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Boston, MA





# OpenShift PaaS

## Overview and Roadmap

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# Agenda

- The 3 Takeaways
- PaaS in 3 Minutes with Demo
- What makes OpenShift Unique?
- The Big Announcement this Summit
- Roadmap Ahead
- Q & A



# Your 3 Takeaways:

Enterprise Grade PaaS  
Dev Acceleration  
Focus on  
what you care the most



# What is OpenShift Anyway?!

**SELF-SERVICE  
ELASTIC  
FULL-STACK APP ENVS  
ON DEMMAND**



# We ❤️ Real Life Features

- Code, Push, Cloud-Build, Deploy, Run!
- Wow! It Scales Up! Scales Down! Scales Up!
- Snap Shot App Here, Download, Upload There



# SHOW ME!



OPENSFIFT

# Step 1: Open the Browser Console...

The screenshot shows the OpenShift Management Console interface. At the top, there is a navigation bar with the OpenShift logo, a search bar, and links for 'Community', 'Developer Center', and 'jnoceda@redhat.com'. Below the navigation bar, the main content area is titled 'OPENSHIFT | MANAGEMENT CONSOLE'.

The main section is titled 'CREATE AN APPLICATION' and contains a three-step wizard:

- 1 Choose a type of application
- 2 Configure and deploy the application
- 3 Next steps

Step 1 is currently active, showing a description: "Choose a web programming cartridge or kick the tires with a quickstart. After you create the application you can add **cartridges** to enable additional capabilities like databases, metrics, and continuous build support with Jenkins." Below this are search and browse buttons.

Step 3 lists two options:

- Cartridge**: A managed runtime that receives security updates and upgrades automatically.
- QuickStart**: A quick way to try out a new technology with code and libraries preconfigured. You are responsible for updating core libraries for security updates.

Below the wizard, there is a 'Featured' section with two cards:

- JBoss Enterprise Application Platform 6.0**: A Java application platform. It is marked as 'OpenShift maintained' and has tags for 'JAVA', 'JBoss', and 'JEE FULL PROFILE'. The URL <http://www.redhat.com/products/jbossenterprisemiddleware/application-platform/> is provided.
- Zend Server 5.6**: A PHP server. It is marked as 'OpenShift maintained' and has a tag for 'PHP'. The URL <http://www zend com> is provided.

At the bottom, there are two more sections: 'Instant App' (with 'Jenkins Server 1.4') and 'Java' (with 'JBoss Application Server 7.1'). Each section has a '(see all)' link.



# Step 1: ...and Select App Type

### Instant App

[\(see all\)](#)

- Jenkins Server 1.4 CI
- Drupal 7 CMS DRUPAL NOT SCALABLE PHP
- WordPress 3.x BLOG CMS NOT SCALABLE
- PHP
- PHP 5.3
- CakePHP NOT SCALABLE
- Reveal.js CSS3 HTML5 PRESENTATIONS
- Ruby
- Ruby 1.9
- Ruby 1.8
- Ruby on Rails RAILS
- Node.js 0.6 JAVASCRIPT NODEJS

### Java

[\(see all\)](#)

- JBoss Application Server 7.1 JBOSS
- Tomcat 6 (JBoss EWS 1.0) JBOSS TOMCAT TOMCAT6
- Tomcat 7 (JBoss EWS 2.0) JBOSS TOMCAT TOMCAT7
- CapeDwarf APP ENGINE GOOGLE
- JEE Full Profile on JBoss JAVA EE JBOSS JEE
- Spring Framework on JBoss EAP6 JBOSS

### Python

[\(see all\)](#)

- Python 2.6 PYTHON2
- Python 2.7 Community Cartridge COMMUNITY PYTHON2
- Python 3.3 Community Cartridge COMMUNITY PYTHON3
- Django



OPENShift

# Step 2: Choose Stack Components

MY APPLICATIONS / AUTOMO

## AutoMo @ <http://AutoMo-JuanDom.rhcloud.com/>

GEARS  
3 TOTAL

Cartridges			ADD CARTRIDGE	+	
<b>JBoss Application Server 7.1</b>			STATUS IDLE	GEARS 2 SMALL	STORAGE 1 GB
GIT REPOSITORY <code>ssh://6f552baeb9884e589376a23b70f7bd3e@AutoMo-JuanDom.rhcloud.com/~git/AutoMo.git/</code>					
WANT TO LOG IN TO YOUR APPLICATION?					
<a href="#">Scaled up with HAProxy x2</a>		<a href="#">Enable Jenkins builds</a>			
NEW TO OPENSHIFT? See the getting started tips for this app →					
NEED HELP? <a href="#">OpenShift User Guide</a> Sync your OpenShift repo with an existing Git repo					
<a href="#">Delete this application</a>					

**MongoDB NoSQL Database 2.2**

STATUS IDLE	GEARS 1 SMALL	STORAGE 1 GB
<a href="#">ADD CARTRIDGE</a>		



# Step 2: Choose Stack Components

Choose a cartridge to add to your application.

## MySQL Database 5.1

MySQL is a multi-user, multi-threaded SQL database server.

[Select »](#)

## PostgreSQL Database 8.4

PostgreSQL is an advanced Object-Relational database management system

[Select »](#)

## Jenkins Client 1.4

The Jenkins client connects to your Jenkins application and enables builds and testing of your application. Requires the Jenkins Application to be created via the new application page.

[Select »](#)

## OpenShift Metrics 0.1

An experimental cartridge that demonstrates retrieving real-time statistics from your application. May be removed or replaced in the future.

[Select »](#)

## RockMongo 1.1

Web based MongoDB administration tool. Requires the MongoDB cartridge to be installed first.

[Select »](#)

## SwitchYard 0.6

SwitchYard is a lightweight service delivery framework providing full lifecycle support for developing, deploying, and managing service-oriented applications.

[Select »](#)

## Cron 1.4

The Cron cartridge allows you to run command line programs at scheduled times. Use this for background jobs and periodic processing.

[Select »](#)

## Installed

### MongoDB NoSQL Database 2.2

### OpenShift Web Balancer

## Has Dependencies

### phpMyAdmin 3.4

Web based MySQL admin tool. Requires the MySQL cartridge to be installed first.

**Requires mysql-5.1**



# Step 3: Is Up! Here's the URL & Repo

The image shows the OpenShift web interface on the left and a browser window on the right. The OpenShift interface displays the application 'AutoMo' with the URL <http://AutoMo-JuanDom.rhcloud.com/> highlighted with a red box. The browser window shows the same URL in the address bar and the OpenShift welcome page with the title 'Welcome To OpenShift, JBossAS7 Cartridge'.

MY APPLICATIONS / AUTOMO

AutoMo @ <http://AutoMo-JuanDom.rhcloud.com/>

Cartridges

JBoss Application Server 7.1

GIT REPOSITORY

ssh://6f552baeb9884e589376a23b70f7bd3e@AutoMo-JuanDom.rhcloud.com:22

File Edit View History Bookmarks Tools Help

Welcome to OpenShift

automo-juandom.rhcloud.com

Most Visited OpenShift.com Sign up for OpenShift Google Web Email RedHat.com Rally ERP

OPENSIFT

Welcome To OpenShift, JBossAS7 Cartridge

Place your application here

In order to commit to your new project, go to your projects git repo (created with the rhc app create command) directory.

For example, if you named your application myfirstapp (by passing in -a myfirstapp to the rhc app create command), you would find the contents of this app located under myfirstapp/src/main/webapp. You can edit that and push your changes from the myfirstapp directory by running:

```
git commit -a -m 'Some commit message'  
git push
```

Then reload this page.

See the myfirstapp/README file for more information on the options for deploying applications.



# Step 3: Open Eclipse Code and Push

The image shows a split-screen interface. On the left, the 'AutoMo' application is displayed in the OpenShift web interface. It shows the URL <http://AutoMo-JuanDom.rhcloud.com/> and a 'Cartridges' section with a 'JBoss Application Server 7.1' cartridge. Below it is a 'GIT REPOSITORY' section with the URL `ssh://6f552baeb9884e589376a23b70f7bd3e@...`. A red box highlights this URL. On the right, the Eclipse IDE is open with a Java project named 'demo3 [demo3 master]' in the Package Explorer. A 'New OpenShift Application' dialog is open, showing the 'Setup OpenShift Application' step. The 'Name:' field is set to 'coolapp', 'Type:' is 'jbossas-7', and 'Gear profile:' is 'small'. Under 'Embeddable Cartridges', a list of options is shown, with checkboxes for 'Select All' and 'Deselect All'. The list includes: mongodb-2.0, cron-1.4, mysql-5.1, postgresql-8.4, haproxy-1.4, 10gen-mms-agent-0.1, phpmyadmin-3.4, metrics-0.1, rockmongo-1.1, and jenkins-client-1.4.



# Step 3: Or do the same from the CL

1. Create JBoss app with MongoDB cartridge

```
rhc app-create javasample jbossas-7 mongodb-2
```

2. Add add WAR or EAR file to your deployments directory

```
cd javasample
```

```
cp /path/to/ear/earfilename.ear ./deployments
```

3. Add the WAR or EAR file to git

```
git add ./deployments/earfilename.ear
```

4. Push your code

```
git push
```

5. Done



OPENSFIFT

# Watch!: It Auto-Scales Out!



Demo time..!



# Dev Acceleration

**CONFIRMED**



Focus on  
what you care the most

**CONFIRMED**



# Enterprise-Grade Maturity

Prove it!

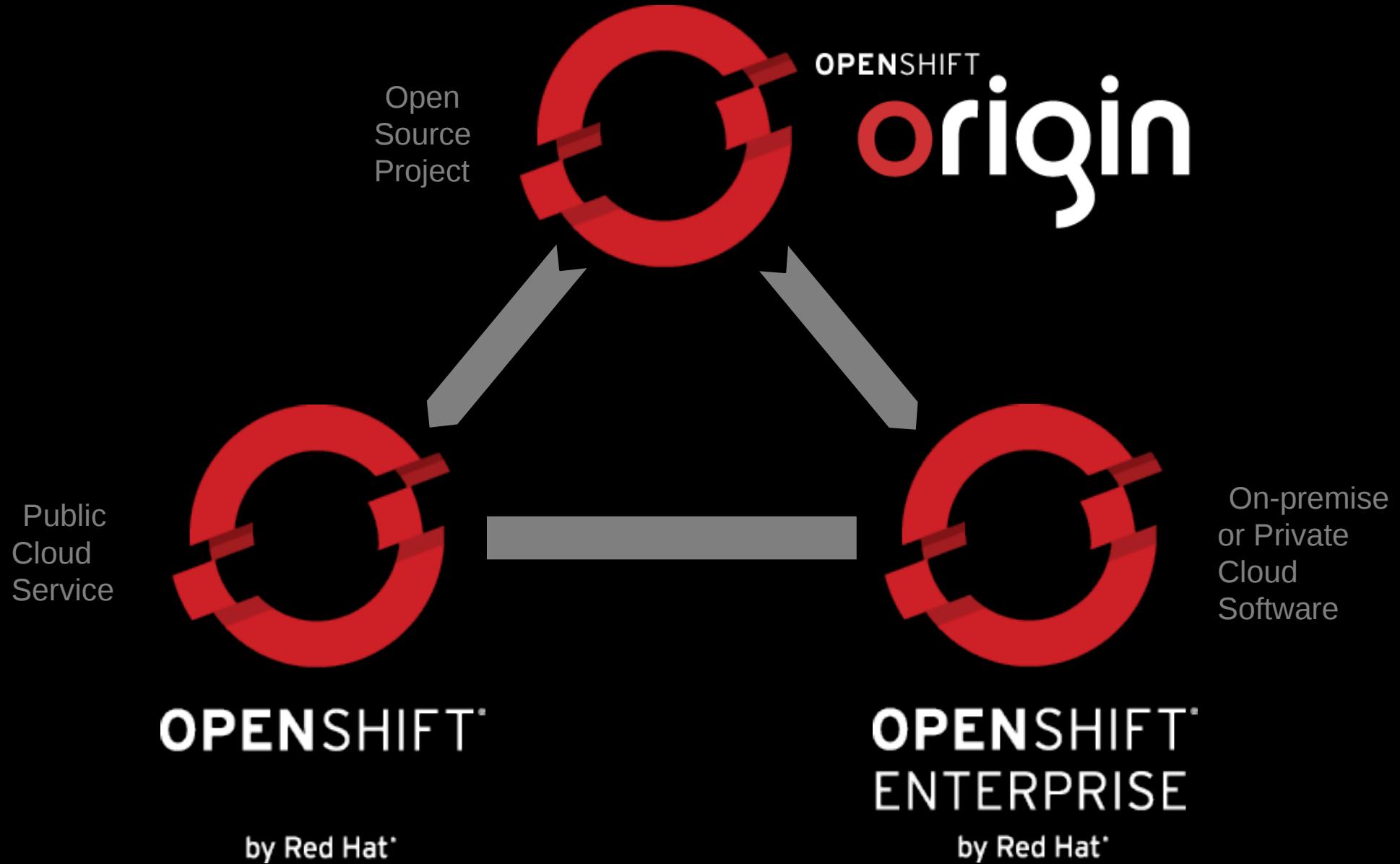


# #S

## Last Month Stats

- 690,000,000 pages served by all apps
- 180,000,000 gear hours
- 13,213,440 IaaS minutes consumed
- 8,000,000 user actions
- 96,000 application updates
- 1000 new applications per day

# The Triangle: Open Hybrid Cloud





The Summit 2013 Big Announcement:



We are  
**OPEN**  
For Business  
[OpenShift.com](http://OpenShift.com)



Base Plan

**FREE**



Go Pro Starting at

**\$20**



High Scale  
Red Hat World Class Support  
Premium Services



OpenShift.com is cool,  
but I have to stay inside the firewall...



To the rescue...

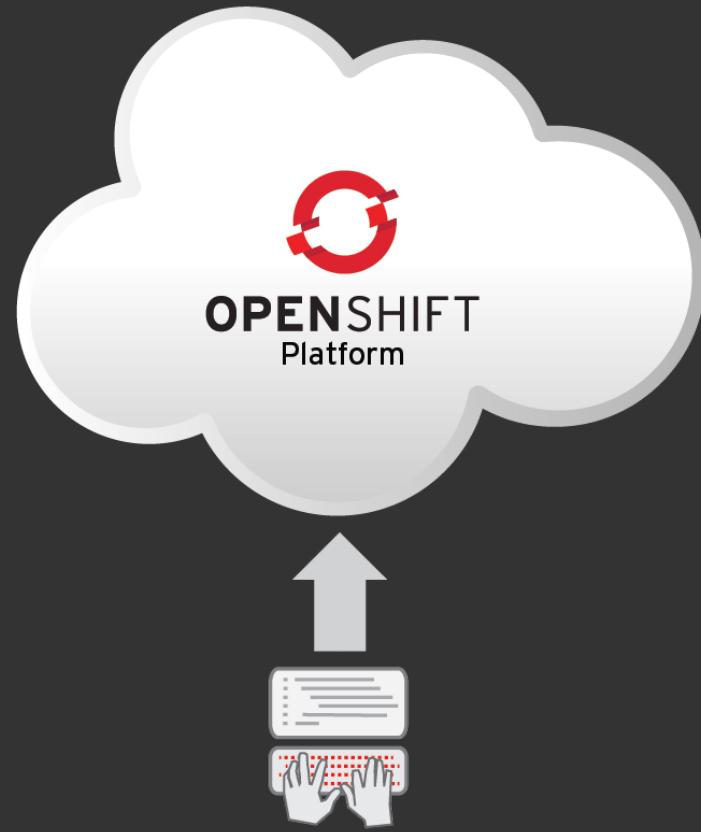


**OPENSHIFT<sup>®</sup>**  
**ENTERPRISE**

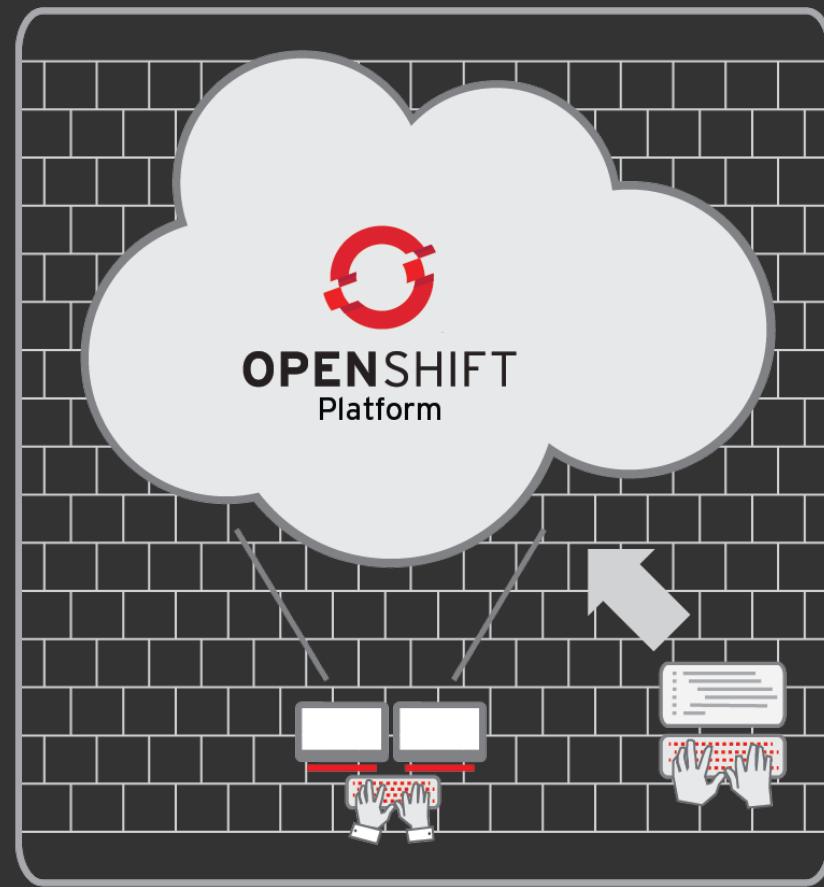
by Red Hat<sup>®</sup>



## Your Choice: Online, On-premises, or Hybrid

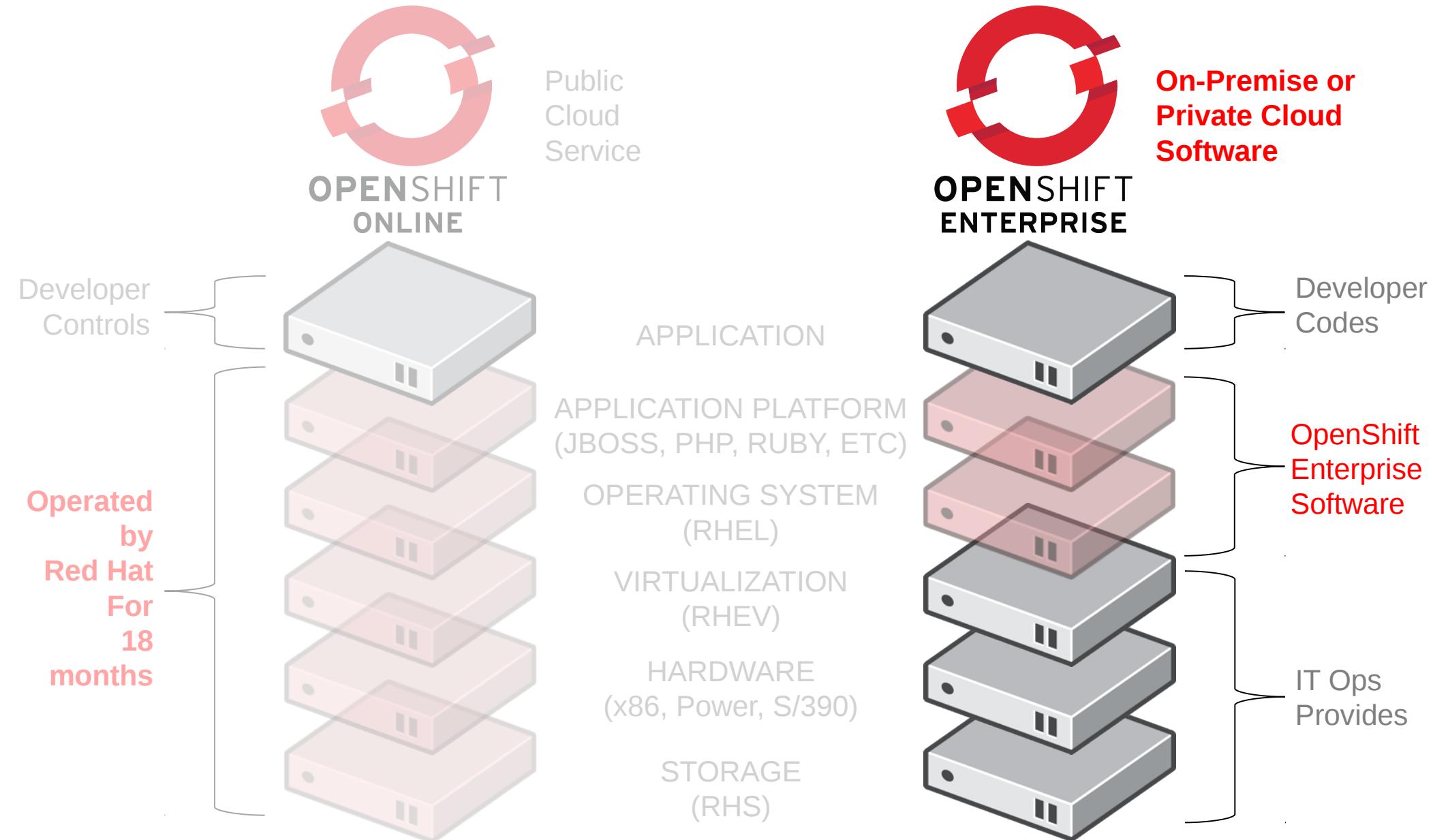


OpenShift OnLine



OpenShift Enterprise

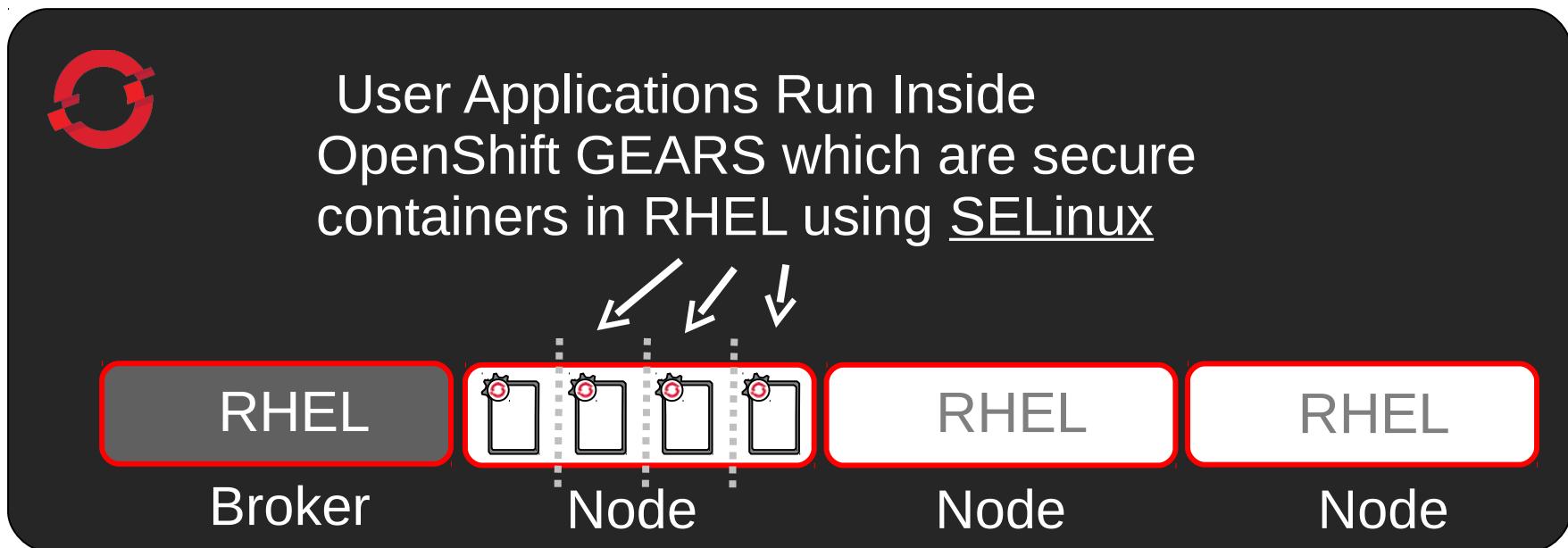
# OpenShift Enterprise: Run your on PaaS on any Infrastructure



# OpenShift ENTERPRISE

## Multitenant within RHEL

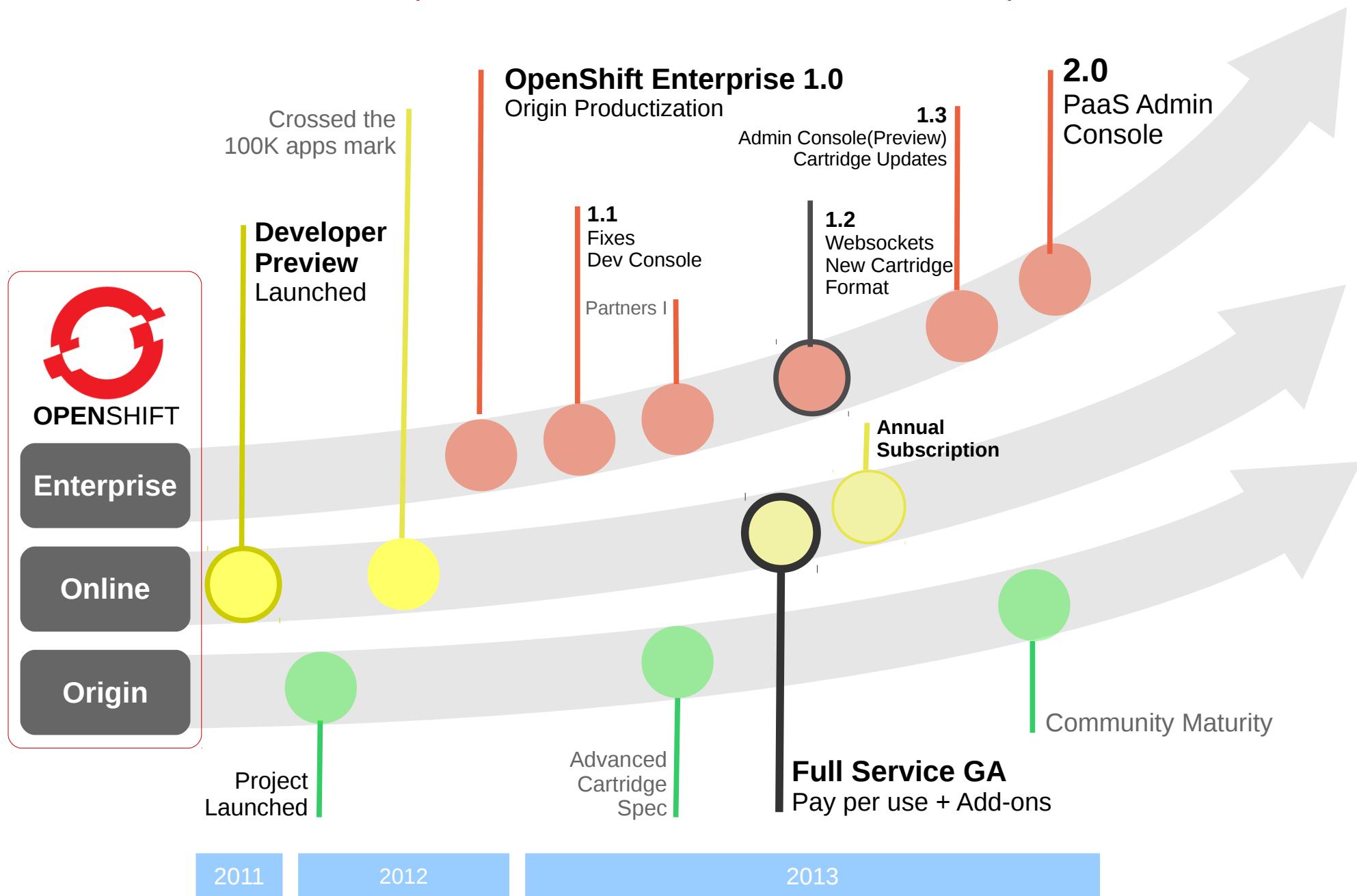
### High Security and High Density with SELinux



AWS / CloudForms / OpenStack / Any VIRT Hyper-visor / Bare Metal

Now a window into the Future...

# OpenShift CY2011-2013 Roadmap



# Thinking Ahead...

- More and Newer Cartridges
- Uplift even more the dev experience for Java and the other stacks
- Go Wider and Deeper in JBoss Middleware Portfolio Integration
- More Modular and Plug-and-Play Topology
- More App-Level and Platform-Level Visibility and Control
- More Scalability Options in the Data Layer
- More Tools for Continuous Delivery, CI, and ALCM
- Stronger Open Source Community and Partner Ecosystem
- Tighter integration with OpenStack



# OpenShift.com

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