SUMMIT

JBoss WORLD

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Seam 3

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Road Map

Background

EE 6 programming model

Seam 3

Status

Java EE 6

- The EE 6 web profile removes most of the "cruft" that has developed over the years
    - mainly totally useless stuff like web services, EJB 2 entity beans etc.
    - some useful stuff (e.g. JMS) is missing, but vendors can include it

Java EE 6

- EJB 3.1 - async, no-interface views, embeddable

- JPA 2.0 - typesafe criteria API, many more O/R mapping options

- JSF 2.0 - Ajax, easy component creation, bookmarkable URLs

- Bean Validation 1.0 - annotation-based validation API

- Servlet 3.0 - async support, better support for frameworks

- Standard global JNDI names

- Managed Beans

CDI

- CDI defines a unifying dependency injection and contextual lifecycle model for Java EE 6
  - a completely new, richer dependency management model
  - designed for use with stateful objects
  - integrates the "web" and "transactional" tiers
  - makes it much easier to build applications using JSF and EJB together
  - includes a complete SPI allowing third-party frameworks to integrate cleanly in the EE 6 environment

Seam's Mission

"To provide a fully integrated development platform for building rich Internet applications based upon the Java EE environment."

– Gavin King, Nov 2008

The Seam Stack

- A complete solution for developing applications based upon Java EE standards
  - Integrating technologies is a framework concern
- The stack consists of...
  - Java EE integration within platform
  - Declarative security
  - Page flows (jPDL) and business processes (jBPM)
  - JavaScript remoting
  - "Render" e-mail, graphics, PDF, and XLS
  - Spring integration and more...

Getting started with Seam...is easy!

- Focus on delivering useful functionality to users early on, then repeat

- Eclipse tooling – JBoss Developer Studio (JBDS)

- Incremental hot deployment

Evolution of Seam

- What will Seam 3 look like?
  - Core Services provided by CDI
  - A set of modules for addressing needs of developer
  - Development environment and tooling
  - Based around Java EE 6 APIs (JSF 2, JPA 2, EJB 3.1)

Runtime environments

- Any Java EE 6 container support
  - JBoss AS 6
  - GlassFish V3
- Weld also supports
  - Tomcat
  - Jetty/Google App Engine
  - Java SE support

Booking Example

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Concepts

- Entities
- Injection
- Producers
- Events
- Conversations
- EJB Services
- Bean Validation

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Road Map

Background

The programming model

Seam 3

Status

Seam 3

Security

Servlet

Drools

JPA/JTA

Wicket

Errai

Remoting

Weld

Java EE 6

JBoss AS 6

GlassFish V3

JMS

Servlet

Tomcat

Jetty

Mail

Faces

Java SE

jBPM

Runtime

JBoss ESB

i8ln/l10n

XML Config
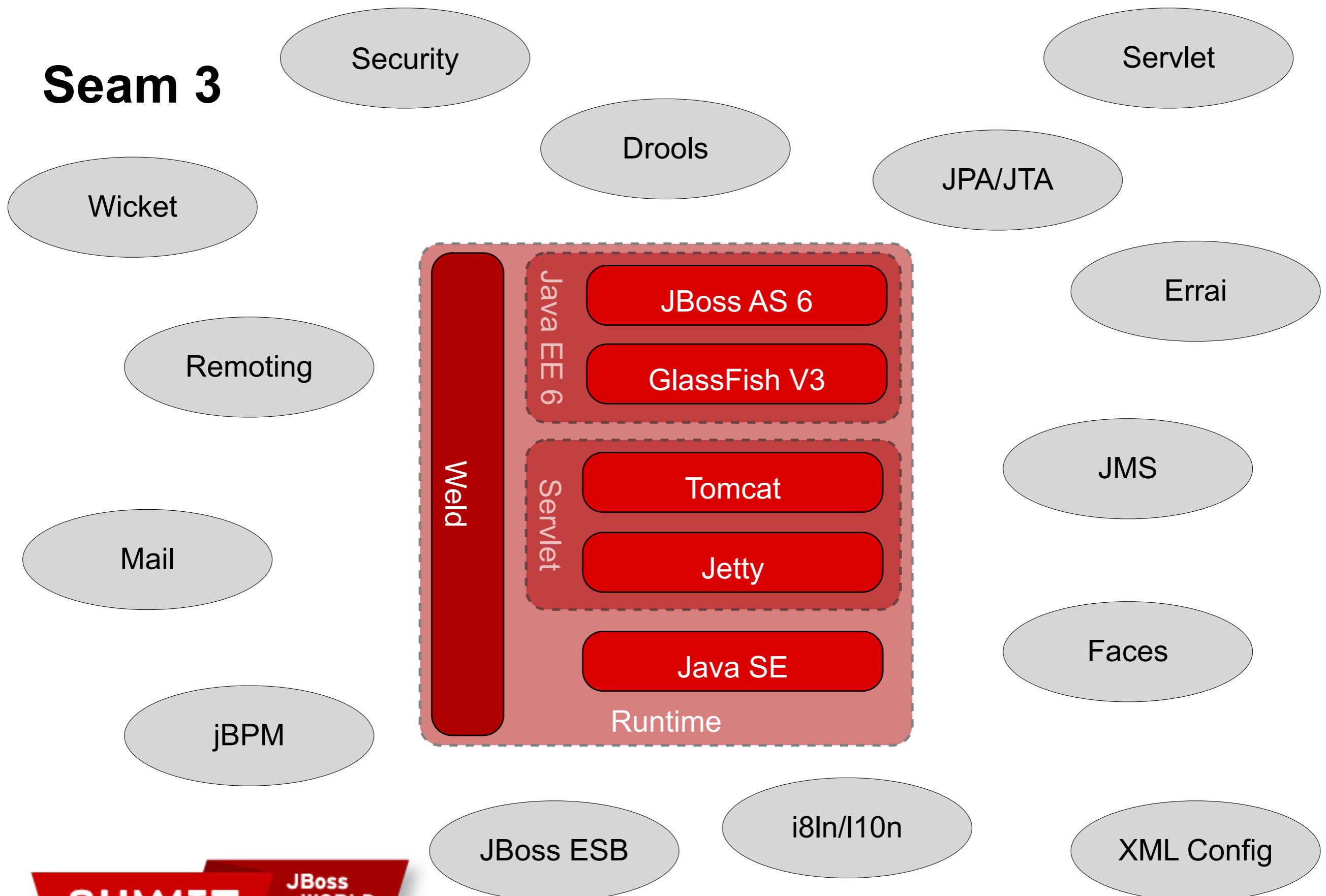
Modules

- Modules:
  - Contain standalone docs
  - Have examples
  - Use only the CDI API, no internal APIs
  - Are released on an independent cycle
- Sandbox:
  - Area for people to try out new ideas

Independent Module Releases

Seam Mail
3.0.0

Seam
Security
3.0.7

Seam GWT
3.0.0.Beta4

Seam
Security
3.0.7

Seam
Security
3.0.8

Seam 3.1

Seam 3.2
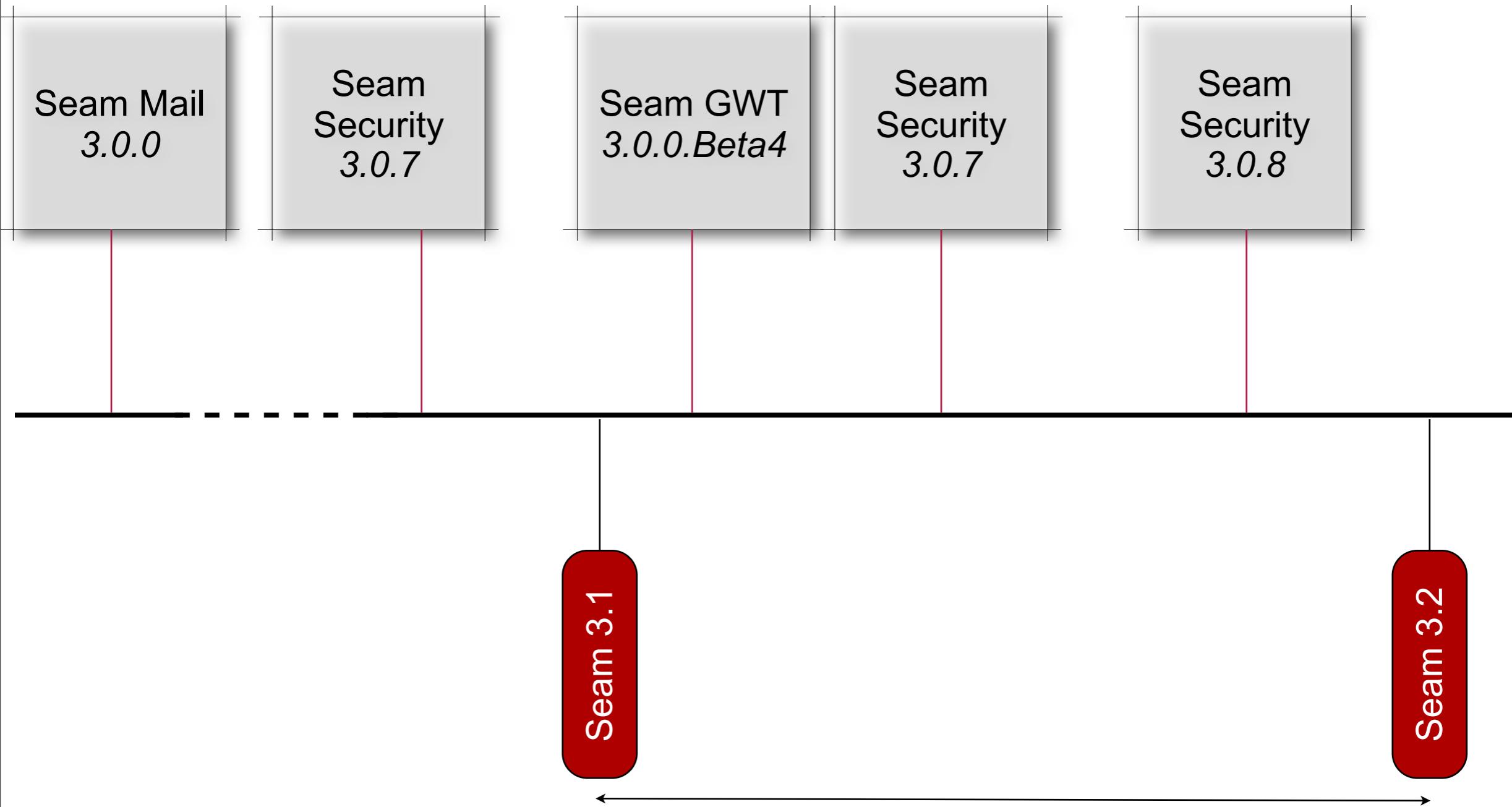
Time boxed: 6 months

Simultaneous Releases

Simultaneous Releases

Seam Mail		Wicket support	**Documentation**
Drools5 support	JBoss ESB	XML Config-uration	**Examples**
			Tooling

Seam Framework

Documentation	Examples	API

Seam Security
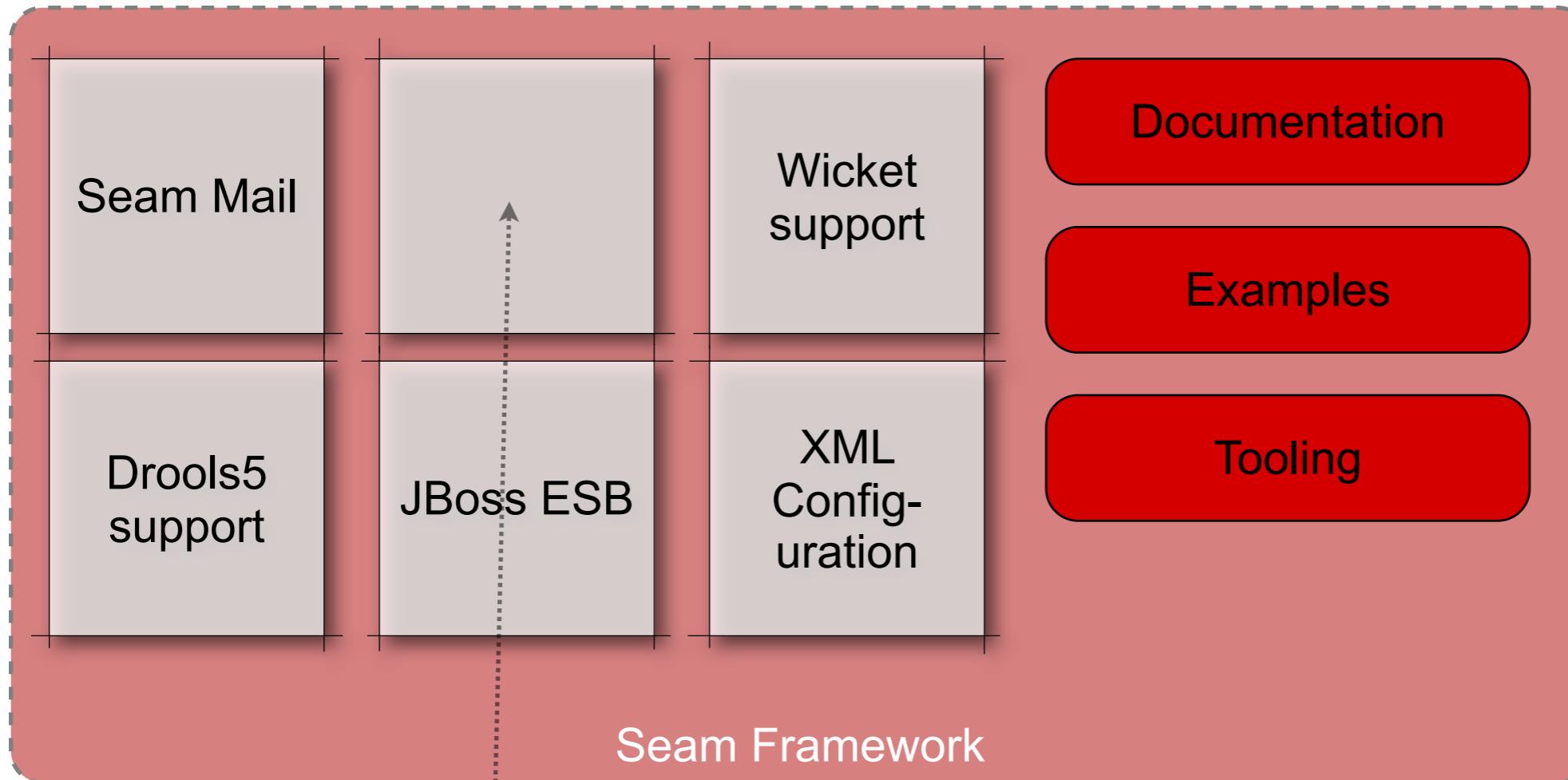
Seam Modules

- Seam i8ln
  - Messages API
- Seam XML
- Weld Extensions

Seam Faces

- Cross Validation
- Injection in all JSF artifacts
- Declarative conversations
- Input decoration
- Automatic propagation of Messages
- View actions
- JSF/CDI Event bridge

Tooling

- JBoss Tools
  - Supports CDI (refactoring, quick links etc.)
  - Support for integrated frameworks
  - No special support needed normally for Seam integration modules
  - Visual editors for configuration files

Tooling

- RAD command line tool
  - bash-style auto-complete
  - pluggable
    - allow any server to be supported
    - allow any view layer to be supported
  - canonical source of new project definition
    - all tools use these (e.g. JBoss Tools)
    - Freemarker templates
    - POMs for dependency definition

Tooling

- Testing
  - Shrinkwrap
    - declarative definitions of deployment archives
    - uses a fluid API
  - Arquillian
    - run the same test in any supported container
    - (Re) uses JUnit/TestNG - works with existing tools
    - injection into test cases
  - Various testing strategies
    - Weld in SE mode (test your POJO based logic)
    - Using Embedded JBoss (test your persistence)
    - Inside a real container (test your views)

Recap

- Programming model
  - Injection, Producers, Events, EJB Services
- Seam modules
  - Faces
    - Validation, Messages, Components, View Actions
  - i8ln
  - XML

Status

- Java EE 6 is final
  - JBoss AS 6 M3 available
- Seam Alphas available
  - Faces
  - Remoting
  - JMS
  - i8ln
  - XML
- http://seamframework.org/Seam3
- Aiming for release later this year

Q&A

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