

Transforming Rational: Visibility, Collaboration and Community

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IBM Rational Software Development Conference UK 2007



▶ What keeps me **Rational**?



The Shift: Intense focus on business outcomes



Align technology and business goals to enable flexibility & innovation



Manage value and mitigate risks via improved project management



Increase customer intimacy & knowledge to grow relationships & markets



Control costs & gain operational efficiency while meeting compliance mandates



Consume & integrate value in organizationally diverse environments



What keeps me **Rational**?

2007 and beyond: Shifts in software delivery

What we're hearing...

"2/3 of our projects span multiple business units"

"People knew it was a train wreck; no one could see what to do."

"We've done two acquisitions in six months and we can't lose customers"

"We run on the Web – and we run fast — new code makes us really nervous"

"We have to go where the best talent is, but we have IP and compliance realities"

What we're seeing...

- **Increasingly diverse and cross organizational global project teams**

- **SOA, Web-centric & Web 2.0 enabling new business models**

Popularity of Agile development and social networking models

- **Interest in replicating the proven models of open, community-governed software delivery models**



Fundamentals of the Rational software strategy

- **Enabling governance**
 - ▶ Maximize value and flexibility of the knowledge-based workforce
 - ▶ Minimize chaos while maximizing individual decision rights
- **Delivering flexible architectures**
 - ▶ Rethink modularity and granularity of software
 - ▶ Focus on “granular decomposition” for re-composition
 - ▶ Enable enterprise modernization
- **Leveraging communities**
 - ▶ Leverage community effects from Open Source, Metcalf’s law, social networking



GOAL:
*Delivering value efficiently
and effectively
in distributed organizations*



IBM Rational Software Delivery Platform

Rational. software

Process design and implementation expertise based on a market-leading solutions delivery platform



Lowering TCO of global delivery

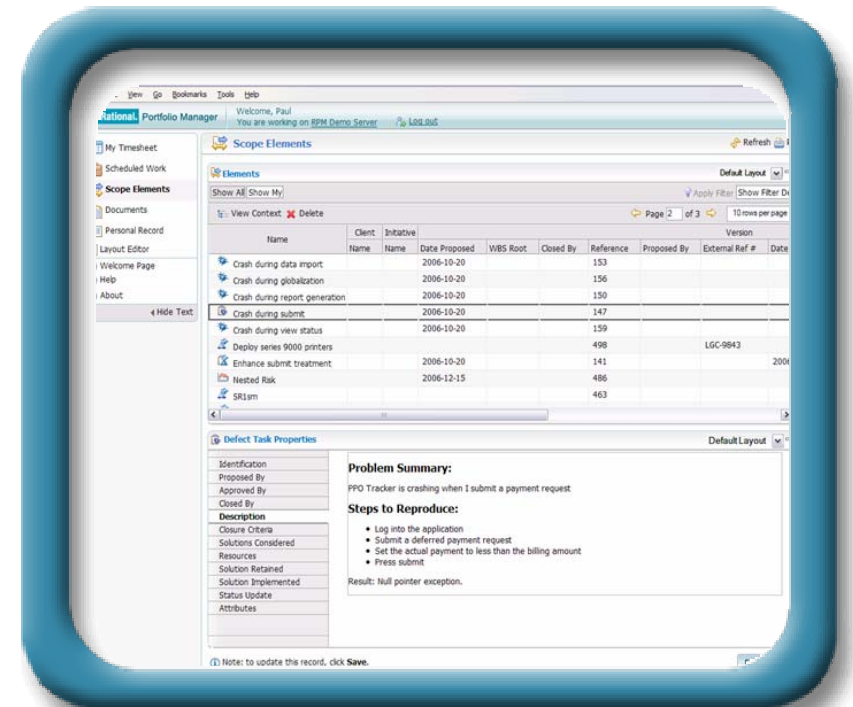
Progress in transformation
**Move to more Web-centric,
 lower bandwidth solutions**

▶ New zero-footprint Web clients

- Rational Portfolio Manager 7.1
- Rational Asset Manager 7.0
- Rational Build Forge 7.0.1
- Jazz Team Concert Beta 1

▶ Transaction improvements

- 25% performance improvement in Rational ClearCase Remote Client check-in/check out (7.0.1 versus SR6)



Rational Portfolio Manager
 Ajax-based client

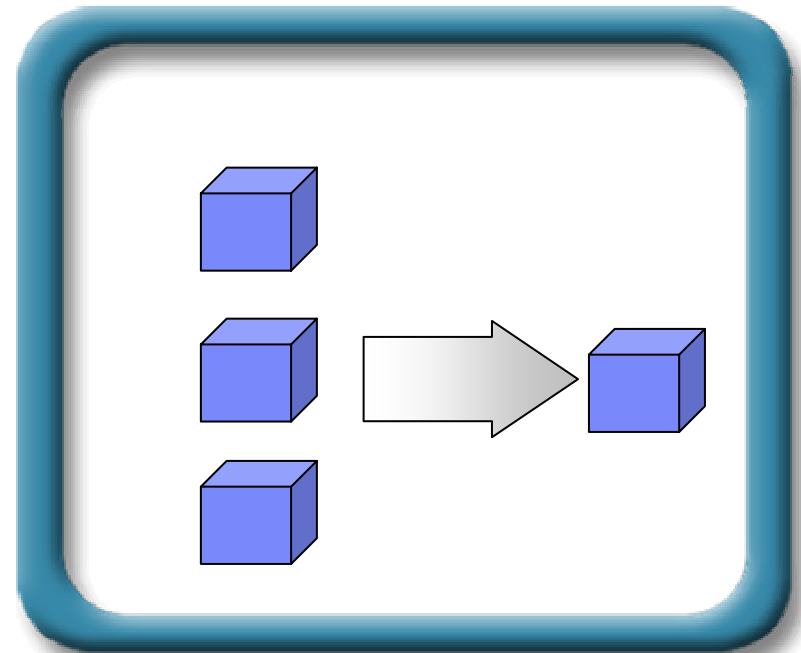


Improving performance

Progress in transformation

Faster, more reliable performance

- ▶ **Rational ClearQuest Web 7.0.1 benchmark improvements***
 - 260% more users / server**
 - 19% throughput improvement
 - 50% reduction in memory footprint
 - 300% MTBF improvement
- ▶ **Global performance**
 - Rational ClearQuest 7.0.1
 - 35% performance improvement since Version 2003 SR6
 - Rational RequisitePro
 - 300% increase in Web server scalability



****Expected customer benefit: Enable 3X hardware consolidation & improved throughput**

*Version v7.0.1 benchmark improvements over v7.0



What keeps me **Rational**?

Improving global security

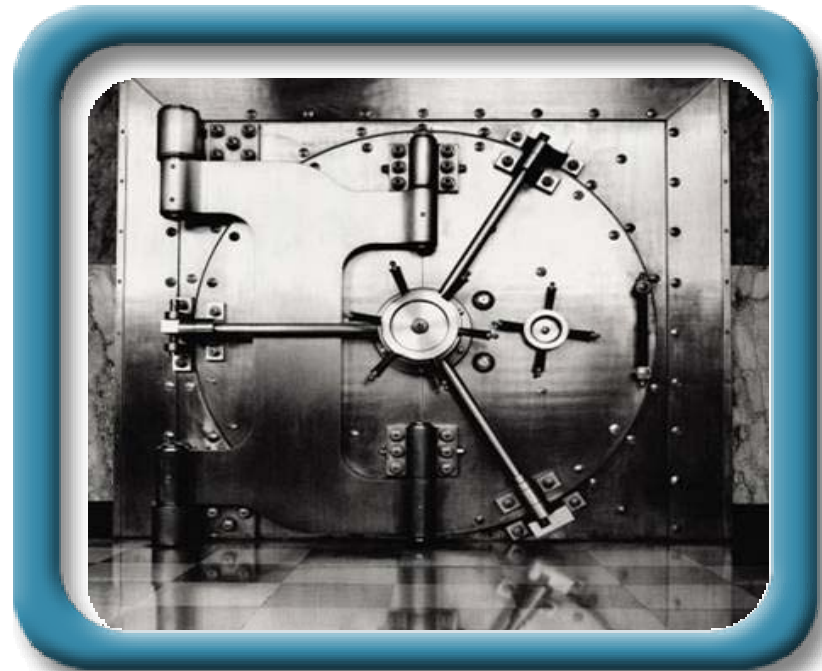
Progress in transformation Enabling cross-organization contributors

▶ Rational ClearQuest 7.0.1

- Greater global management control
 - Finer grained security through improved partitioning of assets with public folder Access Control Lists
 - Example: Control access to folders and content by partners

▶ Rational ClearCase 7.0.1

- Multiple region support with ACLs on a ClearCase Remote Client Server
 - Example: Only show a partial (protected) list of VOBs/PVOBs that have been published to external partners

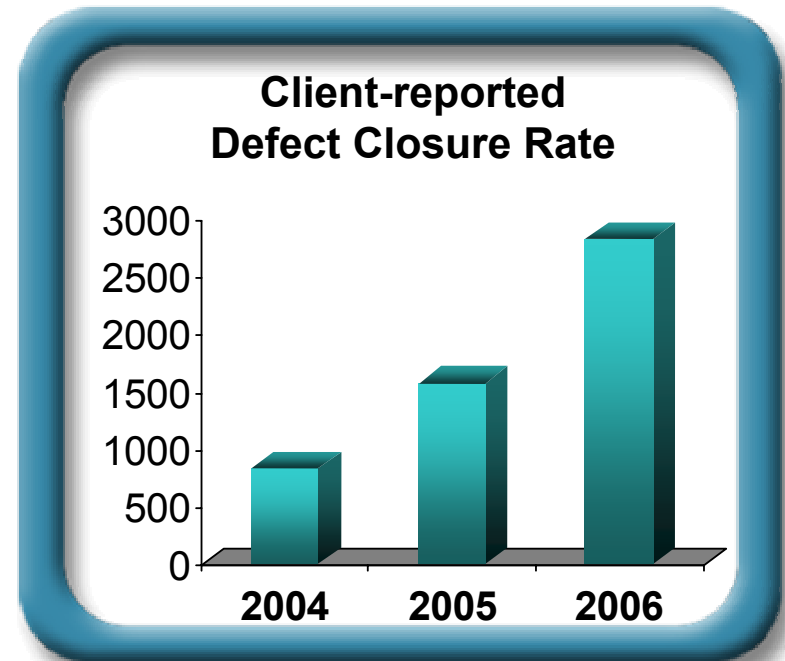


Faster response to Request for Enhancements (RFEs) and defects

Progress in transformation

Timely response on RFEs and defects

- ▶ **New, closed loop RFE process**
 - Goal: 30 day triage, 90 day reply
Currently: 85% of RFEs answered within 30 days
 - 800 of submitted RFEs in 2007 are candidates for future releases
- ▶ **Driving a consistent maintenance and release vehicle strategy**
- ▶ **Defect backlog improvements Since 2006 RSDC**
 - ClearCase closed 39%
 - ClearQuest closed 47%
 - RequisitePro closed 30%
 - Rational Application Developer closed 40%



Result:
79% increase
in closure rate
2005-2006



Improving consumability

Progress in transformation New installation technology

- ▶ **Example**
 - **Rational Application Developer**
 - 50% reduction in time to install
 - 95% reduction in time to move from trial to full license
 - 80% reduction in minimum install

- ▶ **Simplifies deployment of Rational Eclipse-based products**



“Huge improvement over the all or nothing approach from before. Getting only what you need is always the best option instead of having a bloated install.”
- Financial services customer



Better, real world integrations

Progress in transformation
**Delivering integrations based
on business-driven scenarios**

- ▶ **“Green threads”**
- ▶ **Use case approach to integrations**
- ▶ **Examples of governance integrations**
 - Between development and operations
 - RUP/ITUP alignment,
 - Between business & IT
 - WebSphere Business Modeler & Rational RequisitePro
 - Rational Asset Manager & WebSphere Registry and Repository
- ▶ **Moving from point-to-point integration philosophy
to business process integrations**



Focus on quality and how we work at IBM

Progress in transformation

Improving quality and Developing products across a global team

▶ Worldwide In-House Deployment

- 3,000+ users doing production work on pre-release code (Rational ClearQuest)
- Significantly improves release quality through real-world usage
- Also being used for Rational ClearCase

▶ Organizationally diverse IBM use cases

- Teams sizes from 5 - 2500 people
- Multiple methodologies
 - Agile, iterative, Waterfall...
- Operating in co-located, distributed ways



Result:
*In House Deploy
+ more functional
testing by developers
indicates lower
Priority 1 defects*



Faster, easier deployment

Progress in transformation

Support & education on demand

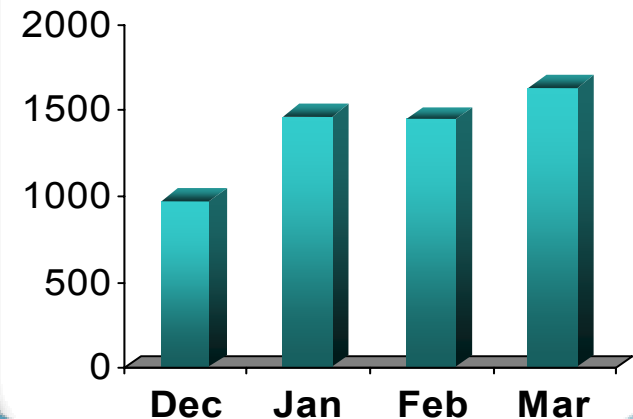
▶ IBM Education Assistant

- Free web-based product training
- Over 10,000 downloads per month since Dec 2006
- 30 new courses in 2007

▶ IBM Software Assistant

- Search, learn, diagnose, report
- 25% growth in usage*
- 40 Rational products supported

Rational Functional Tester
Training Downloads/Month



67% growth
in 4 months*

So what result?...

* Dec – Mar. 2007



What keeps me **Rational**?

A seat at the table

Progress in transformation

Early insight and influence

▶ Design Partner Program

- Active participation in product design

▶ Early Access Program

- Over 100 customers in specific feature design validation
- Over 4,000 beta downloads

▶ Lab Advocacy Program

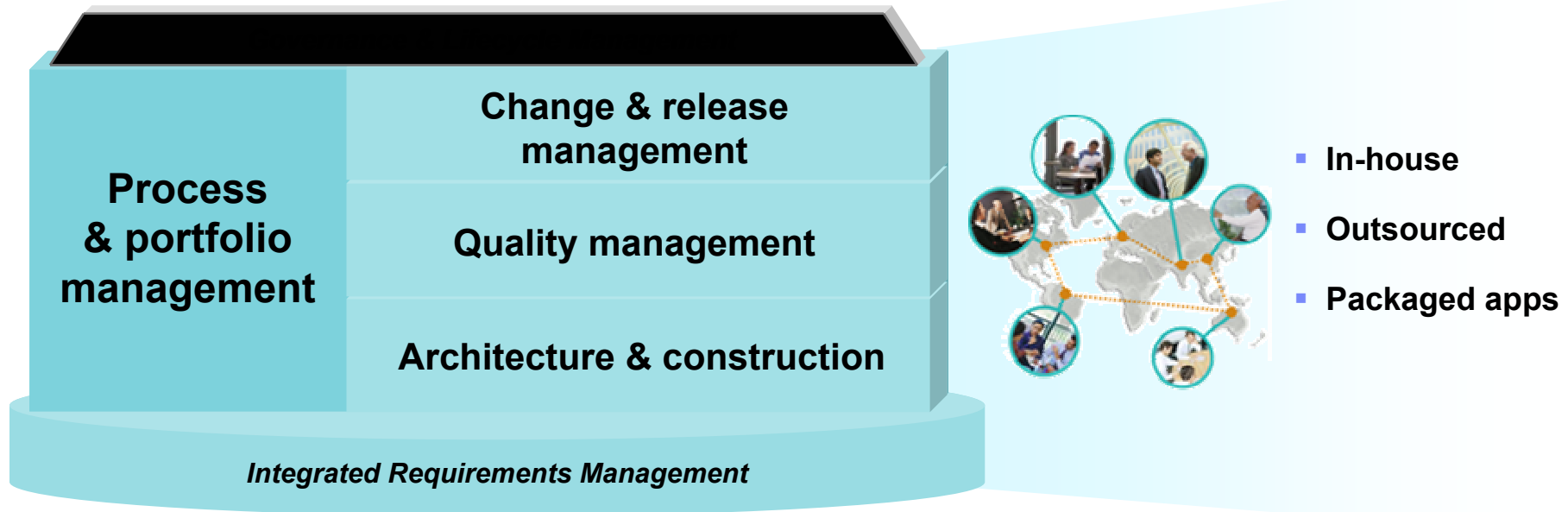
- Tighter connection between support, development and customers
- Over 150 participating customers



IBM Rational Software Delivery Platform

Rational. software

Process design and implementation expertise based on a market-leading solutions delivery platform



What keeps me **Rational**?

Quality Management

*Expanding the frontiers of
comprehensive quality management*

▪ **Rational Tester for SOA Quality**

- ▶ Validate SOA application functionality and performance
- ▶ Generate test assets from BPEL models and WSDL files
- ▶ Diagnose root cause of performance problems using Tivoli ITCAM for SOA

▪ **Rational Functional Tester**

- ▶ Successful completion of SAP certification tests



***Rational Tester for
SOA Quality v7.0***

Watchfire Acquisition



Watchfire: Web Application security and compliance

Reduce the risks and costs associated with online security breaches

Security & Compliance Pains

Cost of remediation of online breaches including adverse impacts on brand and customer relations

Increasing costs of meeting compliance mandates and need for specialized expertise

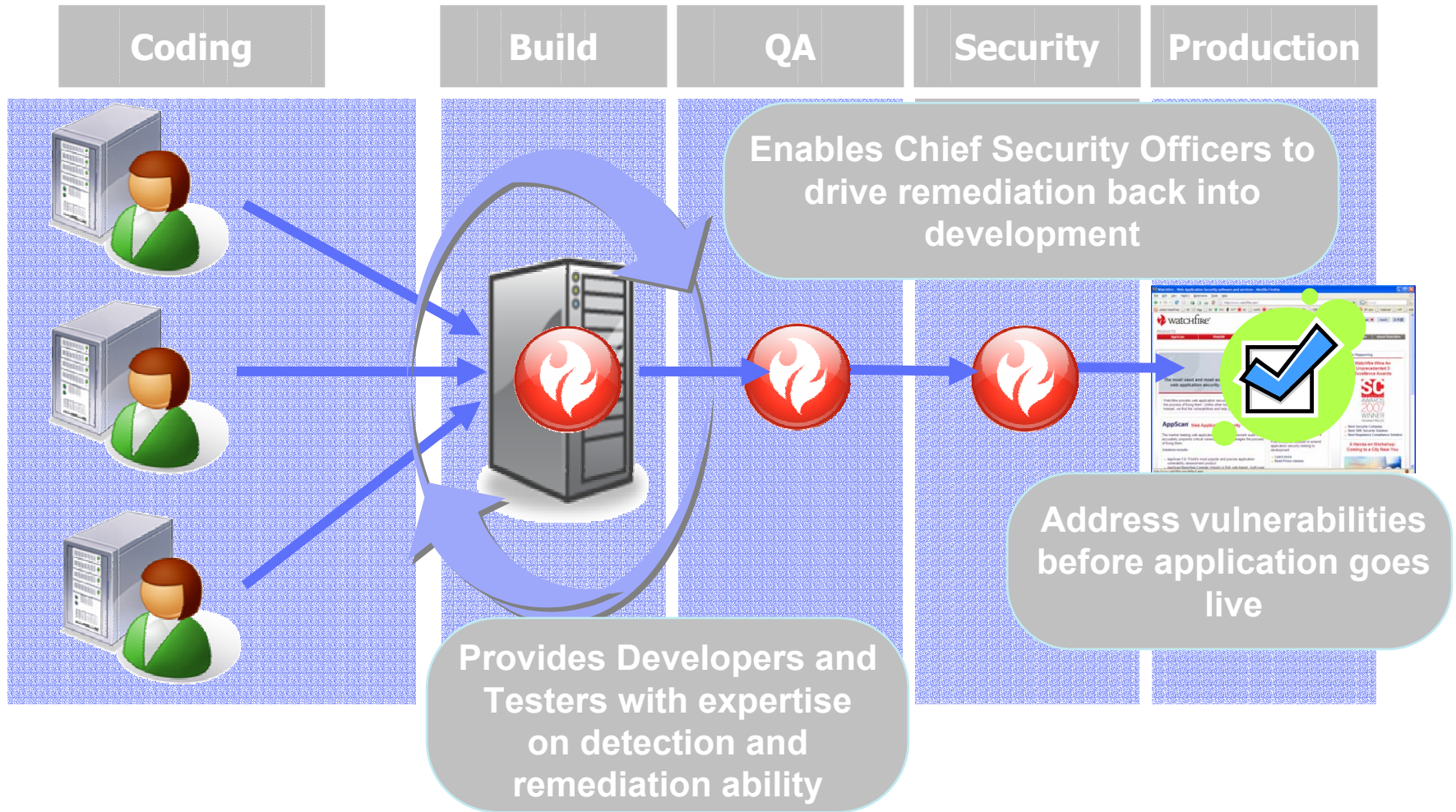
Industry immaturity & fragmentation – many vendor point-products vs. lack of trusted partners

Solution

- **Ensure business integrity before applications go live by integrating security testing throughout software delivery**
- **Minimize risk and reduce costs with automated web-compliance testing covering a wide range of industry mandates**
- **Offers 'core to perimeter' view into enterprise security, that can add web-application security and compliance testing to Tivoli, SWG and ISS offerings**

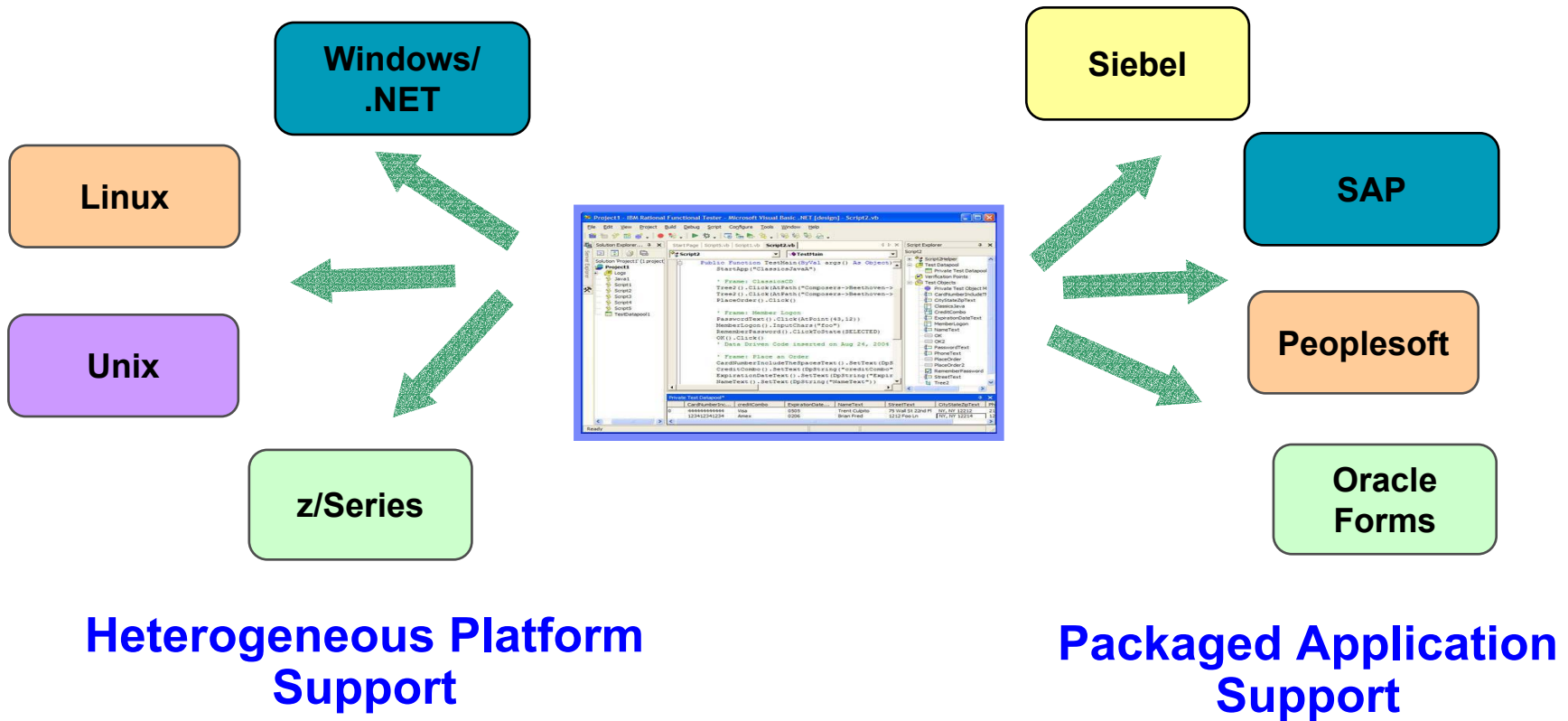


Detect Vulnerabilities Before Release



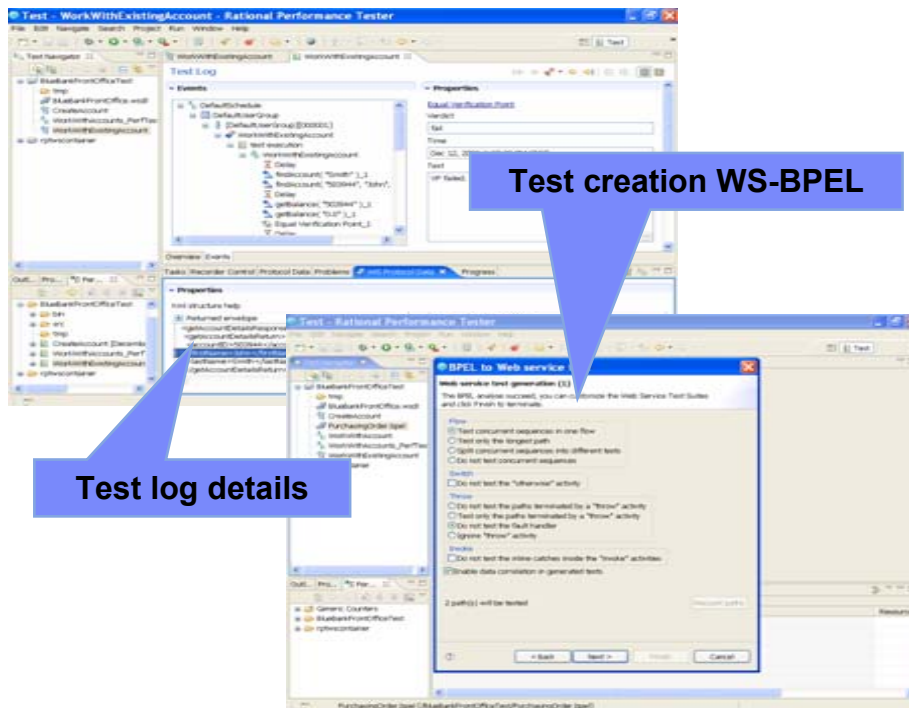
Rational Functional and Performance Tester

*Rational Functional Tester
Successful completion of SAP certification*



Rational Tester for SOA

- ▶ Provide GUI-less service testing for SOA standards
- ▶ Create, modify and execute functional tests for Web Services standards
 - SOAP, HTTP(S), JMS, WS-Security, UDDI



- ▶ Automate test creation from WS-BPEL resources
 - Web Services Business Process Execution Language
- ▶ Integrate with ClearQuest Test Manager and Rational Asset Manager

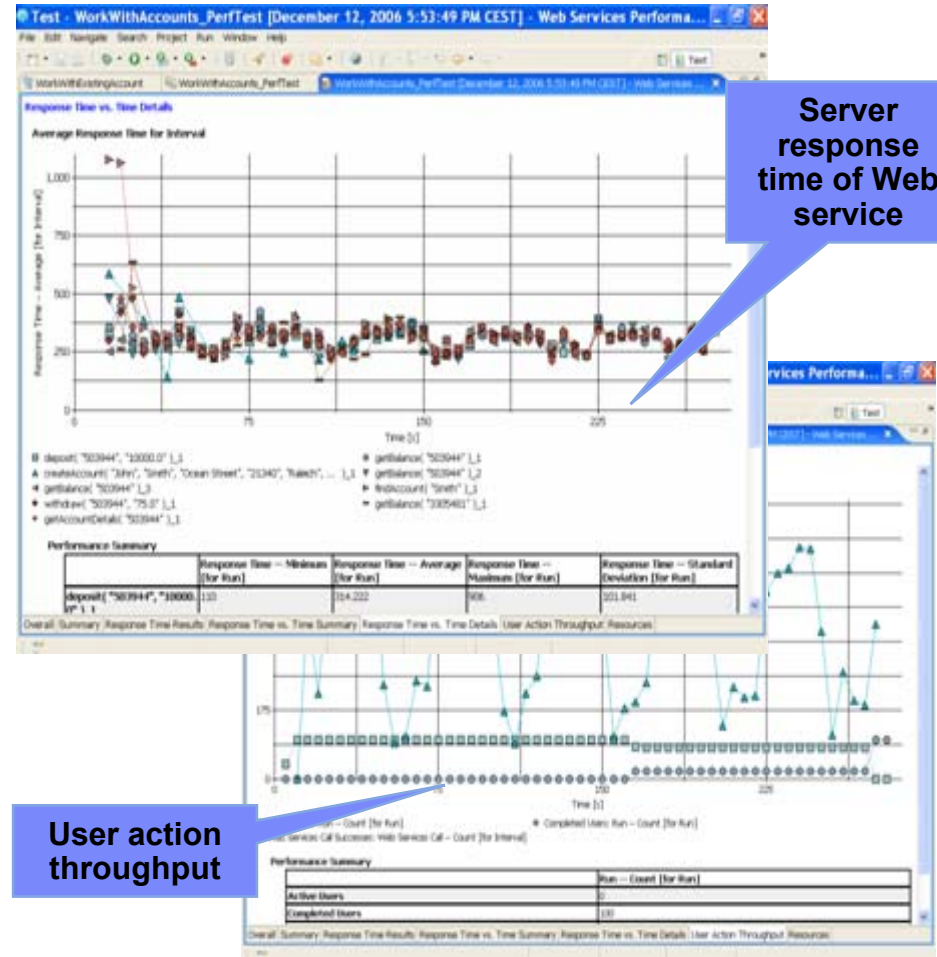
Targeted at developers and the QA Team



What keeps me **Rational**?

Performance Tester for SOA

- ▶ **Automate** generation of Web Service performance tests
- ▶ Obtain **real-time reporting** of server response time and throughput
- ▶ **Find performance bottlenecks** and enable problem determination
- ▶ **Enhance data analysis and parsing**
- ▶ Integrates with **ITCAM for SOA**



Targeted at performance engineers



Process and Portfolio Management

*Easy, effective deployment of customized best practices
Greater project manager efficiency and executive insight*

▪ **Rational Method Composer**

- ▶ Global Development and Delivery
- ▶ CMMi Compliance Support
- ▶ Asset Based Development process

▪ **Rational Portfolio Manager**

- ▶ Zero-footprint Web client
- ▶ Enhanced reporting via Data warehousing

▪ **Rational RequisitePro**

- ▶ Enhanced Web Client



Rational Method Composer v7.2

Rational Portfolio Manager v7.1

Rational Requisite Pro v7.0.1



Change and Release Management

Improved security, scalability and insight in globally outsourced and distributed environments

▪ **Rational ClearCase & Rational ClearQuest**

- ▶ Enhanced security for vendor management
- ▶ Use case focused enterprise scalability
 - IBM DB/2 V9: 1,000 CC users, 12 labs, 8 countries
 - IBM Server Group: 9,000 CQ users
- ▶ **Rational ClearCase high availability with Veritas and Steeleye**

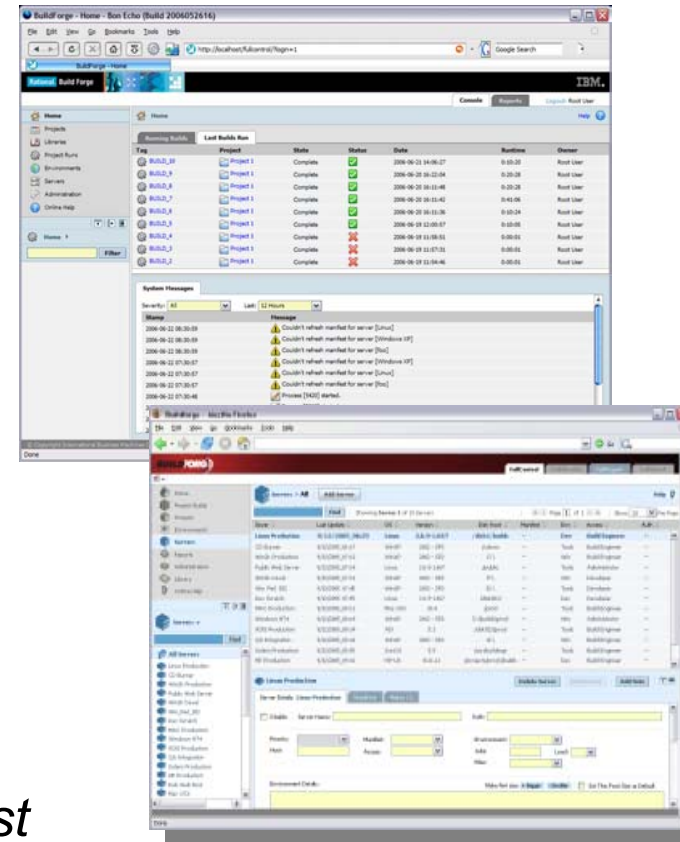


***Rational ClearQuest
& Rational ClearCase v7.01
Rational Build Forge v7.0.1***



BuildForge build-and-release support

- **Standardize repetitive tasks**
 - ▶ Adaptive build-and-release management
- **Improve quality**
 - ▶ Repeatable processes and early detection
- **Support compliance mandates**
 - ▶ Audit trails and role-based security
- **Integrate with leading IDEs**
 - ▶ Eclipse framework
- **Link between source code managers and tracking tools**
 - ▶ Rational ClearCase and Rational ClearQuest



IBM Rational Team Concert – Beta

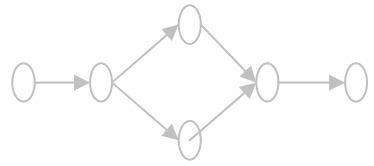
*Introducing a new IBM Rational offering powered by the *jazz* technology*

- A real-time **collaborative portal** improving software delivery team innovation & productivity
- A flexible, low footprint application lifecycle management offering **optimized for Agile development teams in mid-sized & large businesses**
- A middleware foundation based on a services oriented architecture (SOA) providing **flexible lifecycle service integration & adaptive process enactment** in the IBM Rational Software Delivery platform



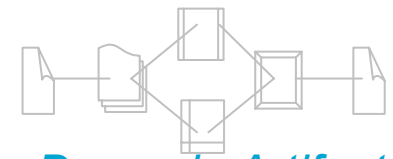
IBM Rational Team Concert – Beta

Globally distributed projects

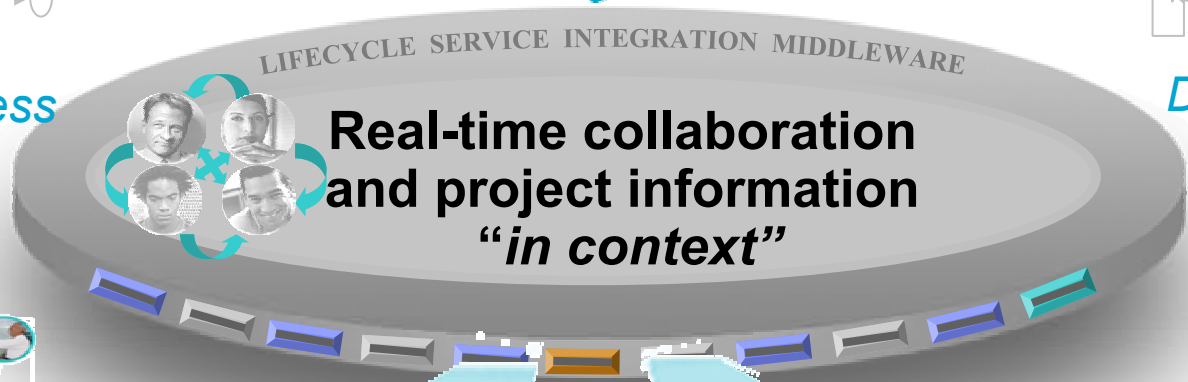


Adaptive Process Enactment

Powered by *jazz*



Dynamic Artifact Relationships



Globally Distributed Projects



Secure Eclipse & Web 2.0 clients

Team Concert Connectors

Provide bi-directional synchronization with ClearCase and ClearQuest

jazz

Rational software

ClearCase

jazz

Rational software

ClearQuest

Architecture Management

*Maximize business impact
with improved return on software assets*

▪ **Rational Asset Manager**

- ▶ Ensure asset traceability, re-use and architectural governance
- ▶ Participates in a federated repository strategy
- ▶ Integrated with CC, CQ and RSA

▪ **Rational Software Architect**

- ▶ UML to BPEL transformations
- ▶ .NET extension for UML modeling

▪ **Rational Application Developer**

- ▶ Enhanced Web services support for WebSphere



Rational Asset Manager v7.0



Increase productivity with Rational Asset Manager

- Easily locate existing reusable assets** with search capabilities, fast retrieval and rich client integration with Eclipse
- Create and package assets** for models, patterns, code, test, and artifact relationships
- Highlight reusable assets** important to the business through ratings, feedback and statistics
- Manage roles and access control securely** by reporting on access patterns, ratings and values for both internal and external assets (outsourced vendors)
- Manage change by implementing a review process** and enabling architectural policies

Search for Assets

Search for [Advanced search >>](#)

Your search and search results 330 assets found

Filters: none

Name	Version	State	TeamSpace	Last modified	Relevance
testCreateWithRAMconnection.asset	1159491744676	Approved	RAM Group	Sep 28, 2006	
testCreateWithRAMconnection.asset	1159491744676	Approved	RAM Group	Sep 28, 2006	
TestDownload	1.0	Review	Delta Project Team	Sep 28, 2006	
TestDownload	1.0	Review	Delta Project Team	Sep 28, 2006	
Tester	1.0.1.2	Approved	Insurance LOB Testers	Sep 28, 2006	

Downloads

Rank: 40 out of 243

Total downloads: 1

Average for this asset type: 2.35

Unique downloads: 1

Artifact browses: 0

Accelerate project timelines and drive innovation

Search for Assets >

Tester

General details | Content | Rate and discuss | Statistics

Asset Information

Name: Tester

My rating:

Average rating: (1 rating)



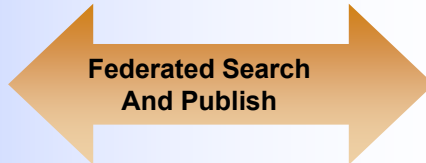
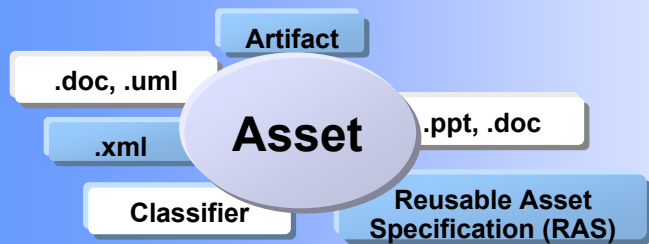
Business will need multiple service and asset registries/repositories, that will need to be federated

Development



Manages asset information for development and re-use

- ✓ Define asset types
- ✓ Creates and manage all types of assets
- ✓ Provide asset traceability and details
- ✓ Collaborate on asset development

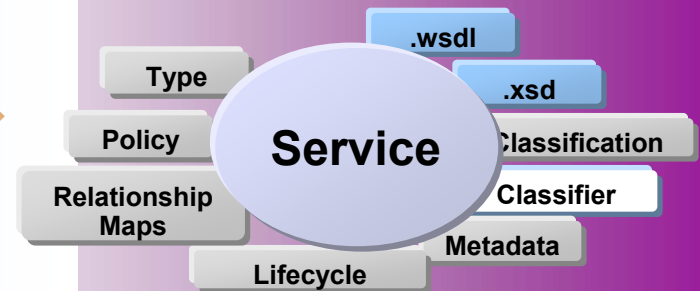


Deployment / Run-time

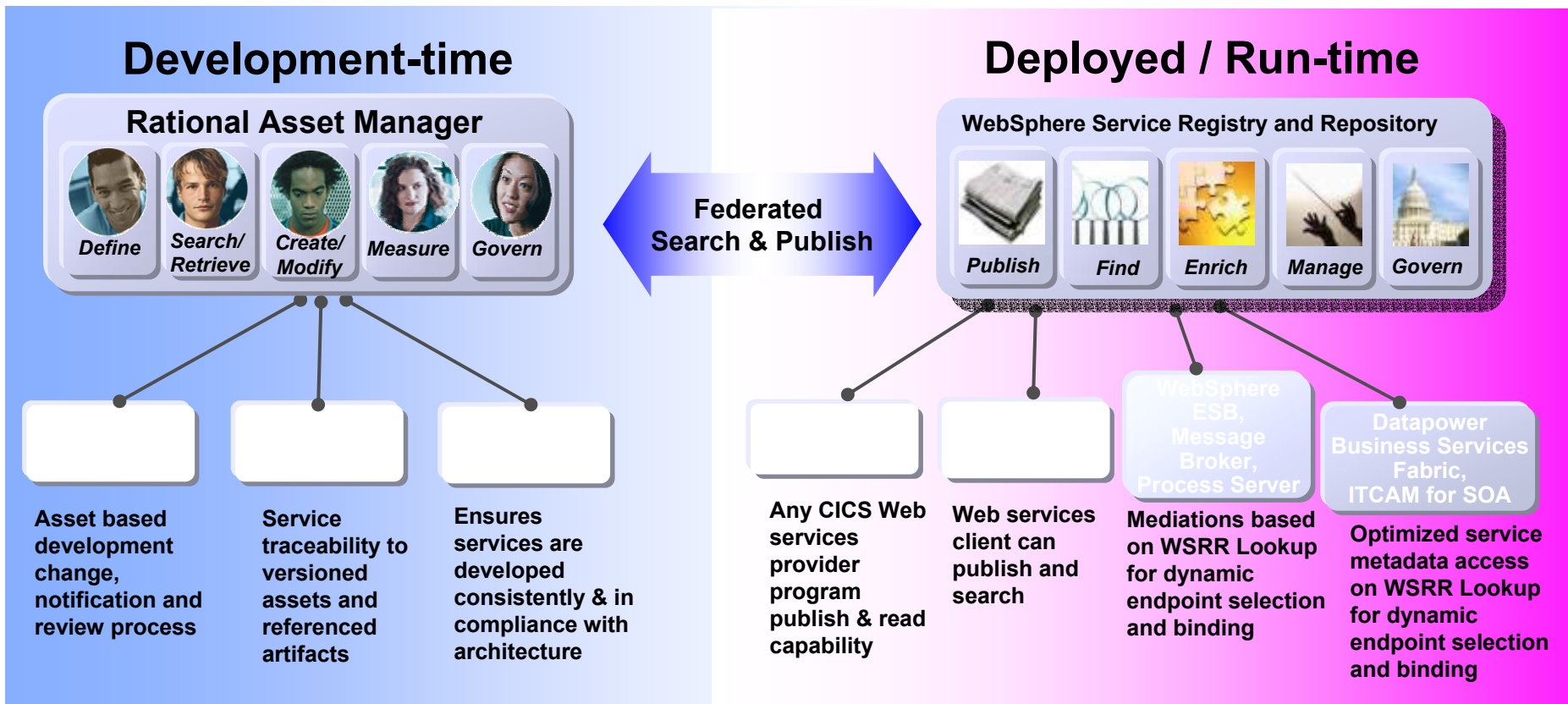


Manages service information for deployment and runtime operation

- ✓ Select service endpoints dynamically at runtime
- ✓ Govern runtime changes to service metadata
- ✓ Set runtime policies for service execution
- ✓ Receive deployed service details



Currently available tools will work with RAM and WSRR in an SOA environment



←

Federated Search & Publish

→

- Not every deployed service is a reusable asset and not every reusable asset is a deployed service
- A service will be one of many types of assets managed by Rational Asset Manager

Enterprise Modernization

*Renewed focus and emphasis
on System i and System z development*

▪ **Rational Business Developer Extension**

- ▶ Develop platform-independent SOA and web applications
- ▶ EGL language supports service definition

▪ **WebSphere Studio Asset Analyzer**

- ▶ Improved legacy asset discovery including enhanced impact analysis

▪ **WebSphere Development Studio Client for System i**

- ▶ Improved speed and productivity of SOA and web development



**Rational Business Developer
Extension v7.0**

**WebSphere Studio Asset Analyzer
v5.1**

**WebSphere Development Studio
Client for System i v7.0**



Announcing the Intent to Acquire Telelogic

Extending the ability to help our customers govern the process of software and systems development

IBM Rational's acquisition of Telelogic will accelerate innovation of products that rely on software, a segment with double-digit growth. The complex space includes industries such as consumer electronics, medical systems, automotive and aerospace & defense.



New Rational offerings driving greater visibility and collaboration

- ▶ **Increasing project insight and efficiency across geographically / organizationally distributed teams**
- ▶ **Gaining intelligence on software asset usage and best practices to improve ROI**
- ▶ **Enabling agile teams with real-time collaboration and project health information**





Thank You

