JBoss WORLD
CHICAGO 2009

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JBoss WORLD CHICAGO 2009

Building Java Applications in the Cloud

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September 3, 2009

presented by

Pragmatic approach to Cloud with JBoss and Ingres Open Source

Why develop in the cloud on JBoss and Ingres?

- You can now develop/operate business critical, enterprise scale applications on OSS.
- Why do it with OSS?
- Why develop in the Cloud?

"If the discussion is around costs that's primarily a Production issue, not a Developer's issue."
NOT TRUE!

- Open Standards/Open Source/Flexible deployment
  - Open Standards => Avoids Vendor Lock-in
  - Open Source => Lower Costs and Innovation
  - Flexible deployment => Gives you options for now and the future.

Business Critical/Enterprise Scale

BBP
Seamless connections

Financial messaging applications

- For SWIFT, SIC, and other financial networks
- 500 M transactions per annum – 160 Billion SF a day

Business Value

- Mission-critical availability and security
- 24x7 real-time support for application/infrastructure
- Reduced risk, cost of time to market
- Develop & deploy on a common stack
- Competitive pricing for end customers
- Pass along cost savings of subscription model

Integrated Open Stack

- JBoss, Ingres, RHEL

JBoss INGRES

Development Models

Traditional (time and $)

Obtain: h/w, servers, o/s, db, tools, integrate and keep current

Capex Intensive

Internal steps: Finance, Legal, Architecture Compliance, Procurement

Vendor lock-in. the technology decision has huge $ implications

Roll your own (Open Source)

Removes the wasted time and $ (of set-up)

…but you still need to handle Version Control, Certification, Integration, Support

… and when you move to production you have the added effort ($) of porting to corp standards eg traditional.

There is an alternative…

Hosted OSS Dev

Pre-built, per-certified environment, training, development expertise and support as needed

Zero Capex (Dev is FREE!)

On Demand, real-time

Open Source ***and*** Open Standards (no lock-in if you decide you want to change the technology)

Flexible capacity provisioning

Simple production deployment model (hosted or on Premise)

What Is Cloud Computing?

"Unlimited" computing power and storage as a utility

Data centre on the Internet

Usage based (utility) pricing or Utility Computing

Commodity utilization

Compelling Business Benefits…

Enhanced business agility and flexibility, faster time to market

Dynamic scalability and on-demand capacity

Reduced up-front costs and financial risk

Enhanced financial leverage by minimizing CAPEX, lowering OPEX, and maximizing innovation investment

Lower TCO, increased efficiencies, and economies of scale

The economics are changing for cloud computing

A Little Bit of Reality…

Inflated expectations: the cloud is not a panacea

Some things have a very good fit for the cloud and some not

XaaS is valuable, but not the only solution

Scalable infrastructure versus scalable applications

Don’t expect that everything will be out there — likely to end up with a hybrid approach

Cloud computing is not always cost effective

Common Concerns about Cloud Adoption

Proprietary programming models and lack of standards

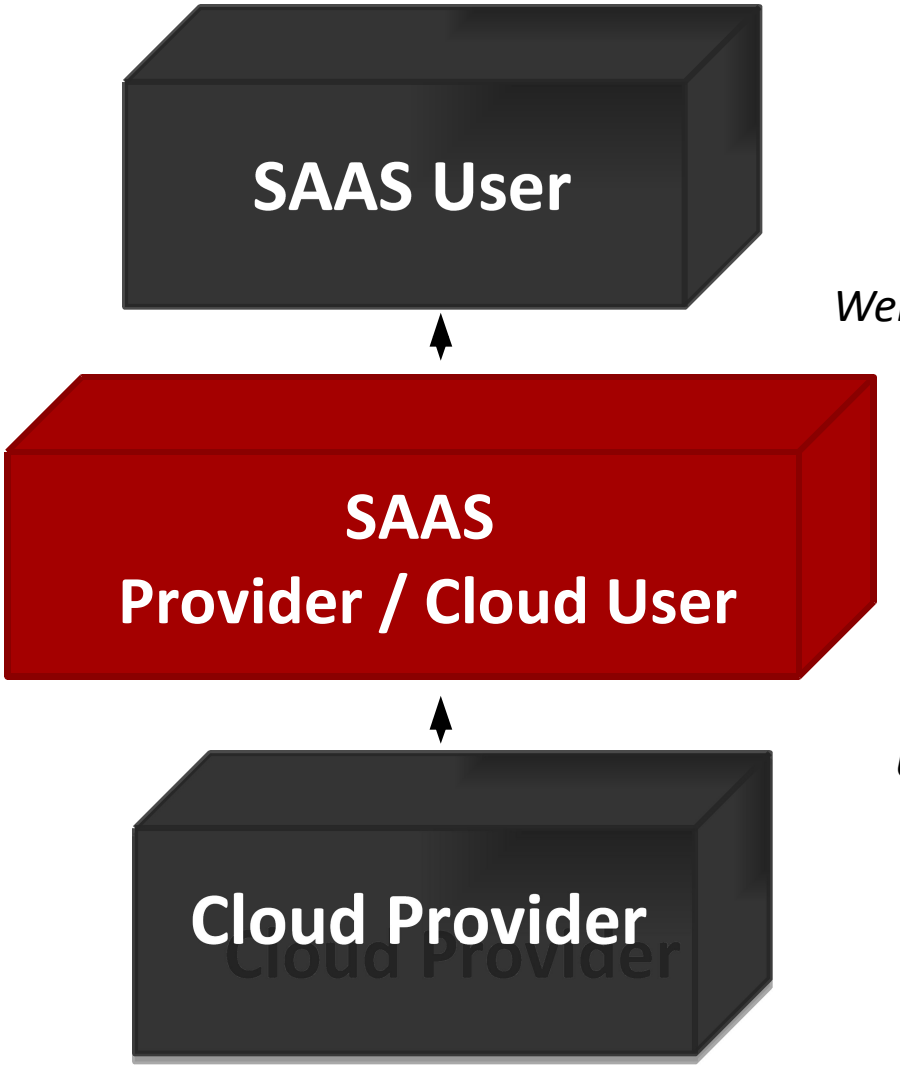
Data security concerns

Performance & reliability concerns

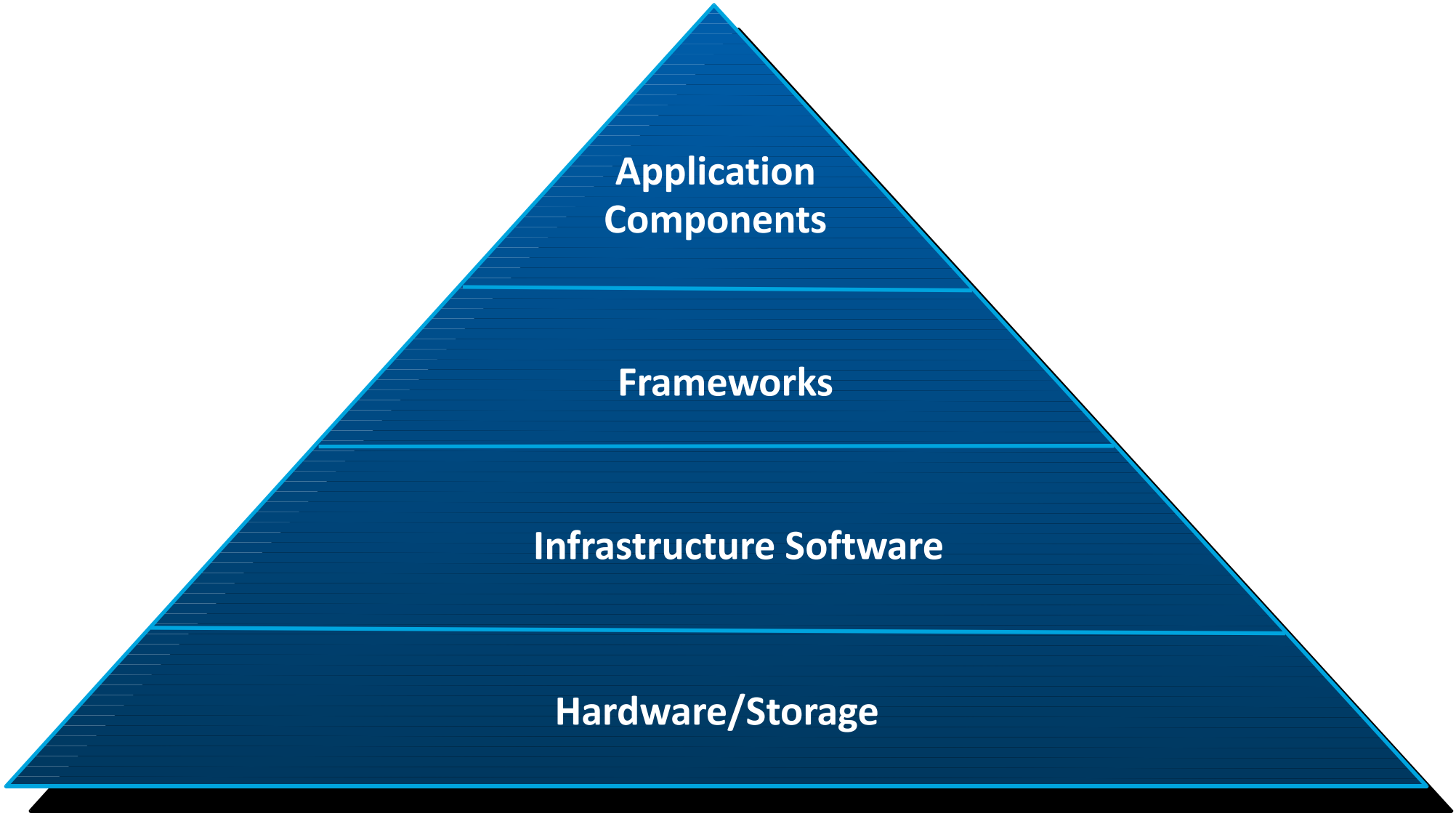
Availability concerns

Maturity of XaaS: Ready for enterprise computing requirements?

Users and Providers



Commodity Utilization



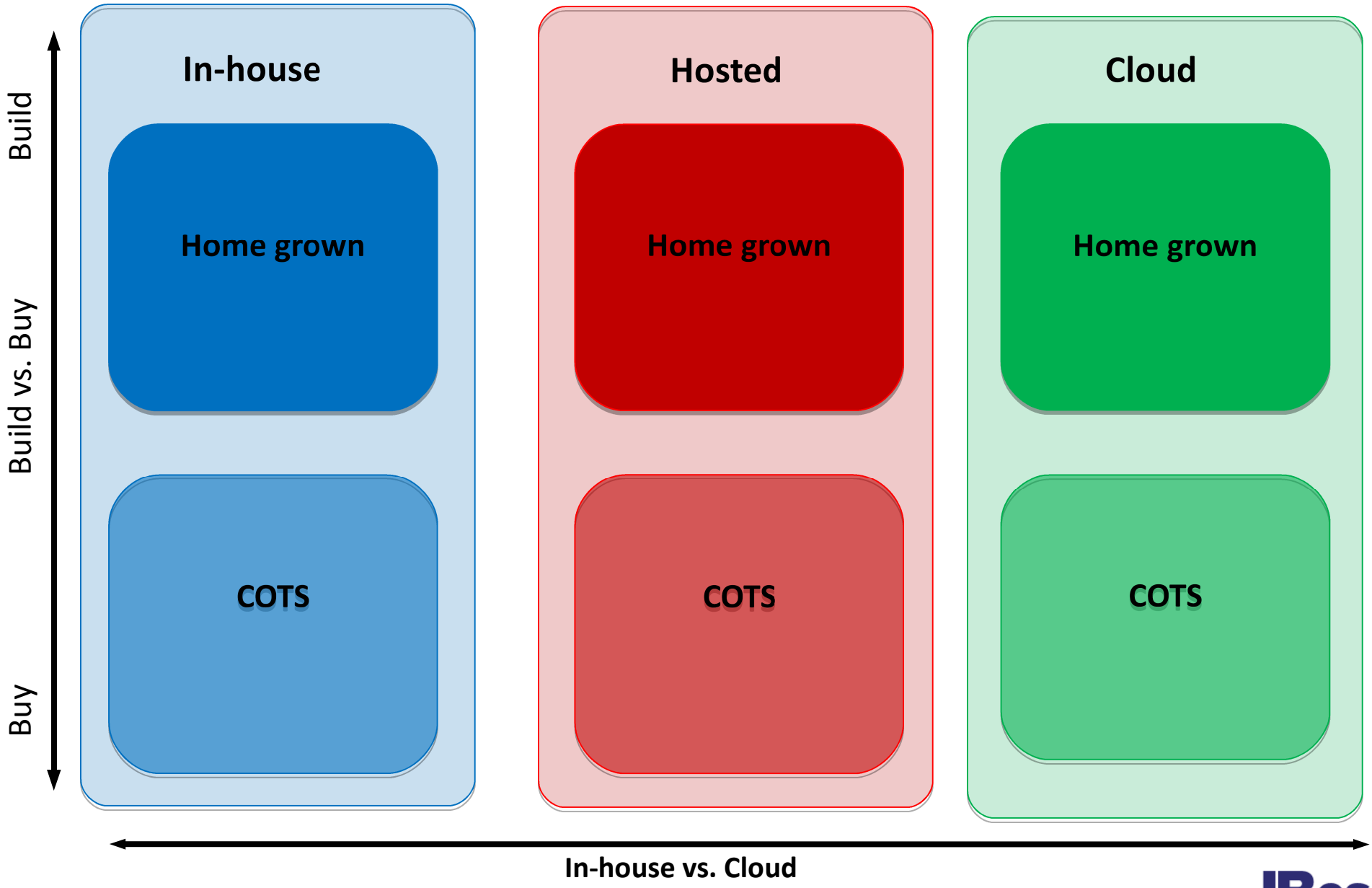
Fit or No Fit

The best fit is when we can achieve a high degree of "Commodity Utilization"

- The processes, applications, and data are largely independent
- Application with "processing on demand"
- The points of integration are well-defined and standard
- A lower level of security will work just fine
- New multi-channel (Web, wireless) applications

- Application users require high availability
- High level of security (privacy and compliance)
- Application requires proprietary software
- Application requires significant data transfers
- High scalability isn't required
- Processes, applications, and data are tightly coupled
- Too Many Points of integrations

Deployment Options



Evolution

The economics are changing for cloud computing

There's no need for radical change. Applications still need to be designed, developed, tested, deployed…. however,

Regardless of the Cloud, we all know that our application infrastructure is long overdue for renovation

- Modernization
- Simplification
- Infrastructure unification

The Cloud is a great facilitator for these transitions

Paradigm Shift

To get the real benefits from cloud computing we need to make some changes in the way we deliver business applications

A different approach to develop applications: scalable infrastructure vs. scalable applications

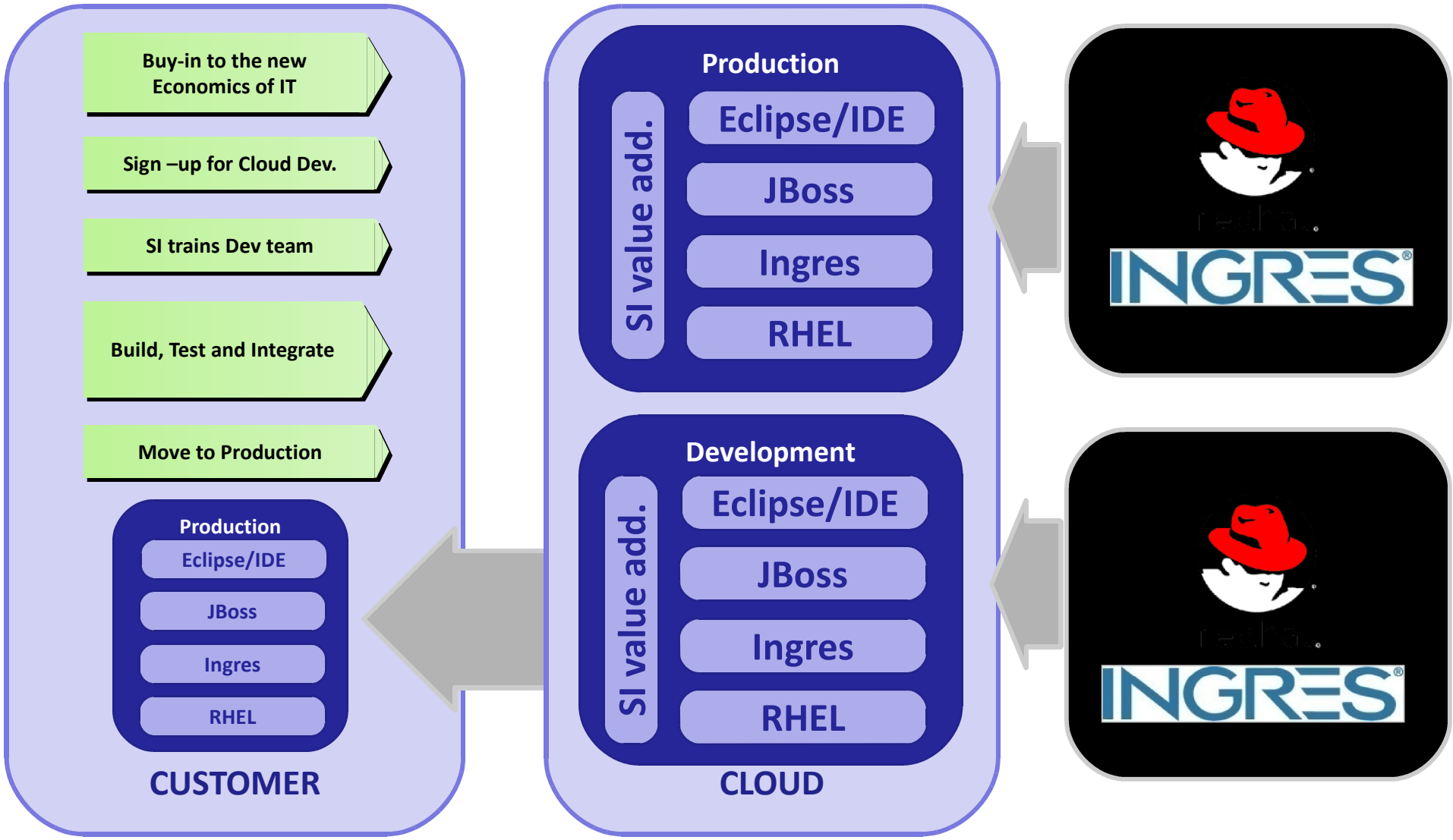
Applications that are easy to assemble, manage, modify, and rapidly scale up and down

Applications that can be useful when disconnected from the Cloud

The same architecture approach for in-house and in-cloud applications

Commodity Utilization requires a uniform development platform

OSS Cloud Accelerator



Uniform Application Platform

OSCA is a uniform application platform that supports a complete application lifecycle for deploying and scaling full-feature enterprise-grade Java applications in the cloud

OSCA combines the world's most popular Java Web application technologies (JBoss) with the enterprise-quality open source Ingres database that takes full advantage of the power of cloud computing

OSCA allows the building of enterprise applications that can be easily deployed in an in-house environment as well as in the Cloud

OSCA greatly reduces the complexity of cloud computing and offers complete application lifecycle management for running fully functional Java Web applications

What we do

We help clients evaluate, plan, and implement cloud computing services to their business advantage

To Start with: A Strategic Advisory

Portfolio assessment and roadmap

Application modernization feasibility

Infrastructure migration feasibility

Technical Execution Services

Pilot execution services

- To build a POC with minimal scope but with all the technical aspects of the Cloud
- Minimize risk by validating a concept for the Cloud
- POC that demonstrate the full functionality of OSCA both on or off premises
- Ability to update infrastructure so latest capabilities are broadly available from a single place

Cloud application development services

- Creation of an application development stack specific for the organization
- Creation of application development, testing, and production environments
- Creation of cloud-related application development process and deployment process
- Architecture, detailed design, planning, and deployment of applications into the Cloud

Three steps to Hosted OSS Dev

Evaluation

Try before you buy

Build a sample application

Give us your feedback

Development Services

Built on Enterprise Grade RHEL, Ingres, JBoss

Design, POC, Prototype,

Test, Version Control, Integration

Training

Production Services

Cloud-based Deployment: On-Demand Provisioning, Usage-based Pricing, Flexible Capacity Scaling

Premise-based Deployment: Deploy Application behind your firewall, Migration Services to Alternate Stack made easy by standards adherence

QUESTIONS?

TELL US WHAT YOU THINK:
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