PRESENTED BY RED HAT

LEARN. NETWORK.
EXPERIENCE OPEN SOURCE.

www.theredhatsummit.com

Red Hat's Business Systems

Enterprise Systems Built on Open Source

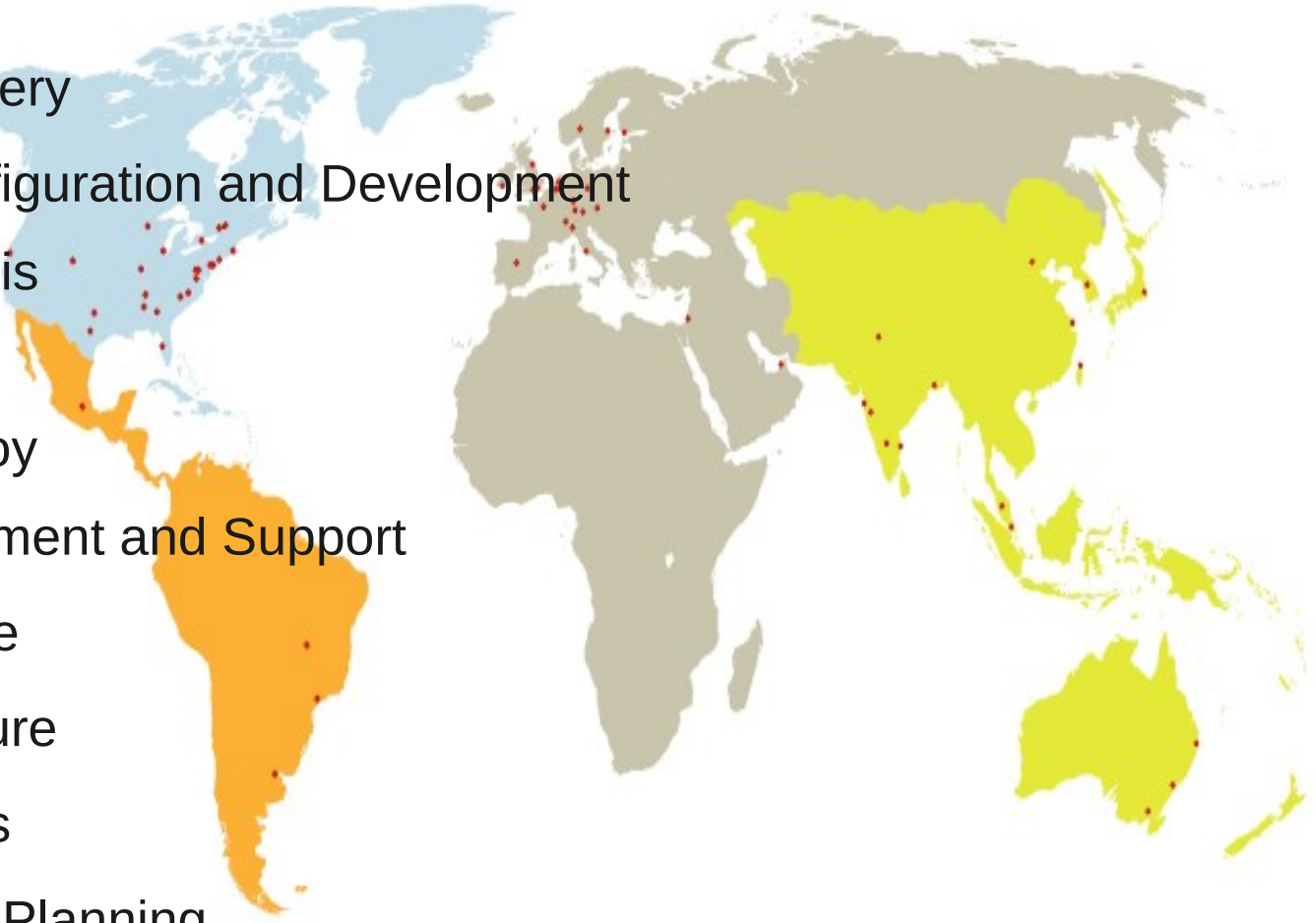
J Nick Otto
Sr. Director IT Business Systems, Red Hat
nick@redhat.com
http://twitter.com/jnickotto
2010-06-23

Agenda

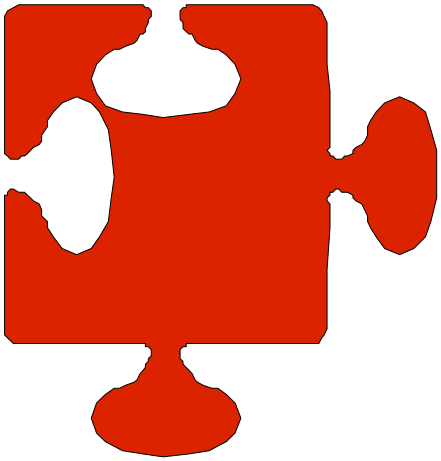
- Overview of IT Business Systems at Red Hat
- Open Source Applications
- RHEV at Red Hat
- JBoss deployment
- Build and Config Management
- Role / Integration of SaaS offerings
- The Internal Stack
- Discussion: 'Real' Benefits, Dialog and Q&A

Red Hat IT Business Systems – What we do

- Business Support
- IT Applications Delivery
  - Application Configuration and Development
  - Business Analysis
  - Requirements
  - QA / Test / Deploy
- Application Management and Support
- Business Intelligence
- Enterprise Architecture
- Middleware Services
- Business Continuity Planning



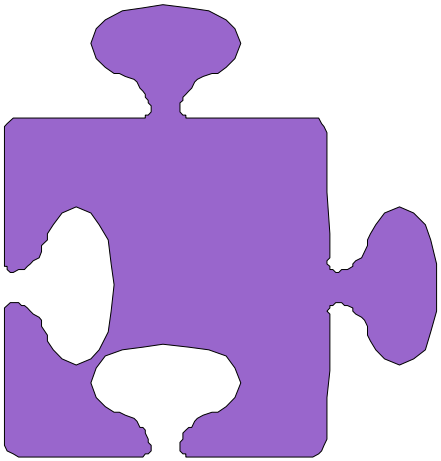
Open Source Applications at Red Hat



- Open Source is just one piece of the puzzle
  - OS – RHEL
  - Virt – RHEV
  - Middleware – JBoss
  - Mgmt – Mixed
  - Apps – Varied
- The further up the stack the more heterogeneous the environment becomes

RHEV at Red Hat

- Internal and External MX servers (~14 VMs in Prod)
- ~60 Plus VMs in Stage / Pre Prod environments
  - Mostly Dev servers
- Working on plans for RHEV 2.2 release for later this summer



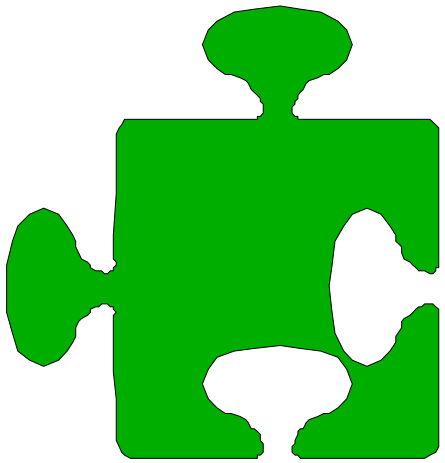
JBoss Deployment

- Four external JBoss Clusters
- Serves ~1.2 Million Requests per day
- ~80 Web Applications
- Content for www.redhat.com, support.redhat.com, etc
- Runs API Backend for rhn.redhat.com
- No maintenance outage for cluster maintenance for two years
- Average response time across all clusters is below 150ms

Build and Config Management

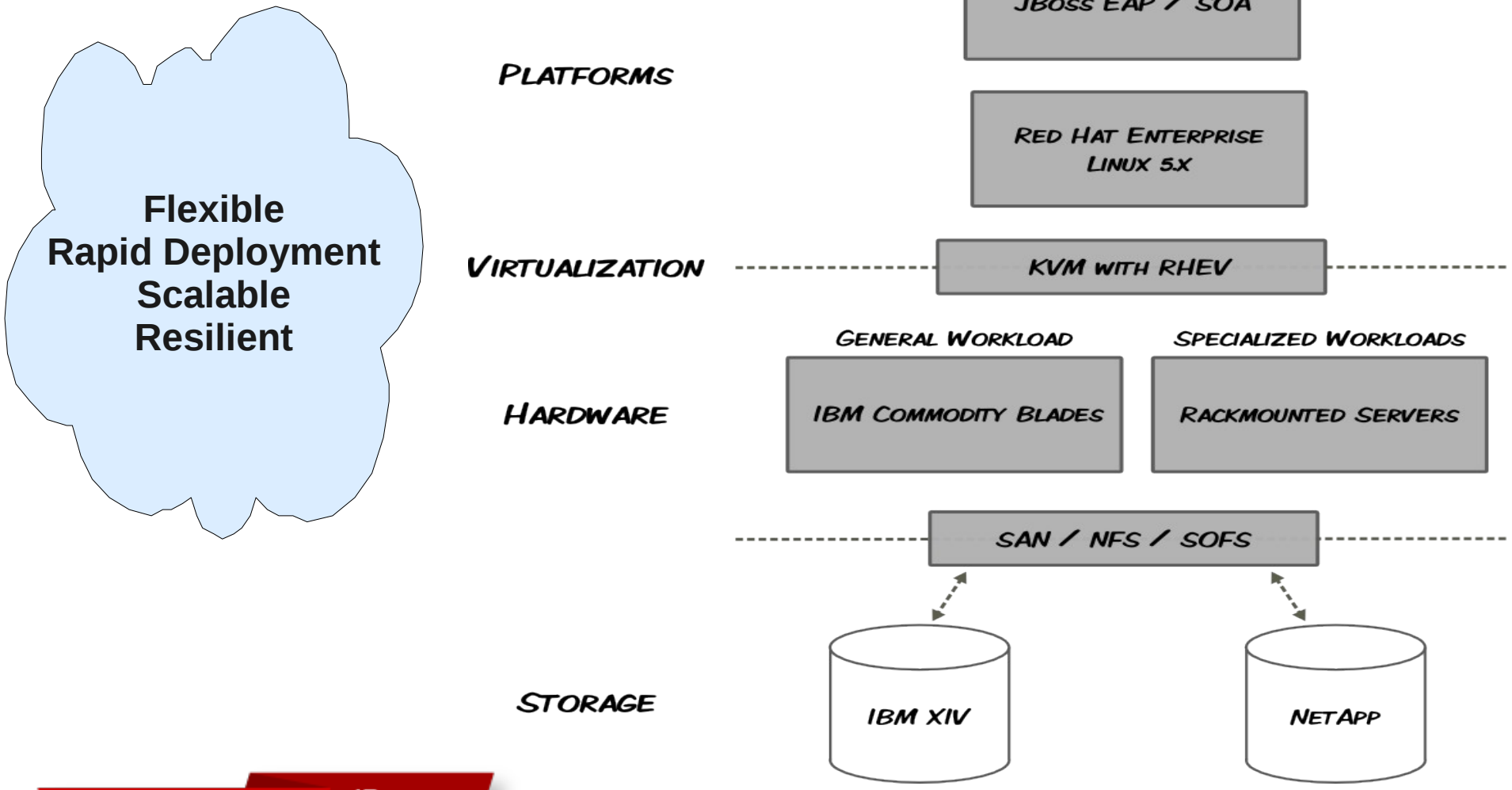
- Common config management platform(Puppet) enabling all environments to share config information
  - System configs are also managed with Puppet – side effect of supporting DR through rapid, automated, machine reproduction
- Continuous integration strategy, leveraging a set of open source tools to completely automate the build process – compiling, testing and deploying
  - Hudson – build process orchestration
  - Maven – build multi-tool to get code into RPMs
  - Func: orchestrates code deployment

Role of SaaS Offerings

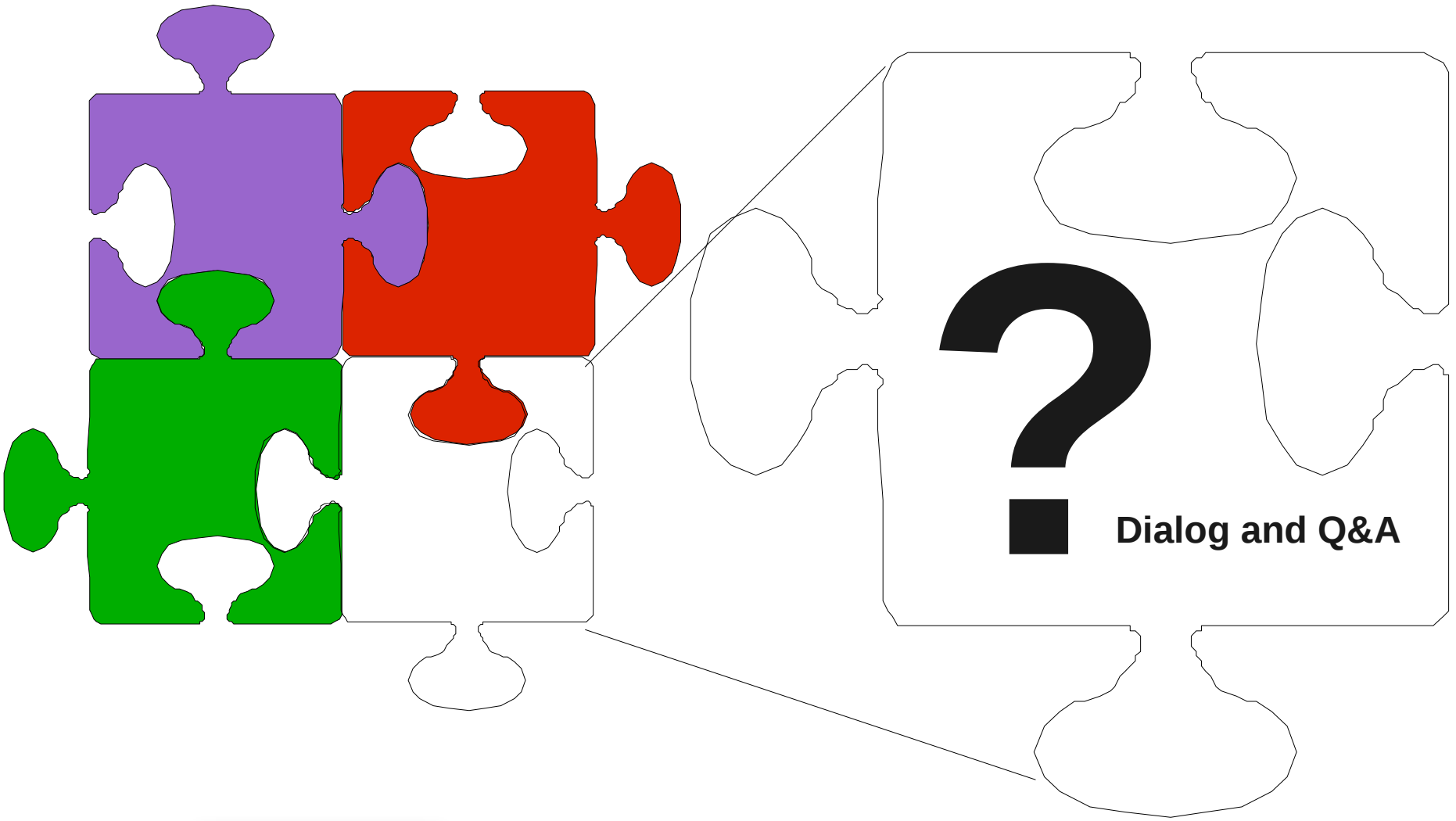


- Yet another piece of the puzzle – a challenging one
- Challenges
  - Integration
  - Security
  - Identity
  - Scope Control
  - Service Levels
  - The 'Business'...

The Stack


Flexible
Rapid Deployment
Scalable
Resilient
NETWORKING
VENDOR PROVIDED CDN
PLATFORMS
JBOSS EAP / SOA
RED HAT ENTERPRISE LINUX 5X
VIRTUALIZATION
KVM WITH RHEV
GENERAL WORKLOAD
SPECIALIZED WORKLOADS
HARDWARE
IBM COMMODITY BLADES
RACKMOUNTED SERVERS
SAN / NFS / SOFS
STORAGE
IBM XIV
NETAPP

Discussion: 'Real' Benefits, Dialog and Q&A



FOLLOW US ON TWITTER

www.twitter.com/redhatsummit

TWEET ABOUT IT

#summitjbw

READ THE BLOG

http://summitblog.redhat.com/