

**RED HAT**  
**SUMMIT**

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# Red Hat CloudForms: Road Map

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## *Disclaimer*

This information is provided for discussion purposes only and is subject to change for any or no reason.



# About Me

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# Agenda

- Introduction
- Release Schedule
- Focus Areas
- **Business Use Cases**
- **Security and Accessibility**
- Futures – Next Release + 1
- ManageIQ Upstream
- Summary

**//CODiE//**  
2015 SIIA CODiE WINNER

Intelligence Server Virtualization  
**BEST OF vmworld 2014**  
Exclusive Media Partner  
**Finalist Award**  
Private Cloud Computing Technologies

> SearchServerVirtualization TechTarget  
**BEST OF VMWORLD 2012**  
Exclusive Media Partner  
**Finalist Award**  
Private Cloud Computing Technologies

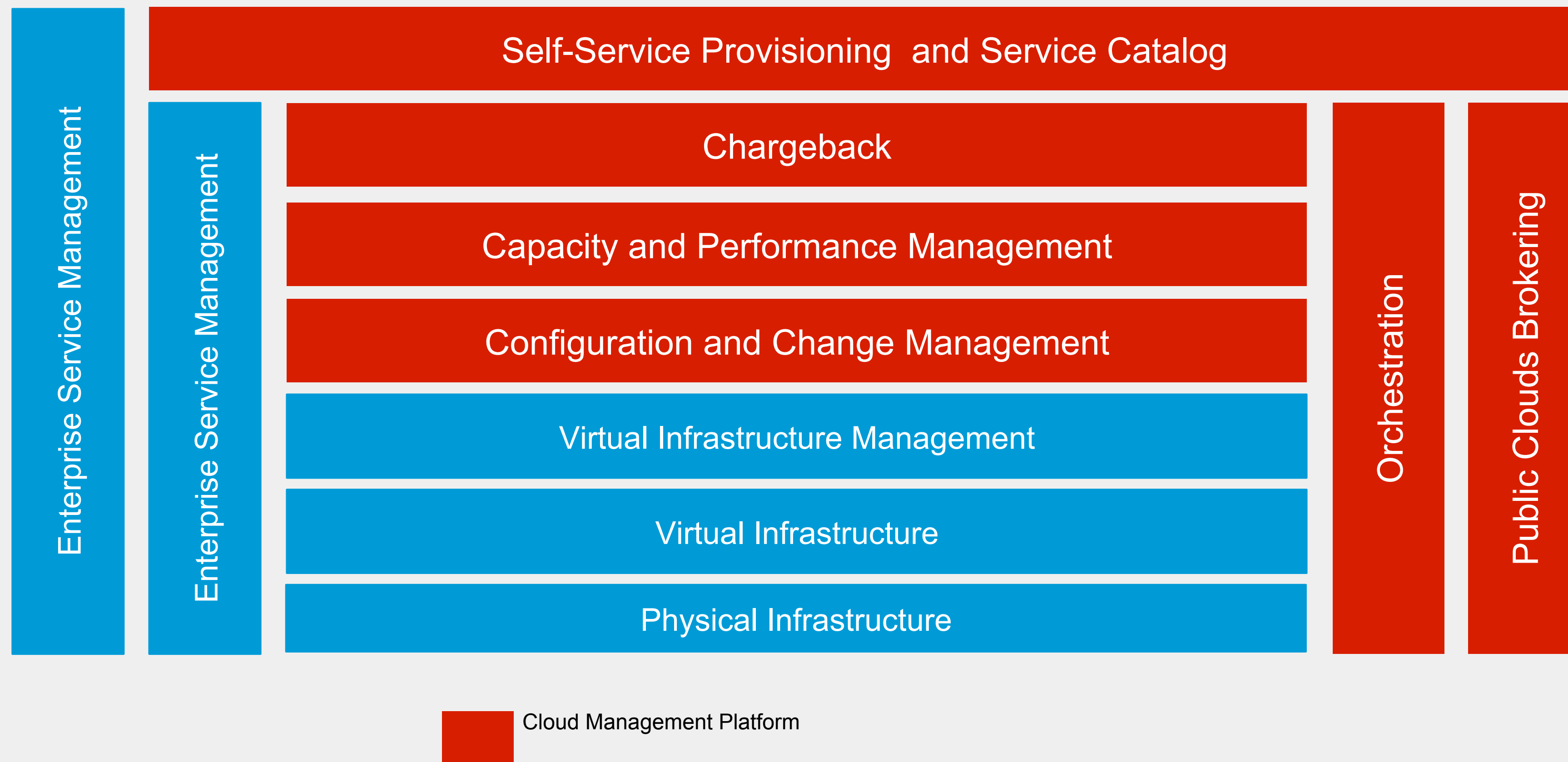


# Mission

To be the global leader in  
**Open Source  
Cloud Management**



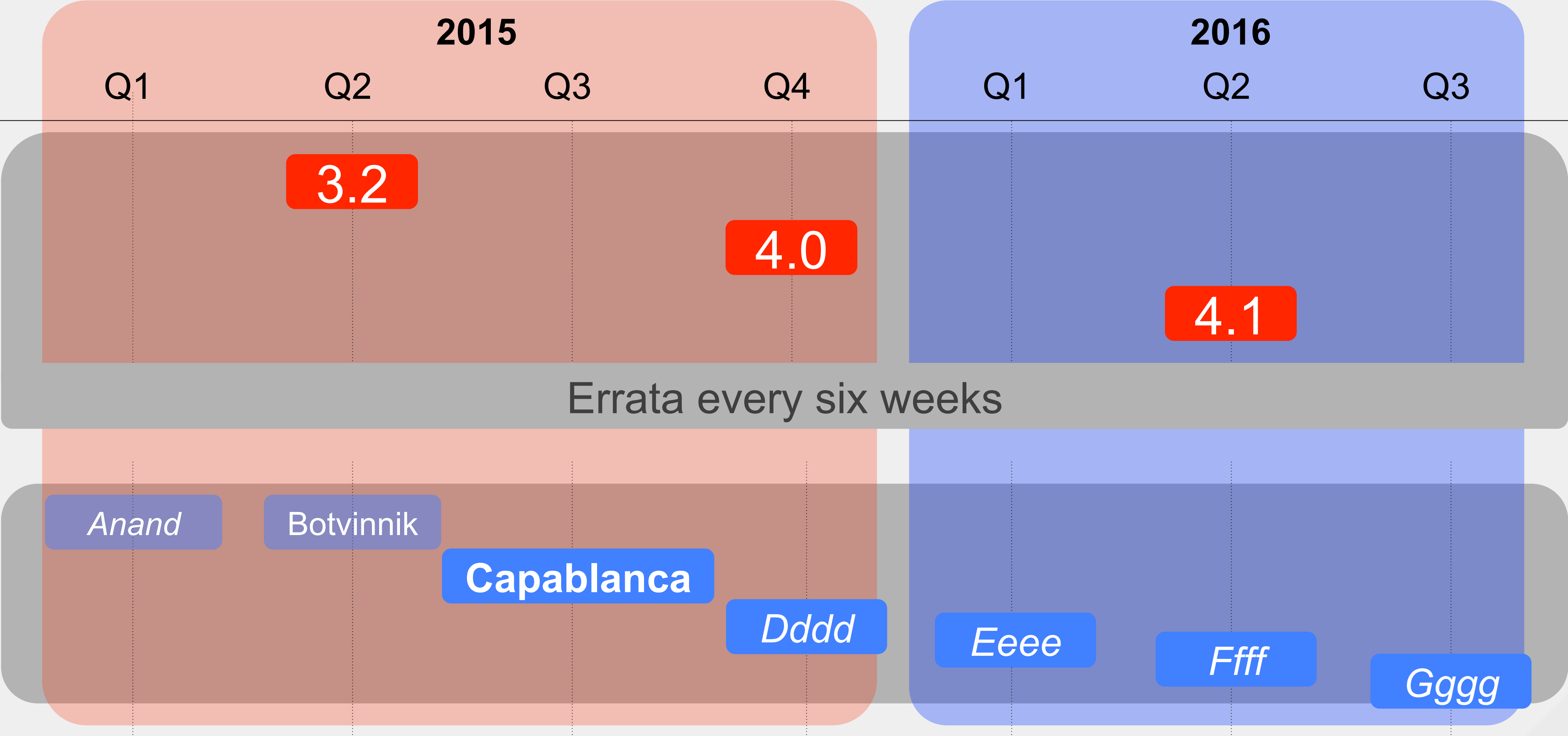
# GARTNER: IAAS REFERENCE ARCHITECTURE AND CMPS



Source: Gartner (July 2012)



# Release Schedule



**Note :** Red Hat CloudForms may NOT align directly to a ManageIQ release of the same month/quarter.  
**Note :** Red Hat CloudForms version numbering is guidance only.



# Now



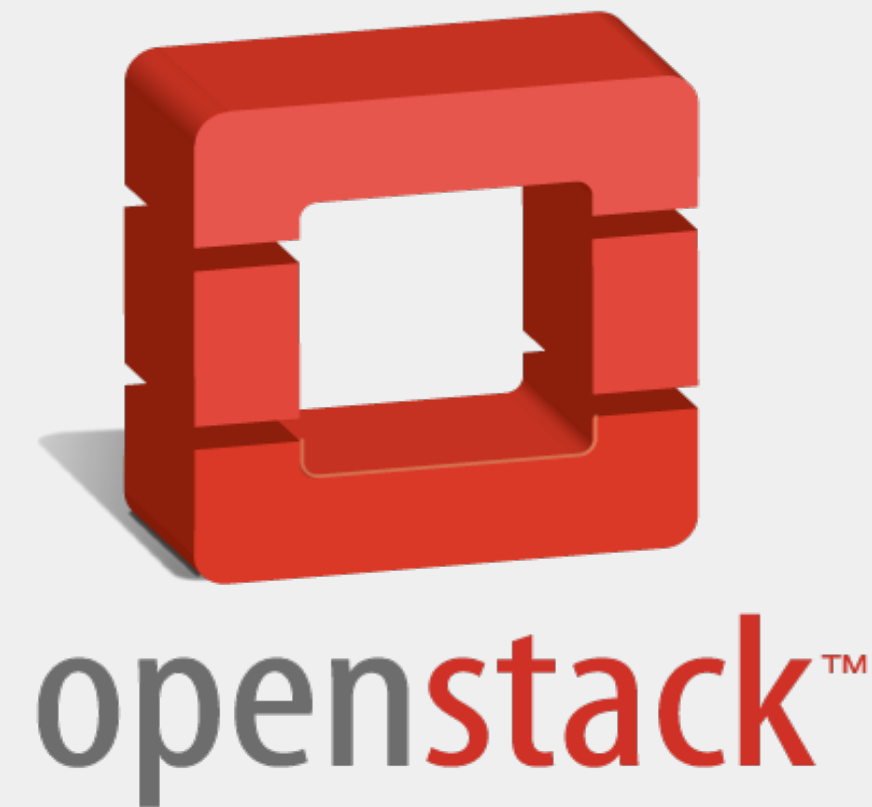
## 3.2 Focus Areas

3.2

1. **Providers** – Building on pluggable providers, adding **3** new providers to this release.
2. **Orchestration** – Discover and Deploy HEAT/CloudFormations templates, auto scale compute infrastructure. Enterprise integrations.
3. **Bare-metal** – Discover, Deploy, Manage and Scale bare metal systems.
4. **i18N** – Factoring code to support localization. **Japanese UI support.**
5. **IPv6** – Native support to be hosted in an IPv6 environment.

## 3.2 Business Use Cases (Providers)

3.2



- **Red Hat OpenStack** – Best of breed OpenStack management, delivering inventory, smart state, eventing and auto scaling of compute infrastructure allowing customers to manage capacity, provision on demand and report against their OpenStack infrastructure. This delivers mature virtual infrastructure management for OpenStack, enabling customers to take OpenStack to production.
- **OpenStack HEAT** – Commercial Off The Shelf application template management, accelerating and simplifying application delivery through a Self Service Catalog.



## 3.2 Business Use Cases (Providers)

3.2



- **Red Hat Satellite 6** – Best of breed Red Hat Enterprise Linux management. True Heterogeneous, managing both virtual machines and bare metal systems in a single pane glass view. Supporting provisioning of common major hardware platforms like IBM, HP and Dell.



- **Microsoft SCVMM** – The 2<sup>nd</sup> installment of features for Microsoft's Management server for HyperV virtualization platform. We have extended the management capabilities so to enable customers to holistically manage their Microsoft platform to the same degree that VMware has support in CloudForms.

## 3.2 Business Use Cases (Operations)

3.2

- **IPv6** support for discovery and appliance hosting. *Industry adoption.*
- Re-use Off the Shelf orchestration templates that are tried and tested in **Amazon EC2** or **OpenStack**. Removes lengthy authoring of common stacks saving time and effort. Support for both **HEAT** and **CLOUDFORMATIONS** templates styles for *increased reusability*.
- Internationalizing of the product. A first pass towards I10N capability. Included in this release will be UI translation to **Japanese**.
- Integration with **AWS:config**, a real-time event bus that CloudForms receives notification to common tasks being performed in **AWS:ec2**. This means you can apply policy, validate and automate **AWS:ec2** common events. Such as updating your corporate CMDB, create routes to your network, change ELB configs etc.



# 3.2 Security & Accessibility

3.2

- The introduction of a new viewer for console access. This will remove the bespoke vendor implementations with a unified HTML5 noVNC & SPICE based integration. Support for VMware, RHEV and OpenStack.
- Faster, Easier and Scalable *Provider* onboarding. The ability to add a new providers to the product. Architecture work is underway to maintain support for yesterdays Virtual Infrastructures as well as moving forward with top of class support for Clouds and Containers.
- Hardening of the CloudForms platform to support the STIG advisories (Security Technical Implementation Guide). Many government security standards share a common framework, such as STIG.

# 3.2 Summary

3.2

***One Stop Shop*** – Red Hat Management

**Hybrid Management** – Extend into non Red Hat environments

**Additional Providers** – Scale adoption



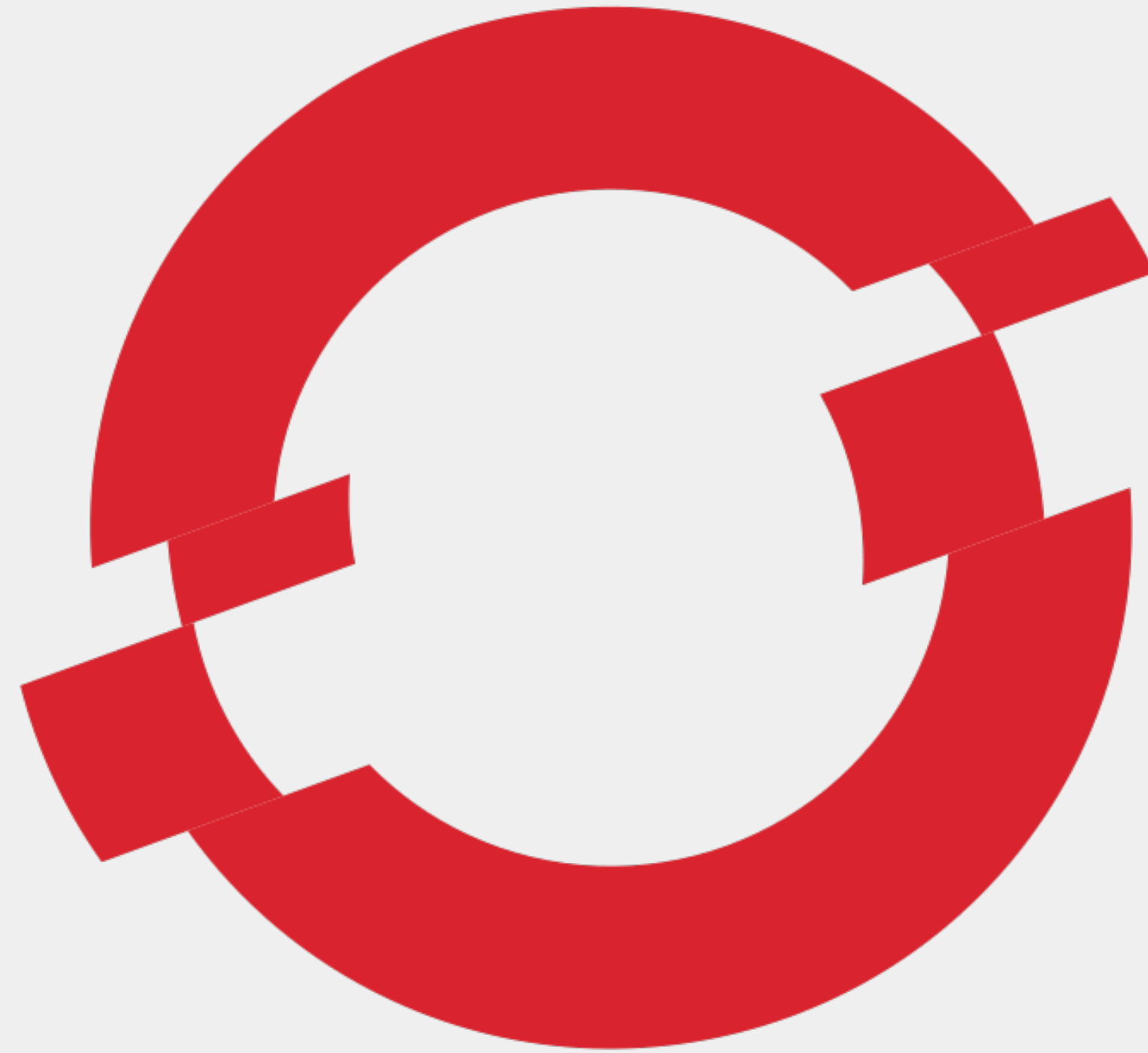
# Futures

**More Providers**  
**Core Platform**  
**Tenancy**  
**UX**  
**Framework**

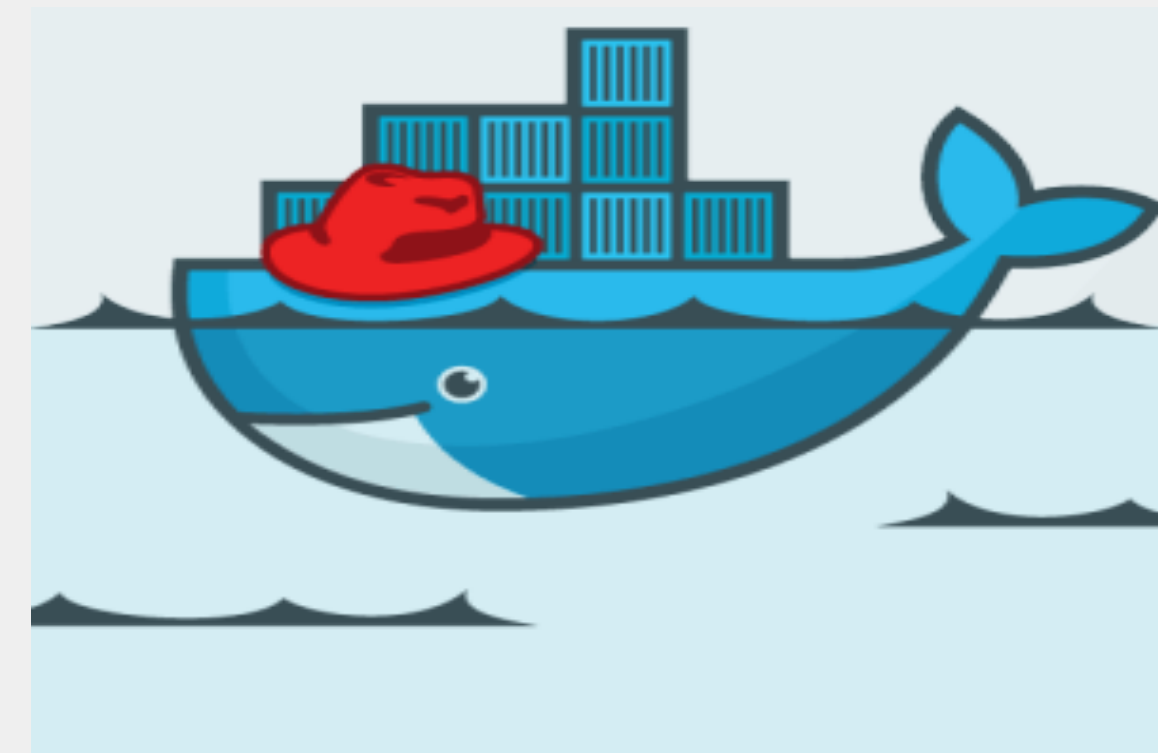


# 4.0 OpenShift v3 – Containers

4+



# OPENSHIFT



# 4.0 Technical Details – Containers XaaS/PaaS

4+

## Operations Infrastructure Dashboard

- Heat Maps – Utilization of Nodes for CPU, Memory, Storage and Network.
- Provider, Nodes, Pods, Services and Projects.
- OpenShift v3 & Kubernetes.
- Time lines activity, Creation & Deletion.





## 4.0 Technical Details – Containers XaaS/PaaS

4+

**Data = Possibilities**

**Alerts, Events, Real-Time Performance**

**Scale Out**

**Scale Up**



# 4.0 Focus Areas – Rails 4.x

4.0





# 4.0 Focus Areas – Rails 4.x

4.0

*“Secure, Supported, Faster application platform for CloudForms”*

## Why Rails 4?

- **Increased Performance** – Better business response.
- **Reduced Memory Usage** – Lower footprint cost.
- **Latest/Greatest Ruby** – Increased interpreter features.
- **Upstream Bug Support** – Enlarging community contribution.
- **Upstream Security Support** – Dependable and Secure.
- **Eliminates Custom Patches** – Reduced maintenance.

## CloudForms Tenancy

Partitioning of Cloud Management Platform

**name.space**

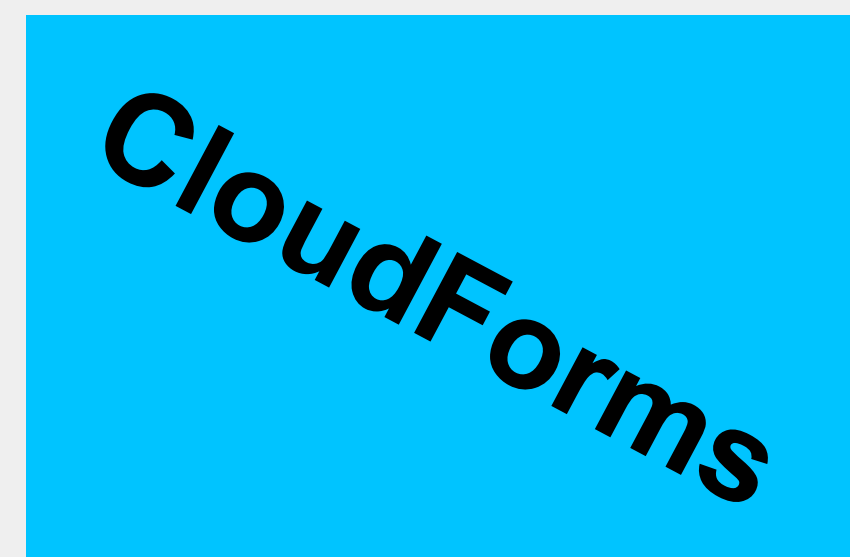
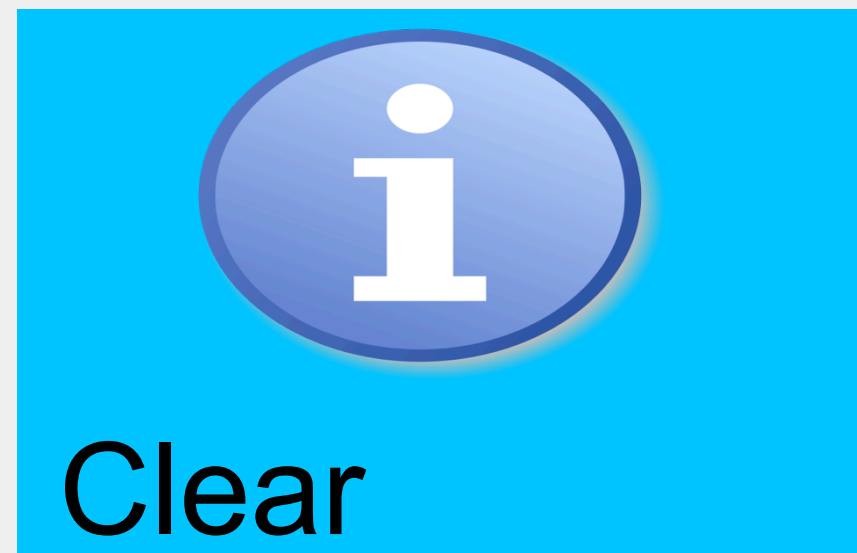
Branding



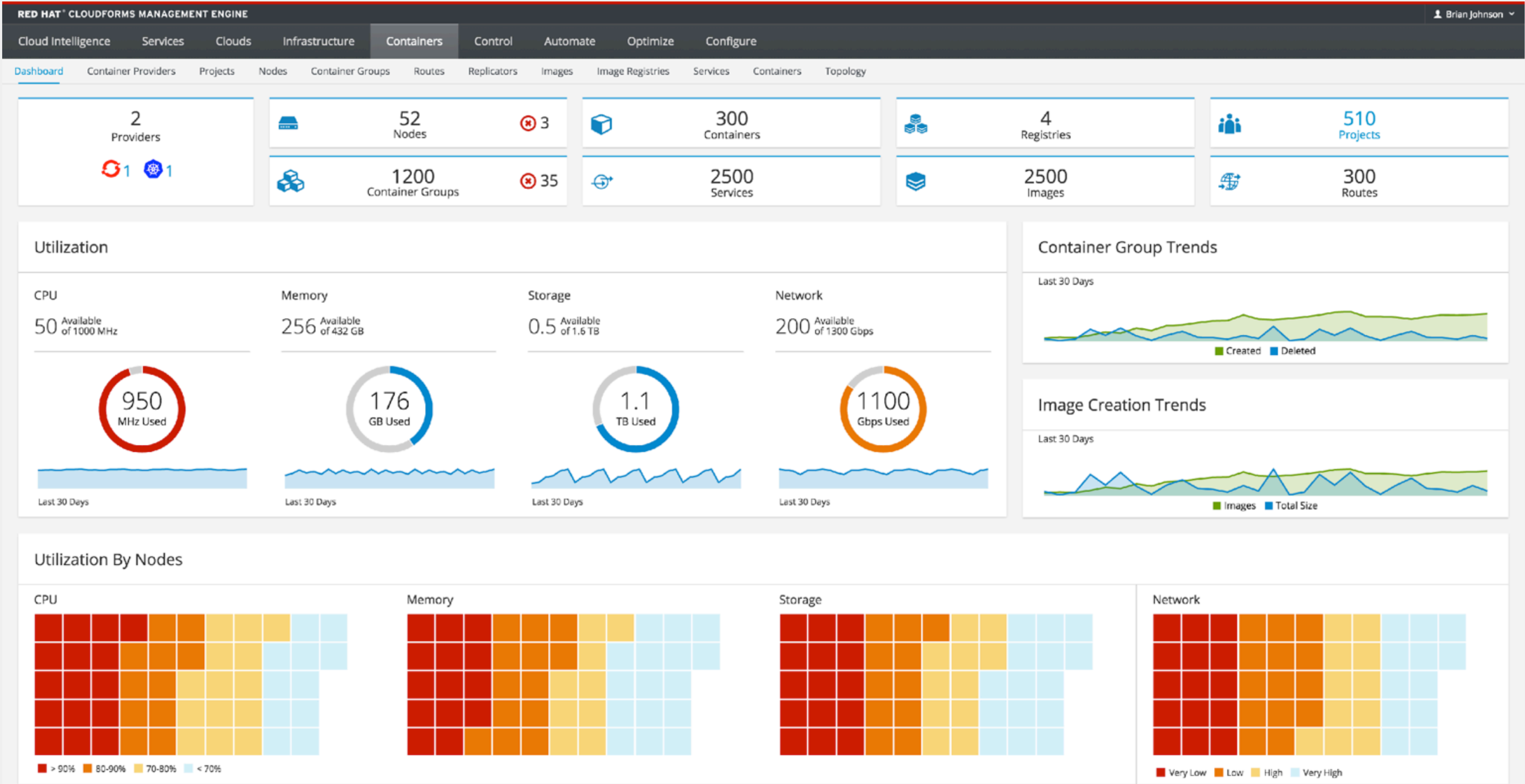
**Authentication**



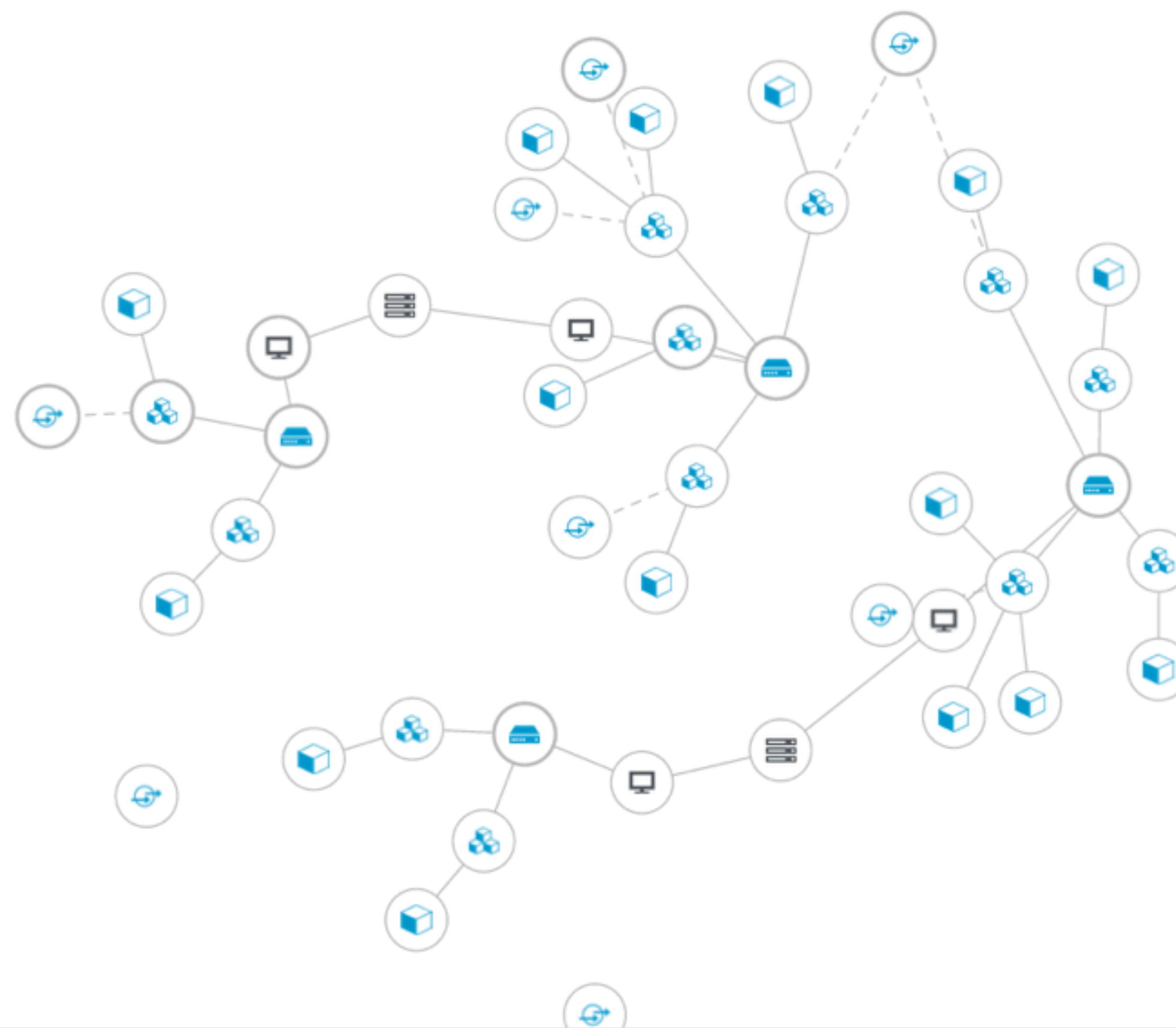
## A new Self Service portal for the Consumer User



# Best of Breed

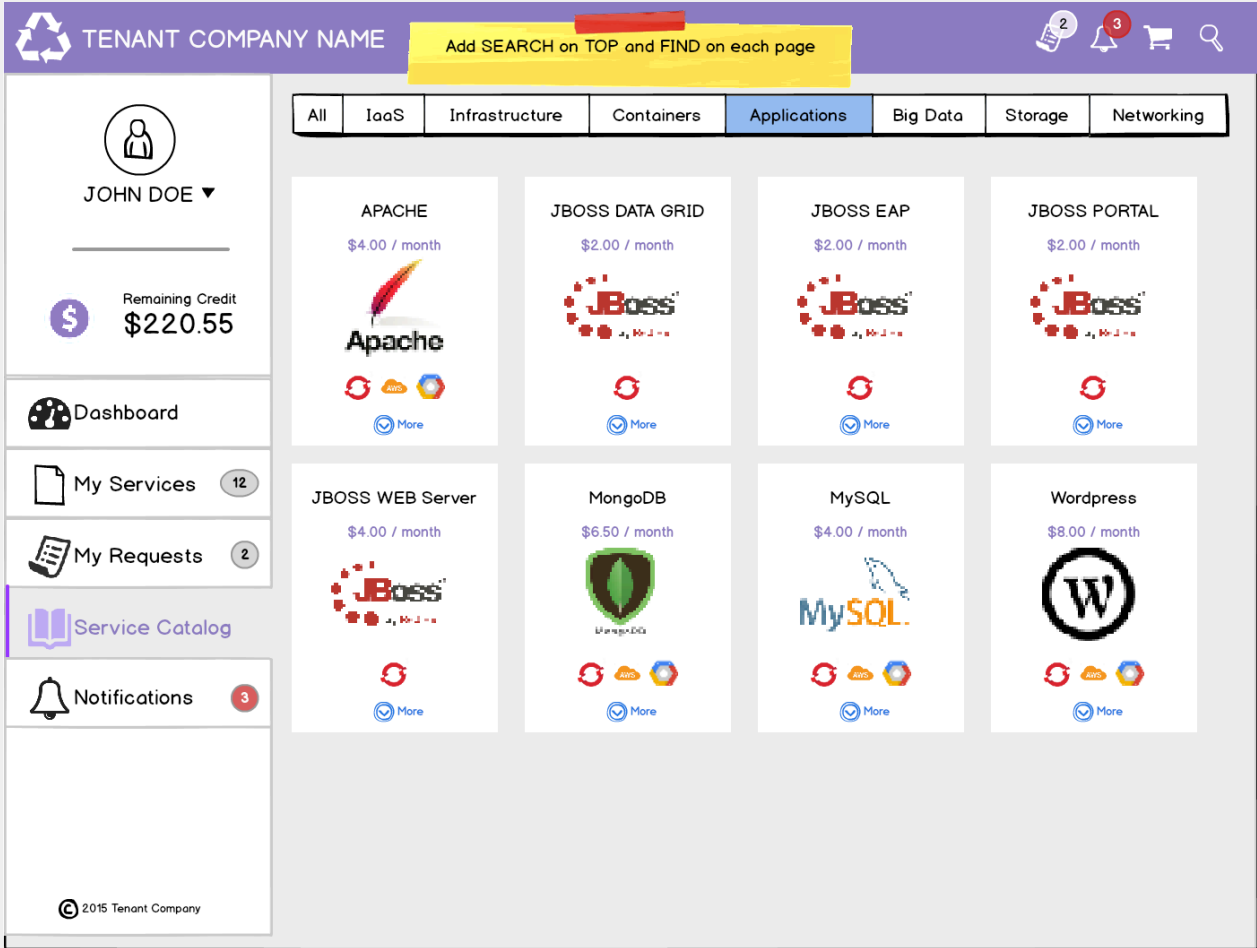
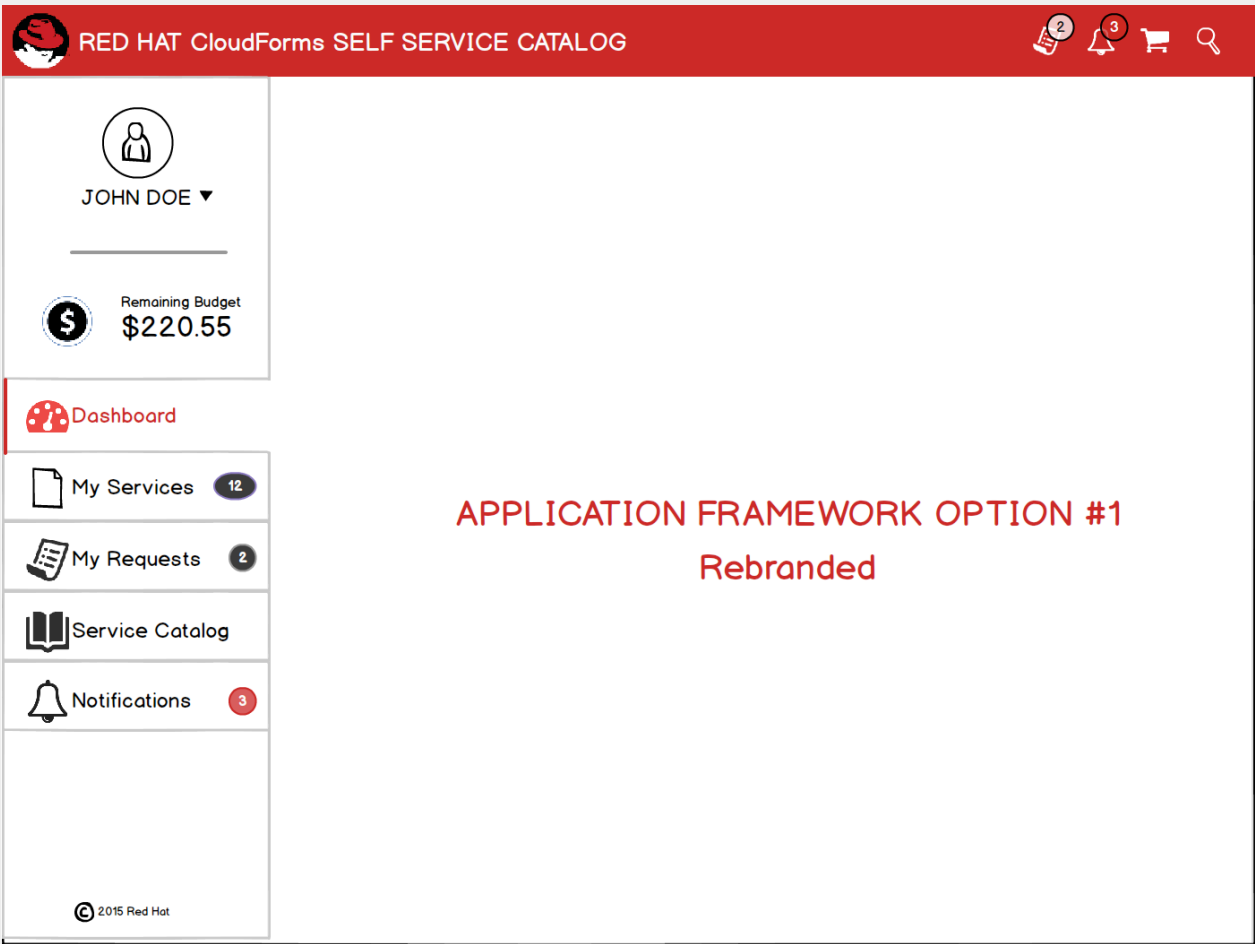
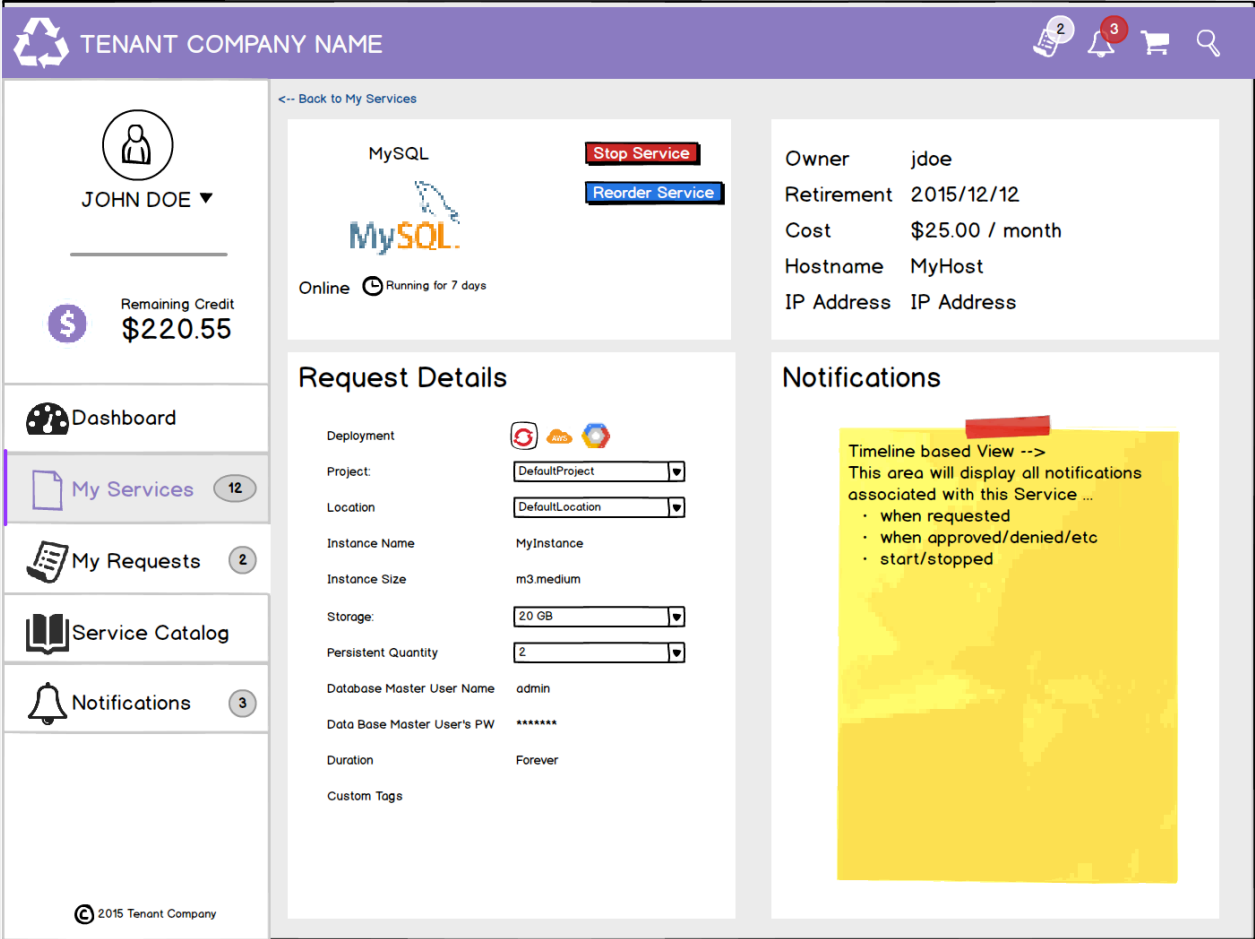
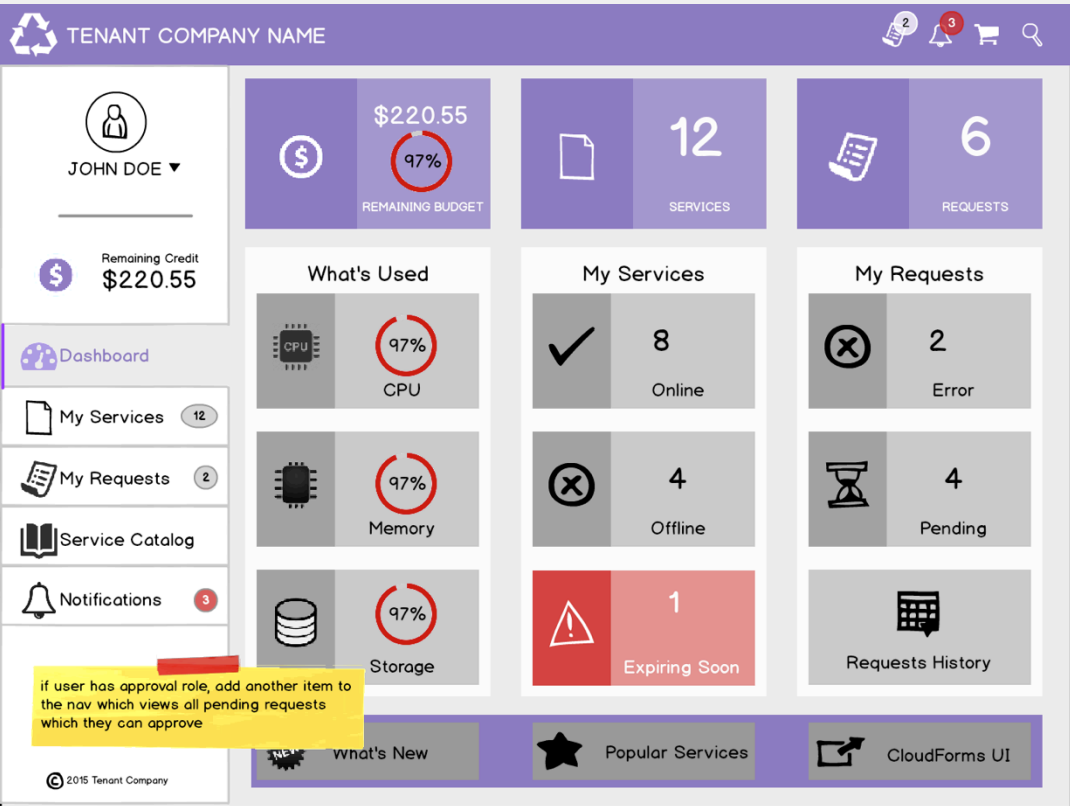






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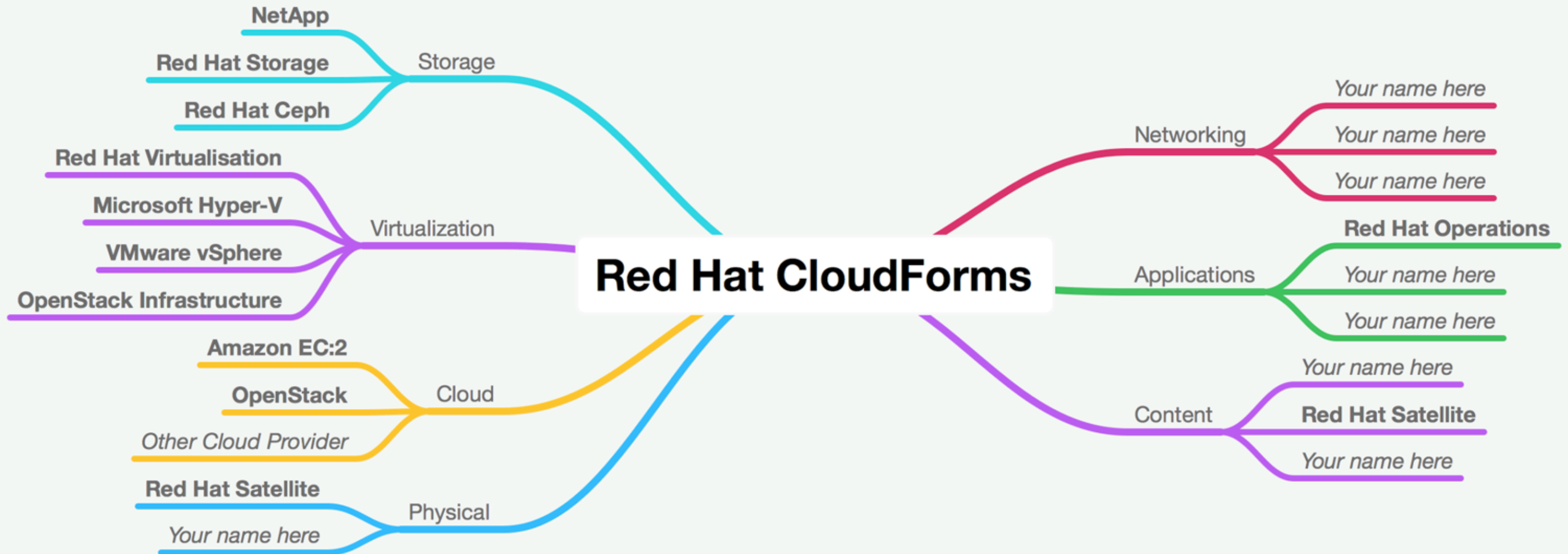
# Consumers





# Providers – Framework

4+



## Talks:

- Wed, 4:50pm, Room 313 - [OpenStack infrastructure management with Red Hat CloudForms](#)
- Thu, 10:40am Room 312 - [Container Management at Red Hat](#)
- **Thu, 2:30pm, Room 206** - [Red Hat CloudForms roadmap](#)
- Fri, 11:00am, Room 313 - [Cloud automation: Migrating 1000+ servers from vCloud to OpenStack](#)

## Other:

- Tue-Thu, Exhibition Floor - [CloudForms and Hybrid Cloud Management Pods](#)
- Thu, 4:00pm, Sheraton Boston - [ManageIQ birds of a feather Session](#)



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