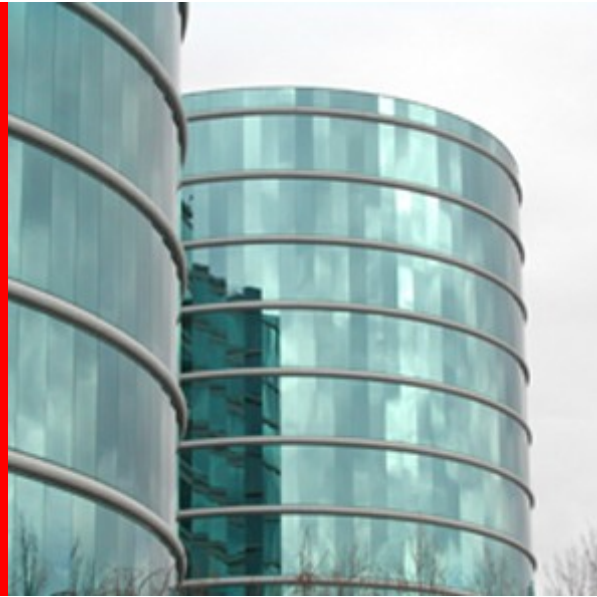


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Java EE 7 Update

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Overview

- Work going on to define the contents of Java EE 7
- Talked about our plans at JavaOne SF and Devoxx
- Also this month: JavaOne Brazil, JavaOne China
- First two JSRs ready for submission:
 - JAX-RS 2.0
 - JPA 2.1
- Others to follow

JAX-RS 2.0 Features (1)

- Client API
 - low-level, builder-based API
 - high-level yet RESTful API
- Reuse of artifacts on the client
 - Message body readers/writers, providers in general
- MVC support (templates)
 - JSP out of the box, others (StringTemplate, Scalate)
- Simple server-side asynchrony
- Support for hypermedia
 - link headers, both client and server

JAX-RS 2.0 Features (2)

- Improved CDI integration
 - use `@Inject` everywhere
- Support for Bean Validation API
- More control for content negotiation (“qs” parameter)
- Other enhancement to usability
 - easier configuration
 - any lambda/SAM-friendly things we can do?

JPA 2.1 Features (1)

O/R Mapping and Modeling

- Converters / custom types
- “Fetch” plans / profiles
- Additional mapping metadata
- User-defined naming strategies
- More flexibility in use of generated values
- Immutable attributes; readonly entities
- More flexible XML descriptors

JPA 2.1 Features (2)

API Enhancements

- Additional event listeners and callbacks
- Improved control of persistence context synchronization
- Support for dynamic definition of persistence unit
- Extension of Metamodel API to ORM
- Methods for dirty detection
- Additional unwrap methods

JPA 2.1 Features (3)

Enhancements to Query Functionality

- Support for stored procedures
- Additional built-in functions
- Database and vendor function invocation support
- Downcasting
- Outer joins with ON conditions
- Update and delete criteria queries
- Mapping between JPQL and criteria queries
- Improved result type mapping for native queries

Schedule

- JAX-RS 2.0:
 - Jan 2011 Expert Group formed
 - Q3 2011 Early Draft
 - Q4 2011 Public Review
 - Q2 2012 Final Release
- JPA 2.1:
 - Jan 2011 Expert Group formed
 - Q3 2011 Early Draft
 - Q1 2012 Public Review
 - Q3 2012 Final Release

Next Steps

- Working on defining full Java EE 7 contents
- Alignment with SE 7/8 important
- Updates to existing APIs:
 - Servlet 3.1, EJB 3.2, JSF 2.2, JAX-WS 2.3, CDI 1.1, DI 1.1, Bean Validation 1.1, ...
- JMS 2.0 (!)
- Complete JSR-236
- Looking for some additional, new JSRs
- More info early next year

Questions?

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