



# The JSF Tools Project – 0.5 Release review

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# The JSF Tools Project



- Provide comprehensive support to the Eclipse Web Tools Project to simplify development and deployment of JavaServer Faces (JSF) applications
- Incubating under the Web Tools Platform project
- Release review for pre-1.0 technology release planned to be shipped with the WTP 1.5 release
- Project requires Eclipse 3.2 and WTP 1.5 release
- Project will be made available from the WTP download site and Update manager (separate from WTP 1.5 release)
- Key Code Contributions
  - Sybase – Faces Configuration Editor
  - IBM – EMF Model of the Faces Configuration resource



# Features

- Faces Config Editor
- Enhanced JSF-JSP Source Editor
- JSF Library Registry
- Extensible framework

# JSF Tools Features



- Faces Config Editor Features
  - Code Contribution from Sybase Inc.
    - Multi-page Editor
    - Overview page
      - Summary of elements in the configuration file
    - Navigation page
      - graphical diagram editor for navigational rules
    - Managed bean page
      - Form-based editor, Wizards
    - Component Page
    - Source Page
  - EMF model of the application configuration resource files
    - Programmatic access

# JSF Tools Features



- JSF-JSP page Source Editor Features
  - Support for standard JSF Tag libraries
    - Content assist for values of tag attributes
    - Validation of values of tag attributes
  - JSF 1.1 EL validation
    - Basic Syntax Validation (Empty, incorrect)
    - Content assist for existing variable, property (managed bean, resource bundle)
    - Semantic validation
  - Enabled by Extensible Meta-data framework
    - Enable Content assist and Validation for other component libraries (Tomahawk)
    - Enables addition of new features (QuickFix, HyperLink)
    - Enhance the existing features (improved validations)
    - Pluggable design-time variable, property resolvers

# JSF Tools Features



- JSF Library registry
  - define a named collection of JARs including tag libraries, JSF reference implementations and utility jars.
  - add, remove libraries associated with a project
  - Automate build classpath settings and deployment
  - Extension point for component developers to contribute their libraries

# Extensible Framework



- Content Model Annotation Framework
  - Define additional meta-data for elements and attributes on any xml-based content model for use at design time.
- Design-time Meta-data Processing Framework
  - Uses the annotations framework to provide services to the JSF-JSP Source Editor
    - Define new services and enhance existing services
- Design-time Application Manager
  - Provide an approximation of certain JSF runtime state information at design time.
  - Pluggable design-time variable, property and method resolvers
- JSF Application Configuration Manager
  - Provide a unified application configuration model through API, effectively merging all faces configuration models into a single model
  - Notification services to monitor changes to the EMF objects in the model
  - Cross model validation will be supportable .

# Standards



- This release supports the following standards
  - JavaServer Faces Technology 1.1 specification (<http://java.sun.com/javasee/javaserverfaces/reference/api/index.html> )
  - JSP 2.0
  - J2EE 1.4





# Communities

- Committers
  - Oracle – Project Lead and WTP PMC member, 3 committers and 1 active contributor
  - Sybase – 1 committer
- Contributors
  - BEA, IBM – Feature review, weekly status calls
  - WTP SSE group – Design discussions ([http://www.eclipse.org/webtools/jsf/dev\\_resource/DesignDiscussion-2006-03-03.html](http://www.eclipse.org/webtools/jsf/dev_resource/DesignDiscussion-2006-03-03.html))
  - WTP Releng group – Integrating with the WTP build process
  - Individual contributors include
    - Lumir Vanek: contributed the Snippets feature, tested the product and has given feedback through bugzilla and newsgroup.

# Communities (continued)



- Active User community
  - Product has been tested by a wide range of people and feedback given through newsgroup and bugzilla (<http://www.eclipse.org/newsportal/article.php?id=272&group=eclipse.webtools.jsf#272>)
- Active Adopter community
  - Feature requests include
    - support for CustomVariableResolver (<http://www.eclipse.org/newsportal/article.php?id=229&group=eclipse.webtools.jsf#229>)
    - need programmatic enhancement for plugin-provided JSF libraries ([https://bugs.eclipse.org/bugs/show\\_bug.cgi?id=128091](https://bugs.eclipse.org/bugs/show_bug.cgi?id=128091))
- Community development
  - Open communications of features, plans and status through newsgroup, mailing list and bugzilla
  - Release includes feature request from an adopter
  - Host weekly status call, communicate project status in weekly WTP PMC call
  - EclipseCon Long talk: Build JavaServer Faces applications with the JSF Tools Project
  - Completed Project release review by the WTP community on June 7th



# Schedule

- WTP 1.5 – JSF Tools Project (0.5) Release
  - M1 - December, 16, 2005
    - WTP 1.0 based. Basic Application Configuration Editor and support for end-to-end JSF application development and deployment.
  - M5 - March 13, 2006
    - Milestone release for EclipseCon 2006. Based on WTP1.5 M5 Milestone.
  - RC2 - May 10, 2006
    - Feature complete for Faces Config Editor. Includes integration between the Faces Config Editor and the Faces Config EMF model.
  - RC3 - May 30, 2006
    - New Features in JSF-JSP Source Editor including Content Assist and Validation and extensible frameworks
  - RC4 - June 7, 2006
    - Feature freeze. Only bug fixes and documentation allowed beyond this date.
  - RC5 - June 20, 2006 Code freeze
    - Only documentation changes allowed beyond this date.
  - Release(RC6) - June, 28, 2006
    - Aligned with WTP 1.5 Final release.



## Release Readiness

- Integrated with WTP build infrastructure
  - JSF Tools Project is built with WTP and is available on the WTP download page.
  - Work in progress to integrate with the WTP Update Manager.
- Milestones
  - **RC4 – Feature Freeze – June 7<sup>th</sup> completed and posted for review.**
  - RC5 – Code Freeze – June 20<sup>th</sup> – In progress.
- Testing Status
  - Junit tests integrated with the build process. All tests passed on the feature freeze build.
  - Junit tests available for all the major functional blocks . Estimated coverage is better than 50%.
- Manual tests
  - All tests are documented and in CVS.
  - All milestone builds are tested manually before releasing the build.



## Release Readiness (continued)

- Testing Status (continued)
  - See `org.eclipse.jsf.components.jsfdevelopment\design` for documentation on the tests.
  - Defect Status
    - 129 - Total Bugs logged
      - 27 - Enhancement requests
      - 17 - Blocker + Critical + Major
    - 79 - Bugs resolved ( all Blocker+Critical+Major bugs resolved)
    - 50 - Bugs deferred
  - Release Exit Criteria:
    - All automated and manual tests pass
    - No P1/Blocker+Critical+Major bugs
    - All provisional API's documented

# Release Readiness (continued)



- Documentation Status
  - User Documentation
    - Complete User documentation available as Eclipse Help
    - Getting started section has comprehensive tutorial
  - Developer Documentation
    - Programmers Guide section available as Eclipse Help
    - Javadoc available for all provisional API's
    - Extensions point documented
    - Tutorial on Extending JSF Tools Project included in the Eclipse Help
    - Design documentation available for all the major features
      - In CVS under, **org.eclipse.jsf.components.jsfdevelopment/design**



# API Overview

- All API's in this release are Provisional
- No end-of-life issues as this is the first release
- Following areas of the product are planned to become API's in the 1.0 release.
- `org.eclipse.jst.jsf.contentmodel.annotation.internal.provisional`
  - API for accessing and populating the internal content model annotations model
- `org.eclipse.jst.jsf.metadataprocessors.internal.provisional`
  - API for providing meta-data driven source editor services using the content model annotations
- `org.eclipse.jst.jsf.taglibprocessing.internal.provisional.attributevalues`
  - API for supplied attribute value runtime types and features used for providing meta-data enabled services for attribute values in source editor
- `org.eclipse.jst.jsf.metadataprocessors.internal.provisional.features`
  - API for meta-data services/features
- `org.eclipse.jst.jsf.context.internal.provisional`
  - Defines the abstract context
- `org.eclipse.jst.jsf.context.resolver.internal.provisional`
  - Defines the abstract context resolver
- `org.eclipse.jst.jsf.context.structuredocument.internal.provisional`
  - Defines the abstract context for \*structured documents\*
- `org.eclipse.jst.jsf.context.structuredocument.context.resolver.internal.provisional`
  - Defines the concrete context resolvers for structured documents.
- `org.eclipse.jst.jsf.context.symbol.internal.provisional`
  - Symbol API used to declare EL variables, properties, methods etc.
- `org.eclipse.jst.jsf.designtime.internal.provisional`
  - API for the Design Time Application Manager including default and pluggable resolvers.
- `org.eclipse.jst.jsf.core.internal.provisional.jstappconfig`
  - Provide a unified application configuration model through API, effectively merging all faces configuration models into a single model
- Notification services to monitor changes to the EMF objects in the model

# IP Review



- About files and license files are complete and correct?
  - Yes
- All significant and third-party contributions have been reviewed by Eclipse Legal?
  - Yes: See project log for complete list
- Project log complete and has been reviewed by Eclipse Legal?
  - Yes
- The URL is [http://www.eclipse.org/webtools/development/ip\\_log.html](http://www.eclipse.org/webtools/development/ip_log.html)



# Future Release plans



- WTP 2.0 – JSF Tools Project (1.0) release – June, 2007
  - Support for JavaServer Faces 1.2 (Java 5 EE)
  - Visual JSF-JSP Page Editor
  - Enhancements to Faces Config Editor and JSF-JSP Page Editor
    - Validations
    - Quick Fix
    - Hyperlink
  - Release first set of public API's
    - Extensible frameworks
  - Comprehensive Developer documentation