



SEAM 3

a Web developer's view

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What is Seam 3?

- Enterprise Internet application platform
- Based on Java EE 6
 - Especially CDI

Agenda

- Java EE 6 Example App
- **Seam 3 Example App**
- Seam and Java Standards
- Contributing to Seam

Java EE 6: Our example

- Web Application Technologies
 - JSF (JavaServer Faces) 2.0 with Facelets
 - EL (Expression Language) 2.2
- **Enterprise Technologies**
 - **CDI 1.0 (Contexts & Dependency Injection)**
 - **EJB 3.1 (Enterprise JavaBeans)**
 - **JPA (Persistence) 2.0**
 - **Bean Validation 1.0**

Java EE 6: full

Web Profile

- Web Application Technologies
 - Servlet 3.0
 - **JSF 2.0**
 - JSP 2.2
 - **EL 2.2**
 - JSTL 1.2
 - Debugging Support for Other Languages 1.0
- Web Services Technologies
 - JAX-RS 1.1 (RESTful WS)
 - JAX-WS 2.2 (XML-Based WS)
 - JAXB 2.2 (XML Binding)
 - WS Metadata
 - JAX-RPC (XML-Based RPC)
 - XML Messaging 1.3
 - JAXR (XML Registries) 1.0
- Enterprise Technologies
 - **EJB 3.1** (with Interceptors 1.1)
 - **JPA (Persistence) 2.0**
 - **CDI 1.0 (Contexts & Dependency Injection)**
 - Dependency Injection 1.0
 - **Bean Validation 1.0**
 - Common Annotations 1.1
 - JTA (Transaction) 1.1
 - JMS (Messaging) 1.1
 - JavaMail 1.4
- Management and Security Technologies
 - Authentication Service Provider Interface for Containers, Authorization Contract for Containers 1.3, Application Deployment 1.2, J2EE Management 1.1, Java EE-related Specs in Java SE, JAXP 1.3, Database Connectivity 4.0, JMX 2.0, JAF 1.1, StAX 1.0

Java EE 6: Our example

- Let's see the demo!

Java EE 6: What we used

- General (javax.annotation.*)
 - @PostConstruct
- EJB3 (javax.ejb)
 - @Stateful
- CDI (javax.enterprise.*)
 - @RequestScoped
 - @Event
 - @Observes
 - @Model
 - @Produces
- CDI (javax.inject.*)
 - @Inject
 - @Named
- JPA (javax.persistence)
 - EntityManager
 - CriteriaBuilder, CriteriaQuery
 - @Entity
 - @Id
 - @GeneratedValue
 - @PersistenceContext
- Validation (javax.validation.*)
 - @NotNull
 - @Pattern
 - @Size

Seam 3: Our example

- Let's see the demo!

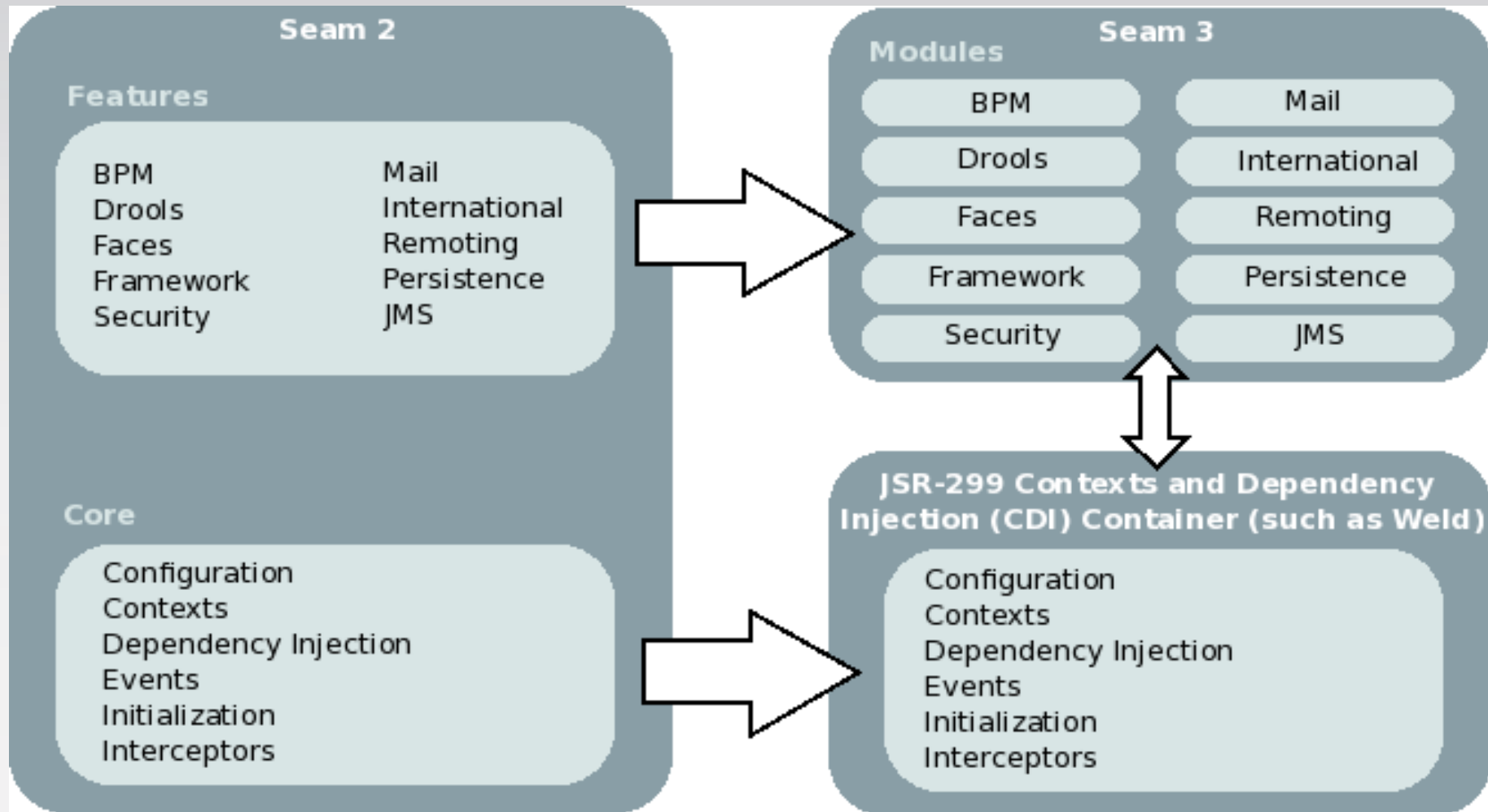
Seam 3: Features (1/2)

- Forge
 - Plugins
- Seam Solder
 - @Veto, @Requires, @Exact, @Client, @Named packages, @FullyQualified
 - Annotation Literals
 - Evaluating EL
 - **Resource Loading**
 - Logging
 - Reference to the BeanManager
 - Properties
 - @Unwraps
 - Default Beans
 - Generic Beans
 - Service Handler
- Seam Configuration
- Seam Persistence
 - Transaction Management
 - Seam-managed persistence contexts
- Seam Servlet
 - Servlet/Session events
 - Injectable Servlet objects and request state
 - @RequestParam, @HeaderParam, @ContextPath, @CookieParam, @ServerInfo, @Principal

Seam 3: Features (2/2)

- Seam Security
- Seam International
 - **Locales**, Timezones
 - **Messages**
- Seam Faces
 - Faces Events Propagation
 - **Faces Artifact Injection**
 - **Messages**
 - @RenderScoped,
@ViewScoped, Flash
 - <s:validateForm>,
<s:viewAction>
- Seam Catch
- Seam Remoting
- Seam REST
- Seam Validation
- Seam Wicket
- **Seam Cron**
- Seam Drools
- Seam Errai CDI (GWT)
- Seam JCR (Content Repo)
- Seam JMS
- **Seam Mail**
- Seam Reports
- Seam Social
- Seam Spring

Seam: a source of ideas for JavaEE standards



Seam: a source of ideas for JavaEE standards

- CDI (JSR 299)
 - @Inject
 - @*Scoped
 - @Produces
 - Events
 - Most of the stuff, really
- CDI 1.1 (JSR 346)
 - from Seam 3
 - esp. Seam Solder
- JSF 2 (JSR 314)
 - Navigation
 - <f:viewParam>
 - <f:selectItems>
 - Get Requests
 - <h:link>, <h:button>
 - Scopes
 - Annotations
 - Managed Beans
 - Converters/Validators
 - Resources
 - Validation integration
 - EL method parameters

Contributing to OS

- github account
- git installed
- No need for commit permissions
- <https://github.com/seam/international/pull/11>

Seam 3 and JavaEE 6

- Thank you!

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Seam 3: Our Example

- Seam International
 - Messages
- Seam Faces
 - Messages
 - @Inject in Validators
- Seam Cron
 - Scheduled tasks
- Seam Mail
 - Mail templates
 - Mail sending
- Seam Solder
 - Resource Loading