some ideas about

OSGi and Discovery in the Cloud

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An example Cloud-based application

- Made up of a number of (replicated) entities
- Possibly a number of different VM images
  - defining each entity
  - configured/wired up during deployment
    - possibly using elastic IP addresses or similar
    - or via a deployment script that plugs in configuration
The example application
**OSGi Approach (provisioning)**

- Minimal, uniform VM image
  - Provides bare OSGi Framework baseline
  - Dynamically provisioned based on the role to be played
    - Use OSGi Enterprise R5 Repository and Resolver
  - Can be dynamically repurposed
    - without the need to redeploy the VM image
  - Highly flexible
  - Saves bandwidth
  - Paremus will demo shortly
OSGi Approach (discovery)

- Use the dynamics of OSGi to do the wiring up of the entities in the cloud
- System becomes self-organizing
- Entities can be added/replaced
  - client entities will automatically reconfigure themselves
- No need for cloud-specific solutions
A possible OSGi Discovery solution
What next?

- Previous slide was just one way of solving the problem
  - Other approaches are possible and will be discussed as part of the RFC-phase
- OSGi building blocks fit the problem quite well
- Work out the technical design, RFC and spec in the EEG
  - Interested? join in!
  - Contact david@redhat.com or look at www.osgi.org