

Alanata

TALKS



Red Hat

14. jún 2023

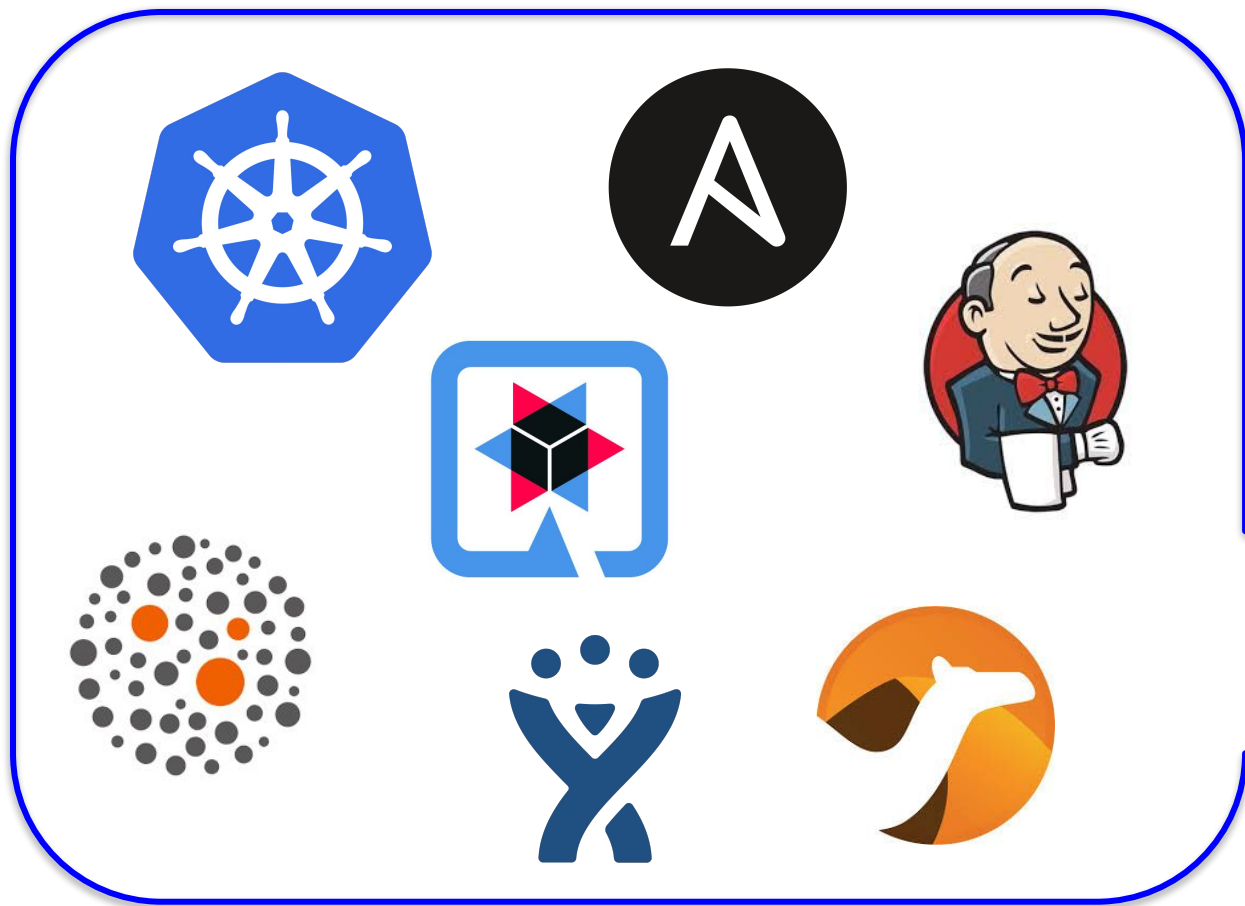
Jurkovičova tepláreň



# Road to Cloud-native

Red Hat supports organizations in their cloud-native transformation journey.

# Are you Cloud Native?



**Yes, there's everything we need in our toolbox!!!**

# Cloud-native definition

<https://github.com/cncf/toc/blob/master/DEFINITION.md>

“

Cloud native technologies empower organizations to **build and run scalable applications** in modern, dynamic environments such as public, private, and hybrid **clouds**. **Containers, service meshes, microservices, immutable infrastructure, and declarative APIs exemplify this approach.**

These techniques enable loosely coupled systems that are **resilient, manageable, and observable**.

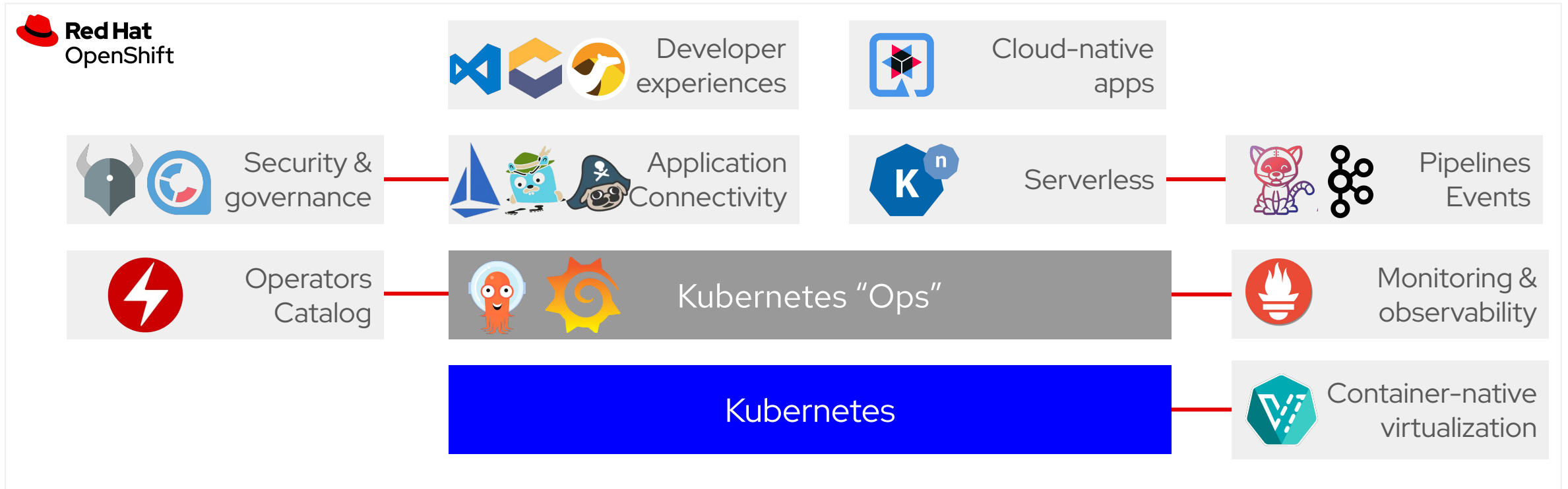
Combined with robust automation, they allow engineers to make high-impact changes frequently and predictably with minimal toil. ”

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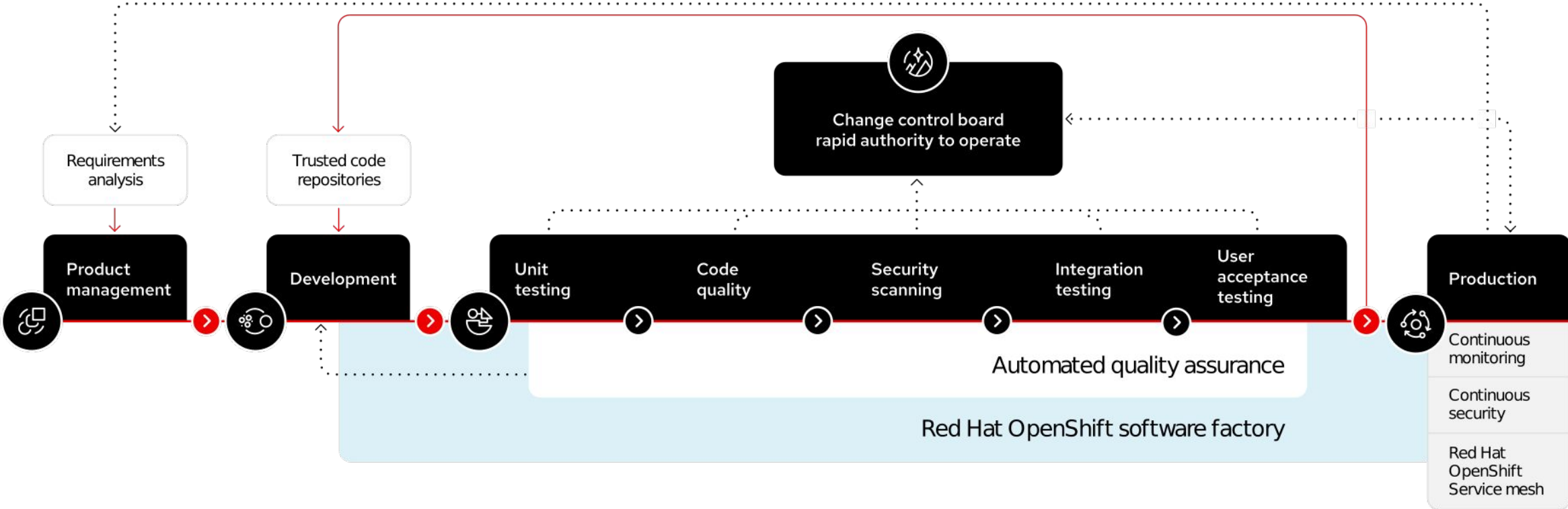
Cloud Native Computing Foundation

# Application requires more than Kubernetes

OpenShift packages CNCF projects



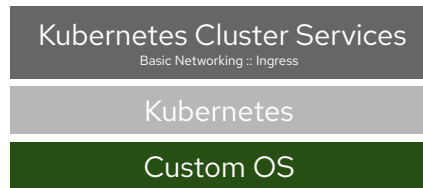
# OpenShift Platform Plus supports a secure software supply chain



# Build and run a platform *versus* a turnkey platform as a cloud service



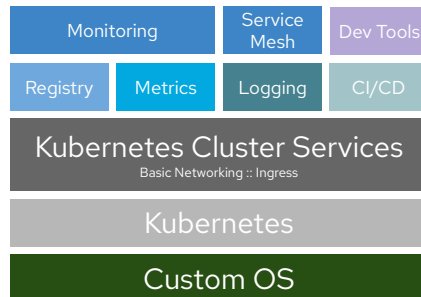
The Engine



xKS



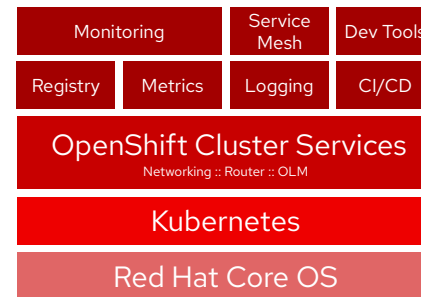
The Parts



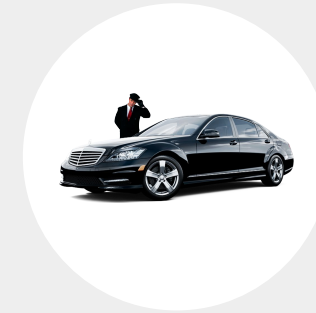
xKS  
plus 'native' services



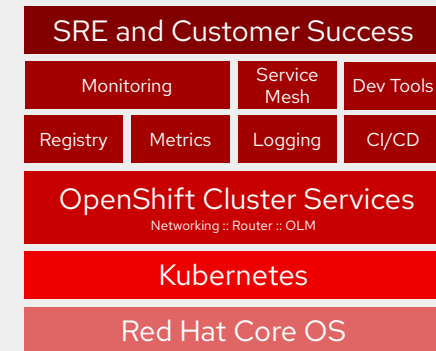
The Assembled Car



Self-managed  
Red Hat OpenShift



The Full Service



Red Hat OpenShift Service  
on AWS

# Insights for OpenShift customers



## What we do?

## How we do it?

## Why it matters?



**Gather** configuration and utilization data from OpenShift Container Platform



### Thousands

Red Hat support, security, SRE and product engineering experts



**Operations, Performance, and Availability issues** addressed at scale by proactively identifying, prioritizing and remediating risks



**Analyze** the data based on Red Hat knowledge and expertise, use Machine Learning



### Hundreds of Thousands

Validated solutions, CVE, Erratas, playbooks and knowledge base articles



**Unique product experience** by feeding data into support and product workflows, building features leveraging Insights analytics.



**Expose** the data in form of **Insights Services, product features** and **support efficiency tools**.



### Millions

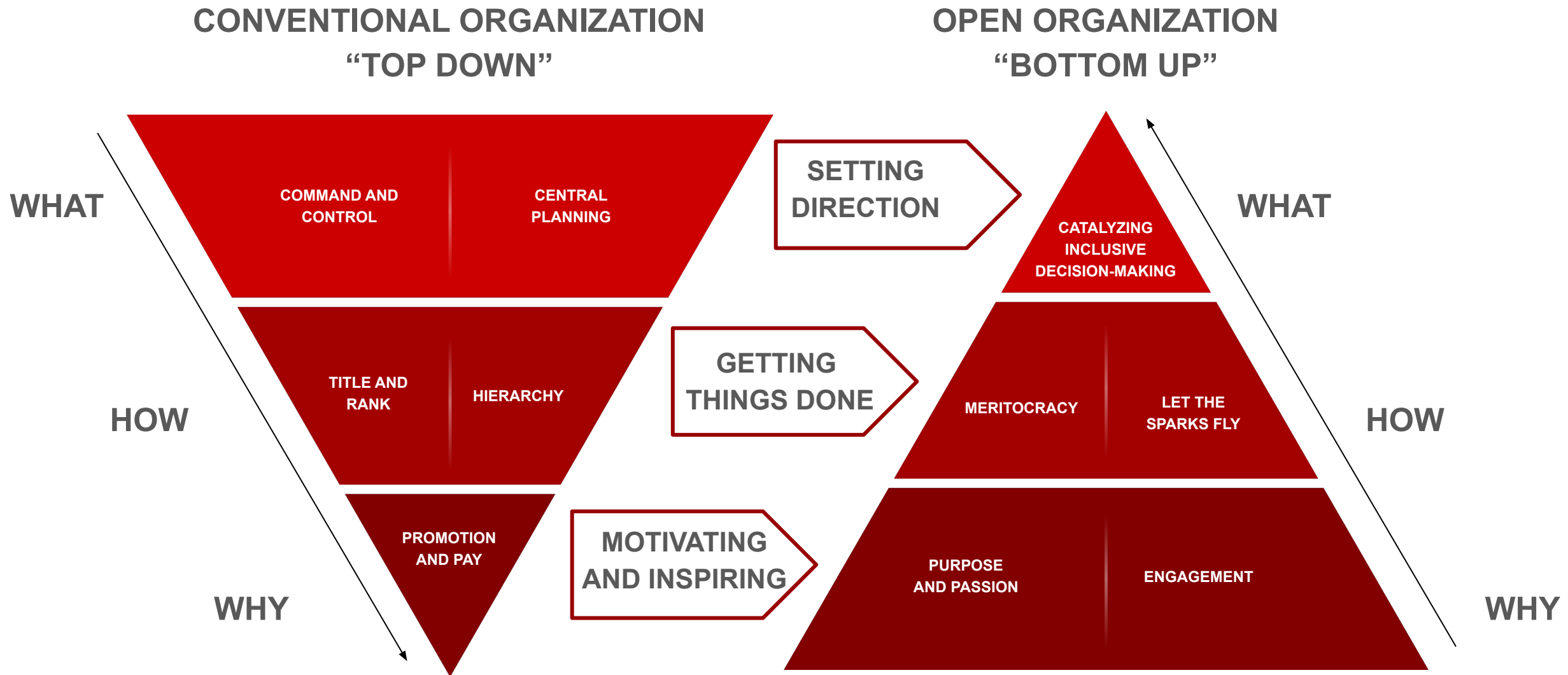
Customer support cases, threat feeds, and connected data points



**Most optimized platform** based on Red Hat knowledge, experience and research



# The Open Organization - Igniting Passion and Performance



# How Are We Empowering Developers?

## Building a Kubernetes Cloud Native DevOps Services Stack



OpenShift Service Mesh with Istio to connect, secure and observe services



OpenShift Serverless with Knative to enable hybrid Serverless, FaaS & EDA



OpenShift Pipelines with Tekton to provide Kubernetes-Native CI/CD pipelines



GitHub Actions to automate container build and deployments to OpenShift



OpenShift Builds with Shipwright to build images from code using S2I, Buildpacks, and buildah



OpenShift GitOps with Argo CD to enable declarative, GitOps based continuous delivery

## Building World Class Developer Tools & Developer Experience in OpenShift



Helm Charts for packaging and distributing applications on OpenShift



OpenShift Developer Console & CLI enhancements to improve dev experience



OpenShift Dev Spaces with Eclipse Che for cloud native development & collaboration



Complete IDE plugin integrations to meet the developer where they are

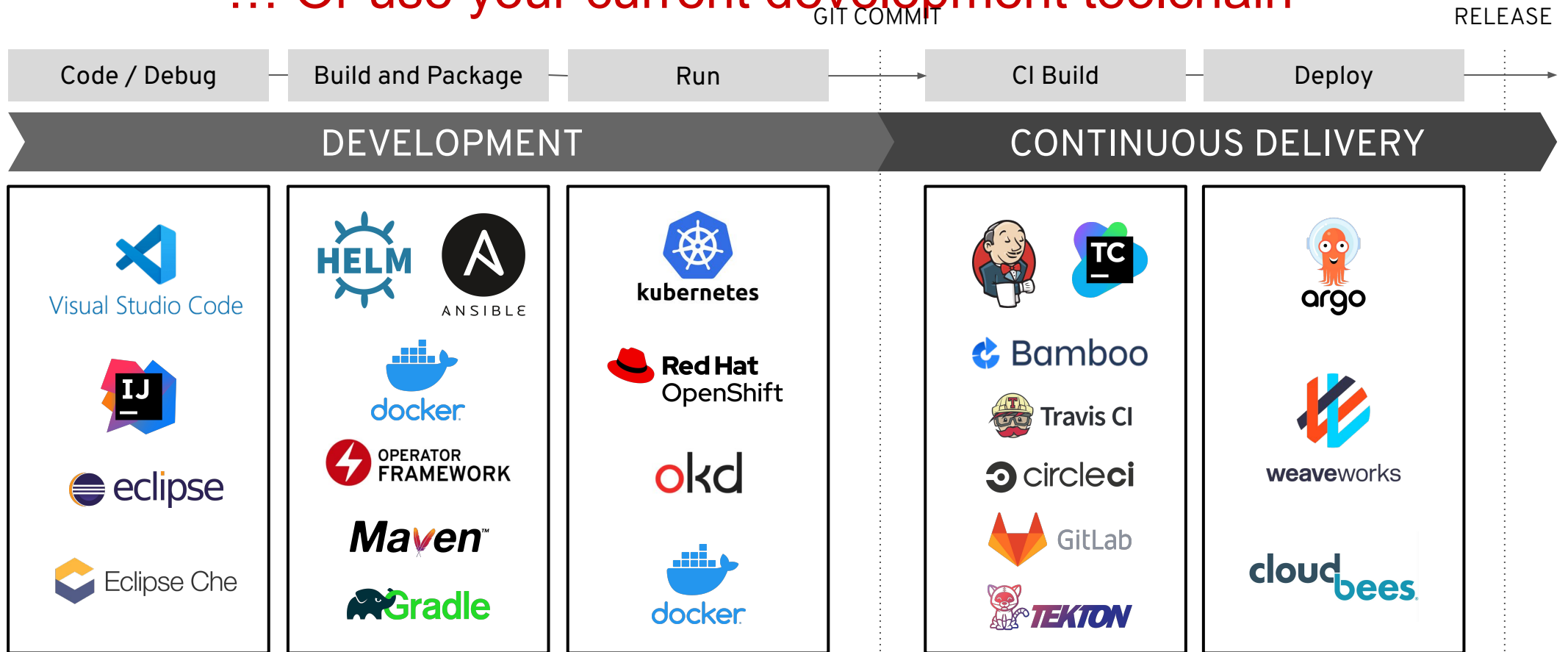


OpenShift developer sandbox and local cluster enhancements to improve access



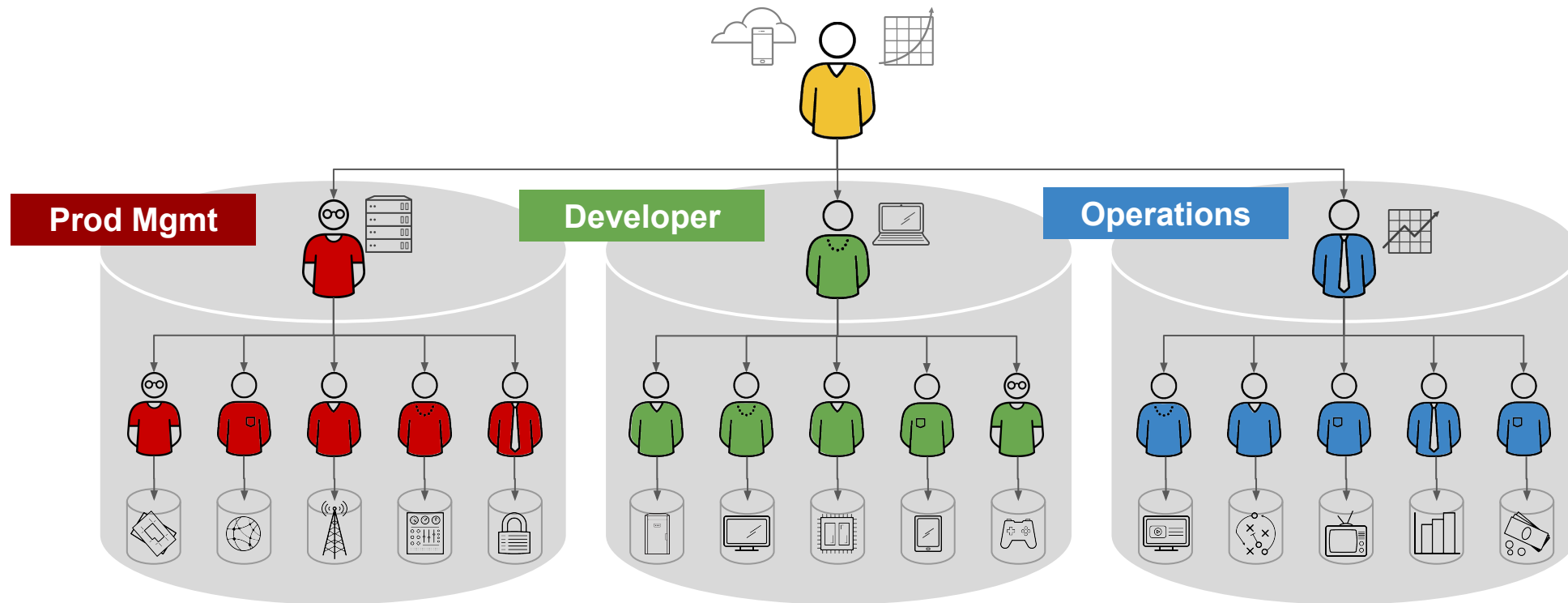
Observability that enables app monitoring for developers on OpenShift

# ... Or use your current development toolchain



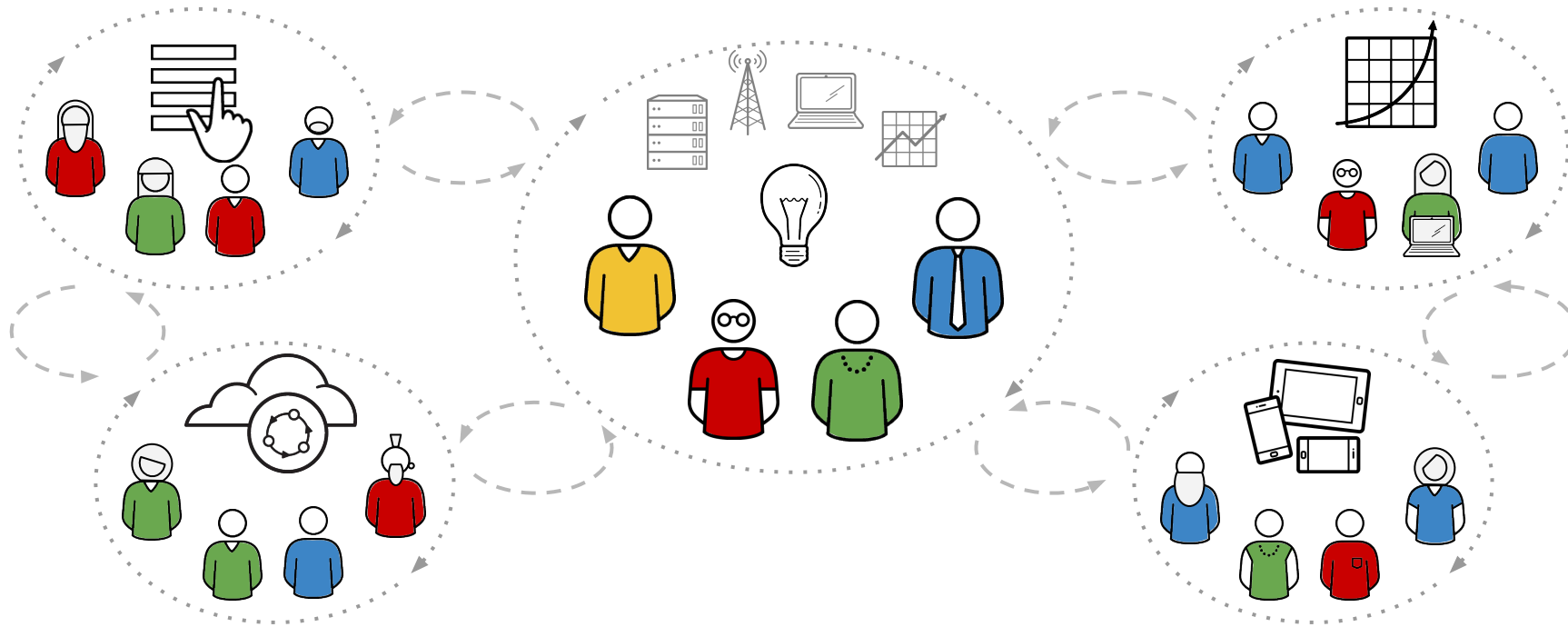
# Siloed organization

The result of throwing over the fence  
Conway's Law (\*) as a downstream effect



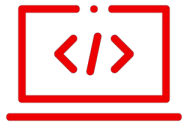
# Open organization

Bottom-up, Collaborative, Continuous Innovation, Agile



# New from Red Hat

Product innovation highlights and more...



## Red Hat Developer Hub

*[Preview]* Improving developer productivity and product velocity with plugins for Backstage and preview of Developer Hub, including verified, curated tools and components for IT operations teams to support developers



## Red Hat OpenShift AI

*[New capabilities]* AI-focused portfolio building on Red Hat OpenShift Data Science to make production-ready AI models and applications an achievable reality for modern enterprises



## Red Hat Trusted Software Supply Chain

*[Preview]* A new family of software and service offerings that address software supply chain security challenges, including the new Red Hat Trusted Content and Red Hat Trusted Application Pipelines services



## Ansible Lightspeed

*[Limited availability]* Using the domain-specific AI of IBM Watson Code Assistant to make automation more accessible to all corners of an organization



## Red Hat Advanced Cluster Security Cloud Service

*[Limited availability]* Pushing security further left in cloud-native operations without needing to be a Kubernetes expert



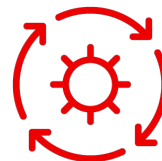
## Event-Driven Ansible

*[General availability]* Delivering “always on” automation, enabling Ansible Automation Platform to respond to changing operational conditions automatically and rapidly based on organization-defined rules



## Red Hat Service Interconnect

*[General availability]* Based on Skupper, connects distributed applications or microservices together across clouds, Kubernetes clusters, or virtual machines without requiring in-depth networking knowledge



## Expanding Red Hat Insights for RHEL management

*[General availability]* Simplifying the RHEL management experience across the hybrid cloud, building on existing Insights-driven predictive analytics to add patching, monitoring, and more for administrators of all