What's new in Faces 1.2 and JSP 2.1
What's coming in Faces 2.0

Ed Burns
<ed.burns@sun.com>

sun.com/software

Sun microsystems

Software Requirements and Process

- Faces 1.2 and JSP 2.1 are:
  - Part of J2EE 5.0
  - Dependant on:
    - JDK 1.4
    - Servlet 2.5
  - Done via transparent development on java.net
  - Faces is licensed with JDL/JRL

New Features: Unified EL

- Motivation
  - # vs. $
  - Foundation for future work
    - Ultimately in Servlet spec or maybe JDK
  - Bring new features from Faces into JSP
  - Align the webtier technologies
  - Break out the EL into a separate spec document under the JSP 2.1 spec
  - Defined in new package javax.el

History: Faces 1.0 and 1.1 EL

- Anyone need a refresher?
  - Wanted to build on use of EL in JSTL
  - Added support for lvalues and method bindings
  - Pluggable resolution of expressions via PropertyResolver and VariableResolver API
  - Had to introduce new delimiter #{} to prevent JSP from evaluating expressions at page execution time.

Changes for Unified EL

- Page Author experience changes
  - Existing apps still run without change via inspection of version level of web.xml and enabling or disabling treatment of #{} expressions
  - It's possible to escape #{}s so JSP container doesn't touch it.

- Java Developer experience changes
  - ELResolver takes place of VariableResolver and PropertyResolver
  - Legacy PR and VR impls still work

Changes for Unified EL

- Faces Implementor changes
  - Lots of deprecated methods
  - Use new EL APIs
  - Leverage javax.el package
  - Complexity around supporting Legacy custom resolvers

New Faces Features

- Already implemented
  - Nothing revolutionary. Spec bug fixes mainly
    - wrappers for commonly decorated objects
    - "binding" attribute for Converter, Validator, and Listener tags.
    - Using XML Schema instead of DTD
    - "dir" and "lang" attributes for <h:outputText>, <h:outputFormat>, <h:messages>, <h:message>.
    - PhaseListener changes: they must guarantee that if beforePhase() is called, then afterPhase() must also be called, regardless of any thrown exceptions.
    - UIViewRoot phaseEvents
    - "caption" facet for DataTable

New Faces Features

- In Progress
  - Tree pre-creation
  - Content interweaving
  - Associating a label with a component for use in messages
  - State saving with multi-Frame or multi-Window apps.
  - Duplicate button press problem
  - Fully specify client id generation algorithm

New JSP Features

- Completed
  - Changes to support EL Alignment

- In Progress
  - Changes for in progress Faces features
  - Shared Tag Libraries spec
  - Clean up EL ambiguities

Faces 2.0

- Learning what we want to do
  - Pre-AJAX plan of record
    - More components in standard set
    - First class client side validation
    - More complete component meta-data for tools
    - Better support for design time interaction
    - Still has the Request/Response lifecycle as the sole means to handle user interaction

Faces 2.0

- Learning what we want to do
  - Post-AJAX plan of record
    - What I know: Having Request/Response lifecycle as the sole means to handle user interaction

    DOESN'T CUT IT ANYMORE

    - Where we are right now: Find the most effective ways to leverage AJAX practices in the Framework to make life easier for the Framework user.

Faces 2.0

- How to leverage AJAX practices to make life easier for the framework user
  - User should never have to write Ecmascript
  - User should have to write less Ecmascript
  - User does not have to write any messy "what browser is this?" Ecmascript.

Faces 2.0

- AJAX challenges for Faces - Lifecycle
  - What to do about the existing request processing lifecycle?
  - Current thinking: should be easy to write an app that has no page refreshes, but the user can use them if they want.

Faces 2.0

- AJAX challenges for Faces – Event Model
  - Faces event model already emulates rich client event model.
  - Is well suited to running in rich client environment.
  - We'll probably end up having some portion of the faces event processing happen in the client.

Faces 2.0 Conclusion

What's new in Faces 1.2 and JSP 2.1
What's coming in Faces 2.0

sun.com/software

Ed Burns
<ed.burns@sun.com>