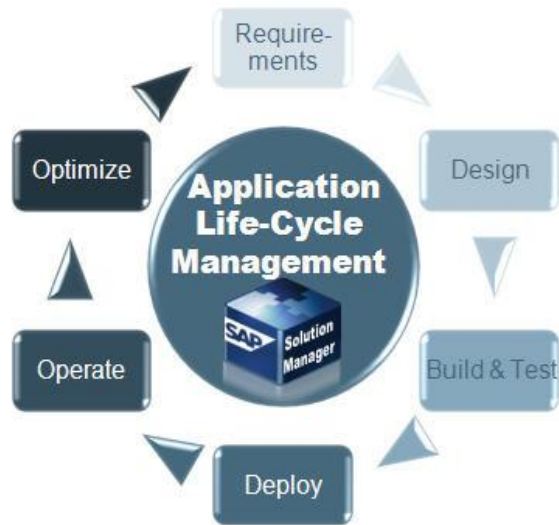


# Application Lifecycle Management for SAP Powered by IBM Rational

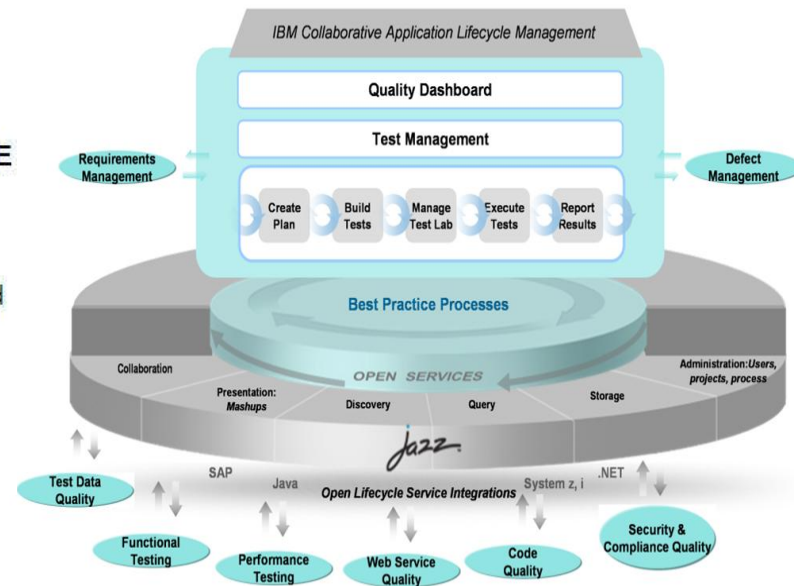
# Application Lifecycle Management with SAP Solution Manager and IBM Rational Software

## SAP Solution Manager



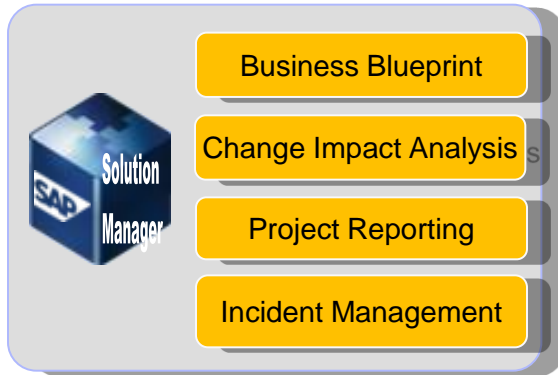
- **Reduces risk and lowers TCO** through standardized and integrated E2E Solution Operations according to ITIL
- **Optimizes business benefits** through a comprehensive and integrated quality management process
- **Leverages built-in innovation** by making innovation a non-event and protecting existing investments

## IBM Rational

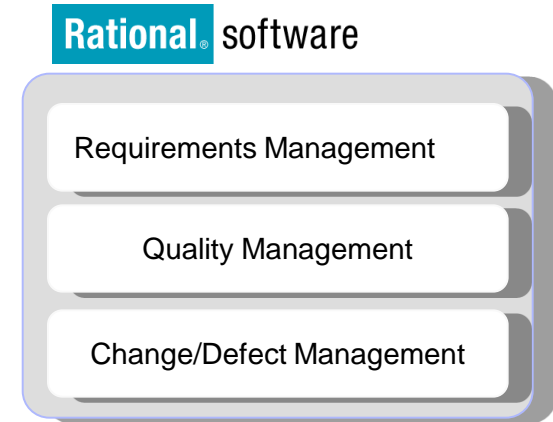


**“Our collaboration with IBM Rational brings together the best of our combined a**  
**Uwe Hommel : Executive Vice President, SAP**

## IBM Rational Connector for SAP Solution Manager



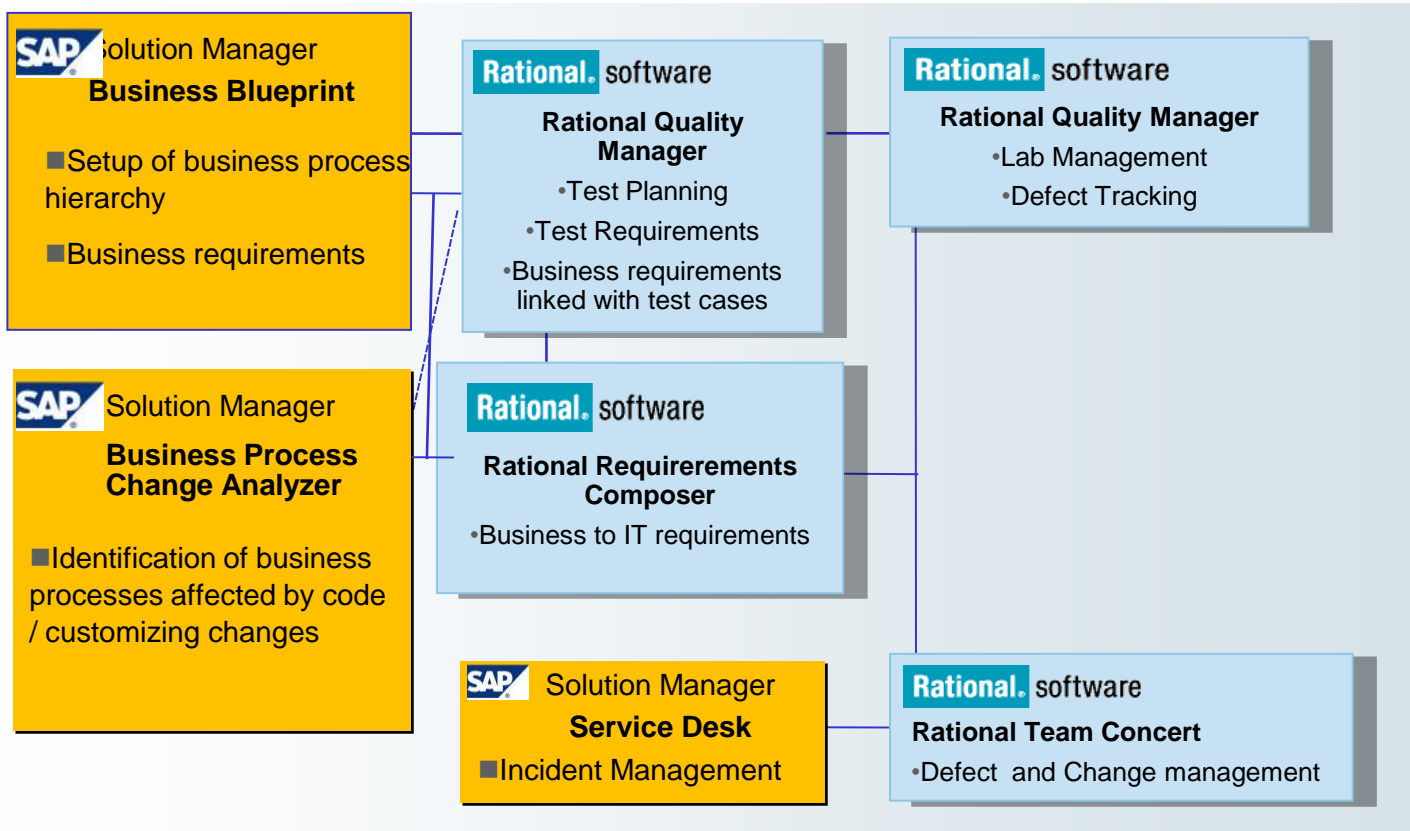
**IBM Rational Connector for SAP Solution Manager**



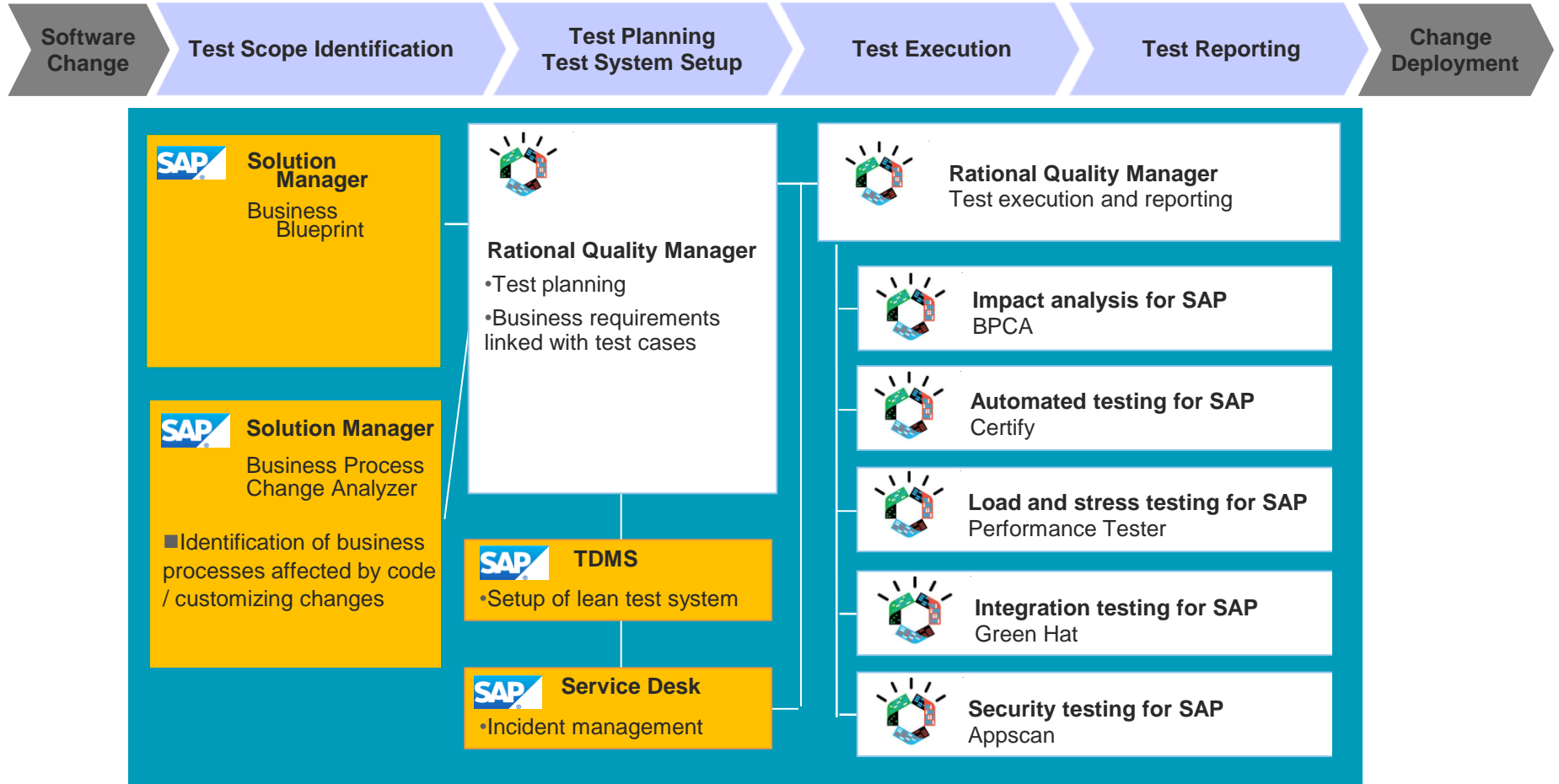
### Customer Benefits

- Allows customers to combine SAP & IBM best practices & standards
- Combine SAP Solution Manager life-cycle management capabilities with IBM Rational's integrated governance and quality management capabilities
- Enables end-to-end business process testing
- Aligns enterprise architecture and requirements with SAP-centric Solutions

# End-to-End ALM of SAP-centric Solutions



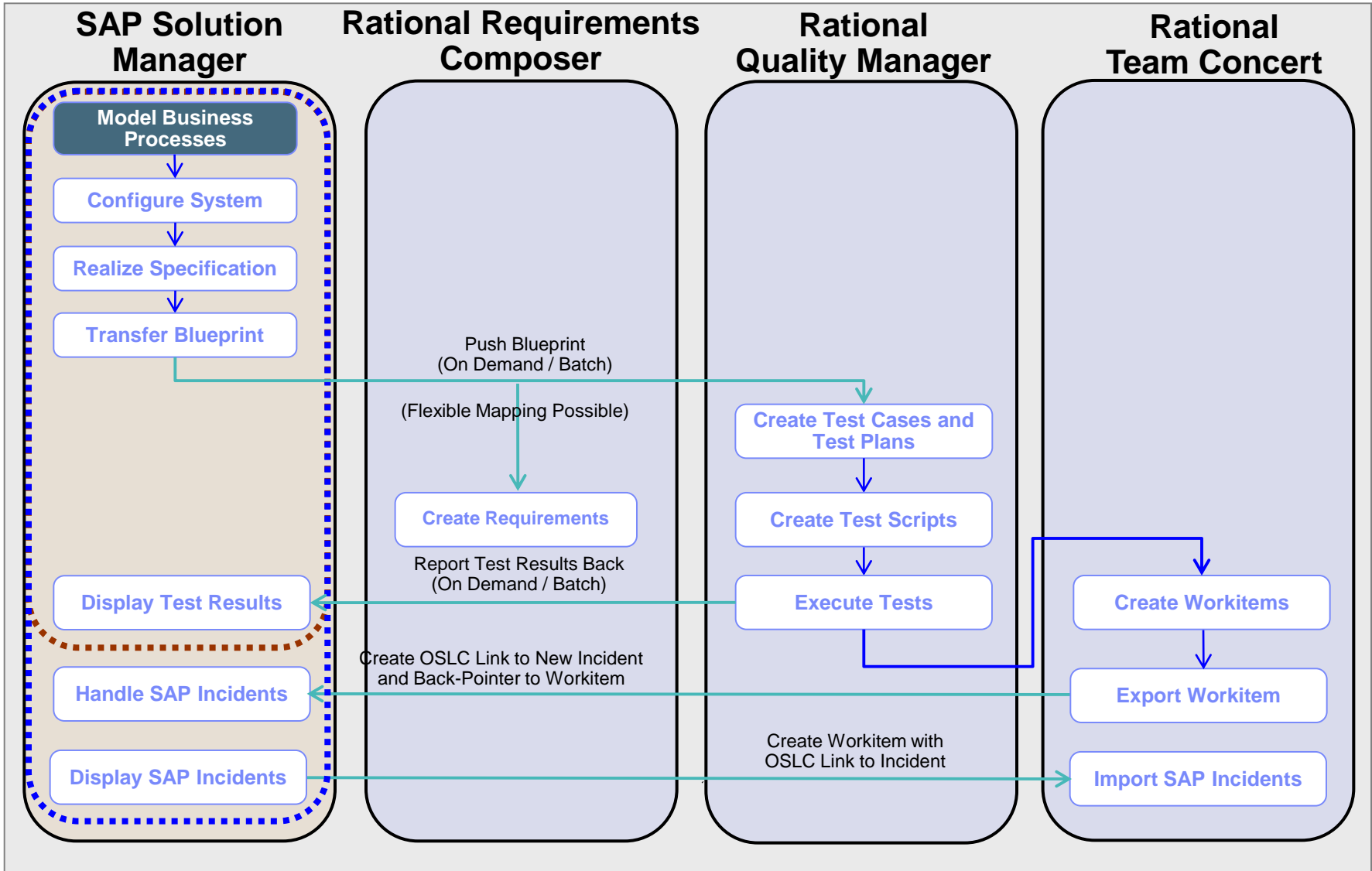
# End-to-End Quality Management of SAP-centric Solutions



Magic Quadrant for Integrated Software Quality Suites

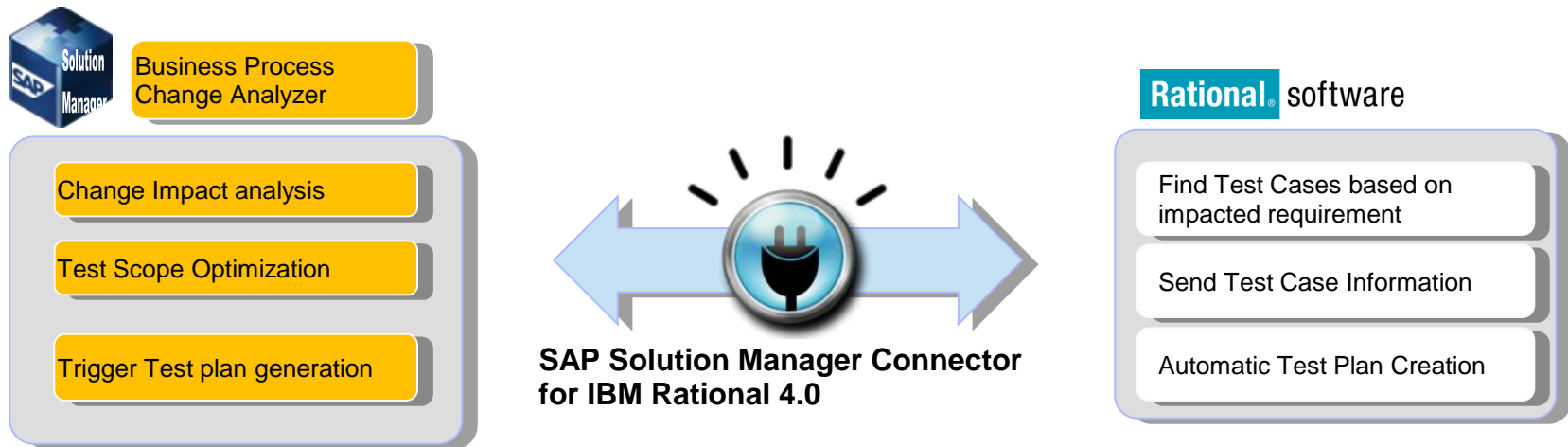


# ALM Process Flow



## BPCA Integration with IBM Rational Quality Manager

- ❑ Customer uses Rational Quality Manager for creation and Maintenance of Tests
- ❑ Customer uses BPCA for change impact analysis
- ❑ Customer needs to create a test plan/test suite in Rational Quality Manager based on the BPCA Analysis results
- ❑ The integration makes use of test scope optimization in SAP Solution Manager 7.1



# SAP Solution Manager - Business Process Change Analyzer

## Preparation

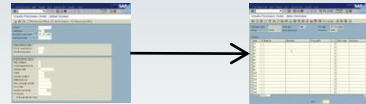


### Order to Cash



### Trace to identify objects by process

Manual execution of process step



Automated

WS Certify, SAP TAO.

Trace Result:

Technical Bill of Material (T-BOM)

- Code: Function modules, ...
- UI: Dynpro 1000, ...
- Tables: Customizing, Master Data

## Change Impact Analysis

“Which critical Business Processes will be affected by planned changes?”



### Planned Change

- SAP Support Packs
- SAP EhPs
- Custom Code
- Customizing changes

### Business Process Change Analyzer

Order to Cash

**Sales Order** → code change

Delivery

**Goods Issue** → UI change

Billing

Procure to Pay

**Create PO** → customizing change

## Risk-based Test Scope

“Can I get a recommendation for regression tests?”



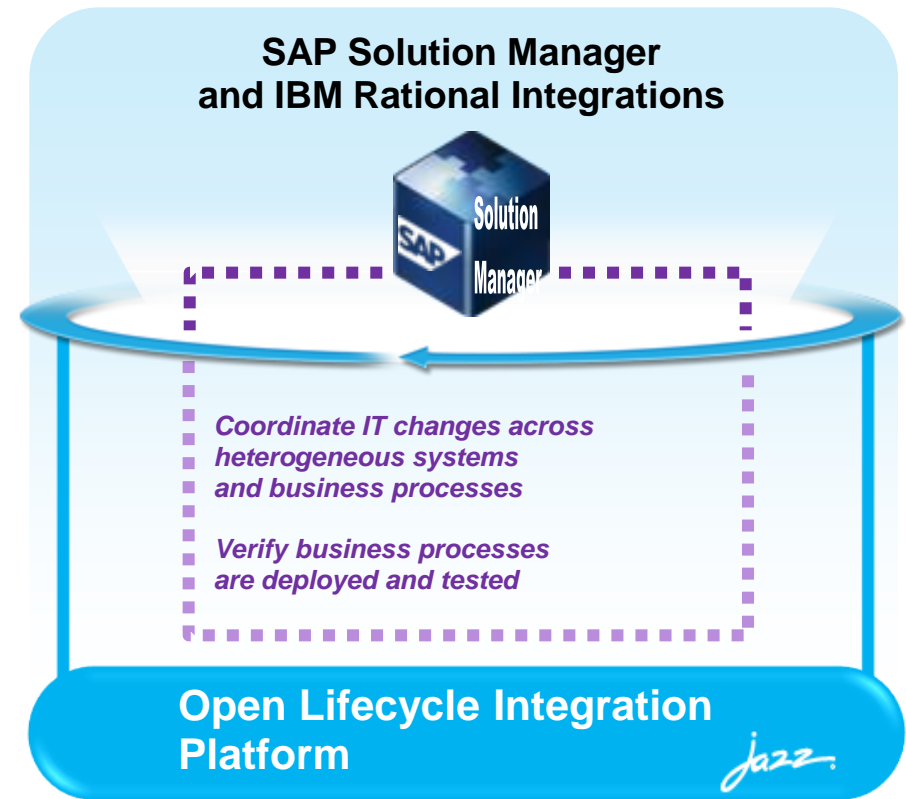
### Business Process Change Analyzer

- Identification of business processes impacted by software changes
- Support decision making whether planned change shall be executed
- Automatic test plan generation



## Accelerate the delivery of SAP

- Collaborate better with integrated requirements, quality and change management
  - Full Rational CLM integration support (Rational Requirements Composer, Rational Quality Manager and Rational Team Concert) built on OSLC standard
- Achieve faster impact analysis of change requests
  - Out of the box integration with Business Process Change Analyzer
- Apply unified SAP and IBM best practices and standards

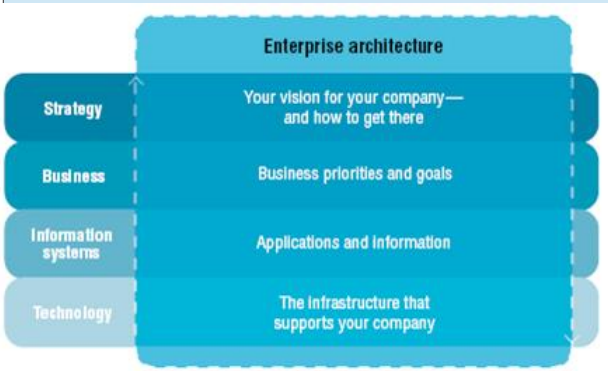


- IBM Rational Connector for SAP Solution Manager:
  - IBM Rational Requirements Composer
  - IBM Rational Team Concert
  - IBM Solution for Collaborative Lifecycle Management

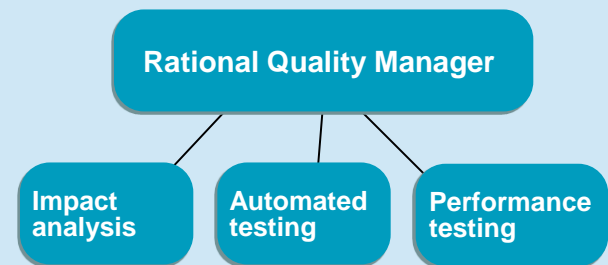
***“Encouraging collaboration between business stakeholders and the IT team, SAP Solution Manager and IBM Rational software help to minimize errors and other risks while maximizing business results.”***

– SAP Services

# Rational® software : 3 ways to optimize your SAP implementation



Rational®



What do you say: What do you want to do next, now!



### 3 ways to optimize your SAP implementation with IBM Application Lifecycle Management for SAP

- IBM Enterprise Planning for SAP
- IBM Application Lifecycle Management for SAP
- IBM Quality Management for SAP

- 1) [Read SAP's solution brief on using IBM Rational and SAP](#)
- 2) [Experience Rational tools on our cloud](#)
- 3) [Download the no-charge Jazz connector for SAP](#)
- 4) Upgrade to SAP Solution Manager 7.1
- 5) [Learn more](#) about IBM Rational [quality management capabilities](#) ([video](#))
- 6) [Take a look at how we could affect your potential ROI](#)
- 7) [Contact us. We can help run an effective proof of concept.](#)

<http://www-01.ibm.com/software/rational/solutions/sap>

## Customer Benefits

### ***SAP Solution Manager and IBM Rational Software***

#### **End To End Traceability**

- Integrated requirements and quality management processes, methods, and tools
- Link business, technical, and IT artifacts across SAP and non-SAP solutions

#### **Governance**

- Comprehensive and integrated change management approach across SAP Solutions and custom-built applications
- Manage compliance against governance mandates with features including audit trails and digital signatures

#### **Quality Management**

- Collaborative quality management platform for test planning, test execution, and reporting
- Test architecture tied to SAP business requirements and business blueprint

#### **Integrated Solution**

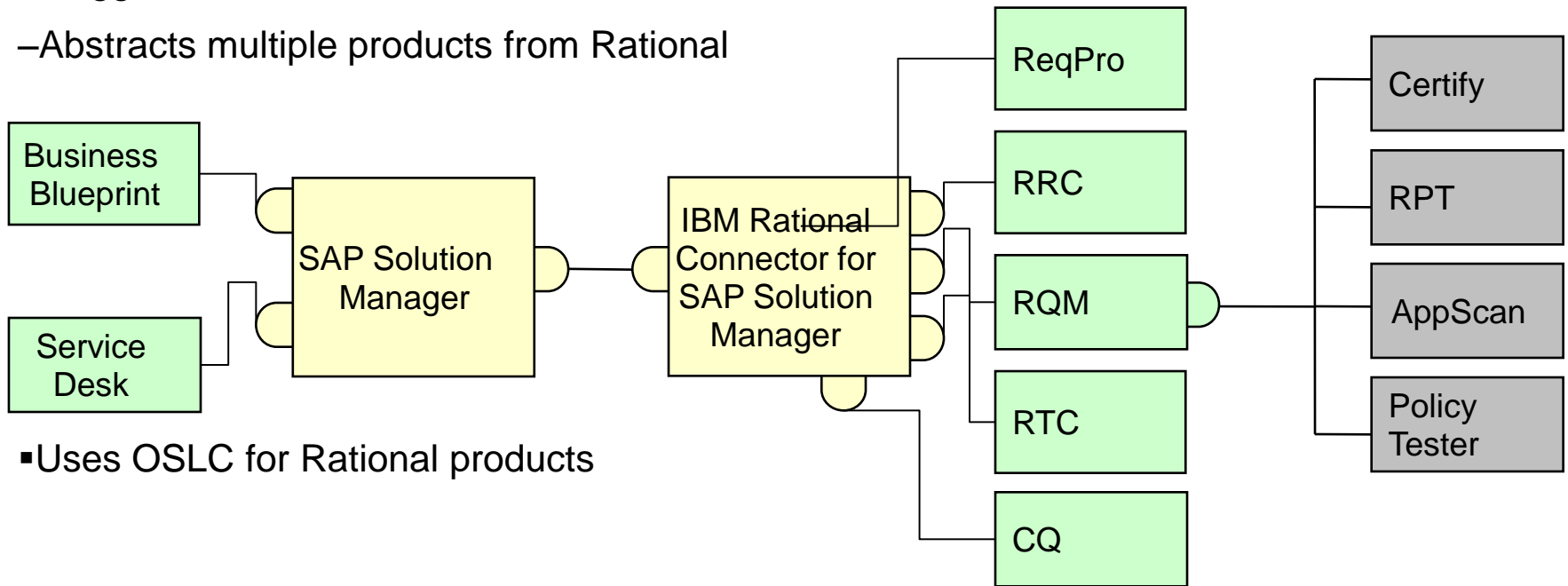
- Combines the best practices of SAP Solution Manager and IBM Rational tools to create an integrated quality management use case for our shared customers



[www.ibm.com/software/rational](http://www.ibm.com/software/rational)

## Architecture for the IBM Rational Connector for SAP Solution Manager

- Web Application that sits as communication layer in front of the Rational Tools and interfaces with SAP Solution Manager
- Uses SAP provided web services to communicate with Solution Manager
  - Web service request secured by SAML trust relationships between servers
- Pluggable, web-based architecture
  - Abstracts multiple products from Rational



- Uses OSLC for Rational products

## SAP and IBM



Global Technology Partner of the year 2012

SAP uses IBM for both production and development, and IBM is one of the world's largest users of SAP – a true reflection of the high level of mutual trust.



## Additional Links/Information

Read on Developer Works and Jazz.net:

[Integrate Rational ALM applications with SAP Solution Manager](#)  
[Announcing the Rational Connector for SAP Solution Manager 4.0.0](#)

Watch on Youtube:

[IBM Rational Solutions for SAP](#)

Download and Use:

[Rational Connector for SAP Solution Manager 4.0.0](#)



# QUESTIONS

[www.ibm.com/software/rational](http://www.ibm.com/software/rational)



[www.ibm.com/software/rational](http://www.ibm.com/software/rational)

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# Backup Material

## Integration Scenario Sample – Blueprint Push

1. Connector creates requirements, test plans and test cases in CLM project
2. All data is linked for traceability using the OSLC standard
3. Requirement collections are used to structure the requirements (Business Scenarios, Processes, Steps)

The screenshot displays the IBM Requirements Management (RM) web application interface. The main window is titled "View All Artifacts" and shows a table of artifacts. A specific artifact, "158: Process Data Requirement", is selected and its details are shown in a pop-up window.

**Artifact Details:**

- ID:** 158
- Name:** Process Data Requirement
- Artifact Type:** Requirement
- Last Modified By:** qmadmin
- Last Modified Date:** May 22, 2012 2:00:00

**Location:** RMPProject / Process data

**Attributes:**

- Format:** Text
- Description:** This requirement was created from SAP Solution Manager business requirement "Process Data Requirement" by IBM Rational Connector for SAP Solution Manager.
- Launch URL:**
- Priority:**
- Requirement Type:**
- Source Tag:**
- Package Info:**
- QM Creation Time:**
- Severity:**
- Status:**

**Links:**

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

The interface also shows a navigation tree on the left with folders like "Business Scenarios", "Analytics Processes in ERP", and "Business Processes". The "Process data" folder is currently selected. The bottom of the browser window shows the URL: `https://192.168.133.143:9443/rm/resources/_dYNcNaREeGWA5bD2XQmQ` and a message "Unsupported browser."

## Integration Scenario Sample – Blueprint Push

1. Test case categories are used to reflect Blueprint structure
2. Supports easier navigation and enhances reporting

The screenshot displays the IBM RMQuality Manager web application. The interface includes a navigation menu at the top with options like Requirements, Planning, Construction, Lab Management, Builds, Execution, Reports, and Defects. A search bar for 'Search QM Resources' is also present. The main content area is divided into several sections:

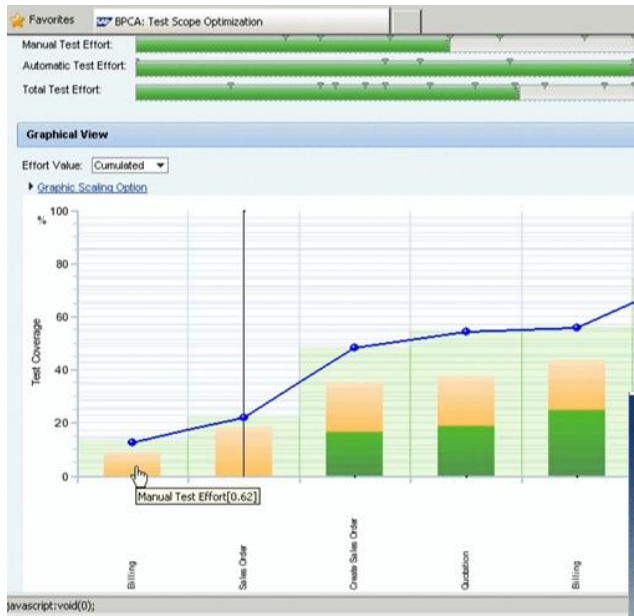
- Filter By Categories:** A tree view on the left showing a hierarchy of test case categories under 'Blueprint', including 'Blueprint Demonstration', 'Analytics Processes in ERP', and 'Process data'.
- View Test Cases:** A central panel showing a table of test cases. The table has columns for 'ID', 'Suspect', and 'Name'. One test case with ID '11' is highlighted.
- Overview:** A panel on the right providing details for the selected test case '11: Process Chain Maintenance'. It shows the state as 'Draft', a description, and various details like 'Type: Test Case', 'Owner: qmadmin', 'Modified: May 22, 2012 3:38 PM', and 'Project Area: RMQuality Manager'.

The URL at the bottom of the browser window is: <https://192.168.133.143:9443/qm/web/conso...nDispatcher&subAction=viewTestCase&id=11>



# Integration Scenario Sample – Business Process Change Analysis

1. Use Solution Manager's BPCA feature to identify and optimize the test scope for planned SAP changes
2. Automatically create test scope optimized test plans in RQM, based on parameters like manual test effort or test coverage



**Create Test Plan**

**Test Management Integration**  
Partner Test Management Tool: IBM Rational SAP Connector

**Template**  
Project: BPCA\_DEMO  
Description: BPCA integration with IBM Rational

**General Data**  
Title: BPCADemoTestPlan

Quality Management (log) | BPCADemoProject | clmadmin

**152 : BPCADemoTestPlan**

Overview | Test Plan Overview | Snapshots | History

Originator: clmadmin | Owner: clmadmin | Action: Select Action | State: Draft

Description: < Click here to enter a description >

**Test Cases**

Lists the test cases associated with a given plan. You can add and remove associations to test documents and create and associate a new test case. Removing a test case will remove the association to this test plan but not delete the test case.

ID	Suspect	Name	State	Owner	Blueprint	Business Process	Business Process Step	Business Scenario	Connector GUID	Function	Test Component	Test Object	Test Phase
315	Cre...	Dr...	clm...	BPCA...	Order...	Quotat...	Logist...	005056...	Unas...	ZBPCA...	VA...	Un...	
316	Cre...	Dr...	clm...	BPCA...	Order...	Sales...	Logist...	005056...	Unas...	ZBPCA...	VA...	Un...	
318	Cha...	Dr...	clm...	BPCA...	Order...	Good...	Logist...	005056...	Unas...	ZBPCA...	VL...	Un...	
319	Cre...	Dr...	clm...	BPCA...	Order...	Billing	Logist...	005056...	Unas...	ZBPCA...	VA...	Un...	
320	Cre...	Dr...	clm...	BPCA...	Order...	Billing	Logist...	005056...	Unas...	ZBPCA...	VF...	Un...	
321	Cha...	Dr...	clm...	BPCA...	Credit...	Settin...	Logist...	005056...	Unas...	ZBPCA...	FD...	Un...	
322	Cre...	Dr...	clm...	BPCA...	Credit...	Creat...	Logist...	005056...	Unas...	ZBPCA...	VA...	Un...	
323	Blo...	Dr...	clm...	BPCA...	Credit...	Revie...	Logist...	005056...	Unas...	ZBPCA...	VK...	Un...	
324	Cre...	Dr...	clm...	BPCA...	Credit...	Creat...	Logist...	005056...	Unas...	ZBPCA...	VL...	Un...	
326	Cre...	Dr...	clm...	BPCA...	Credit...	Billing	Logist...	005056...	Unas...	ZBPCA...	VF...	Un...	

## Integration Scenario Sample – Transfer Test Results

1. Test results are automatically transferred back in to Solution Manager
2. Supports SAP quality reporting and documentation best practices

The screenshot displays the SAP Business Blueprint interface. The main window is titled 'Project: DEMOPROJEC - Change - Business Blueprint'. A sub-window titled 'Maintain Attributes' is open, showing a table of test results. The table has columns for Test Case, Test Suite, Project, Test State, Execution Record Name, Test Object, and Log. Component. The 'Test State' column shows 'failed' for the 'Process Chain Maintenance' test case.

TestCase	Test Suite	Project	Test State	Execution Record Name	TestObject	Log. Component
Process Chain Maintenance	DemoSuite	BlueprntDemo	failed	Process Chain Maintenance	RSPC	SAP NETWEAVER BW S

Below the 'Maintain Attributes' window, another window titled 'Testing: Testresults of Business Test Requirements' is visible. It shows a detailed table of test results with columns for Project Structure, Document Na, Testcase Name, Test Suite, Execution Rec., Test State, Test Object, Test Object Lo, Test Object Type, Owner, End Date, and End Time. The table shows two test results: one failed and one passed.

Project Structure	Document Na	Testcase Name	Test Suite	Execution Rec.	Test State	Test Object	Test Object Lo	Test Object Type	Owner	End Date	End Time
[DEMOPROJEC]											00:00:00
Business Scenarios											00:00:00
Analytics Processes in E											00:00:00
Business Processes											00:00:00
Analyzing and Ber											00:00:00
Process data											00:00:00
Process Data R... Process Chain ...		DemoSuite	DemoSuite	Process Chain ...	failed	RSPC	SAP NETWEAV...	Transaction	clmadmin	25.05.2012	15:56:46
					passed	RSPC	SAP NETWEAV...	Transaction	clmadmin	25.05.2012	15:56:04

# Integration Scenario Sample – Integrate Defect Management

1. Forward a defect in RTC to SAP Service Desk
2. Defect Submission form is populated with live data from SAP Service Desk

The screenshot displays the 'New Service Desk Incident' form in the IBM Rational Team Concert (RTC) interface. The form is populated with data from SAP Service Desk. A red box highlights the following fields:

- Short Description:** Demolncident
- System ID / Client ID:** RB1:000
- Language:** [KO] Korean
- Component:** [AIE-All-AP] Application

The 'Text Type' dropdown menu is open, showing various options, with '[SU15] Information for SAP' selected. Other options include [SU99] Description, [SU04] Internal Note, [SU01] Reply, [SU16] Information from SA, [SU11] Reply from SAP, [SUCT] Phone Call to SAP, [SUST] Phone Call from SAP, [SUSD] System Data, [SUZZ] Log, [SUBI] Business Consequences, [SUQA] Appl-Spec. Questions, [SURS] Reconstruction, [SUDL] Processing delay, and [SUSO] Solution.



## Integration Scenario Sample – Integrate Defect Management

1. Forward an incident from SAP Service Desk to RTC
2. Use “Forward to external Help Desk” option in Service Desk

The screenshot displays the SAP Solution Manager IT Service Management interface. The main window title is "Incident: 8000000054, FromSD". A navigation menu on the left includes options like Home, Worklist, Calendar, E-Mail Inbox, Master Data, Change Request Man..., Incident Management, Service Operations, and Create. The "Create" menu is highlighted with a red box, and "Incident" is selected. The main content area shows a table of incident actions with columns: Actions, Help Desk, Third-Party..., Interface St..., External Me..., Agent ID, Message ex..., Automatic s..., and Logical Port. The table contains several rows, with the fourth row highlighted in yellow. A red box highlights the "Forward to external Help Desk" option in the Actions column of this row. Below the table, there are sections for "Project Assignment" and "Test Details" with various input fields. The status bar at the bottom indicates "Internet | Protected Mode: On" and "125%".

Actions	Help Desk	Third-Party...	Interface St...	External Me...	Agent ID	Message ex...	Automatic s...	Logical Port
ClearQuest	IBM Ration...					<input type="checkbox"/>	<input checked="" type="checkbox"/>	WINSAP1-...
ClearQuest	IBM Ration...					<input type="checkbox"/>	<input checked="" type="checkbox"/>	TOMCAT-...
RTC	IBM Ration...					<input type="checkbox"/>	<input checked="" type="checkbox"/>	QVLNX020...
RTC	IBM Ration...					<input type="checkbox"/>	<input checked="" type="checkbox"/>	DAVE_TO...
Forward to external Help Desk	IBM Ration...					<input type="checkbox"/>	<input checked="" type="checkbox"/>	CHRIS_RA...
RTC	IBM Ration...					<input type="checkbox"/>	<input checked="" type="checkbox"/>	CHRIS_WI...

# Integration Scenario Sample – Integrate Defect Management

1. New defect in RTC is linked to Service Desk incident
2. OSLC data linking model is used

The screenshot displays two overlapping web interfaces. The background interface is the IBM Service Desk, showing an incident titled "Incident: 8000000054, FromSD". A table lists several transactions, with one highlighted in yellow: "RTC IBM Ration... In Internal... 11". A tooltip over the "External Me..." column reads "External Message ID, Click to sort or filter".

The foreground interface is the RTC (Rational Team Concert) "Defect 11" view. It shows a summary of the defect and a "Links" section. Under "Links", there is a "Related Change Request" section containing a link to "Service Desk Incident 8000000054: FromSD".

To the right of the Defect view is a detailed view of the "Service Desk Incident 8000000054: FromSD" with the following information:

- ID: 8000000054
- Description: FromSD
- Status: New
- Priority: 3: Medium
- Created By: DAVE
- Created At: 5/25/12 1:58:59 PM
- Last Changed By: DAVE
- Last Changed At: 5/25/12 2:01:42 PM