





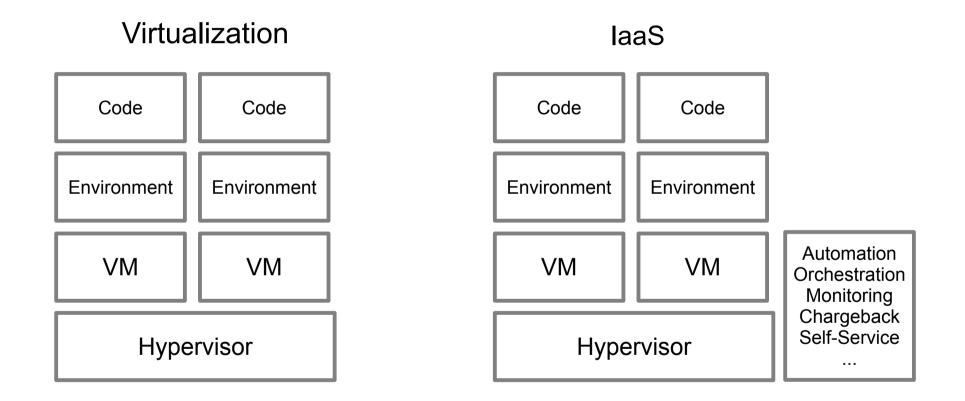
Deploying OpenShift with CloudForms @jameslabocki







### We All Know This ...

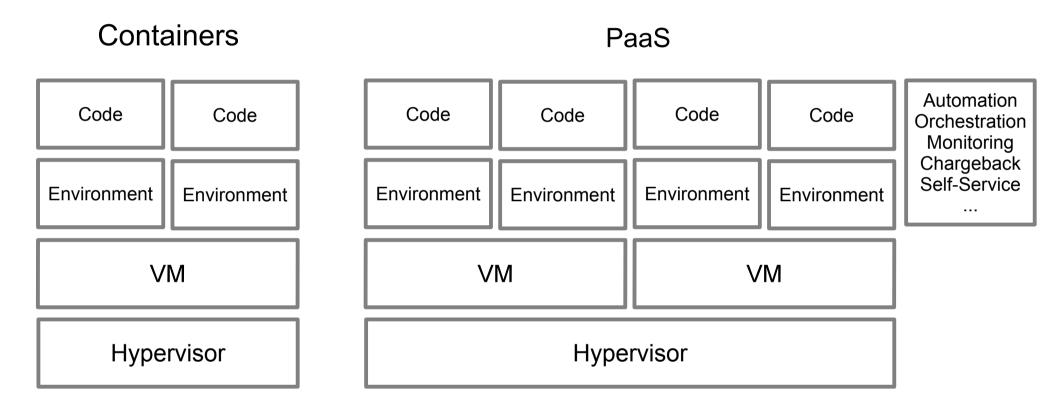








### ... But Does This Look Familiar?



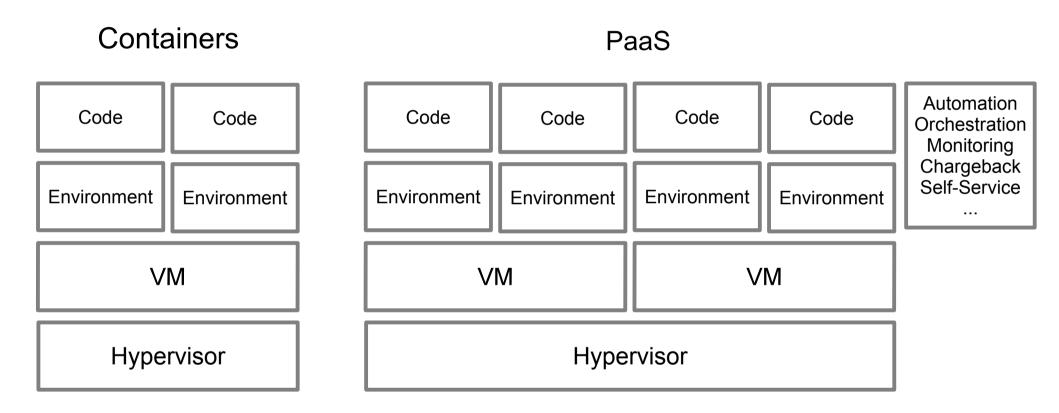




CELEBRATING

PEARS of OPEN

### ... But Does This Look Familiar?



The Operating System is the new Hypervisor
The Container is the new Virtual Machine
Greater Density and More Control







### It's NOT an EITHER/OR it's BOTH

#### IAAS AND PAAS ARE CONVERGING

### laaS

- VMs, storage, VLANs
- Automated operations
- VM library
  - Abstracted services
  - Complex workload deployment

## laaS+

- VM deployment
- App services
- Developer services
- APIs

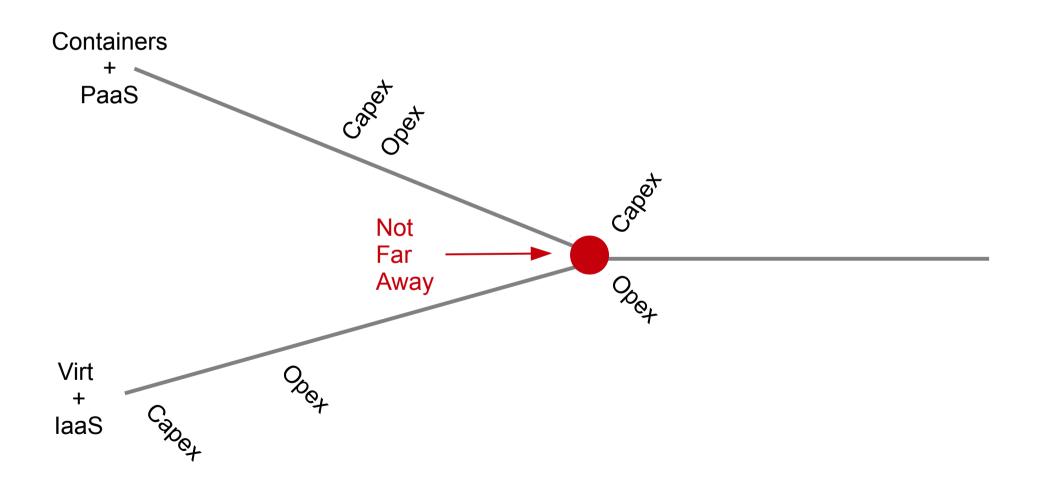
### PaaS

- Application container(s)
- App life-cycle mgmt.
- Development tools
- Transparency to the laaS layer below





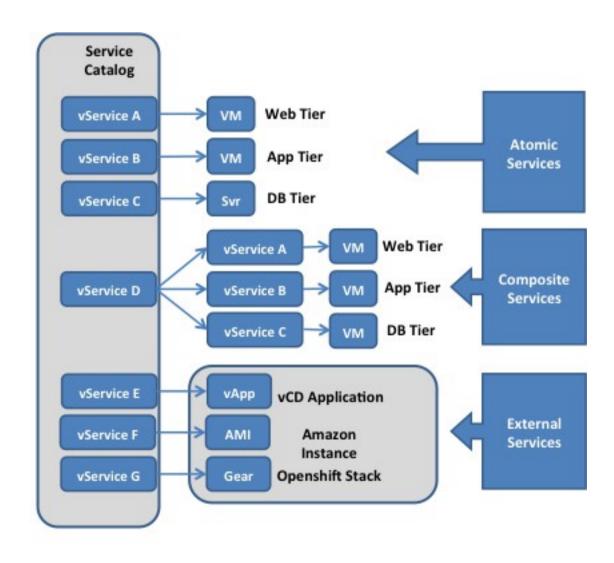
## Efficiency







## **Application Stacks Without Boundaries**



### New and Changing Roles

### **Integration Architects**

Integrating physical, virtual, private cloud, and external service providers.

### **Cloud Service Designer**

Identify and Qualify workloads and maintain them in a catalog.

### **Service Assurance Managers**

Holistic view of quality of service between platforms.







## Who is asking?

- Retailer
- Financial Services
- Healthcare Provider
- Universities
- Red Hat Partners

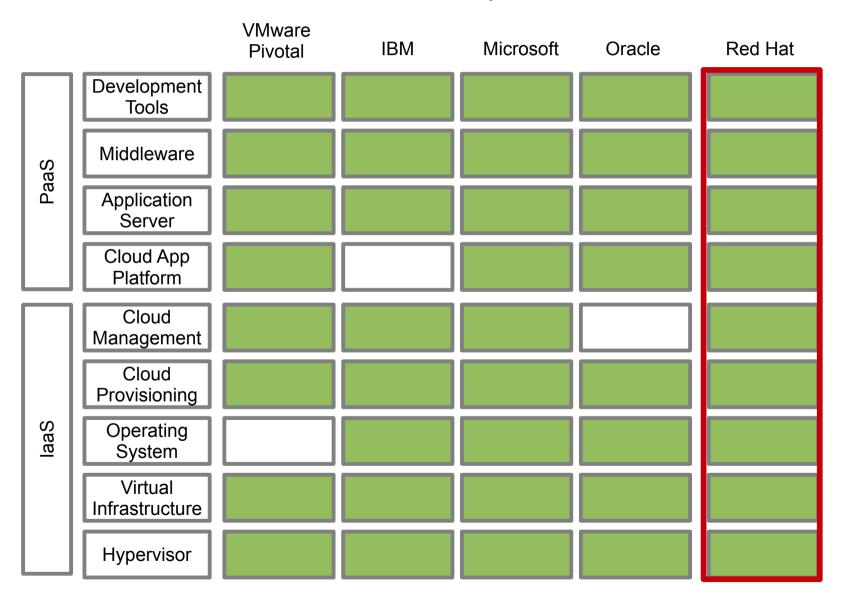




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### The Landscape



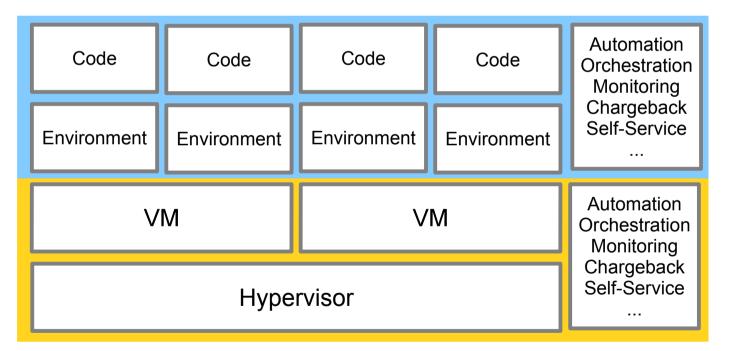
Red Hat has the pieces .... we need to assemble them!





## Red Hat's Opportunity

### IaaS + PaaS

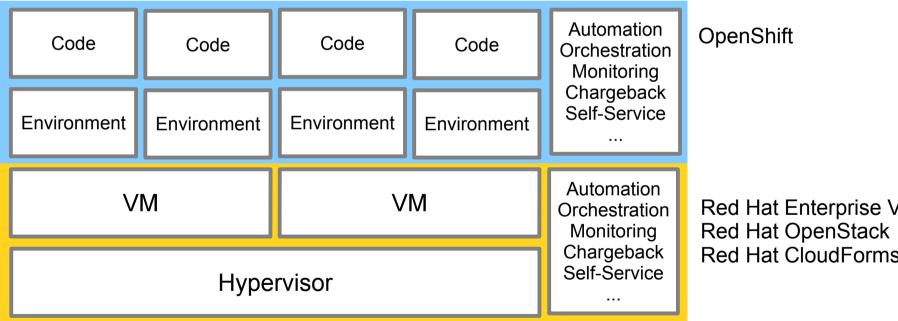






## Red Hat's Opportunity

### IaaS + PaaS



Red Hat Enterprise Virtualization Red Hat CloudForms

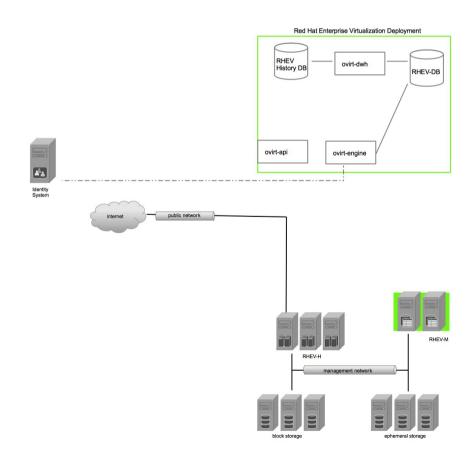


## Thanks For The Inspiration, But What About Today?

For Now, Let's Start with Something Simple ...

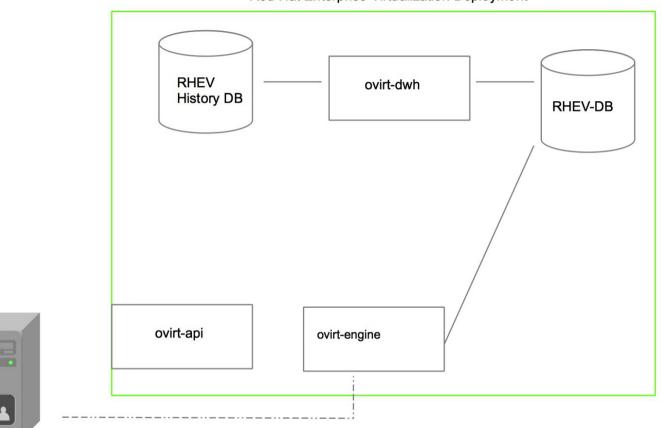
- Automated Deployment of OpenShift Infrastructure on RHEV, vSphere, or OpenStack
- Deploying OpenShift Applications from CloudForms
- Automatic Scaling of OpenShift Infrastructure

## Architecture (RHEV)



## Architecture (RHEV)

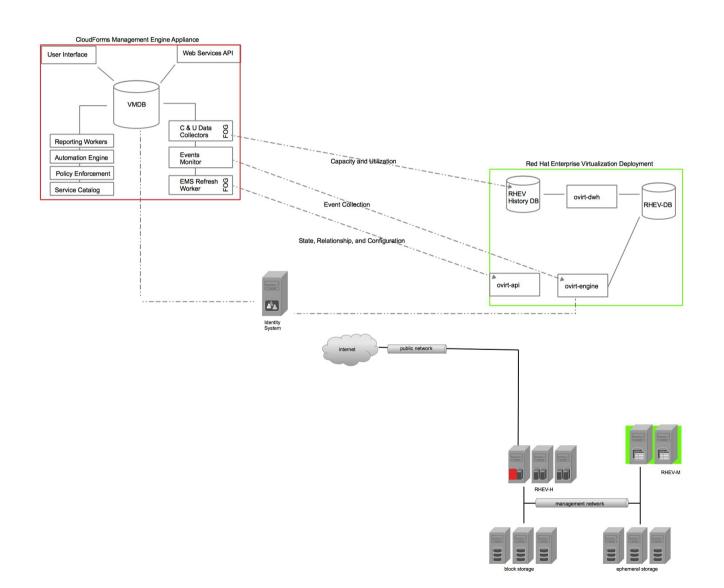
#### Red Hat Enterprise Virtualization Deployment



Line of the

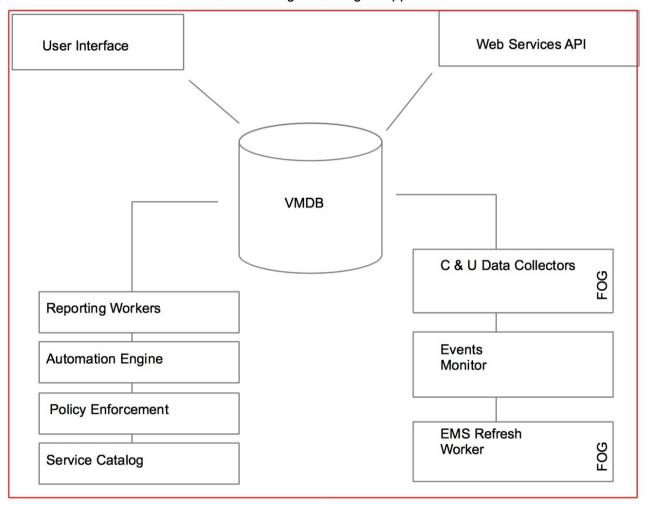
Identity System

## Architecture (RHEV+CloudForms)

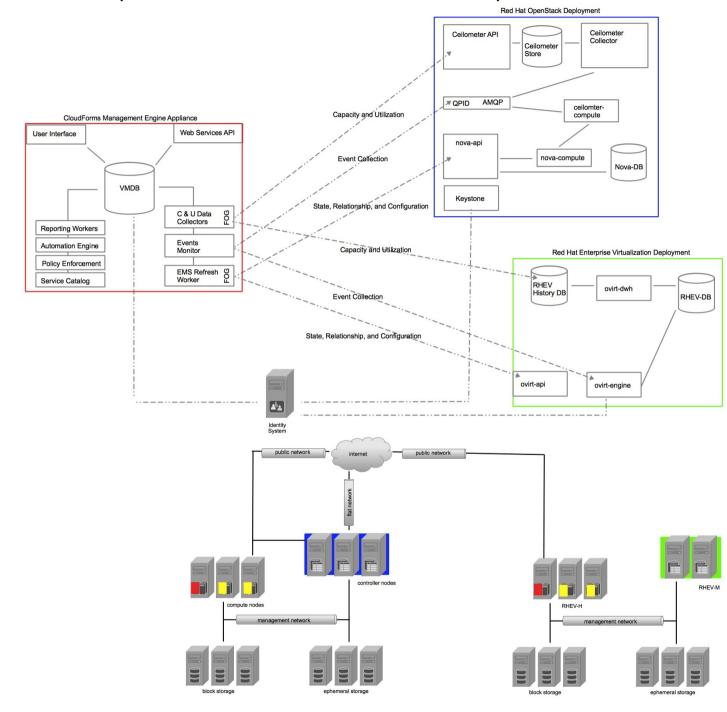


## Architecture (RHEV)

#### CloudForms Management Engine Appliance

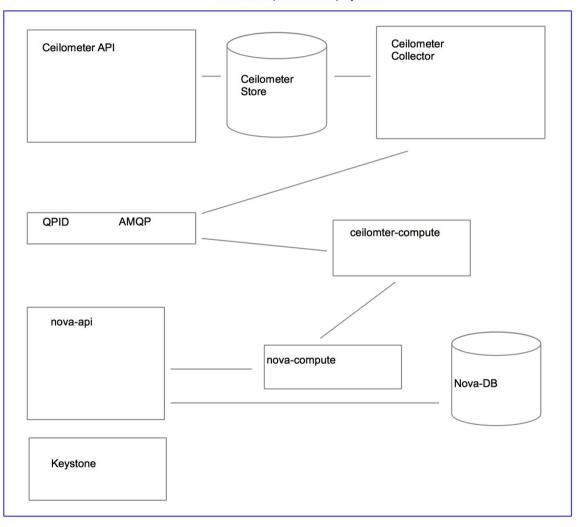


## Architecture (Red Hat Cloud Infrastructure)

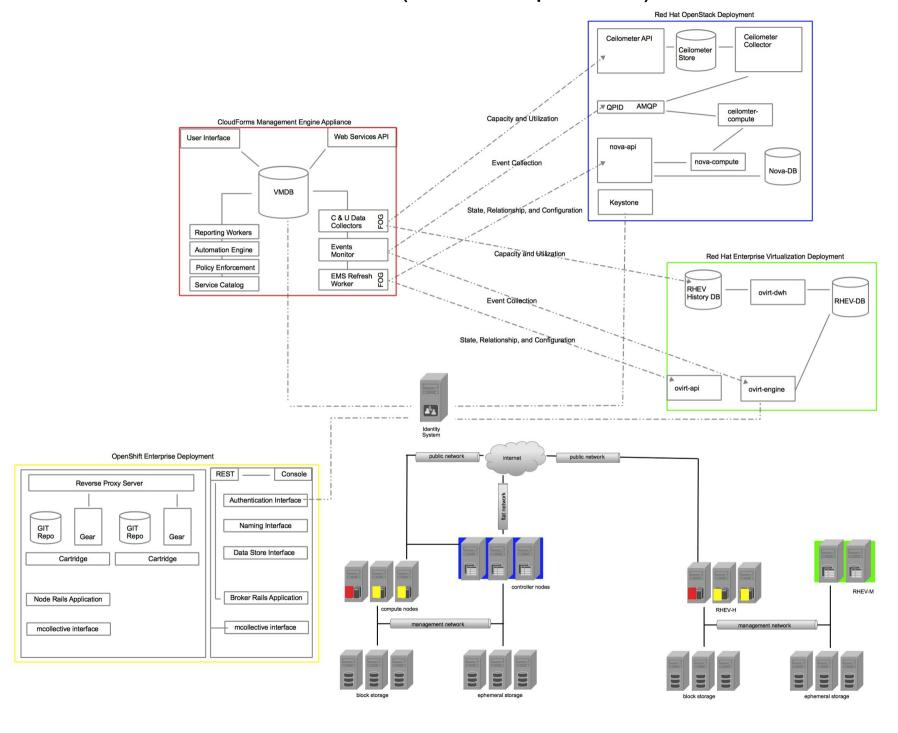


## Architecture (OpenStack)

Red Hat OpenStack Deployment

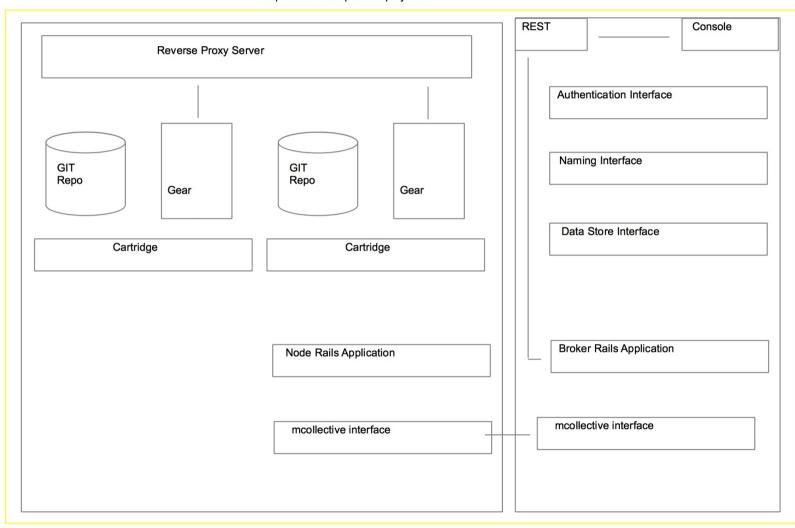


## Architecture (RHCI + OpenShift)



## Architecture (OpenShift)

#### OpenShift Enterprise Deployment

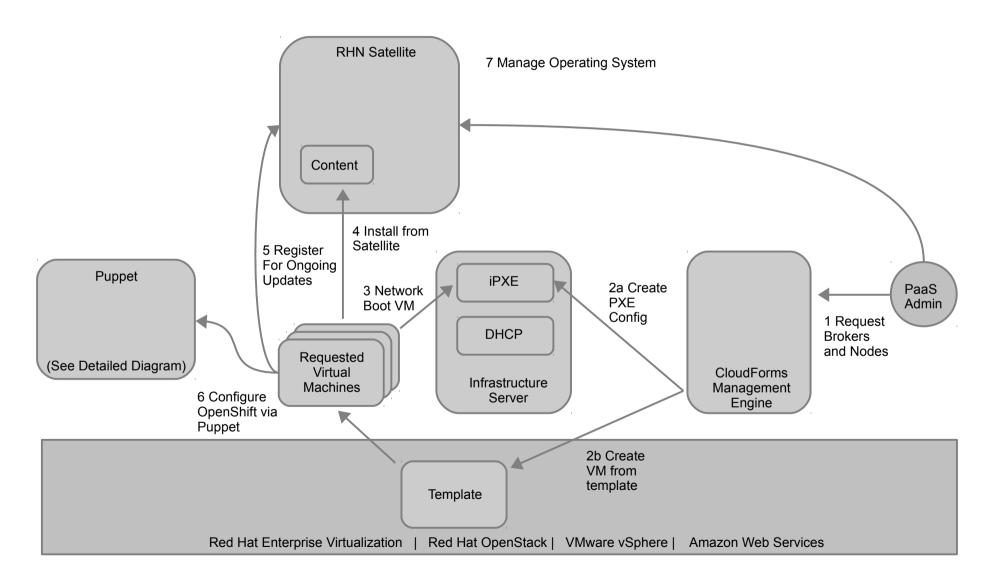




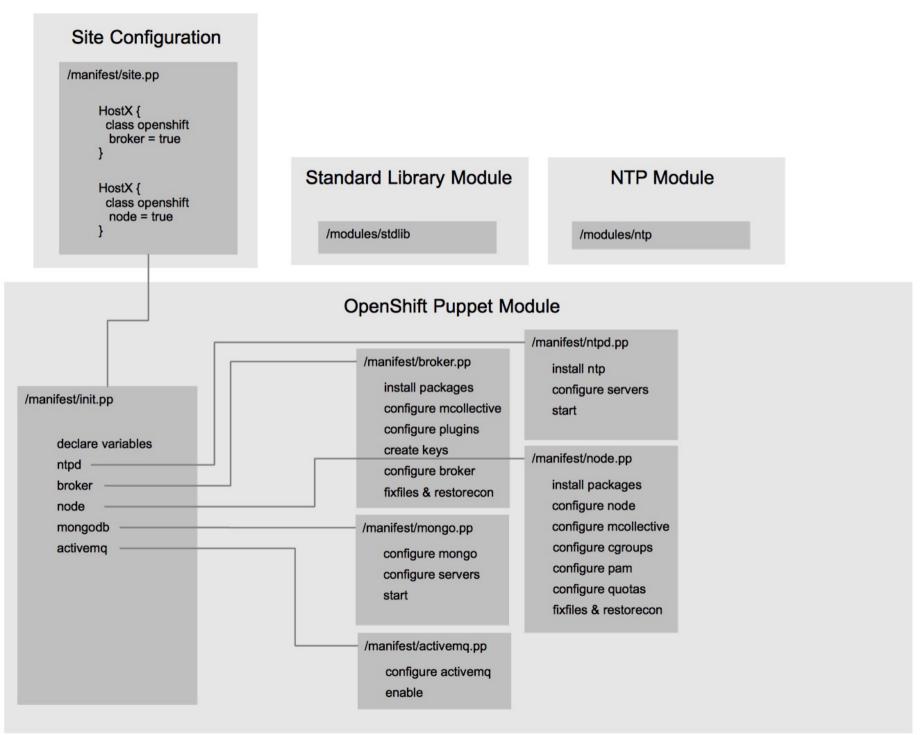




### Automated Deployment of OpenShift Infrastructure



## Automated Deployment of OpenShift Infrastructure









## Automated Deployment of OpenShift Infrastructure

**Demonstration** 



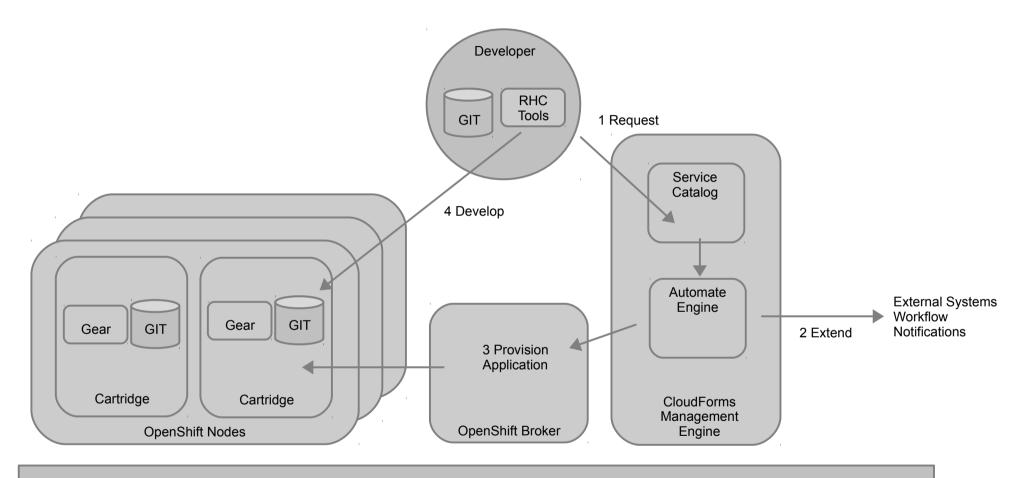


## Deploying OpenShift Applications from CloudForms

- Service Catalog Item
- Custom Dialog
- Automate Method



## Deploying OpenShift Applications from CloudForms



Red Hat Enterprise Virtualization | Red Hat OpenStack | VMware vSphere | Amazon Web Services







## Deploying OpenShift Applications from CloudForms

**Demonstration** 

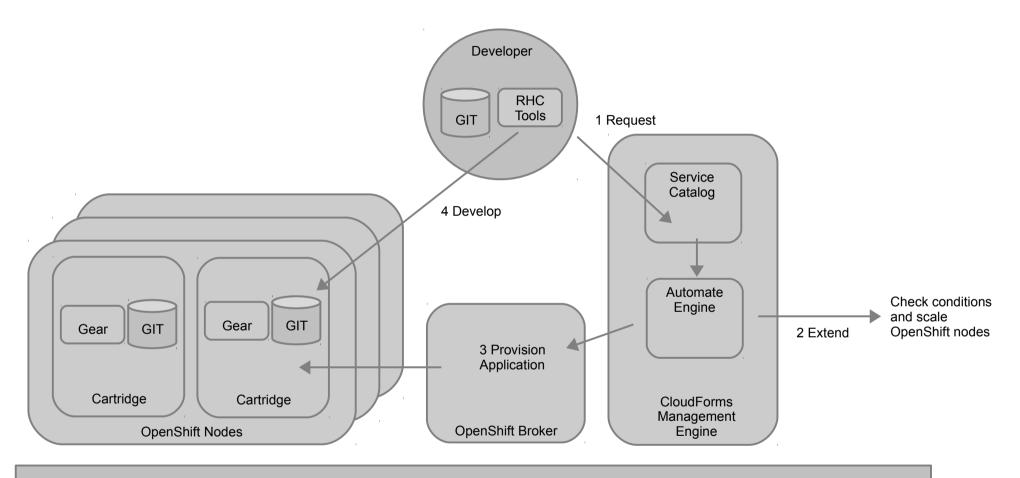


## Automatic Scaling of OpenShift Infrastructure

- Compliance vs Control Policies
- Creating a control policy for OpenShift Infrastructure
- Modifying a schema in Automate
- Automate method for scaling OpenShift nodes



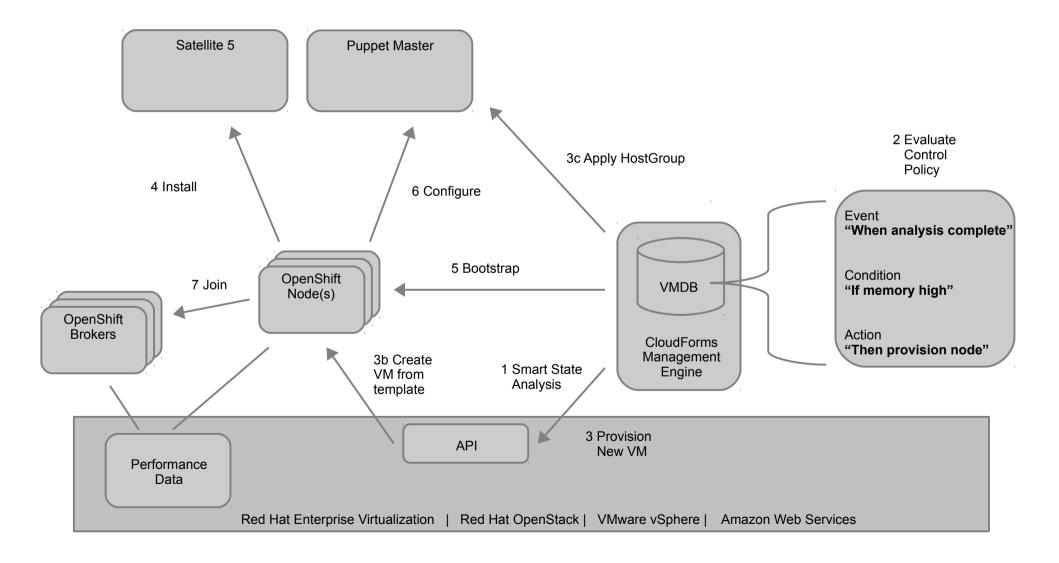
## Automatic Scaling of OpenShift Infrastructure (Automate)



Red Hat Enterprise Virtualization | Red Hat OpenStack | VMware vSphere | Amazon Web Services



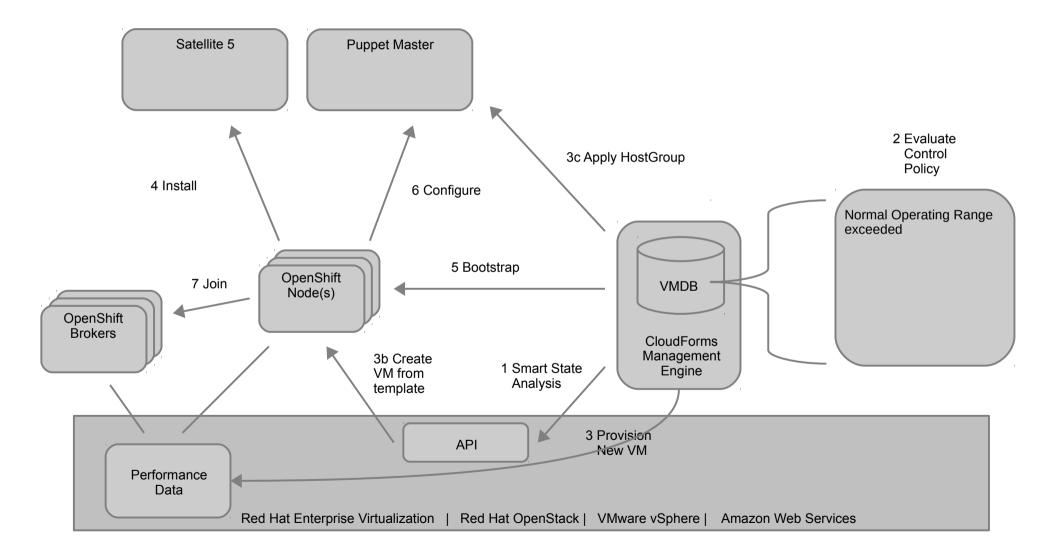
## Automatic Scaling of OpenShift Infrastructure (Control Policies)







## Automatic Scaling of OpenShift Infrastructure (Alert)









## Automatic Scaling of OpenShift Infrastructure

**Demonstration** 





Slides available at www.allthingsopen.com