



# Jakarta EE: Why and how to get involved in Open Source Software?

June 2024

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@TanjaEclipse

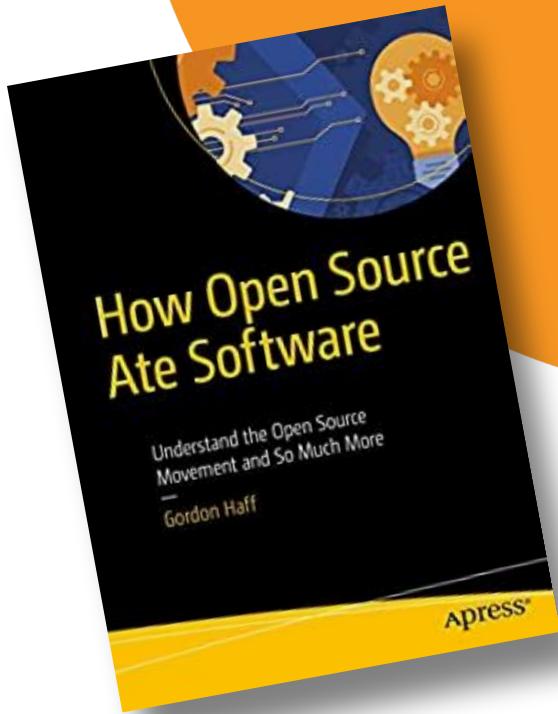
tanja.obradovic@eclipse-foundation.org





# Software ate the world...

# ...then open source gobbled up software





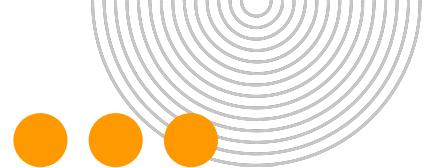
The Community  
for Open  
Innovation  
and  
Collaboration

**Eclipse.org**

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# The Eclipse Foundation at a glance



Driven by a diverse community of communities, we foster open collaboration and sustainable innovation on a global scale

**415+**  
Projects

**2,000+**  
Committers

**360+**  
Members

**21**  
Industry  
Collaborations

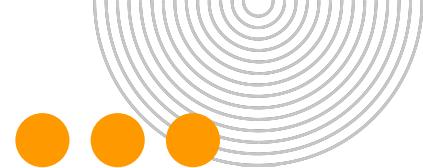
**450M+**  
Lines of Code

**50+**  
Countries  
Represented by  
Committers

**\$25B+**  
Shared Technology  
Investment

**65+**  
Staff Members

# We host a broad spectrum of industry collaborations



## Open Source Java



## Automotive & Mobility



## Embedded & IoT



## Next Gen Tooling



## Emerging Collaborations



Eclipse Foundation

# Collaboration Platform

# Governance Platform



Infrastructure  
for Open  
Collaboration



Ecosystem  
Development

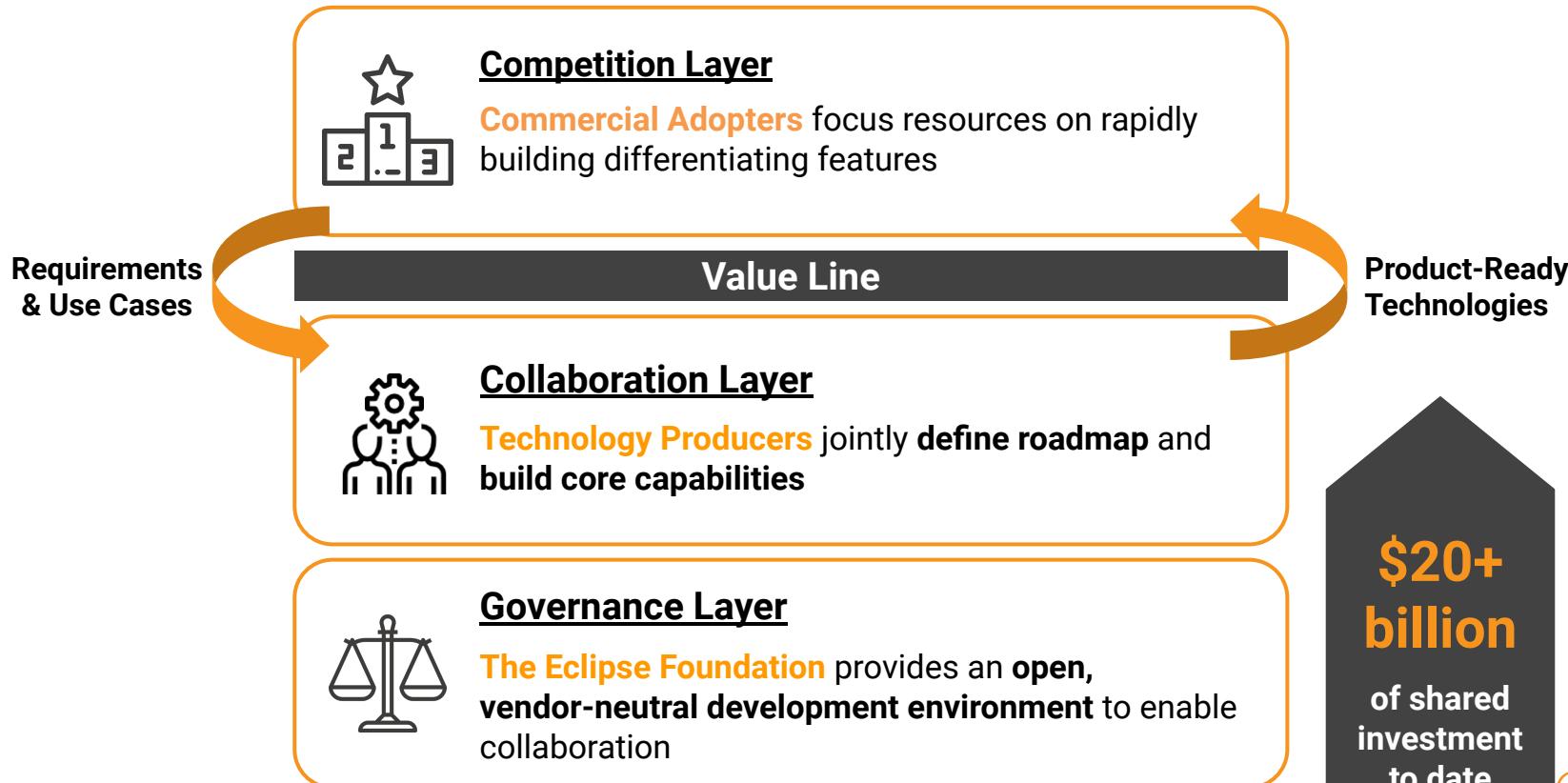
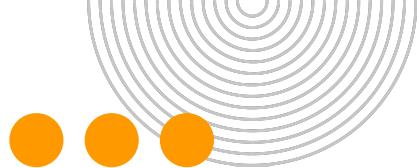


Community  
Governance  
& Processes



IP Management  
& Licensing

# Our Impact: Open Innovation at Industrial Scale

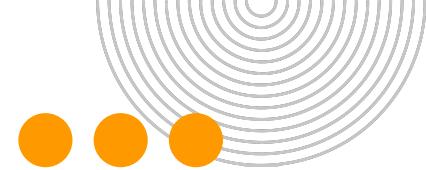
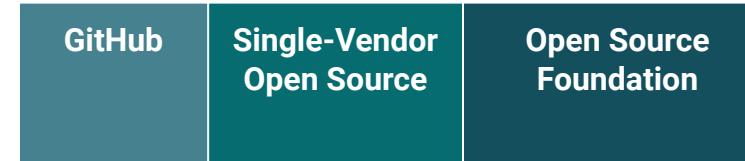


# The Growing Eclipse Foundation Member Community





## The diversity of open source



### Open Source Eclipse Foundation Style

<b>Thriving developer community</b>	○
<b>High quality code</b> that solves complex problems	○
<b>Ecosystem development and marketing</b> services to drive adoption and monetization	○
<b>Predictable processes and guidance</b> to deliver large-scale innovation on a regular cadence	○
<b>Vendor-neutral governance</b> model to support industry-wide collaboration	○
<b>Business-friendly IP and licensing</b> services to enable commercialization	○



# Cloud Native Java Collaborative Projects

The Eclipse Foundation is home to industry standards and an open source stack for building, deploying, and managing containerized enterprise Java microservices on Kubernetes.

We are backed by the world's leading innovators in Java, including IBM, Microsoft, Oracle, Fujitsu, Payara, Red Hat, and Tomitribe.



# Enterprise Java Landscape

\*Dark boxes represent Eclipse projects/WGs & Jakarta EE & MicroProfile Compatible Runtimes

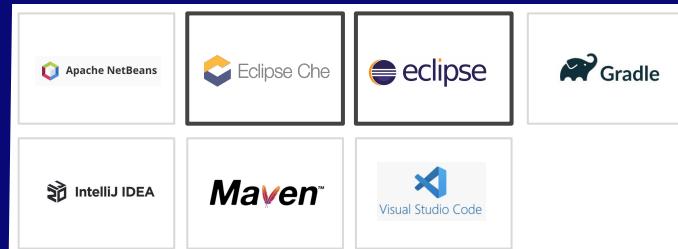
## Languages



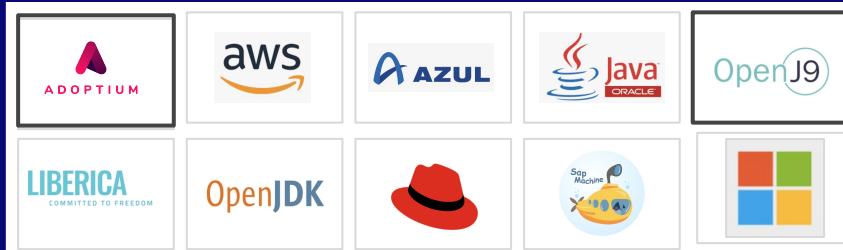
## Framework & Specifications



## Tools and IDEs



## JVM/JRE/JDK Distributions



## Runtimes



## Cloud Platform as-a- Service





# Wait, what is Jakarta EE?

# The Big Move



In September 2017, **Java EE** technologies moved to the Eclipse Foundation, where they now continue to evolve under the **Jakarta EE** brand

# Jakarta EE Platform

## Jakarta EE Web Profile

- Authorization
- Activation
- Batch
- Connectors
- Mail
- Messaging
- Enterprise Beans

Expression Language

Authentication

Concurrency

Persistence

Faces

Security

Servlet

Standard Tag Libraries

Server Pages

CDI

WebSocket

Bean Validation

Debugging Support

Enterprise Beans Lite

Data

Transactions

## Jakarta EE Core Profile

CDI Lite

JSON Binding

Annotations

Interceptors

Restful Web Services

Json Processing

Dependency Injection

## Final Specification

Specification  
Document

API

TCK

Compatible  
Implementation(s)



# Jakarta EE Working Group

## An Industry Consortium

Builds the community

Approves Specifications

Drives the Jakarta EE brand

Establishes the technical roadmap

Ensures compatibility

# So..... Jakarta EE refers to

- Working Group name
- Brand
- Set of specifications
- Enterprise Java Technology



# Backed by Java Industry Leaders

## Strategic Members



## Participating Members



## Enterprise Members



## Guest Members





# Jakarta EE at the Eclipse Foundation Specifications only



**29**

Member  
Organizations

**139**

Committers

**34**

Open Source  
Projects

**38**

Active Git  
Repositories

**~6M**

Lines of Codes



# Jakarta EE at the Eclipse Foundation All projects [EE4] top level project]



**29**

Member  
Organizations

**186**

Committers

**60**

Open Source  
Projects

**75**

Active Git  
Repositories

**~119M**

Lines of Codes

# Jakarta EE Releases

# Jakarta EE to Date!





JAKARTA EE



## Jakarta EE 11

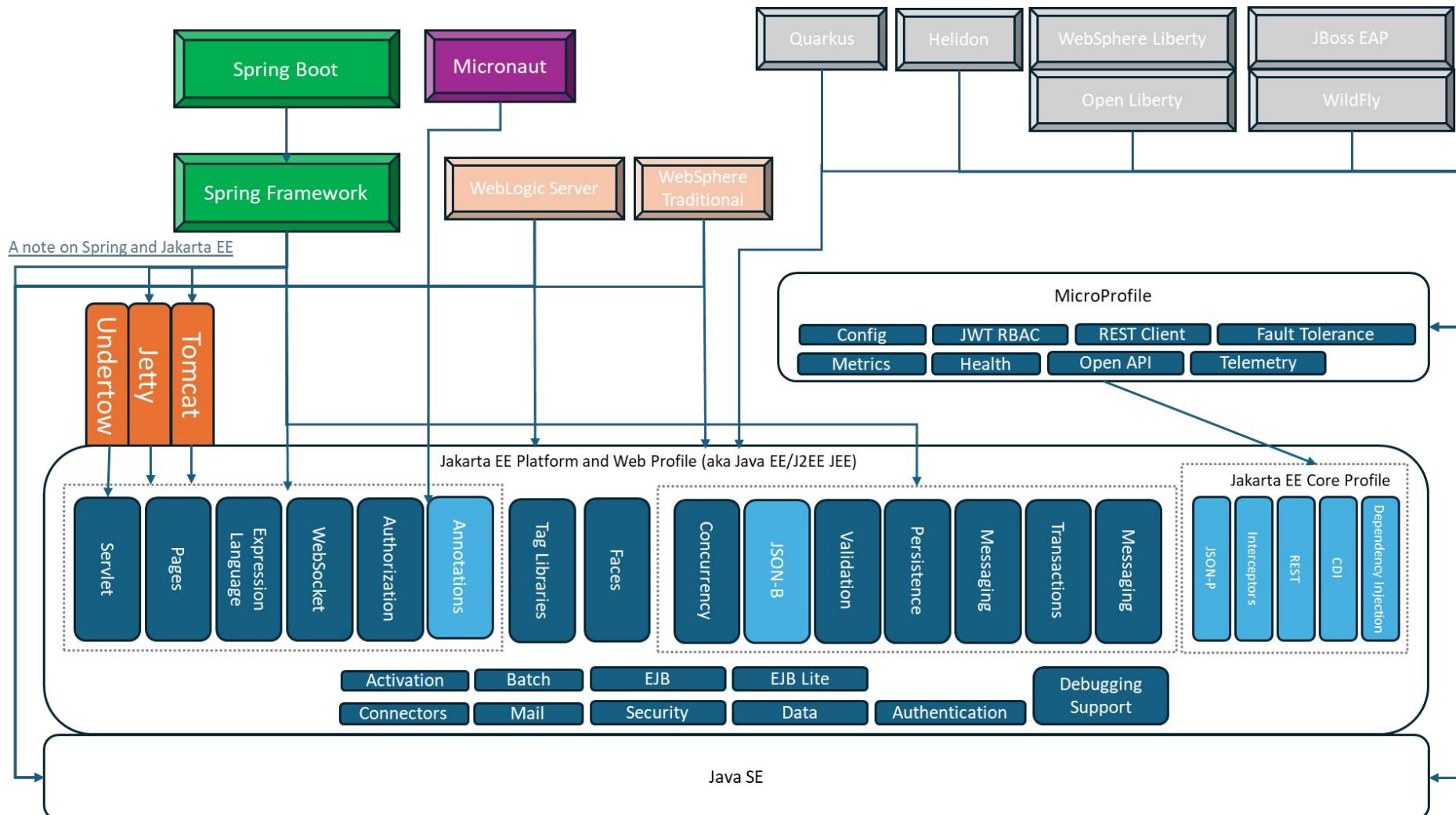
H1, 2024



**javax.\* -> jakarta.\***

**Jakarta EE Core Profile**

**Java 21  
Embrace Records  
Jakarta Data  
CDI Centric  
Removals and  
Deprecations**



# Our Compatible Product Ecosystem



<https://jakarta.ee/compatibility/>

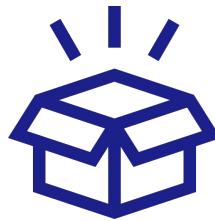


AISWare FlyingServer  
亚信Web应用中间件

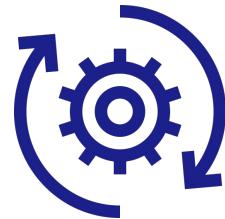


# Jakarta EE 9





**javax.\* -> jakarta.\***



# Transformation



# Eclipse Transformer



# Apache Tomcat Migration Tool

# Jakarta EE 10

# Jakarta EE 10 Platform

## Jakarta EE 10 Web Profile



## Jakarta EE 10 Core Profile



■ Updated

■ Not Updated

■ New



# Key Jakarta EE 10 Features

- **CDI LITE 4.0**
  - Facilitates use in more restrictive environments
  - New API extensions, “dynamic” at build time
  - Removal of deprecated API components
- **Jakarta EE Core Profile**
  - Targets smaller runtimes
- **Jakarta Security 3.0**
  - Supports OpenID Connect
  - Updates to lower level APIs



# Key Jakarta EE 10 Features

- **Jakarta Persistence 3.1**
  - [UUID as basic Java type](#)
  - [Extending Query language and Query API](#)
- **Jakarta RESTful Services 3.1**
  - [Updated API with backwards compatibility](#)
  - [Standardizes a Java SE Bootstrap API](#)
  - [Multipart/form-data Support](#)



Introducing:

New Release!

# JAKARTA EE 10

OPEN, COMMUNITY-DRIVEN INNOVATION  
DEFINING THE FUTURE OF CLOUD NATIVE  
JAVA TECHNOLOGIES



Community Driven

Modernized

Simplified

Lightweight

<https://jakarta.ee/release/10/>

# Jakarta EE 11

Under Development

# Jakarta EE 11 Platform

Authorization 3.0	Authentication 3.1	Data 1.0	
Activation 2.1	Concurrency 3.1	Persistence 3.2	RESTful Web Services 4.0
Batch 2.1	CDI 4.1	Pages 4.0	JSON Processing 2.1
Connectors 2.1	Expression Language 6.0	WebSocket 2.2	JSON Binding 3.0
Mail 2.1	Faces 4.1	Validation 3.1	Annotations 3.0
Messaging 3.1	Security 4.0	Debugging Support 2.0	Interceptors 2.2
Enterprise Beans 4.0	Servlet 6.1	Enterprise Beans Lite 4.0	Dependency Injection 2.0
	Standard Tag Libraries 3.0	Transactions 2.0	CDI Lite 4.1

Updated

Not Updated

New



# Performance and Developer Productivity

NEW in Jakarta EE 11

# Jakarta Data 1.0

**Standardizes the repository pattern for data access**

**<https://jakarta.ee/specifications/data/1.0/>**



# Developer Productivity



- **Jakarta Validation supporting Java Records**
  - Ensures data integrity and reduce boilerplate code
- **Making Jakarta EE leaner**
  - Deprecated Specifications
  - Contexts and Dependency Injection (CDI) Enhancements
  - XML and REST Simplifications
  - Embracing Records throughout the release
  - Deprecation of the SecurityManager
  - Removal of optional features
  - General cleanup and clarifications (started in Jakarta EE 10)

# Performance



## Jakarta EE 11

**API source level: Java SE 17**

**API binary level: Java SE 17**

**TCK run with: Java SE 17+21**

**App Developers (YOU) can use Java SE 21 features if you like !!**

# Jakarta EE 11 Platform

## Jakarta EE 11 Web Profile

Authorization 3.0

Activation 2.1

Batch 2.1

Connectors 2.1

Mail 2.1

Messaging 3.1

Enterprise Beans 4.0

Authorization 3.1

Concurrency 3.1

CDI 4.1

Expression Language 6.0

Faces 4.1

Security 4.0

Servlet 6.1

Standard Tag Libraries 3.0

Data 1.0

Persistence 3.2

Pages 4.0

Validation 3.1

Debugging Support 2.0

Enterprise Beans Lite 4.0

Transactions 2.0

## Jakarta EE 11 Core Profile

RESTful Web Services 4.0

JSON Processing 2.1

JSON Binding 3.0

Annotations 3.0

Interceptors 2.2

Dependency Injection 2.0

CDI Lite 4.1



Updated



Not Updated



New



# Why get involved?

# Why Developers Should Get Involved!

Advance YOUR Career!

Learn from the BEST!



Experience



Recognition



Flexibility



Impact



- **Marketing and Promotional work**
  - Please connect with us on the social media, tweet, share and invite other to participate
  - Help us reach out to the community, write blogs and suggest if we missed anything
- **Technical Work**
  - Work on the Jakarta EE Specifications
    - APIs and Specifications documents
  - Work on TCKs
  - Work on Compatible Implementations, hosted at Eclipse Foundation or not
- **Collateral work**
  - We do need presentations, white papers, technical articles that will explain new specifications and feature updates work



# How to get involved?

# Get Involved with Jakarta EE !

<https://jakarta.ee/community/get-involved/>



**Become a Committer**

Jakarta EE contributors are eligible to become committers. Becoming a committer can happen in a couple of ways: 1) For existing Jakarta EE projects, it happens through an election. After you have made contributions that demonstrate that you understand how the open source project works, a current committer on that project will initiate an election. Current committers must vote in the election; so creating a pull request or filing a bug report does not qualify you to be elected. This is the most interesting part of this entire process. 2) Another option is to become a committer of a new Jakarta EE Specification project, by making initial contributions. The corresponding Project Management Committee (PMC) of the project nominates an initial set of committers for approval by the Executive Director (or his delegates).

If your employer is a member of the Jakarta EE Working Group, they've already signed the necessary paperwork and there is no paperwork for you to complete.

If your employer is not a member of the Jakarta EE Working Group, you will need to complete the following forms:

[Jakarta EE Working Group Individual Participation Agreement](#)  
[Employer Consent Agreement for Eclipse Foundation Specification Projects](#)



All you need to start with:

## Eclipse Contributor Agreement

That's all and it is free!



JAKARTA EE

## How to start?

- Create Eclipse Foundation account  
<https://www.eclipse.org/>
- Select a project you are interested in: *examples, implementation projects, specification projects or TCK project*; visit <https://jakarta.ee/specifications/>, or <https://projects.eclipse.org/projects/ee4j>
- Subscribe to the project mailing list and reach out  
<https://projects.eclipse.org/projects/ee4j.starter/contact> or <https://jakarta.ee/connect/mailing-lists/>
- Find the project repository  
<https://github.com/eclipse-ee4j/starter.git> (\*example)
- Find other ways to connect  
<https://jakarta.ee/connect/>



## Jakarta EE Community Mailing List

jakarta.ee-community is the mailing list for Jakarta EE community discussions. Subscribe to this list for all things Jakarta EE.

[Subscribe](#)



## Jakarta EE Working Group Mailing List

jakarta.ee-wg is the mailing list for the jakarta EE Working Group. Subscribe to this list to share general information regarding jakarta EE.

[Subscribe](#)



## Project Mailing Lists

Want to get involved? Sign up to the jakarta EE project mailing lists here.

[Mailing Lists](#)



## Slack

join the conversations on jakarta EE slack workspace and see what the community members are up to.

[Join](#)



## Updates

Receive updates from the Eclipse Foundation on Jakarta EE and other Eclipse projects, events and community announcements.

[Edit Preferences](#) · Or · [Create Account](#)



## Newsletter

With a Jakarta EE-themed edition released each quarter, the Eclipse Foundation Community Newsletter is your destination for original articles about projects and key technologies.

[Subscribe](#)

[View Archives](#)



## Jakarta EE Community Calendar

Join the jakarta EE Community Calendar to learn more about jakarta EE-related plans.

[Subscribe](#)



## Community Folder

Our public Community Folder features promotional resources and slides from past update calls and other community meetings.

[View](#)



## Tech Talks Meet-Ups

Jakarta Tech Talks are both conference based and virtual webinars dedicated to the discussion and discovery of any cloud native java projects, microservices projects, and technologies.

[Tech Talks](#) · [Sign Up to Host](#)



## Jakarta EE Specifications Calendar

Jakarta EE Specifications Calendar lists meetings dedicated to different Jakarta EE Specifications. Subscribe to the jakarta EE Specifications Calendar to learn more about Specification-related plans.

[Calendar](#)

<https://jakarta.ee/connect/>



# Be part of the Community!

<https://jakarta.ee/community>



## Adopt a Spec

- Learn about the Adopt a Spec Program



## Events

- Find the latest Cloud Native Java Events



## JakartaOne Livestream

- Find the latest JakartaOne Livestream
- Find out how to host a JakartaOne Livestream in your own language



## Stay Connected

- Find the Communication Channels



## Tech Talk Meet-Ups

- Find the latest Jakarta Tech Talk
- Sign up to host a talk



## Videos

- Watch the latest videos
- Subscribe to our Youtube channel

# Growing & Rewarding Committers and Contributors

- Promote **new contributors** on socials Facebook, Twitter and LinkedIn, and on the community news section of the Jakarta EE website.
- Congratulate **newly elected committers** on socials Twitter, LinkedIn and Facebook and also on the community news section of the Jakarta EE website.
- Recognize **the most prolific committers/contributors** to coincide with the JakartaOne Livestream
- Feature and promote one **Jakarta EE Committer's profile** per quarter on the Eclipse Foundation Community Newsletter

Learn more: <https://jakarta.ee/community/get-involved/>

IS WORK IS LICENSED UNDER A CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL LICENSE (CC BY 4.0)

The image contains three separate screenshots of the Jakarta EE website, each showing a different aspect of participation:

- Top Screenshot:** A header with the text "HELP SHAPE THE FUTURE OF CLOUD NATIVE JAVA" and "GET INVOLVED IN JAKARTA EE!". It includes a call to action "Join the Conversation" with options to join communication channels, conversation on email, or join on Social Media.
- Middle Screenshot:** A section titled "How to Contribute" with a sub-section "Select a project of interest, join the projects mailing list and start communicating with the team". It includes a "Login to your EPP account" button and a "How to contribute to Jakarta EE" video thumbnail.
- Bottom Screenshot:** A section titled "Become a Committer" with a sub-section "Jakarta EE committers are eligible to become committers. Becoming a committer can happen in a couple of ways." It includes a "Jakarta EE Working Group Individual Participation Agreement" link and an "Employer Consent Agreement for Eclipse Foundation Specification Projects" link.





# Get your organization involved!



# Get Your Organization Involved

1

Become an  
Eclipse  
Foundation  
Member

2

Join the  
Jakarta EE  
Working  
Group

3

Participate in  
open source,  
Cloud Native  
Java

# Become a Jakarta EE member!

## Strategic Member



## Enterprise Member



## Participant Member



## Guest Member



<https://jakarta.ee/membership/members/>

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# Become a Jakarta EE sponsor!

<https://jakarta.ee/supporters/sponsor/>

**WE APPRECIATE YOUR SUPPORT**

*in our mission to drive innovation and faster evolution  
of cloud native enterprise Java.*

[Become a Sponsor](#)



# Summary



JAKARTA EE



**Jakarta EE 11**

H1, 2024



**javax.\* -> jakarta.\***

**Jakarta EE Core Profile**

**Java 21  
Embrace Records  
Jakarta Data  
CDI Centric  
Removals and  
Deprecations**

**Jakarta EE**

<https://jakarta.ee>

**Blogs Jakarta EE**

<https://jakarta.ee/blogs/>

**EE4J GitHub**

<https://github.com/ee4j>

**EE4J top level project**

<https://projects.eclipse.org/projects/ee4j>

**Get Started**

<https://start.jakarta.ee>

**Specifications**

<https://jakarta.ee/specifications/>

**Jakarta EE GitHub**

[https://github.com/jakartaeel/](https://github.com/jakartaeel)



# jakarta.ee



JAKARTA EE

BUILDING AN OPEN SOURCE ECOSYSTEM FOR  
CLOUD NATIVE ARCHITECTURES WITH ENTERPRISE JAVA



# JAKARTA EE

# THANK YOU!

To receive exclusive access to detailed industry research findings, join the Jakarta EE Working Group:

[Join Today](#)

Learn More:

[jakarta.ee](https://jakarta.ee)

Connect:

[@Jakarta.EE](https://twitter.com/Jakarta_EE)

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# OPEN COMMUNITY EXPERIENCE

22-24 October 2024 | Mainz, Germany

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g

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Join us as our global ecosystem gathers  
22 - 24 October 2024 in Mainz, Germany.

Community #ItsInOurCode

# OPEN COMMUNITY EXPERIENCE

22-24 October 2024 | Mainz, Germany



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THANK YOU TO OUR EVENT PARTNER



22 - 24 October 2024  
Mainz, Germany

A Convergence of Enterprise Java Innovation

[java.ocxconf.org](http://java.ocxconf.org)