



The Programming Model of Java EE 6

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Agenda

- **Introduction**
- Demo & Tech Deep Dive
- Conclusion



Java EE 6: Goals

- Extensibility
 - Allow more components to be standalone (EJB 3.1)
- Profiles
 - Subsets of “full” EE platform
 - Web Profile
- Pruning
 - CMP, JAX-RPC, JAXR, JSR-88 are “pruned” in EE6
- Technology Improvements



Java EE 6: Newcomers

- Managed Beans (part of JSR-316)
- Contexts and Dependency Injection - JSR-299
- Bean Validation - JSR-303
- JAX-RS (RESTful Web Services) - JSR-311



Java EE 6: Notable Updates

- Servlet 3.0
 - Easier configuration
- JPA 2.0
 - Type-safe Criteria API
 - Extra mappings
- EJB 3.1
- JSF 2
 - Ajax
 - Easy component creation
 - Bookmarkable URLs
 - Templating



Web Profile

- Persistence



- JPA 2.0
- JTA

- Component model



- EJB 3.1 Lite
- Bean Validation
- CDI (JSR-299)

- Presentation



- JSF 2.0
- Servlet 3.0



CDI: Essential Ingredients

- Bean types
- Qualifiers
- Scope
- Alternatives
- EL Name (optional)
- Interceptors and decorators
- Implementation



EJB 3.1: Key updates

- No-interface views
- War deployment
- Async, “natural” timers
- Singletons



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Concepts

- Managed Beans
- Producers
- Scopes
- JSF integration
- Persistence
- Validation
- Pooling
- Singletons & Startup
- Events
- Declarative Concurrency
- Timers
- Servlet
- Criteria API
- Decorators



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The EE 6 Story

- Start simple with managed beans
- Add in persistence and validation
- Add in EJB services like pooling, declarative TXs, timers to provide “enterprise features”
- Producers replace factories (loose coupling)
- Add in CDI services like events, decorators to decrease coupling



What else have we learnt?

- Bean Validation
 - DRY
- Criteria API
- JSF 2
 - Templating
 - Tight EE integration
- Servlet 3



Availability

- Java EE 6 is final
- JBoss AS M3
 - CDI
 - most of EJB3.1
 - Servlet 3
 - JSF 2
 - Bean Validation
 - JPA 2



Q&A

