



IBM Software Group

Overview of Rational for System z Software Offerings

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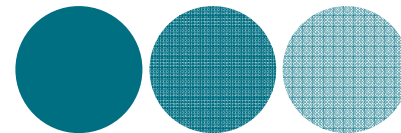
August 20, 2008

Rational software



Agenda

- IT Challenges in today's mainframe world
- Overview of Rational Enterprise Modernization solutions for System z
- Summary
- Q&A



IT Challenges and the need for Modernization

- Businesses need to change to stay viable, and IT must enable this flexibility
- IT must overcome challenges to enable flexibility, such as:
 - ▶ No inventory of current IT assets
 - ▶ Complex, tightly coupled architectures
 - ▶ Skills lock-in
 - ▶ Islands of development
 - ▶ No flexibility for new investments
- The IBM Rational Software Delivery Platform helps companies overcome these challenges with comprehensive support for enterprise modernization



Enterprise modernization challenges

“Legacy modernization is morphing into a strategic function. IT can't afford to toss away reliable application transactions indiscriminately.”

-- Phil Murphy, Forrester Research, April 2007

Assets

Layer of disjointed, poorly understood enterprise assets, preventing reuse

Architectures

Tightly-coupled architectures hindering IT flexibility

Skills

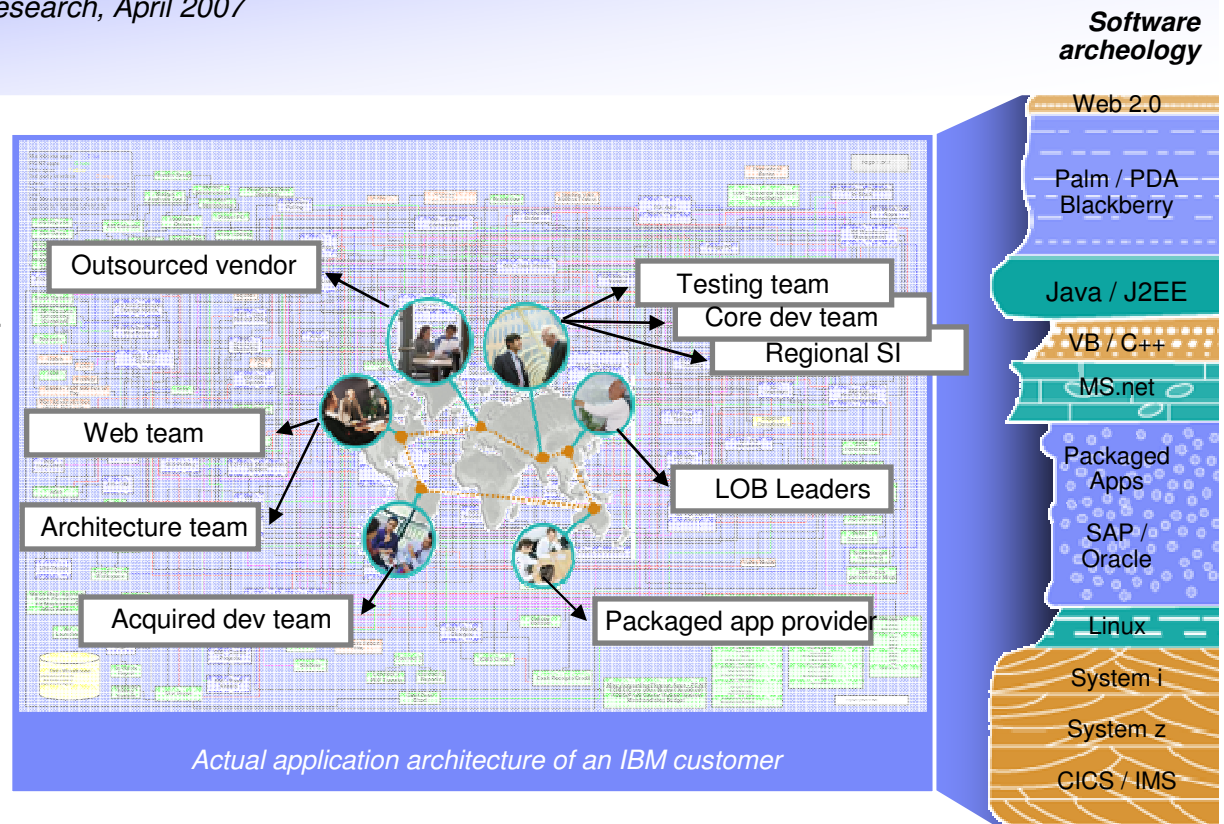
IT skills shortage and silos limiting staff productivity and mobility

Processes and Infrastructure

Duplicate processes, tools and infrastructures limiting collaboration

Investments

Increasing maintenance costs limiting flexibility for new investments



Asset modernization

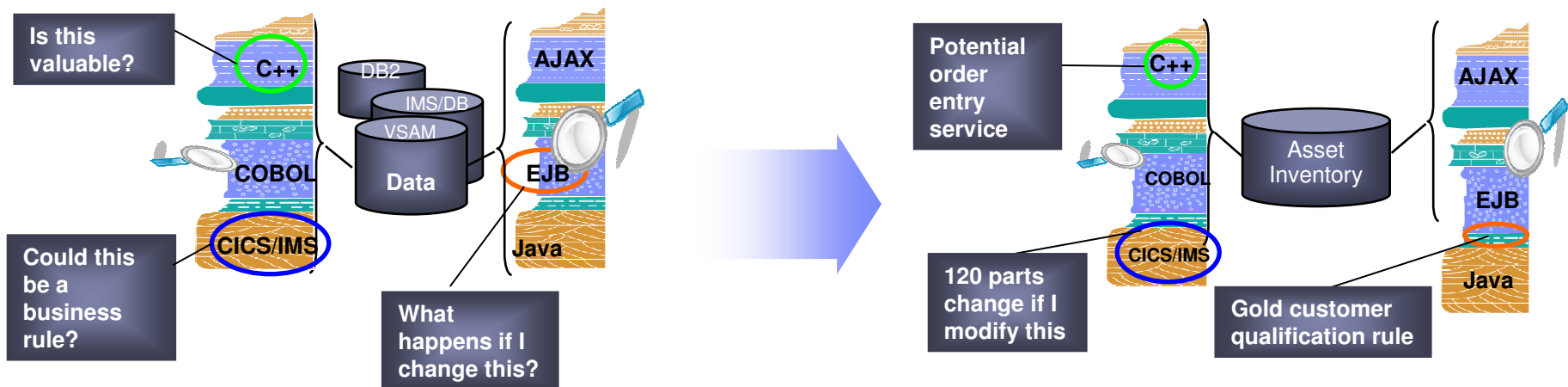
Challenge of managing knowledge assets

What you have...

- **A diverse application portfolio** evolved over many years and understood by few
- **Complexity** hindering the ability to gauge the impact of code changes resulting from new requirements
- **A lack of documentation** that limits reuse of existing business rules embedded within code

What you want...

- **An inventory** of existing highly stable code that embodies enterprise business intelligence
- **Ability to understand and manage** application complexity and change by making dependencies visible
- **Identify and document** existing business rules and business processes



Analyst studies have found it 5x less expensive to re-use existing applications than to write new applications.

Architecture modernization

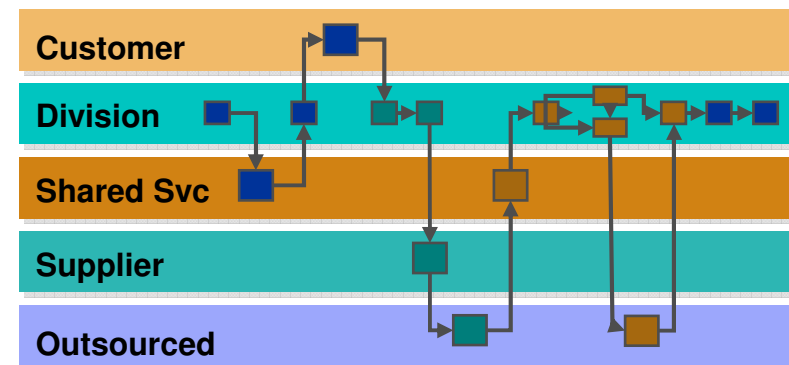
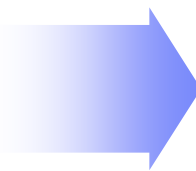
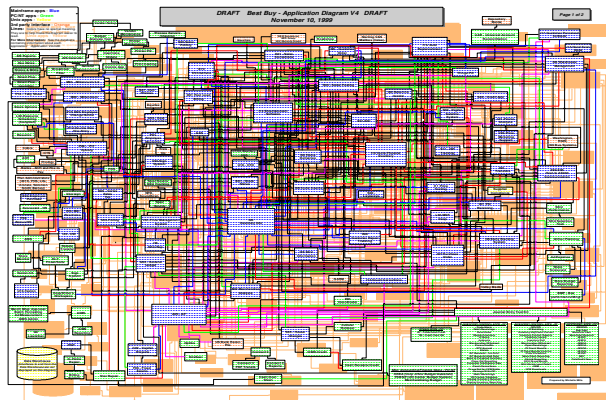
Challenge of tightly-coupled application architectures

What you have...

- **Tightly-coupled architectures** reducing flexibility and speed in moving to new technologies
- **Complexity** that hampers the ability to reuse existing code for new projects
- **Multiple implementation technologies** and incompatible middleware limiting code mobility

What you want...

- **Services created** from existing business logic or user interfaces for wider use and value
- **Increased reuse** of existing highly stable code that embodies enterprise business intelligence
- **Service design separated from service implementation** to attain optimal flexibility



“SOAs cost 20% less to implement and saves 50% more with each reuse than traditional component-based development... the level of reuse in SOA development averages 2.5 times more than non-SOA development”
Jeffrey Poulin, PH.D. and Alan Himler, MBA, 2006 “The ROI of SOA – Based on Traditional Component Reuse”

“Today’s IT architectures, arcane as they may be, are the biggest roadblocks most companies face when making strategic moves.” *The McKinsey Quarterly Special to CNET News.com, “Flexible IT, Better Strategy”, January 24, 2004*

Skills modernization

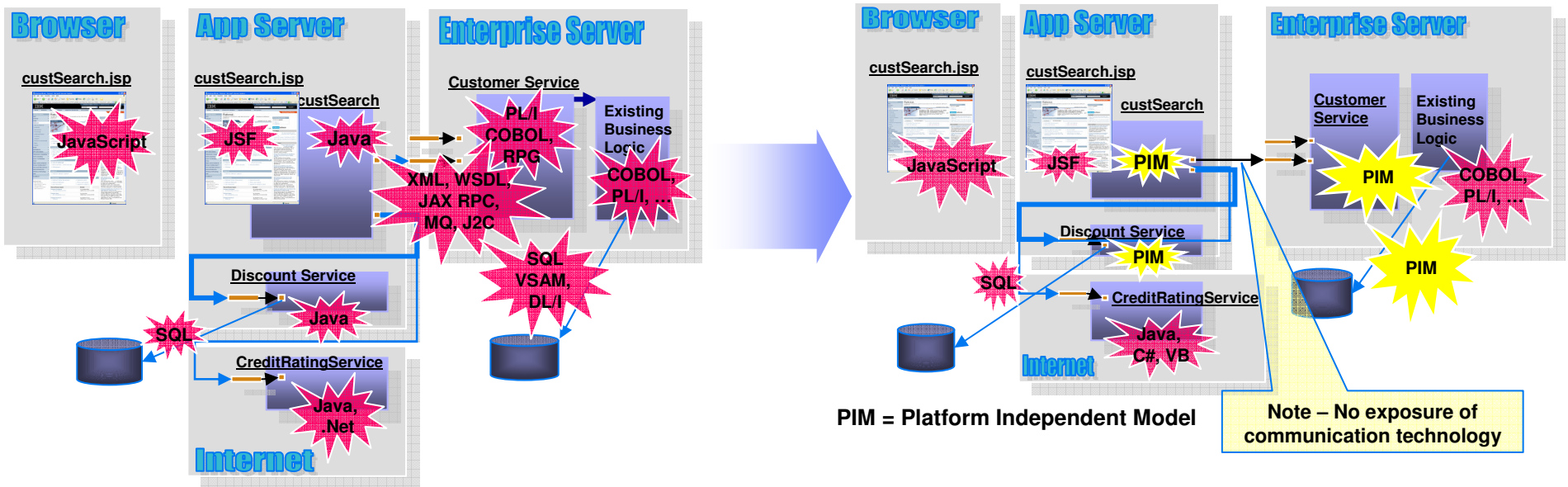
Challenge of IT skills shortage and silos

What you have...

- **Skills islands** preventing staff mobility and constrains IT flexibility resulting in application backlogs
- **Reduced capacity** due to dwindling IT skills and difficulty in attracting new development talent
- **Limited ability** to exploit technology innovations without retraining traditional developers to Java

What you want...

- **Increased mobility** of existing “business-knowledgeable” staff on multi-platform projects
- **Increased capacity** by deploying new employees on any project independent of target platform
- **Increased productivity** by leveraging solutions that hide underlying platform and technology complexity



Processes and Infrastructures modernization

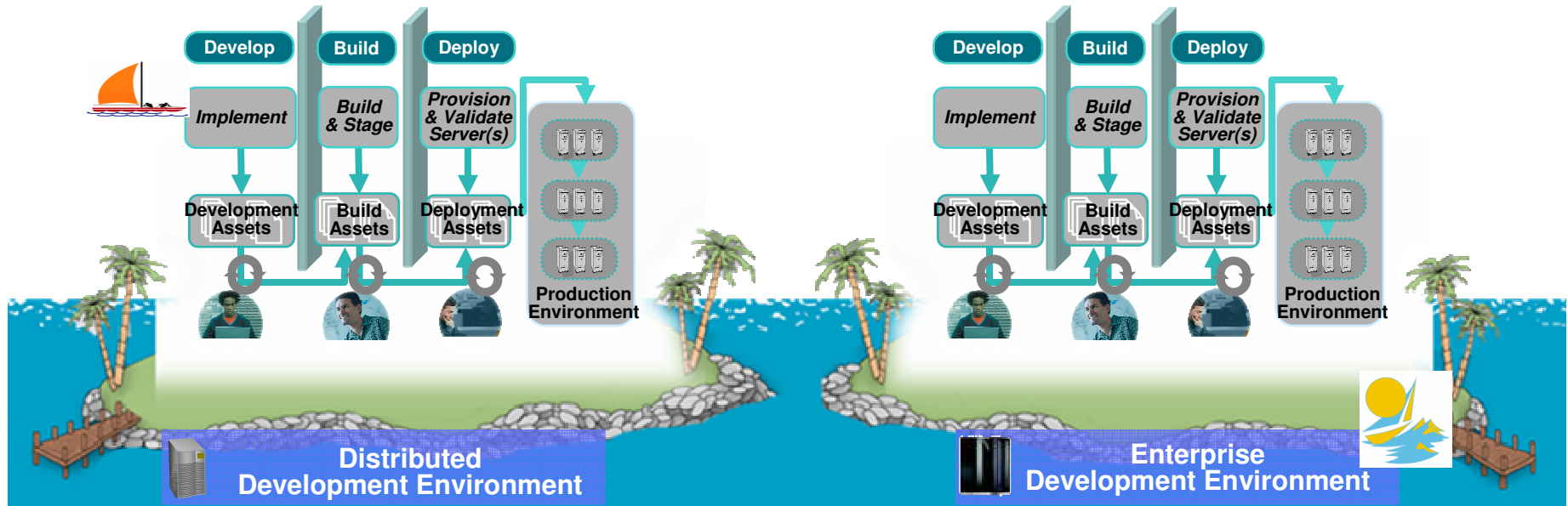
Challenge of IT development islands

What you have...

- **Different infrastructures** for host and distributed development limiting IT and staff flexibility
- **Increased costs** to support multiple infrastructures, with less capital available to invest in new projects
- **Lack of traceability** inhibiting end-to-end governance

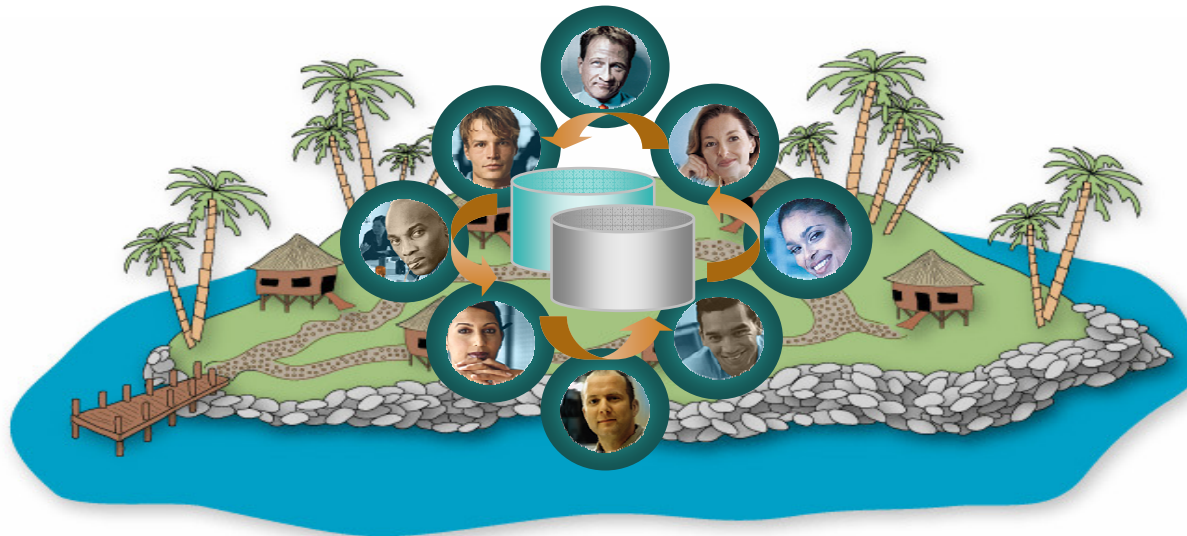
What you want...

- **Consolidated** towards a single infrastructure for host and distributed development environments
- **Improved efficiency** and reduced costs by eliminating duplicate tools and processes
- **Improved governance** and traceability across the entire software lifecycle



Processes and Infrastructures modernization

Challenge of IT development islands



 **Consolidated Development Environment** 

Investment modernization

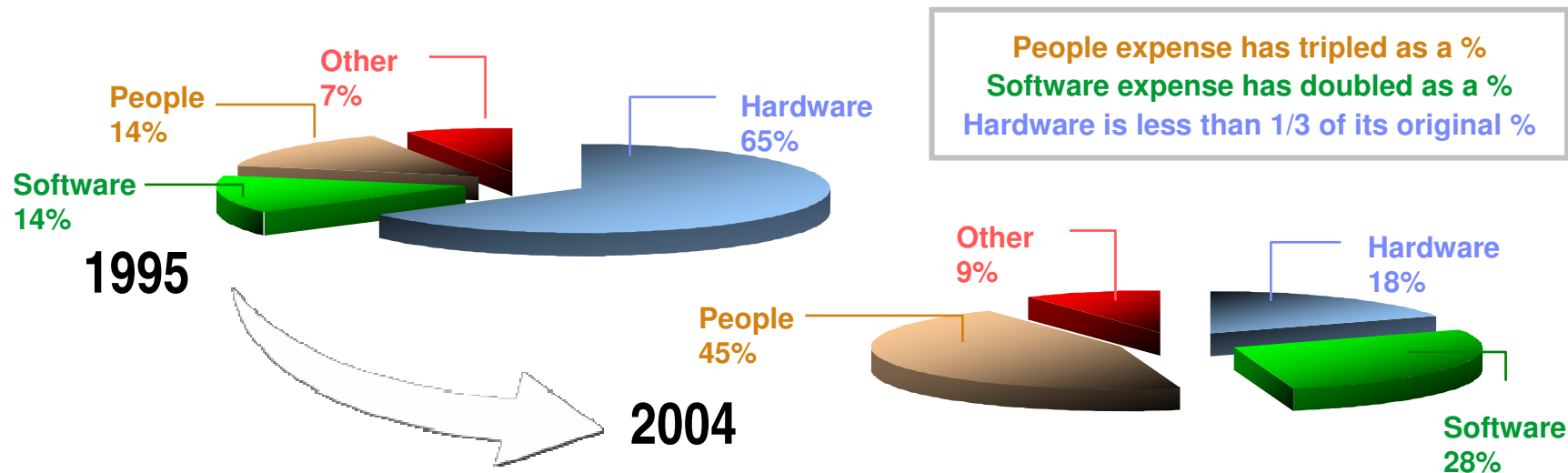
Challenge of lack of flexibility for new investments

What you have...

- **Shrinking IT budgets** with a significant % (~75-80) being applied towards maintaining existing systems
- **Outdated application development platforms** which cannot leverage modern technologies and middleware advances
- **An increasing application backlog** that limits ability to incrementally improve overall modernization posture

What you want...

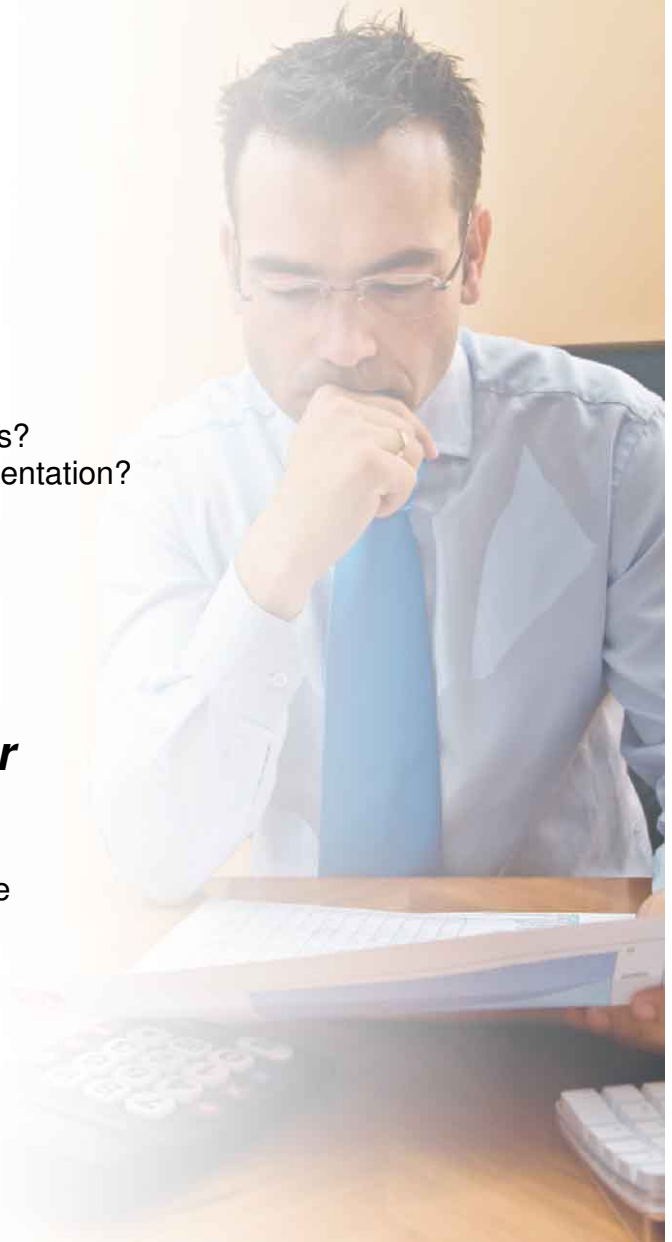
- **Freed-up IT budgets** to help devote resources to new development rather than maintenance
- **Move to standard development platforms** that support enterprise as well as distributed teams
- **Make incremental improvements** within the context of a long-term strategic modernization plan



Over the past 10 years, the cost dynamics in IT has changed significantly. Page 10

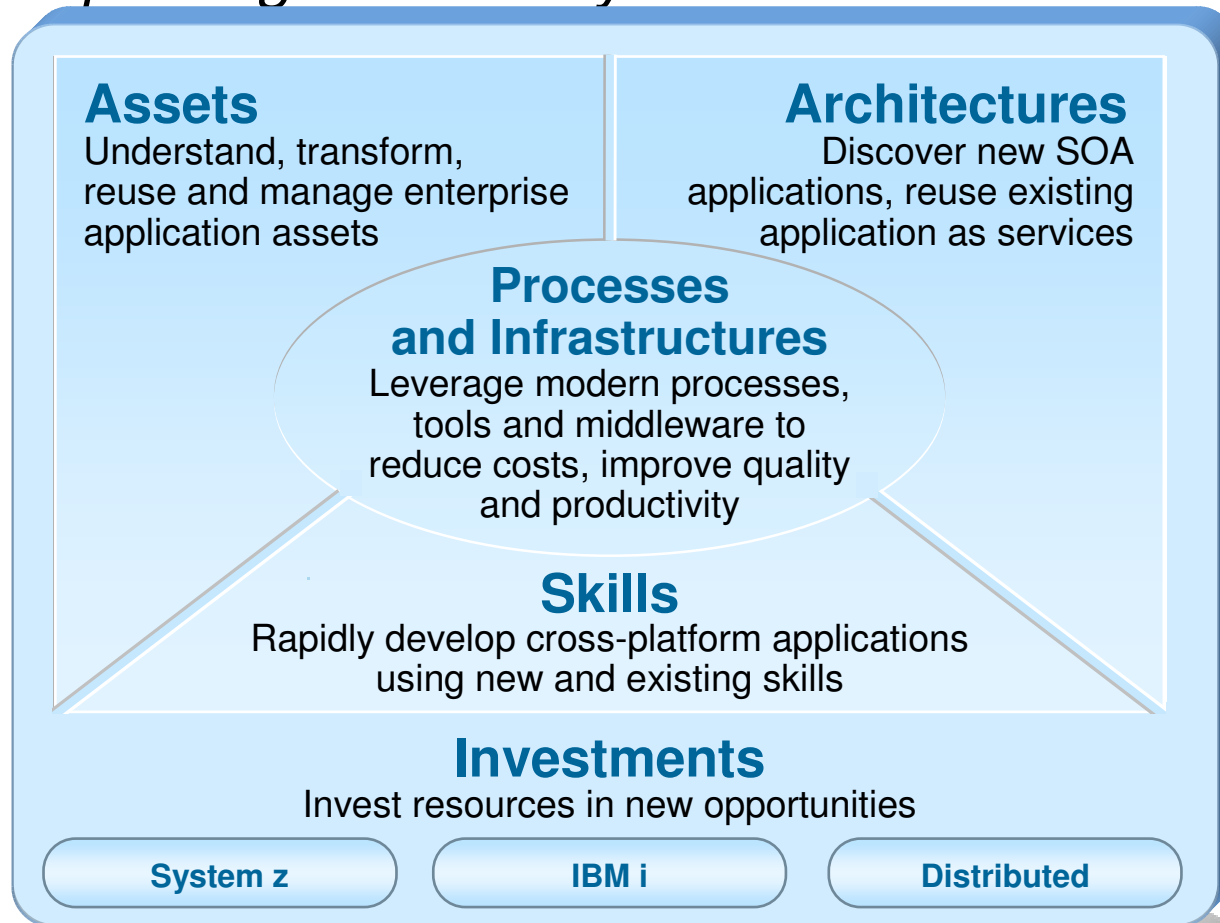
Customers are asking, “*can we...*”

- ***Leverage existing assets?***
 - ▶ Discover and gain control over our existing enterprise application portfolio?
 - ▶ Identify assets for reuse in a Service Oriented Architecture?
- ***Leverage modern architectures?***
 - ▶ Create services easily from existing code, including 3270 terminal applications?
 - ▶ Define new services for all deployment platforms from initial design to implementation?
- ***Leverage existing skills and attract new skills?***
 - ▶ Exploit new technologies and innovation without retraining existing staff that knows the business?
 - ▶ Utilize new employees on any project independent of target platform?
- ***Leverage a common development environment for all development teams?***
 - ▶ Lower costs due to elimination of duplicate tools and processes?
 - ▶ Realize improved end-to-end communication and traceability across the entire lifecycle?
- ***Leverage my development spending better?***
 - ▶ Reduce maintenance costs, freeing resources to work on new projects?
 - ▶ Improve application performance without expensive code changes?



Enterprise Modernization – Solution Overview

Improving IT flexibility



- ✓ Leverage value in existing assets
- ✓ Drive innovation with SOA and web technology advancements
- ✓ Leverage existing and new staff on multi-platform projects
- ✓ Improve quality and flexibility with a consolidated team infrastructure
- ✓ Reduce maintenance costs

For more information, visit:
www.ibm.com/rational/modernization

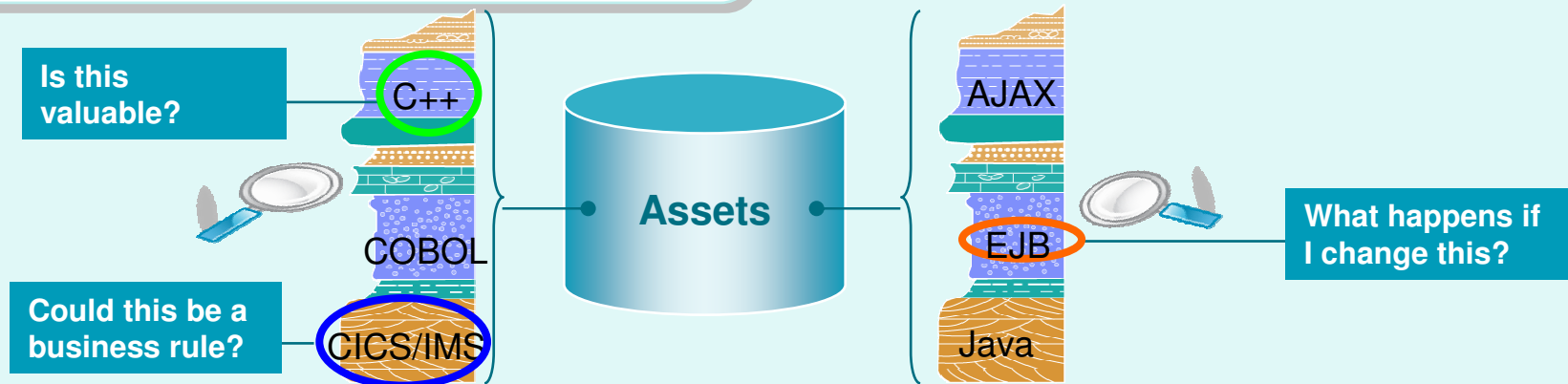
Asset modernization



Challenge *No electronic inventory of assets*

How can we...

- Discover and understand code dependencies so a change does not break production?
- Learn about application relationships and structures for new staff?
- Maintain control over code provided by outsourcers, business partners, or acquired through a merger?
- Identify assets for reuse in a SOA?



Asset modernization



Challenge

No electronic inventory of assets

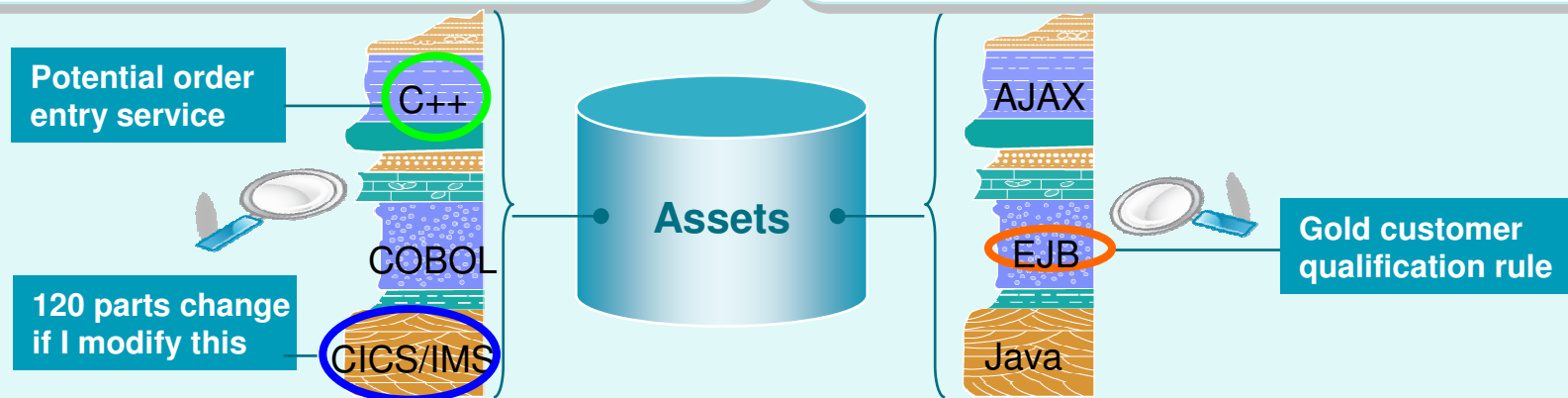
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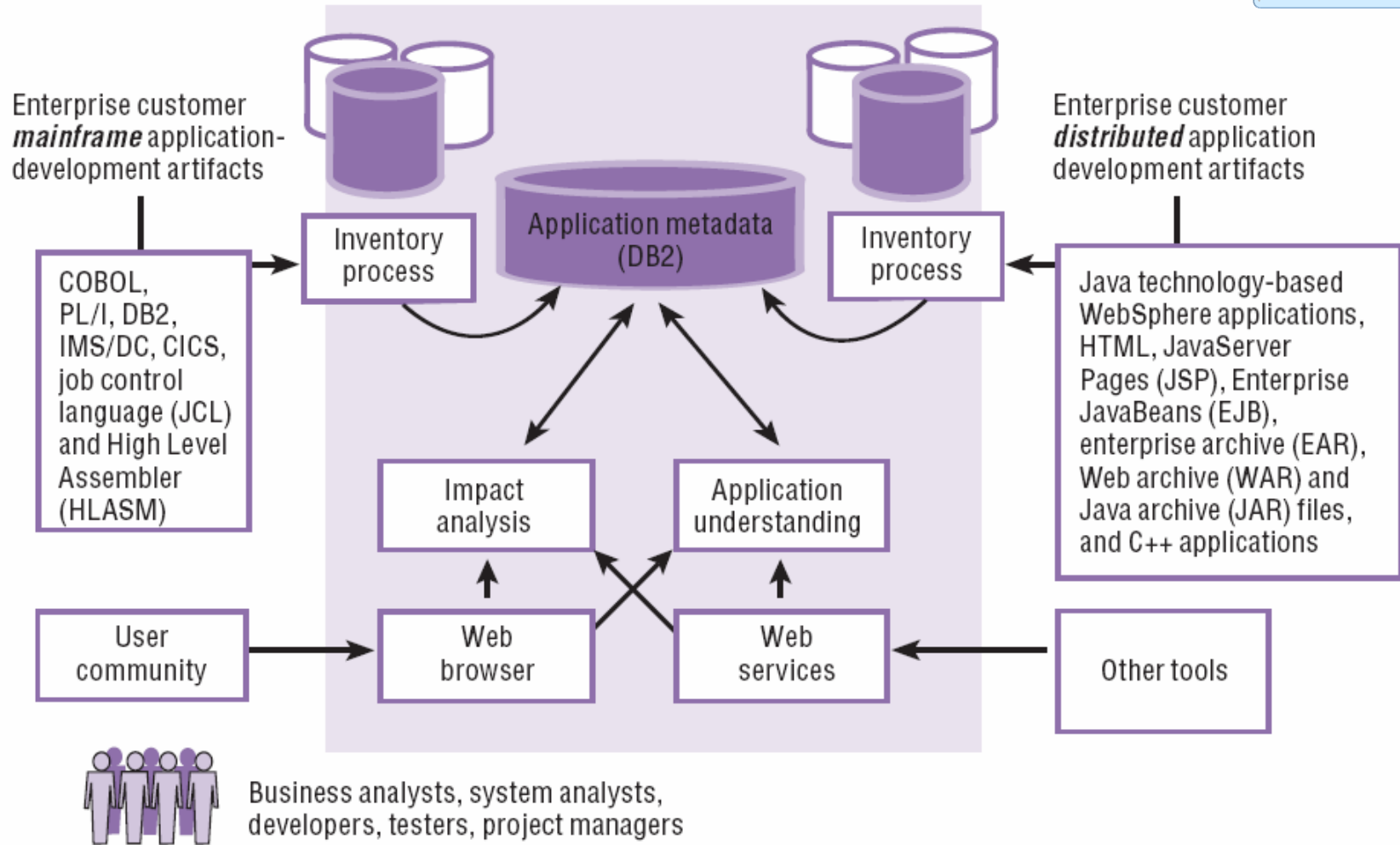
Solution

Comprehensive inventory of assets for impact analysis and reuse

- ✓ Understand existing assets and relationships
 - *WebSphere Studio Asset Analyzer*
 - *Rational Asset Analyzer*
- ✓ Understand and refactor existing assets for reuse
 - *Rational Transformation Workbench*
- ✓ Create and manage assets during development
 - *Rational Asset Manager*
- ✓ Deploy and manage services in a production environment
 - *WebSphere Service Registry & Repository*



WebSphere Studio Asset Analyzer V5.1



WSAA Web Service Support and Integration Features



- Composite and Web service application support, including the following:
 - ▶ Scanning Web services information and including these in impact analysis results
 - ▶ Automated detection of some composite application relationships, including EJB-QL
 - ▶ Wizard for manually articulating relationships between assets
 - ▶ Support for scanning CICS TS V3.1 Web service constructs in application source code
- Metrics support
 - ▶ Open metrics framework provides a way to plug in custom-written metrics engines or other tools.
- Tool integration
 - ▶ URL application programming interface for mashup-like integrations
 - ▶ Web service interface for getting data into and out of the WSAA repository
- Support of other software products
 - ▶ WebSphere Application Server V6.1 (including on System z)
 - ▶ CICS TS V3.1 (including CHANNEL and CONTAINER support)
 - ▶ Latest syntax in Enterprise COBOL and Enterprise PL/I

Rational Asset Analyzer V5.5

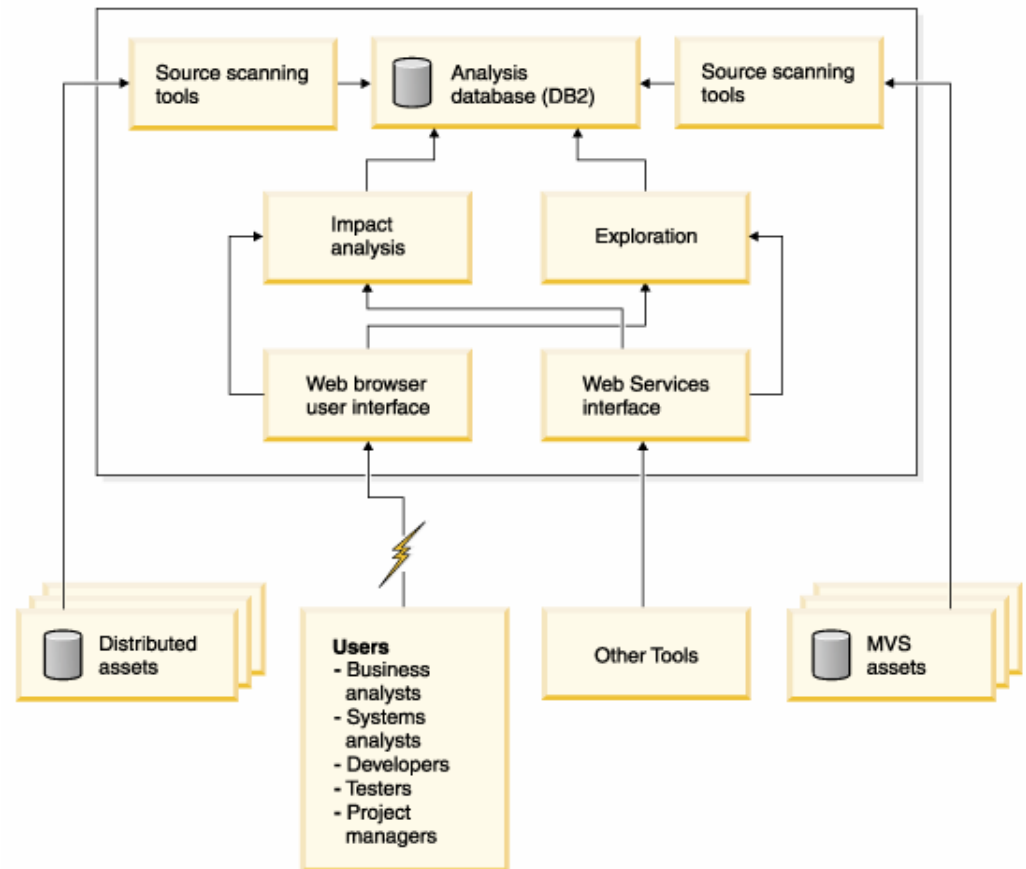
NEW!
Announced
July 29, 2008



What is Rational Asset Analyzer?

Asset Analyzer:

- Scans mainframe & distributed software assets downloaded to a Windows Server
- Stores related application information on DB2 running on Windows
- Consists of the following components:
 - Source scanners running on Windows
 - Metadata repository in DB2 on Windows
 - Web applications running on Windows



Rational Asset Analyzer – Integrations

RAA enhances value of other tools



- **Rational Developer for System z (RDz)**

- *Combine productivity gains of RDz with the enterprise-level insight in RAA to minimize time-to-market and minimize risk due to lack of visibility into impacted artifacts*

- **Rational Asset Manager (RAM)**

- *Use RAA to identify artifacts/assets of interest, then use RAM to publish those assets for reuse, and manage/govern the development process around changes to those assets. That is, jumpstart RAM deployments for a quicker ROI.*
- *Use RAA to perform deeper level analysis for change requests coming in to RAM.*

- **Rational Transformation Workbench (RTW)**

- *Use RAA to gain visibility and control at enterprise level, then*
 - ▶ *Use RTW Business Rules Extension to extract, document and manage business rules.*
 - ▶ *Use RTW Architect Extension to identify and remove dead code, and accelerate componentization efforts.*

RAA / WSAA Positioning



Use RAA when you want to:

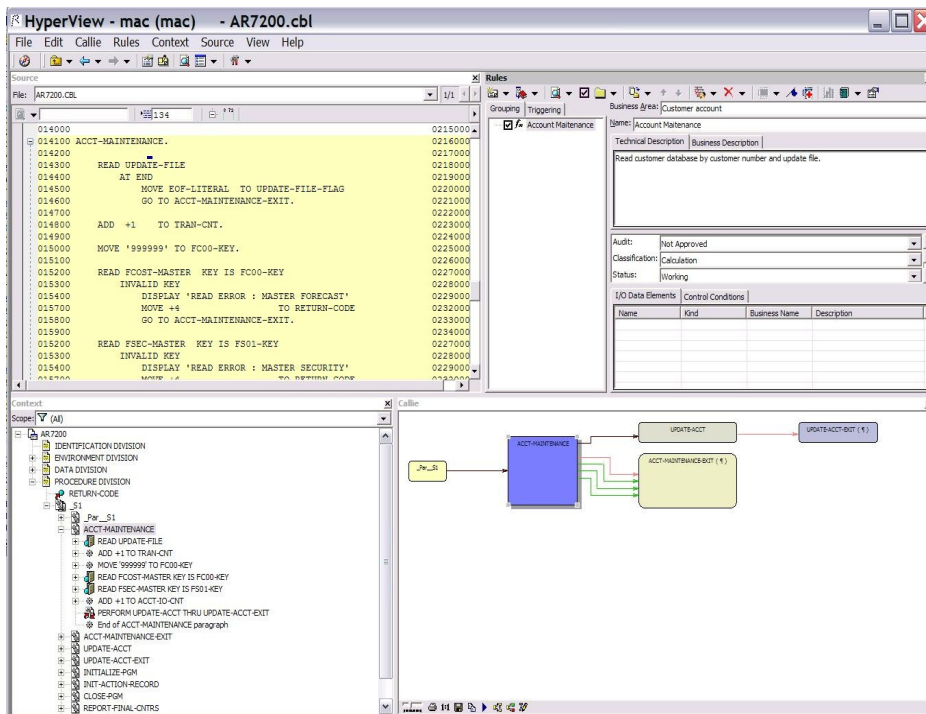
- Use the technology for either a small team that needs to get started quickly, or for the entire enterprise
- Deploy the technology on a Windows server
- To accelerate RAM deployments using information gathered by RAA

Use WSAA when you want to:

- Use the technology for large teams only
- Scan source where it resides i.e. on the mainframe
 - ▶ *There may be security policies that prevent users from moving the source*
- Scan artifacts that RAA does not support
 - ▶ *Assembler, CICS, IMS binaries, DB2 Catalog*

IBM Rational Transformation Workbench V3.1

Accelerate your path to reuse and SOA-readiness



The business rules extension can help speed the identification of your company valuable business rules

Rational Transformation Workbench v3.1 – helps collect and abstract business and technical knowledge from highly complex systems for better understanding

- Demystify enterprise applications and their inter- and intra-relationships
- Gain intellectual control; make fact-based decisions; develop transformation roadmap.
- Identify key assets and restructure for reuse in SOA; reduce cost and time of modernization projects
- Reduce cost and time of on-going application maintenance
- System level, source level and application glossary information to users
- Business rule extension improved usability, productivity, automation, auto-detection, visualization, reporting, abstraction and analytics
- Executive reports and report customization. Key reports available in batch mode

Rational Asset Manager



RAM helps create, modify, govern, find and reuse any type of development assets, including SOA and system development assets.

Key capabilities include:

- Easily locating existing reusable assets by category or key word searches.
- Once you have found them, assets can be inserted directly into IDEs like Rational Developer for System z.
- Ability to create packaged assets; assets can include model assets, pattern assets, code assets, test assets and even create relationships between assets.
- Highlights reusable assets important to the business by providing ratings and feedback and statistics as well as usage characteristics

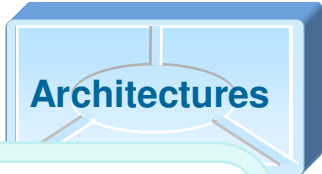
WebSphere Service Registry and Repository



WSRR helps maximize the business value of your service oriented architecture.

- Easily and quickly publish, find, enrich, maintain and govern services and policies in your SOA
- Store, access and manage service metadata information
- Encourage reuse in SOA projects through the publish and find capabilities
- Enhance connectivity through efficient access to services by both runtime applications and processes
- Optimize service usage through managing service interactions, dependencies and redundancies
- Enable enterprise governance via access control, service classification, impact analysis, policy support and a governance profile.

Modernize your architectures



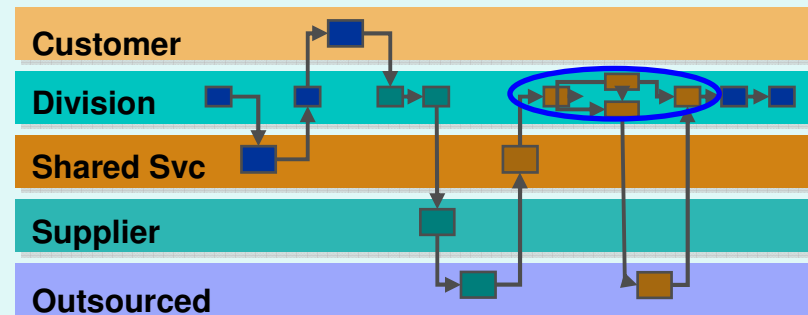
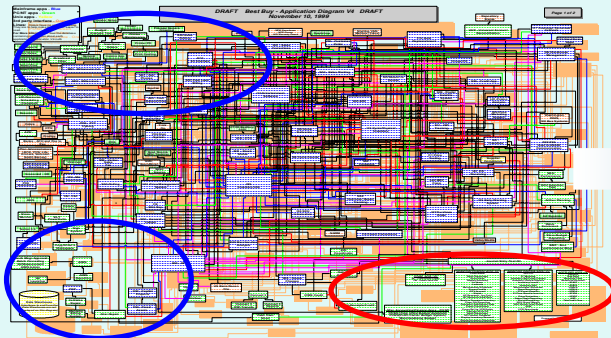
Challenge Complex application architectures

How can we...

- Create web services easily from existing code, including CICS, IMS, and green screen applications?
- Define new services for all deployment platforms from initial design to implementation?
- Use Model-Driven Development (MDD) to improve quality and productivity?

Solution Flexible architectures to enable business agility

- ✓ Transform 3270 and 5250 applications to web services
 - *Host Access Transformation Services*
- ✓ Quickly create web services from existing COBOL, PL/I, Java, or EGL applications
 - *Rational Developer for System z, with Service flow modeler (SFM)*
 - *Rational Business Developer*
- ✓ Transform UML to EGL, COBOL, Java, WSDL, C++
 - *Rational Software Architect*
- ✓ Create new services
 - *Rational Business Developer, with EGL Service*



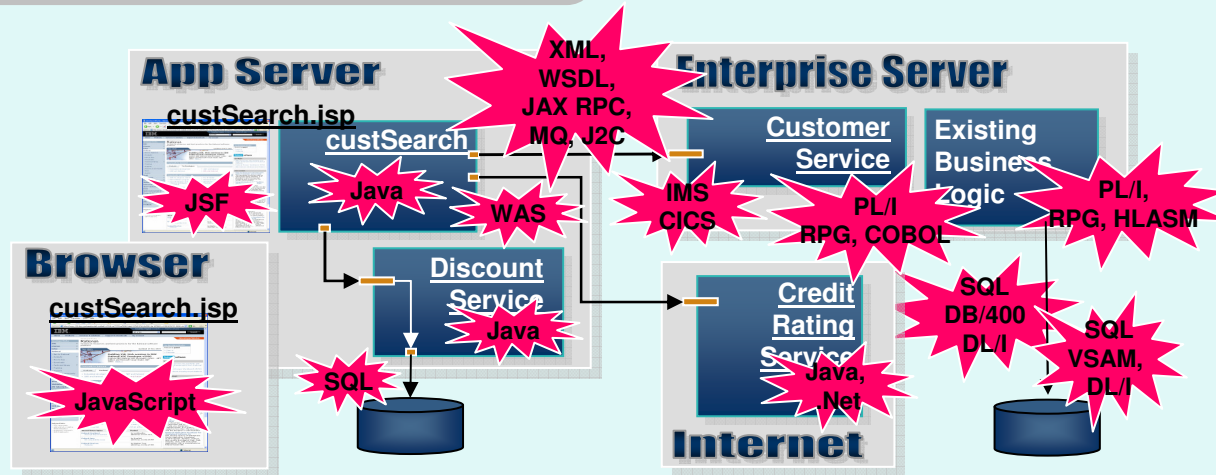
Modernize your skills – languages



Challenge Skills lock-in

How can we...

- Exploit new technologies and innovation without retraining our existing staff that knows the business?
- Use new employees on any project, independent of the target platform?
- Provide modern web UIs leveraging existing skills and systems?



Modernize your skills – languages



Challenge *Skills lock-in*

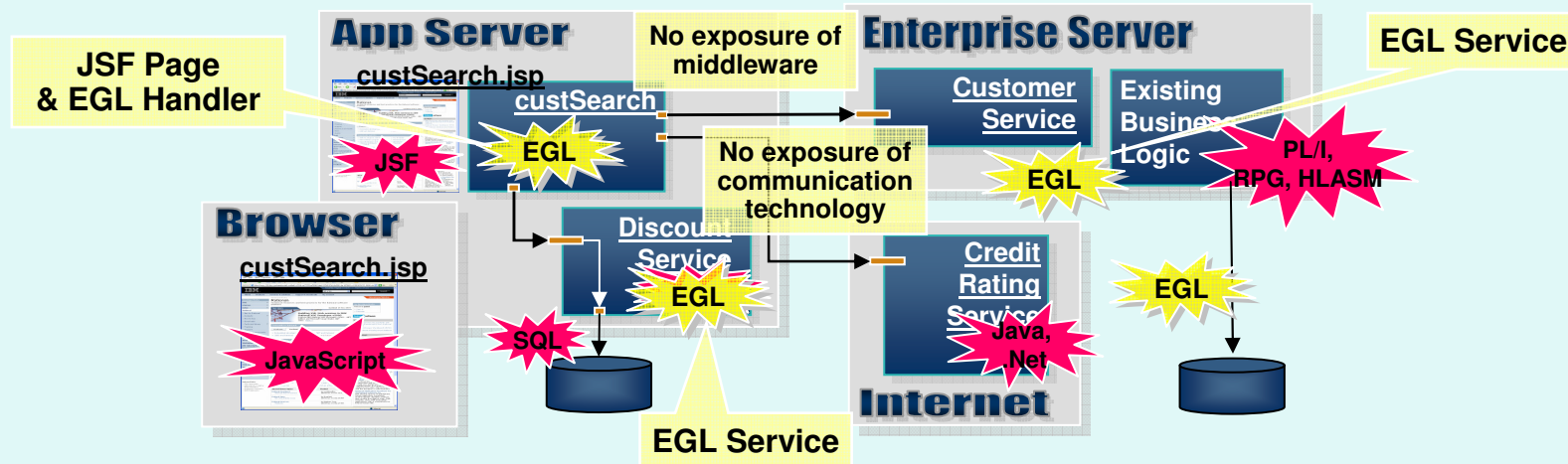
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Solution

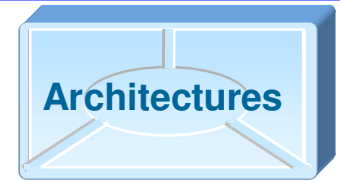
Powerful tools and abstractions for multi-platform development

- ✓ Apply existing business-knowledgeable staff to build all elements of multi-platform applications ... end-to-end from Web 2.0 to services to business transactions
- ✓ Attract new staff with “IBM’s newest business language” – Rational Business Developer

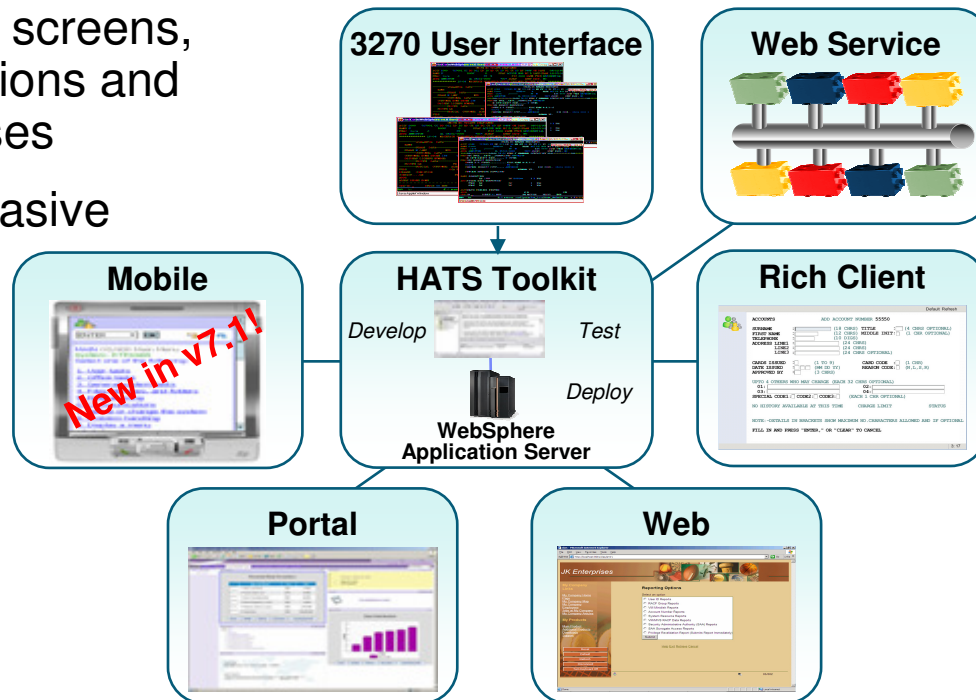


Host Access Transformation Services

Modernize user interfaces and create Web Services

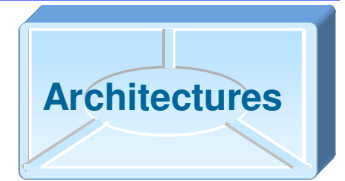


- Modernize and streamline “green screen” applications
- Combine data from multiple screens, applications and databases
- Non-invasive



- Integration at the desktop with other Eclipse applications
- Client side processing
- Rich set of user interface widgets
- Built on the standard, open Eclipse foundation

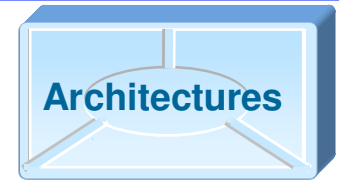
New in HATS V7.1



- Support for mobile services
- JSR 168 Support
- Visual Macro Editor – technical preview
- Updating HATS Web services
- Improved keyboard navigation for rich client applications
- Visual confirmation of subfile recognition
- Enhanced global variable support
- Automatic WebSphere class loader policy update during creation of business logic and custom components and widgets
- Bidirectional language support improvements
- Double-byte character set support improvements

IBM Rational Developer for System z V7.1

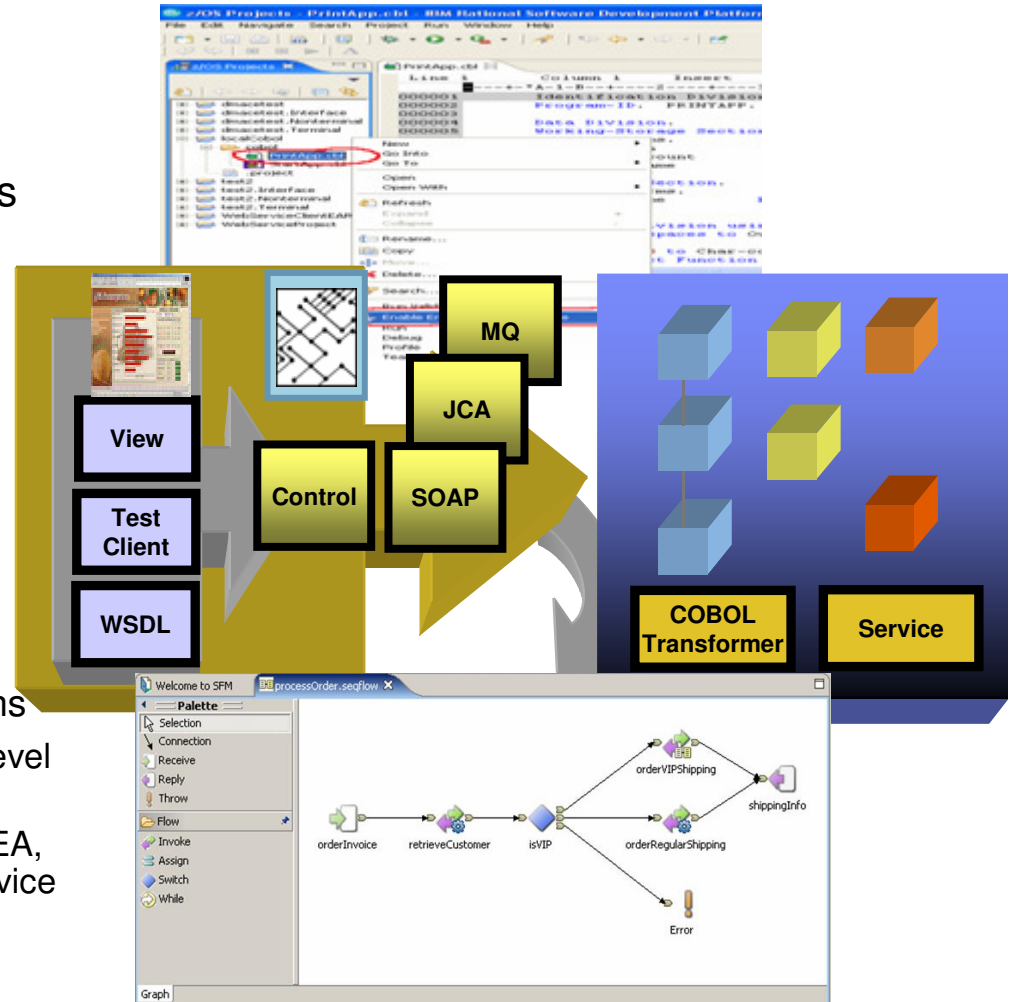
Preserve System z investment – and leverage existing assets



- An intuitive, visual construction based on open standards (J2ee, Java Server Faces)
- Broad SOA support through Web Services and JCA with specialized System z capabilities
- Build Web services from existing CICS applications
- Comprehensive state-of-the-art facilities for developing, debugging and deploying COBOL, PL/I, C, Java, CICS, IMS, Batch, DB2 processing

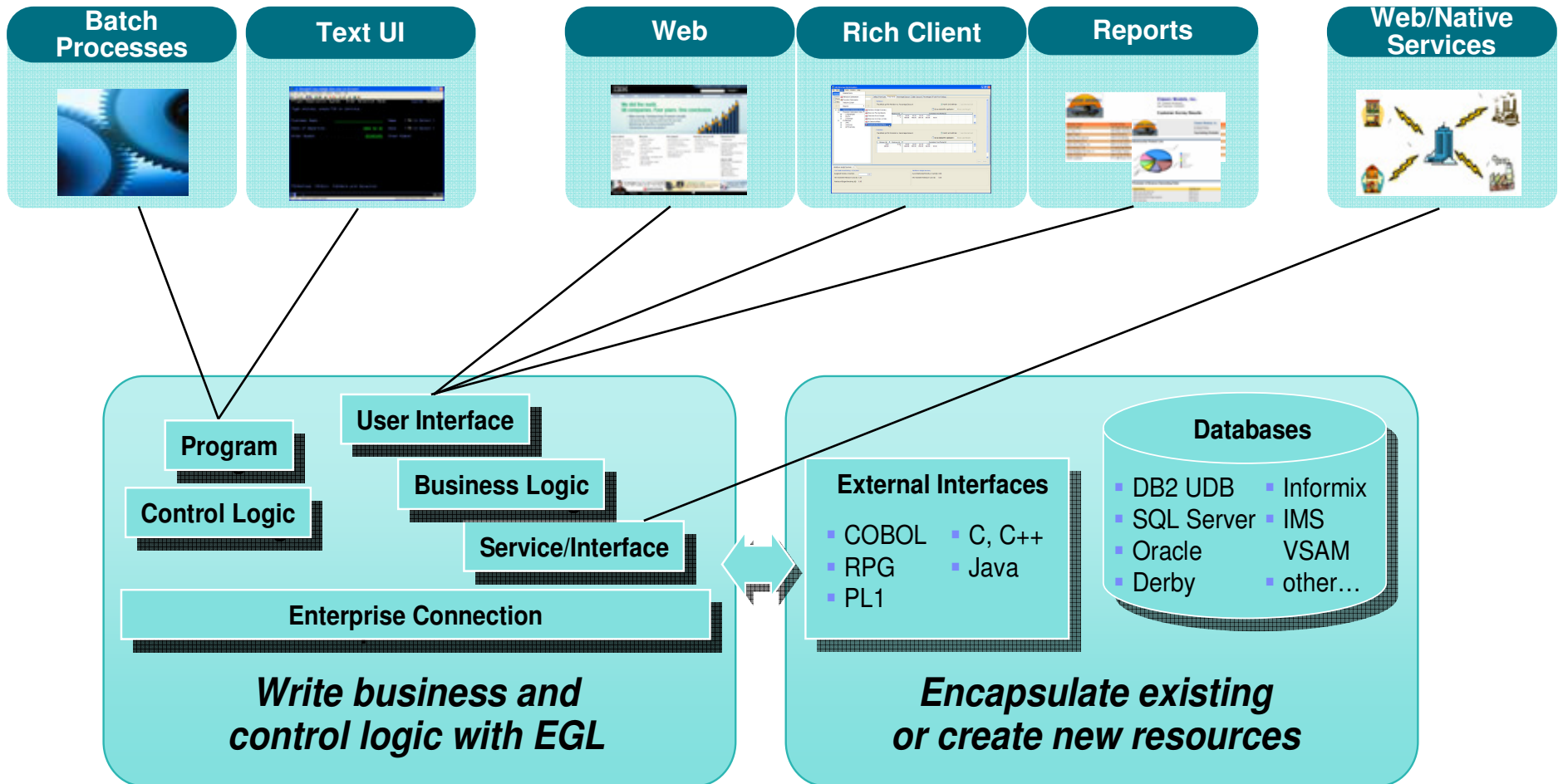
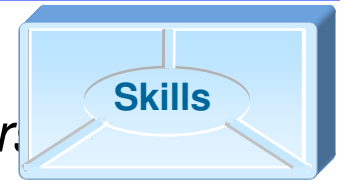
Service Flow Feature and Modeler for CICS v3.2

- Build Web services from existing CICS applications
 - ▶ Aggregates multiple CICS transactions into high-level business processes through visual modeling
 - ▶ Supports BMS (terminal-based), CICS COMMAREA, and CICS Channel/Container, and CICS Web Service applications
 - ▶ Highly optimized CICS runtime supporting Web services and XML interfaces

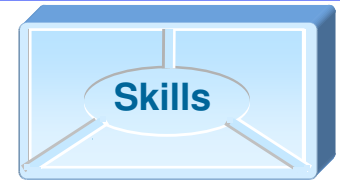


IBM Rational Business Developer V7.1

Unified approach to end-to-end construction that shields developers from intricacies of runtimes and middleware



IBM Rational Business Developer V7.1



- Integrate or reuse existing mainframe applications such as COBOL.
- Simplified and rapid service creation, while shielding developers from the complexity of SOA.
- Create Web 2.0 and AJAX applications using EGL's support for Javascript (Tech Preview).
- Define and create services implementations independently from the target execution platform.
- Deploy application and services to many platforms, including traditional environments, either as web services or natively.
- Integrates with RDz and Rational Software Architect. Model-driven with UML.
- JSF page development, dynamic modification of JSF control properties and able to integrate EGL control and logic behind JSF pages.
- Wizard based generation and specifications for database connectivity and SQL optimization.
- Automated conversion tool for VisualAge Generator.
- Use Rational Migration Extension to assist System z customers who have legacy Natural/ADABAS applications to migrate to EGL via an automated process.

Processes and Infrastructures modernization

Processes and Infrastructures

Challenge

Islands of development

How can we...

- ▶ Consolidate mainframe and distributed development environments to improve responsiveness, increase quality, reduce costs?
- ▶ Create event-based lifecycle management to eliminate inconsistent and mismatched versions across platforms?
- ▶ Establish end-to-end communication and traceability across the entire lifecycle?



Processes and Infrastructures modernization

Processes and Infrastructures

Challenge

Islands of development

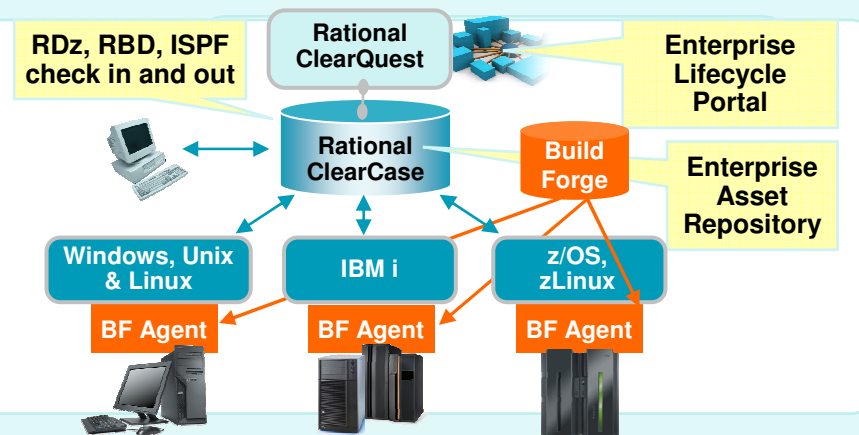
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Solution

Provide coordination, traceability, consistency across platforms

- ✓ Manage enterprise wide assets and change with common shared repository
 - Rational ClearCase
- ✓ Automate and orchestrate defect tracking and configuration management
 - Rational ClearQuest
- ✓ Produce coordinated, traceable, automated, and cross-platform builds
 - Rational BuildForge



Processes and Infrastructures modernization

Continued...

Processes and
Infrastructures

Challenge

Islands of development

How can we...

- ▶ Provide other solution focused process management capabilities?
- ▶ Save time and use automated tests, and validate the scalability and reliability of services before deployment?

Solution

Provide coordination, traceability, consistency across platforms

- ✓ Core Rational products provide project management, requirements management, and best practices to work
Rational RequisitePro, Rational Method Composer
- ✓ Test service functionality and scalability
Rational Functional Tester, Rational Performance Tester

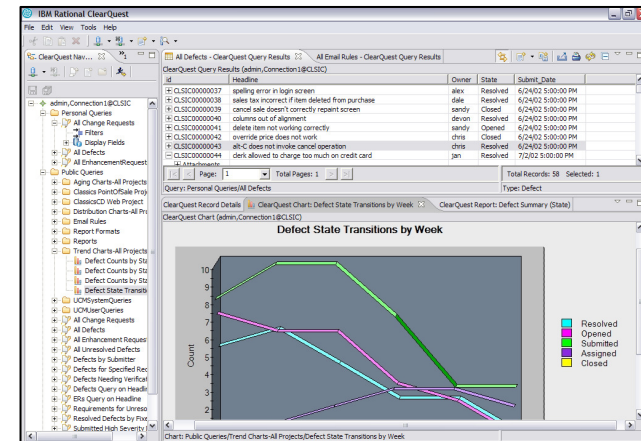
IBM Rational ClearQuest

Single solution to manage change across your project

Processes and Infrastructures

Governs, integrates, and automates your global development processes and workflow between your global teams IBM Rational ClearQuest orchestrates collaboration and work transfer between distributed team members.

- Consolidated, real-time view of the entire project status
- Traceable, auditable relationships between development, testing, building and project artifacts
 - ▶ Comprehensive quality metrics in project dashboards and reports
 - ▶ Manage test planning, test results, quality metrics, and defects
 - ▶ Secure, central repository
 - ▶ Integrations with version control, build management and requirements management



- Integration with Rational Asset Manager (RAM)
 - ▶ maximizes asset reuse
- Enhanced integration with Rational Portfolio Manager
 - ▶ maximizes project management

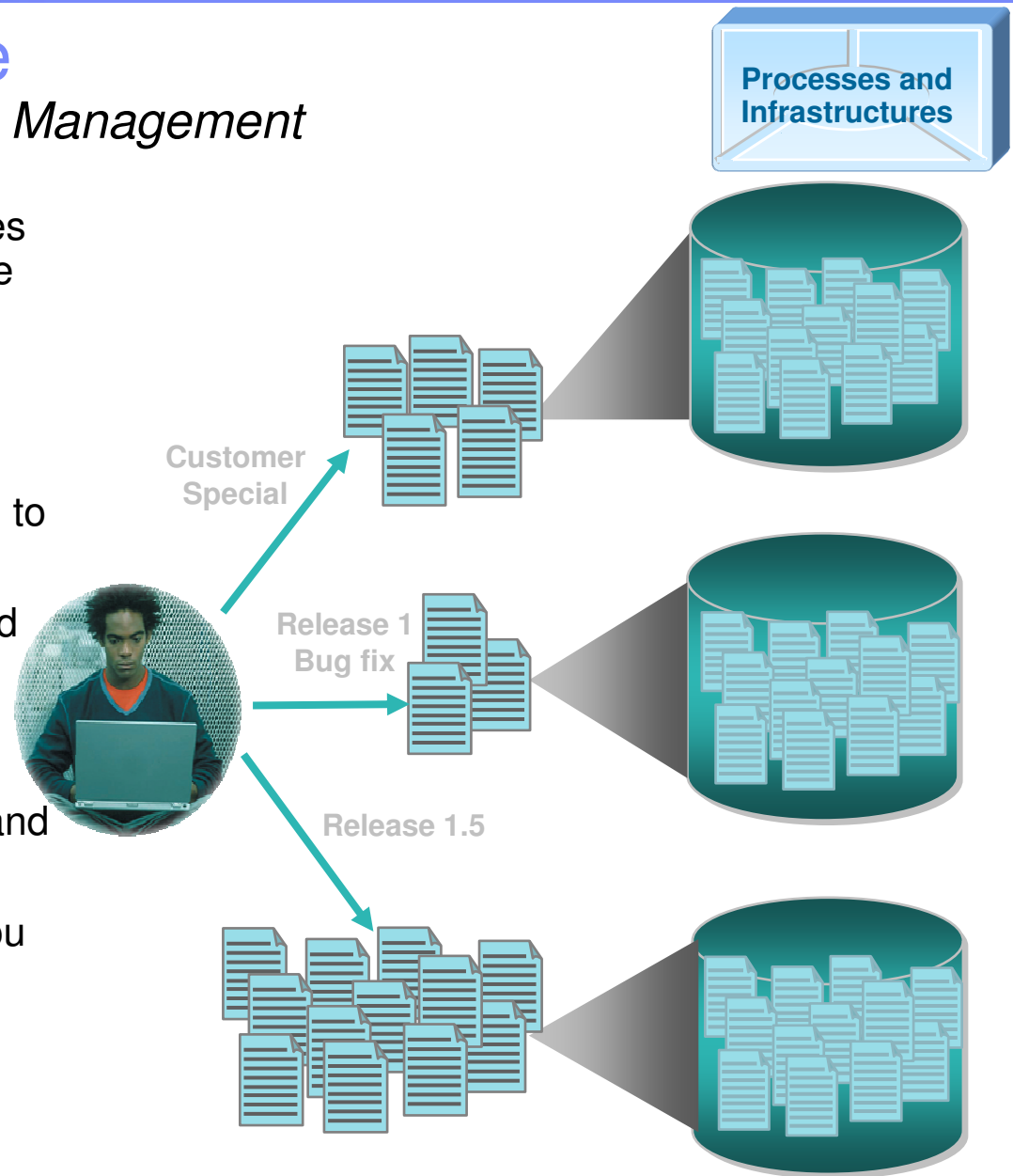
IBM Rational ClearCase

Complete Software Configuration Management

Processes and Infrastructures

An industry-leading solution that provides sophisticated version control, workspace management, parallel development support and build auditing to improve productivity

- Integration with leading IDEs allows you to work in your preferred environment
- Transparent real-time access to files and directories virtually anywhere in your organization
- Sophisticated branching and graphical merge tools enable concurrent access and efficient use of time
- Light-weight feature-rich clients allow you to work locally or remotely.
- Support for open source environments provides added workspace flexibility



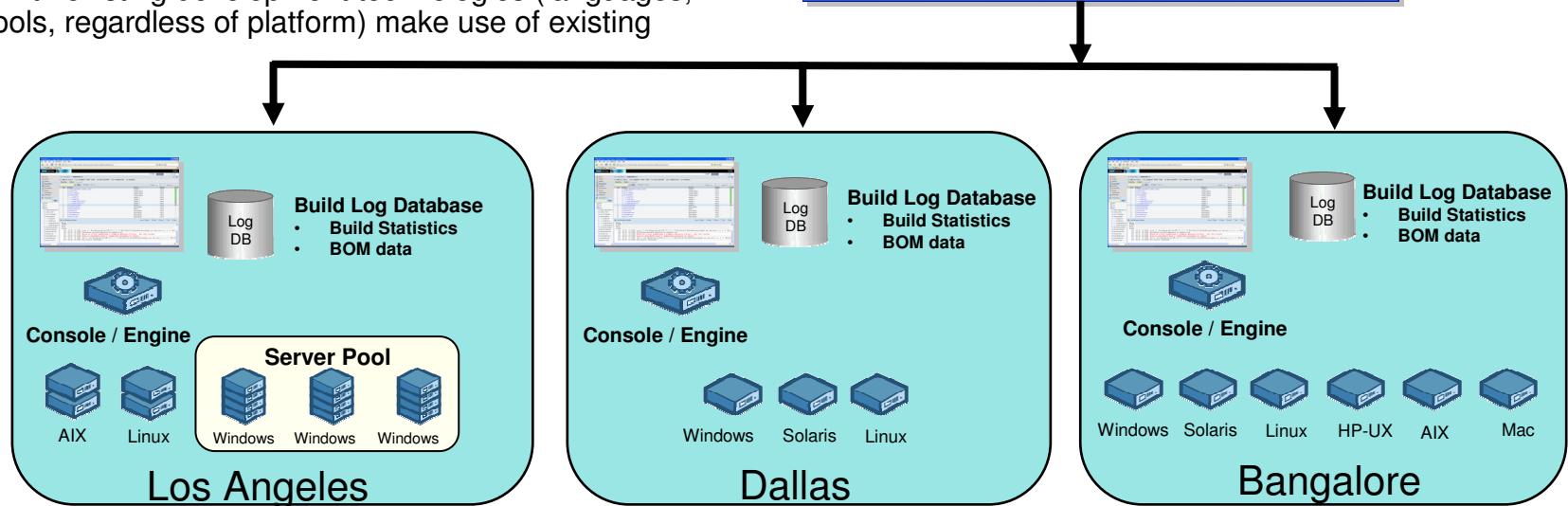
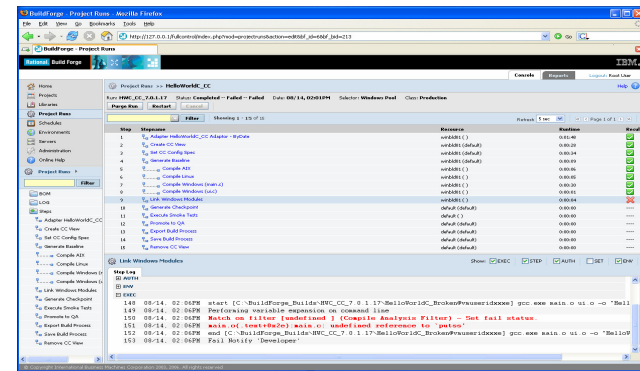
IBM Rational Build Forge

Centralized management across geographically distributed teams



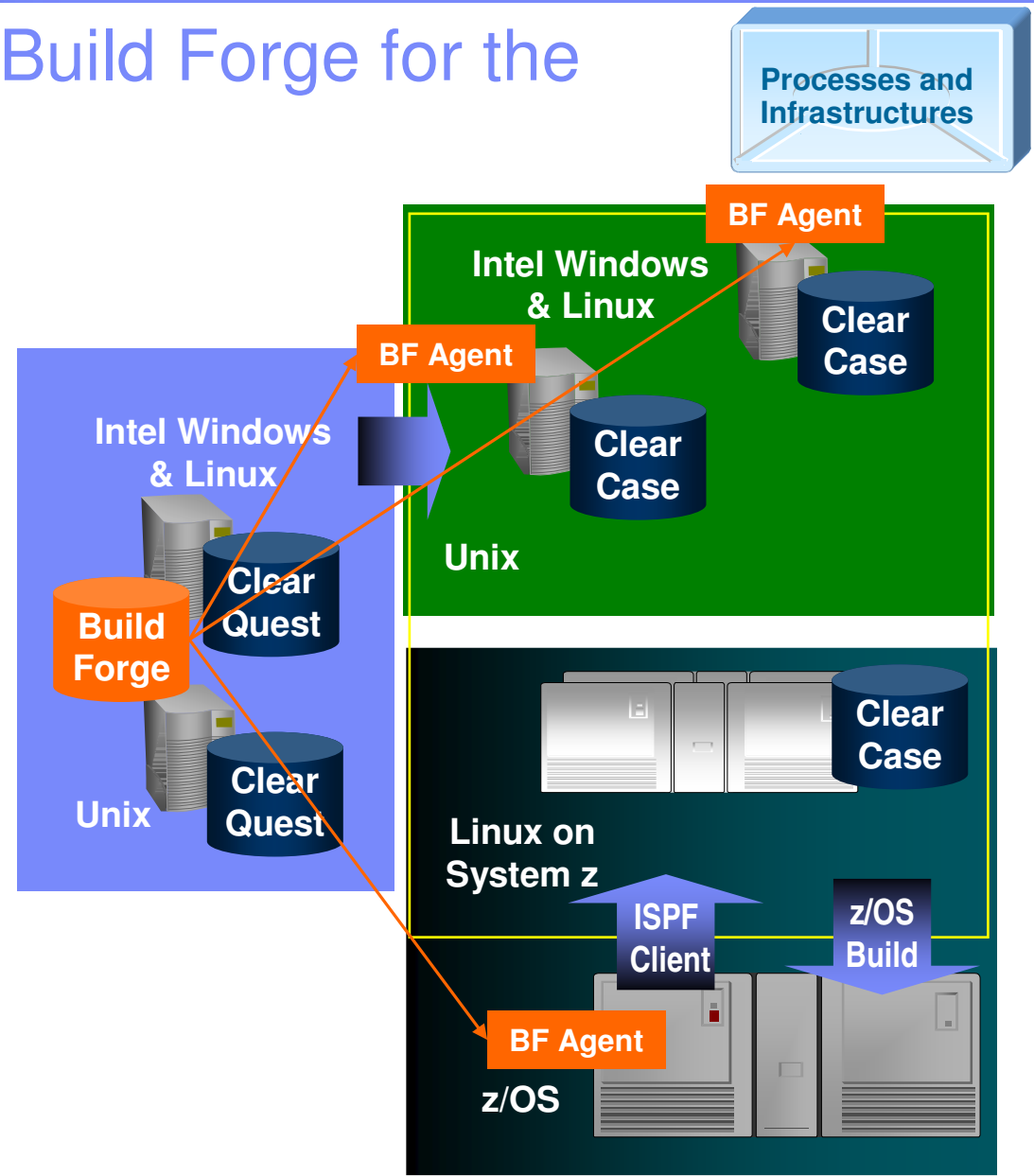
A process execution framework that automates and accelerates build and release processes for Agile development and streamlined software delivery

- Quick builds using pre-configured build processes and environments automates tasks for increased efficiency
- A complete bill-of-materials list changes and the contents of each build for more accurate testing and problem resolution
- Enterprise reporting improves visibility into the build and release processes and helps to meet compliance mandates
- Integration with leading IDEs provides controlled, self service access to production build processes and allows you to work in your preferred environment
- Integration with existing development technologies (languages, scripts and tools, regardless of platform) make use of existing investments



ClearCase/ClearQuest/Build Forge for the Enterprise

- Extends ClearCase/ClearQuest/Build Forge to manage both distributed and z/OS assets
- Provides single point of control, single artifact repository, single set of user interfaces
- Provides consistent process paradigm across platforms
- Extends the power of the Software Delivery Platform and ClearQuest/ClearCase UCM to z/OS development

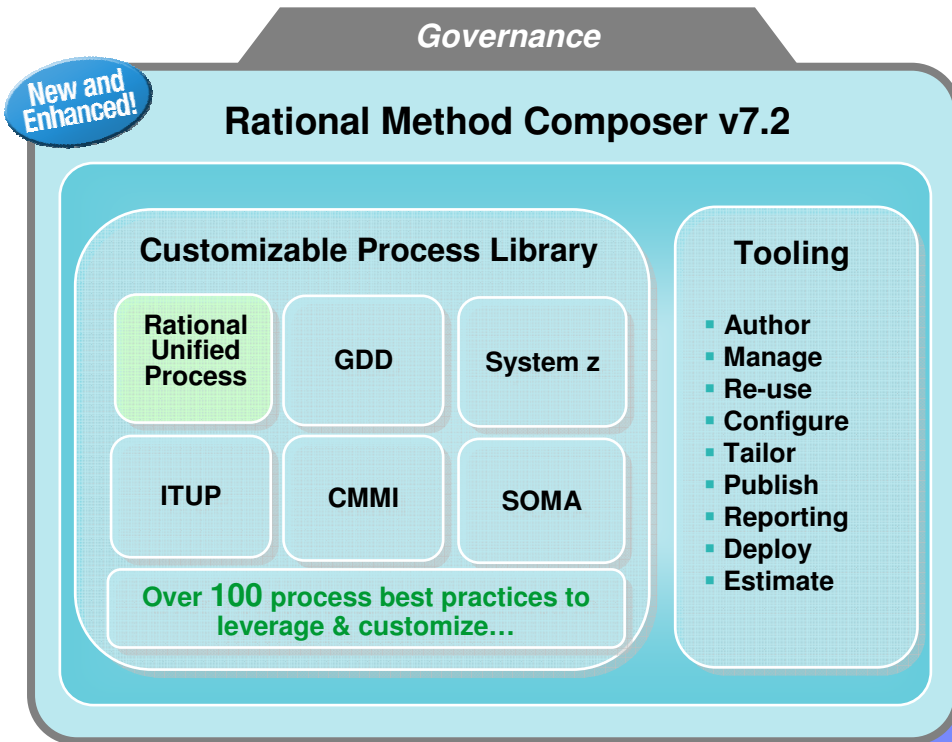


Rational Process Management

Putting process best practices to work



Now a library of over 100 !



Examples of process best practices

- Rational Unified Process for System z
- IBM Tivoli Unified Process (ITUP) & Rational Unified Process (RUP) integration
- RUP for global distributed development
- CMMI level 2 with CMMI & RUP mapping
- Asset Based Development (ABD) process for producing and consuming assets
- Plug-in to govern asset investments
- SOA design and construction

Result: Easier, more effective deployment of customized and adaptable process best practices for enterprise-wide application development

WebSphere

WebSphere Business Modeler integration to analyze & simulate processes

Managing Requirements with IBM Rational RequisitePro

Processes and Infrastructures

- Keep your team on track with interface of your choice
- Organizing and reporting on requirements
- Managing changing requirements for traceability
- Communicating changes and their impact

Requirements	Type	Priority	Status
FEAT1: Secure payment method Secure payment method	Functional	Must	Incorporated
FEAT2: Easy browsing Easy browsing for available titles	Functional	Should	Proposed
FEAT3: Search by multiple criteria Ability to search for CDs by multiple criteria	Functional	Must	Approved
FEAT4: Ability to check status of an order Ability to check the status of an order	Functional	Should	Validated
FEAT5: E-mail notification of new titles of interest E-mail notification for Shoppers when new titles that may interest them are added to the collection.	Functional	Could	Proposed
FEAT6: Highly scalable Highly scalable to include many titles and effective searching through those titles	Non-Functional	Must	Proposed
FEAT7: Ability to customize the Web site Shoppers should be able to customize the Web site.	Functional	Should	Proposed
FEAT8: User registration good for future purchases Shoppers should be able to register once for all purchases; they should not be asked to re-enter personal information.	Functional	Should	Incorporated
FEAT9: Shipping Status Shoppers should be able track any package that has been shipped to them.	Functional	Should	Approved
FEAT10: Ability to add/remove offerings to add/remove CDs available for sale	Functional	Should	Proposed
1.1 Ability to check on customer orders to check on Shopper orders	Functional	Must	Incorporated
1.2 Maintain customer information gain Shopper information	Functional	Must	Proposed
1.3 Generate reports rate reports	Functional	Should	Incorporated
1.4 Use Legacy System existing legacy Warehouse System for shipping orders.	Functional	Must	Proposed

UC4: Purchase CD	FEAT1: Secure Payment method	FEAT2: Easy Browsing for available titles	FEAT3: Search capabilities	FEAT4: Ability to check the status of an order.	FEAT5: E-mail notification of new titles of interest
UC4.1: BRIEF DESCRIPTION The Shopper has already selected CDs he/she is...					
UC4.2: BEGIN REQN. The use case ends when the Shopper...					
UC4.3: IDENTIFY SHOPPER IDENTIFY SHOPPER. The system requests...					
UC4.4: GET PROJECTED SHIP DATES GET PROJECTED SHIP DATES. The system...					
UC4.5: SUMMARY SUMMARY. The system displays a summary of...					
UC4.6: COMPLETE ORDER COMPLETE ORDER. The Shopper completes...					
UC4.7: END END. The use case ends when the new order has...					
UC4.8: INVALID SHOPPER ID					

“With Rational RequisitePro's suspect links, my team members and I can immediately see changes that are made...”

Jason Oliver, Kodak

Functional Testing with Rational Functional Tester

Test automation for the novice and the professional

Processes and Infrastructures

■ IBM Rational Functional Tester

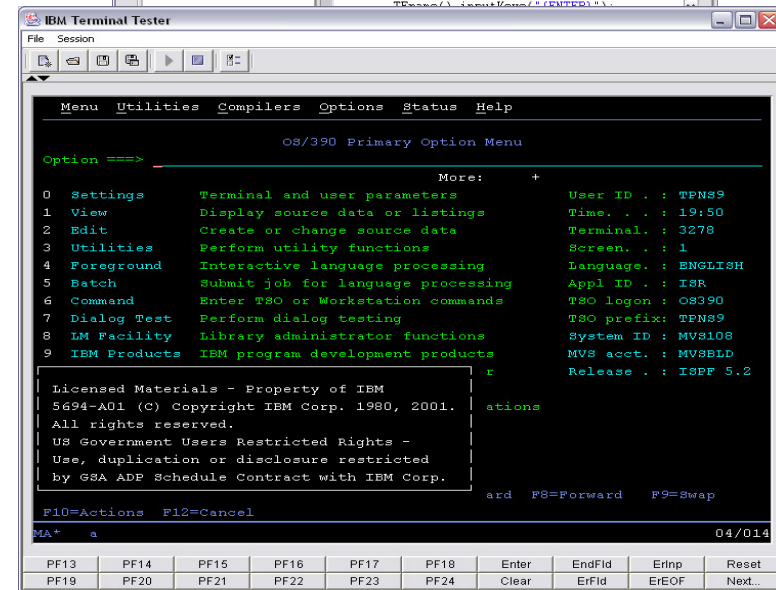
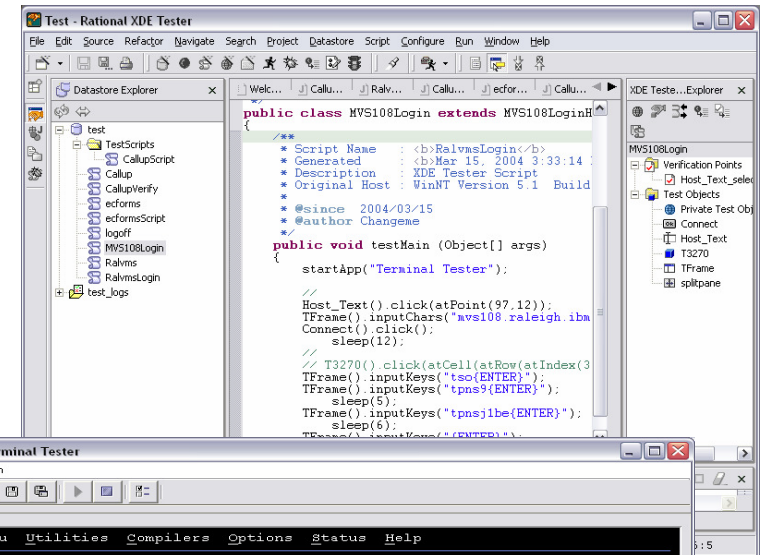
- ▶ Automated regression testing for Web, J2EE and .Net applications

■ IBM Rational Functional Tester Extension for Terminal-based Applications

- ▶ lets you test your System z and System i terminal-based applications with the same tool – IBM Rational Functional Tester – used to test your Java, .NET and Web-based client server applications.

■ Key Benefits

- ▶ Minimize test maintenance with scripts resilient to application changes
- ▶ Wizard enhanced automation to speed test creation for the new user
- ▶ Powerful scripting language and IDE for the professional tester
- ▶ Supports Team oriented parallel development





IBM Rational Performance Tester

Test automation for the novice and the professional

- **IBM Rational Performance Tester**

- ▶ Performance problem identification and diagnosis for Web, SAP, Siebel, Oracle and Citrix based applications

- **Performance test automation**

- ▶ **Built for Day 1 Productivity**

- Mask complexity to get the job done

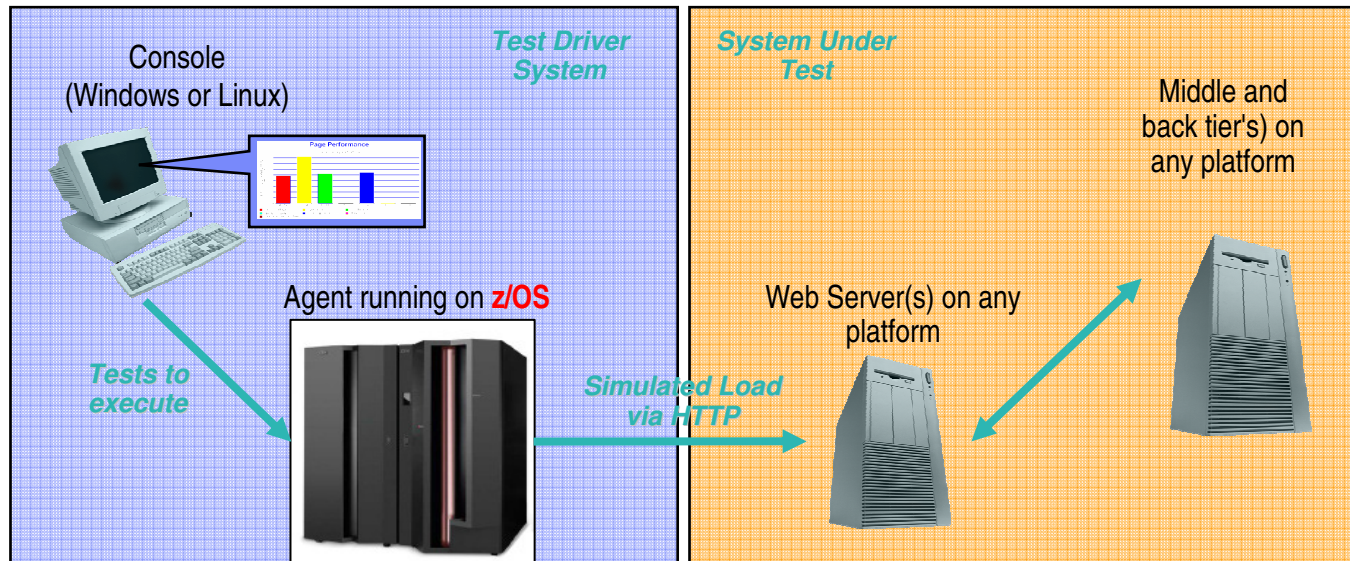
- ▶ **Advanced Data Access & Manipulation**

- Automated data variation and synchronization

- ▶ **Root Cause Analysis**

- Identifies location and **root cause** of performance problem in hardware and software

Topography of Rational Performance Tester for z/OS



Modernize your development investments



Challenge

Mainframe green screen UIs

How can we...

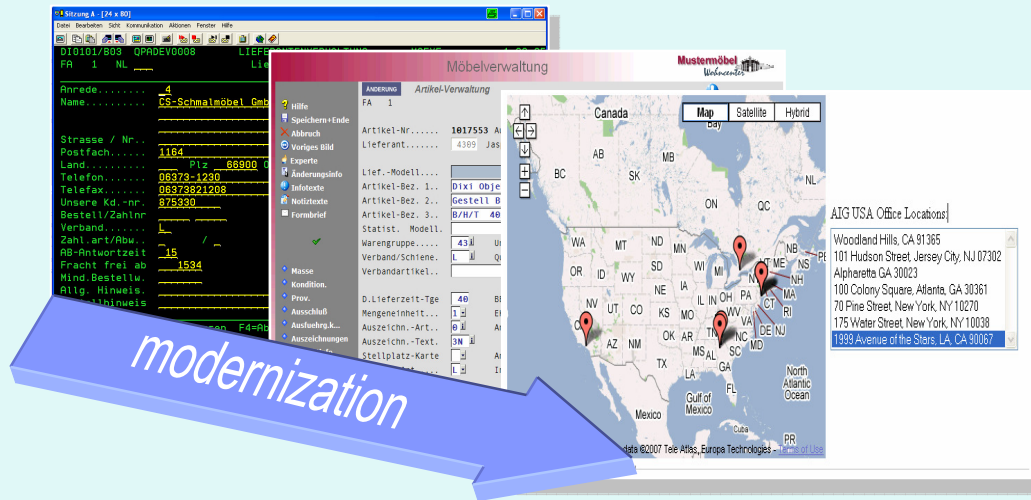
- Make incremental improvements within the context of a long-term strategic modernization plan?
- Create modern Web 2.0 rich web UIs without training staff in Javascript, XML and REST?

Solution

Create impressive UIs quickly

- ✓ Quickly and easily create impressive UIs for your 3270 and 5250 applications
 - Host Access Transformation Services
- ✓ Leverage rich UI and Web 2.0 technologies
 - Rational Business Developer 7.x
 - On AlphaWorks today!

Coming Soon!



Modernize your development investments



Challenge

Unsupported legacy development platforms

How can we...

- Efficiently move to modern development platforms, languages, and tools?

Solution

Save money by moving off old platforms and languages

- ✓ Migrate from out-of-date and expensive legacy development platforms onto the IBM Rational Software Delivery Platform (SDP)
 - EGL, DB2
 - All SDP tools

Non IBM Technologies

HPS/AppBuilder

COBOL

ca Ideal
COOL: GEN
COOL: Enterprise



IDMS ADS/Online

natural ADABAS

Microsoft
Visual Studio
SYBASE
PowerBuilder

Microsoft
Visual Basic 6.0
RPG

Conversion Tooling

Consolidate & Advance with EGL

Process & Portfolio Management

Change & Release Management

Quality Management

Architecture & Construction

Integrated Requirements Management

Deploy to:

- Linux
- AIX
- Solaris
- HP-UX
- IBM i
- System z
- Windows

Rational System z software offerings

Assets

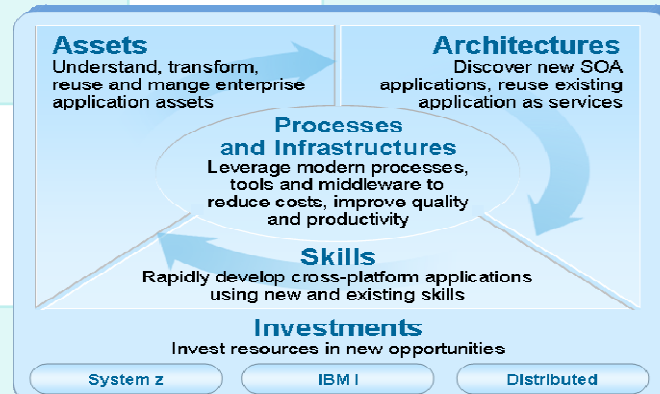
- ✓ Understand existing assets and relationships
 - *WebSphere Studio Asset Analyzer*
 - *Rational Asset Analyzer*
- ✓ Understand and refactor existing assets for reuse
 - *Rational Transformation Workbench*
- ✓ Create and manage assets during development
 - *Rational Asset Manager*
- ✓ Deploy and manage services in a production environment
 - *WebSphere Service Registry and Repository*

Architecture

- ✓ Transform 3270 and 5250 applications to web services
 - *Host Access Transformation Services*
- ✓ Quickly create web services from existing COBOL, PL/I, Java, or EGL applications
 - *Rational Developer for System z, with Service flow modeler (SFM)*
 - *Rational Business Developer*
- ✓ Transform UML to EGL, COBOL, Java, WSDL, C++
 - *Rational Software Architect*

Skills

- ✓ Apply existing business-knowledgeable staff to build all elements of multi-platform applications ... end-to-end from Web 2.0 to services to business transactions
- ✓ Attract new staff with “IBM’s newest business language”
 - *Rational Business Developer*
 - *Rational Developer for System z*



Investments

- ✓ Quickly and easily create impressive UIs for your 3270 and 5250 applications
 - *Host Access Transformation Services*
- ✓ Leverage rich UI and Web 2.0 technologies
 - *Rational Business Developer 7.x on AlphaWorks today!*
- ✓ Migrate from out-of-date and expensive legacy development platforms onto the IBM Rational Software Delivery Platform (SDP)

Processes and Infrastructure

- ✓ Manage enterprise wide assets common repository
 - *Rational ClearCase*
- ✓ Automate and orchestrate defect tracking and configuration management
 - *Rational ClearQuest*
- ✓ Produce traceable, automated, and cross-platform builds
 - *Rational BuildForge*
- ✓ Other Core Rational Tools like RequisitePro, RMC, RFT and RPT

Want to learn more?

- Get this complimentary kit for mainframe developers for a practical, how-to guide for making the most of an existing development environment, including the skills and infrastructure already in place at an established enterprise.
 - ▶ Did you say mainframe? e-kit <http://www.ibm.com/developerworks/integrate/kits/mainframe/>
 - This kit contains the following:
 - **Podcast series:** Did you say mainframe?
 - **Webcasts**
 - **Tutorials**
 - **White and red papers**
 - **Demos**
 - **developerWorks articles and other resources**
- Find more Enterprise Modernization System z resources
 - ▶ <http://www-306.ibm.com/software/info/developer/solutions/em/systems/z/index.jsp>
- You can also find out more about other IBM Enterprise Modernization offerings at this site
 - ▶ <http://www-306.ibm.com/software/info/developer/solutions/em/index.jsp>

Enterprise Modernization Sandbox for System z

Quickly try practical scenarios guided by self-paced exercises 24/7



System z Sandbox

Examples and best practices provide a low-risk, practical, hands-on path to understanding

- Rational Developer for System z
- Rational Business Developer
- Rational Transformation Workbench
- Rational Host Access Transformation Services

- ✓ **Launched on 2/26/08**
- ✓ **Over 250 customer registrations to-date**
- ✓ **13 hands-on tutorials are live**
- ✓ **Additional scenarios coming soon**

New scenarios planned for 2H08

- Rational Asset Analyzer
- IMS, DataStudio, Info 2.0, Rational Data Architect
- WAS, CICS, PD Tools
- Rational ClearCase, ClearQuest, and BuildForge

Full version software trials
'Try online' hosted environments
Tutorials
Online resources

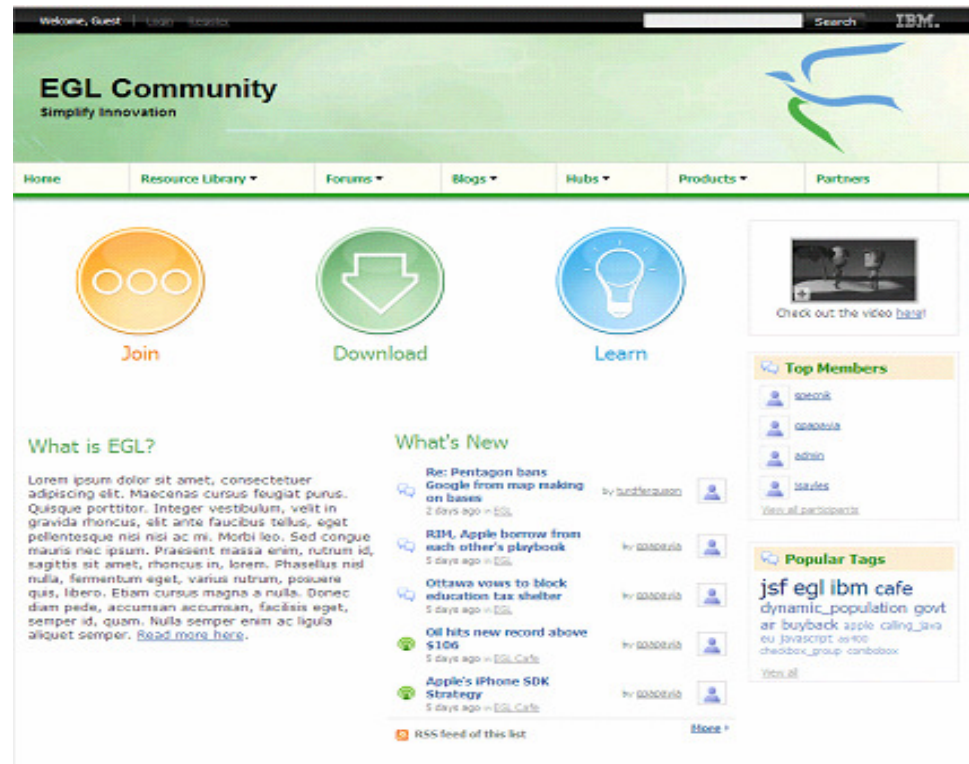
<http://www.ibm.com/developerworks/downloads/emsandbox/>

Rational Business Developer – EGL Café

Building a Community for Business Developers

- Attract participation with compelling experience – Partners, Users, Prospects
- Capture “Wisdom of the Crowd” – Experience knowledge base
- Sustainable Participation – Team, Users
- Leverage re-use to reduce effort
- Extending community to CICS, IMS, COBOL, and PL/I developers

ibm.com/rational/eglcafe



Resources: Download, Learn, Presentations, Video/viewlet, Sample Code

Community: Clients, Partners, Influencers, Press, News and Events

Collaboration: Blogs, Forums, Tips and Techniques Comments, Ratings

Testimonials: Case Studies, Celebrations!



Learn more at: [IBM Enterprise Modernization Solution](http://www-306.ibm.com/software/info/developer/solutions/em/index.jsp)

(<http://www-306.ibm.com/software/info/developer/solutions/em/index.jsp>)

- [IBM Rational software](http://www-306.ibm.com/software/rational/) (<http://www-306.ibm.com/software/rational/>)
- [IBM Rational Software Delivery Platform](http://www-306.ibm.com/software/info/developer/index.html)
(<http://www-306.ibm.com/software/info/developer/index.html>)
- [Process and portfolio management](http://www-306.ibm.com/software/rational/offerings/ppm/)
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- [Change and release management](http://www-306.ibm.com/software/rational/offerings/crm/)
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And additionally learn more at:

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Questions