Seam 2:
Real Integration Testing with Arquillian

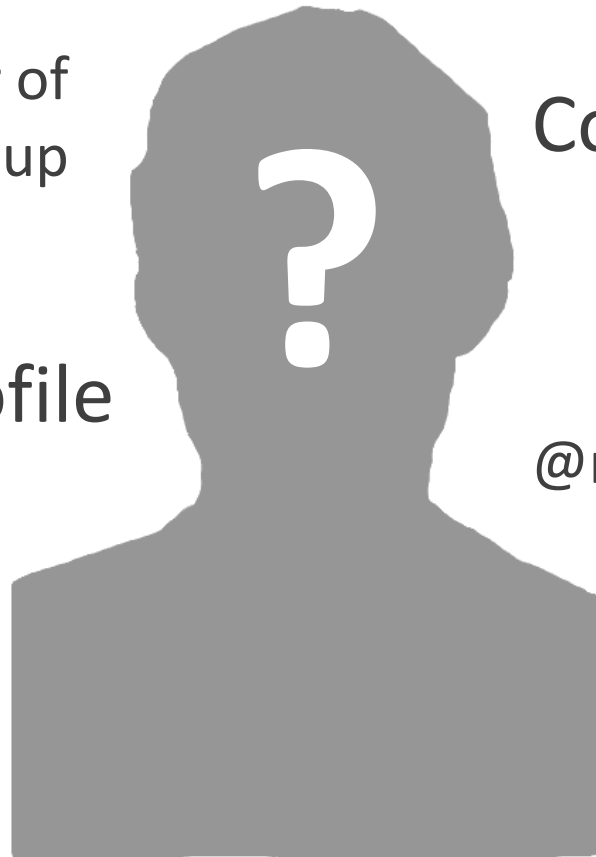Michael Schütz

Michael Schütz

Moderator of
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Profile

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BED-Con 2011

What will you expect today?

- Introduction
- Arquillian warm up
- Focus on practical experiences
- Live coding
- The future

Seam 2? … I think it's outdated?

So why are we using Seam 2 still?

- Cool: Seam 3, CDI, Weld, Java EE 6, JSF 2, GF3, JBossAS 6

- Seam 3 – bunch of independent modules
  - First final release of hole bundle 3 days old (-:

- Portal Context!
  - GateIn 3.1. "final" (JBoss Portal + exo + JBoss AS 5.1)

- No JSF 2 Portlet Bridge ready to use
  - JBoss Portlet Bridge 3.0.0.ALPHA (JSF2 + CDI + Seam3)

- JBossAS6 final since end of 2010
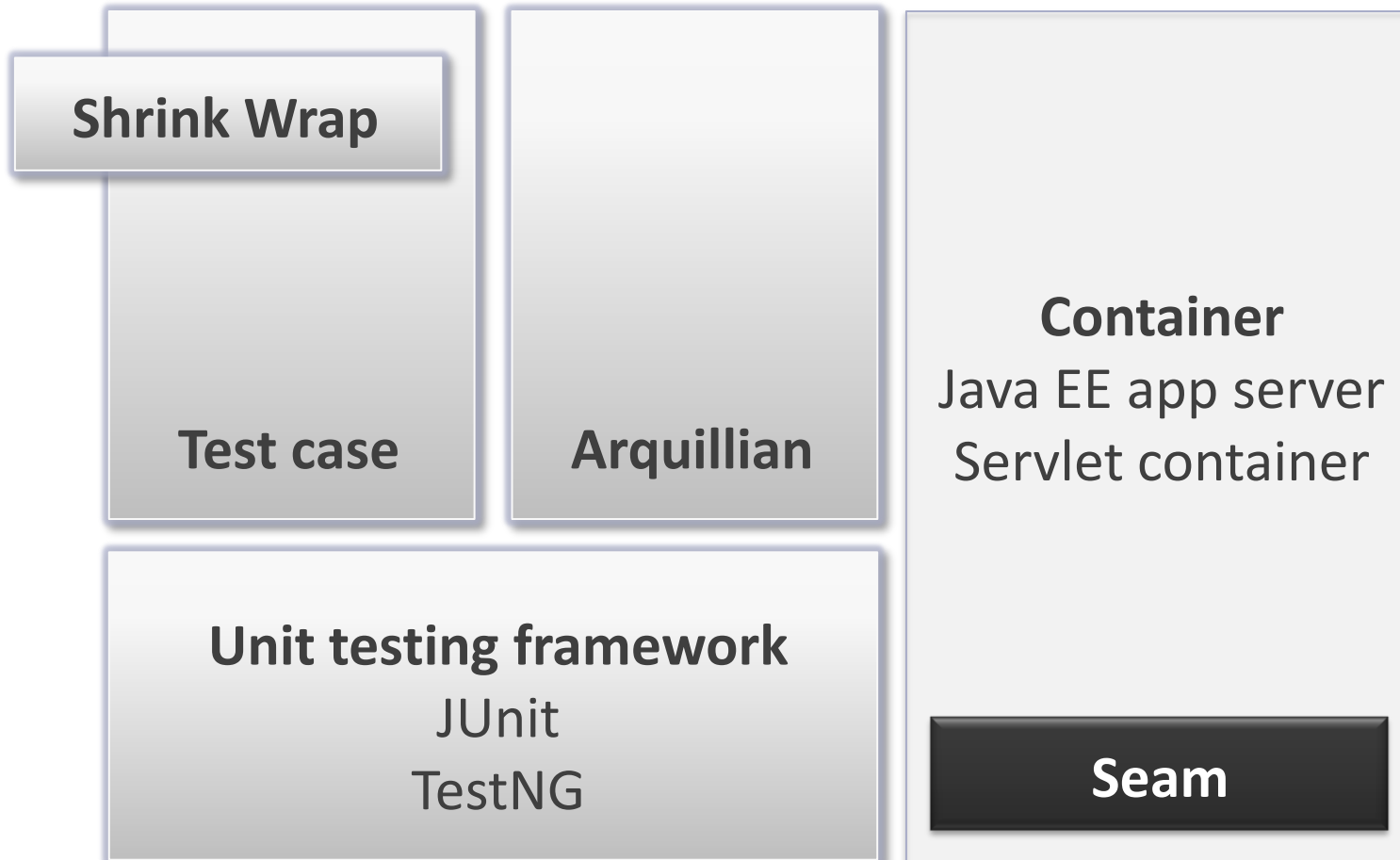 - No official GateIn portal integration

Arquillian – future of Java EE testing

What are the key issues?

- Project lead: Aslak Knutsen
- Archives
  - ShrinkWrap
- Multiple Test frameworks
  - JUnit, TestNG
- Multiple Run modes
  - In container, as client
- Multiple Enrichers
  - CDI, EJB, Resources
- Multiple Containers

Saving time…

- ShrinkWrap – Programmatic archive creation

- Simple API

- Micro deployments

- IDE incremental compilation
  - Save and re-run
  - Skip the Build!

Combining Arquillian and Seam...

Shrink Wrap

Test case

Arquillian

Container
Java EE app server
Servlet container

Unit testing framework
JUnit
TestNG

Seam

3 usecases

1.
SAP-Integration

2.
JMS: AS4.2.3 – AS 5.1

3.
Seam 2-Integration

EJB3, JCA container configuration

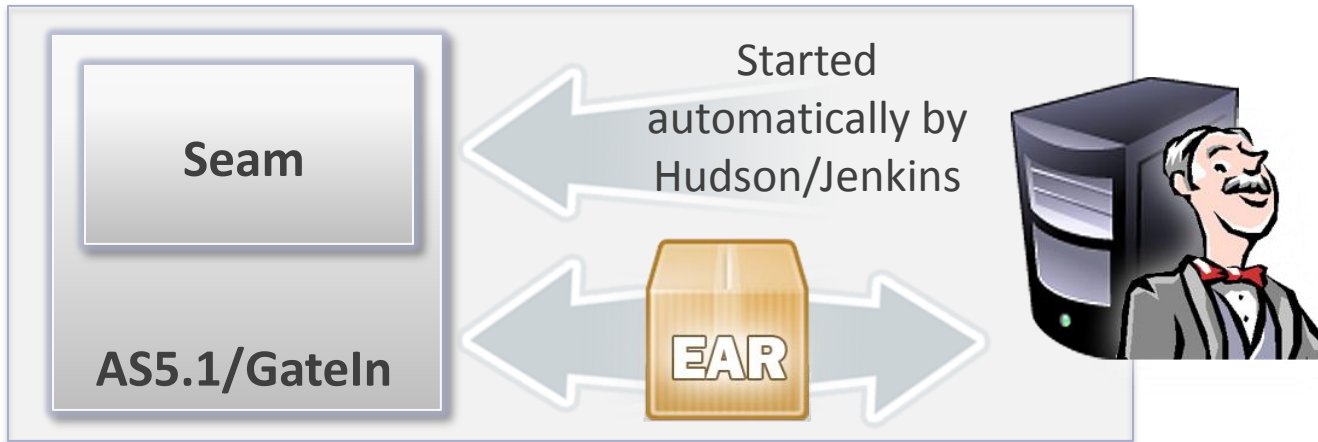*multiple containers, Cargo*

focus

Practice – Seam 2-Integration

Local development

- Remote container
- Deployment against running instance
- Fast feedback
- **mvn verify -Pit,jbossas51_remote**

akquinet

CI – Continuous Integration

- Managed container
- Automatic nightly Hudson/Jenkins build
- Full Lifecycle support
- **mvn verify -Pit,jbossas51_managed**

1. **EJB injected Seam test**

2. **Native Seam injection**

Seam 2 and Arquillian Roadmap

- API support → as Arquillian extension?

- Extending → @In Enricher

- MavenArtifactResolver → ShrinkWrap API

- JSFUnit Arquillian integration

Multiple containers

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Container name	Container type	Spec compliance	artifactId
JBoss AS 5	remote	Java EE 5	arquillian-jbossas-remote-5
JBoss AS 5.1	remote	Java EE 5	arquillian-jbossas-remote-5.1
JBoss AS 5.1	managed	Java EE 5	arquillian-jbossas-managed-5.1
JBoss AS 6.0	remote	Java EE 6	arquillian-jbossas-remote-6
JBoss AS 6.0	managed	Java EE 6	arquillian-jbossas-managed-6
JBoss AS 6.0	embedded	Java EE 6	arquillian-jbossas-embedded-6
JBoss Reloaded 1.0	embedded	JBoss MC	arquillian-reloaded-embedded-1
GlassFish 3.1	remote	Java EE 6	arquillian-glassfish-remote-3.1
GlassFish 3.1	embedded	Java EE 6	arquillian-glassfish-embedded-3.1
Tomcat 6.0	embedded	Servlet 2.5	arquillian-tomcat-embedded-6
Jetty 6.1	embedded	Servlet 2.5	arquillian-jetty-embedded-6.1
Jetty 7.0	embedded	Servlet ~3.0	arquillian-jetty-embedded-7
Weld SE 1.0	embedded	CDI	arquillian-weld-se-embedded-1
Weld SE 1.1	embedded	CDI	arquillian-weld-se-embedded-1.1
Weld EE 1.1	embedded	CDI	arquillian-weld-ee-embedded-1.1
Apache OpenWebBeans 1.0	embedded	CDI	arquillian-openwebbeans-embedded-1
Apache OpenEJB 3.1	embedded	EJB 3.0	arquillian-openejb-embedded-3.1

The future

- **1.0.0.Alpha5 out**, 1.0.0.Beta1 this week (-;

- More containers – Weblogic, Spring, Hibernate, Drools…

- Frameworks: Selenium, DBUnit

- Multiple deploy against containers

- Cloud deployment (jClouds, Steamcannon/DeltaCloud)

Thank you

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- **Source Code**
  - http://github.com/michaelschuetz/seamArquillian-sdc2011