



# Forge and Arquillian Hands on Lab

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# Agenda

- Introduction to JBoss Forge
- Hands on
- In-container testing with Arquillian
- Hands on



# Jay Too Eee Eee

- Hard to develop
- Long turn around times
- Many redundancies
- Complicated tooling

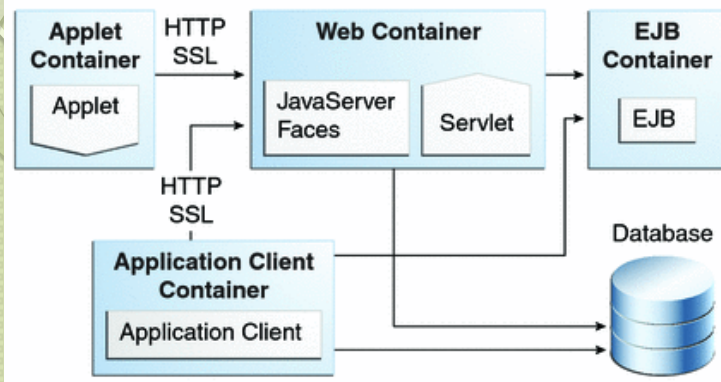


# Java EE

- Much more simplified
- Convention over configuration
- Massive use of POJOs
- Easier to test



# But still



<b>Application Client Container</b>	Java Persistence Management	<b>Java SE</b>	
	WS Metadata		
	Web Services		
	JSR 299		
	JMS		
	JAXR		
	JAX-WS		SAAJ
	JAX-RPC		SAAJ
	Application Client		

<b>Web Container</b>	JSR 330	<b>Java SE</b>	
	Interceptors		
	Managed Beans		
	JSR 299		
	Bean Validation		
	EJB Lite		
	EL		
	Servlet		JavaMail
	JavaServer Faces		JSP
			Connectors
			Java Persistence
			JMS
			Management
			WS Metadata
			Web Services
	JACC		
	JASPIC		
	JAX-RS		
	JAX-WS	SAAJ	
	JAX-RPC	SAAJ	

<b>EJB Container</b>	JSR 330	<b>Java SE</b>
	Interceptors	
	Managed Beans	
	JSR 299	
	Bean Validation	
	JavaMail	
	Java Persistence	
	JTA	
	Connectors	
	JMS	
	Management	
	WS Management	
	Web Services	
	JACC	
	JASPIC	
JAXR		
JAX-RS		
JAX-WS	SAAJ	
JAX-RPC	SAAJ	

# Java is dead?



*Play!* 



# Forge to the rescue

- Knows all the details
- Generates code for you
- Integrates with IDEs and command line
- Unobtrusive
- Use it whenever you need it



# Time for lab...





# Greeting earthlings



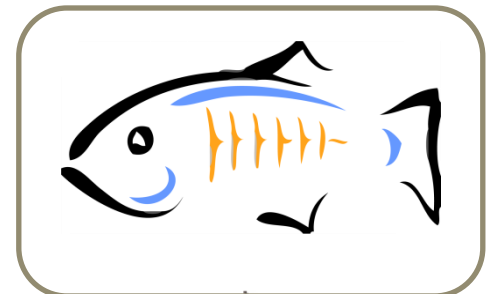
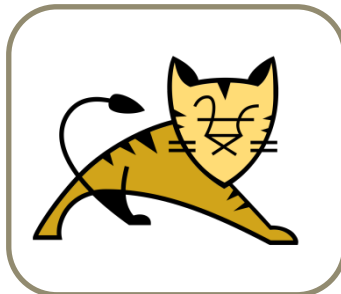
# Core principles

- Tests should be portable to any container
- Tests should be executable from both IDE and build tool
- The platform should extend existing test frameworks



# Step 1 – pick a container

- Container extensions
  - JBoss, Tomcat, Weld, Glassfish, Jetty, WebSphere, WebLogic



# Step 2 – connect the container

- Container types
  - Embedded
  - Remote
  - Managed



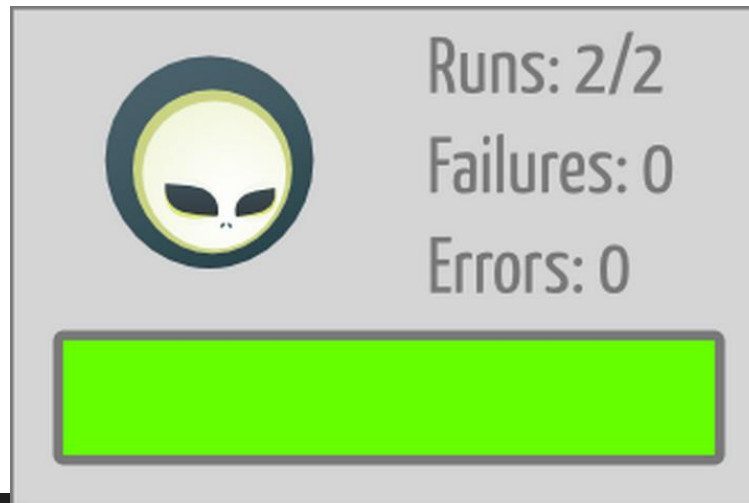
# Step 3 – package and deploy

- ShrinkWrap library
  - Deployment
  - Resolve from Maven
  - Create descriptors



# Step 4 – run the test

- Tests runs in-container
  - CDI, EJB, JNDI available
  - No need to mock most of the services
- Present the result as a normal unit test



# Step 5 – undeploy the test

- Undeploy the test archive
- Disconnect or stop the container



# Time for lab...





# That's not all

- Persistence extension
- Warp
- Drone
- Graphene
- AngularJS, Android, OSGi
- ...



