

Microservicios con Jakarta EE y Eclipse MicroProfile

Víctor Orozco - @tuxtor

3 de agosto de 2021

Academik



ACADEMIK

Java EE

Java Platform, Enterprise Edition (Java EE) is based on the Java SE specification. It represents a **collaboration between numerous vendors and industry leaders**, and provides the infrastructure support for applications - *IBM*

- Especificaciones (Estandares) desarrollados en el Java Community Process -e.g. JPA, CDI, JAX-RS -
- Implementaciones totales (Glassfish, Weblogic) o parciales (Tomcat, Jetty)
- TCK (\$\$\$)

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				

Java EE 8 Full Platform Compatible Implementations

GlassFish Server Open Source
Edition 5.0



IBM WebSphere Application
Server Liberty Version 18.0.0.2



Wildfly 14.x



Tested Configuration

Red Hat JBoss Enterprise
Application Platform 7.3



Eclipse GlassFish 5.1



InforSuite Application Server
Enterprise Edition V10.1



Oracle Weblogic Server 14.1.1.0



TongTech TongWeb Application
Server 7



Beijing Baolande Software
Corporation BES Application
Server V9.5.5



Java EE 8 Web Profile Compatible Implementations

GlassFish Server Open Source
Edition 5.0



Wildfly 14.x Web Profile



IBM WebSphere Application
Server Liberty Version 18.0.0.2



Red Hat JBoss Enterprise
Application Platform 7.3



Eclipse GlassFish 5.1



InforSuite Application Server
Standard Edition V10.1



Java EE 8

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



COMMUNITY, JAVAEE

August 17, 2017



Opening Up Java EE



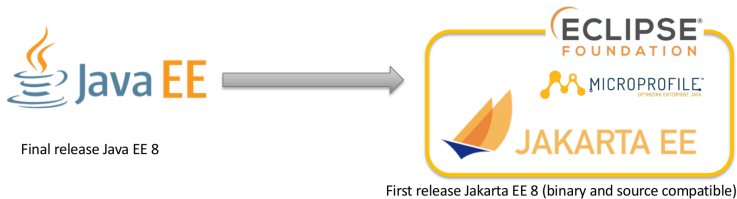
David Delabassee
SOFTWARE EVANGELIST

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.

Java EE is enormously successful, with a competitive market of compatible implementations, broad adoption of individual technologies, a huge ecosystem of frameworks and tools, and countless applications delivering value to enterprises and end users. But although Java EE is developed in open source with the participation of the Java EE community, often the process is not seen as being agile, flexible or open enough, particularly when compared to other open source communities. We'd like to do better.

We are discussing how we can improve the Java EE development process following the delivery of Java EE 8. We believe that moving Java EE technologies including reference implementations and test compatibility kit to an open source foundation may be the right next step, in order to adopt more agile processes, implement more flexible

Java EE - JakartaEE + MicroProfile





AKADEMIK

Jakarta EE





- Especificaciones (Estandares) desarrollados en la fundación Eclipse -e.g. JPA, CDI, JAX-RS -
- Implementaciones totales (Glassfish, Weblogic) o parciales (Tomcat, Jetty)
- TCK (Open Source) y disponibles en Github

Cambios más importantes

- Jakarta EE 8 - Transición hacia Eclipse
- Jakarta EE 9 - Desde javax.* hacia jakarta.*
- Jakarta EE 9.1 - Java 11 es el mínimo

Specifications

Jakarta EE Platform

Defines a platform for hosting Jakarta EE applications

Jakarta EE Web Profile

Web profile of platform for hosting Jakarta EE applications

Jakarta EE Core Profile

Core profile of platform for smaller runtimes

Jakarta Activation

Defines standard services for MIME type data access

Jakarta Annotations

Declarative style annotations for common semantic concepts

Jakarta Authentication

Low-level container SPI for authentication mechanisms

Jakarta Authorization

Low-level container SPI for authorization modules

Jakarta Batch

API plus an XML-based batch job specification language

Jakarta Bean Validation

Object level constraint declaration and validation facility

Jakarta Concurrency









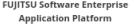











Jakarta Config

Jakarta Connectors

Innovate with Us

- ▶ [About Jakarta EE](#)
- ▶ [Frequently Asked Questions](#)
- ▶ [Become a Member](#)
- ▶ [Stay Connected](#)
- ▶ [Working Group Charter](#)
- ▶ [Technical Direction](#)
- ▶ [Newsletter Archives](#)
- ▶ [Meeting Minutes](#)
- ▶ [Trademark Guidelines](#)
- ▶ [Specification Process](#)

Jakarta EE - Implementaciones

Jakarta EE Compatible Products			
Jakarta EE 9.1	Jakarta EE 9	Jakarta EE 8	
 ApacheTomEE Apache TomEE	 Apusic Application Server Apusic AAS	 BES Application Server BES Application Server	 Eclipse GlassFish
 FUJITSU Software Enterprise Application Platform	 IBM WebSphere Liberty	 INFORMS 中创中间件® InforSuite Application Server	 Red Hat JBoss Enterprise Application Platform
 FUJITSU Software Enterprise Application Platform	 IBM WebSphere Liberty	 Open Liberty	 ORACLE WebLogic Server
 Tmax JEUS JEUS	 ManageFish Server	 Open Liberty	 Oracle WebLogic Server 14c
 payara SERVER Payara Server Community	 payara SERVER Payara Server Enterprise	 Primeton AppServer Primeton AppServer	 华宇应用服务器 Thunisoft Application Server Thunisoft Application Server

Jakarta EE - Migraciones



Apache Tomcat®

Tomcat Migration Tool for Jakarta EE Software Downloads

Welcome to the Apache Tomcat® Migration tool for Jakarta EE software download page. This page provides download links for obtaining the latest version of Tomcat Migration Tool for Jakarta EE software, as well as links to the archives of older releases.

Quick Navigation

[KEYS](#) | [1.0.0](#) | [Browse](#) | [Archives](#)

Release Integrity

You **must** [verify](#) the integrity of the downloaded files. We provide OpenPGP signatures for every release file. This signature should be matched against the [KEYS](#) file which contains the OpenPGP keys of Tomcat's Release Managers. We also provide [SHA-512](#) your download, and make sure it is the same as ours.

Mirrors

You are currently using <https://downloads.apache.org/>. If you encounter a problem with this mirror, please select another mirror. If all mirrors are failing, there are *backup* mirrors (at the end of the mirrors list) that should be available.

Other mirrors:



ACADEMIK

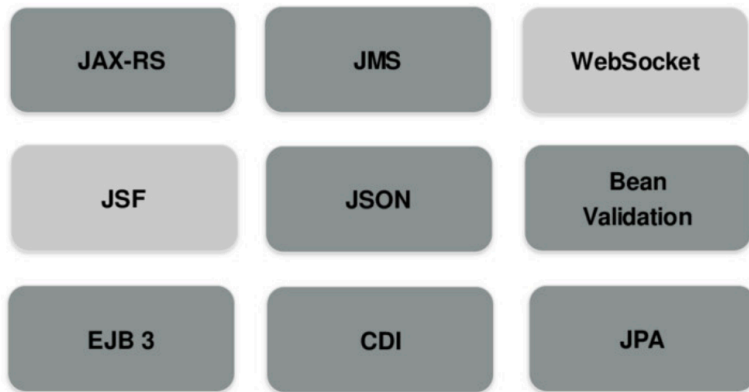
MicroProfile





- Especificaciones (Estandares) desarrollados en la fundación Eclipse -e.g. Fault Tolerance, OpenAPI-
- Implementaciones con Jakarta EE completo (Payara Micro, Apache TomEE) o unicamente MicroProfile (Oracle Helidon, Red Hat Quarkus)
- TCK (Open Source) y disponibles en Github

Microservicios - Java EE



Administration

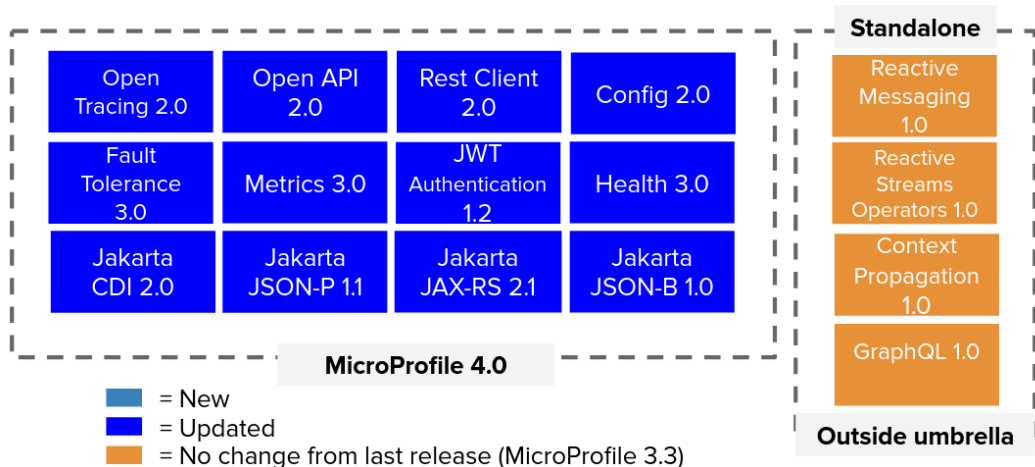
Monitoring

High
Availability

Security

Resources

MicroProfile





Resumen

- Jakarta EE -WebLogic-
- MicroProfile -Quarkus, Oracle Helidon-
- Jakarta EE + MicroProfile -Payara Micro, IBM OpenLiberty-
- Implementadores -SmallRye, Apache Geronimo, Tomcat, Jetty-

Entornos de ejecución

- Servidores de aplicación
- Fat-jar/Uber-jar
- Docker



- vorozco@nabenik.com
- @tuxtor
- <https://voroeco.com>
- <https://tuxtor.shekalug.org>



This work is licensed under
Creative Commons Attribution-
NonCommercial-ShareAlike 3.0
Guatemala (CC BY-NC-SA 3.0 GT).