Java Workflow Tooling (JWT) 1.3.0
 Kepler Review
Release Review

Marc Dutoo (Open Wide, FR)
Christian Saad (University of Augsburg, DE)
Ahmed Samir Wafa (University of Augsburg, DE)

Overview

- About JWT

- Release 1.3

- Communication

About JWT - Overview

Java Workflow Tooling (JWT) aims at providing a complete Business Process Management (BPM) and workflow tooling platform

A special focus lies on a unified approach to BPM design, allowing to bridge the gap between different process representations, standards, engines and deployment environments (platforms, information systems, SOA)

Goals

- Support for workflow and business process modeling, deployment, execution and monitoring inside Eclipse

- Provide a complete, flexible, interoperable and usable BPM toolkit

- Set of generic and extensible plugins and APIs

- Extensions allowing support for specific business representations, process language formats, process engines, service platforms, etc.

- Targeting and supporting SOA in close collaboration with Eclipse SOA projects : BPMN, SCA, Mangrove and others
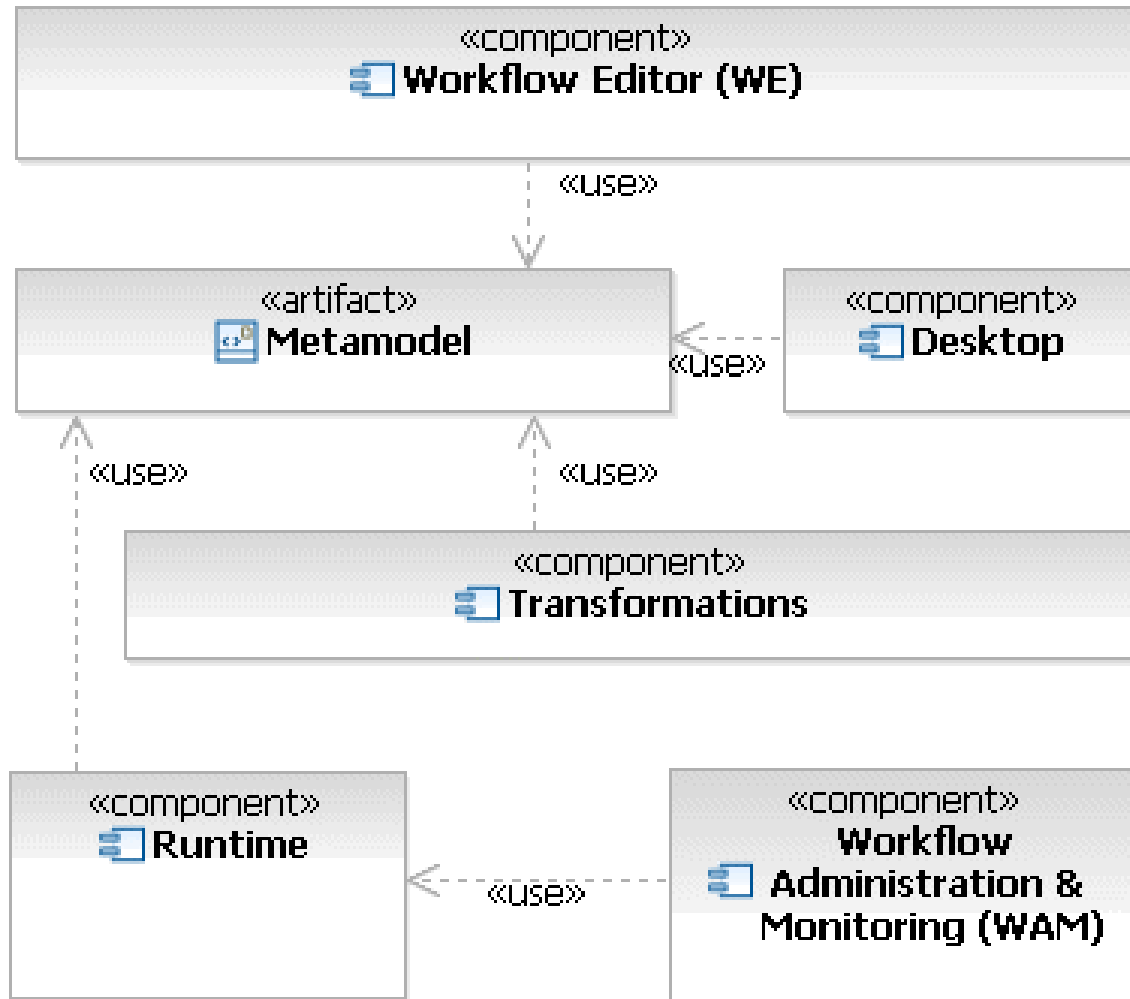
JWT Screenshot

About JWT - Components of JWT

About JWT - Status

- JWT is a mature project in Eclipse SOA, already part of the yearly release train since Galileo

- The usage of JWT (Workflow Editor, Transformations, …) is well documented in its Wiki

- Several pages on the wiki provide developer documentation. All extension possibilities by external plugins are documented there, and have examples that are available at least in the SVN.

- Ongoing development and active mailing list

About JWT - Maturity

- The build process is automatized for continuous integration

- Since Galileo, JWT is part of the yearly release train

- Well-documented in Wiki

- Several example plugins are available that demonstrate the usage

- JWT is used in development and production
  - It has been integrated in several third-party solutions like e.g. AgilPro or OW2 Scarbo. **OW2 Scarbo 1.2 has been released** in November 2011 and is **used in production** by ANCV in Paris, France.
  - Mailing list exchanges show new products being built on JWT, by companies like Mastek LTD, India and research work being done by labs like the German University in Cairo, Egypt.

Release 1.3 – Features & BugFixes

- BPMN View
  - [Bug 388127] A BPMN View for the workflow editor
  - This long-awaited feature is a critical milestone towards JWT's objectives of agnosticy of representation for workflows

- New Tycho-based build system
  - [Bug 383409] Move to another build method

- Various bugs, notably to improve e4 compliance
  - [Bug 405775] Null pointer exception in Kepler when eclipse is restarted with a model open in the WE

Release 1.3 – APIs

- The code conforms to the Eclipse Quality.

- The code has been implemented by committers of the project.

- The API has been officially declared (using PDE tooling) in prior to this release.

- Several examples have been tested and JUnit tests exist.

- Build (includes unit testing) has been fully automated in CBI and is easily repeatable.

Release 1.3 – Non-Code Aspects

- Documentation is up to date and constantly improved, mailing lists and bugzilla are constantly used, news are written on the website.

- Until this date, two articles about JWT have been published in the german „Eclipse Magazin"

- Several presentations about or involving JWT have been given
  - Eclipse Summit Europe 07, EclipseCon08, Open World Forum 2008, EclipseCon09, Solutions Linux 2009, Eclipse Forum Europe 2009, Eclipse Europe Summit 2009 and EclipseCon10, Eclipse Demo Camp Grenoble 2011

- **Eclipse Con Europe 2012**
  - « Models as Operational Documentation & SOA Use Case » by Marc Dutoo in SOA Symposium
- **Eclipse DemoCamp Juno 2012** in Grenoble, 2012 June 13
  - « From Eclipse to Document management : a case study for JWT & EasySOA » by Marc Dutoo, see http://wiki.eclipse.org/Eclipse_DemoCamps_Juno_2012/Grenoble

Release 1.3 – Architectural issues

- Several extension points available that are already used by plugins in order to extend the JWT Workflow Editor.
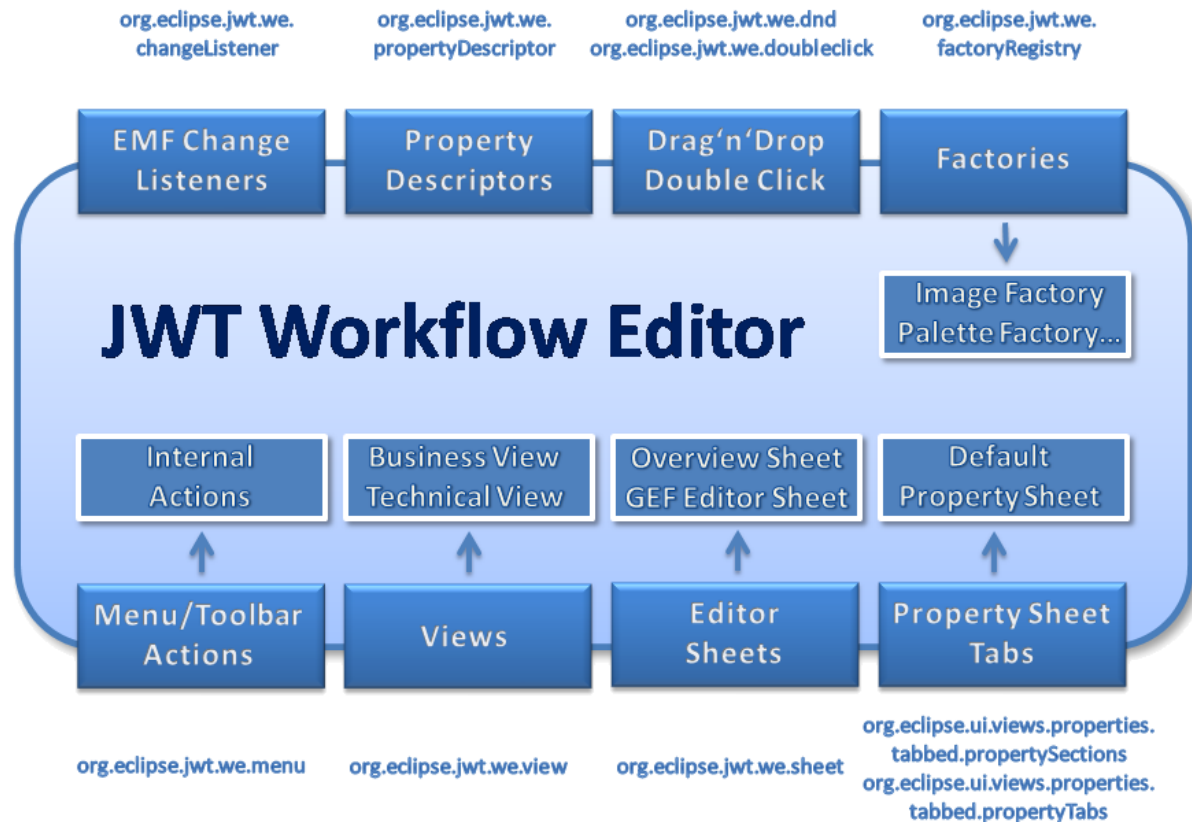
Release 1.3 – Tool usability

- JWT enables a user to model his/her processes and workflows and use these models not only for documentation, but also for execution.

- The model can be used to generate code in different languages (such as XPDL)

- The model can be transformed to other models (e.g. SOA BPMN & Mangrove).

- It provides a lot of extension points where others can build on it and extend several parts of the editor, see http://wiki.eclipse.org/JWT_Extensions

- If necessary, the meta-model can be adapted to the needs of each user through Aspect Oriented Modeling.

Release 1.3 – End-of-Life

- There are no features that are end-of-life'd in this release.

Release 1.3 – Bugzilla

- Current bug status

Component	0.3.0	0.4.0	0.5.0	0.6.0	0.7.0	1.0.0	1.1.0	unspecified	Total
Releng	.	.	.	1	1	.	2	.	4
Website	.	.	.	.	2	.	.	.	2
Desktop	.	.	.	.	.	.	1	1	2
Metamodel	.	.	.	.	.	1	1	.	2
Transformations	.	.	.	6	1	1	2	.	10
Wam	.	.	.	.	.	1	1	.	2
WE	1	1	3	5	2	.	3	2	17
Yearly Release	.	.	.	1	.	.	1	.	2
Total	1	1	3	13	6	3	11	3	41

- There are currently 55 non-critical bugs / feature requests which have been moved to the next release

Component	1.1.0	1.2.0	Total
Desktop	1	.	1
Metamodel	5	.	5
Releng	3	.	3
Transformations	8	.	8
WE	28	9	37
Wam	1	.	1
Total	46	9	55

Standards

The relationship to existing standards has been achieved by the following:

- Addition of a UML Activity diagram view

- Addition of a EPC model view

- Transformation to the Eclipse STP BPMN modeler

- Codegeneration of XPDL possible

- Addition of a BPMN Activity diagram view

- Existing transformation to the SOA Mangrove model (formerly STP IM), which aims to bridge different standard oriented tools within the STP project, like BPMN and SCA editors or BPEL.

UI Usability

- The Workflow Editor supported originally several languages such as English, German and French. For the latest releases we collaborated with Babel so that much more languages now exist.

- Several wizards exist to ease the usage of the Workflow Editor.

- All transformations are easily selectable via Import and Export menus thanks to the transformation base.

- The Eclipse User Interface Guidelines have been followed.

- UI usability has been improved since last release but a more in depth UI walkthrough is still planned for one of the next releases.

Communities

- Active bugzilla usage by the committers and others (extenders).

- Many discussions on the mailing list, inside JWT as well as with partners from the SOA projects (**Mangrove**, BPMN, etc.).

- Discussions with several companies (Bull, jBoss, **EasiFab**) have produced collaboration (ex. BPM model comparison, FactoryRegistry) and keep feeding JWT's requirements.

- Solutions built on JWT include AgilPro and OW2 Scarbo (Open Source). Mailing list exchanges show new products being built on JWT.

- The friend EasySOA community (http://www.easysoa.org) has worked in 2011-2013 on using JWT to design and model the business part of an SOA such as the EasySOA Registry models. This has produced the (not yet released) EMF2CMIS bridge to document management solutions.

- Coordination with several OW2 projects such as Bonita, Orchestra, FraSCAti, Spagic, Scarbo.

- The University of Augsburg is an official Eclipse Foundation Member

IP Issues

- The code has been committed by individuals who are either committers of the project themselves or their foundation. Code contributions from others have undergone a CQ.

- The contribution questionaires for all components have been completed.

- The legal information has been inserted into the source code as described in the Eclipse IP Policy.

- There are no outstanding CQs and the IP log has been committed and approved for this release.

IP Issues

- The code has been committed by individuals who are either committers of the project themselves or their foundation. Code contributions from others have undergone a CQ.

- The contribution questionaires for all components have been completed.

- The legal information has been inserted into the source code as described in the Eclipse IP Policy.

- There are no outstanding CQs and the IP log has been committed and approved for this release.

Project plan and IP log

- The current project plan can be found at
    - http://www.eclipse.org/projects/project-plan.php?projectid=technology.jwt

- The IP log can be found at

    http://www.eclipse.org/projects/ip_log.php?projectid=soa.jwt
- Currently no open IP requests

Communication

- ## Project Leads
    - Marc Dutoo, Open Wide
    - Christian Saad, Augsburg University (release engineer)
    - Ahmed Samir Wafa, Augsburg University (release engineer)

- ## Communication Channel
    - JWT Mailing List: jwt-dev@eclipse.org