



**The Open Source Leader  
in Information Collaboration**

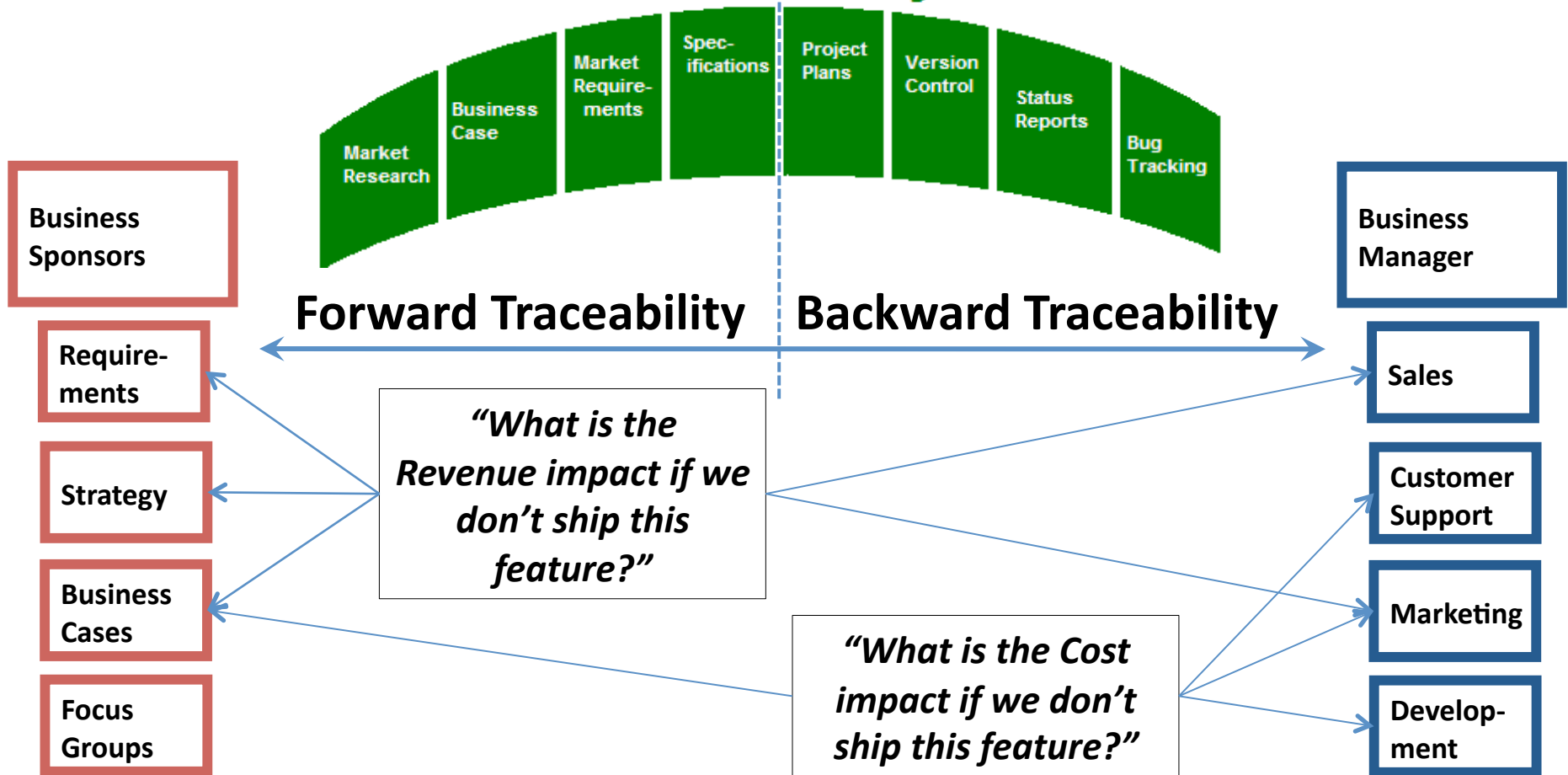
**Model-driven Framework for  
Process Deployment, eXtreme  
Traceability**

# Agenda

- Traceability Challenge
- eXtreme Traceability Defined
- MetaModel and Ontology Architecture
- Tool Chain Automation Architecture
- Questions

# The Traceability Challenge

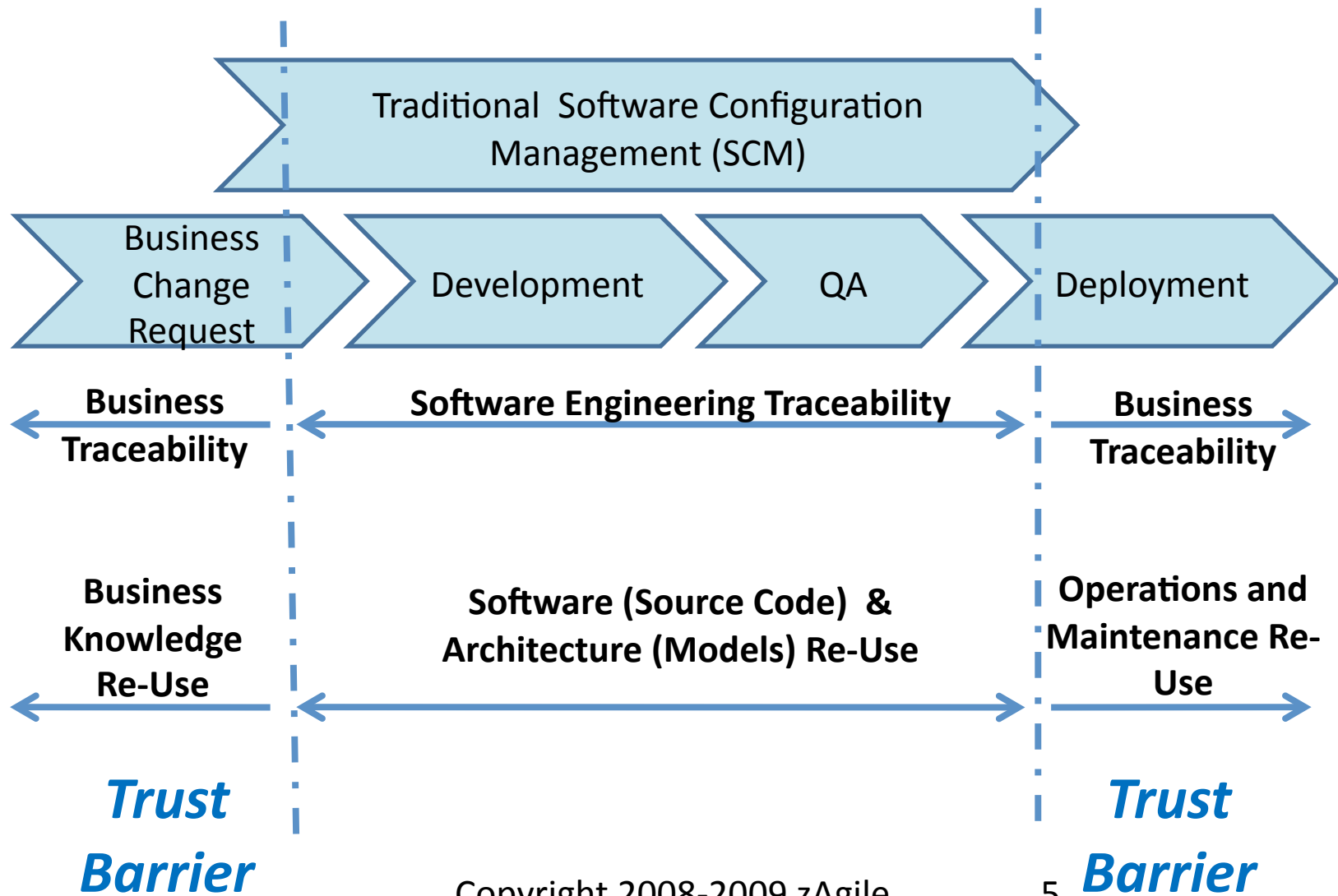
## Software Lifecycle



**“All I can see is the DNA on the Bark of the Tree.  
Where is the Forest?”**

# eXtreme Traceability


Traditional Traceability	eXtreme Traceability
Focus within the Organizational Silo	End-to-End focus from concept idea to deployment
Software Development Lifecycle Focus	Knowledge Development Lifecycle Focus
Software Re-Use	Knowledge Re-Use
“Things”	“Relationships”



## Why a Model Driven Approach?

- Process Automation will not scale unless you have Re-Use of Process Fragments to
- Models enable both Standardization and Flexibility through Extension Mechanisms
- Agility requires “programmable granularity” of just the right level of process complexity for the organization’s process maturity.
- Process Tailoring

# Information Integration Across the Enterprise

 Software Engineering Teams

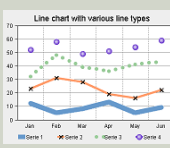
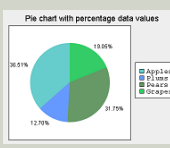
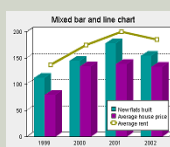
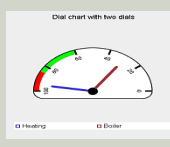
 Project Sponsor

 Managers

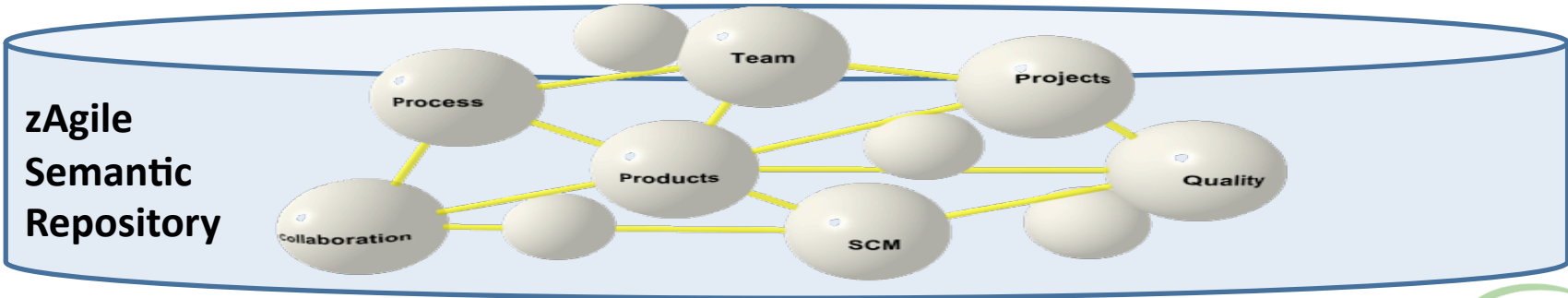
### Tools

Project Artifacts	Version Control	Product Artifacts
Project Planner	Forums	Defect Tracking
Other Applications & Widgets	Instant Messaging	Build Tools

### Dashboard and Applications

Asset Management	Team Management	Product Management
Auditing & Compliance	Project Management	Quality Management
Change Management	Process Management	

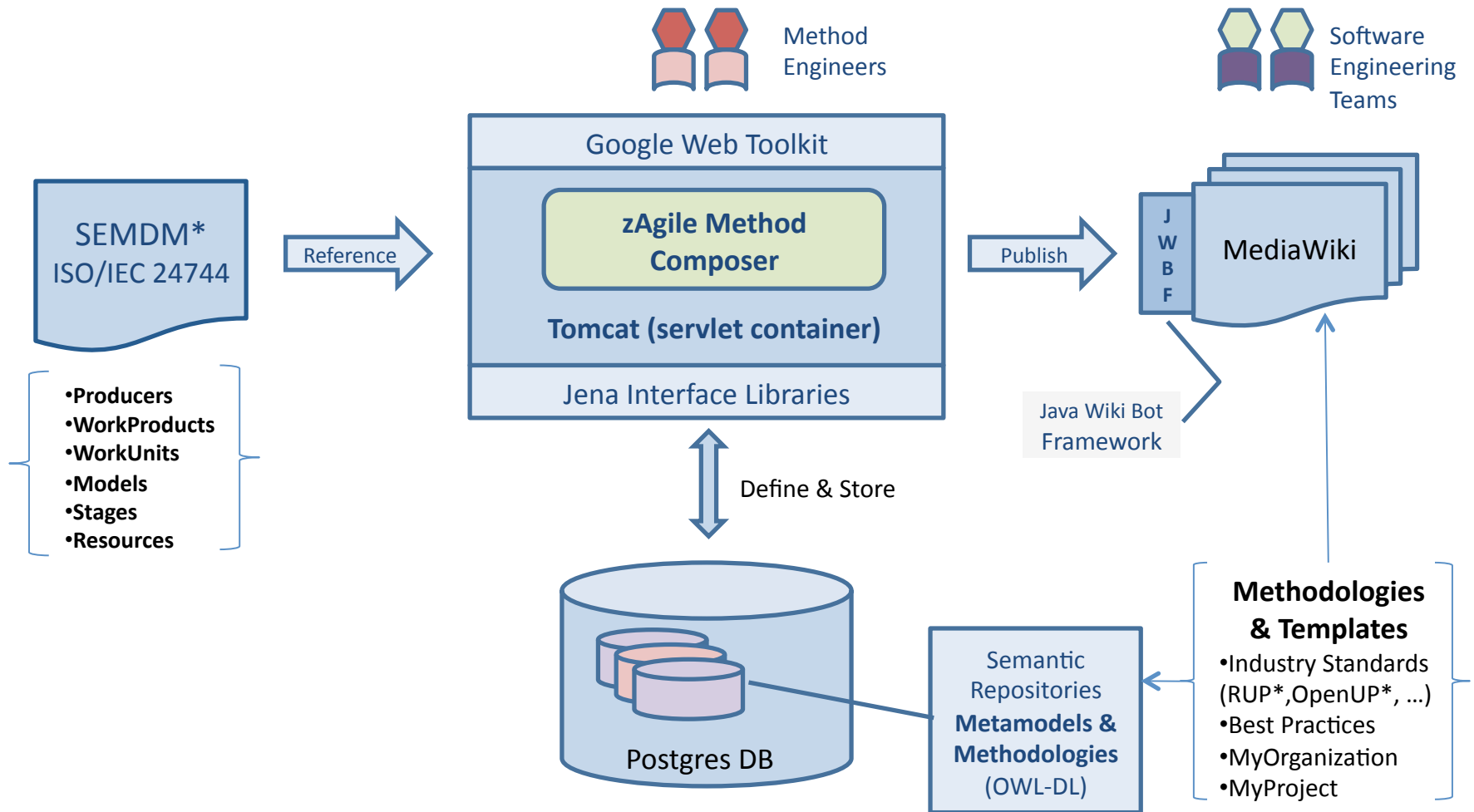




# zAgile Method Composer

## 1. Establish Guidelines for Software Engineering Teams

Define and Publish Reusable Methodologies Based on an Industry Standard Metamodel



- SEMDM – Software Engineering Metamodel for Development Methodologies, copyright ISO/IEC 2007
- RUP -- Rational Unified Process, copyright IBM Corp.
- OpenUP -- Open Unified Process, copyright IBM Corp.

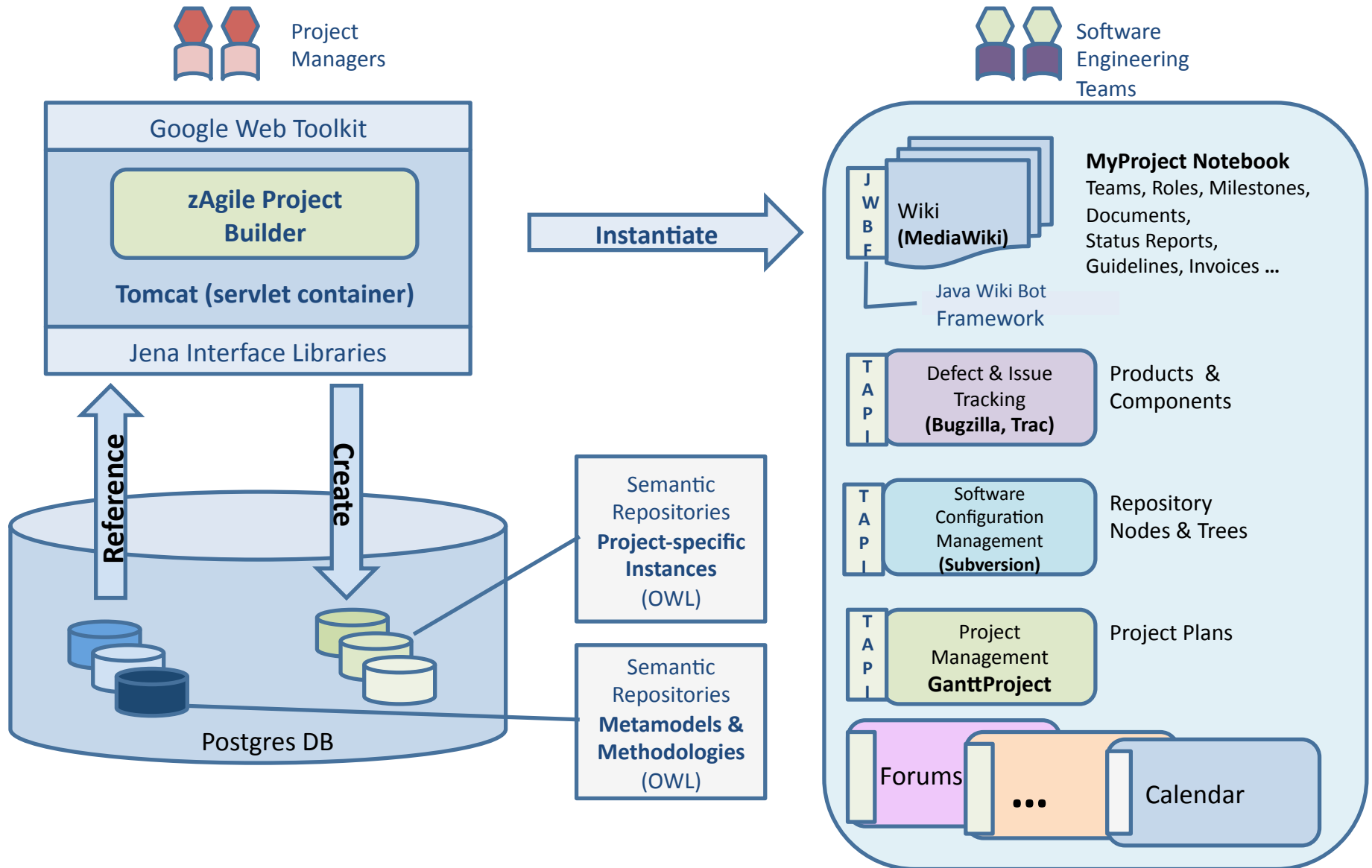




# zAgile Project Builder

## 2. Implement Methodology For Projects & Configure Tools

Implement Methodology  
Elements for specific  
Projects, Configure Project  
Environment and Tools

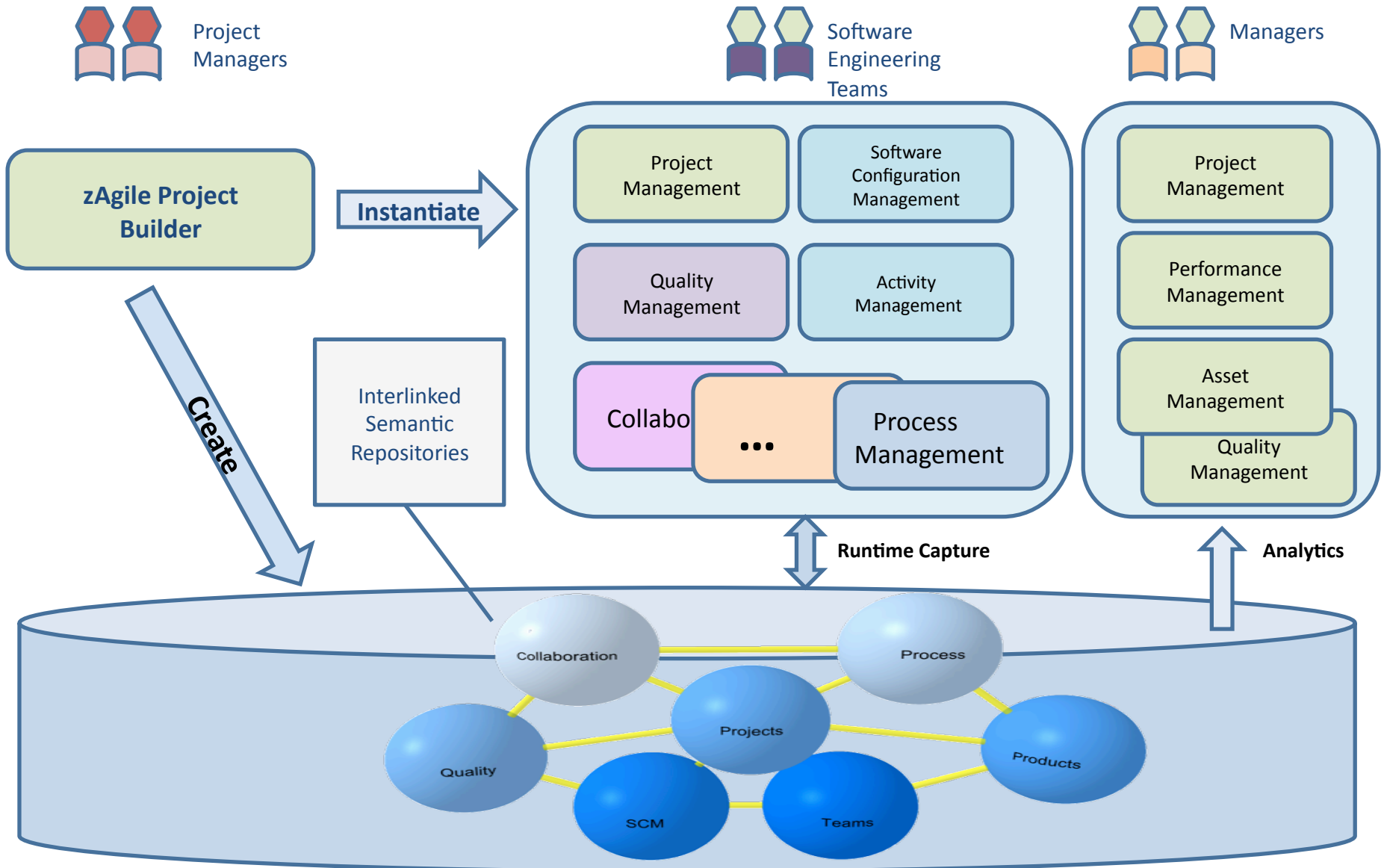




# zAgile Process Manager

## 3. Capture Runtime Data and Manage Project Process

Capture runtime activities in interlinked semantic repository, generate analytics, manage process



# Ontology-driven Forms



## Hudson Test Case Suite for License

[Edit Data](#) | [Preview](#) | [Notation Guide](#)

[Save](#) | [Cancel](#) | [Edit Layout](#)

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  - [S1. Add valid license](#)
  - [S2. Add an invalid license](#)
- [Hudson Test Case Suite for License TestCase 3](#)
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**Summary**

Test Suite for the license mechanism validation

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**Validating the license restriction by server id**

**Test Case and Test Steps Block**

Test Case ID	Related Component	Related Requirement
1010	hudson connector	R2. License mechanism restri

**Description**

Test the feature of restriction the connector license by server id

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**Tests Steps**

Label	Description	Pre-Condition	Post-Condition

**Category**  
 TestCaseSuite  
**Planned for**  
 HudsonConnector

**Belongs to Test Suite**

[None]  
 zAgile Test Case Suite  
 test suite definition  
 test suite  
 document test case1

**Test Suite Type**  
 [None]

**Test Specification Document:**  
 [None]



# The Information Dashboard

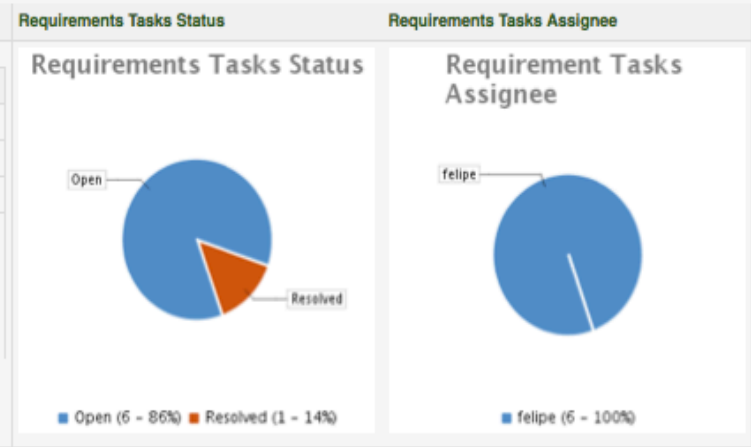
## View Properties - release2.0

Labels: (None)  
Go to source

<b>Description</b> release2.0	<b>Project</b> • <a href="#">HudsonConnector</a>	<b>Release Date</b> Aug 18, 2010
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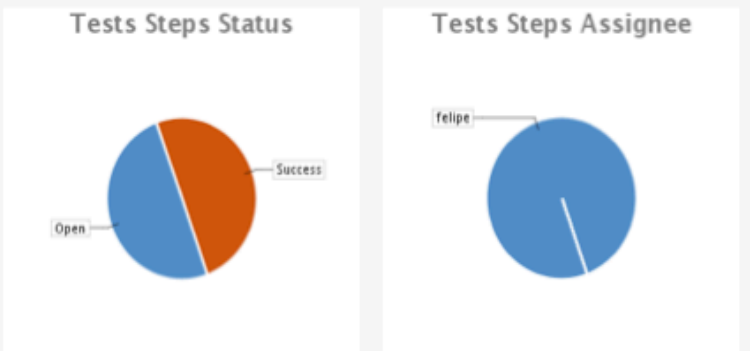
**Requirements and Related Task for this Release**

Requirement	ReqTask	ReqStatus	Task	TaskStatus	DueDate
<a href="#">New GTech Requirements Document Requirement 1</a>			<a href="#">PT-40</a>	<a href="#">Open</a>	Thu Sep 30 00:00:00 CDT 2010
<a href="#">R2. Capture build information</a>			<a href="#">PT-22</a>	<a href="#">Open</a>	Mon Aug 23 00:00:00 CDT 2010
<a href="#">R1. Develop an Administrative UI</a>			<a href="#">PT-4</a>	<a href="#">Open</a>	Tue Aug 10 00:00:00 CDT 2010
<a href="#">R1. Develop an Administrative UI</a>			<a href="#">PT-3</a>	<a href="#">Open</a>	Mon Aug 09 00:00:00 CDT 2010
<a href="#">RD2. Commits Build Detail Requirement</a>			<a href="#">PT-9</a>	<a href="#">Resolved</a>	Thu Aug 12 00:00:00 CDT 2010
<a href="#">R2. License mechanism restriction</a>			<a href="#">PT-5</a>	<a href="#">Open</a>	Wed Aug 11 00:00:00 CDT 2010
<a href="#">R1. Develop an Administrative UI</a>			<a href="#">PT-48</a>	<a href="#">Open</a>	Mon Jan 31 00:00:00 CST 2011



**Requirements and Test Case Step Execution for this Release**

Requirement	TestCase	TestExec	TestStatus	Step	StepExec	StepStatus	DueDate
<a href="#">R2. License mechanism restriction</a>	<a href="#">Validating the license restriction by server id</a>	<a href="#">PT-6</a>	<a href="#">Success</a>	<a href="#">S1. Add valid license</a>	<a href="#">PT-11</a>	<a href="#">Success</a>	Wed Aug 11 00:00:00 CDT 2010
<a href="#">R2. License mechanism restriction</a>	<a href="#">Validating the license restriction by server id</a>	<a href="#">PT-6</a>	<a href="#">Success</a>	<a href="#">S2. Add an invalid license</a>	<a href="#">PT-12</a>	<a href="#">Success</a>	Wed Aug 11 00:00:00 CDT 2010
<a href="#">R2. License mechanism restriction</a>	<a href="#">Validating the license restriction by user amount</a>	<a href="#">PT-8</a>	<a href="#">Open</a>	<a href="#">S2. Add an invalid license</a>	<a href="#">PT-14</a>	<a href="#">Open</a>	Wed Aug 11 00:00:00 CDT 2010
<a href="#">R2. License mechanism restriction</a>	<a href="#">Validating the license restriction by server id</a>	<a href="#">PT-16</a>	<a href="#">Open</a>	<a href="#">S1. Add valid license</a>	<a href="#">PT-17</a>	<a href="#">Open</a>	Wed Aug 11 00:00:00 CDT 2010



# Semantic (Concept-based) Search



2 match(es) found

## Validating the license restriction by user amount

**Updated:** Mon Nov 29 2010 22:00:00 GMT-0800 (PST)  
**Description:** Test the feature of restriction the connector license by amount of users allowed  
**Created:** Sun Aug 08 2010 22:00:00 GMT-0700 (PST)  
**Test Case ID:** 1011  
**Concepts related with Requirements:** R2. License mechanism restriction  
**Requirement related to the test case:** R2. License mechanism restriction  
**Test Steps:** S1. Add valid license  
 S2. Add an invalid license  
**Test execution:** PT-8  
**Tests:** hudson connector

hudson connector

**Application ID:** 10050

**Description:** This the component that is triggered all the time that an build process happens in hudson.

**Tested by:** Validating the license restriction by server id  
 Validating the license restriction by user amount

**Author:** felipe

**is Produced by:** HudsonConnector

**Associated Issue:** PT-15  
 PT-14  
 PT-17  
 PT-10  
 PT-20  
 PT-47  
 PT-39  
 PT-45  
 PT-8

## Validating the license restriction by server id

**Updated:** Mon Nov 29 2010 22:00:00 GMT-0800 (PST)  
**Created:** Sun Aug 08 2010 22:00:00 GMT-0700 (PST)  
**Description:** Test the feature of restriction the connector license by server id

Simple Search
Power Search

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**Concept**

Test Case

Associated Issue

Version

Extension

Author

Tests

License

Summary

Tests Specification Document

Test Case ID

Reviewed by

Post-condition

Occurs in environment

Description

Test execution

Author



# Summary

## Problem

- Project Mgmt is Costly
  - Siloed Tools
  - Distributed Environment
  - Lack of Formal Processes
  - Lack of Traceability

## Solution

- Integration of People, Tools and Processes
  - Application Integration Platform & Connectors
  - Methodology and Process Modeling
  - Integrated BI
  - Model-driven Architecture

## Technology

- Semantic Technology-based Architecture
  - Domain and application-specific Ontologies
  - Jena-based Framework
  - RESTful Interfaces
  - SPARQL support

## Business Benefit

- Reduced Costs and Increased Visibility
  - Effective Collaboration
  - Efficient Project Tracking
  - Rapid Knowledge Access

## Thank you

- Test-drive hosted zAgile Teamwork at [zTeamwork.zAgile.org/confluence](http://zTeamwork.zAgile.org/confluence)
- Download open source Wikidsmart (semantic extension for Confluence Wiki) from Sourceforge for your own projects
- Correspond with zAgile at [info@zagile.com](mailto:info@zagile.com), we can help