Microservicios con JavaEE

Víctor Orozco - @tuxtor

3 de diciembre de 2017

GuateJUG

Acerca de

- Developer (JVM/Open Source Advocate)
- Consultor independiente (Nabenik)
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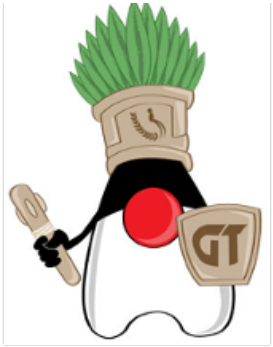

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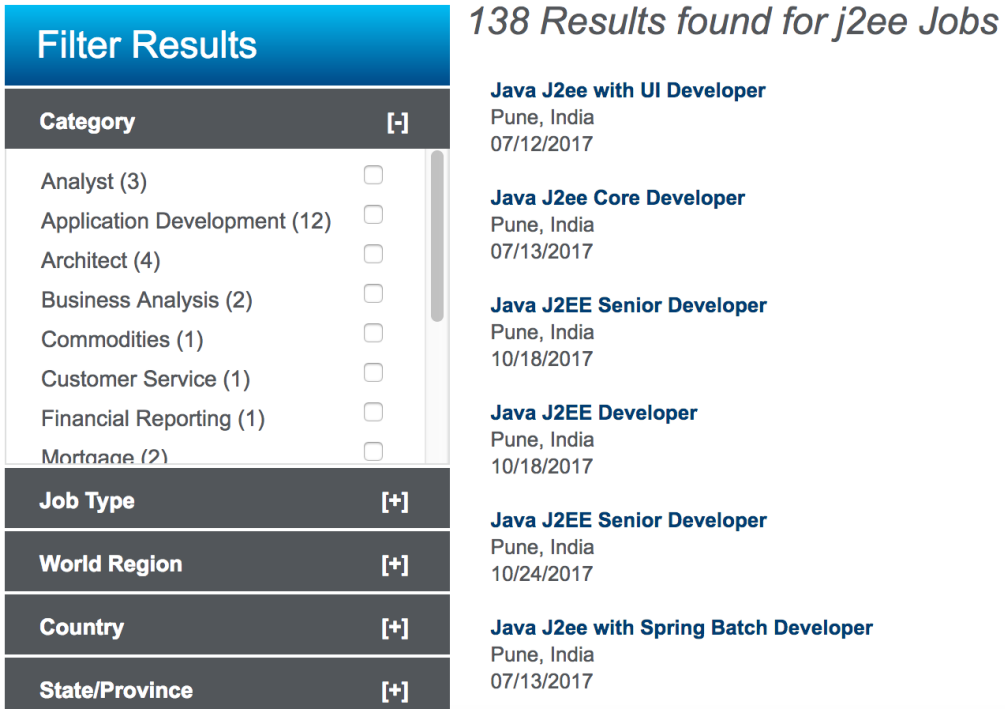
J2EE

J2EE



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EL FUTURO ES HOY,OISTE VIEJO

Java EE 7

JavaEE 7

- More annotated POJOs
- Less boilerplate code
- Cohesive integrated platform

- WebSockets
- JSON
- Servlet 3.1 NIO
- REST

- Batch
- Concurrency
- Simplified JMS

JavaEE 7

- Nuevo JMS
- WebSockets
- JSON Support
- Concurrency
- Nuevo JAX-RS
- Batch apps

Java EE 7 - La rebelión de los Dukes

JavaEE 7 - La rebelión

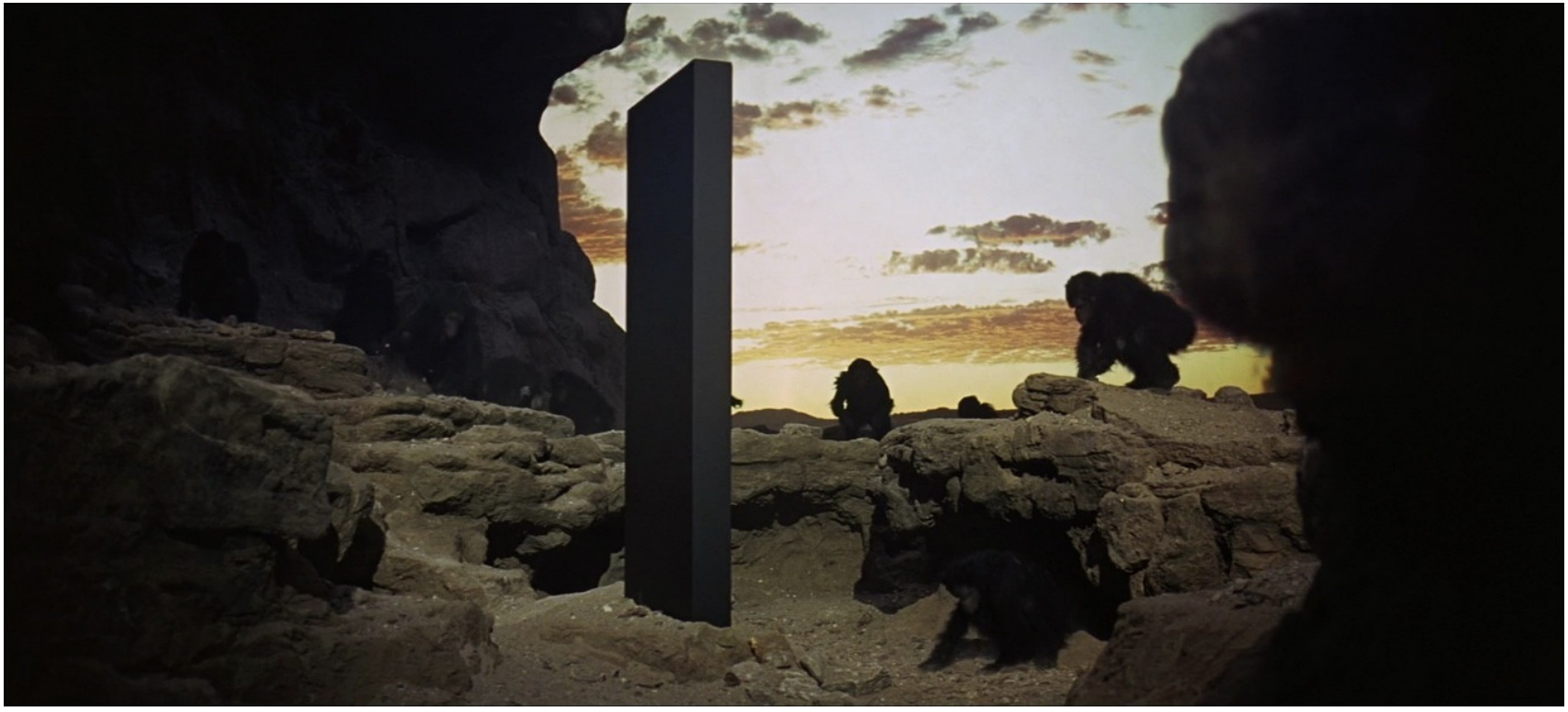
JavaEE Micro

Solución

Estado zen del arquitecto de software

- **Productividad** - Java 8
- Recurso humano - POO -¿ Funcional
- **¿Predictibilidad y estabilidad?**
- **¿Escalabilidad?**
  - **App Server** - Vertical y luego horizontal
  - **Microservicios** - Horizontal
- Costos - Todas las anteriores

Solución



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Monolito

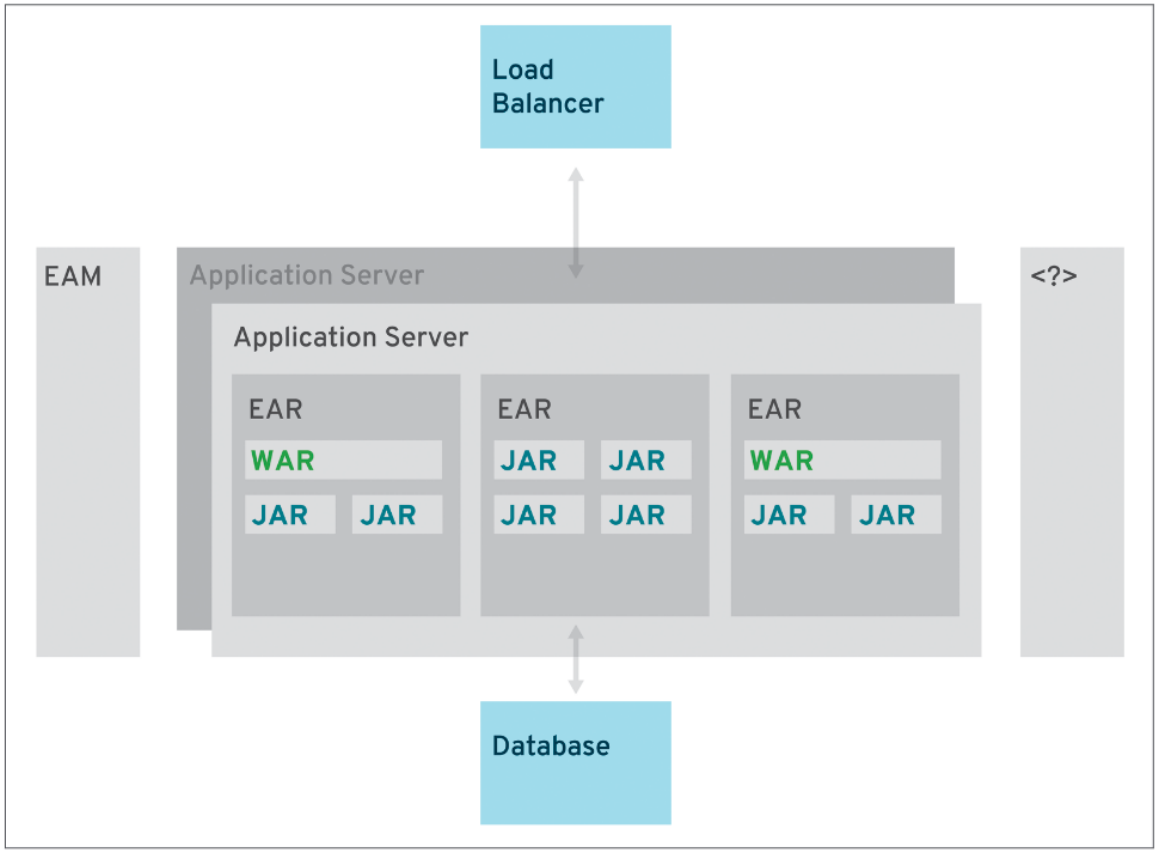

Figura 1: Arquitectura monolitica - Creditos: Markus Eisele

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ESB

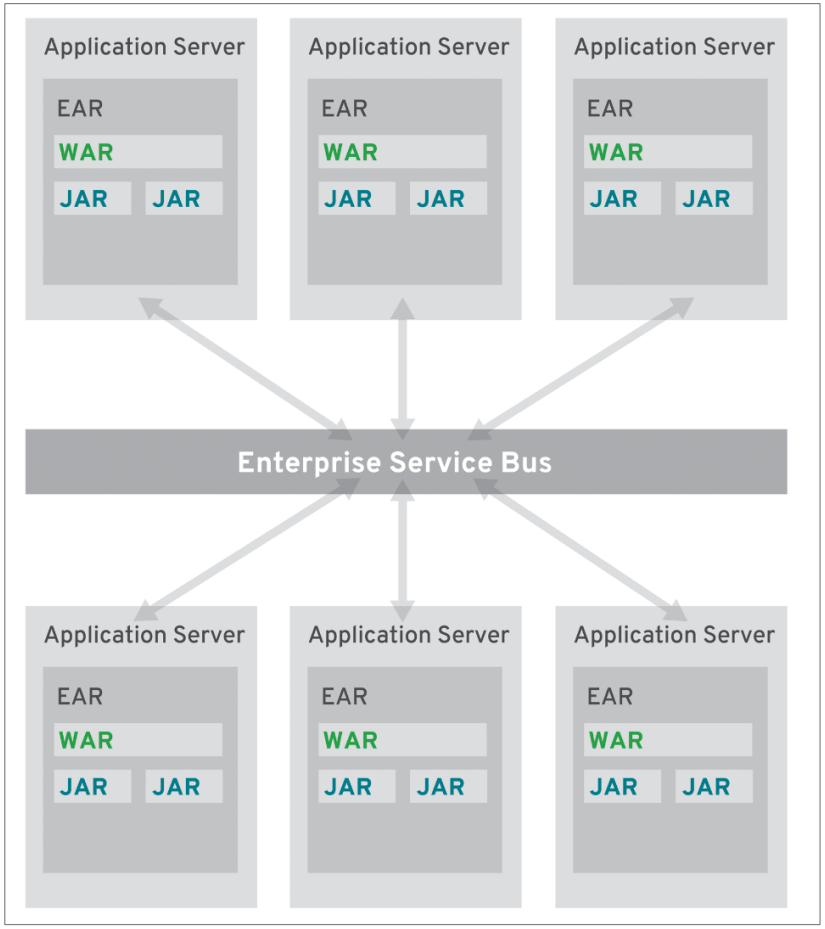

Figura 2: Arquitectura Esb - Creditos: Markus Eisele

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Microservicios

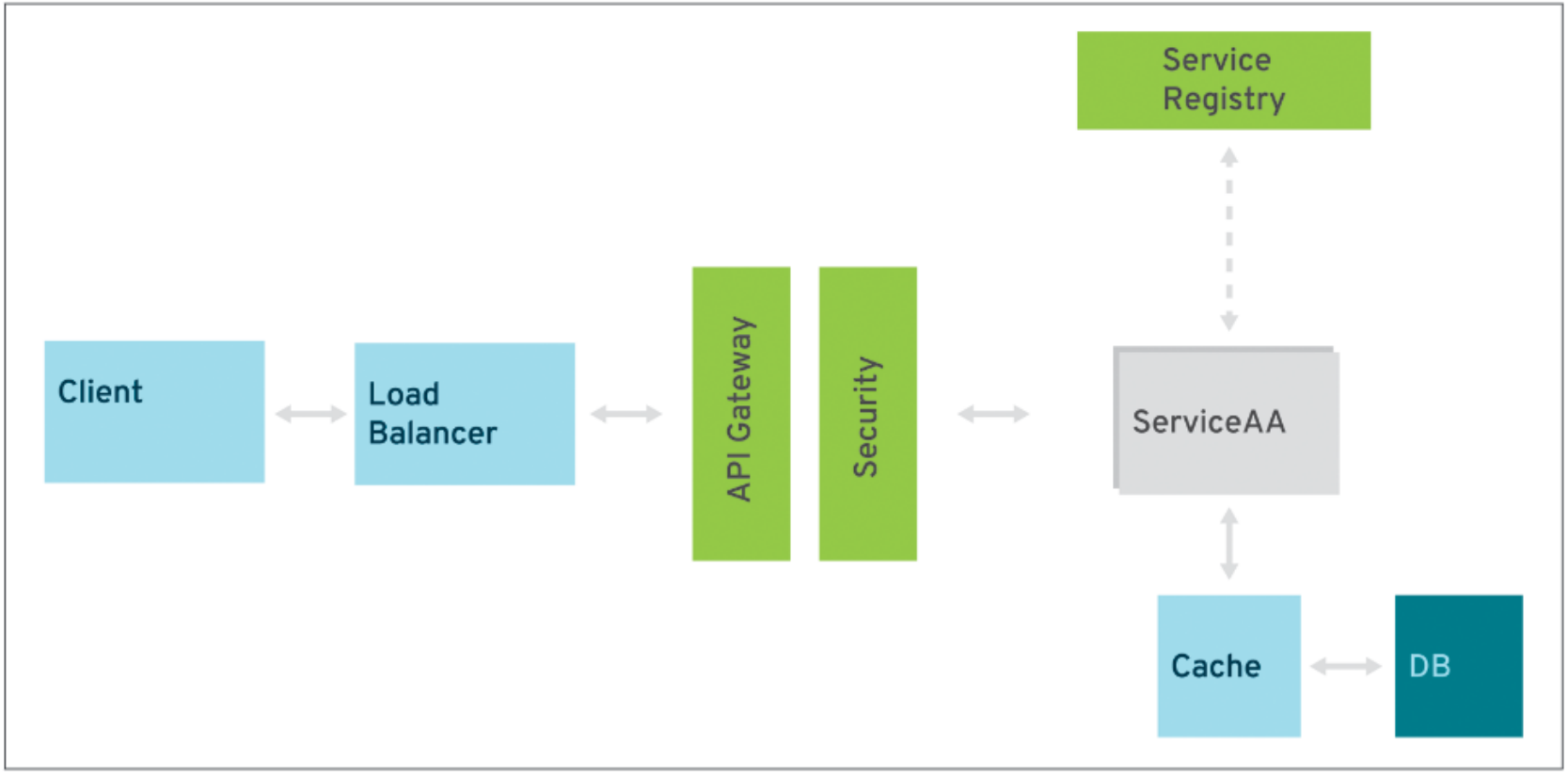


Figura 3: Arquitectura Microservicio - Creditos: Markus Eisele

Microservicios

Ventajas

- Bases de código pequeñas
- Buenas practicas de programación
- Tolerancia a fallas
- Escalabilidad

Desventajas

- Tooling overhead
- Debug
- Transacciones distribuidas
- Latencia
- Interdependencia
- Falacias de la computación distribuida

Desventaja

Hype Driven Development

Microservicios funcionales con JavaEE

JavaEE el framework más anti-hype de la tierra

J2EE 1.2 (Diciembre 12, 1999)

Implementación

- Refactoring iterativo
- Refactoring practico
- Nuevos servicios

Implementación

- **Refactoring iterativo**
- **Refactoring practico**
- **Nuevos servicios**

Microservicios - JavaEE

Subset de Api en JavaEE

- JAX-RS
- JSON-P
- CDI, EJB
- JCache, JPA

Nuevas formas de despliegue

- Versiones micro JavaEE (CLI)
- Uber-Jar/Fat-Jar

Microservicios - JavaEE

Opciones

- **Wildfly Swarm**
- KumuluzEE
- Dropwizard
- WebSphere Liberty
- **Payara Micro**

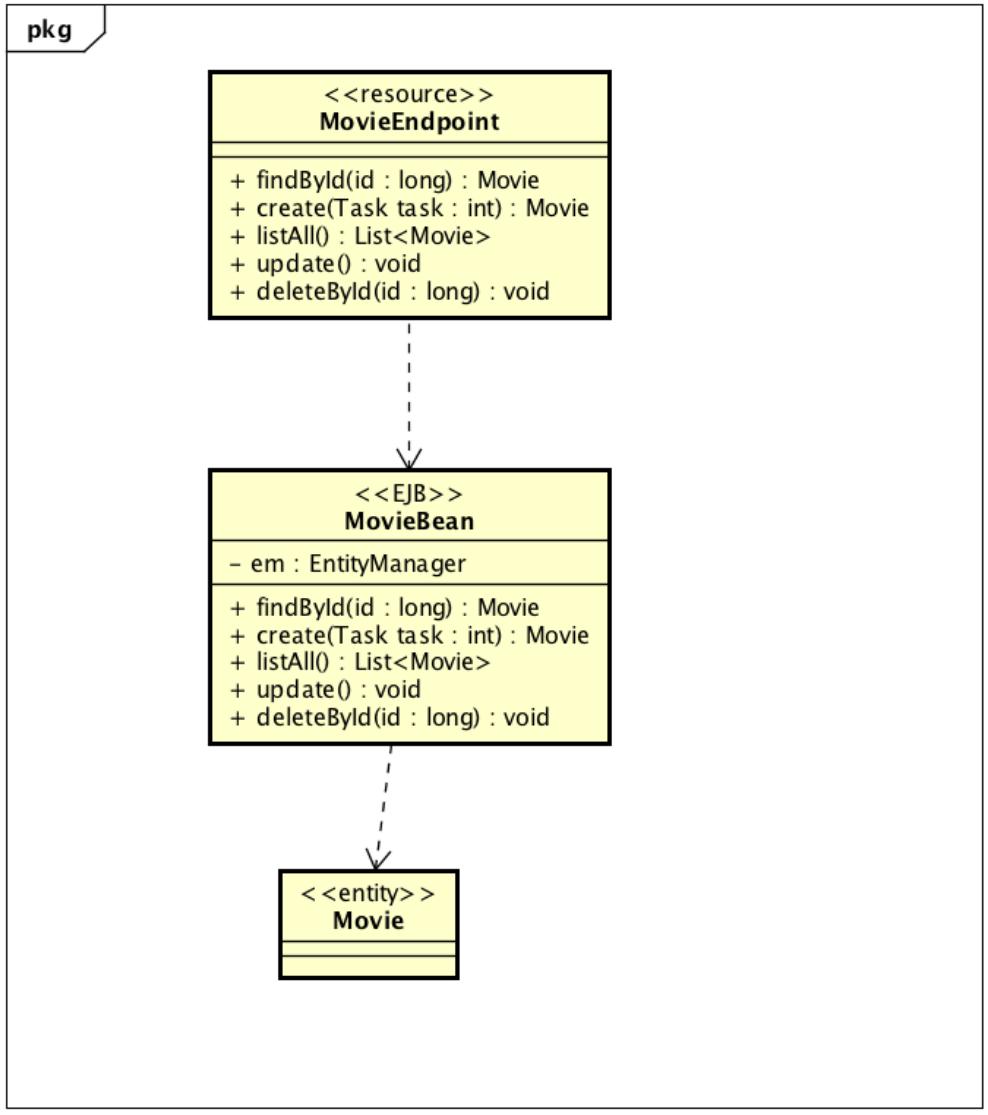
Demo

JavaEE Micro - Demo

Java 8, JAX-RS, CDI, EJB, JCache

`https://github.com/tuxtor/javaee-hol`

Payara Micro - Demo



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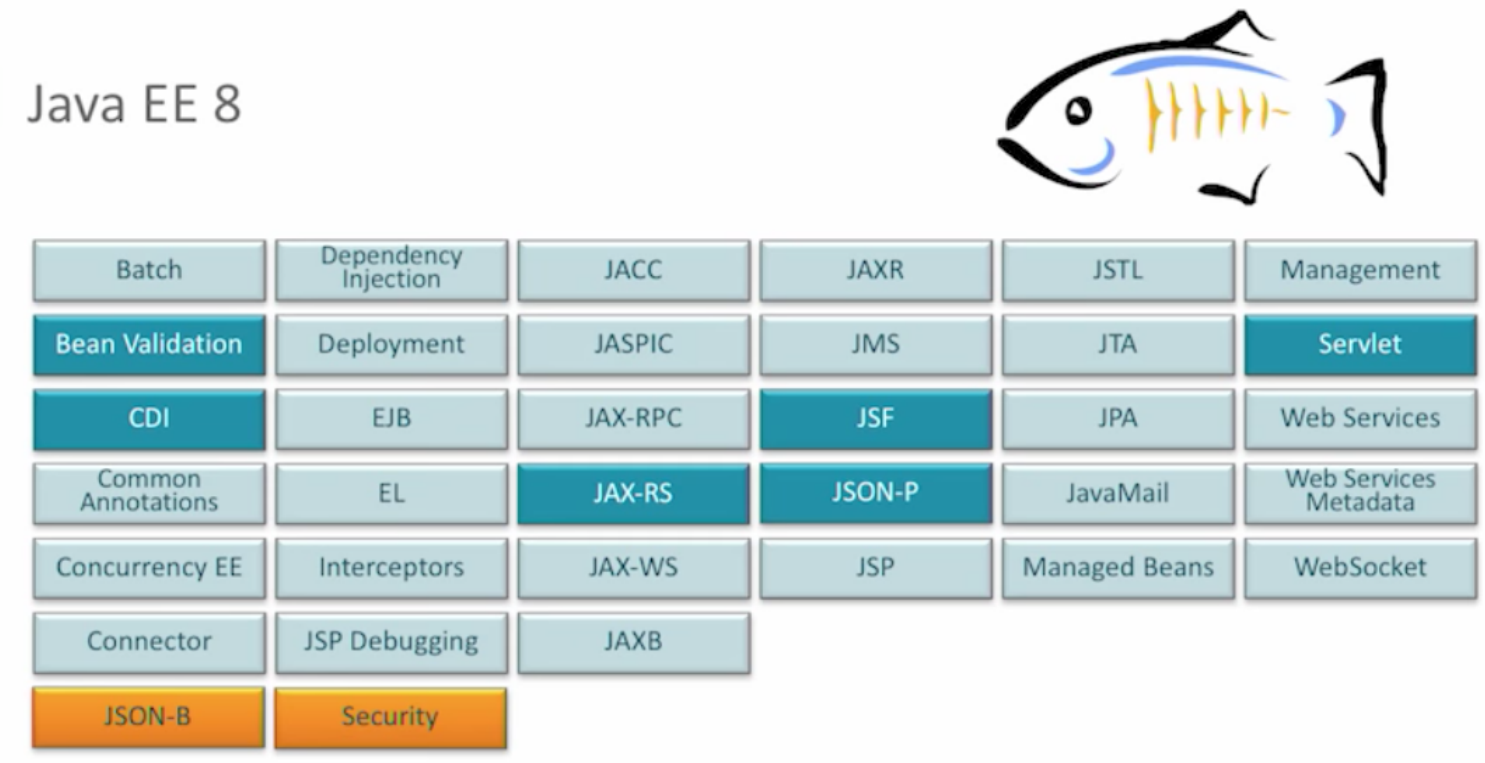
Java EE 8

JavaEE 8


Java EE 8
Batch
Dependency Injection
JACC
JAXR
JSTL
Management
Bean Validation
Deployment
JASPIC
JMS
JTA
Servlet
CDI
EJB
JAX-RPC
JSF
JPA
Web Services
Common Annotations
EL
JAX-RS
JSON-P
JavaMail
Web Services Metadata
Concurrency EE
Interceptors
JAX-WS
JSP
Managed Beans
WebSocket
Connector
JSP Debugging
JAXB
JSON-B
Security

JavaEE 8

- Mejor integración de JSF con CDI
- Mejor integración de JMS con CDI
- HTTP/2
- JSON-B
- Security
- JAX-RS Reactivo

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Payara Server 5 Alpha 1 release is here!

12 Sep 2017

We're excited to announce that the first Alpha release of Payara Server 5 is now available for download! We highly encourage you to give it a go, test it out and let us know what further improvements are needed.

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Payara Server 5

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JavaEE 8

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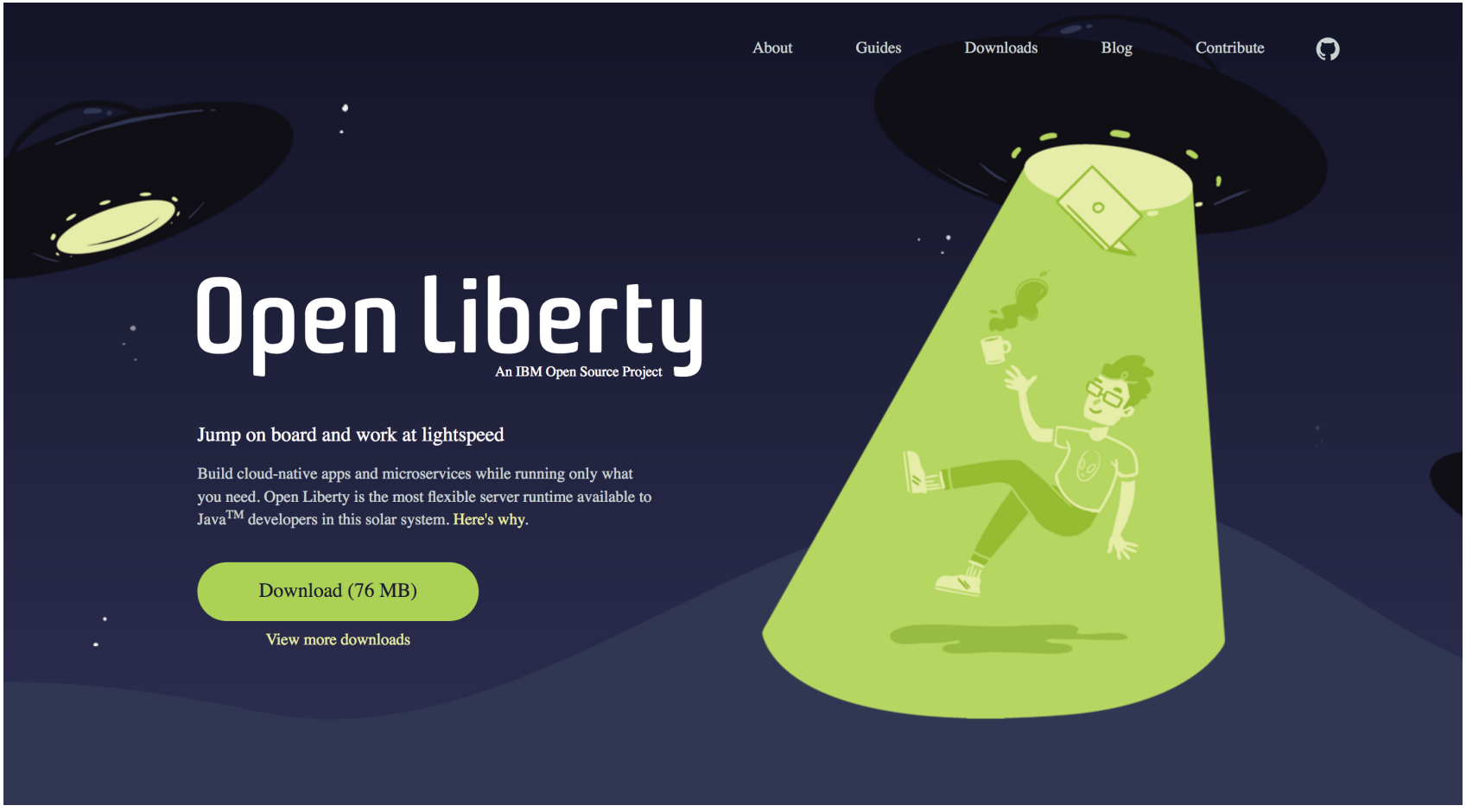
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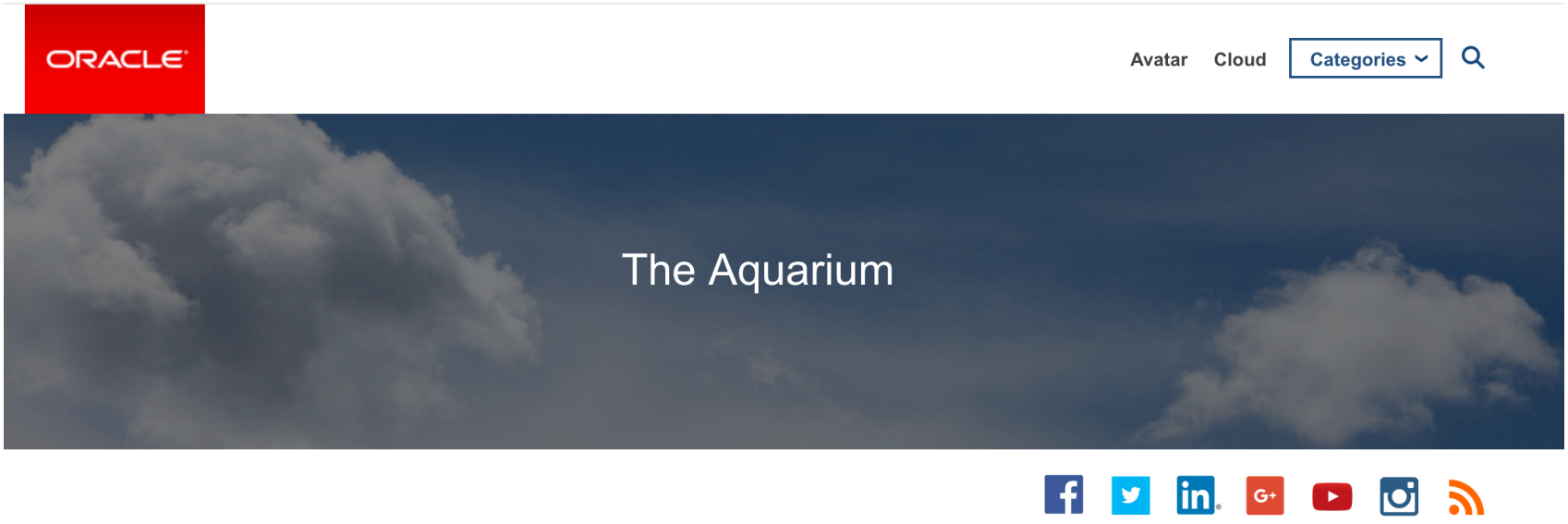
JavaEE 8

- Glassfish – 100 % compatible con JavaEE 8
- Wildfly(JBoss) – Inician los trabajos para JavaEE 8, se esperan para Wildfly 12
- OpenLiberty – Fase beta de soporte
- Payara – Fase beta de soporte
- TomEE – Inican los trabajos para JavaEE 8
- Weblogic – Compromiso publico que JavaEE 8 sera implementado

EE4J



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COMMUNITY, JAVAEE | Thursday, August 17, 2017

Opening Up Java EE

By: David Delabassee | Software Evangelist

We continue to make great progress on Java EE 8. Specifications are nearly complete, and we expect to deliver the reference implementation this summer. As we approach the delivery of Java EE 8 and the JavaOne 2017 conference, we believe there is an opportunity to rethink how Java EE is developed in order to make it more agile and responsive to changing industry and technology demands.

EE4J

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HOME / PROJECTS / THE ECLIPSE ENTERPRISE FOR JAVA PROJECT TOP LEVEL PROJECT CHARTER

The Eclipse Enterprise for Java Project Top Level Project Charter

This is a draft. We invite your feedback. Join the conversation at ee4j-community.

Please see the Frequently Asked Questions.

Overview

Eclipse Enterprise for Java (EE4J) is an open source initiative to create standard APIs, implementations of those APIs, and technology compatibility kits for Java runtimes that enable development, deployment, and management of server-side and cloud-native applications. EE4J is based on the Java™ Platform, Enterprise Edition (Java EE) standards, and uses Java EE 8 as the baseline for creating new standards.

Although Java EE was developed in open source, often the Java EE development process was not perceived as nimble, flexible or open enough when compared to other open source projects and processes. EE4J enables the use of more nimble processes, more flexible licensing, and a more open governance process for evolution of the platform.

This charter was developed in accordance with the **Eclipse Development Process** and will outline the mission of the EE4J Project. This document extends the Eclipse **Standard Top-Level Charter v1.2**, and includes the required content and overrides that follow. It is anticipated that as the standard charter is updated, this charter will incorporate the changes and make adjustments as seen fit by the PMC, and with approval from the EMO and board of directors.

- Descriptive name: Eclipse Enterprise for Java
- Nickname: EE4J

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Fin

Gracias

- me@vorozco.com
- http://vorozco.com
- http://github.com/tuxtor/slides

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