# Introducción a JavaEE con Apache TomEE

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#### César Hernández

- Senior Software Enginner at Tomitribe
- Java Champion
- Ducke's Choice Award 2016
- Oracle Certified Professional
- +9 experience with Java EE
- Parte de OTN Speaker Bureau.
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@CesarHgt



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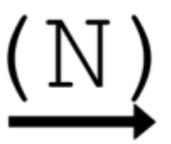
#### Java es comunidad







Grupo de Usuarios Oracle Guatemala



Java Community Rock Band



JEspañol



OTN Speaker Bureau

www.guate-jug.net

// Guate.Java.User.Group

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https://community.oracle.com/community/ otn-speaker-bureau



#### Agenda

- ¿Qué es Apache TomEE y JavaEE?
- JavaEE
  - Modelo de aplicaciones
  - Especificaciones
- Apache TomEE
  - Versiones
  - Demo ☺



#### ¿Qué es JavaEE?

- API's + Runtime Environments = Enterprise Software
- Multi-tiered
- Scalable
- Reliable
- Secure



### ¿Qué es Apache TomEE?

- Versión de Apache Tomcat certificada para Java EE
  - Java EE 8 en progreso
- Construido con componentes Apache
- Footprint: 30MB zip, 100~MB memoria



Duke's Choice Award



Java Rockstar Award



Java Champion
Award



Geek Choice Award

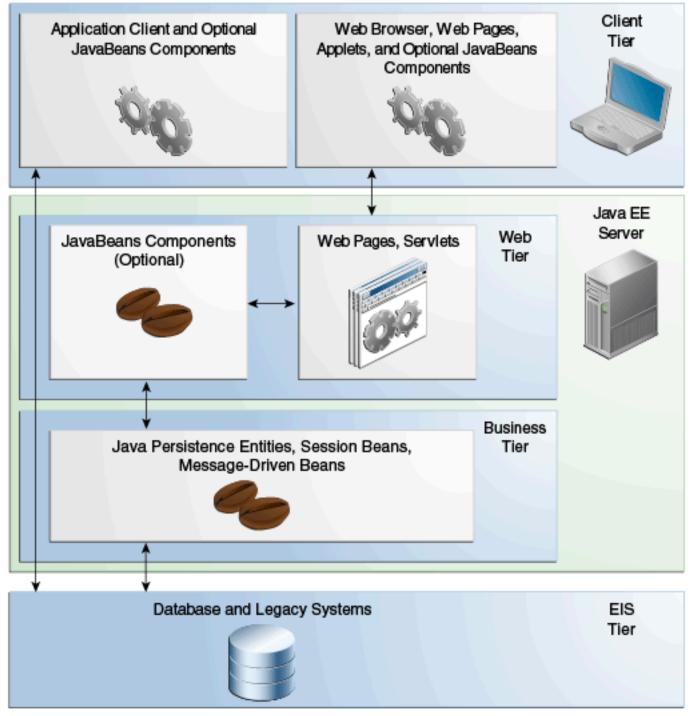


#### JavaEE y Apache TomEE

Apache Tomcat + JavaEE =

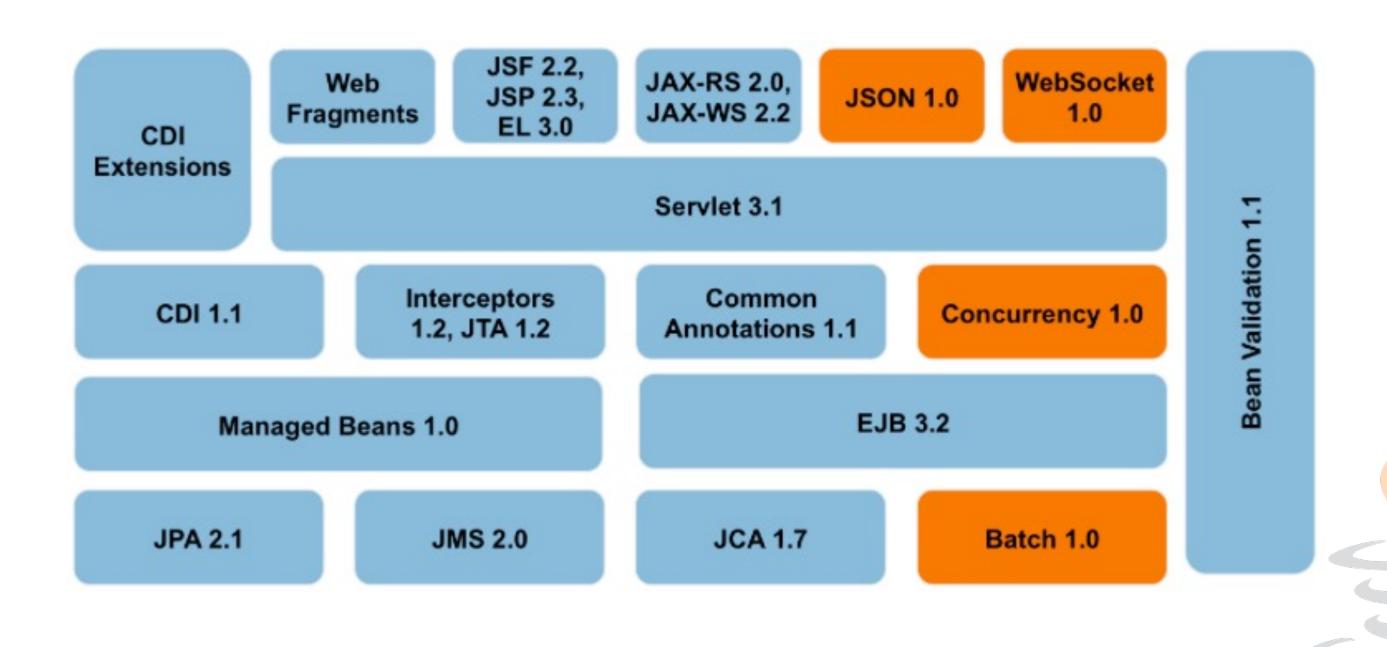
**Apache TomEE** 

## Modelo de aplicación JavaEE



https://docs.oracle.com/javaee/7/tutorial/overview003.htm

#### **Especificaciones JavaEE**



http://blog.eisele.net/2015/12/a-refresher-top-10-java-ee-7-backend.html

### Especificaciones JavaEE y TomEE

- •WebSocket JSR 356
- •JSON-P JSR 353
- •Servlet 3.1 JSR 340
- •JSF 2.2 JSR 344
- •EL 3.0 JSR 341
- •JSP 2.3 JSR 245
- •JSTL 1.2 JSR 52
- •JBatch (plus) JSR 352
- •Concurrency utilities for EE JSR 236
- •CDI 1.2, DI, Interceptors 1.2, Common Annotations JSR 346 + JSR 330 + JSR 318 + JSR 250

- •Bean Validation 1.1 JSR 349
- •EJB 3.2 JSR 345
- •JavaEE Connector JSR 322
- •JPA 2.1 JSR 338 (WARNING: openjpa based distributions provide a JPA 2.0 runtime)
- •JMS 2.0 JSR 343 (layer based on ActiveMQ 5 / JN 1.1 for default distributions)
- •JTA 1.2 JSR 907
- •Javamail 1.4 (NOTE: EE 7 requires 1.5)
- •JAX-RS 2.0 JSR 339
- •JAX-WS 2.2 JSR 224
- •JAXB 2.2 JSR 222
- •and more inherited from TomEE 1/JavaEE 6

http://tomee.apache.org/comparison.html

# Demo



#### **Ambiente**

- ApacheTomee PlumEE
- Java SE 8
- Maven 3



#### **Pasos**

- Crear un proyecto maven en blanco
- Agregar con maven dependencia Java EE
- Codificaremos con
  - Web Service SOAP (JAX-WS)
  - Web Service REST (JAX-RS)
  - CDI
  - EJB's
  - JAX-B
  - JSON-P
  - Web Sockets

- Servlet 3.1
- JSF 2.2
- Jbatch \*



# Q&A



# Thank You!



### **TomEE Maven Plugin**

- step-1
- Allows Fat Jar, tomee:exec
- Setup and Run, tomee:run
- Build a Server, tomee:build
- Add, remove jars and webapps

