

RED HAT :: CHICAGO :: 2009

SUMMIT

Data Center on a Stick:

The Reality of Data Center as a Service

Presenters

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presented by



Agenda

- Progress
- Why are we so unhappy?
- What is Data Center as a Service
- What is the Goal
- Demonstrating the Possibilities

Progress

- Last year
 - Presented a pre-built clustered Xen grid on laptops
 - We showed how the pieces fit together
 - We discussed the benefits of clustered virtual (server, network and storage) environments
- What we have been working on
 - Installation management
 - Package management
 - Configuration management
 - Identity management

Why are we so unhappy?

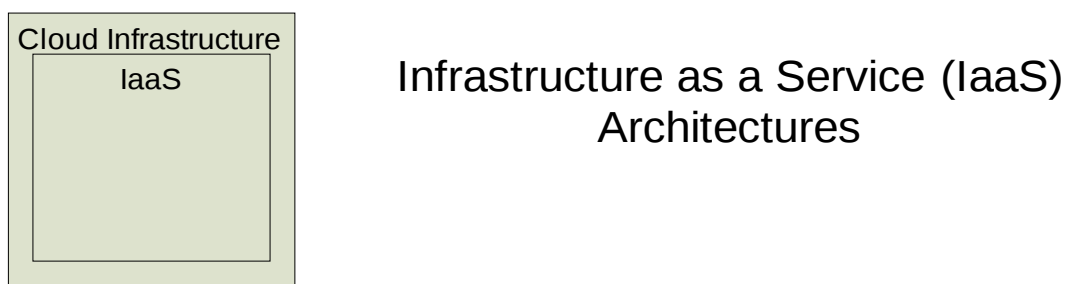
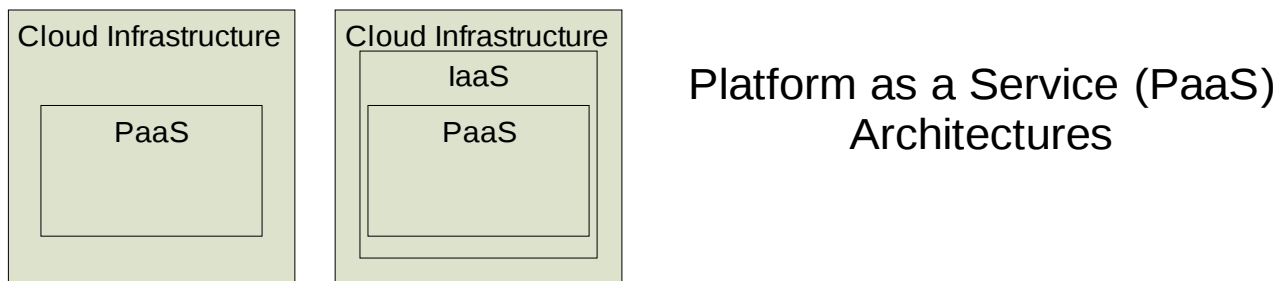
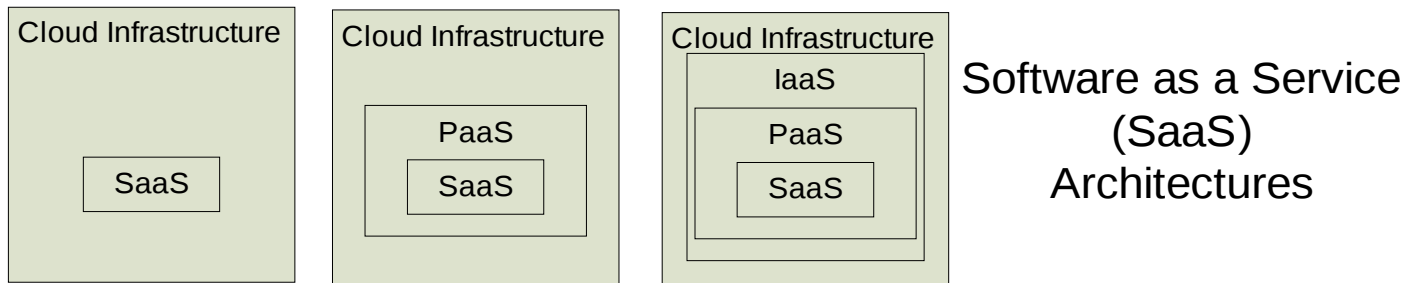
- Building and shaking out the infrastructure for large projects took too much time to meet our agility goals
 - 85% of our time was spent preparing the infrastructure
 - Servers
 - Networks
 - Storage
- We needed to capture the changes we were making to our deployments in real time
 - We didn't have an efficient mechanism to incorporate changes into our baseline
- We needed to decouple our products from our methods

Where do we start?

- We need an open language not a universal language
 - Universal leads to lock in as one player tends to take the lead and then becomes dominant
 - As long as we can communicate, we don't have to dominate
 - Managing the Data Center: Using the JBoss SOA Platform (Thursday @ 5:00 with Happy Hour to follow)
- Production, Consumption and Decomposition
 - We need to start thinking in terms of limited duration
 - We embrace a technology and want to keep it for ever because of the expense involved with implementation
 - We end up using archaic technologies that we shoehorn into our current need

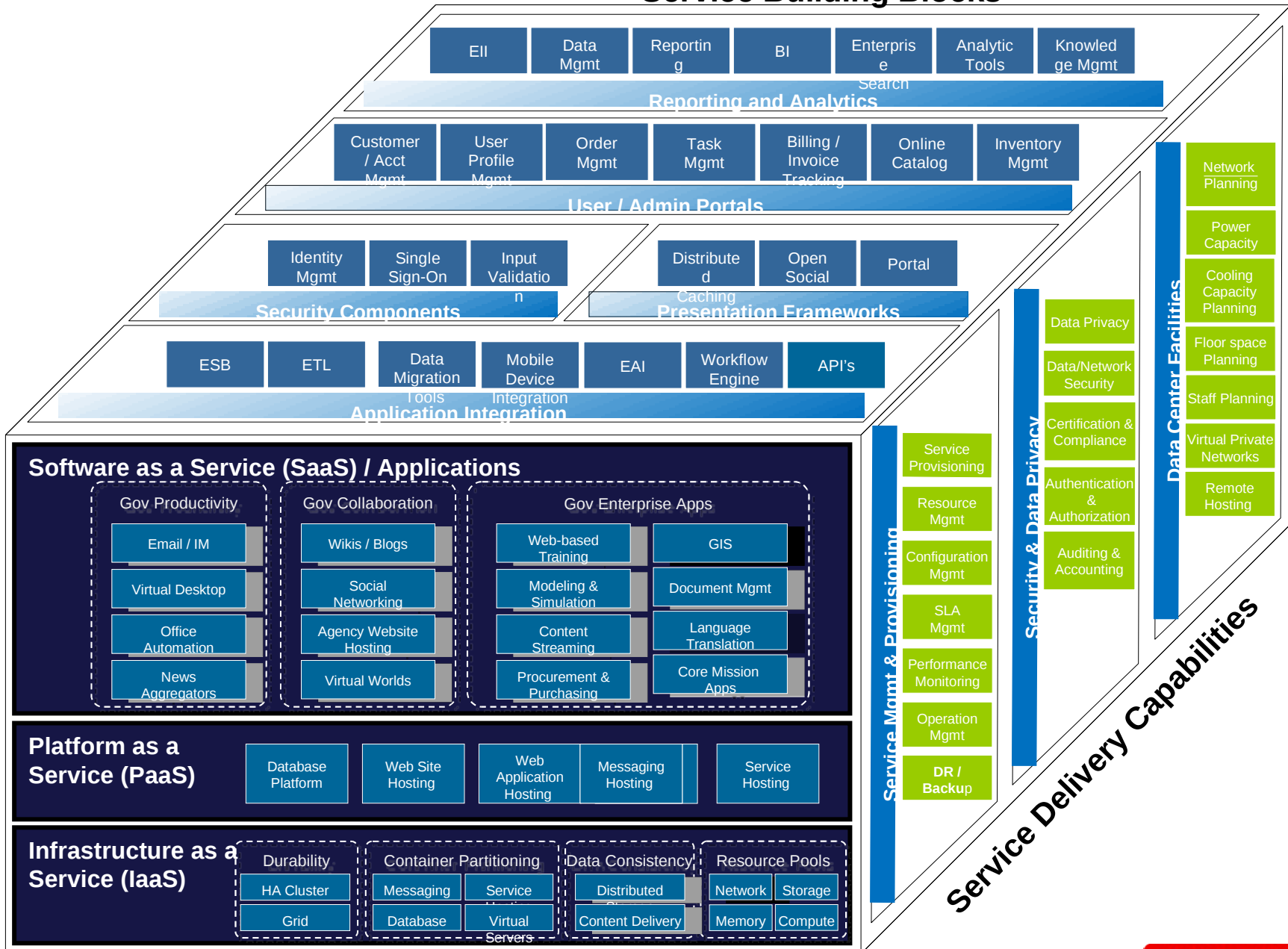
Propriety APIs masquerading as open standards are the perfect language for vendors because it allows them to sell you a solution before you fully understand your problem.
- Isaac Christoffersen

Service Model Architectures



Source: NIST, Information Technology Laboratory
<http://csrc.nist.gov/groups/SNS/cloud-computing/cloud-computing-v25.ppt>

Service Building Blocks



Service Integration Layers

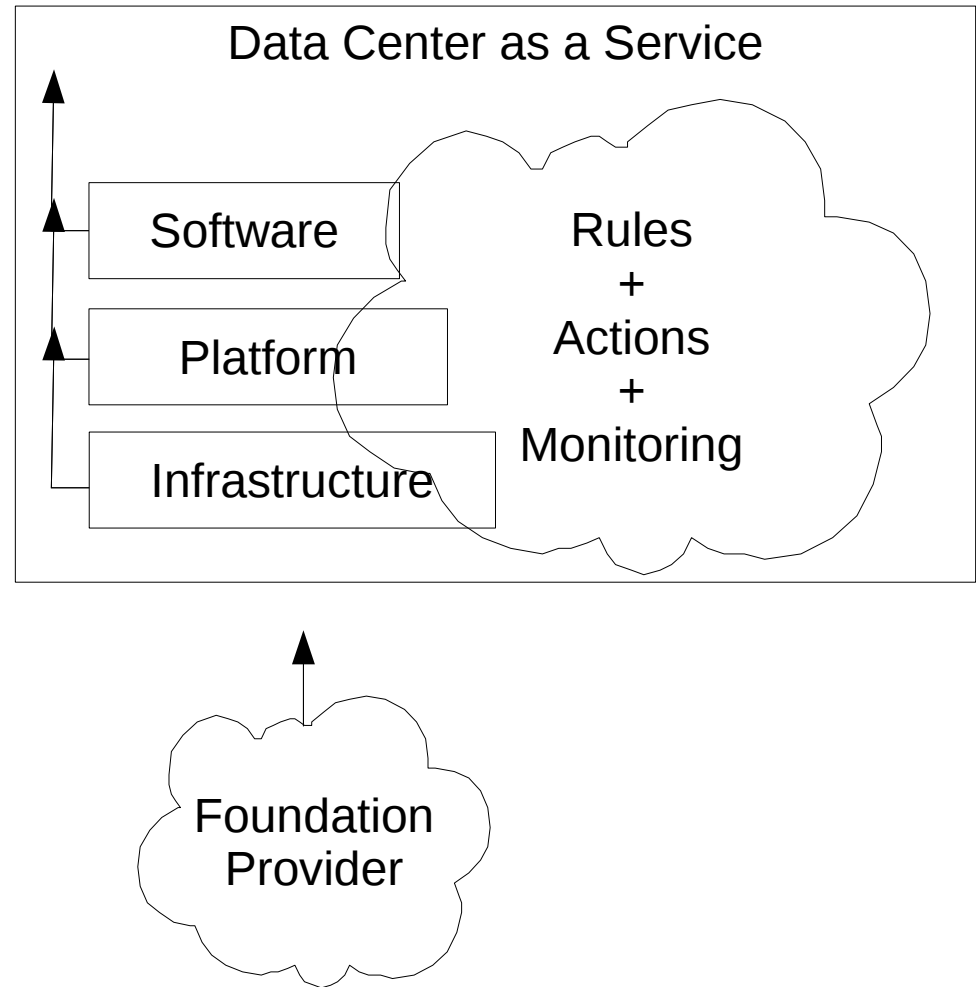
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Data Center as a Service

or Service to provide Data Center?

DCaaS or StpDC are focused on delivering integrated and stand alone capabilities. These capabilities may be delivered from the infrastructure, the platform or the software layer.

This is not meant to imply outsourcing your Data Center, but to free your business to think of tasks in terms of capabilities provisioning. The capability may be outsourced or it may be 'pushed' into your space.



The Goal

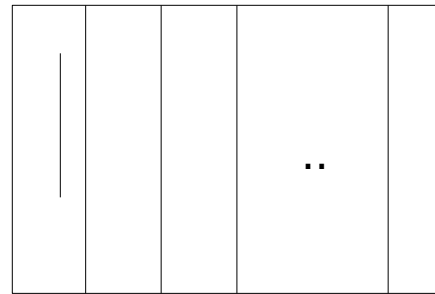
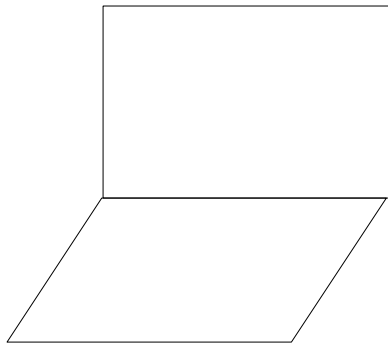
- Philosophy
 - Turn 85 / 15 to 15 / 85
- Architecture
 - Dynamic Federated Services Model
 - Grid Backed Services

Enablers

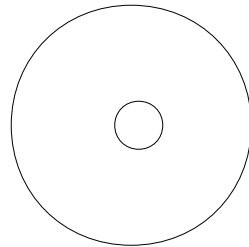
- Infrastructure Management
 - Cobbler
 - Puppet
 - Satellite
 - FUNC
 - Hyperic HQ
- Middleware
 - JBoss SOA Platform
 - JBoss BRMS
- Clusters, Grids and Virtualization
 - RHCS
 - MRG
 - GFS
 - Ovirt
- Monitoring
 - Hyperic HQ
 - Audit (IPA?)

The Demonstration (Recap - Building your Data Center)

Time Saver –
Locally cached copy
of repositories



Ultra Mobile Blades



Live DVD with Foundation knowledge and
Data Center seeds.

QUESTIONS?

**TELL US WHAT YOU THINK:
[REDHAT.COM/SUMMIT-SURVEY](https://redhat.com/summit-survey)**



As community engagement practitioners, we seek to build ongoing, permanent relationships for the purpose of applying a collective vision for the benefit of the community.

inCommon, Inc was started to **advocate** the use of Open Source and Open Architecture solutions in the U.S. government market.

As part of this mission, we seek to **educate** individuals on the value of Virtual, Grid and SOA architectures based on Open Source and Open Architecture constructs.

We work with clients to efficiently and effectively **accelerate** systems delivery while maximizing existing resources whenever possible.

<http://incommon.us>

