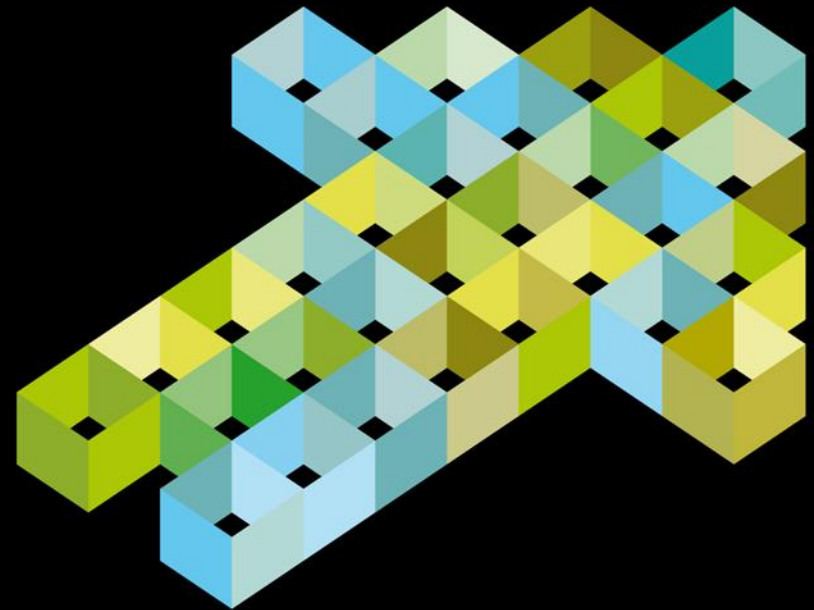


Collaborative Lifecycle Management auf der Basis von Jazz

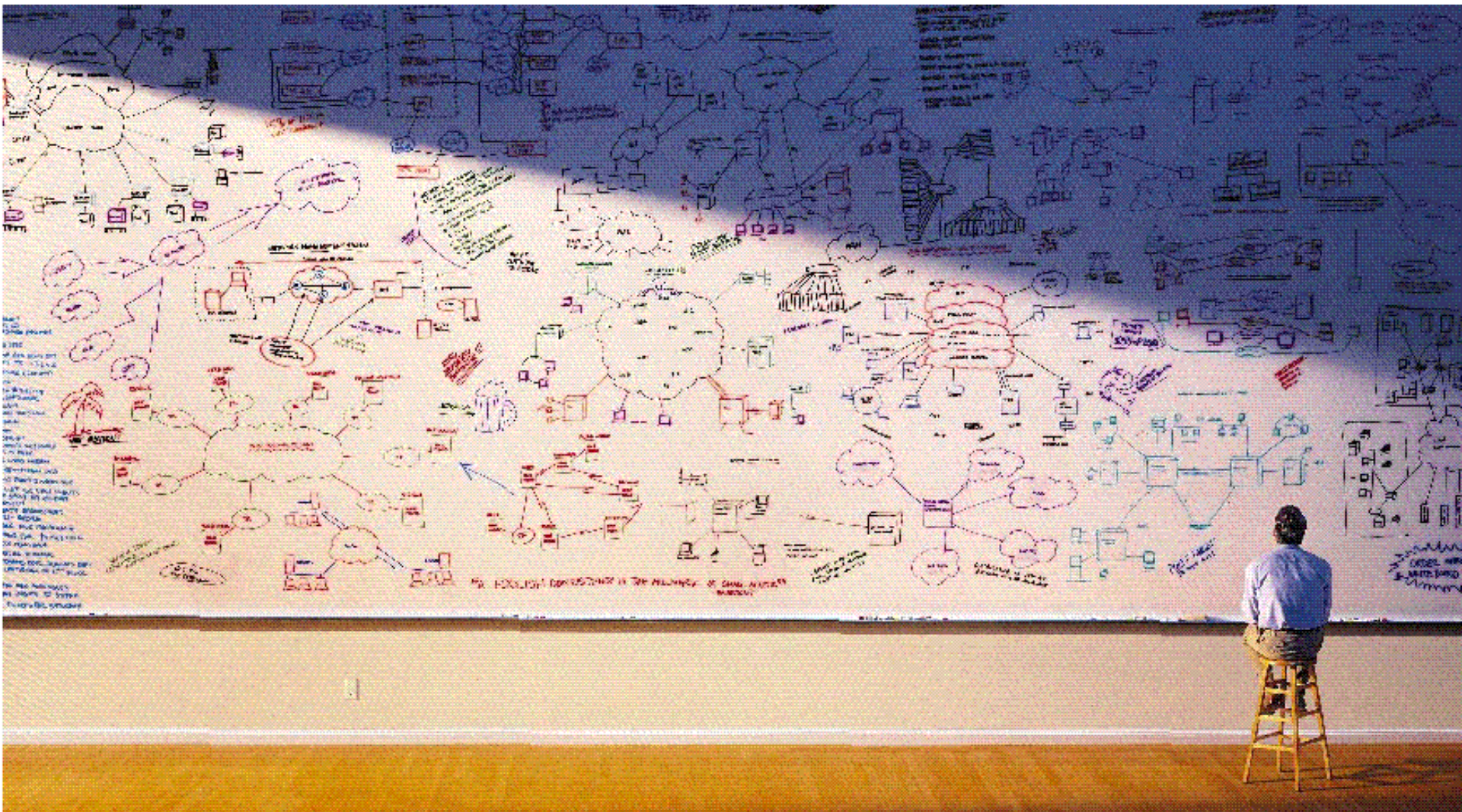
Werner Schoepe
29. Juni 2012



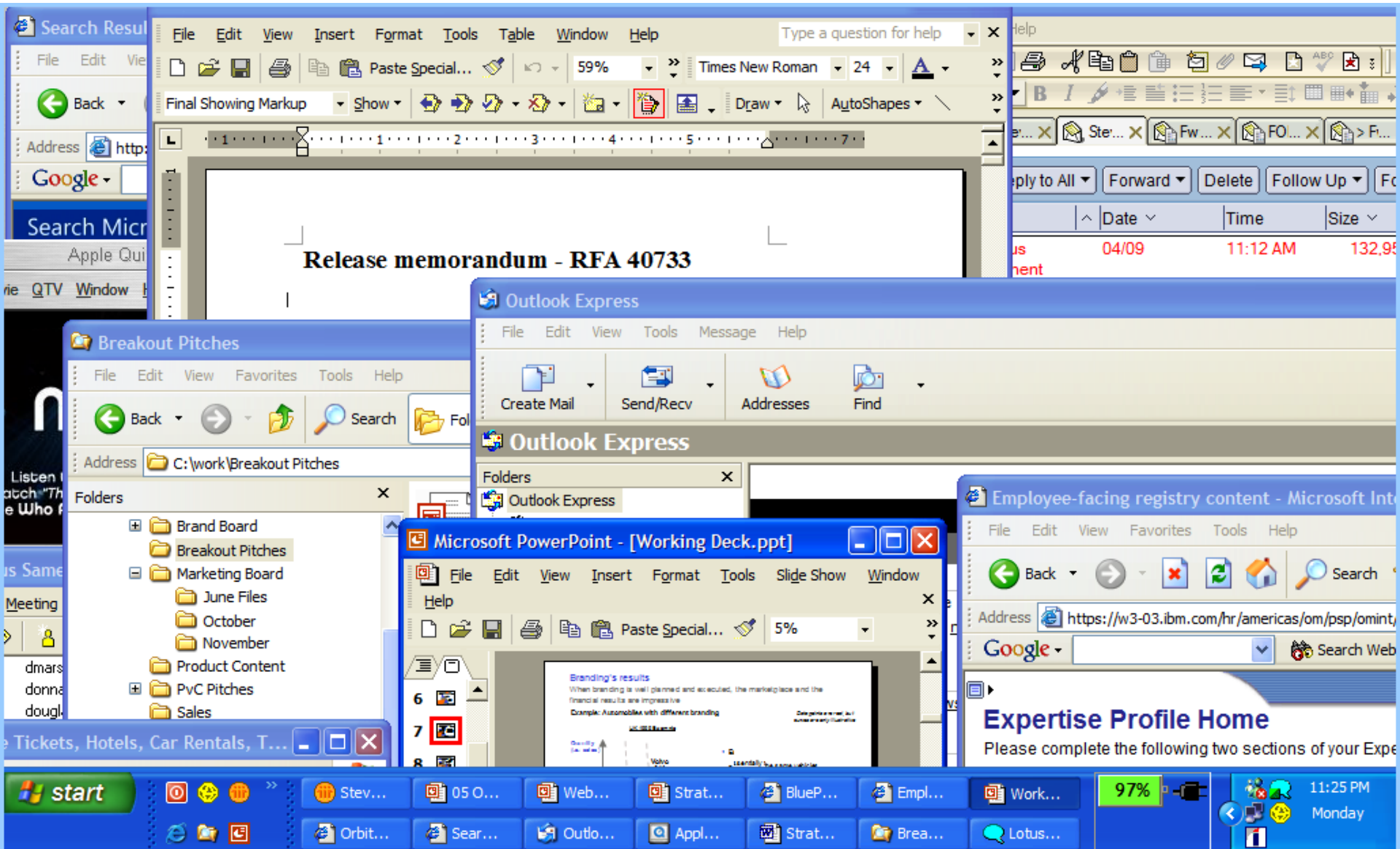
Agenda

- Herausforderungen im Application Lifecycle Management
- Vom ALM zum CLM
- Die Werkzeuge
 - Rational Requirements Composer
 - Rational Team Concert
 - Rational Quality Manager
- Zusammenfassung

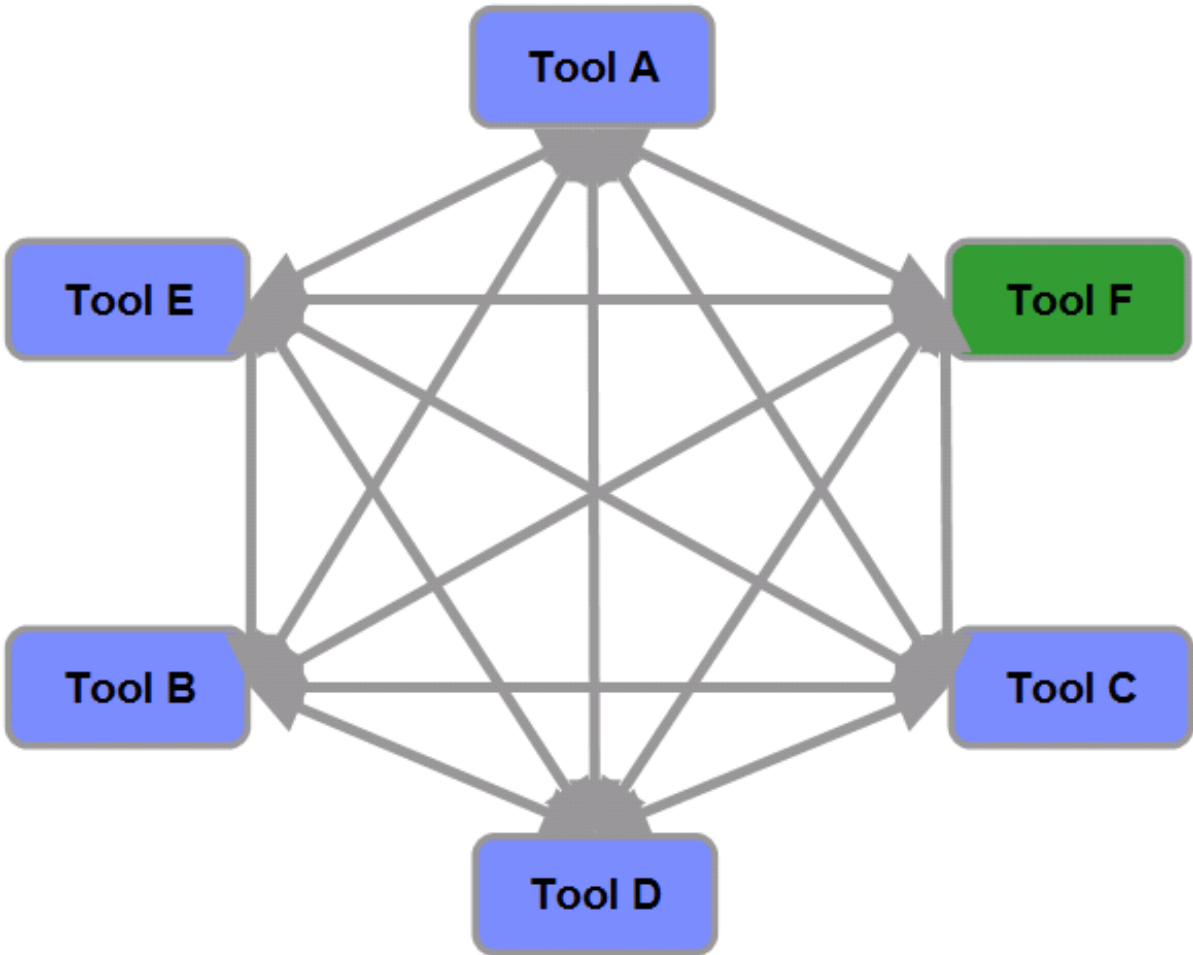
Die Anwendungslandschaft



Die Werkzeuge



Werkzeugintegration



Entwicklungsunterstützung heute - Painpoints

- **Heutige Entwicklungsplattformen bestehen aus unzähligen Tools**

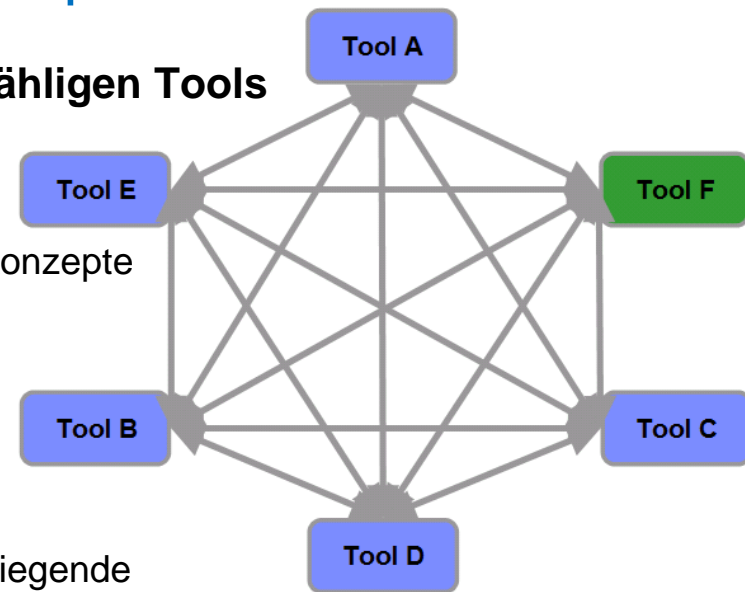
- Verschiedene Architekturen, proprietäre Protokolle
- Verschiedene Repositories
- Verschiedene und z.T. nicht vorhandene Workflow Process Konzepte
- Verschiedene User und Rollen Verwaltungen / Konzepte
- Verschiedenes Look&Feel, UI Konzepte
- **Integration auf Client Level**

- **Eclipse hat keine Unterstützung für User und Rollen**

- Verschiedene User / Rollen Konzepte werden durch darunterliegende Infrastrukturen eingeführt

- **Eclipse hat kein Workflow / Prozess Konzept**

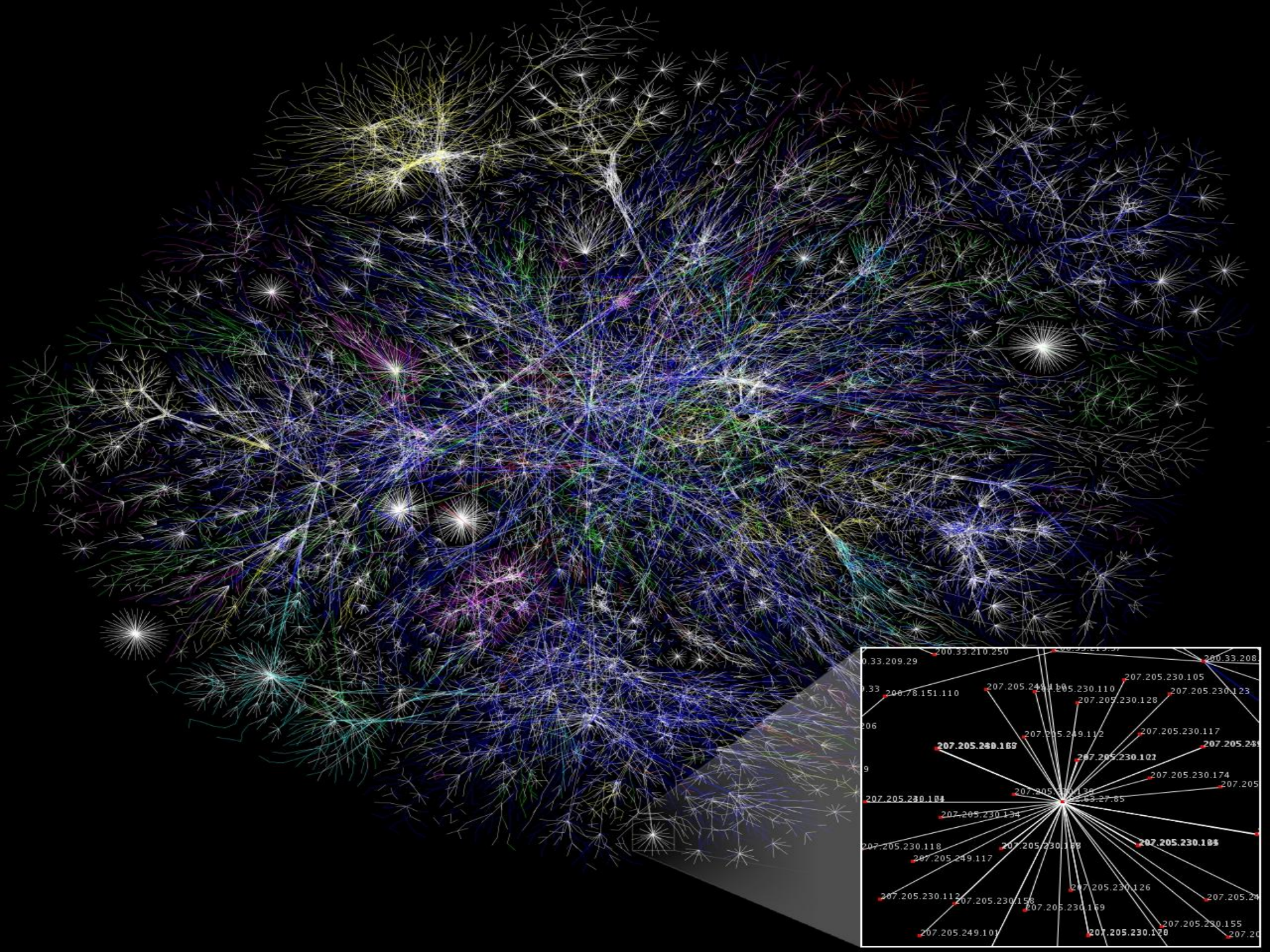
- **Die Anzahl der Tools nimmt stetig zu**



⇒ Komplexe Infrastruktur mit unzähligen brüchigen Integrationen

⇒ Für Benutzer schwer zu verstehen und zu nutzen

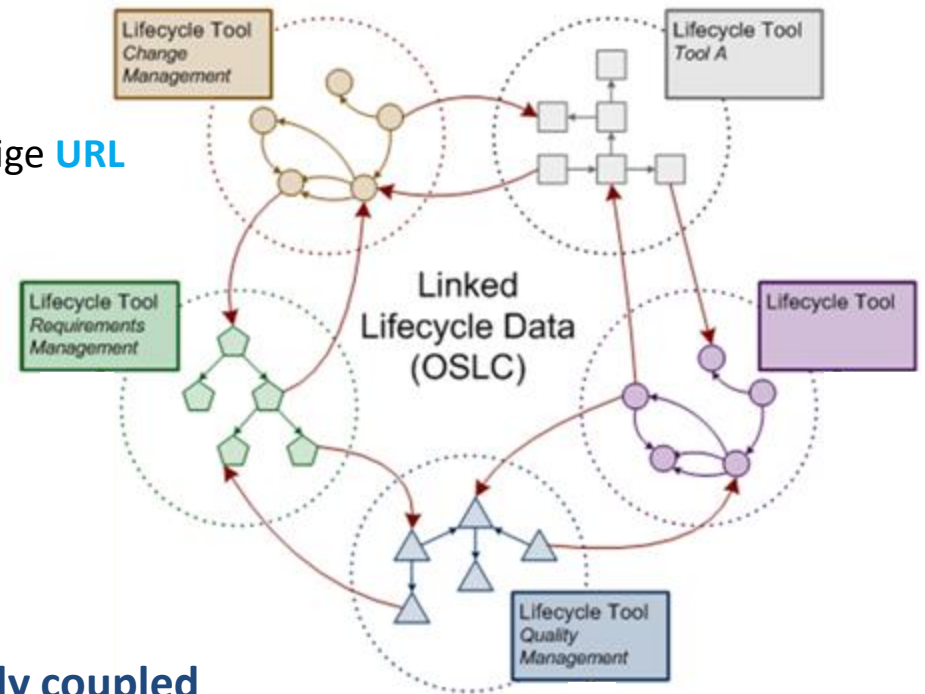
⇒ Hohe Kosten und geringe Effizienz



Die Jazz Werkzeugintegration folgt 3 Prinzipien:

Inspired by Internet principles, implemented with Internet technologies

- Jede Ressource (Artefakt) erhält eine eindeutige **URL**
 - Vernetzung als eingebettete **Links**
- Lose Kopplung über **technologie-neutrale**, RESTful Services (REST: Representational State Transfer)
- Ressourcen haben externe Representationen
 - Representationen sind **werkzeug-unabhängig** als **Standards** definiert



Loosely coupled

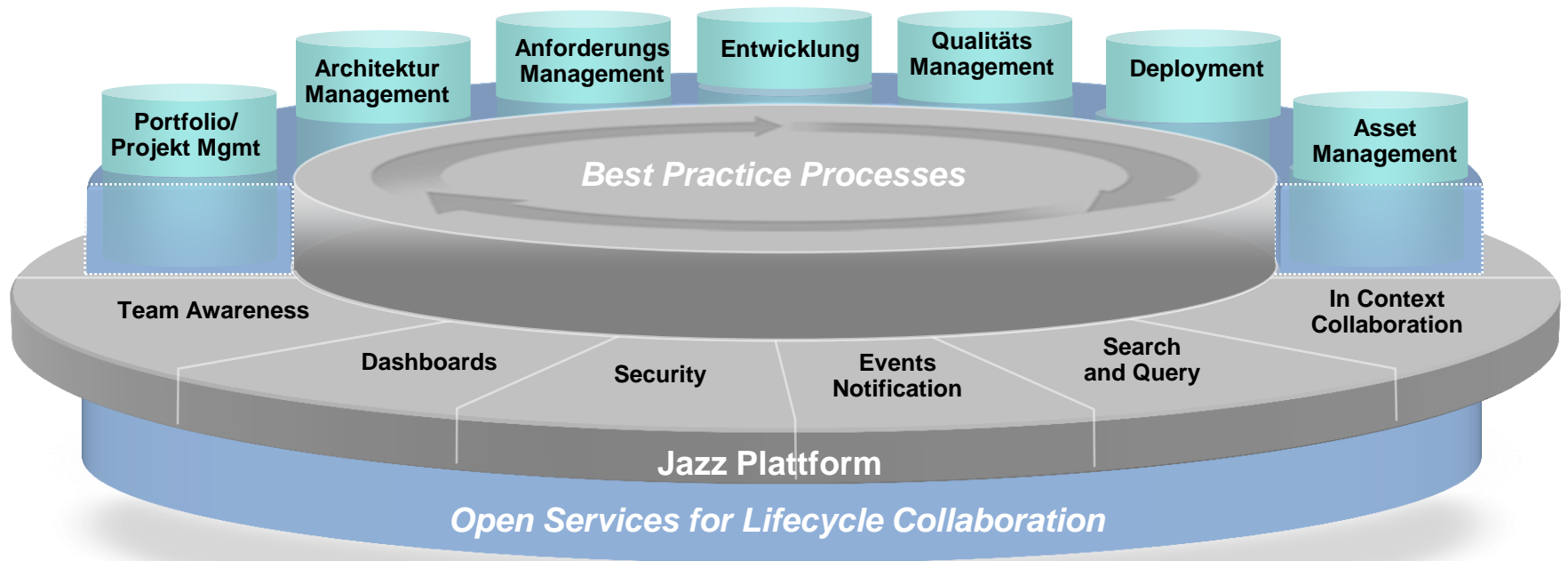
Technology neutral

Minimalist

Incremental

Open and patent-free

IBM hat Jazz erfunden,
um integrierte Lösungen zu liefern
und kundenspezifische Integration zu erleichtern



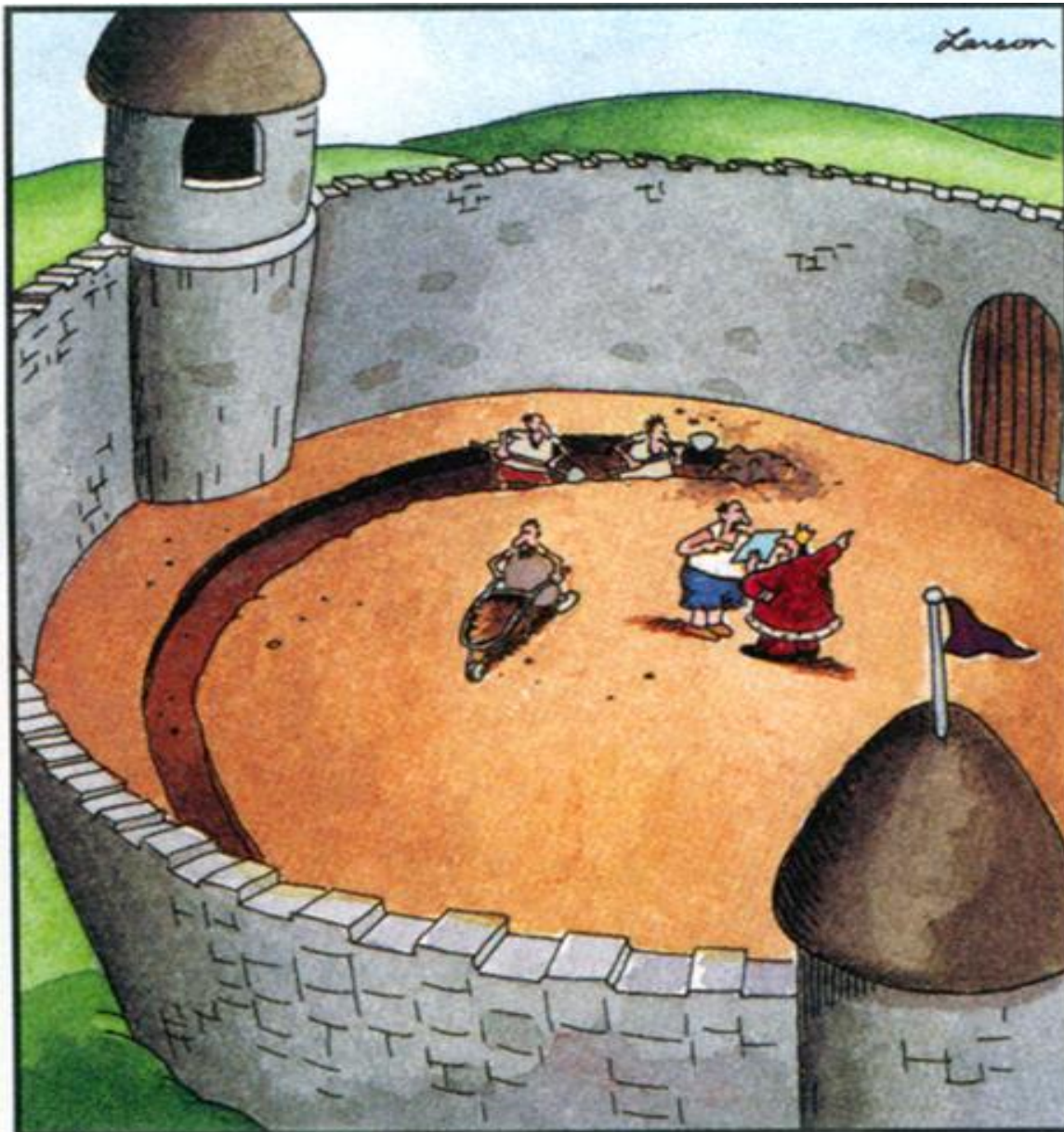
Collaborative Application Lifecycle Management --- CLM

**für mehr Kollaboration, Automatisierung und
Transparenz**

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Die Geburtsstunde des Anforderungsmanagements

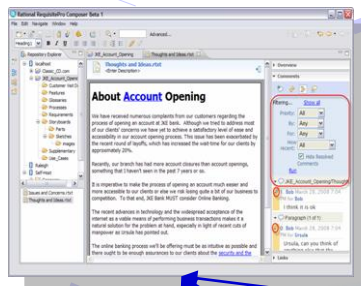


**Plötzlich brach Streit aus
zwischen dem König und
der Baufirma
über die genaue Lage
des Burggrabens**

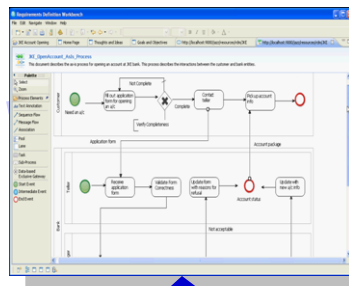


Erfassung, Strukturierung und Verknüpfung verschiedenster Anforderungsartefakte

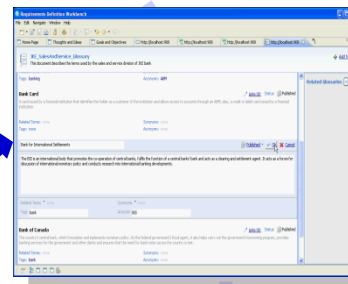
Dokumente zur Erfassung von strukturierter und unstrukturierter Information



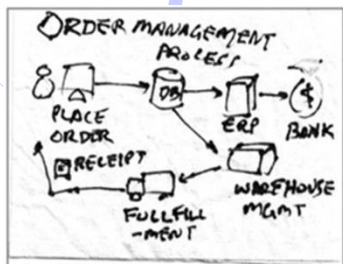
Grafische Beschreibung von Abläufen wie z.B. Geschäftsprozessen



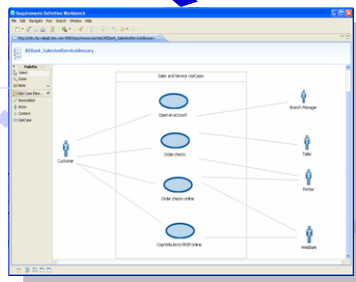
Verwendung von Glossaren, um Mehrdeutigkeiten zu vermeiden



Einfügen beliebiger Dateien (z.B. Bilder, Präsentationen, Audio, Video)



Beschreibung von Use Cases in Diagrammen und Rich Text



Visualisierung von Benutzeroberflächen mit UI Sketches und Storyboards





Comments on requirements' details are in-context

79: Donors will receive confirmation and receipt

Key Scenarios

1. Donor will receive confirmation notice that donation has been processed.
2. Once the confirmation is received, the Back Office System will initiate an email to the donor based on the primary contact information in the donor's profile.
3. If the profile indicates no email address available and or the given email address is not valid, then a hard copy of the donation will be sent to the donor's mailing address specified in the donor's profile.
4. The Donor will receive an email - mail notice affirming the donation % and amount.
 1. If in email, the donor will be provided an option to print the confirmation notice for tax purposes.
5. The printed confirmation notice must be in a format that is acceptable by country, state, and province agencies and will be mailed in their Bank Statement

Related Features

Overview

Comments (2)

1. Marco to Bob 1 minute ago (1 reply)
Statements must be mailed?
We need to understand if this applies to customers that have opted for electronic statements. Does paper still need to be mailed?
2. Bob to Marco 2 minutes ago
RE: Statements must be mailed? [RE: #1]
No requirement to mail if customer selected electronic statments.

A click on the comment highlights the text under discussion.



Formal reviews drive agreement & prevent re-work

✓ Reviews & approvals ensures artifacts are reviewed and/or approved by key team members and capture compliance requirements.

Requirements



JKE Banking (Requirements) > Approval

Participant's Review: In progress 0% completed | Your role: Approver

Overall Review: Draft → In progress 65% completed | Pause Review

Due: Apr 18, 2011

Instructions to reviewers:
List of requirements for our second sprint. All comments have been resolved. Please review and approve requirements as written.

Participant	Type of Participant	Review results
<input type="checkbox"/> Bob	Approver	Done - 5 Approved
<input type="checkbox"/> Deb	Approver	Done - 5 Approved
<input type="checkbox"/> Marco	Approver	60% - 2 Approved, 1 Disapproved
<input type="checkbox"/> Tanuj	Approver	

Test Artifacts



18 : Dividend Allocation by Percentage

Test Case Overview | Snapshots | History

Originator: Tanuj | Owner: Tanuj | State: Under Review

Description: select a list of potential donations and enter percentages for each

Formal Review

List the people who will be reviewers and approvers of this content and define your roles.

View: All

Show All items per page | Previous | 1 - 4 of 4 | Next

Review Type	Name	Status	Comments
Approver	Bob	Pending	
Reviewer	Sally	Pending	

Work Items



Task 41

Summary: Implement - Frequency of dividend transfer

Overview | Links | Approvals | History

Approvals (1) - 1 pending

New: Approval

Type	Name	State	Due
Review	Check of algorithm to prevent transfer on weekend	Pending	Apr 18, 2011
	AI	Pending	
	Curtis	Pending	
	Tanuj	Approved	

Add Approvers...

Plan Item collaboration improves quality

- ✓ Story points include test effort
- ✓ Everyone knows what's being developed when and by whom.
- ✓ A Story is 'done' when associated tests have passed

Developers understand user story, test effort and done criteria



Product owners clarify the details of a user story



Testers define and execute test cases with a clear definition of the 'done' criteria



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IBM Rational Team Concert: *Software im Team entwickeln*

▪ Funktionalität

- ▶ Teamintegration
- ▶ CLM Integration
- ▶ Rollenbasiertes Arbeiten
- ▶ Online und offline Kollaboration
- ▶ Umsetzung, verschiedener agiler und klassischer Prozesse
- ▶ Erweiterung bestehender Entwicklertools (IDEs)
 - Eclipse, Rational, MS Visual Studio

▪ Architektur

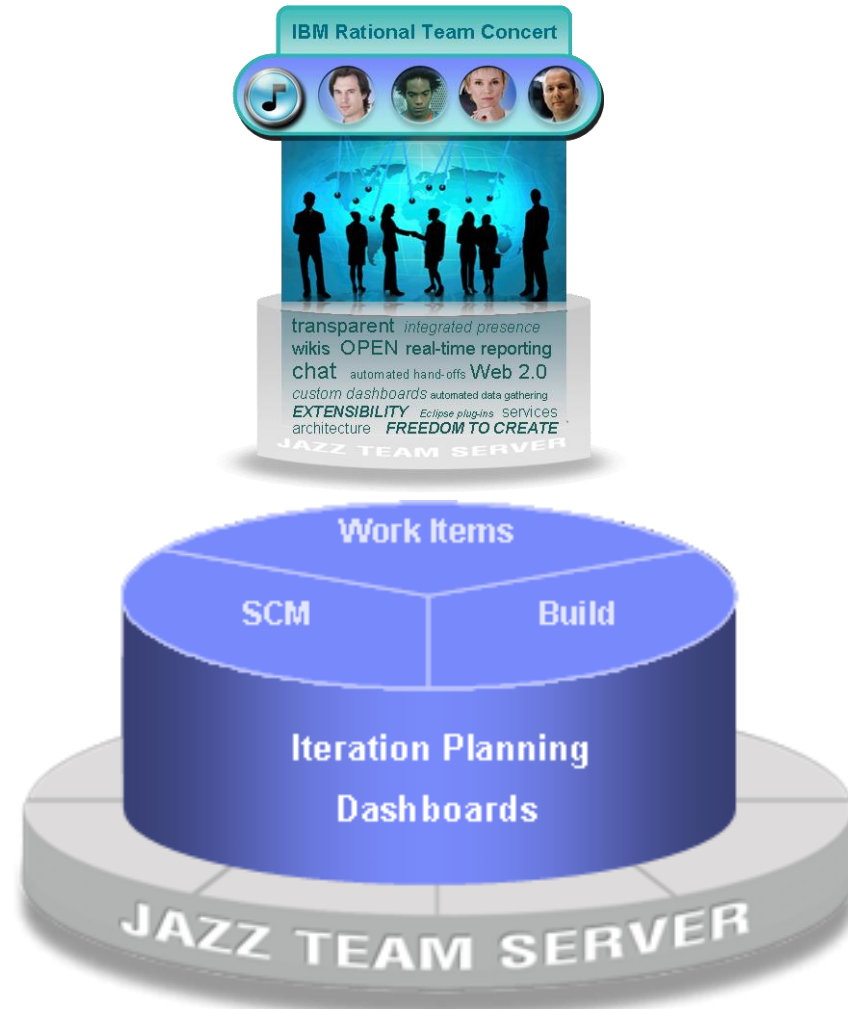
- ▶ REST-basierter Server
- ▶ Robuste RDBMS
- ▶ Hoch skalierbar

▶ Clients

- ▶ Web 2.0
- ▶ Eclipse (RSA, RDz, RAD, u.v.a)
- ▶ MS Visual Studio
- ▶ ISPF

▪ Erweitert und integriert Entwicklungsumgebungen für

- ▶ Linux, AIX, Unix (JEE, C++, ...)
- ▶ Windows (.NET)
- ▶ System z (Cobol, PL1, EGL)
- ▶ System i



Rational Team Concert: Integrierte Funktionsblöcke

Planung

- Integrierte Release- und Iterationsplanung
- Fortschrittskontrolle
- Vordefinierte Schablonen für agile Prozess(SCRUM..)

Projekt-Transparenz

- Wikis
- Anpassbare Dashboards und Reports
- Aktueller Status
- Vordefinierte Schablonen und Muster

SCM

- Integrierte Versionierung und Konfigurationsmanagement
- Verteilt, WAN-optimiert
- Sofort einsatzbereit
- Anpassbar
- Konnektoren

Work Items

- Vordefinierte und frei definierbare Typen
- Freigabeverfahren (4-Augen-Prinzip)
- Angehängte Diskussionsbeiträge
- Konnektoren

Build

- Nachverfolgbarkeit
- Flexible Build-Definitionen
- Lokale oder entfernte Build-Server
- Integration von Ant, Maven und Kommandozeilen-Tools
- Integrationen

Jazz Team Server

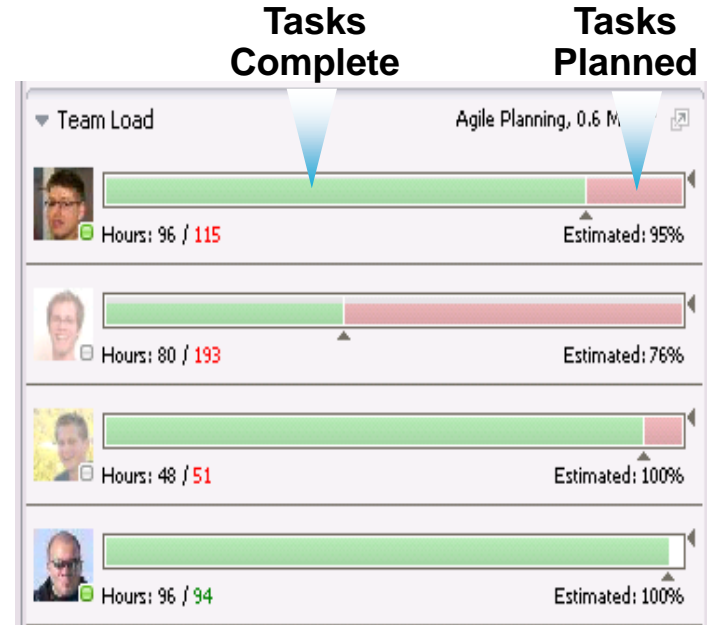
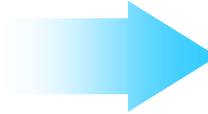
Repository für den gesamten
Application Lifecycle

Teamfähigkeit

Prozessumsetzung

Zusammenarbeit
im Kontext

Integrierte, aktuelle Planung

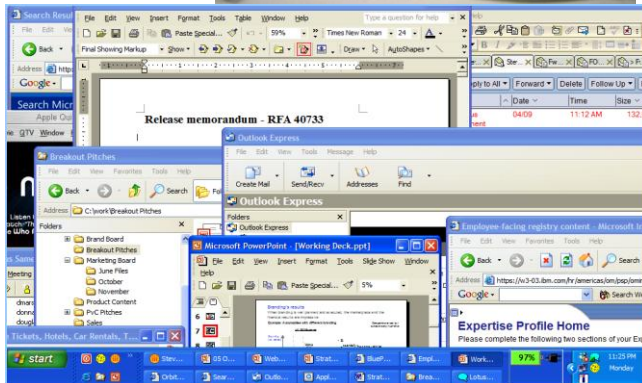
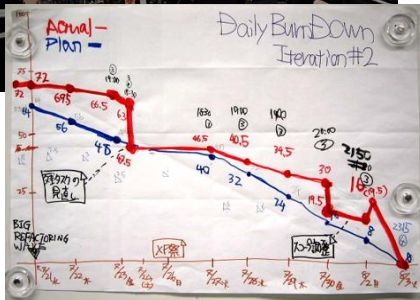


Schlecht	Gut
Individuelle, isolierte Spreadsheets	Übergreifende integrierte Pläne.
Fehleranfällige manuelle Updates	Automatisierte Updates
Nicht integrierte Planungswerkzeuge	Integriert mit dem Aufgaben-Management
Statische, fiktive Pläne	Fortlaufende Anpassung (agile Planung)

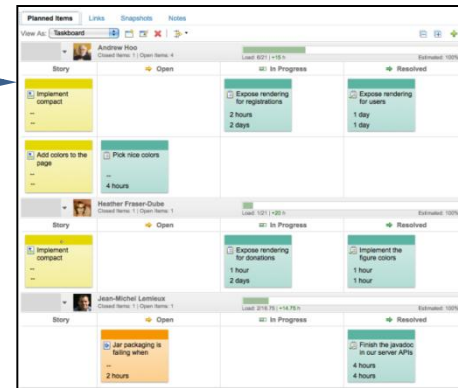
verbessert Vorhersagbarkeit und Flexibilität

Kollaboration im Kontext erleichtert Planung und Abstimmung im Team

ohne Kollaborationswerkzeuge



Mit Kollaborationswerkzeugen



Enhancement 43191

Summary: Support cvs-style keywords

Overview Links Approvals History

Details

Type: Enhancement
Severity: Major
Found In: 0.6 Beta2
Creation Date: Feb 1, 2008 1:11
Created By: Gary Karasiuk
Project Area: Rational Team
Team Area: Source Control
Filed Against: Source Control
Tags: hursley cognic ibm_internal_c

Description

I'm happy to move my source code from CVS into Jazz source control. But now my source code is littered with old CVS key public static final String GK_VERSION = "Sid: NewApp.template.v.1.8.2007/02/01 12:21:33 karasiuk Exp 5";

It would be very helpful, if Jazz source control, processed the standard CVS keywords, or at least \$ID:Header and \$Revision

Discussion (37 comments)

Collapse All | Expand All

1. Jean-Michel Lemieux Feb 1, 2008 10:25 PM Keyword expansion mess-up merges and makes conflict resolution hard...
2. John Kelly Nov 30, 2009 3:52 PM Is there any plan to do this at ANY stage ?
3. John Camelon Nov 30, 2009 4:08 PM We have not received much customer pressure for this as of yet.
4. John Kelly Nov 30, 2009 5:21 PM Thanks for placing this on the Backlog...
5. John Lanuti Dec 16, 2009 4:34 PM I have a customer where this use case is very important. They develop C application...
6. Kevin Kingsbury Jan 25, 2010 7:36 PM Our product also comes from a C/MVC background. We are completely moved...
7. Jennifer leey@ibm.com Jan 26, 2010 3:57 PM We have an external customer who is also citing the use case John c...
8. John Camelon Jan 26, 2010 4:11 PM This is not yet scheduled for a release.
9. Rick Gillaspay Feb 10, 2010 11:26 PM I would also be interested in this item. Perhaps the correct solution is a paramet...
10. Jean-Michel Lemieux Feb 10, 2010 11:37 PM @RickGillaspay I like that option, we should really consider this a post-to...
11. Rick Gillaspay Feb 11, 2010 12:35 AM @Jean-Michel I don't know all the possible keywords for substitution in cvs and

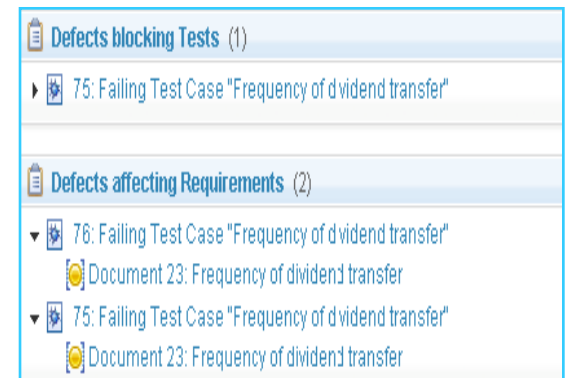
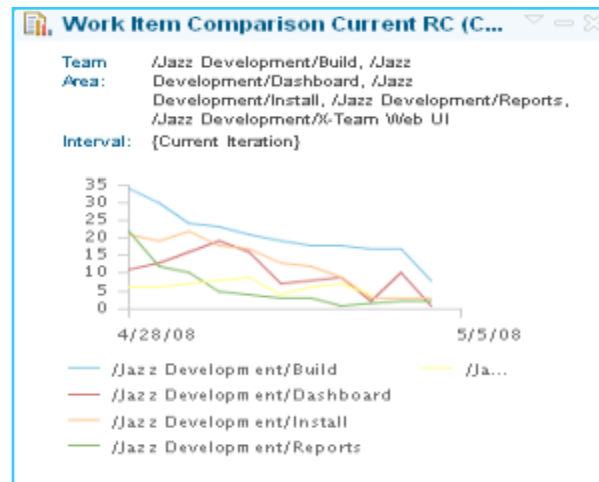
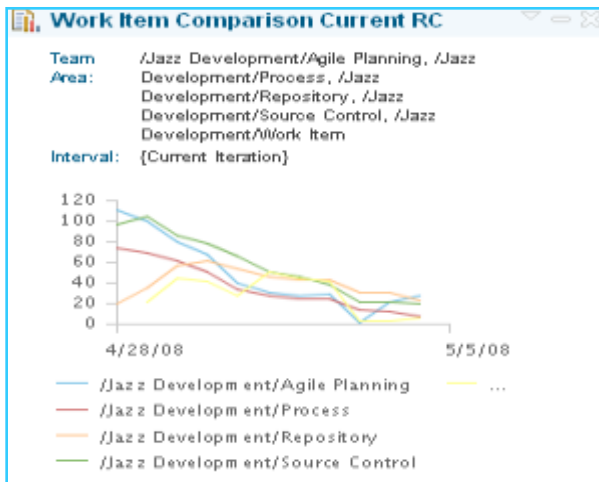
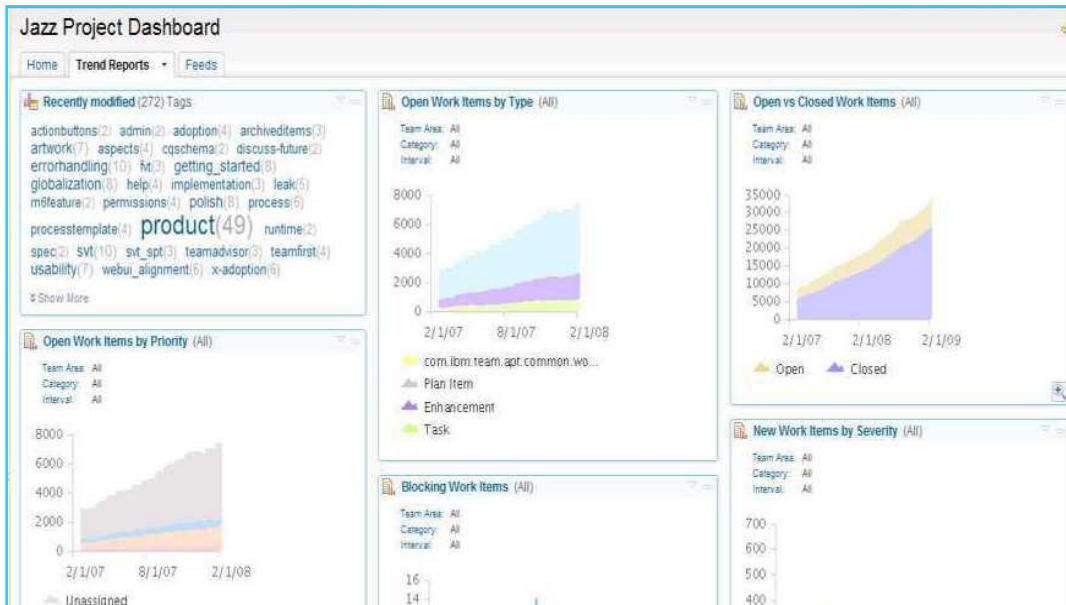
Team leads have visibility into coverage & completeness

- Proactively respond to gaps (in red) as they surface throughout the project
- Issues are quickly highlighted and resolved (in yellow)

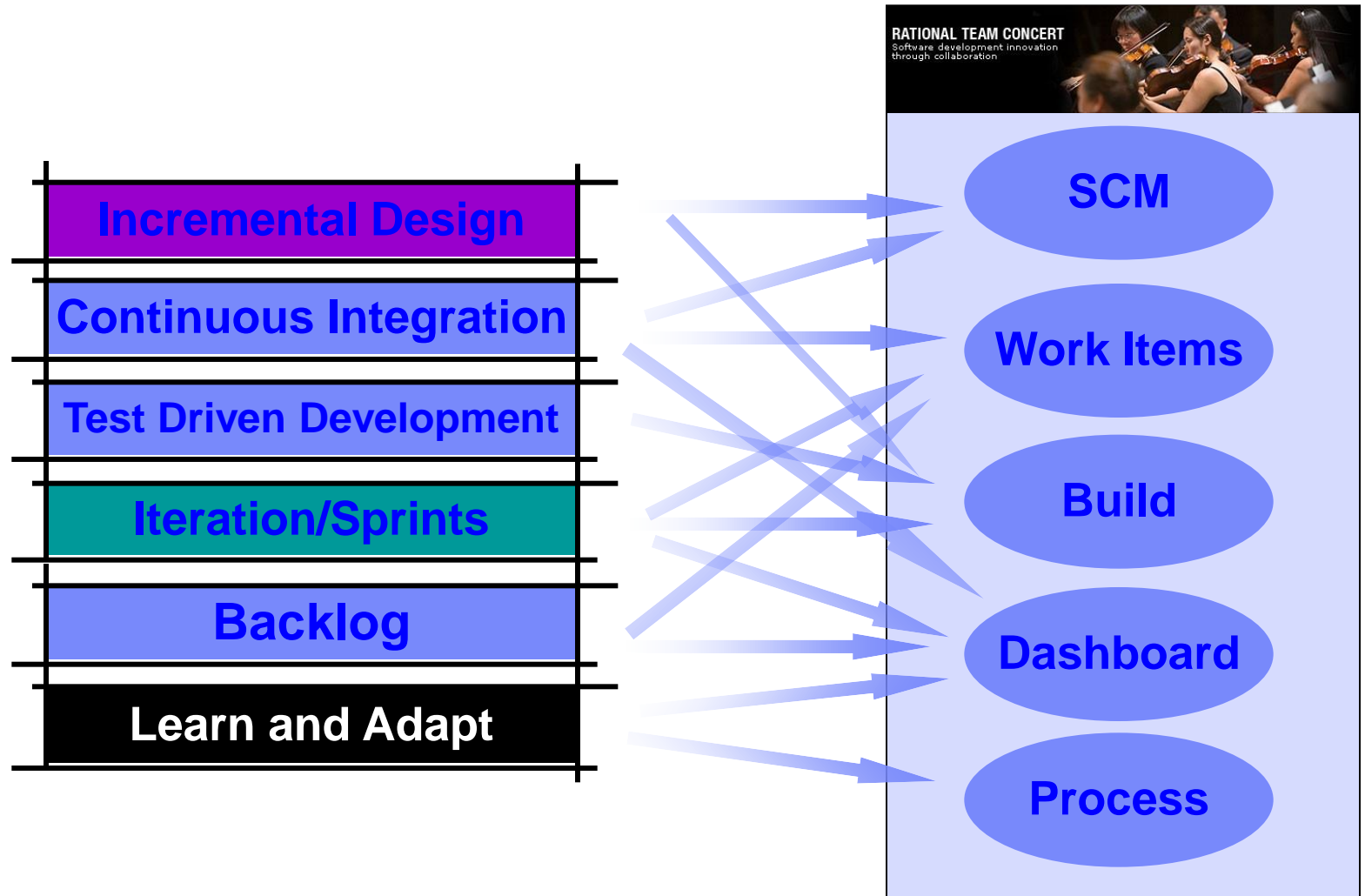
The screenshot shows a project management interface for 'BRM Sprint 2 (1.0) Plan'. The table below displays planned items with columns for Actions, Summary, Owned By, Implements Requirement, Tested By Test Case, and Affected by. Two rows are highlighted: one in red indicating a gap and one in yellow indicating a resolved issue.

Actions	Summary	Owned By	Implements Requirement	Tested By Test Case	Affected by I
	Requests sent in form of email	Unassigned	Requests sent in form of email	--	--
	Frequency of dividend transfer	Unassigned	--	Verify dividend transfer frequency	--
	Organization must provide justification for why funds are nee	Marco	Organization must provide justification for why funds are ne	Organization must provide justificatio	--
	Organizations can Apply	Marco	Organizations can apply	Organizations can Apply	--
	Organization must identify how much money is desired	Marco	Organization must identify how much money is desired	Organization must identify how much	Links (2,
	Donor Dividend Allocation Criteria	Deb	Donor Dividend Allocation Criteria	Donor dividend allocation conforms t	--
	Organizations may apply with an initial request	Bob	Organizations may apply with an initial request	Organizations may apply with an initi	--
	JKE Charity Coordinator will respond to request in the websit	Marco	JKE Charity Coordinator will respond to request in the web	JKE Charity Coordinator responds to	425: Ru
	Customers can Nominate an Organization	Marco	Customers can nominate an organization for the program	Customers can Nominate an Organi	--

Integrierte Dashboards unterstützen integrierte Planung



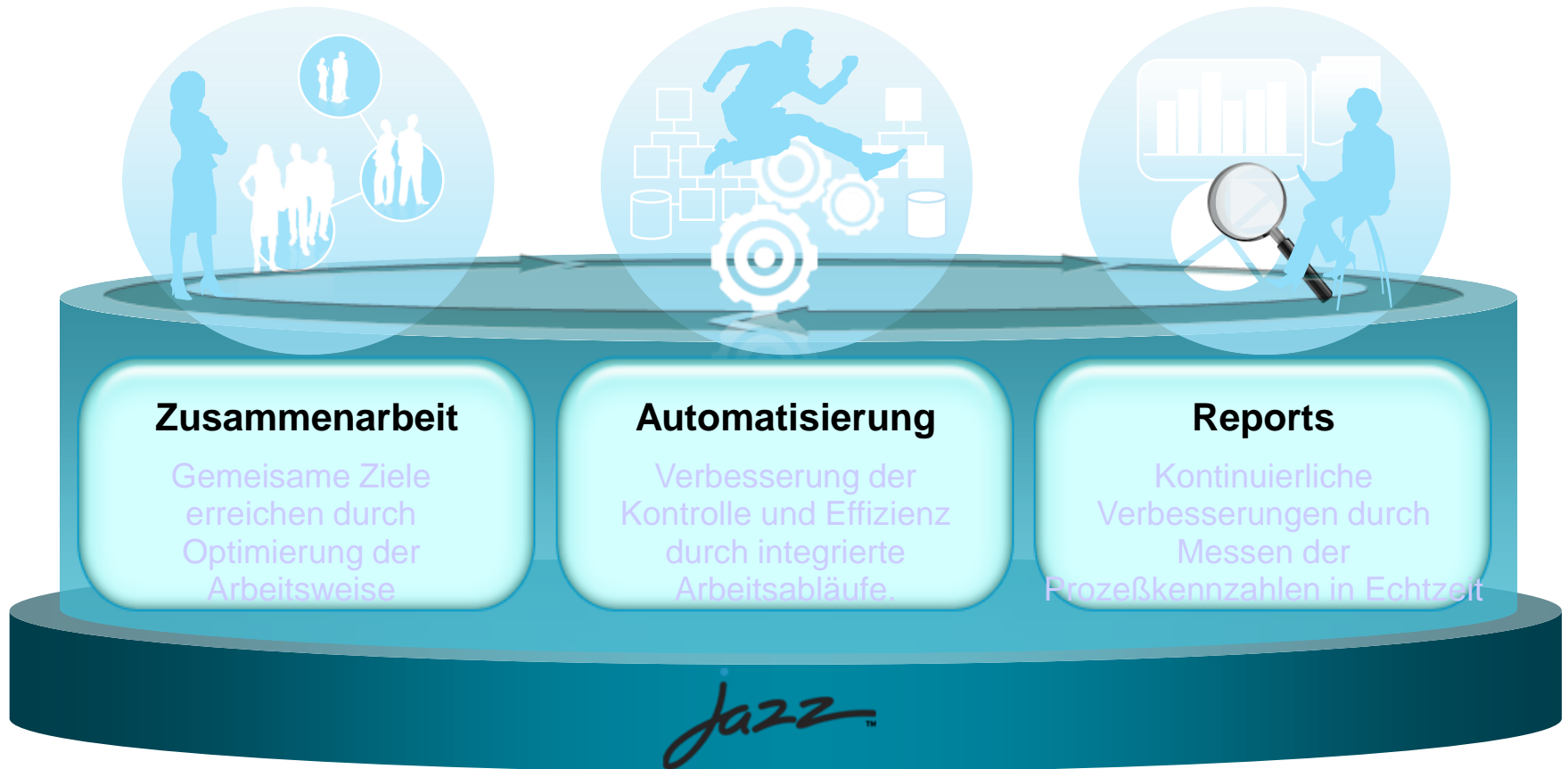
Rational Team Concert für agile Teams!



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Quality Management Imperatives

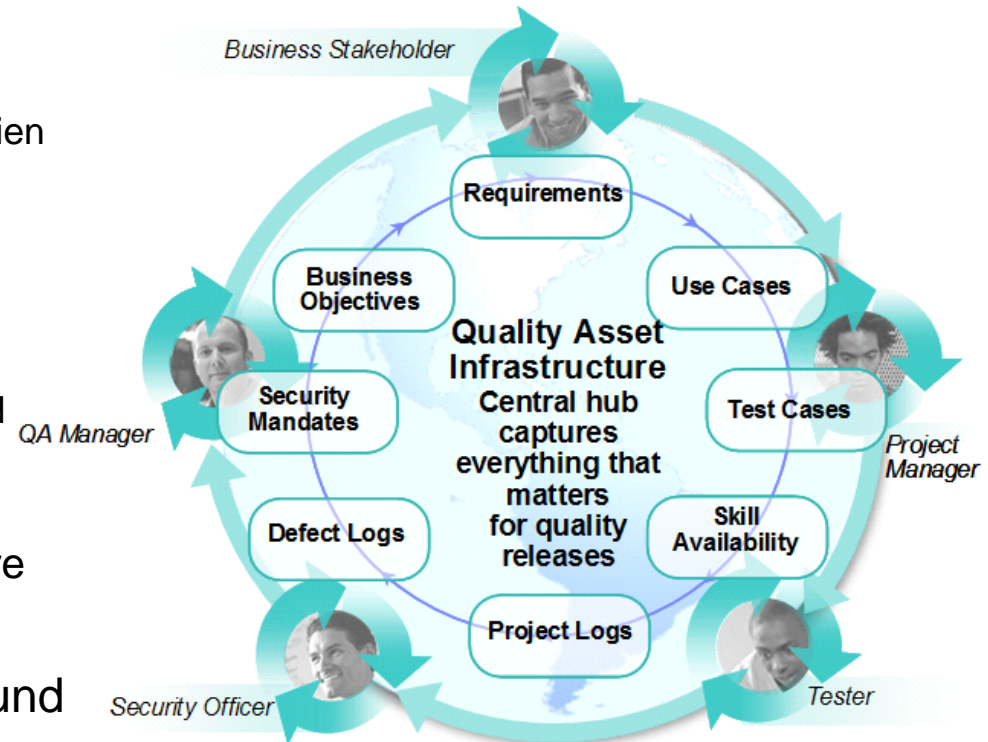


Verbesserte Kenntnisse und ausgereifte Praktiken mit einer Teamfreundlichen Umgebung, die ebenfalls individuelle Talente entfalten läßt

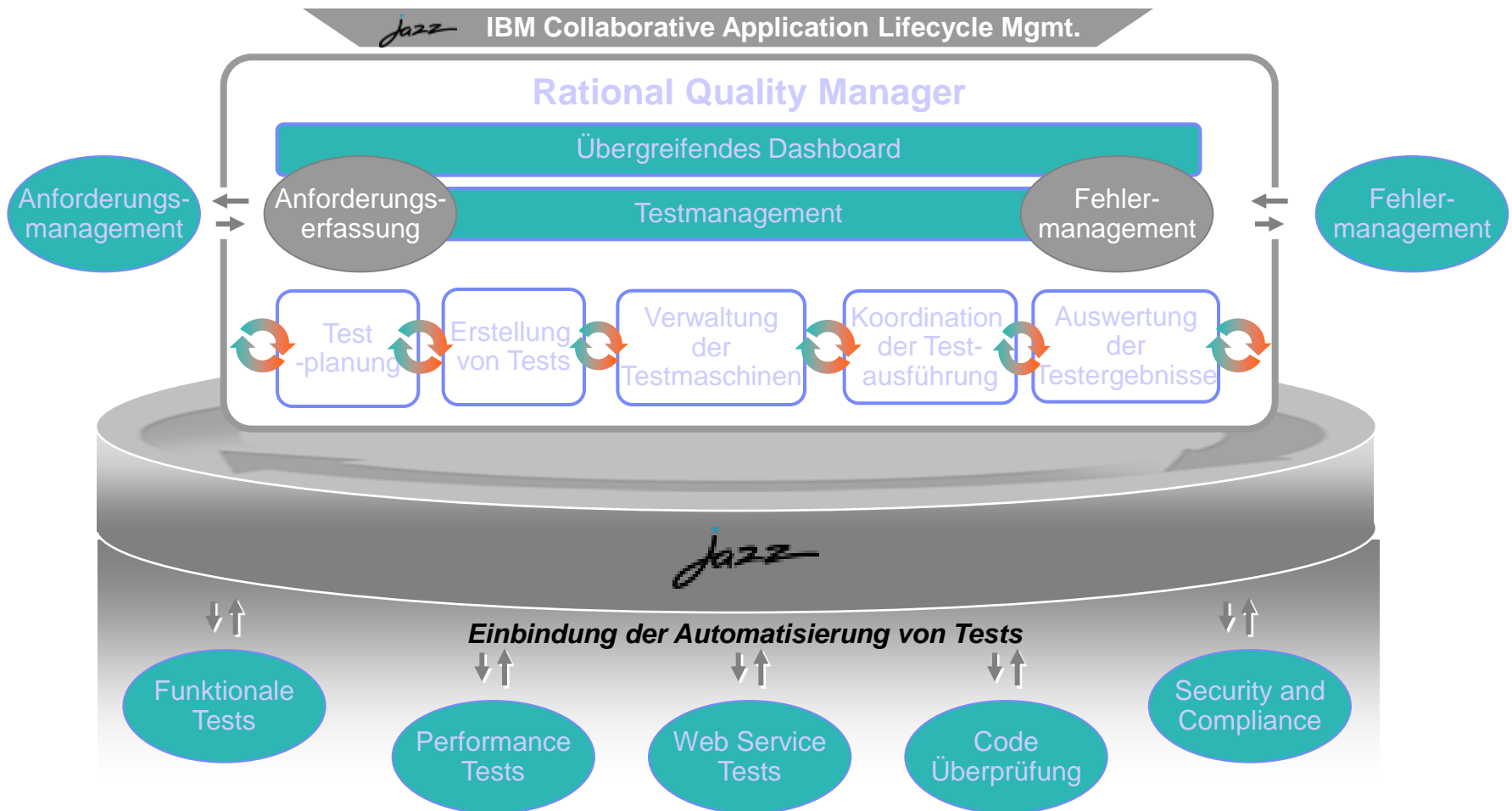
Teambildung durch „in-context-collaboration“

A single, dynamic quality contract provides clear and accountable direction

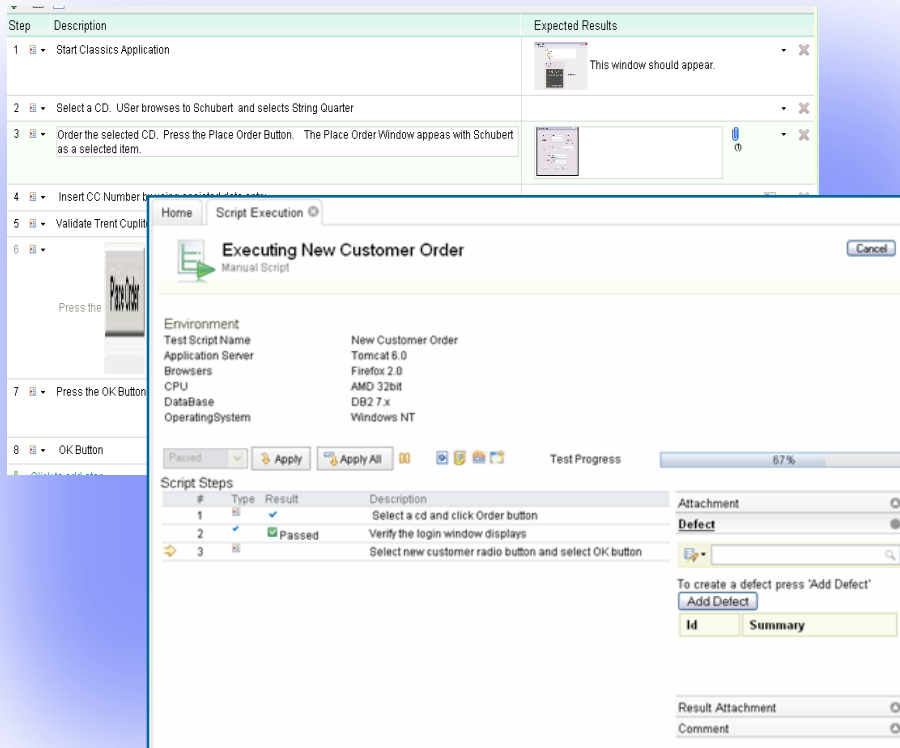
- Ein gemeinsamer Blick auf alle Assets/ Artfakte
 - **Zentrale Ablage** alle Assets (z.B. Requirements, Ressourcen, Abbruch Kriterien ...)
- Umfassende dynamische Planung und Aktualisierungen
 - **Integrierter Workflow**
 - Teamaktivitäten, Übergaben, Reviews und Freigaben werden *nicht* durch Dokumente gesteuert.
- Kenntniss was andere tun und was andere erwarten.
 - Aufgabenverwaltung fürs Team und deren Mitglieder.










IBM Rational Quality Manager



Integrated Manual test authoring and execution



Step	Description	Expected Results
1	Start Classics Application	 This window should appear.
2	Select a CD. User browses to Schubert and selects String Quarter	
3	Order the selected CD. Press the Place Order Button. The Place Order Window appears with Schubert as a selected item.	
4	Insert CC Number	
5	Validate Trent Cuplit	
6	Press the 	
7	Press the OK Button	
8	OK Button	

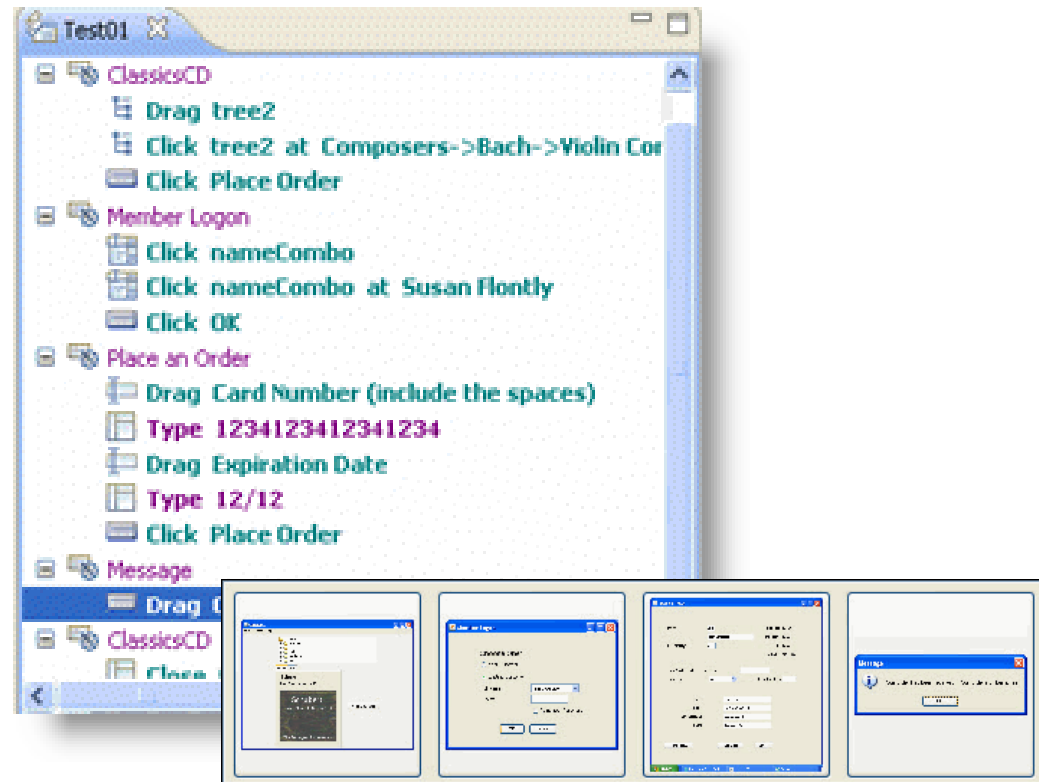
#	Type	Result	Description	Attachment
1			Select a cd and click Order button	
2			Verify the login window displays	
3			Select new customer radio button and select OK button	

- Manual test author and execute
 - Step by step capture and execution of manual tests
 - Assisted data entry
 - Keyword support for integrated manual and automated testing
 - Rich defect capture during execution, including screenshot and attachments
 - Simple intuitive interface for quick test execution

Maximizing efficiency of manual testing

Integrated Functional and Regression test execution

1. Increase repeatability through automated test playback
2. Test more critical functions faster with automation
3. Automatically deploy your test environment and schedule the execution of your test Suites
4. Track and communicate progress and regressions throughout the testing lifecycle



Accelerate test execution and deepen test coverage through automated test execution



Rich hovers automate information access without having to click

- ✓ Rich hovers provide quick access to information to determine if additional details are required!

Quality Management (/qm)

JKE Banking (Quality Management)

Requirements Planning Construction Lab Management Builds Execution Reports

Mini Dashboard

My Tasks

14: Release 1 Planning

- 58: Dividend processing payment is a one time transaction.
- 78: Requests sent in form of email
- 80: Donors will receive confirmation and receipt
- 69: Dividend allocation by percentage
- 79: Organizations may apply with an initial request

... 13 More

Location

- JKE Banking (Requirements) Collections
- Release 1

Attributes

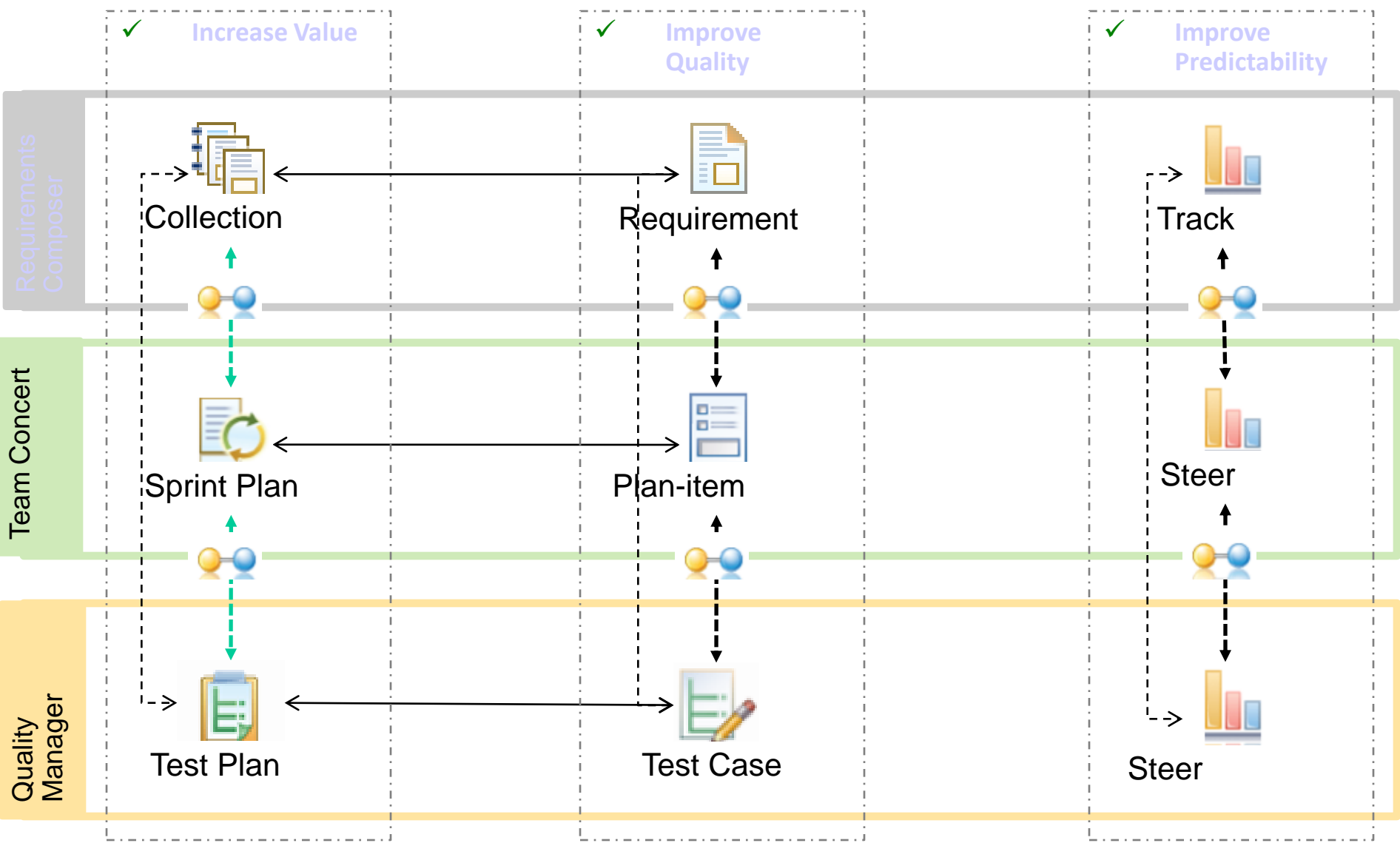
Type: Release Collection Format: Collection

Description: Status: Approved

Links

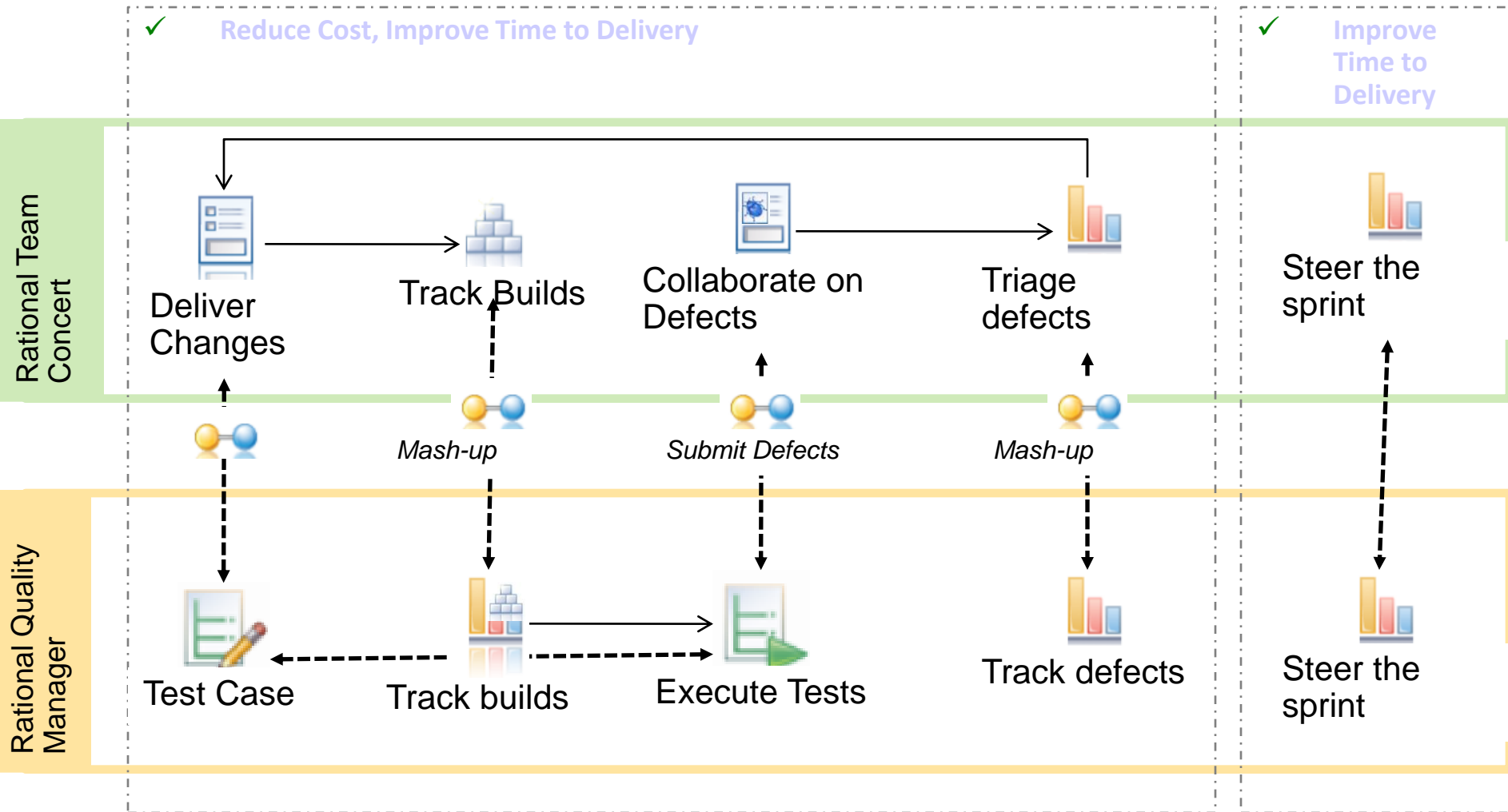
- Validated By (1): ...
- Implemented By (1): ...

Zusammenarbeit in der Planung



←→ In beta

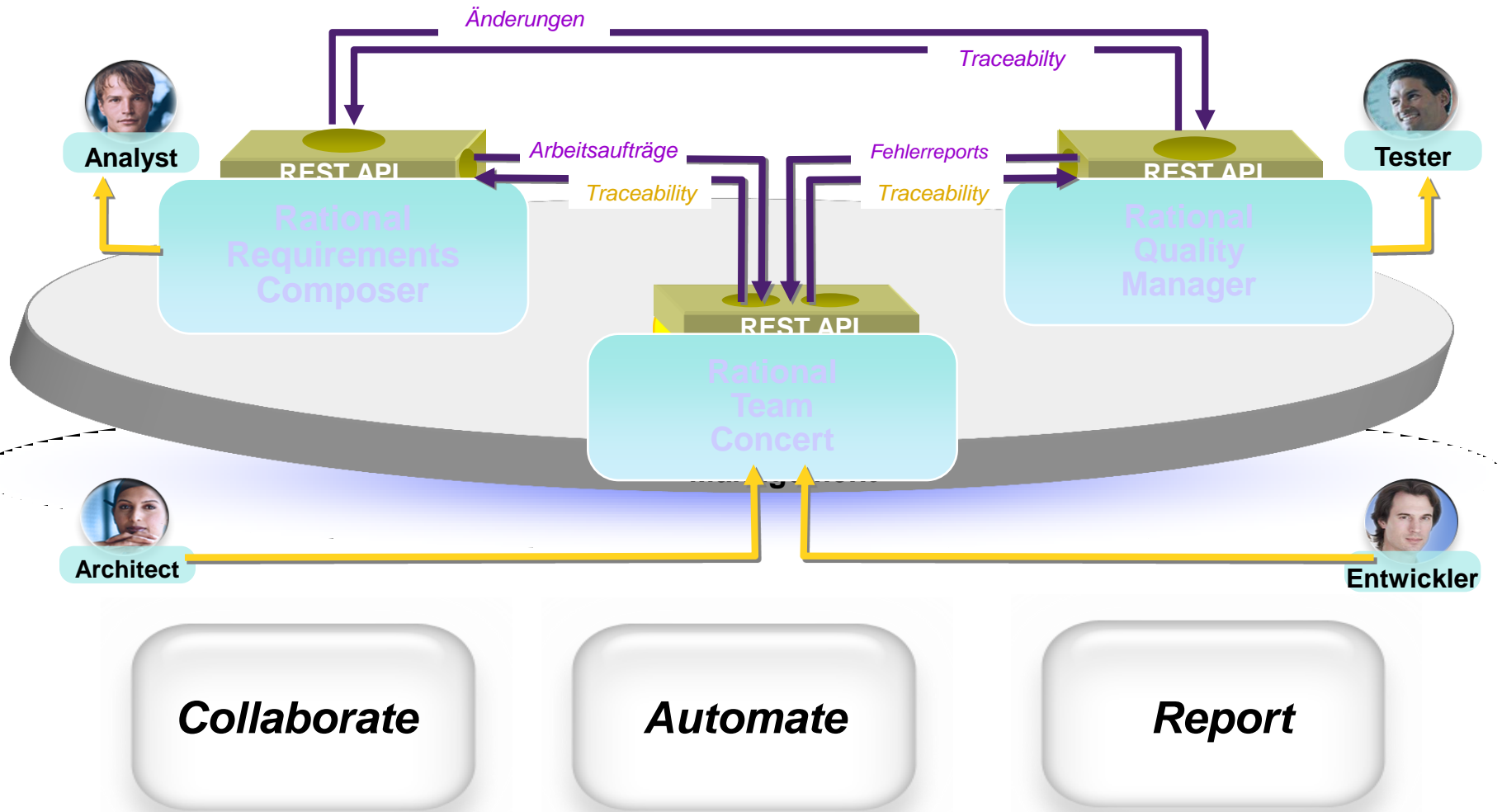
Zusammenarbeit von Entwicklung und Test



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Die Werkbank des CALM



Kontakt Daten

Werner Schoepe
Diplom Informatiker



Mobile 0171 223 4157
Email Werner.schoepe@de.ibm.com

THANK YOU