RED HAT
FORUM
Beijing

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OpenShift Enterprise

Applications without boundaries

Krishnan Subramanian
Director, OpenShift Strategy
Red Hat

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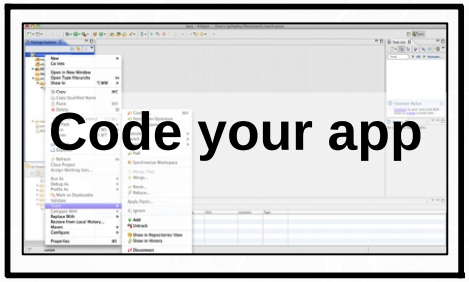
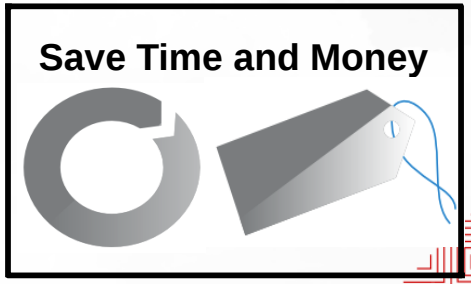
PaaS = Platform as a Service

A Cloud Application Platform





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Today's IT Challenge

IT is under tremendous pressure from the Business to enable growth

Constant demand for new services (new apps)

Need to accelerate time-to-market for applications and services

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PaaS Lets You Streamline App Dev

Craftwork

Assembly Line

Physical

How to Build an App:

1. Have Idea
2. Get Budget
3. Submit hardware acquisition request
4. Wait
5. Get Hardware
6. Rack and Stack Hardware
7. Install Operating System
8. Install Operating System Patches
9. Create user Accounts
10. Deploy framework/appserver
11. Deploy testing tools
12. Code
13. Test
14. Buy and configure Prod servers
15. Push to Prod

• Launch

1. Order more servers to meet demand
2. Wait…
3. Deploy new servers
4. Etc.

Virtualized

How to Build an App:

1. Have Idea
2. Get Budget
3. Submit VM Request request
4. Wait
5. Deploy framework/appserver
6. Deploy testing tools
7. Code
8. Test
9. Configure Prod VMs
10. Push to Prod
11. Launch
12. Request VMs to meet demand
13. Wait
14. Deploy app to new VMs
15. Etc.

*"The use of Platform-as-a-Service technologies will enable **IT organizations** to become more agile and **more responsive to the business needs**." –Gartner**

With PaaS

How to Build an App:

1. **Have Idea**
2. **Get Budget**
3. **Code**
4. **Test**
5. **Launch**
6. **Automatically Scale**

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Increase IT Velocity with PaaS:

Faster Time-to-Market for Products and Services

- Produce Apps Faster
- Increase revenue
- Improve competitiveness
- Meet mission goals

"Enable your Developers and Get out of the Way"

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Drive IT Efficiency with PaaS:

Automation and Self-Service

- Optimize OPEX costs
- Automate Ops Tasks
- Give Self-Service to Devs
- Ops Becomes Strategic

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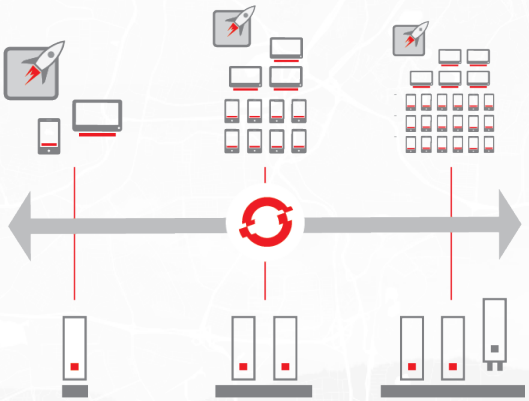
Improve IT Scalability with PaaS:

Velocity and Efficiency enable Scalability

- Scalable Applications
- Scalable Infrastructure
- Scalable Workflows/Processes



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OpenShift is PaaS by Red Hat

OPENSHIFT PLATFORM

- ✓ Multi-language
- ✓ Auto-scaling
- ✓ Self-service
- ✓ Open Source
- ✓ Enterprise-grade
- ✓ Secure
- ✓ Built on Red Hat

Powering Your Apps

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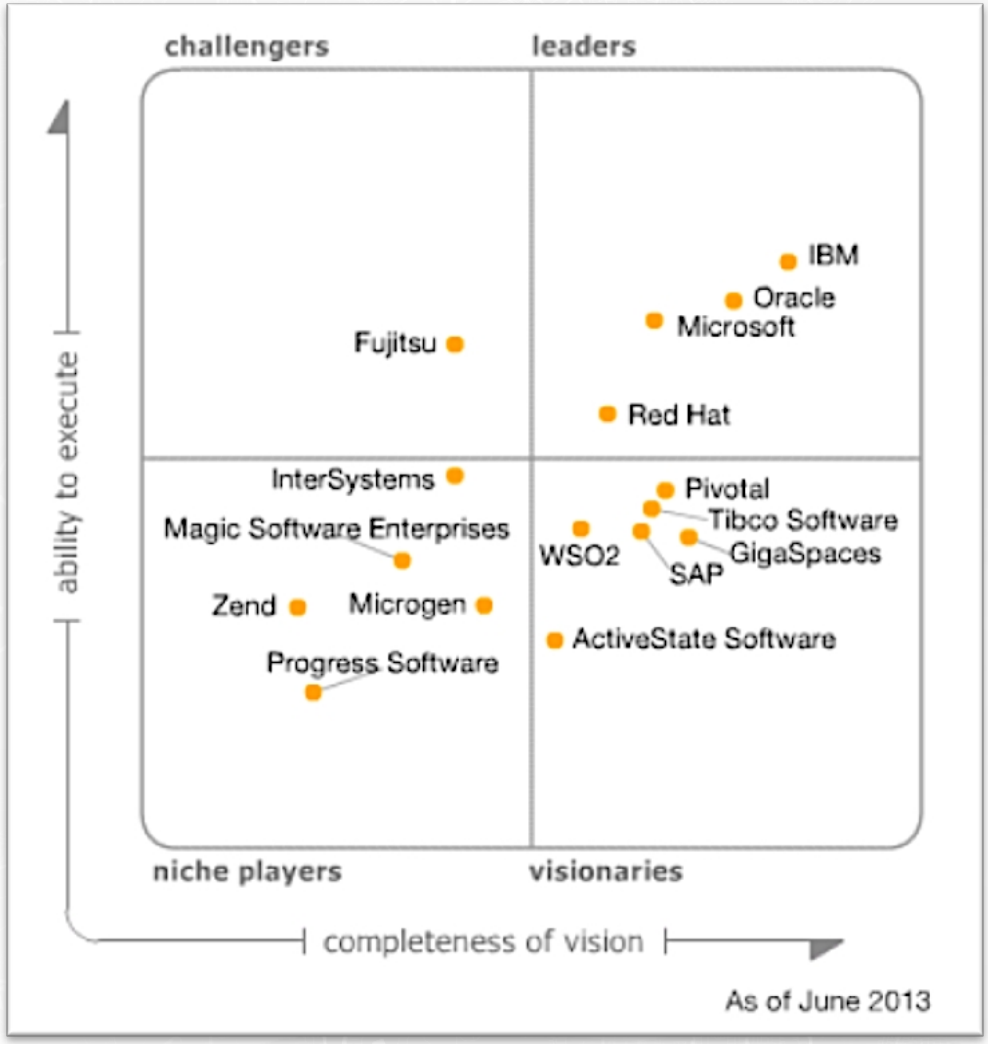
IN THE MAGIC QUADRANT

FOR ON-PREMISES APP PLATFORMS (INCLUDING PRIVATE PAAS)



Gartner

Source: Gartner, Magic Quadrant for On-Premises Application Platforms, June 27, 2013

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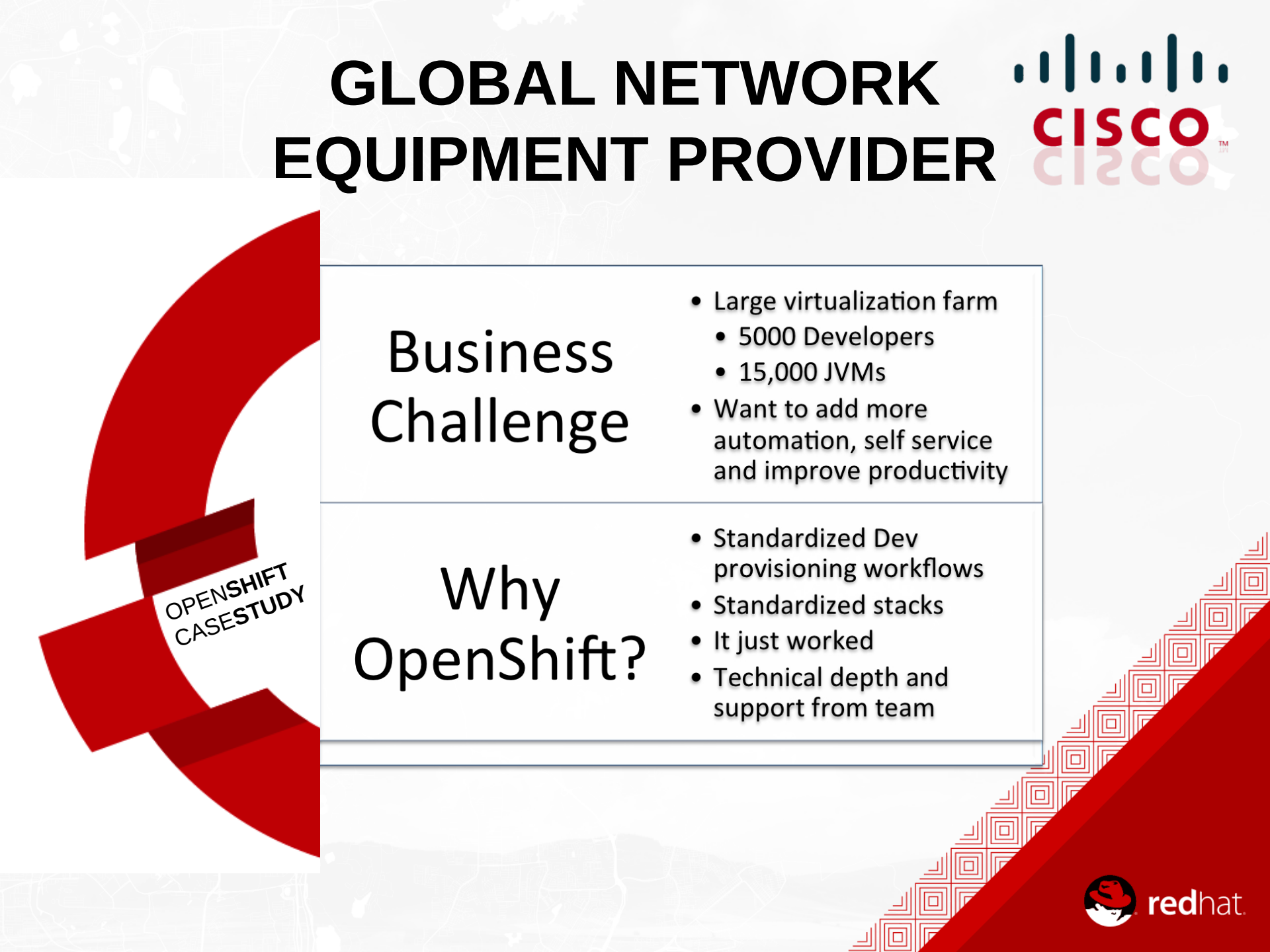
GLOBAL NETWORK EQUIPMENT PROVIDER



Business Challenge

- Large virtualization farm
  - 5000 Developers
  - 15,000 JVMs
- Want to add more automation, self service and improve productivity

Why OpenShift?

- Standardized Dev provisioning workflows
- Standardized stacks
- It just worked
- Technical depth and support from team

LEADING ISV IN FINANCIAL SERVICES

FICO™

OPENSHIFT CASESTUDY

Business Challenge

- ISV with traditional on-premise offerings
- They are building a cloud offering too
- Want to improve their ability to innovate their cloud offering and manage their on-prem offerings
- See OpenShift as a platform to build on

Why OpenShift?

- Known Enterprise OS
- Feature-set
- Extensibility
- API Interfaces
- Ease of integration

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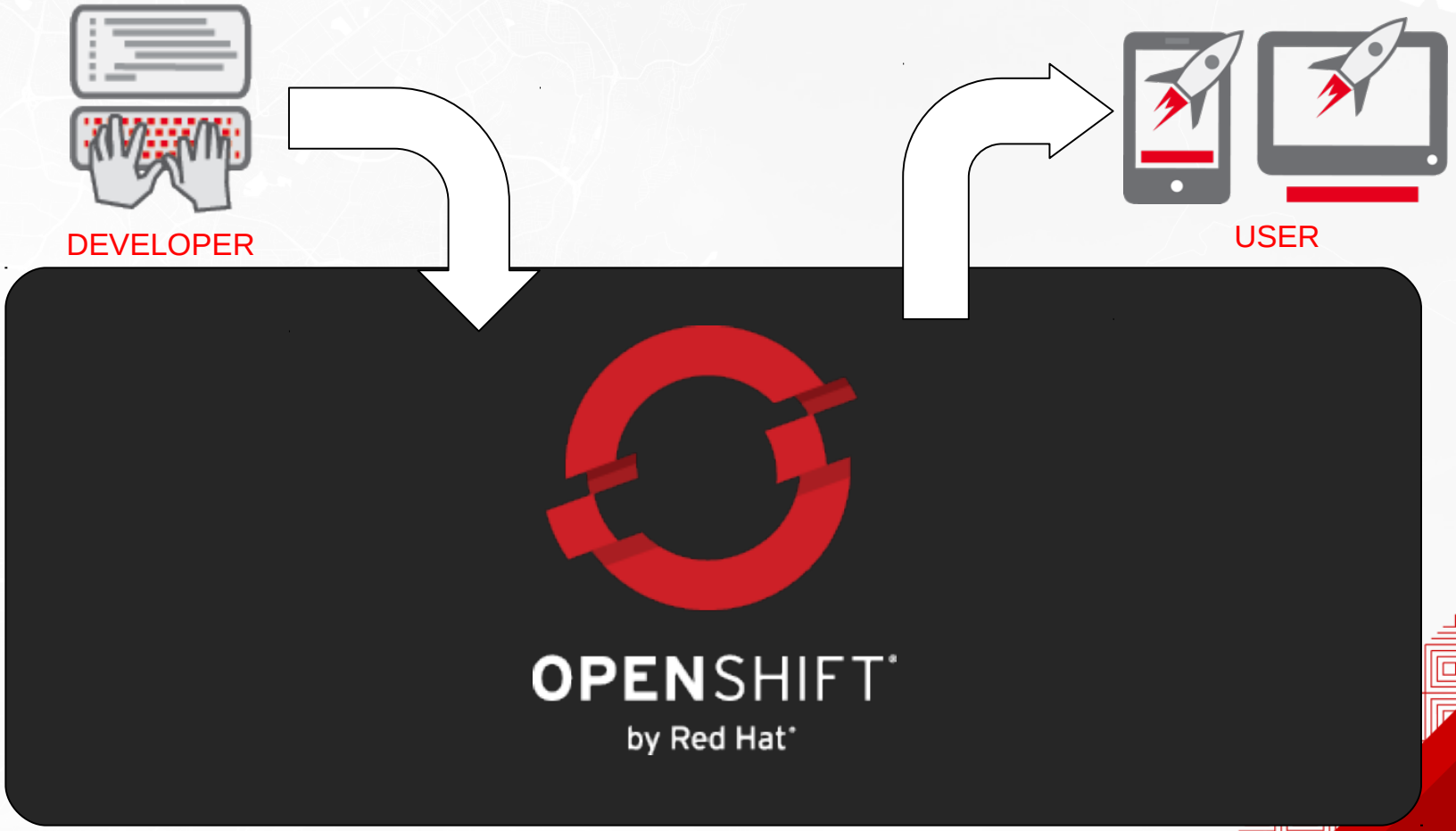
PaaS



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OpenShift PaaS on your choice of cloud or infrastructure…

Public / Hybrid / Private / Virtualization / Bare Metal

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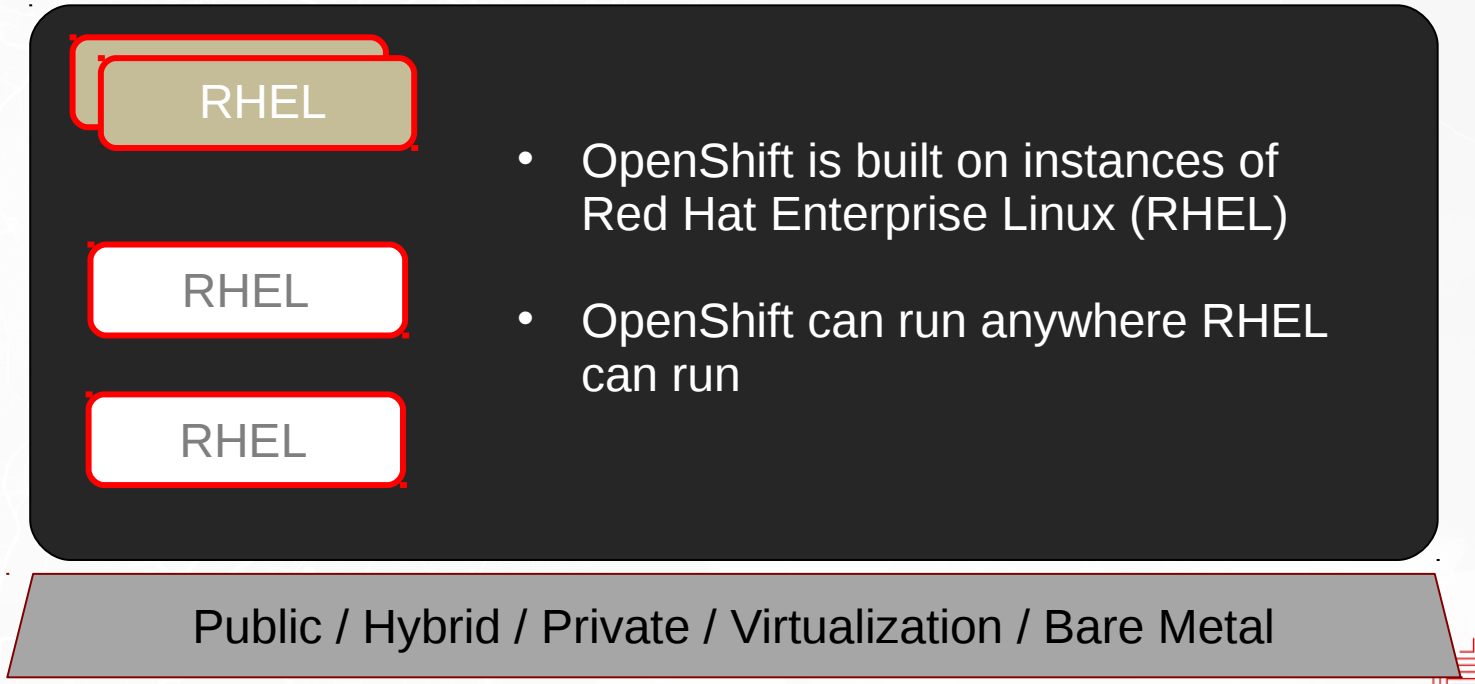
The Foundation of OpenShift is Red Hat Enterprise Linux



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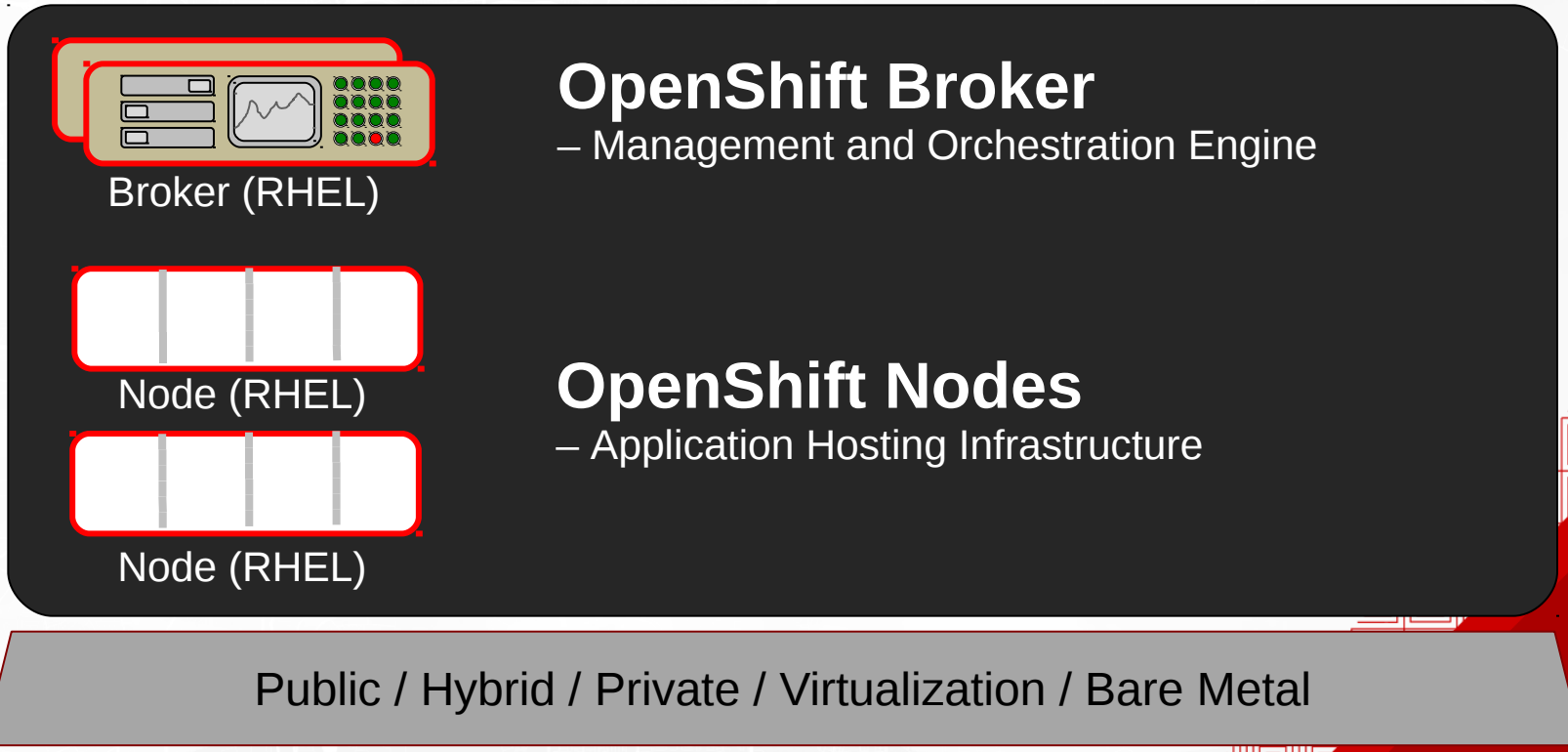
An OpenShift Broker Manages Multiple OpenShift Nodes



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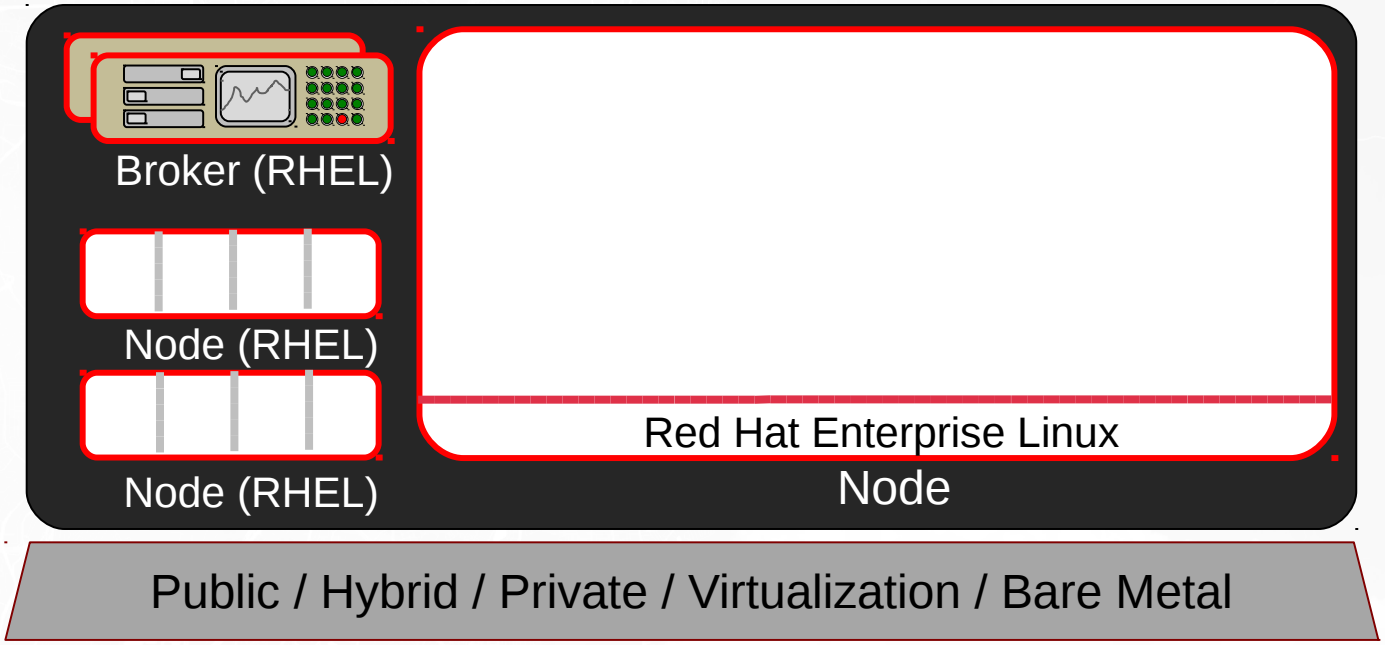
A Node is an Instance of RHEL



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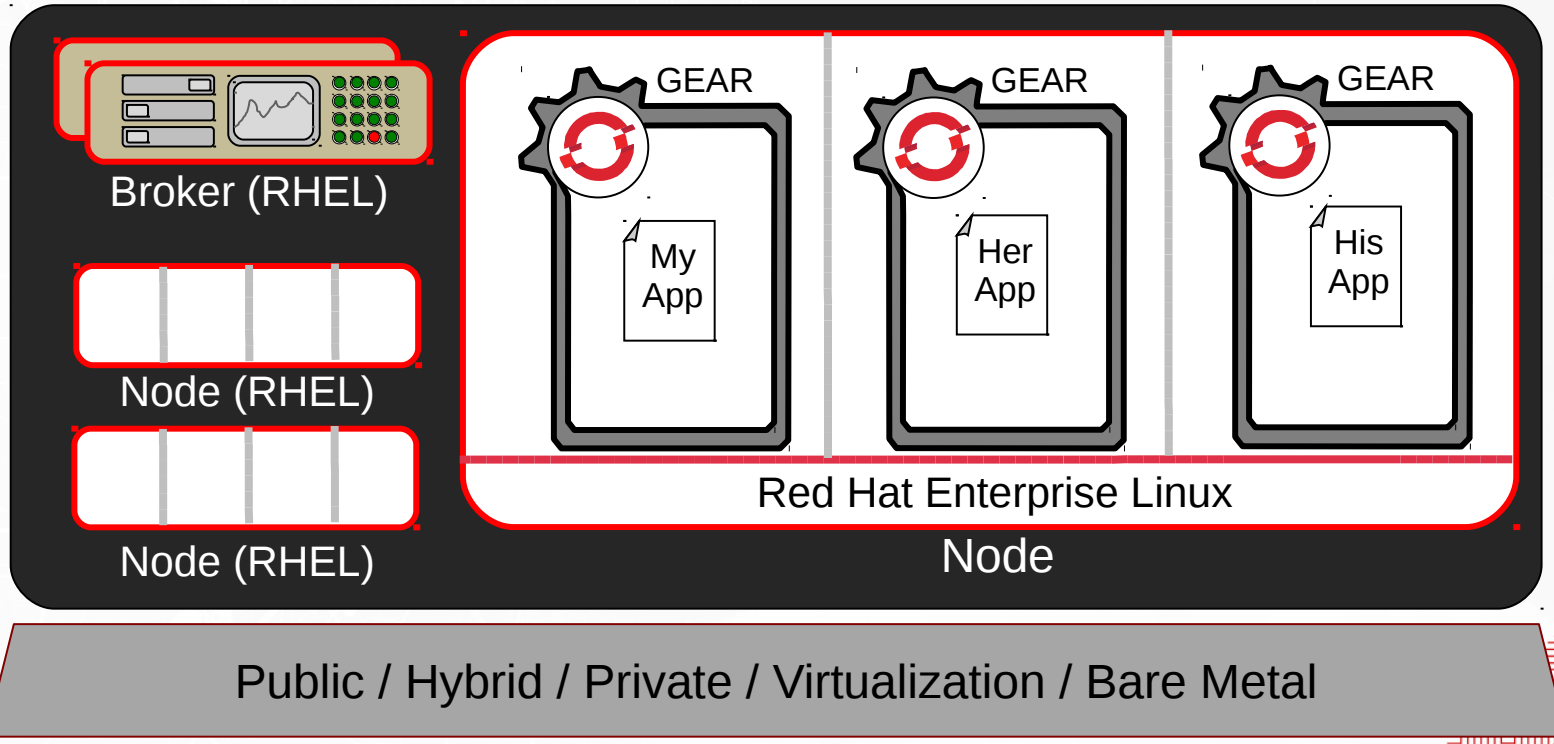
OpenShift User Applications Run in Containers called Gears



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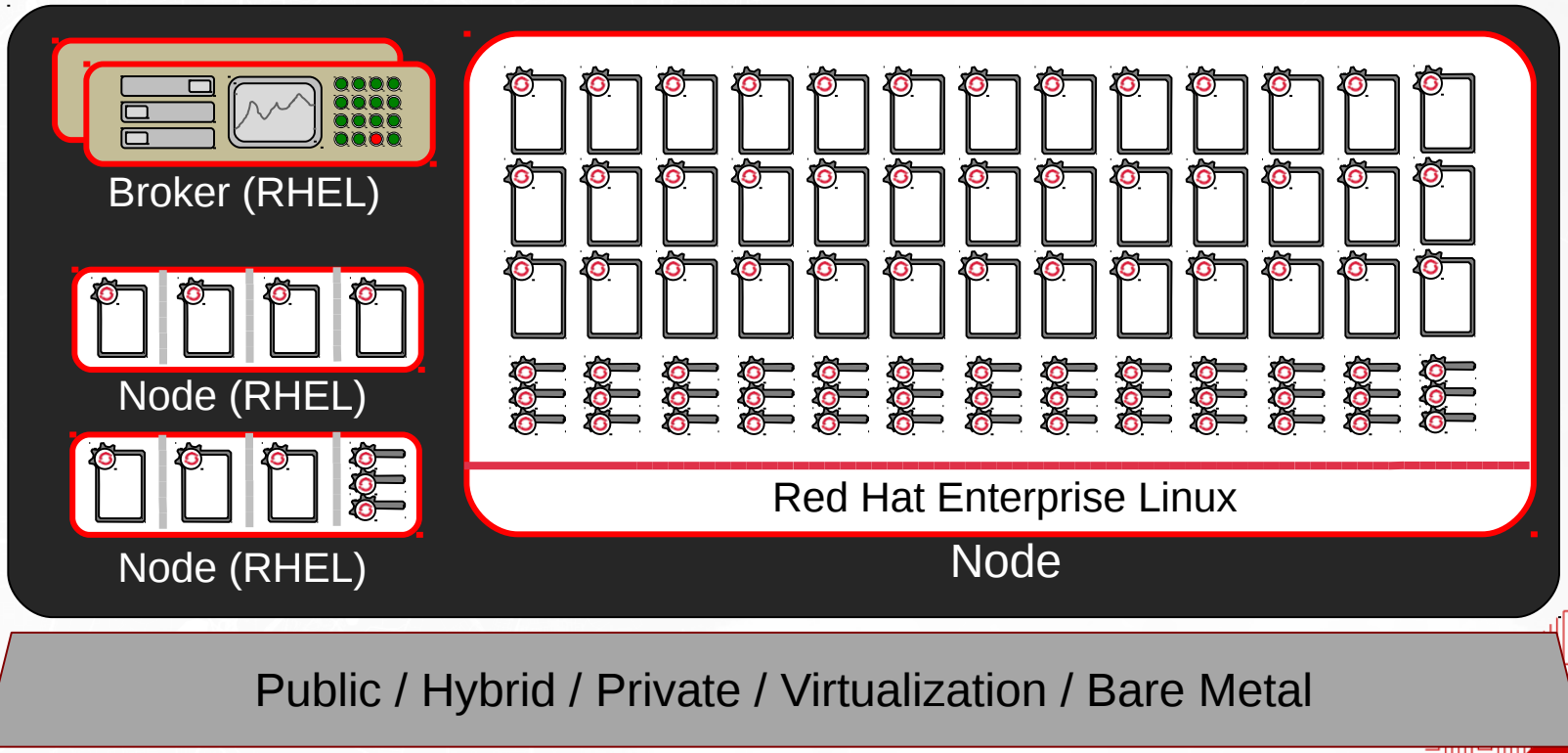
OpenShift Multi-tenancy Provides Density, Efficiency, and Security



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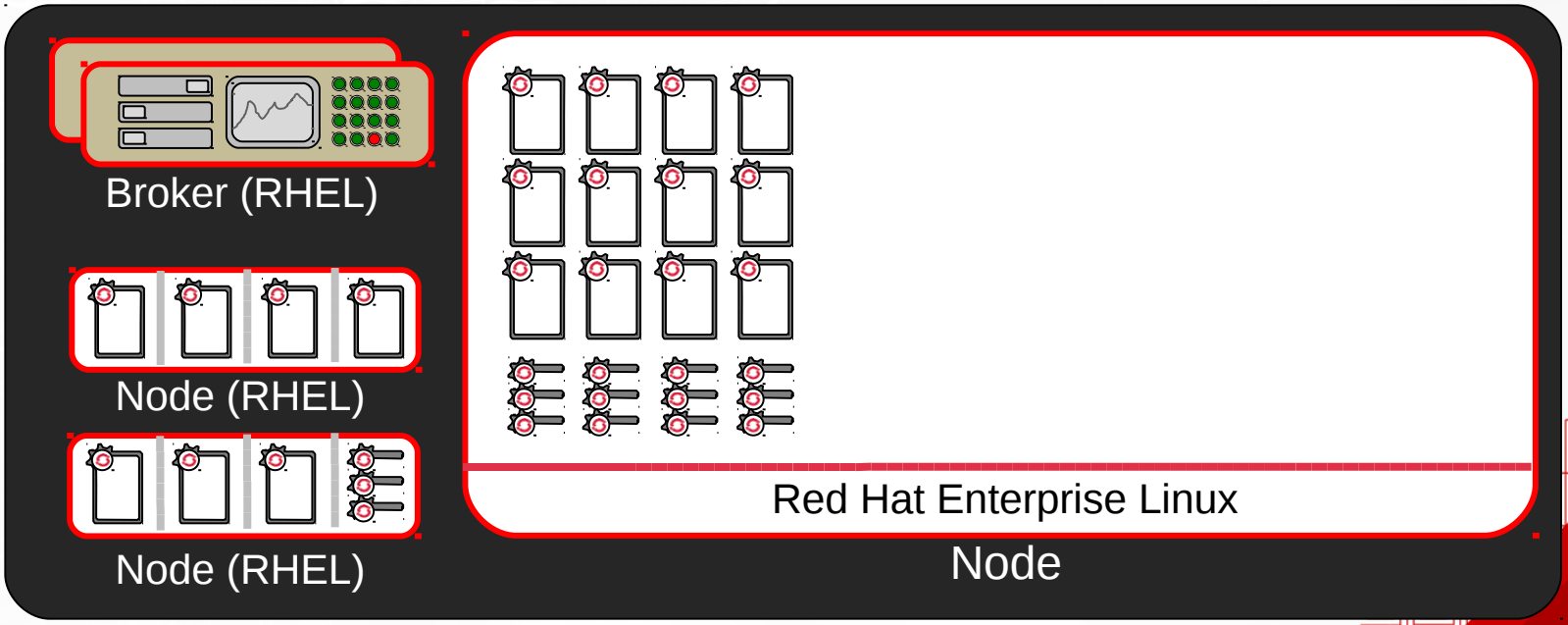
Developer Workflow

A Developer creates a new application → OpenShift creates a GEAR



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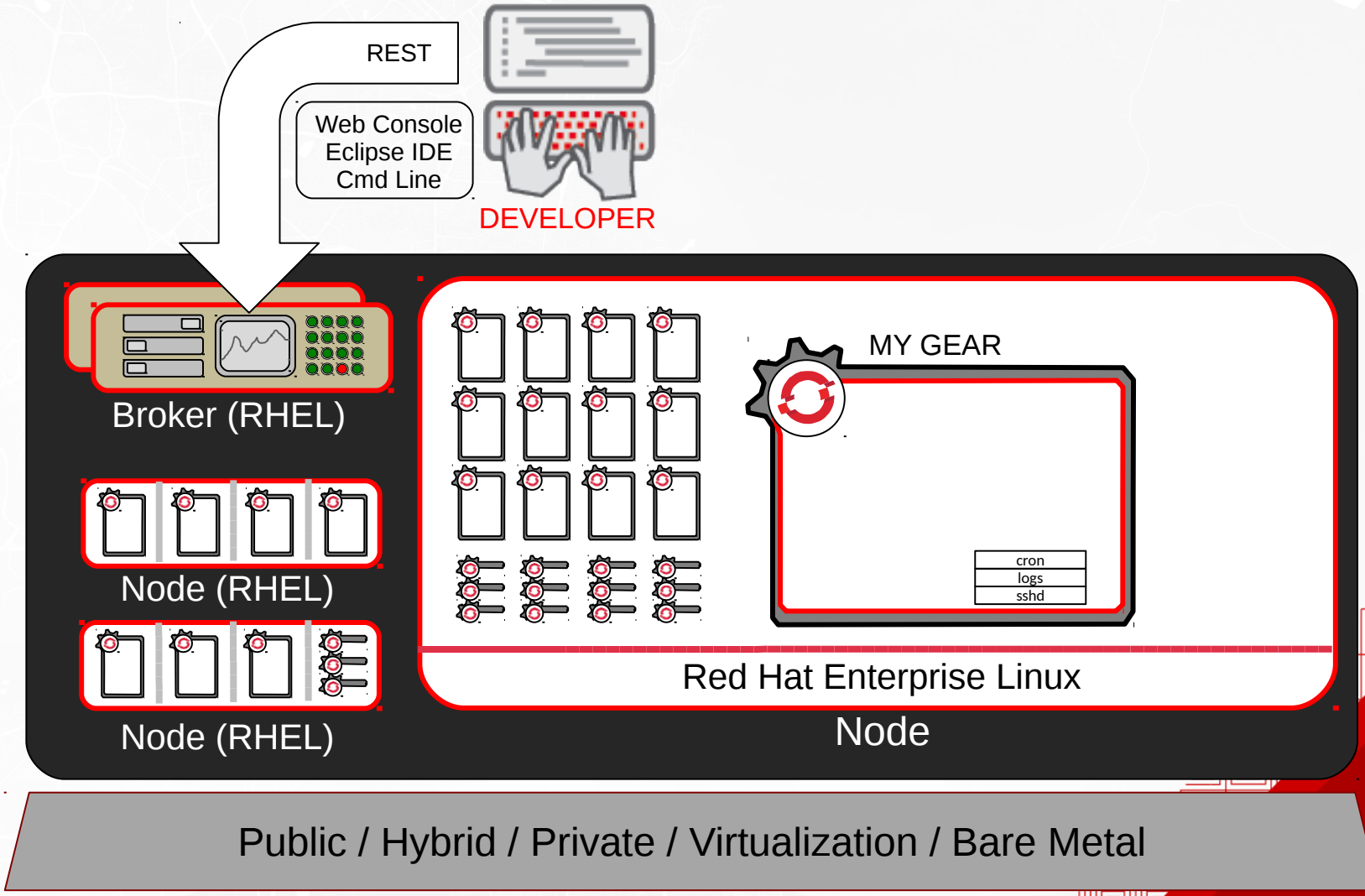
Gears Created via Web, CLI, Eclipse

-RESTful call to Broker



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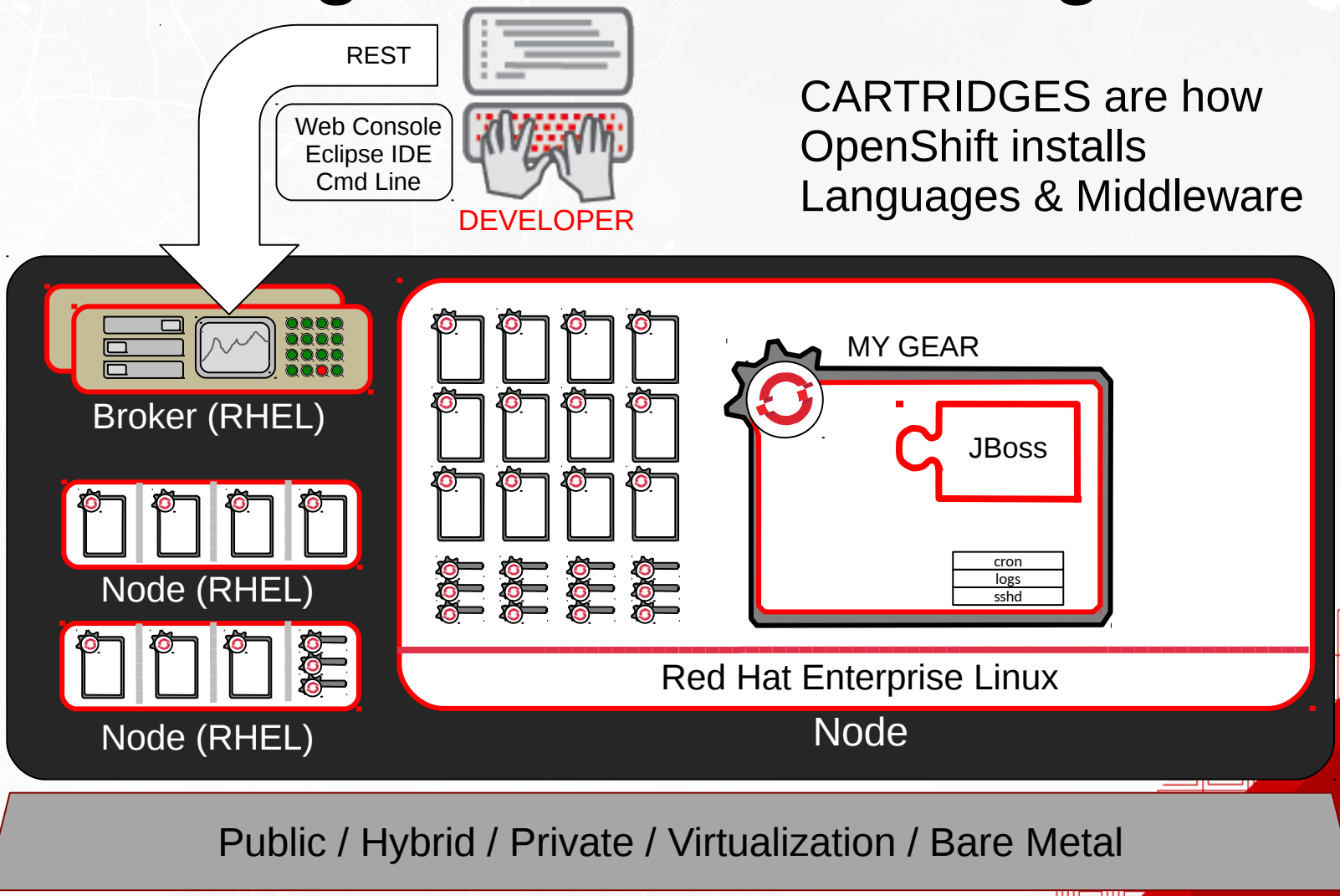
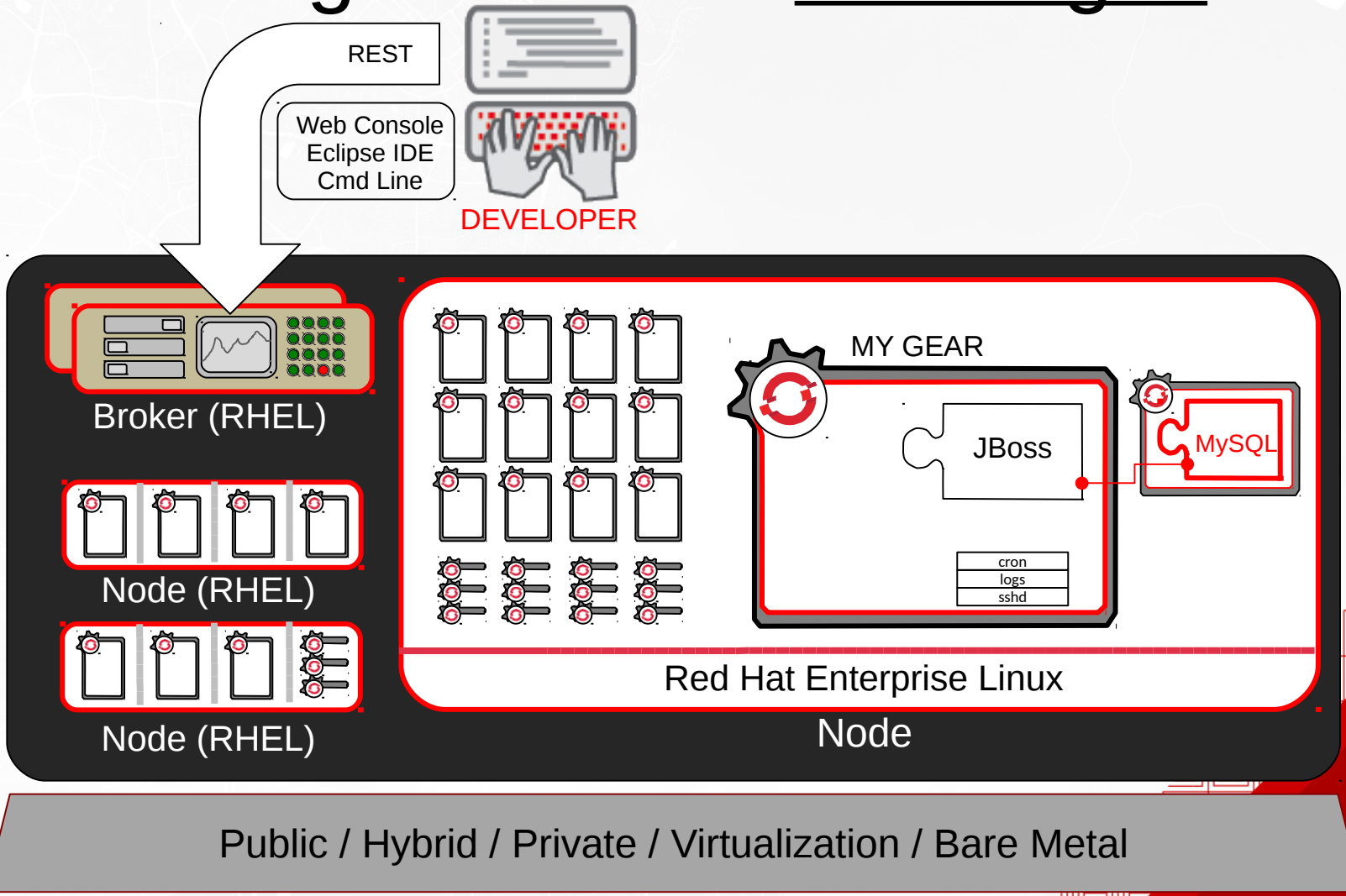
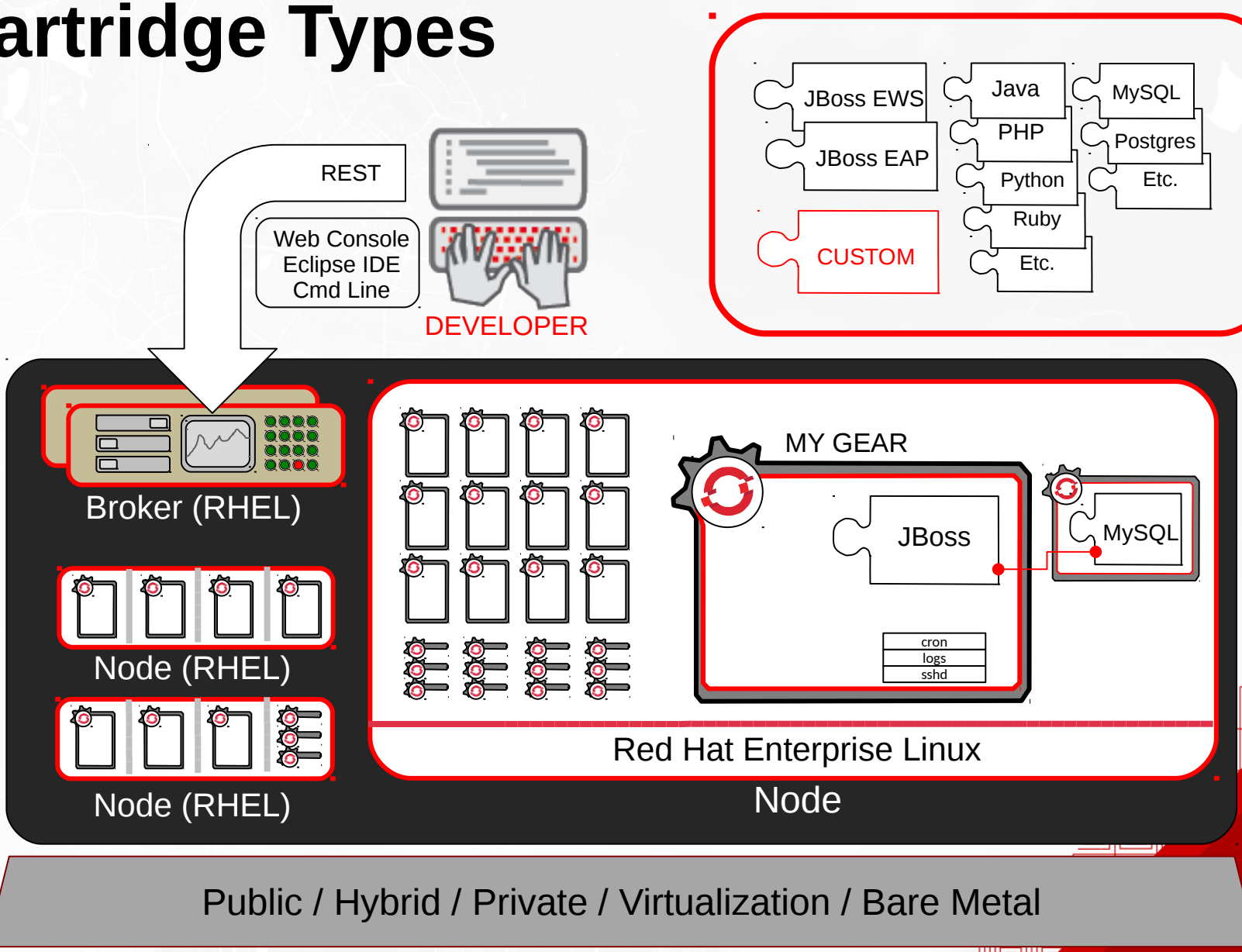
OpenShift Automates Gear Configuration via Cartridges



OpenShift Automates Gear Configuration via Cartridges



Cartridge Types



OPENSHIFT PARTNERS

"With OpenShift and Hadoop, developers will have the ability to rapidly develop and deploy application stacks on Hortonworks Data Platform, enabling them to more easily exploit multiple data types, including: sensor and machine-generated data, server logs, social, clickstream, and geo-location data currently stored in Hadoop."

"We have been pleased to seed the open source community with the technologies we use (like Linux Control Groups), and are working closely with Red Hat on contributions to introduce strong application container hosting to the open source community."

"Red Hat will bring Docker container technologies into the high-touch beta program for Red Hat Enterprise Linux 7, and to OpenShift, its award-winning Platform-as-a-Service (PaaS) offering."

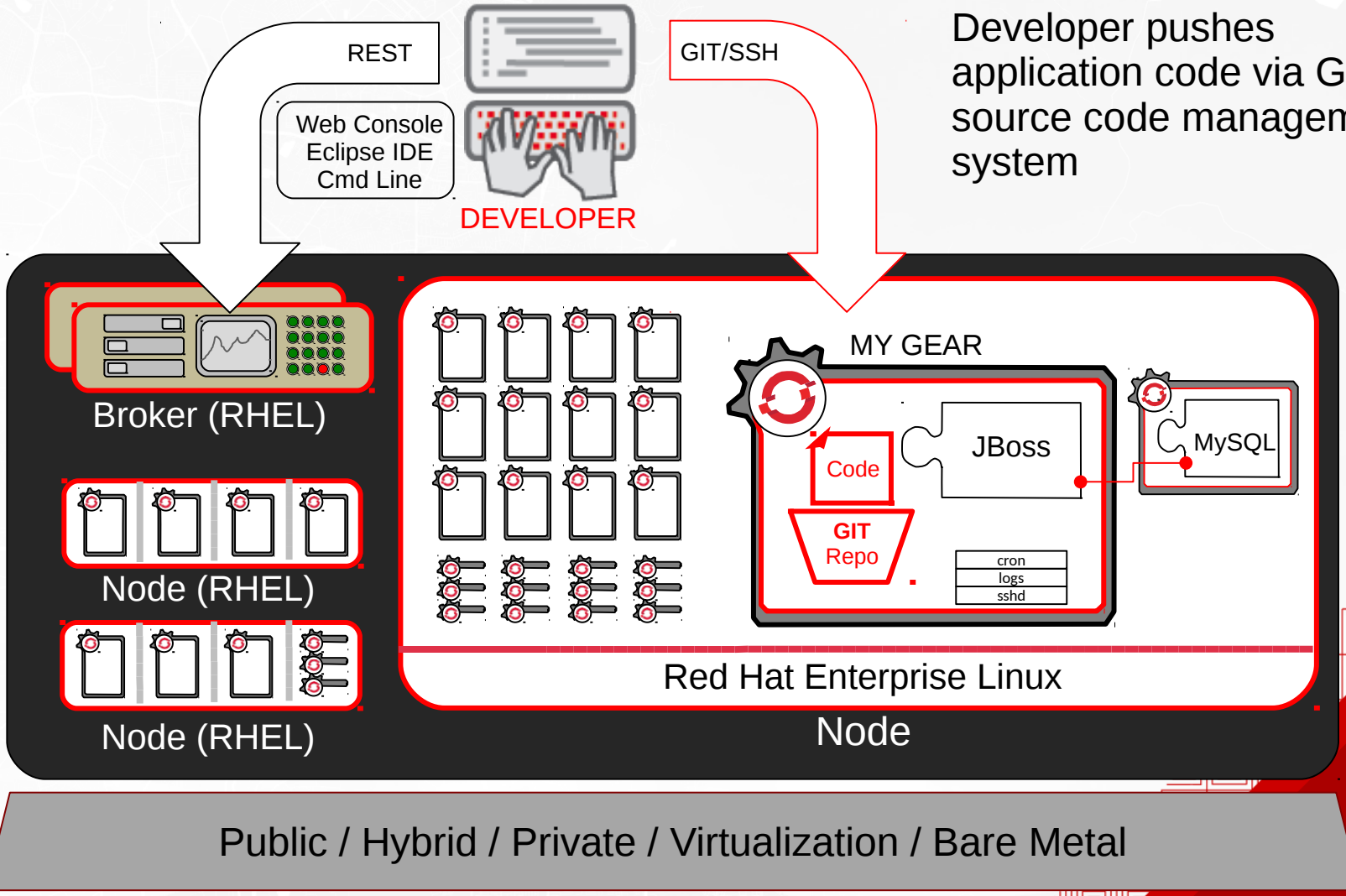
"The database cartridges make it easy for developers creating applications on OpenShift to get access to key SAP database technologies such as SAP ASE, SAP IQ and SAP SQL Anywhere. Red Hat and SAP are making it easier to reach out to developers all around the globe to build and extend their applications based on world-class operating system and data management technologies."

"Cisco's integration of OpenShift (by Red Hat) and the Cisco Prime Service Catalog (PSC) creates a solution to provision, configure, and manage Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), Software-as-a-Service (SaaS), and other IT services all through a single pane-of-glass. The combined solution provides a unified portal and service catalog for XaaS (anything-as-a-Service)."

"Dell and Red Hat will work together within the OpenShift community to build OpenShift solutions that provide support for enterprise application developers looking for efficient ways to make their current and future data and applications more portable and accessible. "

"Jelastic has added support for OpenShift's Cartridge model to its Platform-as-Infrastructure offering—making it easier for independent software vendors (ISVs) to offer core services in multiple platforms and for a wider array of cloud ecosystems and marketplaces. "

Now, Code and Push



Developer pushes application code via GIT source code management system

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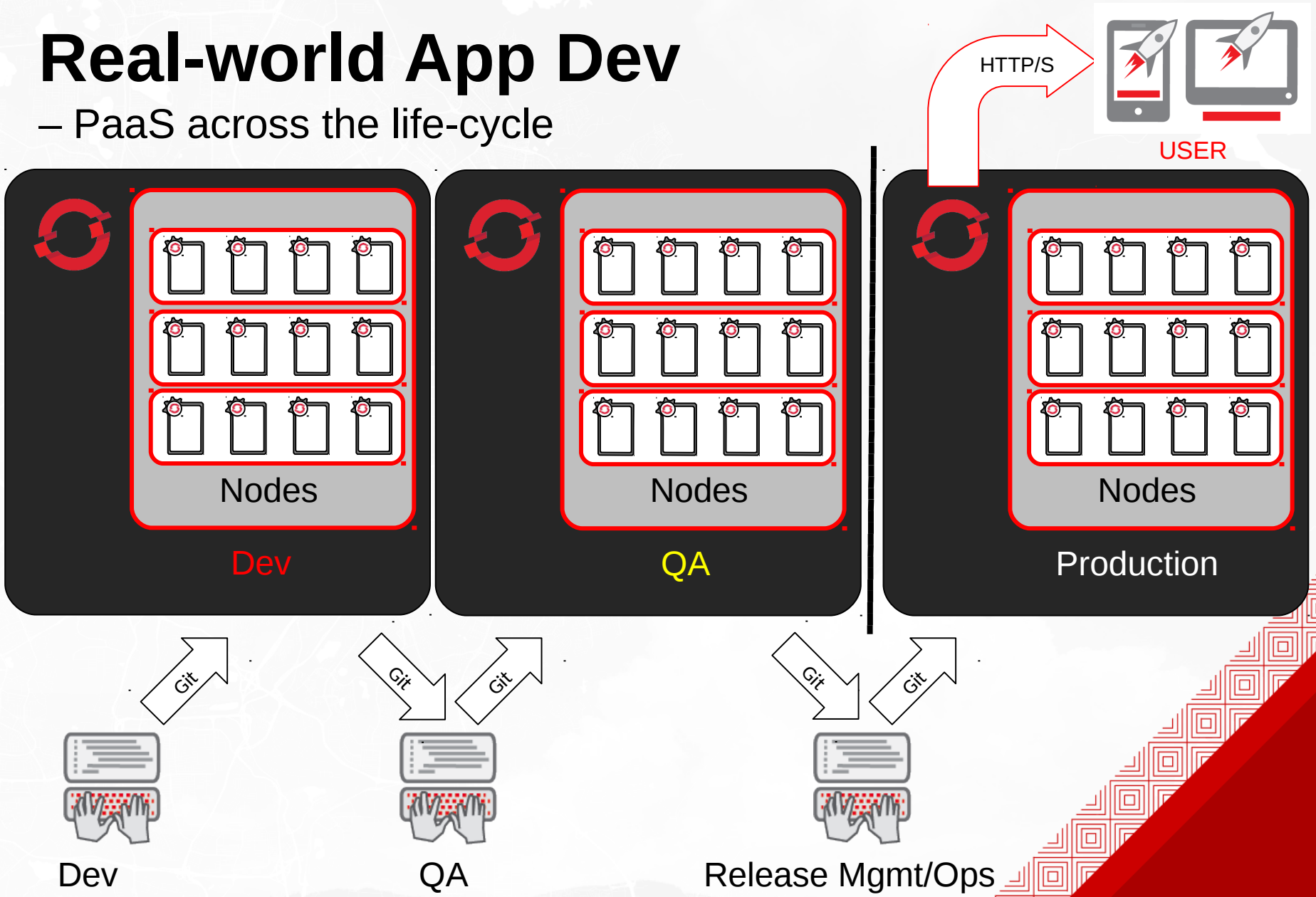
Real-world App Dev

– PaaS across the life-cycle



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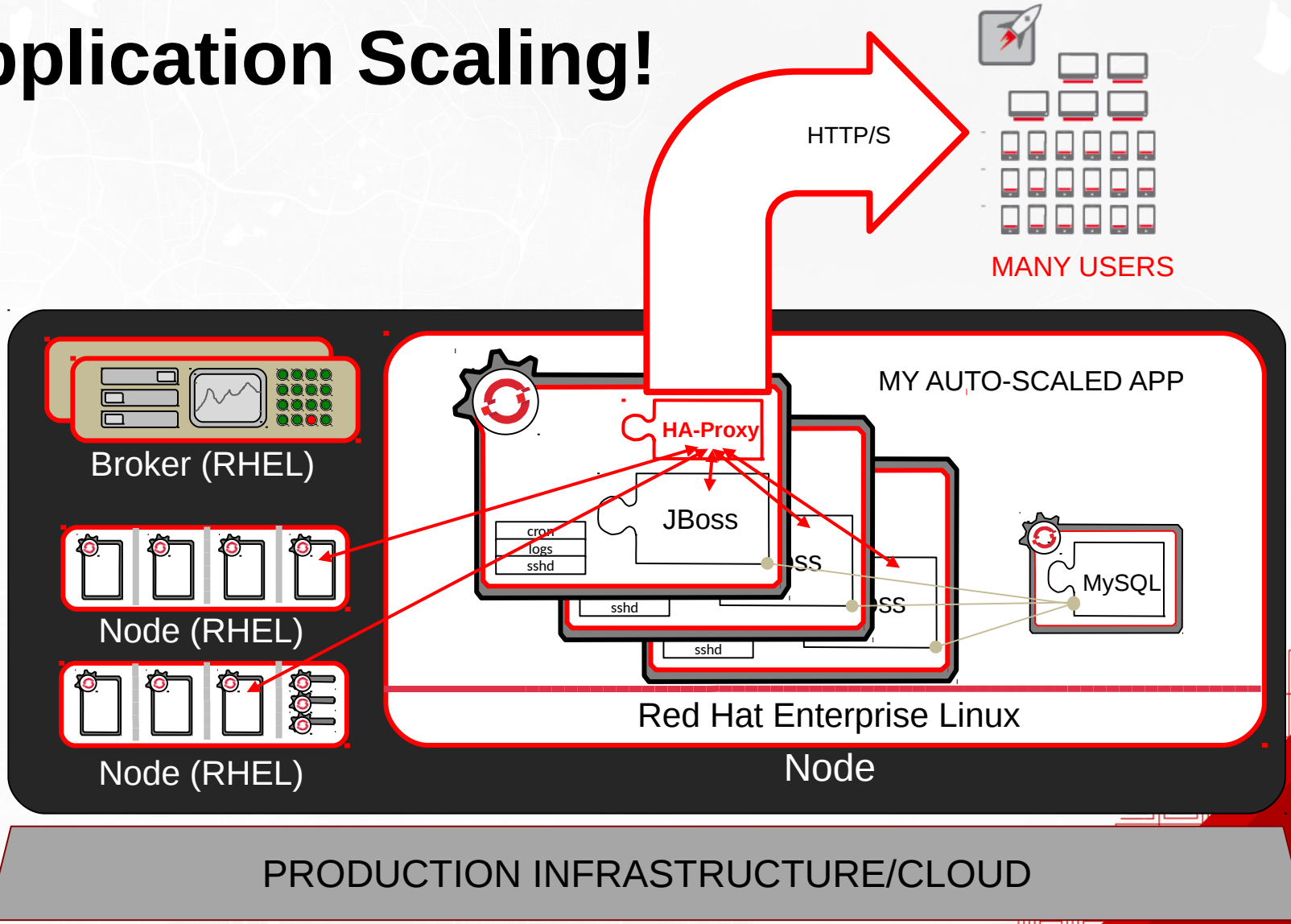
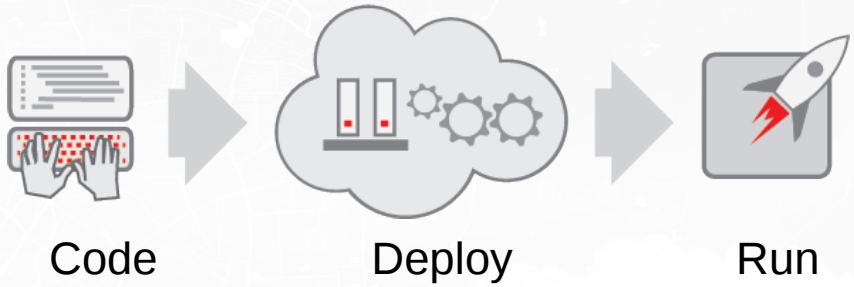
OpenShift Automates Application Scaling!



Accelerate IT Service Delivery

OpenShift leverages **automation** technologies and a **cloud** architecture…

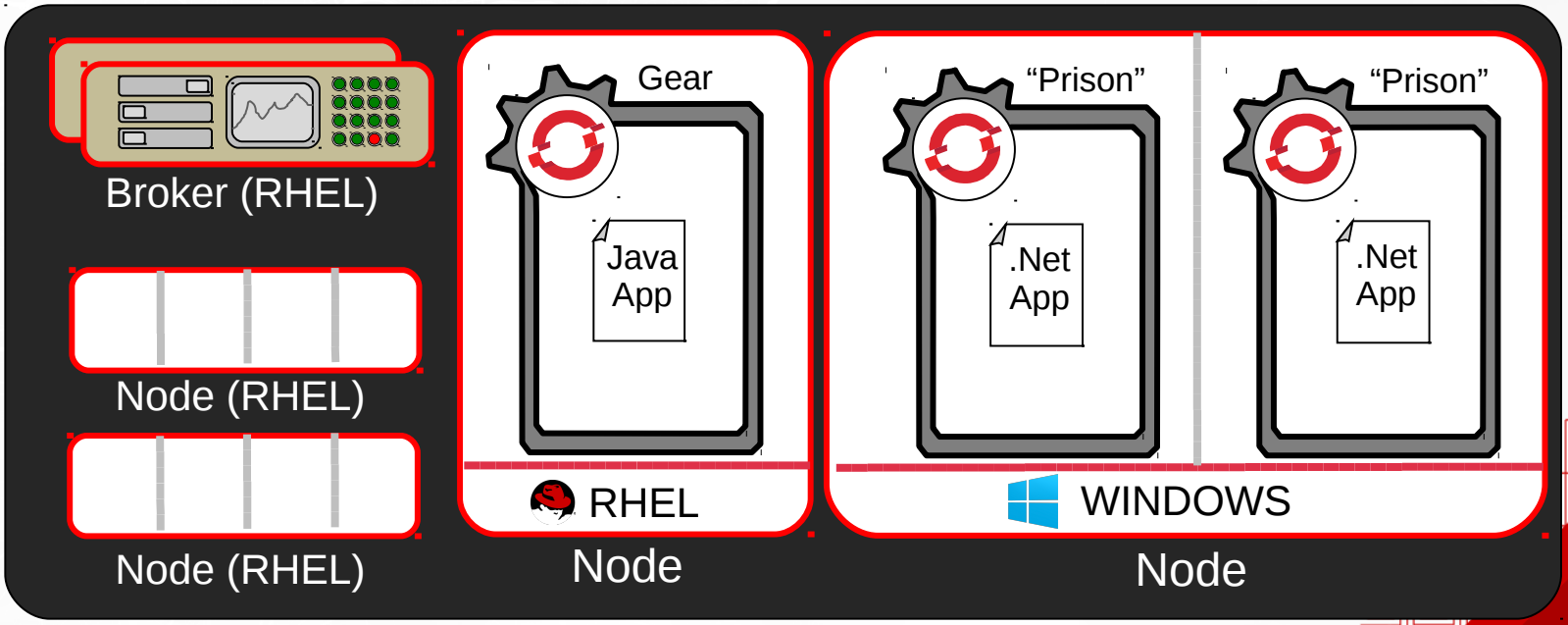


to drive **Velocity**, **Efficiency** and **Scalability** in IT.

Bringing .Net to OpenShift

software Uhuru

OPENSHIFT by Red Hat + Microsoft .NET



Public / Hybrid / Private / Virtualization / Bare Metal

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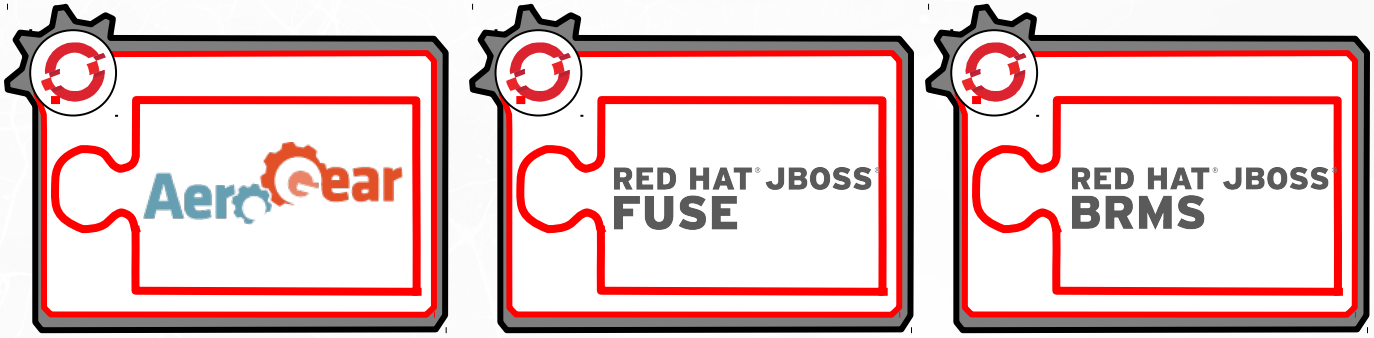
Red Hat JBoss xPaaS Services For OpenShift

Leading Enterprise PaaS Innovation

Bringing the rest of the Red Hat JBoss Middleware family of enterprise application capabilities to OpenShift via Cartridges

RED HAT® JBOSS®
MIDDLEWARE



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THANK YOU

Email: krishs@redhat.com
Twitter: @KrishAtRH
Web: www.openshift.com