Not your Parent’s Java EE...

Kevin Sutter, EE4J PMC (among other things...)

EclipseCon Europe
October 2018
About Me

• IBM Senior Technical Staff Member (STSM)
• WebSphere MicroProfile and Jakarta EE Architect
• WebSphere development, open source, and enterprise Java standards
  • WebSphere, Liberty, Open Liberty, Java EE, Jakarta EE, MicroProfile, JPA, JCA, ...
• Based in IBM’s Rochester MN lab

Kevin Sutter

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EclipseCon Europe, October 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

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

• Is it “clean”?  
  • IP Clearance
  • License
  • Copyright
  • COO
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% - Build / Test in Github and Jenkins
- 100% - Project has First Release!

*As of Oct 19, 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
     http://www.oracle.com/technetwork/java/javaee/overview/compatibility-jsp-136984.html
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  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
  • Source 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
Announcement!

Specification Process 1.0

- Replacement for JCP Standards Process
  - [https://docs.google.com/document/d/1ONGUyGvZPtrcuxA7RQNV2qBESFcAphQbzd3pUIQ5s/edit#heading=h.o84um3qIls283](https://docs.google.com/document/d/1ONGUyGvZPtrcuxA7RQNV2qBESFcAphQbzd3pUIQ5s/edit#heading=h.o84um3qIls283)
  - Comments accepted until Oct 31, 2018
- Guinea Pig Spec Project
  - JNoSQL
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.
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- 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.

“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](https://accounts.eclipse.org/mailing-list/jakarta.ee-spec)
JCP – Spec first, then code...

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  - Especially true in J2EE days...
  - 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 ???
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  • 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
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• 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)
• Optimizing Enterprise Java for a Microservices Architecture
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    • JAX-RS 2.1
    • JSON-P 1.1
    • JSON-B 1.0
    • (Common Annotations 1.3)
    • Open Tracing 1.2
Eclipse Foundation “teams”

- Jakarta EE Working Group (https://www.eclipse.org/org/workinggroups/)
  - 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
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:

The Aquarium

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>glassfish.openjdk.org</td>
<td>GlassFish is the open source, production quality, Java EE Reference Implementation</td>
</tr>
<tr>
<td>Open Source Edition</td>
<td></td>
<td>built in open source</td>
</tr>
<tr>
<td>Jersey</td>
<td>jersey.github.io</td>
<td>Jersey is the open source, production quality, JAX-WS (JSR 350) Reference Implementation for building RESTful Web services.</td>
</tr>
<tr>
<td>Grizzly</td>
<td>grizzly.java.net</td>
<td>Project Grizzly helps developers to build scalable and robust server using NIO as well as offering extended framework components.</td>
</tr>
<tr>
<td>JavaServer Faces</td>
<td>javaserverfaces.jboss.org</td>
<td>JavaServer Faces (JSF) Reference Implementation</td>
</tr>
<tr>
<td>Project Maven</td>
<td>maven.apache.org</td>
<td>Project Maven is a high-performance, extendable, easy-to-use web service stack.</td>
</tr>
</tbody>
</table>

Join the discussion groups: javaee.groups.io
Jakarta EE Community

Jakarta EE

The New Home of Cloud Native Java

Powered by participation, Jakarta EE is focused on enabling community-driven collaboration and open innovation for the cloud.

Jakarta EE Working Group  Stay Connected

Strategic Members

Fujitsu  IBM  Oracle  Payara  RedHat  Tomitribe

Participating Members

cloud:bees  DDDAS  Gensler  Ince  Liferay  Lightbend  LJC  Microsoft  MIZU  Pivotal  RCP Vision  SAP  USEnGn  voodin
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 Oct 22, 2018
  • Java EE, since March 2017 (move to javaee.groups.io)
  • Jakarta EE, since Sept 2017 (move to Eclipse)
Individual Community Participation

Subscribers

- Java EE
- Jakarta EE

<table>
<thead>
<tr>
<th></th>
<th>Java EE</th>
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<tr>
<td>Community</td>
<td>599</td>
<td>676</td>
</tr>
<tr>
<td>Platform</td>
<td>47</td>
<td>84</td>
</tr>
<tr>
<td>JAX-RS API</td>
<td>48</td>
<td>70</td>
</tr>
</tbody>
</table>

@kwsutter

EclipseCon Europe, October 2018
Individual Community Participation

Messages

- Community: 2736
- Platform: 1345
- JAX-RS API: 541

Platform: Jakarta EE
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 today’s...
Questions?

Evaluate the Sessions

Sign in and vote at eclipsecon.org

-1 0 +1
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://mmlinkov.wordpress.com/2018/02/26/and-the-name-is/
- https://jakarta.ee/about/faq/
- https://www.pbs.org/show/the-mayo-clinic/
- https://github.com/eclipse-ee4j/glassfish/releases/tag/glassfish-main-aggregator-5.1.0-RC1