

# Java EE moderno, de Monolitos a Payara Micro

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Víctor Orozco - @tuxtor

4 de noviembre de 2017

Java Day Guatemala 2017

# Acerca de

- Developer (JVM/Open Source Advocate)
- Consultor independiente (Nabenik)
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# J2EE

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**Java J2ee with Spring Batch Developer**

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# Java EE 7

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## JavaEE 7

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



# Java EE 7 - La rebelión de los Dukes

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# JavaEE Micro

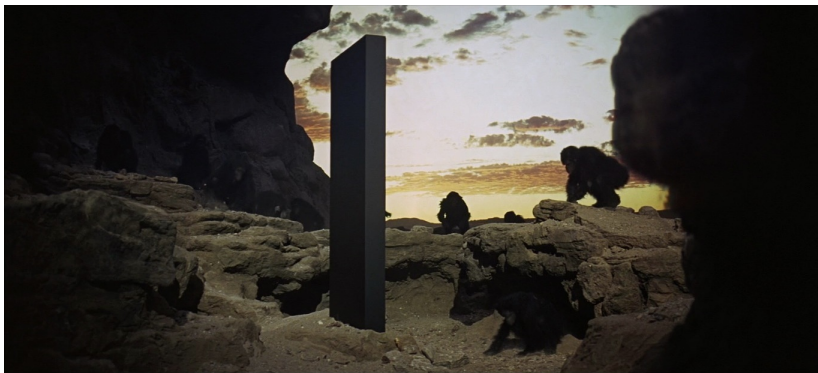
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## Estado zen del arquitecto de software

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





# Monolito

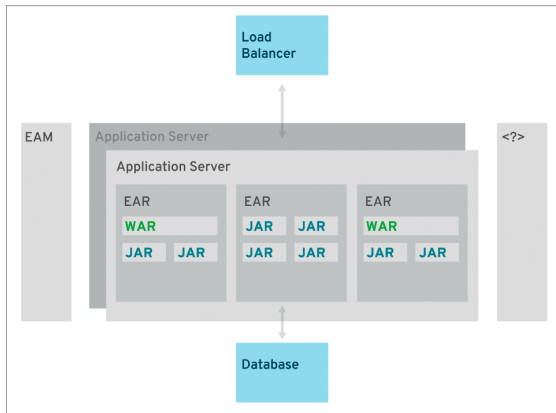


Figura 1: Arquitectura monolitica - Creditos: Markus Eisele

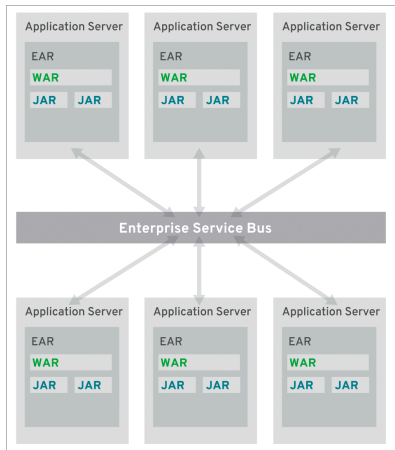


Figura 2: Arquitectura Esb - Creditos: Markus Eisele



# Microservicios

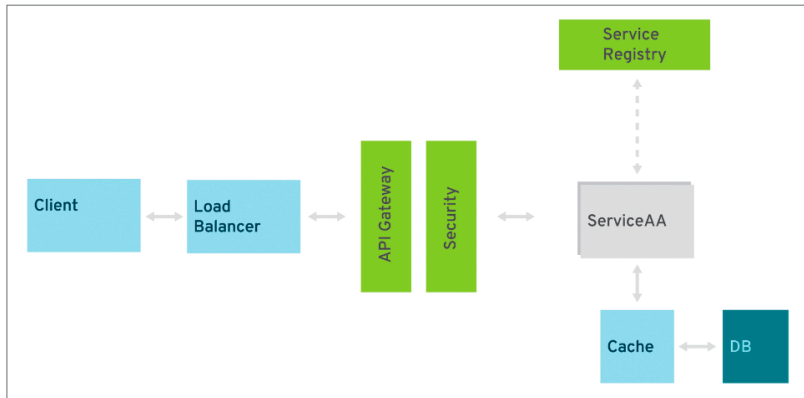


Figura 3: Arquitectura Microservicio - Creditos: Markus Eisele

## 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

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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

## 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/Serverless





## Opciones

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



- Glassfish Embedded (Web Profile)
- Container friendly
- War en CLI
- FatJar en `main()`
- Compatible con Microprofile (JAX-RS, CDI, Config, JSON-P)
- JCache y clustering - Hazelcast

## Estado zen del arquitecto de software

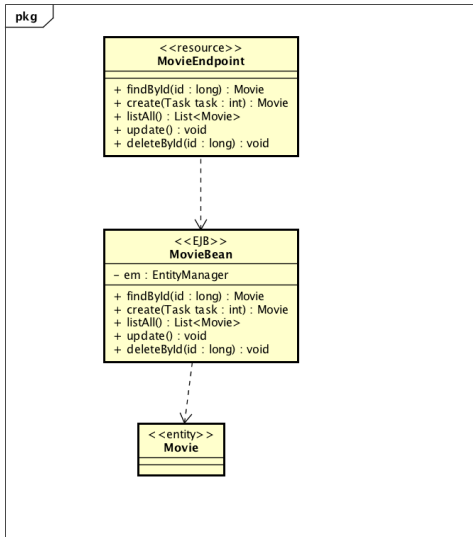
- Productividad - Java 8
- Recurso humano - POO -> Funcional
- Predictibilidad y estabilidad - Payara Micro
- Escalabilidad brutal - Microservicios
- Costos - Todas las anteriores

# Demo

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

<https://github.com/tuxtor/payara-demo>



# Java EE 8

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## 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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Bu



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**WildFlyAS** @WildFlyAS · Oct 24  
[#WildFly 11.0.0.Final](#) is now available! [wildfly.org/news/2017/10/2...](http://wildfly.org/news/2017/10/2...)  
7 114 98

**Garul Silva O.** @garulsilva · Oct 24  
Java EE 8 support?  
1

**WildFlyAS**  
@WildFlyAS Following

Replying to [@garulsilva](#)

WildFly 12 will start bringing EE8 features.  
11 was mostly focused on new security infrastructure [#Elytron](#)

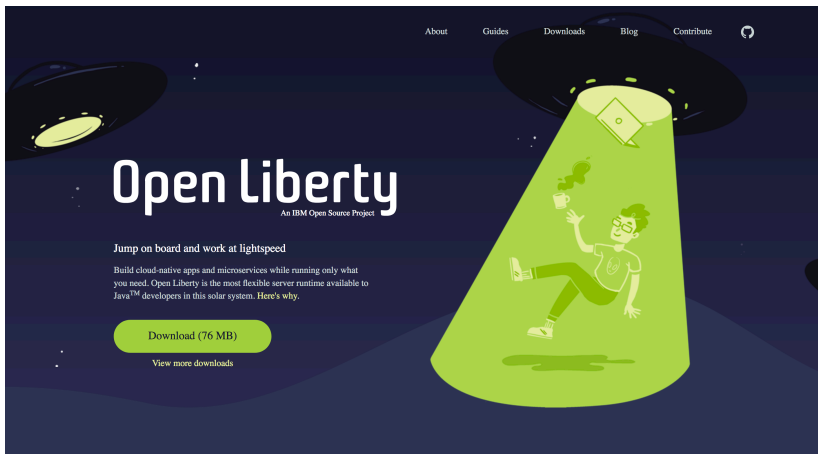
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The image shows the landing page of the Open Liberty website. The background is a dark blue space-themed illustration with two UFOs. One UFO's beam of light illuminates a person sitting on the ground, holding a laptop and a coffee cup. The person is wearing a t-shirt with a Java logo. The other UFO's beam is visible in the upper left.

Navigation links: [About](#), [Guides](#), [Downloads](#), [Blog](#), [Contribute](#), [GitHub icon](#)

# Open Liberty

An IBM Open Source Project

Jump on board and work at lightspeed

Build cloud-native apps and microservices while running only what you need. Open Liberty is the most flexible server runtime available to Java™ developers in this solar system. [Here's why.](#)

[Download \(76 MB\)](#)

[View more downloads](#)

- 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 – Inician los trabajos para JavaEE 8
- Weblogic – Compromiso publico que JavaEE 8 sera implementado

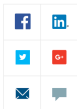
EE4J

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## The Aquarium



### Share



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.



# 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



# Fin

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



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