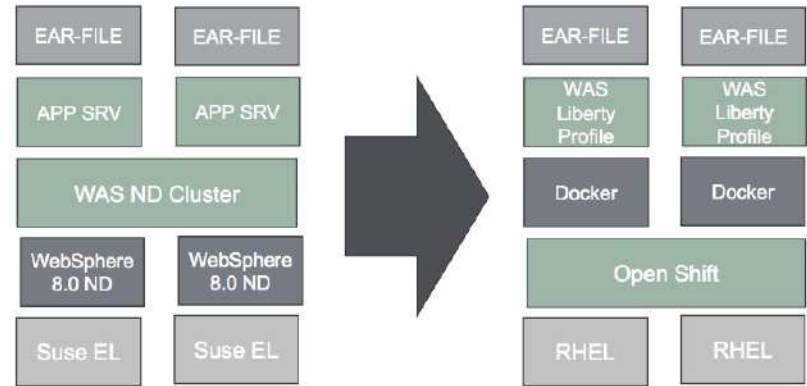
CONTAINERS

- ✓ Technology to package & isolate apps with the files they need to run
- ✓ Reduces conflict by separating areas of responsibility
- ✓ Open source way to orchestrate app development & deployment

Evolving Application Architecture at Volvo

- 785 apps across 560 app servers
- OpenShift provides build, distribution & runtime environment
- Platform for DevOps and Microservices
- Running OpenShift on Azure, automatically provisioned with Ansible

OUR NEW ENVIRONMENT



AUTOMATE PROCESSES & SERVICES

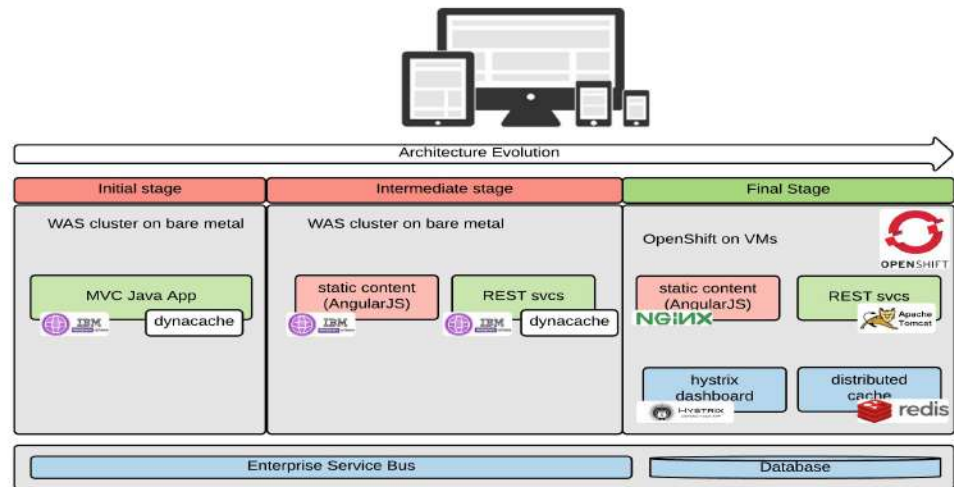
ACCELERATE SERVICE DELIVERY & IMPROVE USER EXPERIENCE



- Provisioning & configuration
- Testing and Deployment
- Measure everything
- Container and code scanning
- Everyone is a programmer

APPLICATION ARCHITECTURE

- Shift from monolithic applications to microservices
- Independently deployable and updatable, limited dependencies
- Optimized for agility & accelerated time to market

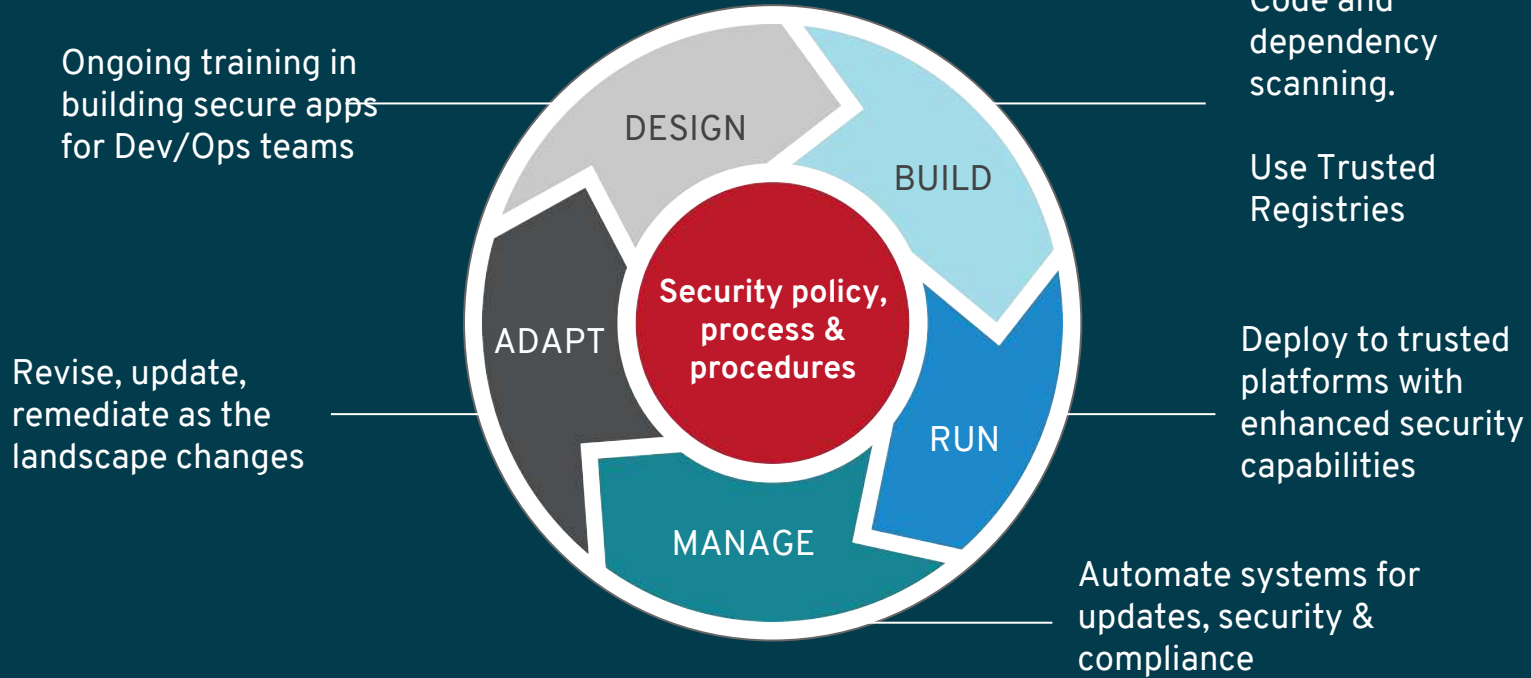




On Day 1 of our acquisition of a new bank, 10 changes were put into production, with 0 defects, during the middle of the day. That is the power of OpenShift.” -- John Rzeszotarski, Dir. DevOps, Keybank

IMPROVE SECURITY PROCESSES

PUT SECURITY POLICY & PROCEDURES AT THE HEART OF YOUR BUSINESS



OUR VISION: TECHNOLOGY

OUR TECHNOLOGY VISION IS OPEN, HYBRID CLOUD

APPS & ENVIRONMENTS ARE INTEROPERABLE & FLEXIBLE

DEVELOPER TOOLING

APPLICATION PLATFORMS



BARE METAL



VIRTUALIZED

INFRASTRUCTURE PLATFORMS



PRIVATE CLOUD

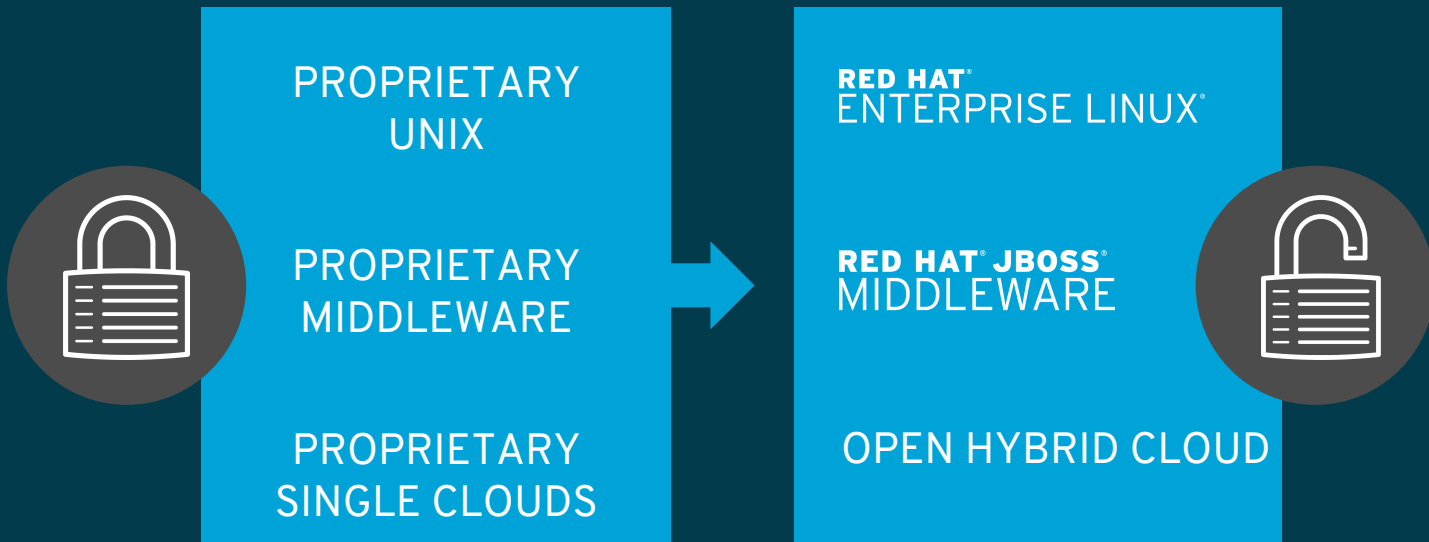


PUBLIC CLOUD

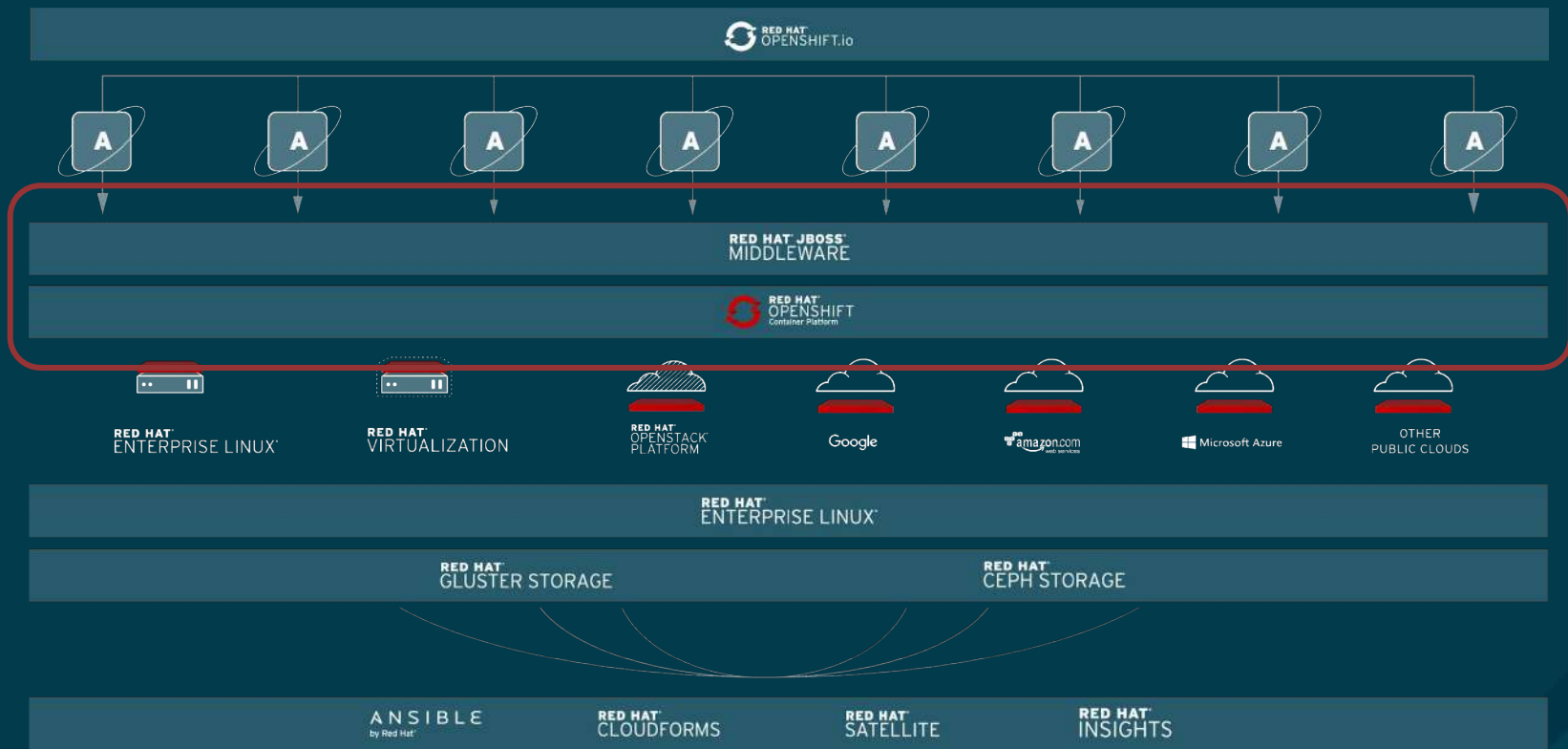
SOFTWARE DEFINED STORAGE

MANAGEMENT & AUTOMATION

WE'VE MADE THIS MOVE TO OPEN BEFORE



THE RED HAT PORTFOLIO



SCHIPHOL AIRPORT - Rethinking Traveler Experience



Red Hat OpenShift Container Platform, truly, has stolen my heart, because the platform is innovative, I can deploy quickly, and I am in control of the containers. - Michael Aalbers, Amsterdam Airport Schiphol

- International Airport, 3rd busiest in Europe, 64M passengers per year.
- Goal to become the world's best digital airport by 2018.
- Needed to accelerate application development time through cloud-agnostic platform.
- Deployed OpenShift across **VMWare** Private Cloud, **AWS** and **Azure**.
- Leverage JBoss FUSE and 3Scale for API Management, delivering API-based services to passengers and partners.

Read the [press release](#)

COMMON OPERATING PLATFORM



RED HAT
ENTERPRISE LINUX

- A common foundation for Red Hat platforms
- The first step toward cloud-based infrastructure, platforms, and applications
- Part of traditional OS, virtualization, private cloud, and all public clouds

CONTAINERS ARE LINUX



CONTAINERS

- Next-generation application platform for existing and new apps
- Portable across the hybrid cloud
- Container companies must be Linux companies

COMMON APPLICATION PLATFORM ACROSS THE HYBRID CLOUD



OpenShift Container
Platform

- Consistent Developer Experience
- Platform services for management, resiliency, tracing, elasticity, storage
- Support for CI/CD
- Multi-language, multi-framework
- Both stateful and stateless applications

THE INDUSTRY IS CONVERGING

Kubernetes

Mesos

Docker Swarm

Others



redhat.

Google RANCHER

Microsoft intel HUAWEI

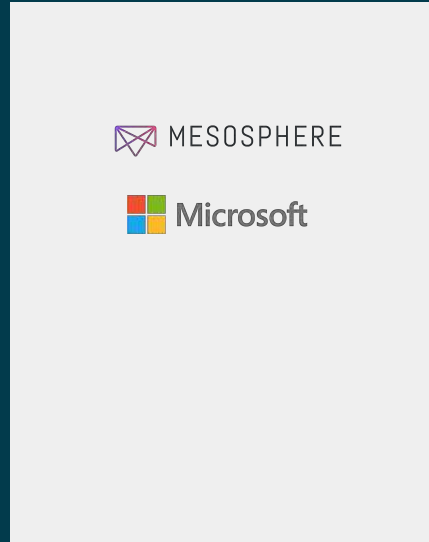
CoreOS MESOSPHERE

apprenda vmware®

Engine Yard CANONICAL

Walmart APCERA

IBM



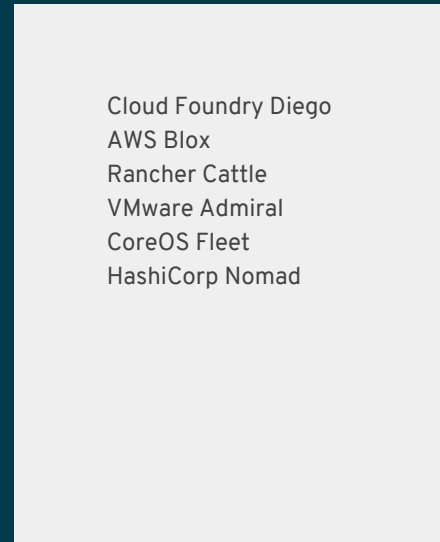
MESOSPHERE

Microsoft



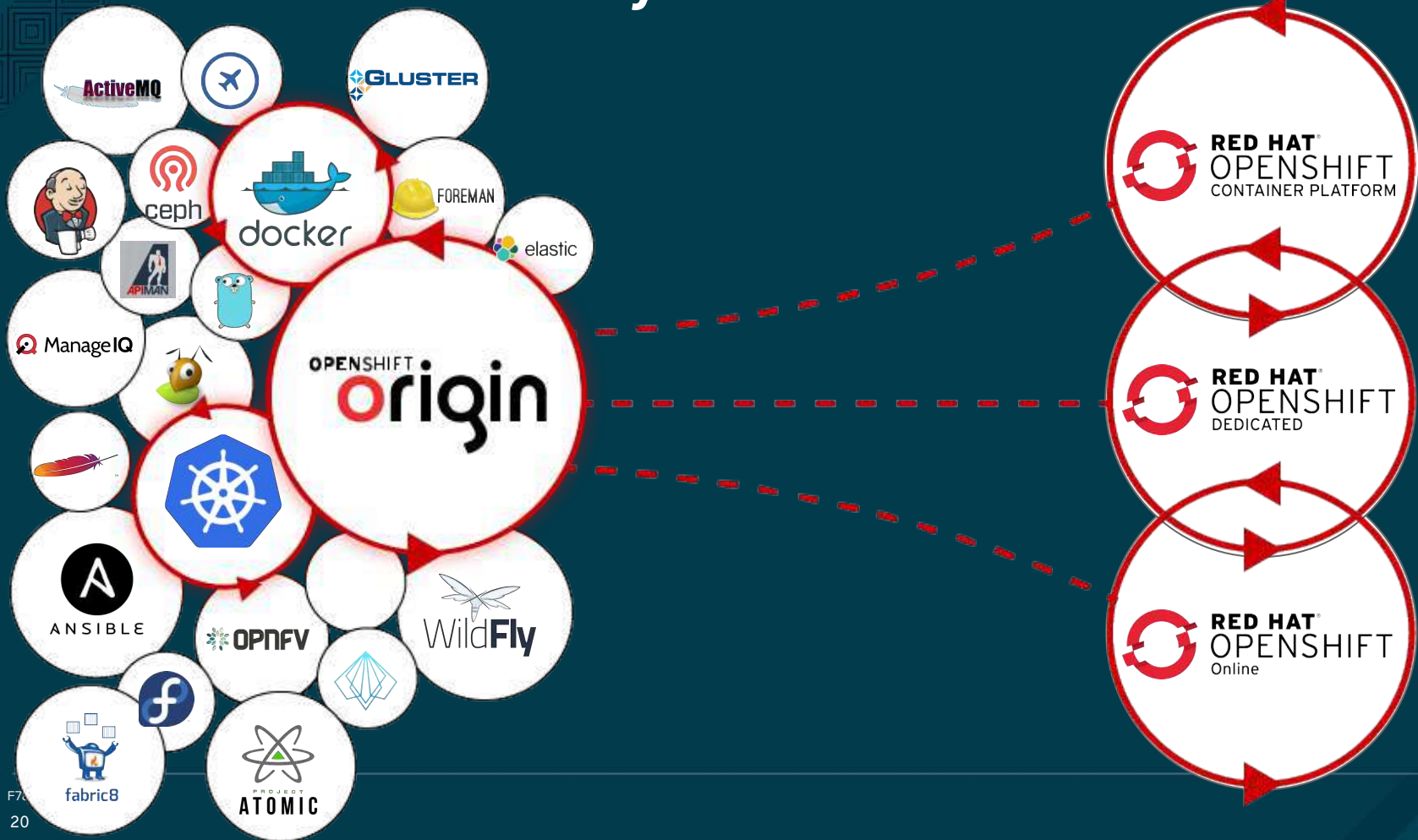
docker

IBM




Cloud Foundry Diego
AWS Blox
Rancher Cattle
VMware Admiral
CoreOS Fleet
HashiCorp Nomad


Community Powered Innovation




OPENSIFT COMPONENTS



Self-Service	
Service Catalog (Language Runtimes, Middleware, Databases)	
Build Automation	Deployment Automation
OpenShift Application Lifecycle Management (CI/CD)	



Container Orchestration & Cluster Management (kubernetes)				
Networking	Storage	Registry	Logs & Metrics	Security
Infrastructure Automation & Cockpit				



Enterprise Container Host	
Container Runtime & Packaging	
Atomic Host	Red Hat Enterprise Linux

CHALLENGES REMAIN THE SAME...

SECURITY

DEBUG

DISCOVERY

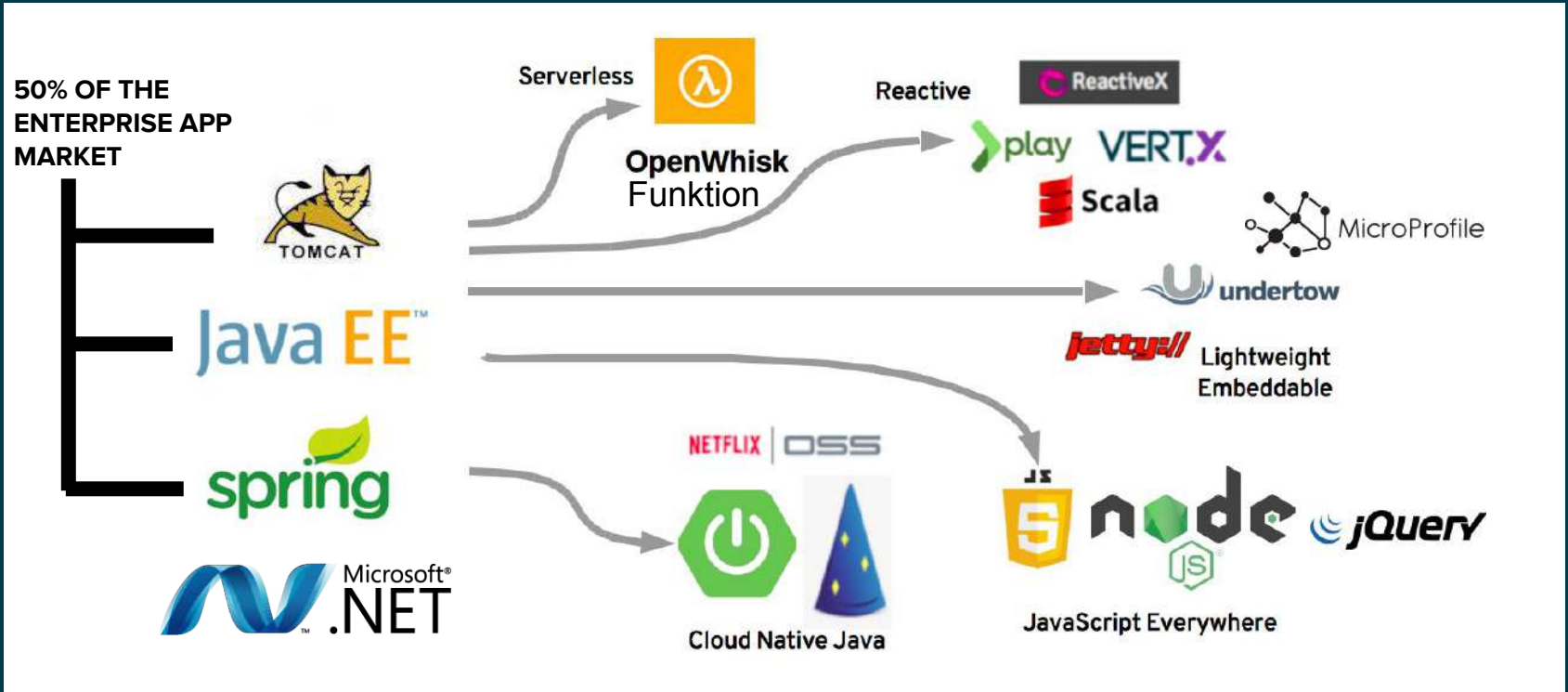
CONFIGURATION

LOAD BALANCING

LOGGING/METRICS

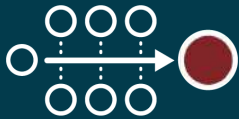
HIGH AVAILABILITY

... AND DEVELOPERS HAVE (AND EXERCISE) MORE CHOICES THAN EVER BEFORE



MIDDLEWARE

INTEGRATE, AUTOMATE, & ACCELERATE DATA, APPLICATIONS, & PROCESSES



INTEGRATION

Red Hat JBoss Fuse
Red Hat JBoss AMQ
Red Hat 3scale
API Management



AUTOMATION

Red Hat JBoss BPM Suite
Red Hat JBoss BRMS



DATA MANAGEMENT

Red Hat JBoss Data Grid
Red Hat JBoss
Data Virtualization



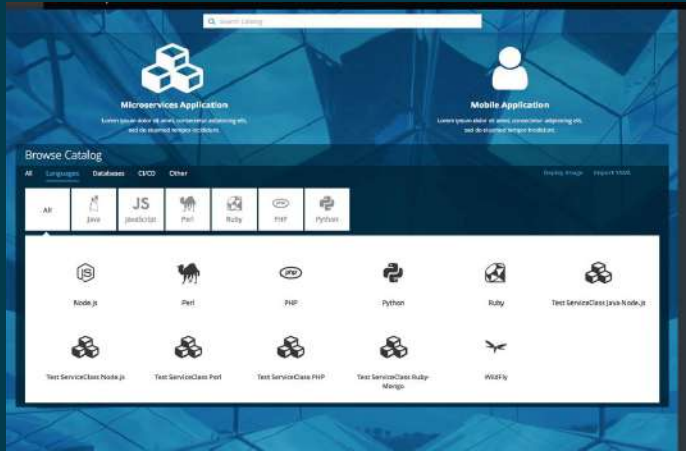
APPLICATION SERVICES

Red Hat JBoss Enterprise
Application Platform
Red Hat JBoss
Developer Studio
Red Hat OpenShift
Application Runtimes

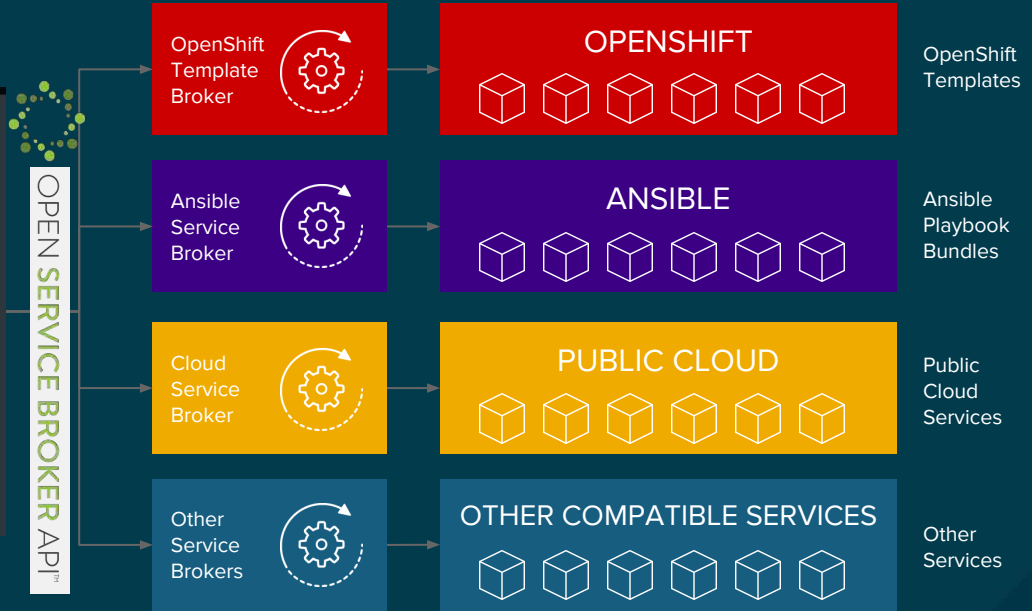
CONTAINER PLATFORM BRINGS IT ALL TOGETHER



OPENSHIFT SERVICE CATALOG



OPENSHIFT SERVICE CATALOG
(TECH PREVIEW)



OPEN INNOVATION LABS

A HANDS-ON ENVIRONMENT FOR RAPID INNOVATION & REAL BUSINESS RESULTS



EXPERIMENT

Rapidly build prototypes,
do DevOps, & be agile



IMMERSE YOUR TEAM

Work side-by-side with experts
in a residency-style engagement



INNOVATE

Bring modern application
development back to your team

START EXPLORING TODAY

- References:
 - [Red Hat Demo Central](#) (AppDev collection)
 - [Install OpenShift Container Platform in minutes](#)
 - [AppDev in the Cloud Workshop](#) (OpenShift Container Platform 3.6)
 - [Ten Layers of Container Security](#) (whitepaper)
 - [Hands-on Kubernetes Tutorial](#)
 - [Hands-on OpenShift Tutorial](#)

THANK YOU



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