





Java EE Platform Expert Group Meeting

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MAKE THE
FUTURE
JAVA

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Meeting Agenda

- Introduction of attendees
- Discussion of agenda
- Review Java EE 8 ideas
- Add more Java EE 8 ideas
- Prioritize Java EE 8 ideas



Attendees

- Bill Shannon
- Linda DeMichiel
- Arun Gupta
- Antonio Goncalves
- Adam Bien
- Emmanuel Bernard
- Nigel Deakin
- Rick Curtis
- Brian Martin
- Fred Rowe
- Fabio Velloso
- Ed Burns
- Anatole Tresch
- David Blevins



Java EE 8

- Planning is just getting started.
- Looking at work not completed for Java EE 7.
- Looking at requests from the community.
- Looking at industry trends.
- Continue to fill gaps, increase alignment.
- Considering ways to leverage Java SE 8 features.
- Looking at 2.5 – 3 years after EE 7 (i.e., our usual pace).



Java EE 8 Ideas

- Following are just some of the ideas we've heard.
 - Some are from blogs by [Antonio](#) and [Arjan](#).
- These are mostly “platform” ideas.
 - Individual API ideas dealt with in corresponding expert groups.
- We can't do everything here.
 - We want to know what you consider important.
- We want to hear about things that are **not** on this list as well.
- Will likely turn this into a community poll, as we did for EE 7.



Java EE 8 Idea JCache

- It's almost done!



Java EE 8 Idea Data Grid API

- JSR 347.
- Builds on JCache.
- Not very active.



Java EE 8 Idea State Management API

- JSR 350.



Java EE 8 Idea Identity API

- JSR 351.



Java EE 8 Idea Cloud

- We did some in EE 7.
 - Mostly “enablement” rather than “requirements”.
- What more should we do?
- Is it mature yet?
- Is it time to standardize yet?



Java EE 8 Idea NoSQL

- Which kind of NoSQL?
 - Key/value store, tuple store, object database, document store, wide columnar store?
- Is it time to standardize yet?
- Based on JPA?
- New API?
- Just a simple key/value store API?



Java EE 8 Idea Big Data

- What exactly does this mean?
- Just standardize Hadoop?



Java EE 8 Idea More CDI

- Expand use of CDI?
- Platform-defined default CDI beans for administered objects?
 - Implicit producers.
 - Replace need to use @Resource.
 - [JAVAEE_SPEC-14](#)
- CDI events for more application and server events?
- CDI stereotypes for component definition?



Java EE 8 Idea Security Interceptors

- Apply Container Managed Security to any bean.
- Part of deconstructing the EJB programming model.



Java EE 8 Idea Password Alias Support

- Proposed and defined for EE 7 but didn't quite make it.
- Allows credentials to be provisioned along with app.
 - But not in clear text.



Java EE 8 Idea Improved Security Framework

- Standardize group to role mapping – [JAVAEE_SPEC-20](#)
- Standardize authentication – [JAVAEE_SPEC-9](#)
- Deploy JAAS artifacts in application – [JAVAEE_SPEC-25](#)
- EL-enabled authorization annotation – [JAVAEE_SPEC-29](#)
- Standardize simple security providers – [JAVAEE_SPEC-28](#)



Java EE 8 Idea JSON-B

- JSON binding, similar to JAXB.



Java EE 8 Idea JAX-RS MVC

- Action-oriented web framework.
- Do we really need another standard web framework?
- Would this be The One?



Java EE 8 Idea More HTML 5, Mobile Alignment

- What exactly does this mean?
- What's missing to better enable HTML 5 mobile apps?



Java EE 8 Idea JavaScript on the Server

- Write web user interface in JavaScript?
- Glue together business logic with scripting?
- Scripting for management operations?
- See Oracle's Project Avatar.



Java EE 8 Idea

More Configuration Flexibility and Control

- Many have asked for it, but what does it mean?
- More application APIs?
- Configuration and management APIs?
- Configuration files?
- Need more use cases...
- Configurable deployment descriptors – [JAVAEE_SPEC-19](#)



Java EE 8 Idea Templating Support

- Templates for web pages.
- Templates for email.
- Standardize an existing technology?



Java EE 8 Idea Logging Improvements

- Improve java.util.logging API?
- Replace java.util.logging API?
- Either is a decision for Java SE.
- Other than log message generation, what needs to be standardized?
- Need use cases...
- [JAVAEE_SPEC-6](#)



Java EE 8 Idea More Embedded Support

- Embedded web container, like EJB container?
- Primarily for testing?
- [JAVAEE_SPEC-27](#)



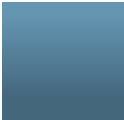
Java EE 8 Idea Generalized Timer Support

- Make EJB timers available to any CDI bean.
- Part of deconstructing the EJB programming model.



Java EE 8 Idea JMS Messages as CDI Events

- Simplify JMS further by using the CDI programming model?



**THE FOLLOWING
ITEMS WERE
ADDED DURING
THE MEETING...**





Java EE 8 Idea Multitenancy

- Related to cloud.
- Ability to support multiple tenants with a single application deployment.
- SaaS.



Java EE 8 Idea Better MDBs

- More flexibility.
- Shorter, application-defined, lifecycle.
 - Using CDI scopes?
- Support multiple protocols per endpoint.
 - Web Services, ReST, RMI, etc.



Java EE 8 Idea Dev Ops Support

- ReST APIs to deploy and manage applications



Java EE 8 Idea ReST-based Monitoring

- ReST APIs to monitor applications
- ReST-ize JSR-77?



Java EE 8 Idea More Profiles and Pruning

- Manage “feature creep”.
- Not all vendors need all features for all environments.



Java EE 8 Idea Testability

- Related to embedded support.
- Includes “shrinkwrap-like” app packaging API.



Java EE 8 Idea Trace Context

- For managability/serviceability/debuggability.
- Track requests all the way through the system.



Java EE 8 Idea Summary

Most Popular Ideas

- More CDI
- JSON-B
- Templating
- More Configuration Flexibility and Control
- ReST-based Monitoring
- More Embedded Support
- Trace Context



Java EE 8 Idea Summary

Some Support

- Logging Improvements
- Dev Ops
- More Profiles and Pruning
- Testability
- Better MDBs
- JAX-RS MVC
- NoSQL



Java EE 8 Idea Summary

Little Support

- Security Interceptors
- JavaScript on the Server
- Generalized Timer Support
- JCache
- Data Grid API
- Cloud



Java EE 8 Idea Summary No Support

- State Management API
- Identity API
- Big Data
- Password Alias Support
- Improved Security Framework
- More HTML5, Mobile Alignment
- JMS Messages as CDI Events
- Multitenancy



Personal Observations

- People mostly want “more of the same”.
 - Make the existing stuff better.
- Despite all the complaints, no interest in making security better.
- People would really like all app servers to be managed the same.
 - Same admin APIs and commands.
 - Same debuggability features.
 - Same logging configuration and output.
- People seemed excited about JCache in EE 7 but now no interest.

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