Not your Parent’s Java EE...

Kevin Sutter, EE4J PMC (among other things...)
EclipseCon France
June 2018
“Jakarta EE: Not your Father’s Java EE...”
“Jakarta EE: Not your Parent’s Java EE…” 😊
Jakarta EE vs Java EE

• Compare and Contrast
• Content, Processes, Participants, Deliverables, etc
Roadmap

- Moving material from Oracle to Eclipse
  - Java EE 8 Specifications
  - Java EE 8 APIs
  - Java EE 8 RIs
  - Java EE 8 TCKs
Roadmap

• Moving material from Oracle to Eclipse
  • Java EE 8 Specifications
  • Java EE 8 APIs
  • Java EE 8 RIs
  • Java EE 8 TCKs

• Is it “clean”?  
  • IP Clearance
  • License
  • Copyright
  • COO

• Physical move to Eclipse infrastructure
  • Project proposal / creation
  • Project provisioning
  • Contributions of “code”
  • Building/Testing of artifacts
  • Performing a release
Roadmap

- [https://www.eclipse.org/ee4j/status.php](https://www.eclipse.org/ee4j/status.php)
- 20% - Project Proposed
- 40% - Project Accepted and Provisioned
- 60% - Initial Code Contribution to Eclipse
- 80% - Initial Code Contribution in Github
- 100% - Project has First Release!

*As of May 30, 2018*
Compliance Testing

- Jakarta EE 8 == Java EE 8
Compliance Testing

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  1. Jakarta EE 8 will be Java EE 8 compliant using existing Java EE 8 CTS/TCK

Java EE Compatibility

JAKARTA EE
Compliance Testing

• Jakarta EE 8 == Java EE 8

  1. Jakarta EE 8 will be Java EE 8 compliant using existing Java EE 8 CTS/TCK
     http://www.oracle.com/technetwork/java/javaee/overview/compatibility-jsp-136984.html

  2. Jakarta EE 8 will be Jakarta EE 8 compliant using Jakarta EE 8 CTS/TCK
     https://jakarta.ee/
Licensing

• **Oracle**
  - Usage License (CDDL, GPL v2)
    - Specs, APIs, RIs
    - **No TCKs available for testing!**
  - **Commercial License (TLDA, TCK, TM)**
    - Access to TCKs for compliance testing
    - Access to Java EE brand

• **Eclipse Foundation**
  - Usage License (EPL v2*)
    - Specs, APIs, RIs, **and TCKs!**
  - **Commercial License (none)**
    - Access to Jakarta EE brand (TM license)

* (Secondary) GNU General Public License, version 2 with the GNU Classpath Exception
Old Processes...

- **JCP**
  - [https://www.jcp.org/en/home/index](https://www.jcp.org/en/home/index)
  - [https://www.jcp.org/en/introduction/overview](https://www.jcp.org/en/introduction/overview)
  - **JSRs** - [https://www.jcp.org/en/jsr/overview](https://www.jcp.org/en/jsr/overview)
  - [https://www.jcp.org/en/procedures/jcp2](https://www.jcp.org/en/procedures/jcp2)
  - **JSPA** - [https://www.jcp.org/aboutJava/communityprocess/JSPA2.pdf](https://www.jcp.org/aboutJava/communityprocess/JSPA2.pdf)
    - Java Specification Participation Agreement (between participant and Oracle)
  - [https://www.jcp.org/en/participation/overview#roles](https://www.jcp.org/en/participation/overview#roles)
    - Contributor
    - Expert Group Member
    - Specification Lead
    - Executive Committee Member
JCP – Java Community Process

• The JCP (for Java EE) is roughly equivalent to the Jakarta EE Working Group
  • Note: The JCP as a governing body is not dissolving. It still exists, but its focus is now mainly with Java SE.
JCP —> Jakarta EE Working Group

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• Key Benefits of the Jakarta EE Working Group
  ✓ Vendor Neutral
  ✓ Open Intellectual Property Flows
  ✓ More Agile and Flexible
JSR – Java Specification Requests

• The JSR (for Java EE) will be replaced by the Eclipse Foundation Specification Process
  • Note: The JSR as a specification document is not going away. It still exists, but its focus is now mainly with Java SE.
JSR → Eclipse Foundation Specification Process

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• Eclipse Foundation Specification Process
  • Currently being defined by the Jakarta EE Specification Committee
  • Covers many aspects – Specifications, APIs, Implementations, TCKs, Licensing, and Branding
  • https://accounts.eclipse.org/mailing-list/jakarta.ee-spec
JSPA – Java Specification Participation Agreement

• The JSPA allows an organization or individual to participate in the JSR process of the JCP.
  • Defines how IP rights are granted and the terms which the Spec, RI, and TCK must be licensed. (Normally, the IP rights flow back to Oracle.)
  • Note: The JSPA is not going away. It will still be used for JSRs in the Java SE domain.
JSPA → “Working Group” Participation Agreement

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  • Note: The JSPA is not going away. It will still be used for JSRs in the Java SE domain.

• “Working Group” Participation Agreement
  • Currently being defined by the Jakarta EE Specification Committee
  • Still is responsible to define the IP flows, but it will not be controlled by a for-profit entity
  • https://accounts.eclipse.org/mailing-list/jakarta.ee-spec
JCP – Spec first, then code...

• JCP – Spec first
  • Especially true with Java EE
  • Classic example
    • EJB Entity Beans and Persistence – Fail!
    • EJB 3 and JPA – Success!
      • Incorporate proven ideas from the industry
Jakarta EE – Code first, then spec...

• JCP – Spec first
  • Especially true with Java EE
  • Classic example
    • EJB Entity Beans and Persistence – Fail!
    • EJB 3 and JPA – Success!
      • Incorporate proven ideas from the industry

• Jakarta EE – Code first!
  • Encourage Innovation
  • Push the envelope with new ideas
  • Feed the matured, solidified, proven ideas back into Jakarta EE
• Optimizing Enterprise Java for a Microservices Architecture
• Innovate, solidify, release, repeat ...
• Configuration JSR 382
  • MicroProfile Config 1.0 .. 1.3
  • Configuration JSR -> Jakarta EE <- MicroProfile Config
• Similar integration paths possible for other MicroProfile components
  • MicroProfile Rest Client -> JAX-RS -> Jakarta EE ???
  • MicroProfile Fault Tolerance -> Jakarta EE ???
• Optimizing Enterprise Java for a Microservices Architecture
• Innovate, solidify, release, repeat …
• Configuration JSR 382
  • MicroProfile Config 1.0 .. 1.3
  • Configuration JSR -> Jakarta EE <-> MicroProfile Config
• Similar integration paths possible for other MicroProfile components
  • MicroProfile Rest Client -> JAX-RS -> Jakarta EE ???
  • MicroProfile Fault Tolerance -> Jakarta EE ???
• In the mean time…
  • MicroProfile 1.4 (Java EE 7)
    • Config 1.3
    • Fault Tolerance 1.1
    • JWT 1.1
    • Open Tracing 1.1
    • Rest Client 1.1
• Optimizing Enterprise Java for a Microservices Architecture
• Innovate, solidify, release, repeat ...
• Configuration JSR 382
  • MicroProfile Config 1.0 .. 1.3
  • Configuration JSR -> Jakarta EE <- MicroProfile Config
• Similar integration paths possible for other MicroProfile components
  • MicroProfile Rest Client -> JAX-RS -> Jakarta EE ???
  • MicroProfile Fault Tolerance -> Jakarta EE ???
• In the mean time...
  • MicroProfile 1.4 (Java EE 7) and MicroProfile 2.0 (Java EE 8)
    • Config 1.3
    • Fault Tolerance 1.1
    • JWT 1.1
    • Open Tracing 1.1
    • Rest Client 1.1
  • CDI 2.0
  • JAX-RS 2.1
  • JSON-P 1.1
  • JSON-B 1.0
  • (Common Annotations 1.3)
Eclipse Foundation “teams”

• Jakarta EE Working Group (https://www.eclipse.org/org/workinggroups/)
  • https://www.eclipse.org/org/workinggroups/explore.php
  • https://jakarta.ee/
  • Jakarta EE Steering Committee
  • Jakarta EE Specification Committee (https://accounts.eclipse.org/mailing-list/jakarta.ee-spec)
  • Jakarta EE Marketing Committee

• EE4J Top Level Project
  • Similar to other TLPs in Eclipse – Technology, Modeling, Tools, etc
  • EE4J PMC (https://accounts.eclipse.org/mailing-list/ee4j-pmc)
  • Jakarta EE Platform Project (soon)
  • All of the individual Spec, API, TCK, and Implementation projects

• Relationship
  • http://www.agilejava.eu/2018/03/22/the-relationship-between-jakarta-ee-ee4j-and-java-ee/
  • https://dev.eclipse.org/mhonarc/lists/ee4j-community/msg01403.html
Power by Participation
Java EE Community

Oracle contributes to numerous open-source projects that involve a wide variety of technologies. Each open source project has its own vibrant community.

GlassFish Server, the Java EE Reference Implementation, has an active developer community. Follow GlassFish on these popular social media sites:

In addition, GlassFish utilizes technologies provided by related projects as shown in the project table below.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Home</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GlassFish Server</td>
<td>javaee.github.io/glassfish</td>
<td>Java EE Reference Implementation for open source</td>
</tr>
<tr>
<td>Project OpenMQ</td>
<td>javaee.github.io/openmq</td>
<td>High quality, enterprise ready messaging, open source and community of developers and users.</td>
</tr>
<tr>
<td>Jersey</td>
<td>jersey.github.io</td>
<td>Jersey is the open source, production quality, JAXB-RS (JSR 369) Reference Implementation for building RESTful Web services.</td>
</tr>
<tr>
<td>Griffy</td>
<td>javaee.github.io/griffy</td>
<td>Projects that help developers to building reliable and robust servers using NIO as well as offering extended javax.net.spi components.</td>
</tr>
<tr>
<td>JavaServer Faces</td>
<td>javaee.faces.github.io</td>
<td>JavaServer Faces (JSF) Reference Implementation</td>
</tr>
<tr>
<td>Project Metro</td>
<td>javaee.github.io/metro</td>
<td>Metro is a high-performance, extensible, easy-to-use web service stack.</td>
</tr>
</tbody>
</table>

Join the discussion groups: javaee.groups.io

http://www.oracle.com/technetwork/java/javaee/community/index.html
Jakarta EE “Community”
Individual Community Participation

• Java EE
  • [https://javaee.groups.io/g/javaee](https://javaee.groups.io/g/javaee)
    • javaee ([https://javaee.groups.io/g/javaee](https://javaee.groups.io/g/javaee))
    • javaee-spec ([https://javaee.groups.io/g/javaee-spec](https://javaee.groups.io/g/javaee-spec))
    • jaxrs-spec ([https://javaee.groups.io/g/jaxrs-spec](https://javaee.groups.io/g/jaxrs-spec))

• Jakarta EE
  • [https://accounts.eclipse.org/mailing-list](https://accounts.eclipse.org/mailing-list)
    • ee4j-community / jakarta.ee-community ([https://accounts.eclipse.org/mailing-list/jakarta.ee-community](https://accounts.eclipse.org/mailing-list/jakarta.ee-community))
    • ee4j-pmc ([https://accounts.eclipse.org/mailing-list/ee4j-pmc](https://accounts.eclipse.org/mailing-list/ee4j-pmc))
    • jaxrs-dev ([https://accounts.eclipse.org/mailing-list/jaxrs-dev](https://accounts.eclipse.org/mailing-list/jaxrs-dev))

• All data as of June 01, 2018
  • Java EE, since March 2017 (move to javaee.groups.io)
  • Jakarta EE, since Sept 2017 (move to Eclipse)
Individual Community Participation

![Subscribers Graph]

- **Community**: Java EE (599) vs. Jakarta EE (612)
- **Platform**: Java EE (47) vs. Jakarta EE (62)
- **JAX-RS API**: Java EE (48) vs. Jakarta EE (64)

@kwsutter  EclipseCon France June 2018
Individual Community Participation

![Bar chart showing participation in Java EE and Jakarta EE]

- **Java EE**
  - Community: 1 message
  - Platform: 82 messages
  - JAX-RS API: 264 messages

- **Jakarta EE**
  - Community: 1942 messages
  - Platform: 499 messages
  - JAX-RS API: 389 messages
More Community Participation

• Brand Selection (replacement for “Java EE”)
  • Solicited input from community
  • Over 170 unique submissions
  • Over 1300 “likes” -- +1, -1, thumbs up, thumbs down

• Narrowed all of this down to 2 finalists
  • Jakarta EE
  • Enterprise Profile

• Community Vote
  • Almost 7000 unique votes!
  • Clear Winner with 64% of the vote
Even More Community Participation

• Logo Selection (replacement for “coffee cup”)
  • Again solicited input from community and professionals

• Narrowed all of this down to 7 finalists

• Community Vote
  • Almost 2100 unique votes!
  • James Cobb – community member from Red Hat was the clear winner!
In conclusion, we went from your parent’s…”
To modern day...
Questions?
References

- https://godsofadvertising.wordpress.com/2008/10/14/this-is-not-your-fathers-oldsmobile-how-a-portfolio-tarnishing-piece-of-creative-changed-our-culture-forever/
- http://that401ksite.com/2017/05/17/what-were-they-thinking-20-oldsmobile-kills-its-brand-with-one-ad-campaign/
- https://smalltownbrewery.com/beers-old/not-your-fathers/
- https://smalltownbrewery.com/beers-old/not-your-moms/
- http://www.tomitribe.com/blog/2018/02/java-ee-to-jakarta-ee/
- https://mmilinkov.wordpress.com/2018/02/26/and-the-name-is/
- https://jakarta.ee/about/faq/