

SCA Tools 2.1.0 (Helios) Release Review



Planned Review Date: June 11, 2010

Communication Channel: [eclipse.stp.sca-tools](http://eclipse.stp.sca-tools.com) forum

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SCA Tools Overview

- The purpose of the Eclipse SCA Tools project is to develop a set of tools to help developers of SCA applications
- The SCA Tools project focuses on tools covering the SCA specifications:
 - SCA ecore meta model corresponding to the XSD scheme proposed by the Open SOA consortium and by OASIS
 - Ecore meta models of additional implementations, interfaces, and bindings defined by the SCA runtime implementations Tuscany, Frascati, and Fabric3
 - Editors (XML, form, graphical) helping developers to construct SCA assembly files
 - Introspective tools that analyze existing code to complete the SCA model according to SCA annotations found in the code

Features

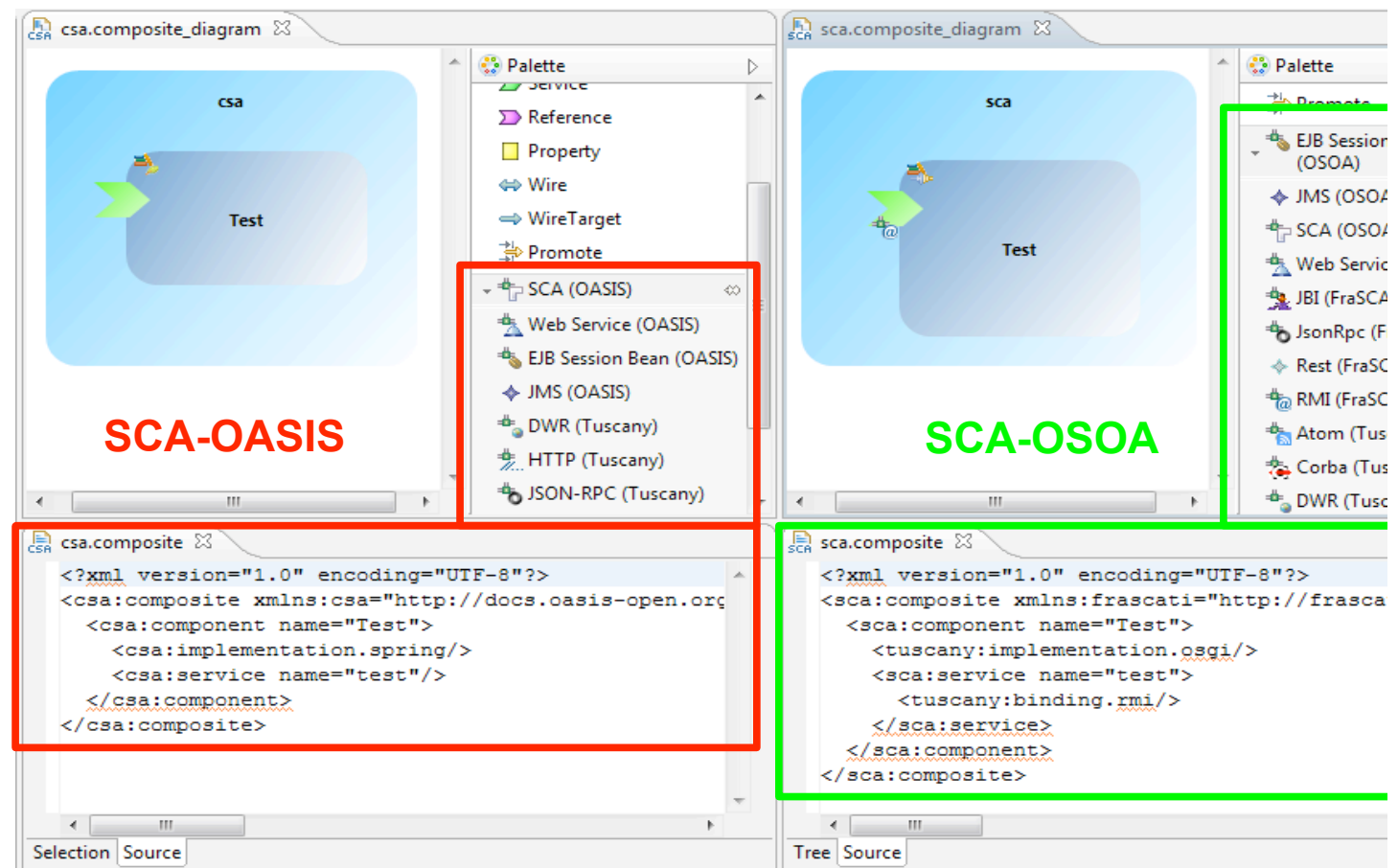
- SCA Meta Model
 - 2 core meta models: OSOA and OASIS
 - Extensible: one extension per SCA platform
 - The user can define its own extensions
- SCA Composite Designer
 - Easily extensible
 - Bottom-up approach: introspection of existing Java code and ComponentType files
- SCA XML Editor
 - Customization of the WTP XML editor: auto-completion for attribute values

Features

- SCA Form Editor
 - Editor with a web-interface for SCA XML artifacts
- SCA Project utilities
 - Creation wizards
 - SCA Builder
 - Generation of Java code skeletons from a composite
- SCA Runtime support
 - Deployment of SCA projects on servers from Eclipse
 - Currently available: Apache Tuscany 1.x, Apache Tuscany 2.›
OW2 FraSCAti 1.x
- OSOA Java annotations and APIs embedded

New & Noteworthy

- Support for:
 - The Open SOA and OASIS specifications
 - Different SCA runtimes: Tuscany 1.x, Tuscany 2.x, FraSCAti 1.x, and Fabric3 1.x



New & Noteworthy

- Acceleo is used to generate code skeletons from SCA composites

```
[module generateJava('http://www.osoa.org/xmlns/sca/1.0' /)]
@template public generateJava(j : JavaImplementation)

    [comment @main /]
    [file (j.class.substituteAll('.', '/') .concat('.java'), false)]
    [j.class.getPackageName() /]

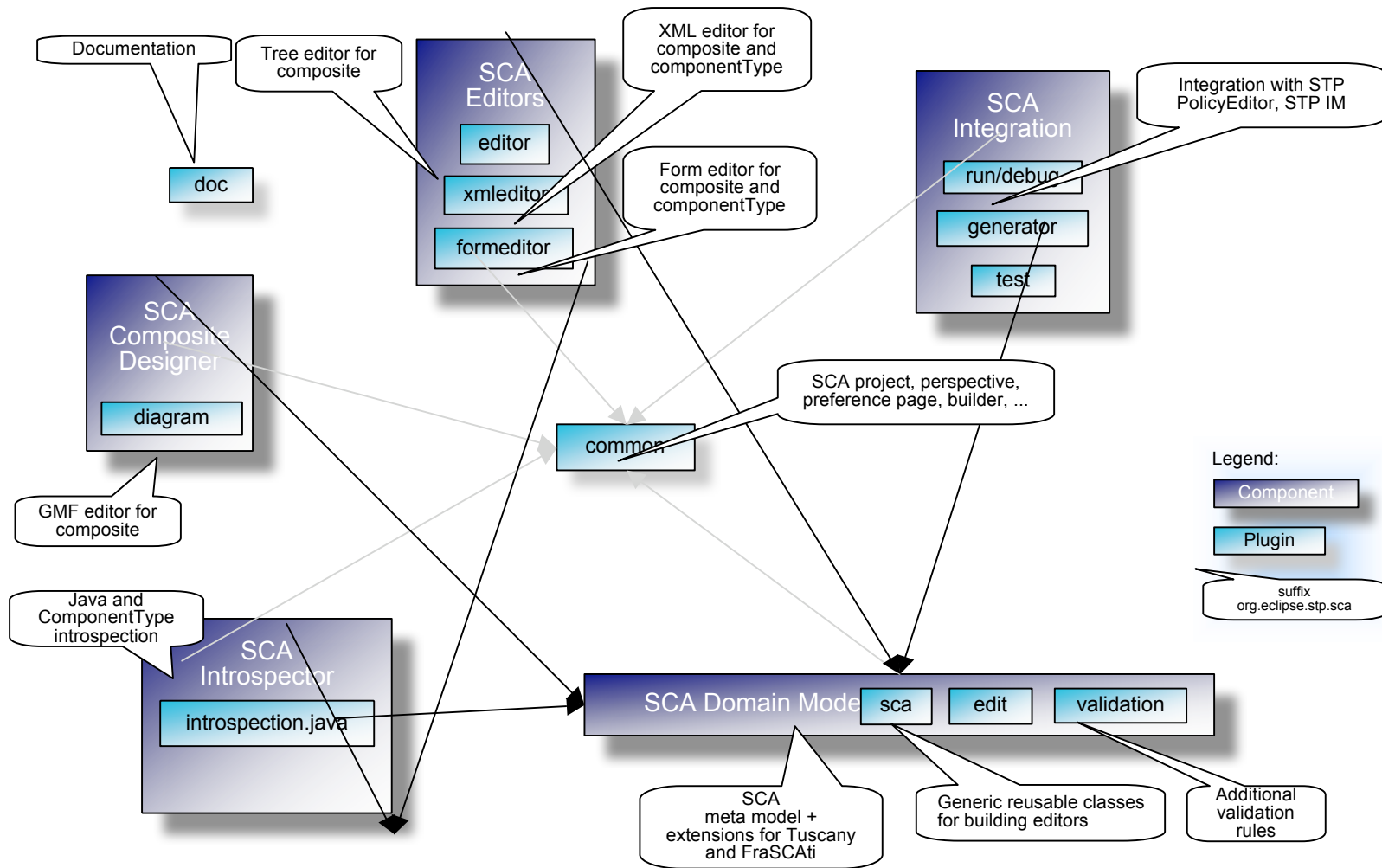
    //[protected ('for imports')]
    //[/protected]

    /**
     *
     * [protected ('for comments')]
     *
     * Put your comments here.
     *
     * [/protected]
     *
     * @generated
     */
    public class [j.class.tokenize('.')->last() /] {
```



- Resolution of the line number in the SCA builder

Architecture



Non-Code Aspects

- 2 new committers in 2009 (Damien and Lionel)
- Conferences
 - Eclipse Summit Europe 2009
 - Eclipse Con 2010
- SCA Tools has been moved from the STP TLP to the SOA TLP in April 2010

Schedule

- http://wiki.eclipse.org/STP/SCA_Component#Planning

API

- Metamodels and corresponding implementations

Documentation

- For users :
 - http://wiki.eclipse.org/STP/SCA_Project#Tutorials - section « Tutorials for SCA Tools users »
- For developpers :
 - http://wiki.eclipse.org/STP/SCA_Project#Tutorials - section « Tutorials for SCA Tools developers »
- Wiki
 - http://wiki.eclipse.org/STP/SCA_Project

Standards

- The SCA Composite Designer is compliant with:
 - The SCA specifications 1.0 proposed by the Open SOA consortium and
 - The SCA Specifications 1.1 proposed by OASIS

End of life

- No features from the previous release have been end-of-life'd in release 2.1.0

Tool usability

- Localization / externalization

Synergies

- With other Eclipse projects
 - EMF project is used to generate the SCA Domain Model
 - EMF Validation Framework is used to implement the validation rules
 - GMF project is used to generate the SCA Composite Designer
 - XML editor from WTP is extended
- With other communities
 - OW2 FraSCAti
 - We share the same meta model and
 - The same introspection mechanism
 - Apache Tuscany
 - Collaboration with the Tuscany community to update SCA Tools according to the last version of Tuscany
 - Fabric3
 - Collaboration with the Fabric3 community to provide SCA Tools extensions for Fabric3

Bugzilla

	Severity							Total
	blocker	critical	major	normal	minor	trivial	enhancement	
Status	NEW	.	.	<u>5</u>	<u>1</u>	<u>1</u>	<u>6</u>	<u>13</u>
	ASSIGNED	.	<u>2</u>	<u>3</u>	.	.	<u>2</u>	<u>7</u>
	RESOLVED	<u>1</u>	<u>1</u>	<u>5</u>	<u>39</u>	<u>8</u>	<u>38</u>	<u>92</u>
	VERIFIED	<u>1</u>	<u>1</u>
	CLOSED	.	.	<u>4</u>	.	.	.	<u>4</u>
	Total	<u>1</u>	<u>1</u>	<u>7</u>	<u>51</u>	<u>9</u>	<u>47</u>	<u>117</u>

- 20 contributions from 6 contributors
- 92 bugs resolved
- 7 bugs will be resolved after Helios
(enhancements or bug tagged as « help wanted »)

IP

- The developer understands and adheres to the Eclipse Development Process, committer responsibilities and due diligence rules, as well as the Eclipse IP Policy
- All contributions are marked with the keyword “contributed” in bugzilla
- IP Log
 - http://www.eclipse.org/projects/ip_log.php?projectid=stp.sca

Project Plan

- June 2010
 - Helios Release : SCA Tools 2.1.0
- December 2010
 - SCA Event Processing Meta Model
 - SCA Composite Designer: update with the SCA Event Processing Meta Model
 - SCA Composite Editors: update with the SCA Event Processing Meta Model
 - Update of the utilities for the OASIS specification (builder, wizards)
- February 2010
 - Ease the definition of WS references
 - SOA Policy editor support
 - Use Eclipse EEF for the property view

Team

- Stéphane Drapeau – Obeo (lead)
- Vincent Zurczak – EBM WebSourcing
- Oisín Hurley – Free Electron at large
- Etienne Juliot - Obeo
- David Porter – Progress Software
- Lionel Seinturier – Univ. Lille
- Damien Fournier – INRIA

More information

- SCA website
 - <http://www.eclipse.org/stp/sca/>
- SCA wiki
 - http://wiki.eclipse.org/STP/SCA_Project
- SCA newsgroup: starting point for questions
 - <news://news.eclipse.org/eclipse.stp.sca-tools>
- SCA Bugzilla
 - Review and create Bugzilla entries
- SCA SVN repository
 - <http://dev.eclipse.org/svnroot/stp/org.eclipse.stp.sca-tools/org.eclipse.stp.sca/>

Communication Channel for Feedback

- Please provide feedback on the SCA Tools forum:
 - <http://www.eclipse.org/forums/eclipse.sca-tools>