



Collaborative Application Lifecycle Management (C/ALM): roadmap della piattaforma e dei prodotti Jazz

Marco Balzarotti
IBM Rational Solution Architect
marco_balzarotti@it.ibm.com

Rational. software

Agenda

- Introduzione alla piattaforma Jazz
- Roadmap Prodotti
- Collaborative Application Lifecycle Management

Agenda

■ Introduzione alla piattaforma Jazz

- ▶ Una piattaforma scalabile ed estensibile per rendere efficace e collaborativo lo sviluppo software
- ▶ Una architettura di integrazione che abilita la collaborazione di strumenti eterogenei attraverso un approccio “Web-like”
- ▶ Una comunità presente in Jazz.net dove i prodotti Jazz-based vengono sviluppati in maniera trasparente.

■ Roadmap Prodotti

■ Collaborative Application Lifecycle Management

Lo sviluppo software spesso è paragonato a...



...scienza



...arte



...manifattura

...dimenticando l'importante aspetto ***collaborativo***

Immaginiamo un *gruppo jazz* che fa un *concerto* per un *pubblico pagante*

- Più che eseguire, *interpretano*
- Sono *disciplinati* anche senza direttore d'orchestra
- *Collaborano* e si ascoltano
- *Improvvisano*
“consapevolmente”
- Suonano “*live*” di fronte al pubblico
- Si *divertono* in quello che fanno



Proviamo a sostituire

- *Gruppo jazz* con *team di sviluppo SW*
- *Concerto* con *progetto*
- *Pubblico* con *cliente*

jazz

People,
not organizations,
build great software.

Jazz Vision

Fornire un ambiente di lavoro fluido che aiuti i team di sviluppo a collaborare per creare software di qualità superiore.



Collaborazione

Ridurre i problemi di comunicazione anche tra team geograficamente distribuiti

Automazione

Ridurre i costi e la possibilità di errore umano

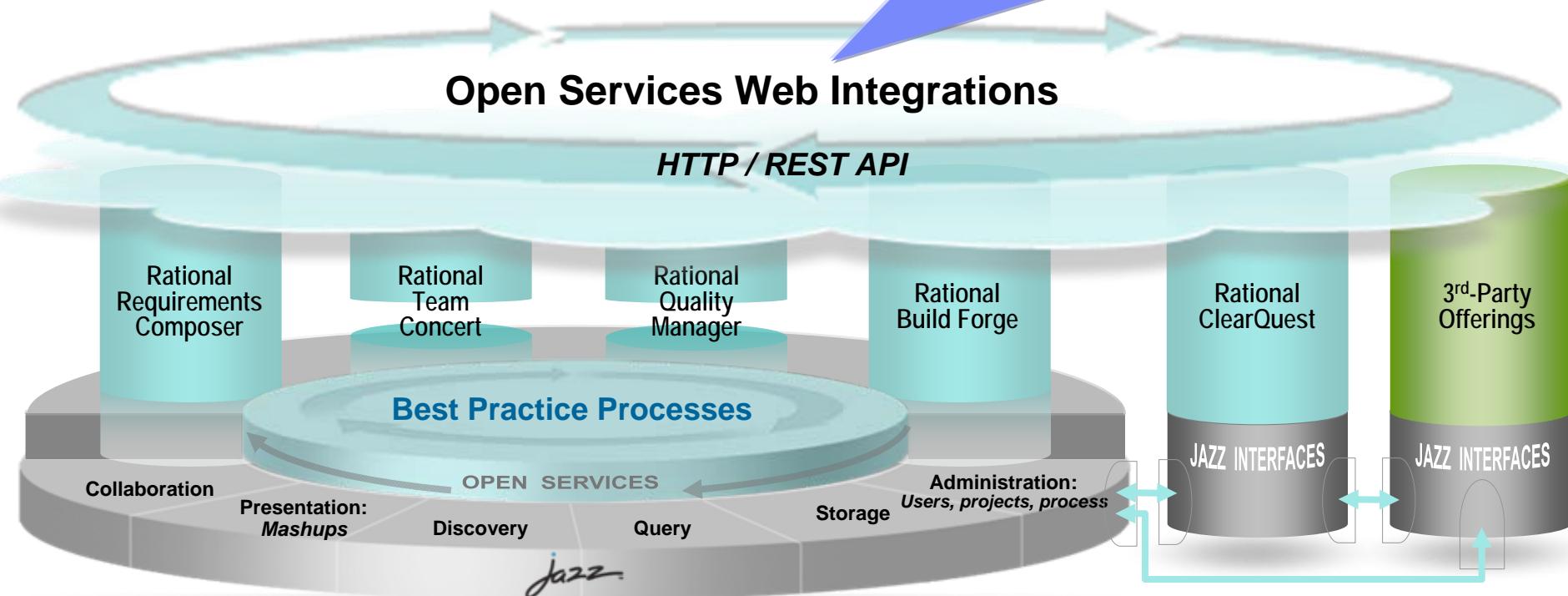
Reportistica

Tenere sotto controllo l'andamento dei progetti in relazione agli obiettivi di business

La piattaforma Jazz per lo sviluppo collaborativo del software

Jazz: una architettura di integrazione aperta, estensibile e “web-centric”

Integrazioni basate su Open Service Lifecycle Collaboration (OSLC)



Built on Jazz

Integrated with Jazz

*Integrazioni basate su Jazz
Integration Architecture (JIA)*

Elementi principali della architettura Jazz

- Open Services Lifecycle Collaboration (OSLC)
 - ▶ Specifica di servizi HTTP/REST per la condivisione di risorse di ALM
 - ▶ IBM, Clienti e Partners insieme per definire la strategia di integrazione del futuro. (community: open-services.net)
- Jazz Integration Architecture (JIA)
 - ▶ L'implementazione IBM di OSLC, offre un livello di integrazione più elevato di OSLC
 - ▶ Definisce i Jazz Foundation Services (JFS) messi a disposizione dei tool jazz based. I servizi includono collaboration, process enactment, discovery, storage, administration
 - ▶ Ciascun tool può esporre servizi specializzati attraverso una interfaccia RESTful indipendente dal linguaggio

Collaboration



A large cloud of black text words related to social collaboration, including: feed, atom, linkedin, Sourceforge, search, work-item, social-network, wiki, blog, rss, facebook, tagging, delicio.us, messaging, newsgroup, friend, iteration, myspace, colleague, feedback, review, evaluation, comments, open-source, tag, attachment, approval, chat, Apache, Twitter, query, instant-messaging, instant-messaging, instant-messaging, instant-messaging, instant-messaging.

Contestuale al progetto, al team e alle attività



Process enactment

- Un progetto di sviluppo software crea e modifica un grosso numero di risorse
 - ▶ Work-products di progetto
 - ▶ Risorse utilizzate per gestire il processo (es. work-items, iterazioni, piani, fasi)
- Il processo è “enacted” controllando la creazione e modifica delle risorse
 - ▶ Dati, Stati, Eventi
 - ▶ Pre-condizioni da verificare
 - Sono stati eseguiti tutti i prerequisti? Ho i giusti privilegi? Sono state ottenute le approvazioni richieste? Le risorse necessarie si trovano in uno stato consistente?
 - ▶ Post-azioni da pilotare
 - Chi deve essere notificato? Quali altre risorse debbono essere automaticamente aggiornate?

Jazz è anche una Community – Jazz.net



We're building a new generation of products to help make software development more collaborative, productive and enjoyable.



**Learn
about Jazz**



**Explore
projects**



**Download
products**

Jazz Team Blog



Enterprise performance and scalability testing

By Jean-Michel Lemieux

Fri, 03 Apr 2009 @ 09:41:40

If you've been reading some of our previous blog posts (wan performance testing using metronome, selfhosting sizing numbers, repository workspace scalability,...)

[More >](#)

Upcoming Events

Rational Software Conference 2009



31 May - 4 June 2009 in Orlando, FL

It's no secret that in today's economy, we are facing more challenges than ever. And...

[More >](#)

Rational Quality Manager and Rational Test Lab Manager now available!



[Read more in the blog >](#)

Fri, 20 Mar 2009

We are pleased to welcome Rational Quality Manager and Rational Test Lab Manager to jazz.net.

Now available for download: 1.0.1.1 and 2.0 Beta 1.

Buy Rational Products → at ibm.com

IBM.

Featured Downloads

Rational Quality Manager and Rational Test Lab Manager 1.0.1.1

Rational Requirements Composer 1.0.0.1

Rational Team Concert 1.0.1.1

[All Downloads >](#)

In The News

From the Eclipse Platform to the IBM Rational Jazz Platform SDLC blog Monday, 20 April 2009

[Jazz - Better the Second Time Around](#)

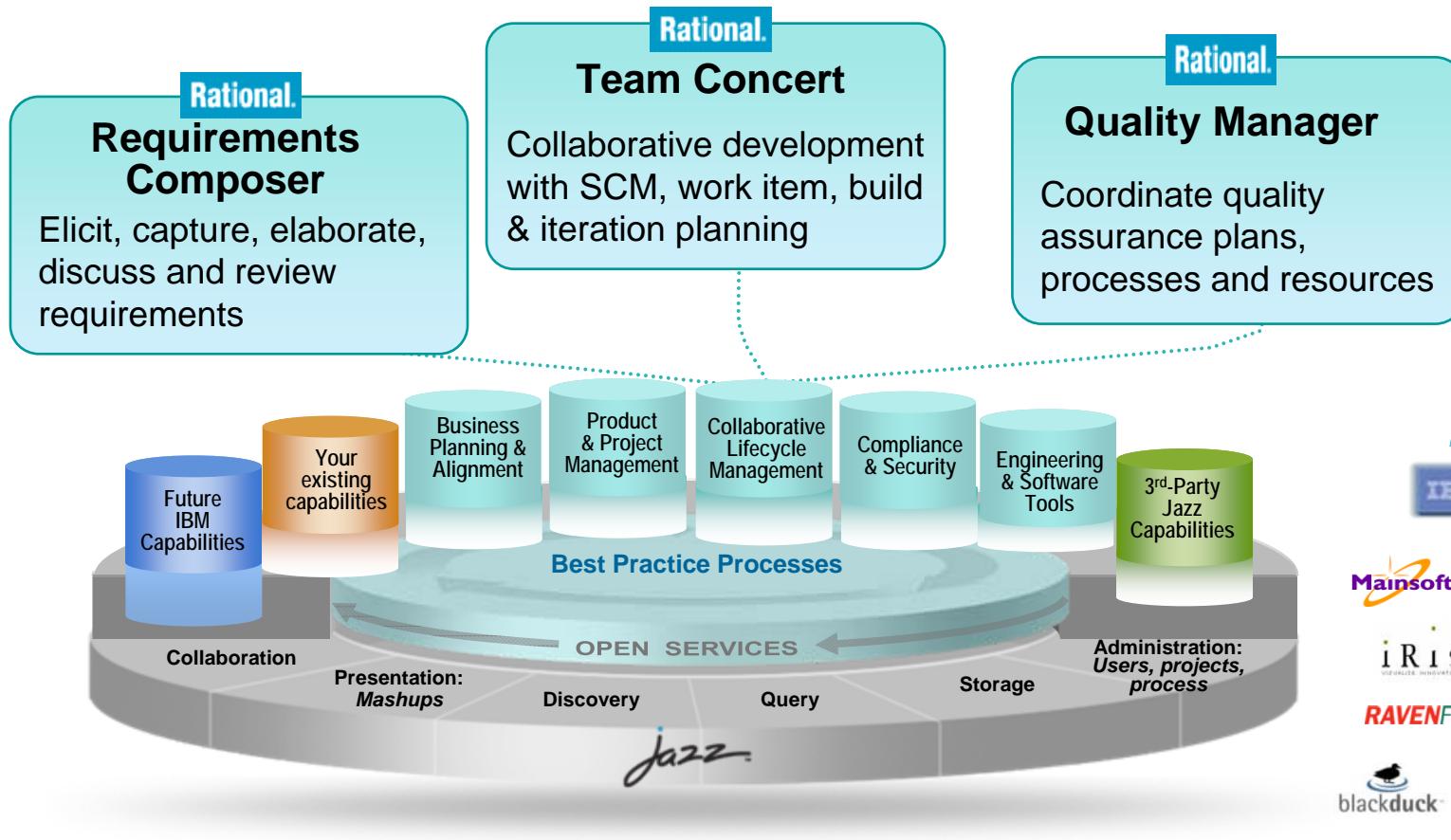


Segrate 13 ottobre – Roma 15 ottobre 2009

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- Roadmap Prodotti
 - ▶ Alcuni prodotti sono stati sviluppati da zero sfruttando la tecnologia Jazz
 - ▶ Altri prodotti stanno evolvendo sfruttando le potenzialità della tecnologia Jazz
- Collaborative Application Lifecycle Management

I primi prodotti su Jazz (2008)



I nuovi annunci sui prodotti Jazz

Beta

Rational Requirements Composer 2.0

New!

Rational Team Concert 2.0

New!

Rational Quality Manager 2.0

New!

Rational Asset Manager 7.2

New!

Rational Insight 1.0

Beta

Rational Project Composer


APG
CAST
ACHIEVE INSIGHT. DELIVER EXCELLENCE.

BSD GROUP
cm-logic
empowering change

Mainsoft
RAVENFLOW
SEER
GALORATH

QSM
WebLayers


Rational Requirements Composer

Rich Authoring Environment

Use Cases

Rich Text Requirements

Glossaries

UI Sketching and Storyboarding

Process Sketching

Web Review and Approval

- Wiki style interface
- Categorize / Tag
- Comment
- Review / Approve

Collaboration Server

Rational. RequisitePro/DOORS, TeamConcert, Quality Manager

▪ ALM Collaborative

- Share work instantly
- Users / teams / authorizations
- Linking between all artifacts
- Versioning

Rational Team Concert

Process
Automation &
Guidance

Team Central
RSS
Personalized

Work Items

Agile SCM and
Build

Iteration
Planning and
Execution

Team Advisor

The screenshot displays the Rational Team Concert application interface. At the top, there's a menu bar with Run, Window, Help. Below it is a toolbar with icons for New, Open, Save, Print, etc. A central window shows a task titled "Task 18463 - Please make workflow stateids globally unique". The "Details" tab shows the task type is a "Task", severity is "Normal", and it was found in "Unassigned". It was created by André Weinand on Feb 21, 2007, at 10:30 AM, in the "Source Control / Jazz Project" team area. The "Description" tab contains a detailed description of the issue, mentioning state IDs s11, s12, s13 and suggesting adding 30 to them. It also refers to defect 18025. The "Discussion" tab shows two entries from Jean-Michel Lemieux and André Weinand. At the bottom, there's a "Work Items" view showing a list of 76 work items, including their status (Resolved, Verified), summary, and owner.

ID	Status	Summary	Owner
18463	Resolved	Please make workflow stateids globally unique	Jean-Michel Lemieux
18460	Verified	Remove vertical dividers from global navigation	Josh Staiger
18119	Resolved	History in Add Subscriber dialog should appear when ...	Marcel Bähr
17972	Verified	adopt new search icon	Bill Higgins
17894	Verified	Owner attribute should depend on both Category and ...	Christof Marti
17848	Resolved	Build notes enhancements	André Weinand
17846	Resolved	Improve Contributor hover	<No Owner>



Rational Team Concert

v2.0

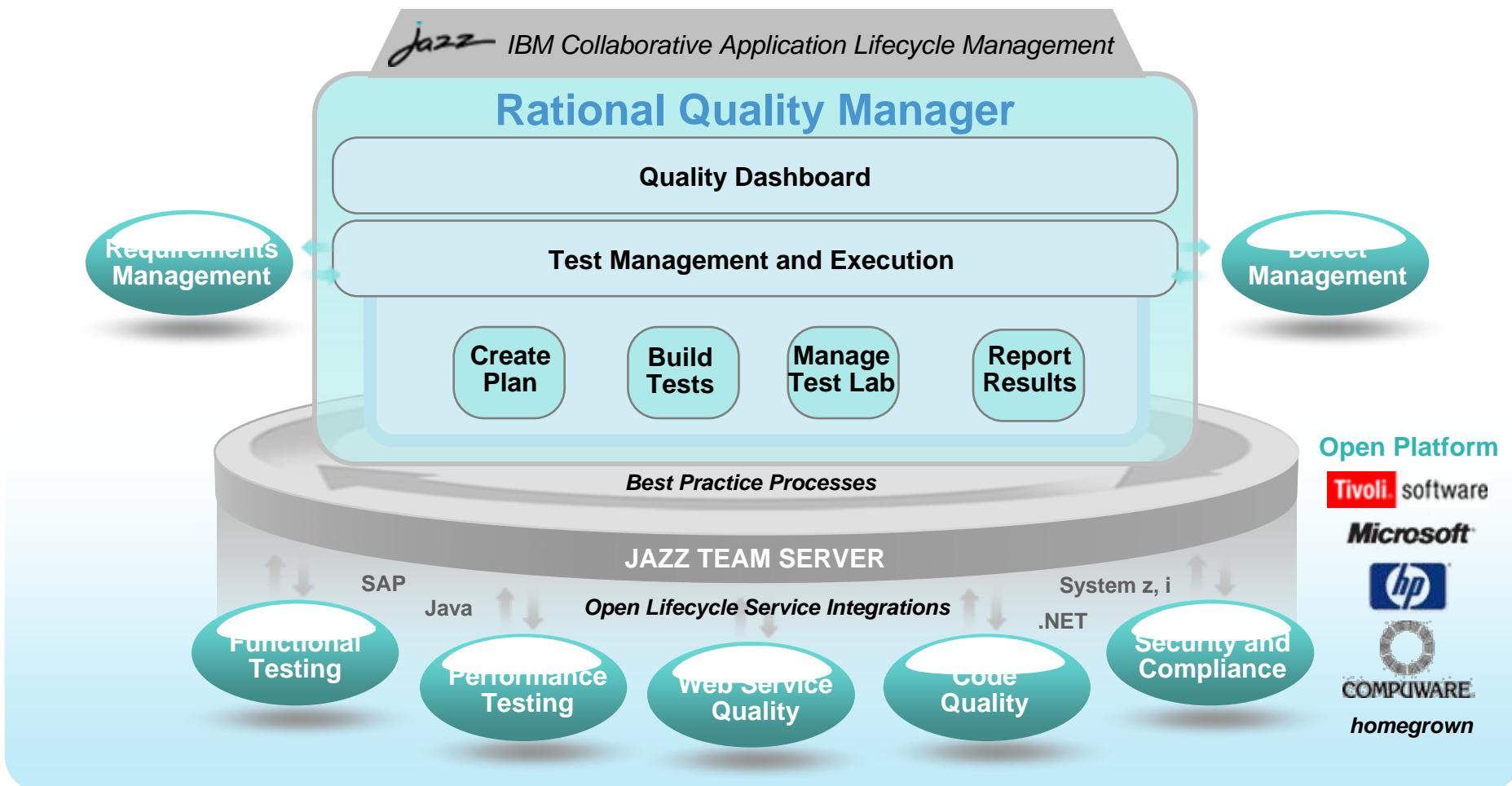
- Scalabile fino a migliaia di sviluppatori, e milioni di file e workitems
- Alta affidabilità di base (failover)
- Supporta release planning e processo SCRUM
- Supporta, J2EE, .NET, IBM i, System z, Microsoft Sharepoint®, Lotus Quickr®, HP QualityCenter e business partner offerings



"We've seen a 30% productivity gain on our global projects. The ability to easily suspend and resume work, along with advanced SCM features, helps team members juggle multiple tasks and priorities without missing a beat."

Alain Bergeron
VP Consulting Services, CGI

Rational Quality Manager



Rational Asset Manager

The screenshot shows the Rational Asset Manager V7.0 interface. The main menu includes File, Edit, View, History, Bookmarks, Tools, and Help. The address bar shows the URL <http://localhost:13080/com.ibm.ram.repository.web/home.faces?origin=/home.faces>. The title bar says "Asset Manager" and "Rational". The top navigation bar has tabs for Home, My Asset Manager, Search for Assets, Submit an Asset, and Administration. A sign-out link for "Master Administrator" is visible.

Using the repository

- Search and evaluate assets
- Download assets
- Create assets
- Submit assets
- Review assets
- Update assets
- Subscribe to assets

Configuring the repository

- Create Teamspaces
- Create category schemas
- Create asset types
- Create review processes
- Create roles and access control
- Manage repository configuration
- View repository metrics

Welcome to Rational Asset Manager M5

[Watch the M5 viewlet](#) | [Read the Infocenter](#)

M5 features

Utilise Stellant to index artifacts | CQ based reviews | WSRR deploy | CVS integration | LDAP integration | Improved UI | Help/Infopops | 2nd Rev. on the Rich Client

Links and Information

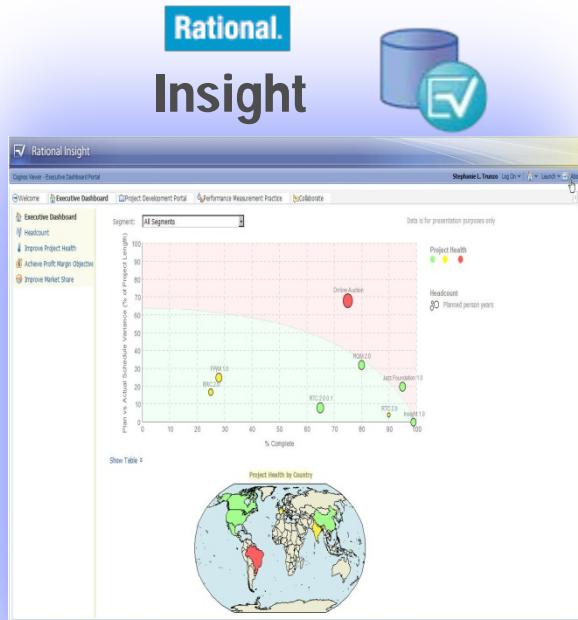
- Most popular downloads
 - [SampleLifecycleDefinition.wsdl](#) 1
 - [Struts License Text](#) 1
 - [LowTouchClaimProcessTestSe](#) 1
 - [logging-log4](#) 1
 - [LowRiskImport](#) 1
 - [HighRiskClaimProcessProductic](#) 0
 - [InsuranceLibrary http.wsr](#) 0
 - [BaseLibrary CustomerBO.xsd](#) 0
 - [ValidateInsurancePolicyInterf](#) 0
 - [InsuranceLibrary ClaimBO.xsc](#) 0
- Submissions and updates
 - [HighRiskClaimProcessPro](#) 4/26/07
 - [InsuranceLibrary http.w](#) 4/26/07

Asset Management Lifecycle

The lifecycle is divided into four phases: **Search & Retrieve Assets**, **Define**, **Create & Modify Assets**, and **Measure**.

- Search & Retrieve Assets**: Analyst, Developer, Architect Tester
- Define**: Asset Administrator
- Create & Modify Assets**: Analyst, Developer, Architect Tester
- Measure**: Project Manager, Reviewer, Approver
- Govern**: Project Manager, CIO/CTO

Rational Insight

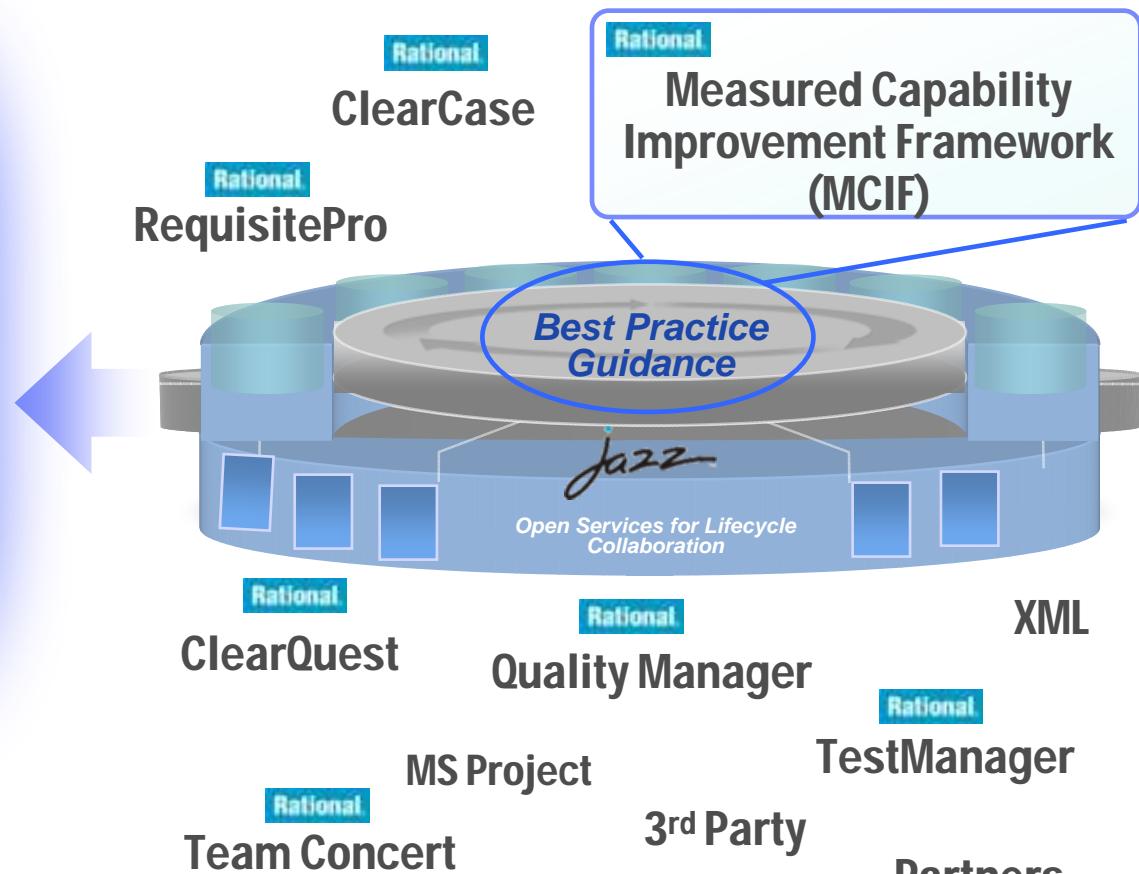


**Single View into Your
Organizational Performance**

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IBM COGNOS SOFTWARE

Powered by
Rational. software

jazz



Rational Project Composer

Beta

- Gestione dei piani di progetto
- Gestione dinamica delle risorse
- Gestione Rischi

The screenshot displays the Rational Project Composer application interface. At the top is a 'Dashboard' window showing project resources, tasks, and availability. Below it is a 'MyProject' window with tabs for Overview, Schedule, Baselines, Documents, Resources, Risks, Timesheets, Details, and Add New Tab. The 'Risks' tab is selected, showing a table of risks with columns: Risk, Category, Date, Probability, Impact, Precision, and State. The table contains five rows of risk data. To the right of the main windows is a 'Task 53' details view showing task summary, general information, and a large list of task items.

Risk	Category	Date	Probability	Impact	Precision	State
Risk_1	Resources	Nov 16, 2008	Medium	Medium	High	Accepted
Risk_3	Hardware	Nov 16, 2008	Low	High	Medium	Rejected
Risk_1	Schedule	Nov 23, 2008	Medium	Medium	High	Accepted
Risk_2	Language Support	Dec 14, 2008	Low	High	Medium	Rejected
Risk_3	Third Party	Dec 01, 2008	High			

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 - ▶ Progetto Jazz con lo scopo di definire le integrazioni tra Team Concert, Quality Manager e Requirement Composer.
 - ▶ Lo scopo è l'unificazione delle discipline di ALM utilizzando la collaborazione contestuale sugli elaborati la navigazione web-like tra elaborati e il tracciamento attraverso repository e team di lavoro diversi.

I principi del Collaborative Application Lifecycle Management

Architecture

Data

Workflow

Architettura e principi di Internet
Jazz Integration Architecture

**Approccio aperto per definire il
modello dati**
Open Services for Lifecycle
Collaboration

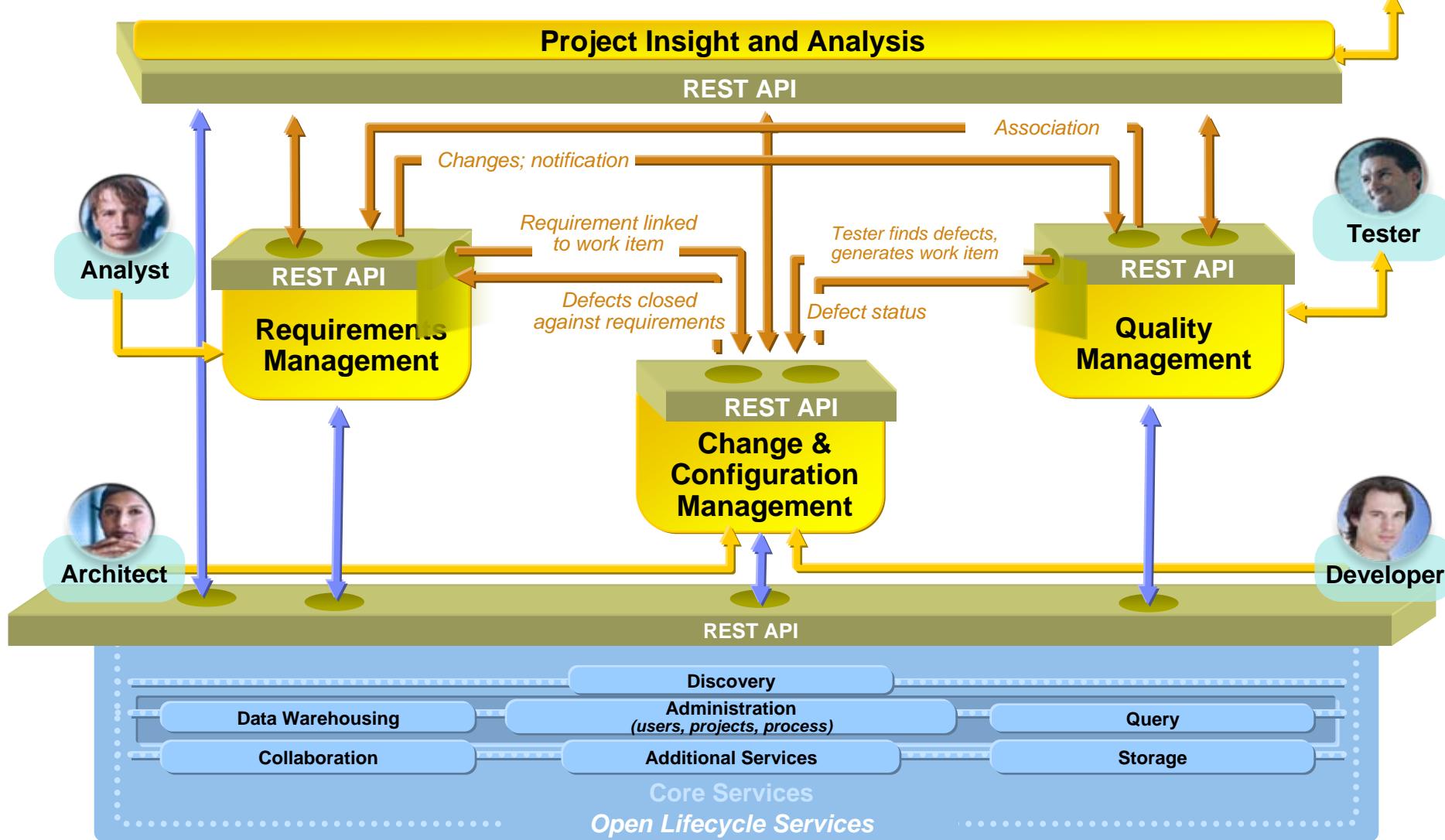
Scenari di utilizzo completi
Scenari di C/ALM pubblicati in
Jazz.net & open-services.net



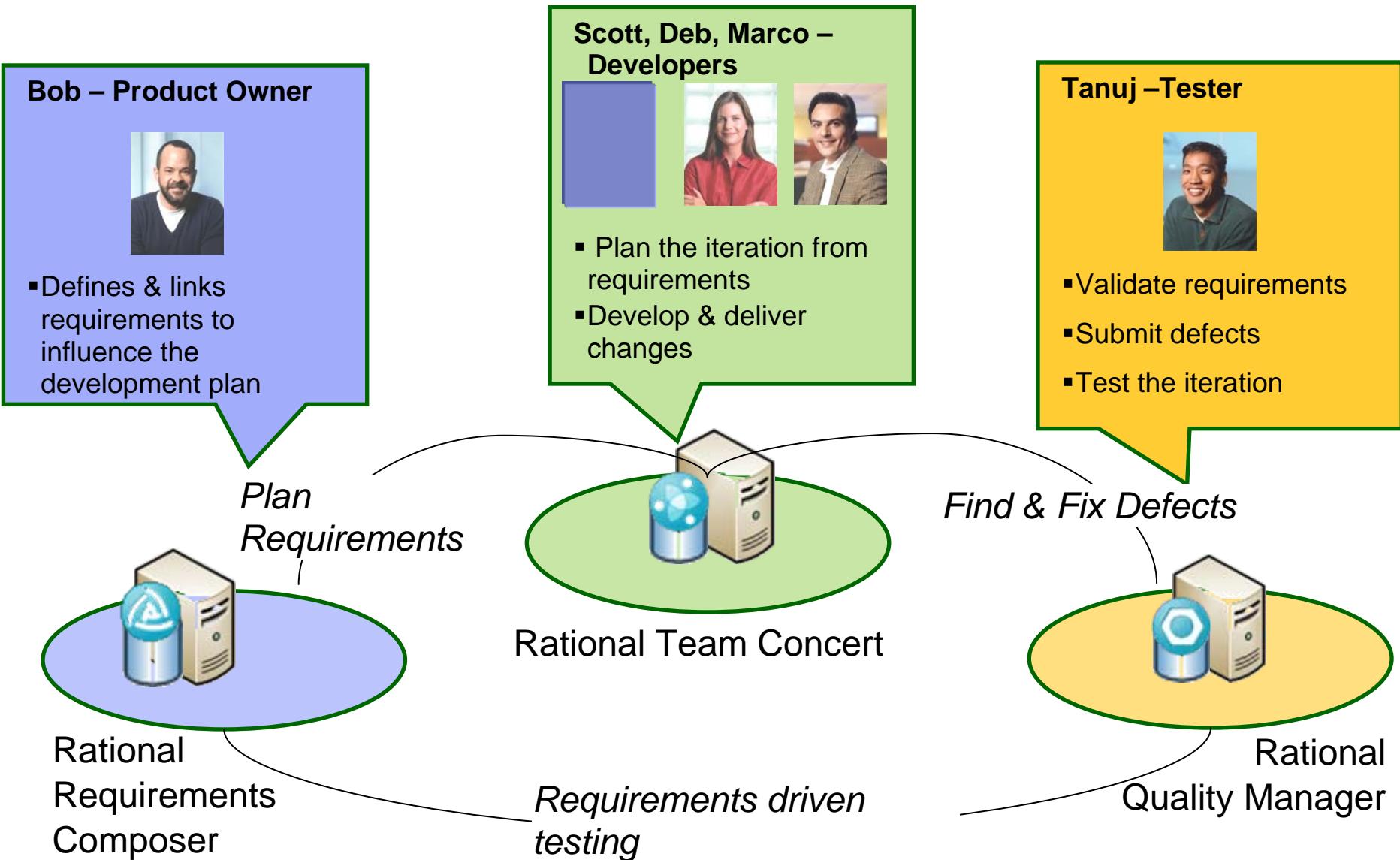


Team Lead

L'integrazione delle componenti di ALM



Demo: scenario di C/ALM



Cosa abbiamo visto oggi...

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- ▶ Progetto Jazz con lo scopo di definire le integrazioni tra Team Concert, Quality Manager e Requirement Composer.
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Questions



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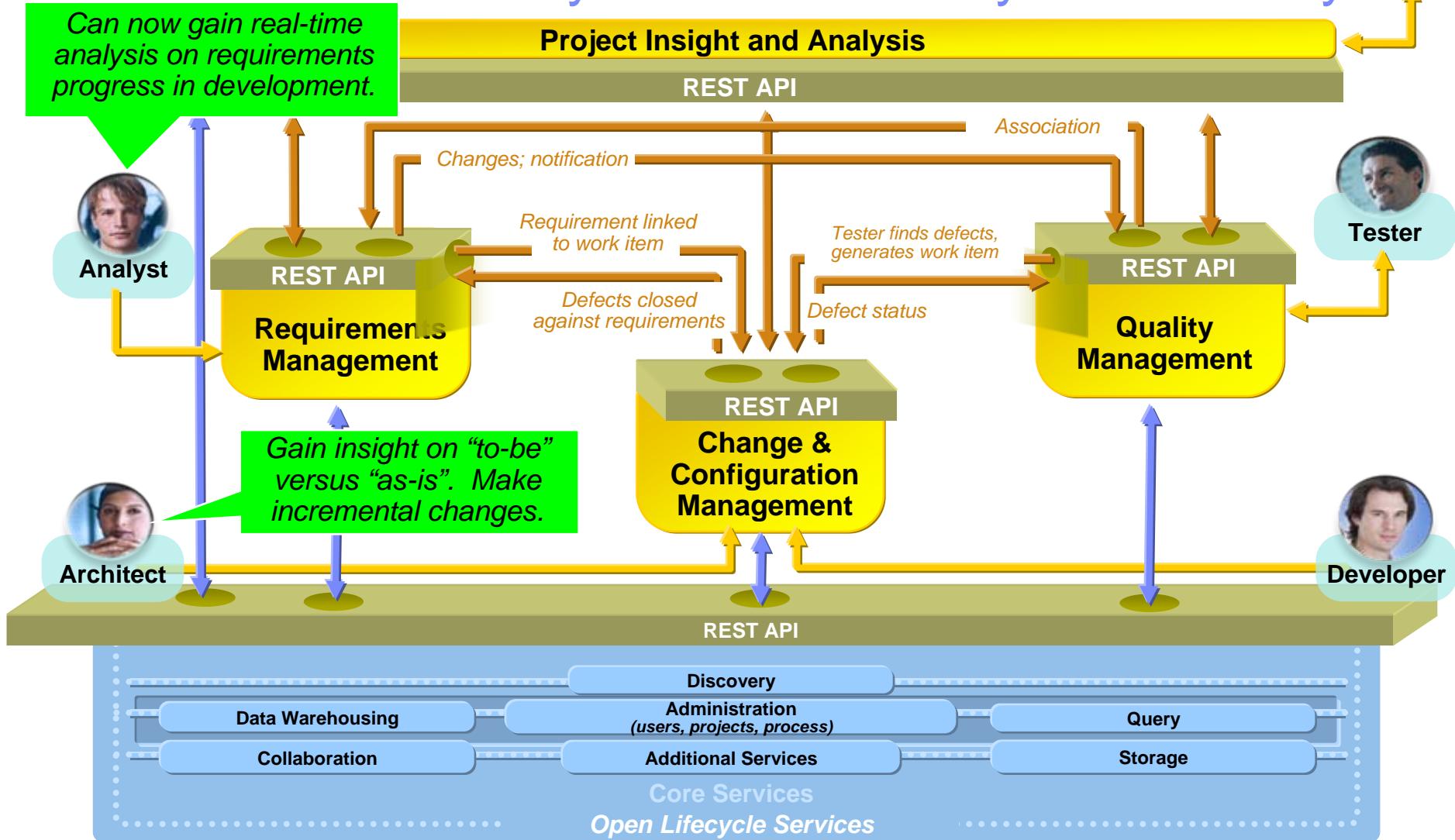


BACKUP SLIDES



Team Lead

The Software Delivery Platform – Unity in the Lifecycle



The Software Delivery Platform – Unity in the Lifecycle

Development Manager Portal

Projects: * Auction

Reports: Cognos > Public Folders > Auction Project Reports

Name: Recently Viewed, Defect Management, Defects Needing Attention, Development Activity, Project Management, Requirements Delivery, Requirements Management, Test Management

Search: Search: Name field, Advanced

Project Status Dashboard

Selected Report: Requirements Traceability Matrix

Parameters: Project: * Auction, Type: * Usecase Requirement

Requirements Traceability Matrix

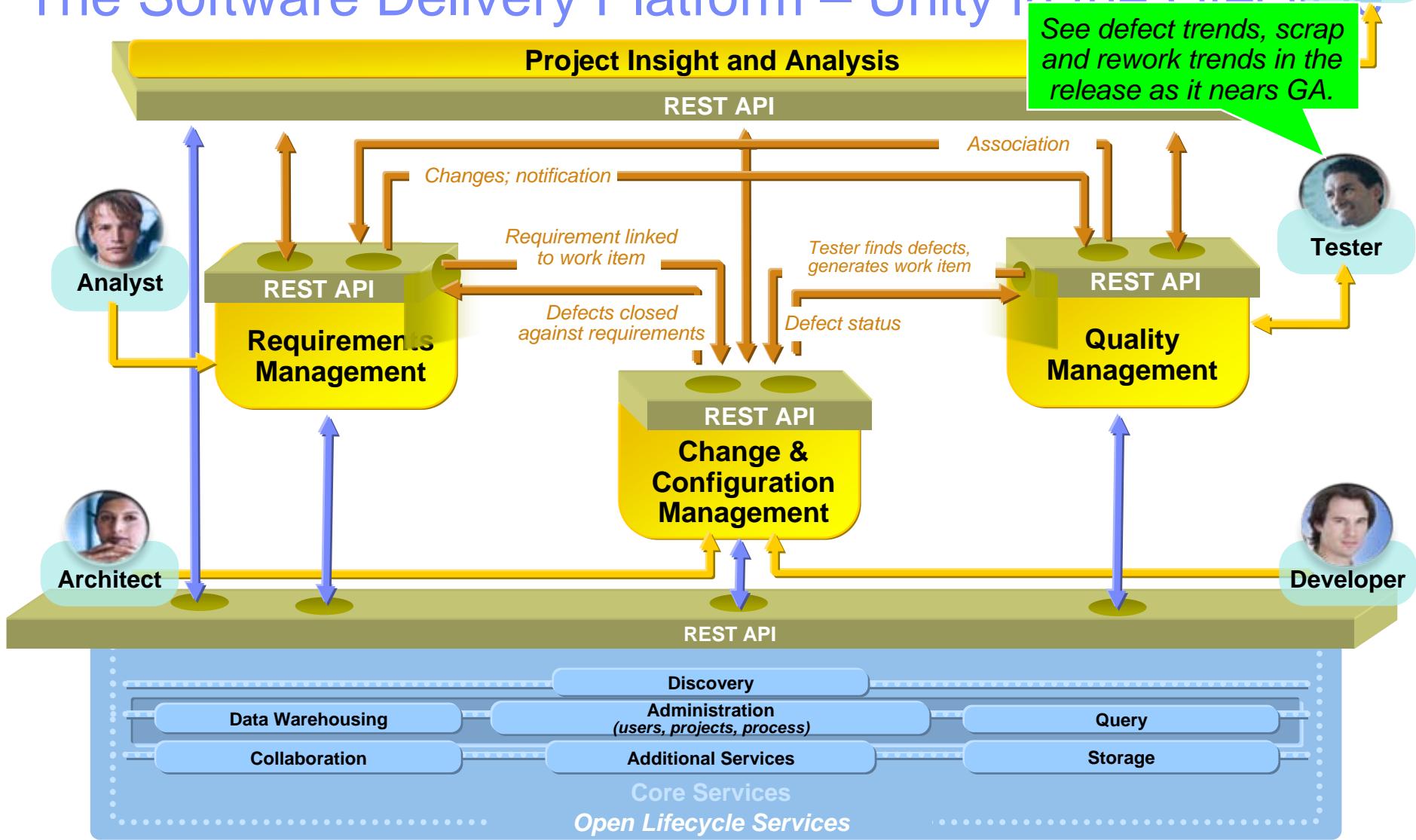
ID	Tag	Name	Status	Priority	High Level Requirement	Related Defects	Related Activities	Related Test Cases
29	UC1	Arrange Shipment	INCORPORATED	SHOULD	FEAT1			Add New Customer
30	UC1.1	Brief Description	INCORPORATED	COULD	FEAT2			
31	UC1.2	Basic Flow	INCORPORATED	COULD	FEAT2			Add New Products
32	UC1.3	INVENTORY NON AVAILABLE	PROPOSED	COULD	FEAT4			Administer Orders
33	UC1.4	INVALID INFORMATION	INCORPORATED	MUST	FEAT3			Add New Products
34	UC1.5	NO RESPONSE	PROPOSED	SHOULD	FEAT4			Add New Products
35	UC1.6	ORDER PLACED	INCORPORATED	SHOULD		SAMPL00000007 SAMPL00000007		Existing Customer Order
36	UC1.7	SUCCESS	PROPOSED	SHOULD				Login
37	UC2	Check Order Status	INCORPORATED	SHOULD	FEAT4			New Customer

See EXACTLY which requirements have developer activities or related test cases. Guarantee that this release has the right requirements included.



Team Lead

The Software Delivery Platform – Unity in the Lifecycle



Map your improvement objectives to best practices

Welcome VP Dev - Defect Development Manager Portal Public Folders My Folders Practice Guidance Average Defect Trends

The dashboard displays several charts and a practice guidance page:

- Build Health - Passed Tests:** A line chart showing the number of passed tests over six weeks. The trend shows a decline from approximately 12,000 in week 1 to about 9,000 in week 6.
- Burndown:** A burndown chart showing open work items over six weeks. The chart is divided into two sections: Defects (red) and Enhancements (blue). The total number of open work items starts at ~65 in week 1 and decreases to ~45 by week 6.
- Average Defect Trends:** A chart showing the number of defects by severity over time. It includes a legend for 'fix pass' (blue) and 'test pass' (yellow).
- Rational Method Composer:** A navigation pane for 'Team (ISM)' containing links to various practices and concepts like Iterative Development, Micro-Increments, and Retrospective.
- Practice Guidance:** A page titled 'Average Defect Trends' with a diagram illustrating an iteration lifecycle. The diagram shows four phases: Iteration planning (A few hours), Upfront planning and architecture (A few days), Stable weekly build (Continuous micro-increments, bug-fixing and builds), and Stable iteration build (Continuous bug-fixing, micro-increments and builds). The final phase is Iteration review and retrospective (A few hours).

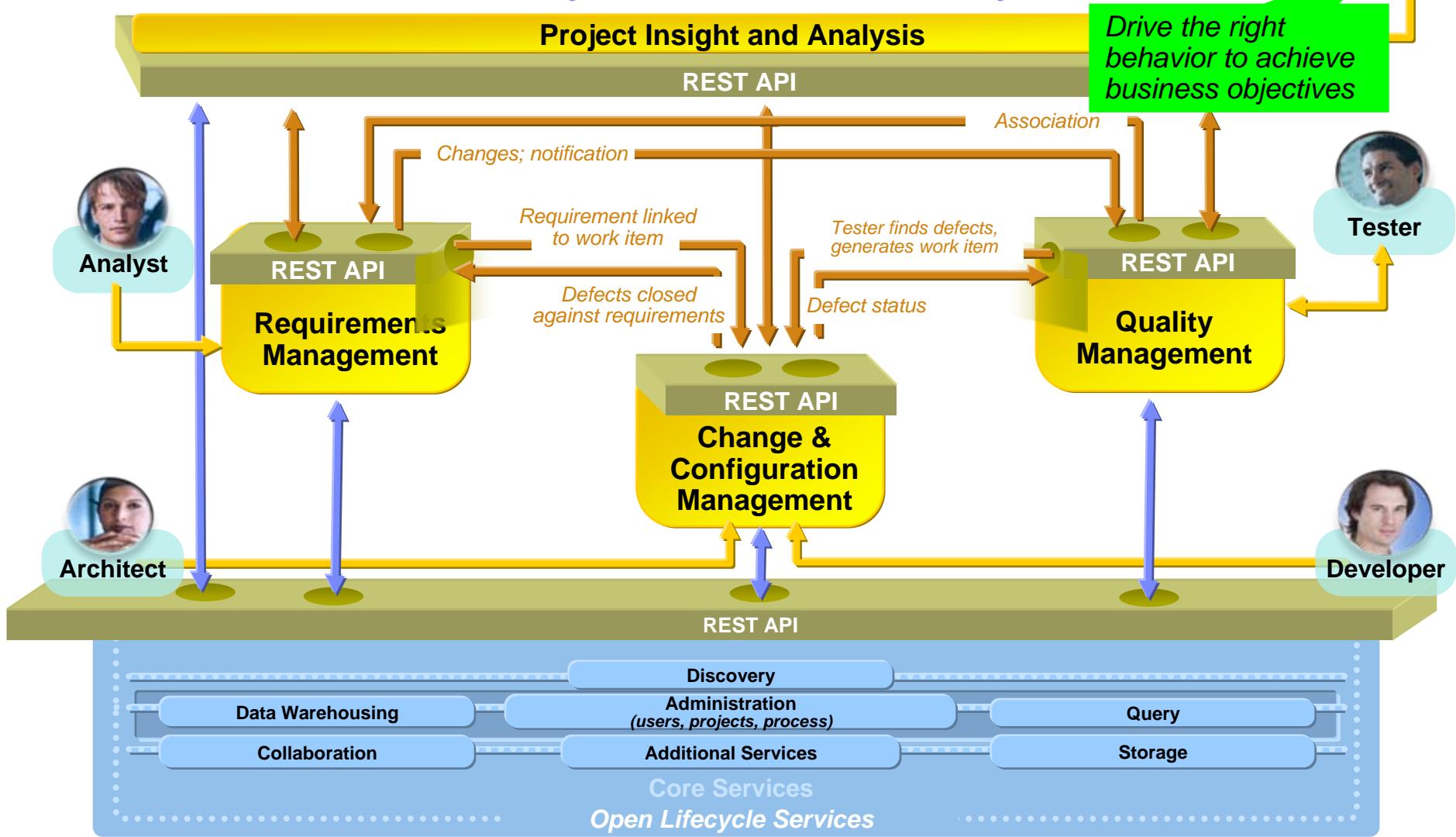
Quality is deteriorating as a result of prioritizing new features over fixing defects towards the end of iterations.

Identifying problems for achieving operational objectives and use practice guidance and policies to drive the right behaviors



Team Lead

The Software Delivery Platform – Unity in the Lifecycle



The Platform can enforce policy and right behavior

Configurable Rules can be run to enforce team or organizational standards. Can be refined "on the fly" for continuous improvements

Quick Fixes can be specified to simplify corrective action. Out of the box processes include OpenUP, Scrum, The Eclipse Way, etc

Change set missing required comment or work item.
Change set missing required comment or work item.

Quick Fix:

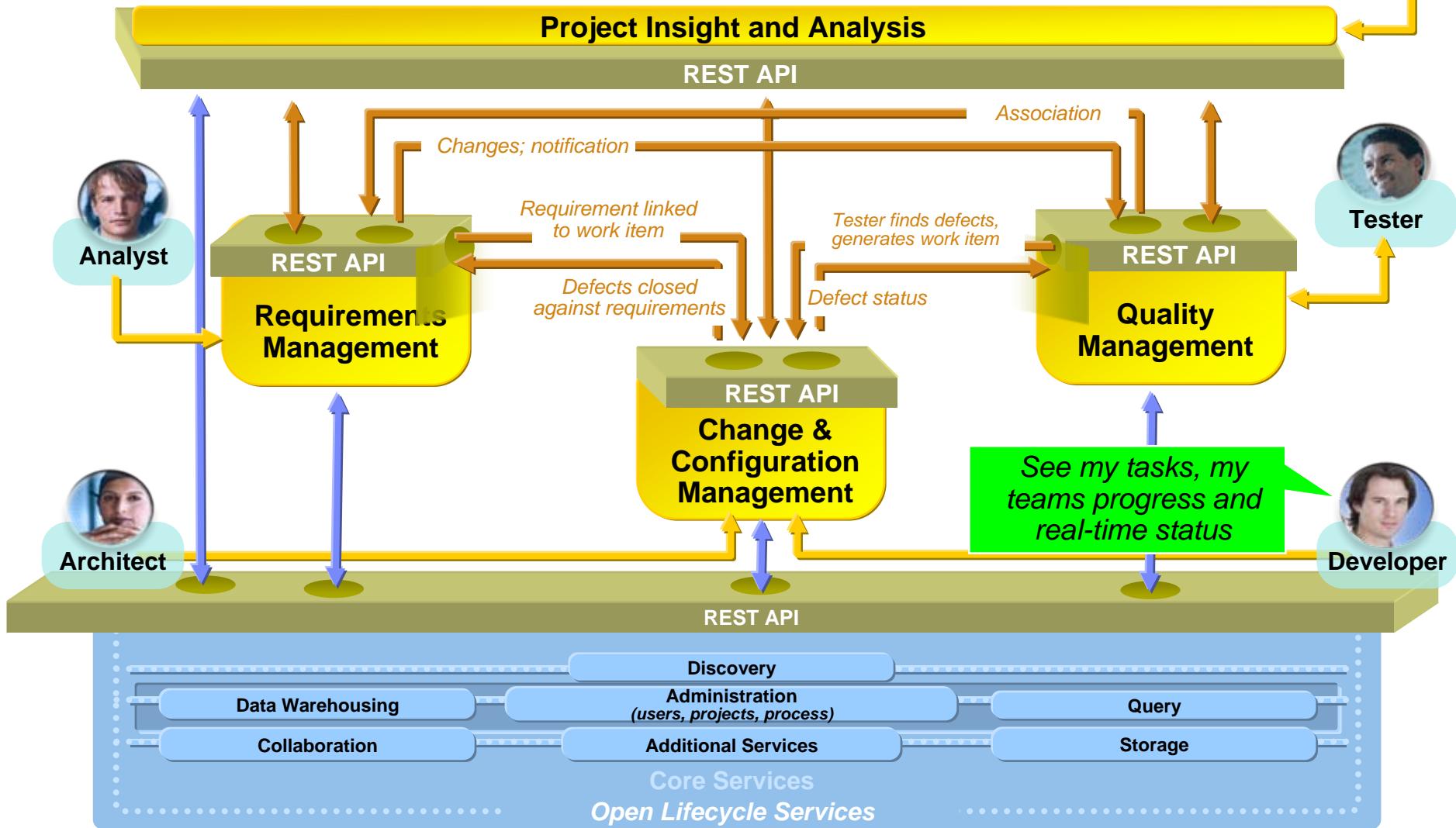
- Associate Existing Work Item
- Associate New Work Item
- Associate and Try Again (experimental)

Source Workspace: TC Workspace
Target Stream: Eval
Result: no problems found



Team Lead

The Software Delivery Platform – Unity in the Lifecycle



The Software Delivery Platform – Unity in the Lifecycle

Committed Tasks

Date	OPENED	ACTIVATED	COMPLETED
2008-11-27	~40	~10	0
2008-12-04	~35	~20	~5
2008-12-11	~25	~30	~10
2008-12-18	~28	~20	~12

Approved Requirements

Status	Count
Approved	52
Incorporated	24
No Request	186
No Test Case	186
No Test Case Execution	186
Proposed	88
Validated	3

Test Execution

Test Execution Status

Total TC	# executed TC	# failures	% of fail
910	16	15	94%

Requirements with Test Failures (Top 10)

Tag	Name	Status	# Failed T

Quality-Actuals vs. Target

	Current	Target
# of Blocking Defects	0	0
# of Defects to Verify	70	50
% of Test Executed	12	30
% of Test Passed	100	80
Open Critical/Major Defects	27	20

Project Performance

Date	CV	SV	CPI
Mar 1, 2008	-198,000	-16,600,000	0.92
Apr 1, 2008	-198,000	-16,600,000	0.92
May 1, 2008	-407,000	-13,960,000	0.92
Jun 1, 2008	-550,000	-10,176,000	0.94
Jul 1, 2008	-605,000	-6,832,000	0.95
Aug 1, 2008	-874,000	-5,136,000	0.94
Sep 1, 2008	-1,321,000	-1,728,000	0.93

For each project, understand expected requirements, tasks committed to the release and overall performance data.

Actuals



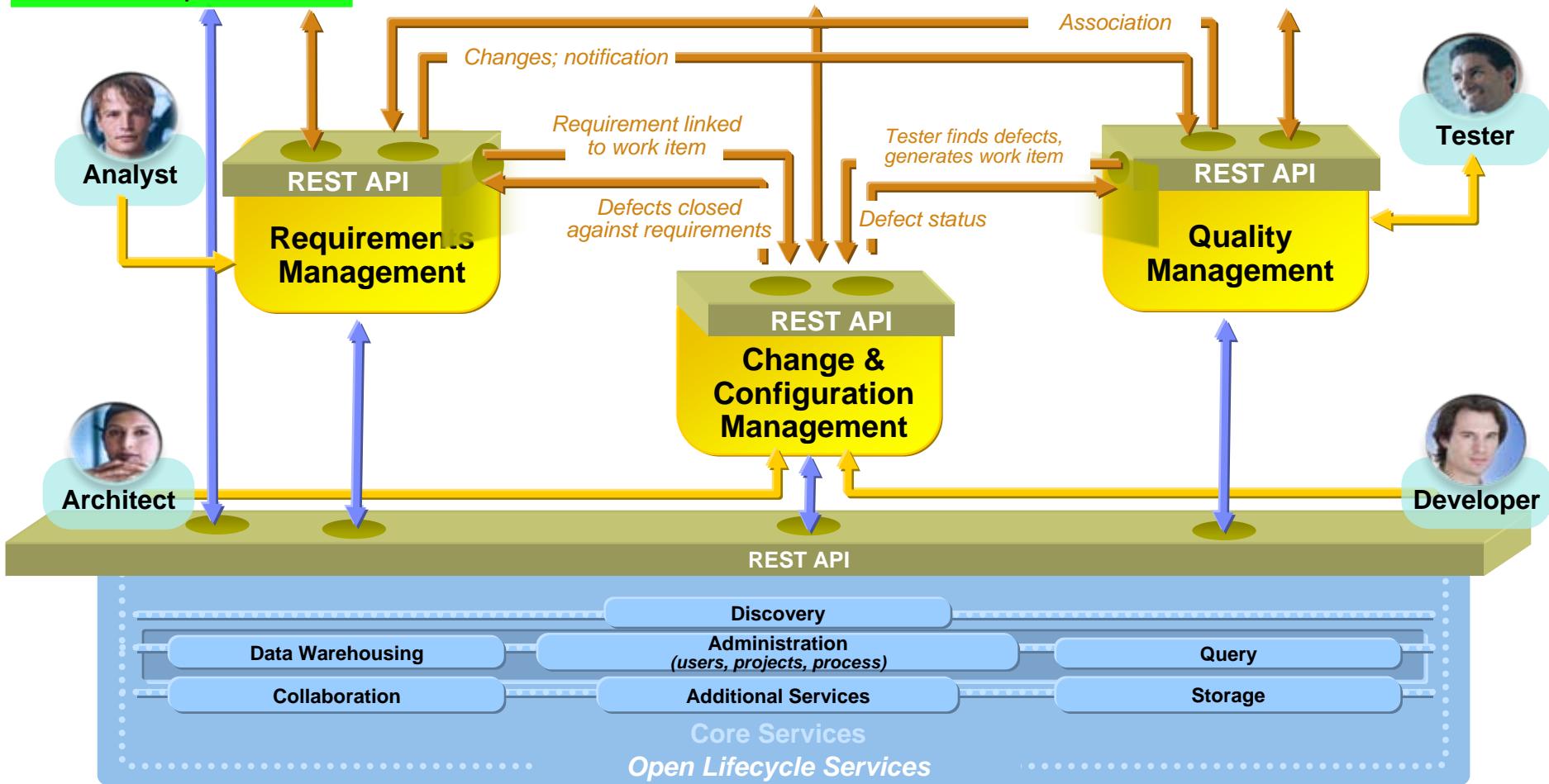
Team Lead

The Software Delivery Platform – Unity in the Lifecycle

Evaluate time and cost to complete this project. Adjust priorities and see impacts

Project Insight and Analysis

REST API



Rational Insight

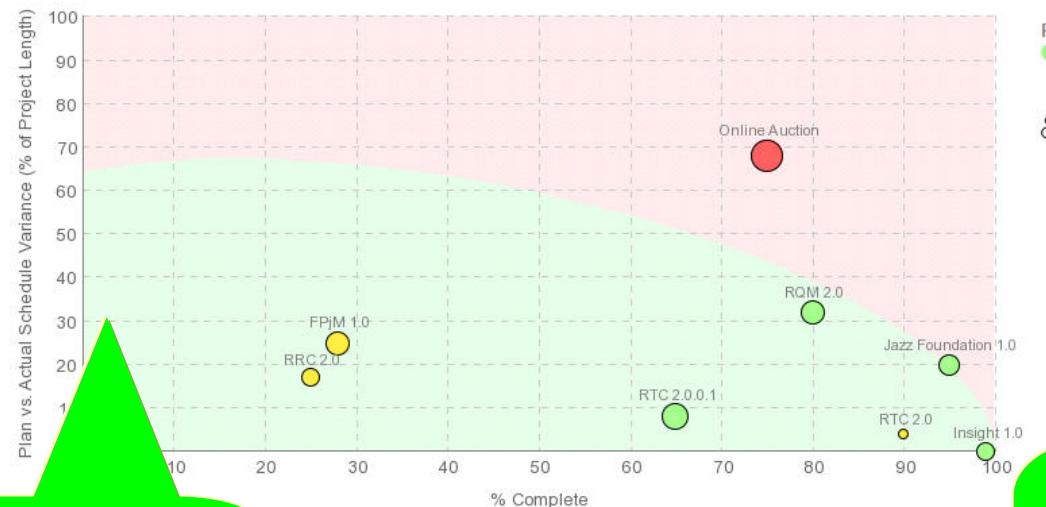
Cognos Viewer - Executive Dashboard Portal

Stephanie L. Trunzo Log On | Home | Launch | About

[Welcome](#) [Executive Dashboard](#) [Project Development Portal](#) [Performance Measurement Practice](#) [Collaborate](#)

- [Executive Dashboard](#)
- [Headcount](#)
- [Improve Project Health](#)
- [Achieve Profit Margin Objective](#)
- [Improve Market Share](#)

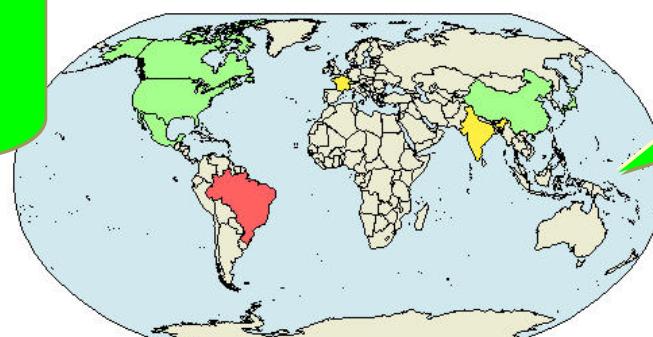
Segment: All Segments



Project Health
Headcount
Planned person year

With a single view, you can see “through” the information gaps and quickly focus your attention on where the problems are...

Another valid view of your portfolio is to look across the distributed development teams and understand if you are receiving the value from each team.



Project Health