

Cloud Development Made Easy with CloudFoundry

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Hi, my name is...Shekhar Gulati

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2011 will be the Year PaaS

- VMWare → CloudFoundry (Scala support)
- RedHat → OpenShift
- Amazon → Elastic Beanstalk
- Google App Engine added Go language

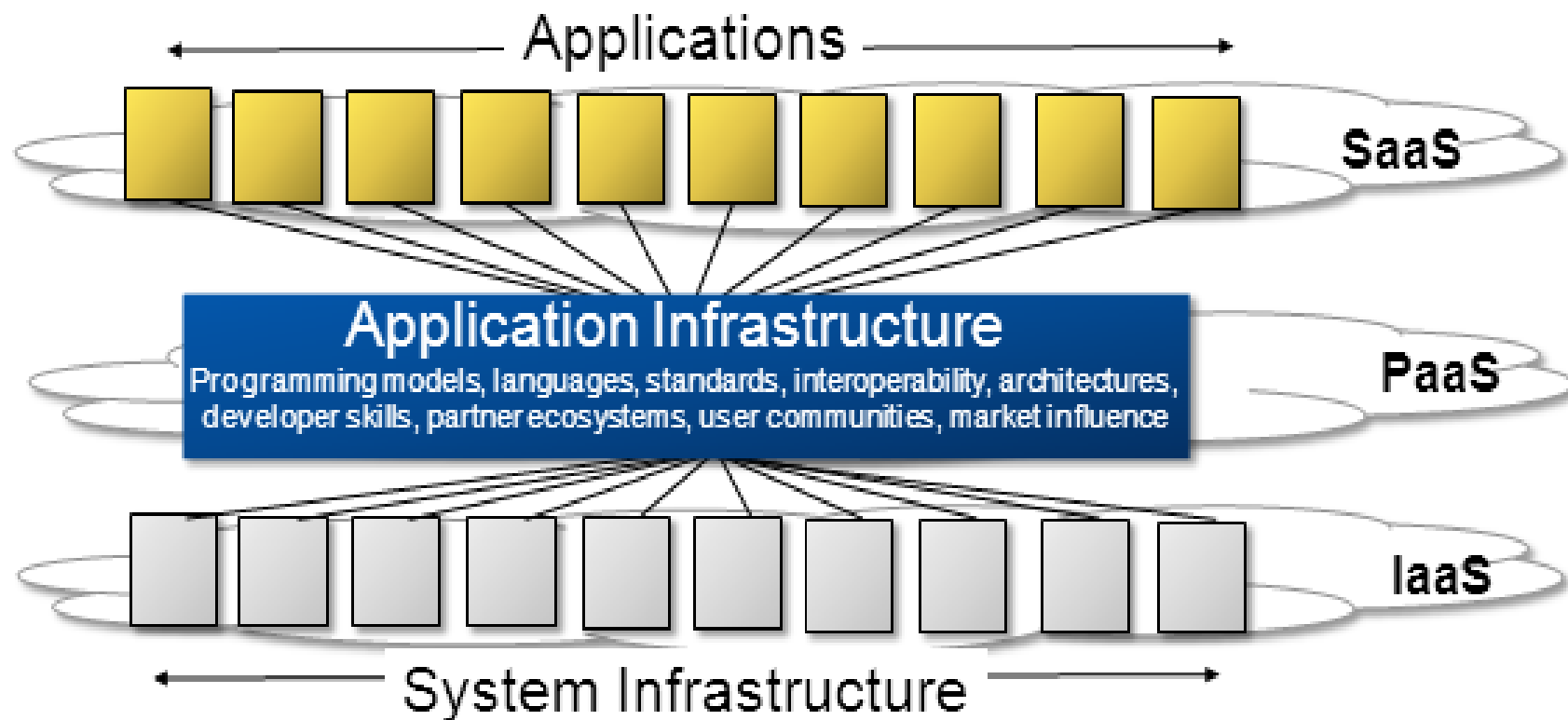


Agenda

- What is PAAS
- Issues with existing PAAS offerings (GAE)
- Open PAAS - CloudFoundry
- CloudFoundry Demos
- Spring Roo + CloudFoundry Demo
- Conclusion



Platform as a Service: The Strategic Center of Cloud-Computing Architecture



Platform as a Service

PaaS provides the facilities to support the end to-end life cycle of building and delivering web applications and services.

PaaS = Computing Platform + Solution Stack

PaaS is for professional and business developers

To develop new applications “Cloud Aware” from the bottom up.

PaaS is also called Middleware as a Service.

Egs. Google App Engine, Force.com



Issues with existing PAAS(GAE)

- Can't run existing code.
- Tied to particular environment.
- Vendor lock-in (lack of cloud portability).
- Deployment on public cloud only.
- Need to change the mindset.
- Diluted frameworks.
- Read this article

http://www.carlosble.com/2010/11/goo_7

[dbye-google-app-engine-gae/](http://www.carlosble.com/2010/11/goo_7/dbye-google-app-engine-gae/)



Cloud Developers Bill of Rights

<http://www.developerrights.org/>

The Right to Code

The Right to Build Applications

The Right to Cloud Portability

The Right to a Choice of Frameworks

The Right to a Choice of Application Services

The Right to Platform Transparency

The Right to Emigrate

The Right of Ownership

The Right to Be Left Alone





The Open
Platform as a Service

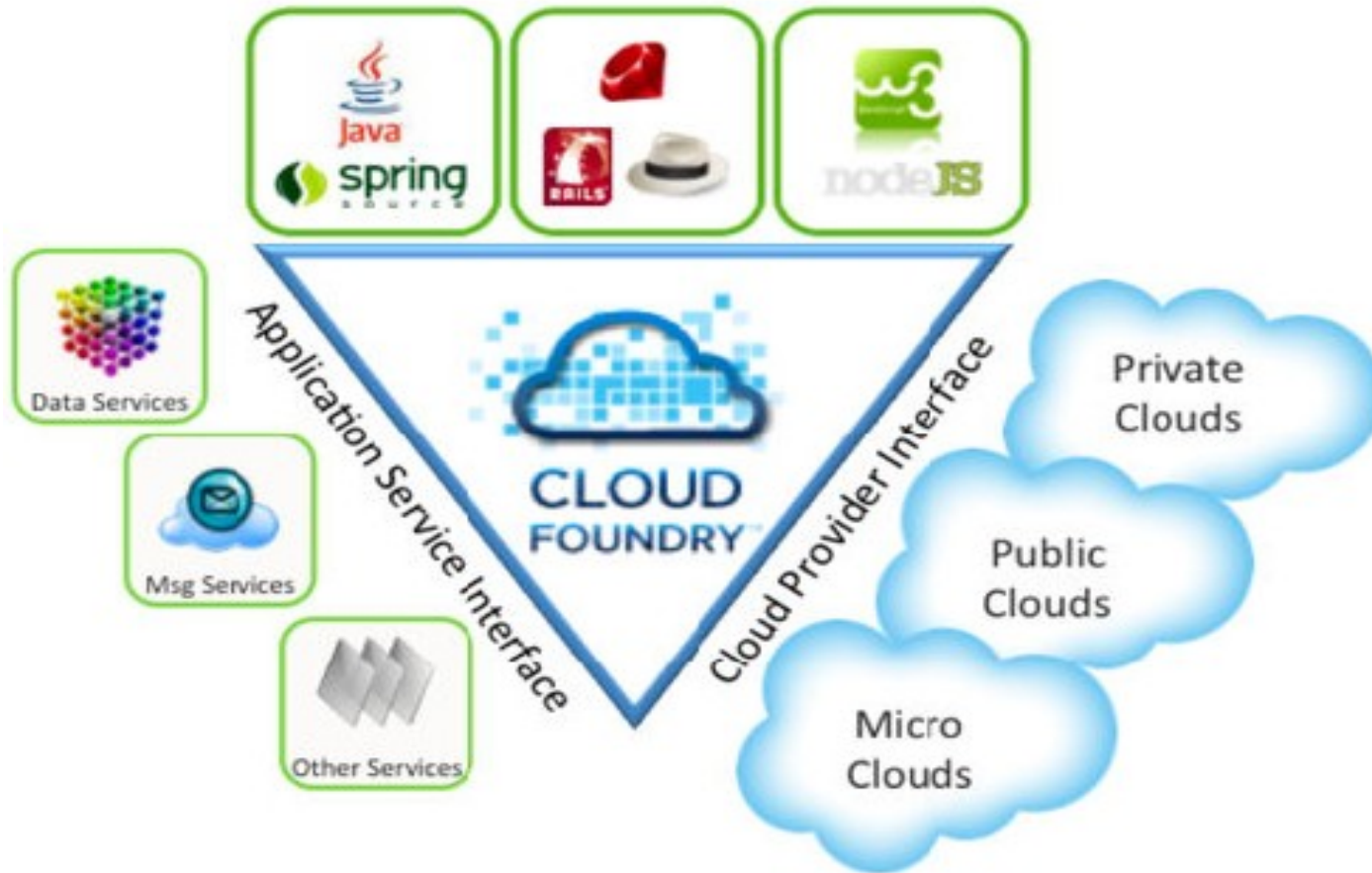


CloudFoundry – Open PAAS

- Open Source
- Multi-Language, Multi-Framework, Multi Application services, Multi-cloud.
- Cloud Portability
- Cloud Foundry is both
 - deployment destination
 - layer that allows deployment to a choice of clouds, both public and private.



CloudFoundry – The Open PaaS



Choice of Developer Frameworks

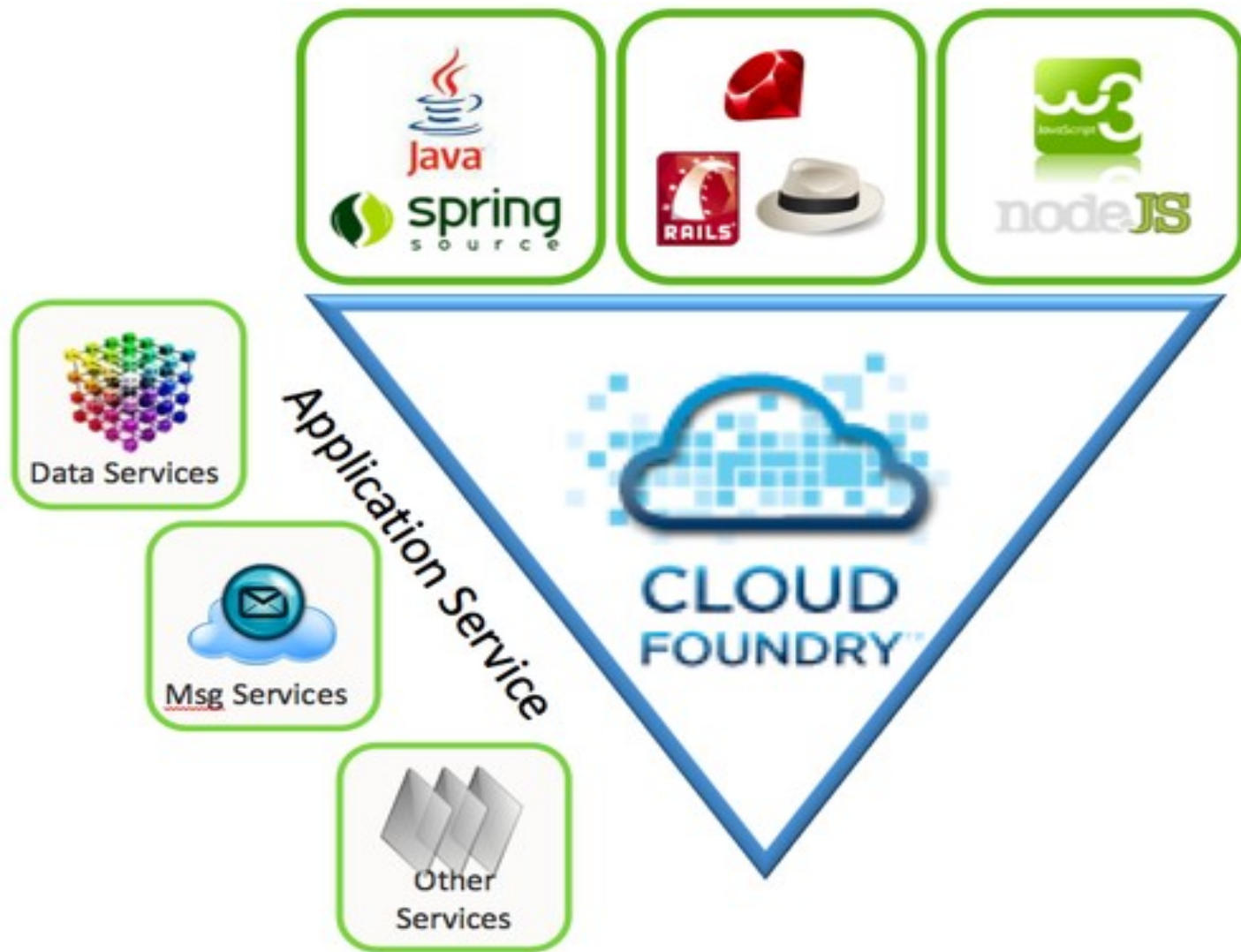


Demo 1 – Spring Framework

Let's deploy a Spring Application



Choice of Application Services



Demo 2 – Going to Production

Let's replace hsqldb with MySQL



Demo 3 – Can I support both?

Wouldn't it be great if I can use hsqldb for development and mysql for production?

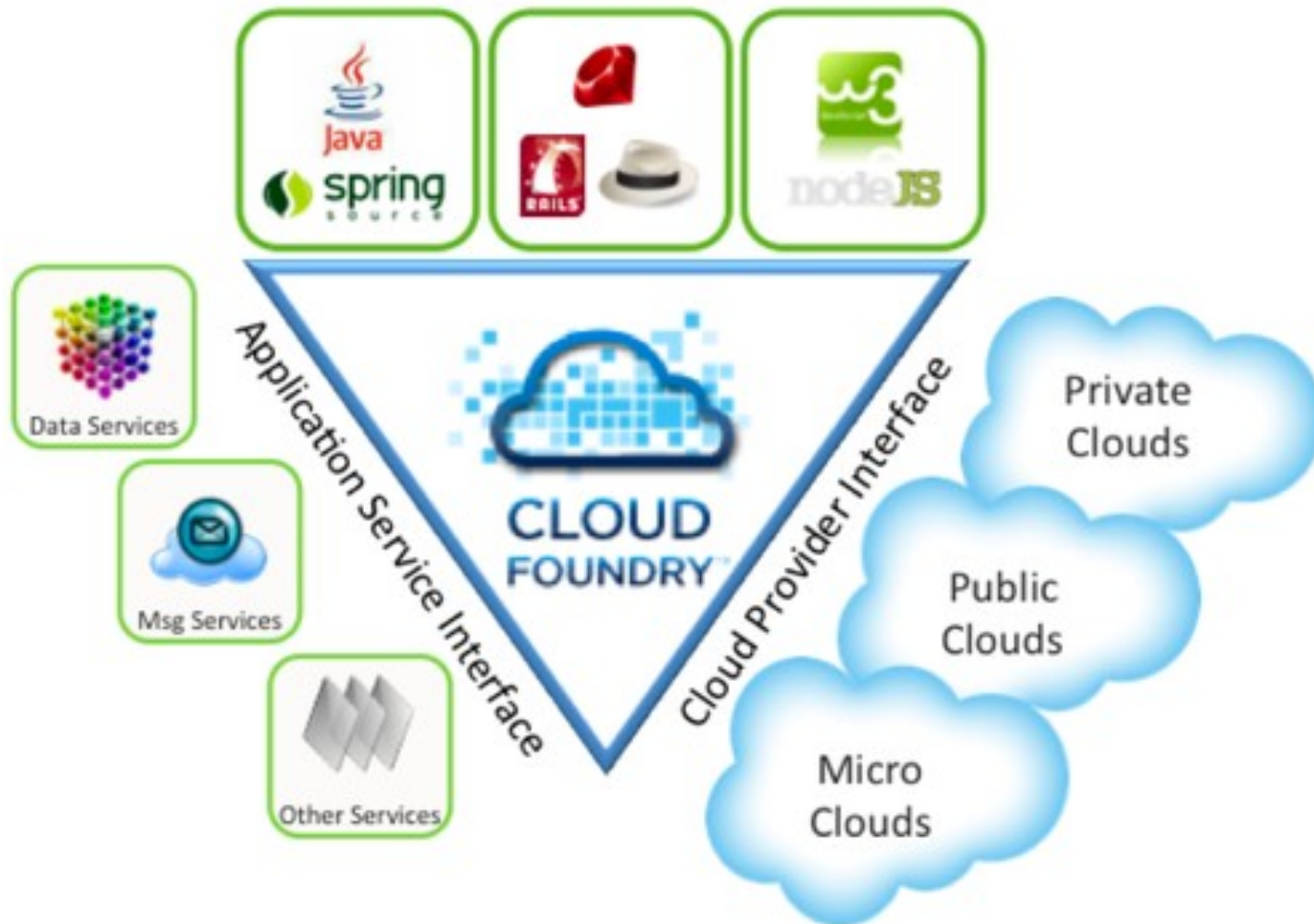


Demo 4 – Play with NoSQL DB's

Let's play with Redis and MongoDB
(Using STS)



Choice of Clouds



Micro Cloud

I want to run CloudFoundry on my laptop



Managing Overload



Demo 6 - Scalability

Let's scale our app up and down



RAD for Cloud



Demo 7 – Spring Roo + CloudFoundry

Rapid Feedback in the Cloud



Conclusion

Developers should write code, not IT
trouble tickets



