Extending Your Mainframe For More Business Value

Extend Development Team Productivity With Eclipse And Web 2.0

Service Oriented Finance Needs Productive Development Tools

We have a lot of new solutions to build. If I build them all on System z, I will have to find more System z development skills

Service Oriented Finance Development Manager

With modern tools from Rational, even your inexperienced programmers will be productive

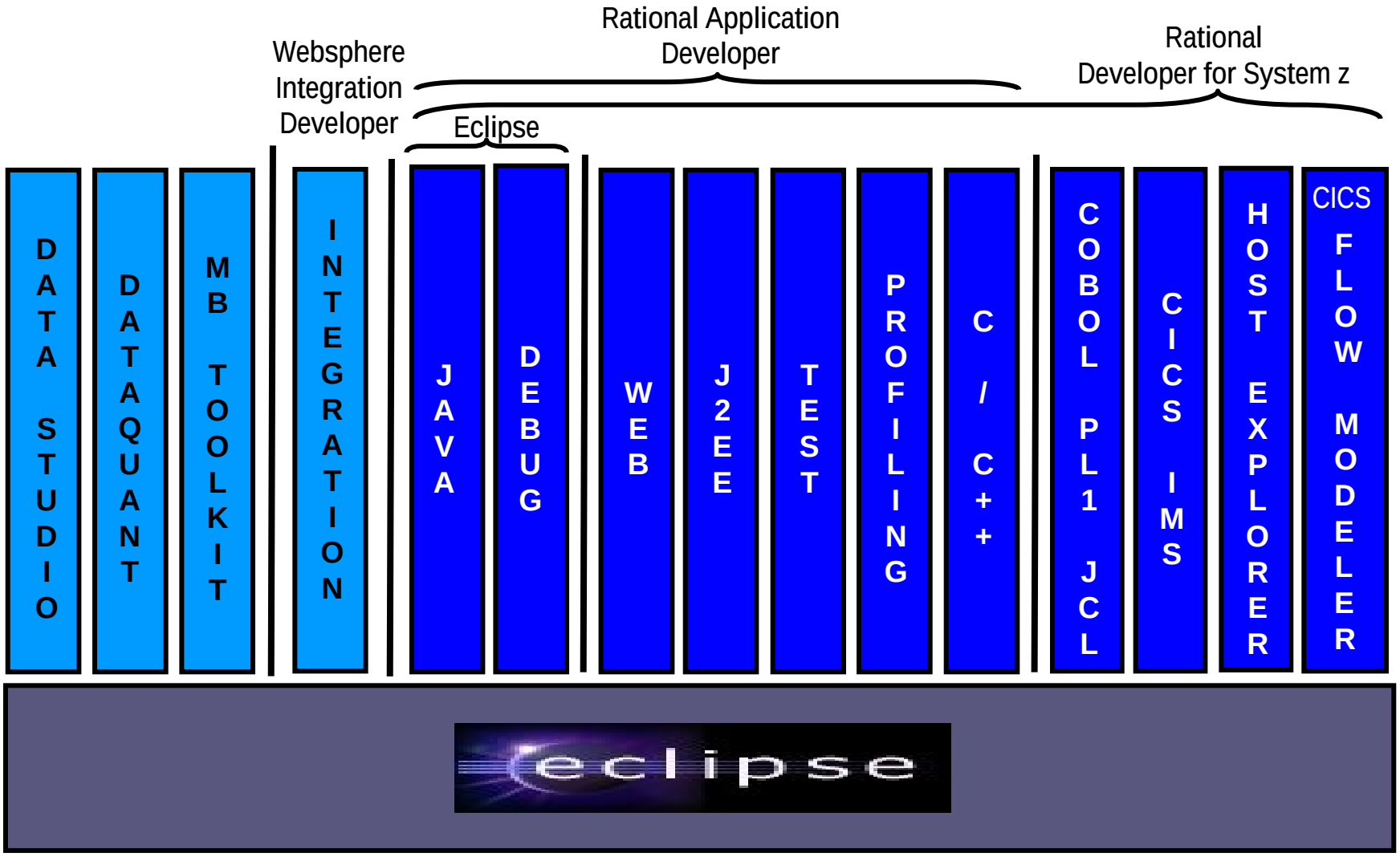
IBM

Rational Developer For System z (RDz)

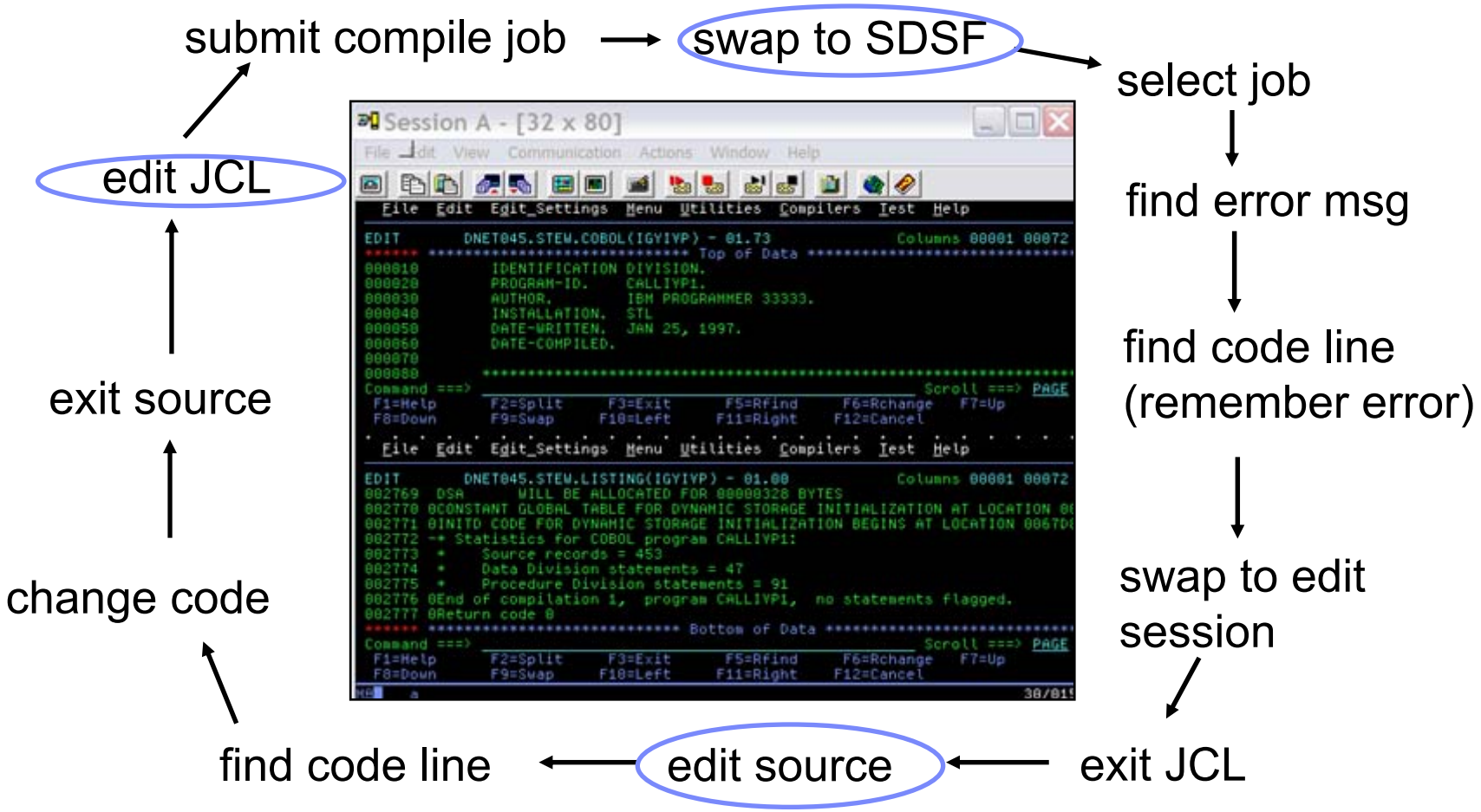
- IBM's latest tool for System z development
  - Version 7.1 shipped Sep 2007
- Single integrated tool for developing mainframe applications using both traditional and newer technologies
  - Develop traditional COBOL/PL1/ASM/JCL/BMS/EGL applications
  - Develop Java/J2EE and Web applications, including JSF and struts
- Boosts developer productivity compared to green screen tools
  - Workstation tool based on Eclipse
- Leverage existing assets in a Service Oriented Architecture
  - Quickly expose CICS, IMS and DB2 assets as native services
  - Visually wire together CICS transactions into a business flow

IBM Development Tools Are Built On Eclipse

Function delivered as perspectives in eclipse – **blue plug-ins ship with RDz**



ISPF: How Does Traditional "Green Screen" Development Work?



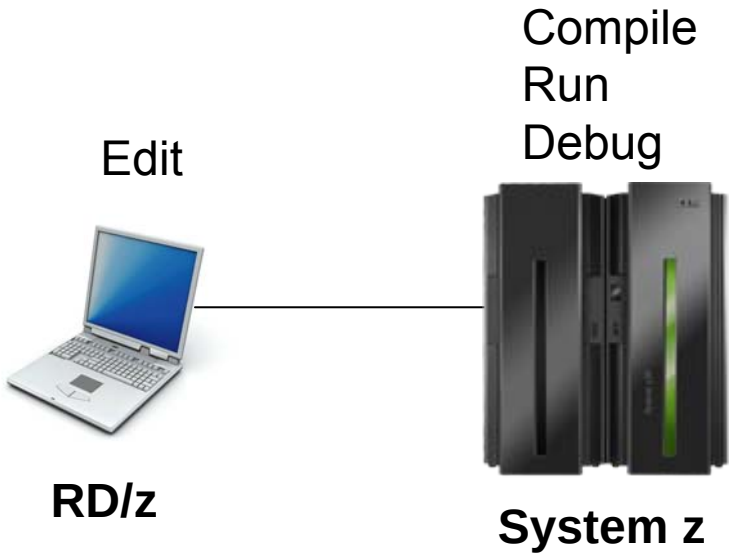
- Programmer goes through a sequence of screens in order to get the job done
  - 3.4 listings, job listings, SDSF outputs, etc.
- Programmer is constantly flipping back and forth between these ISPF screens

RDz Highlights For Traditional Mainframe Development

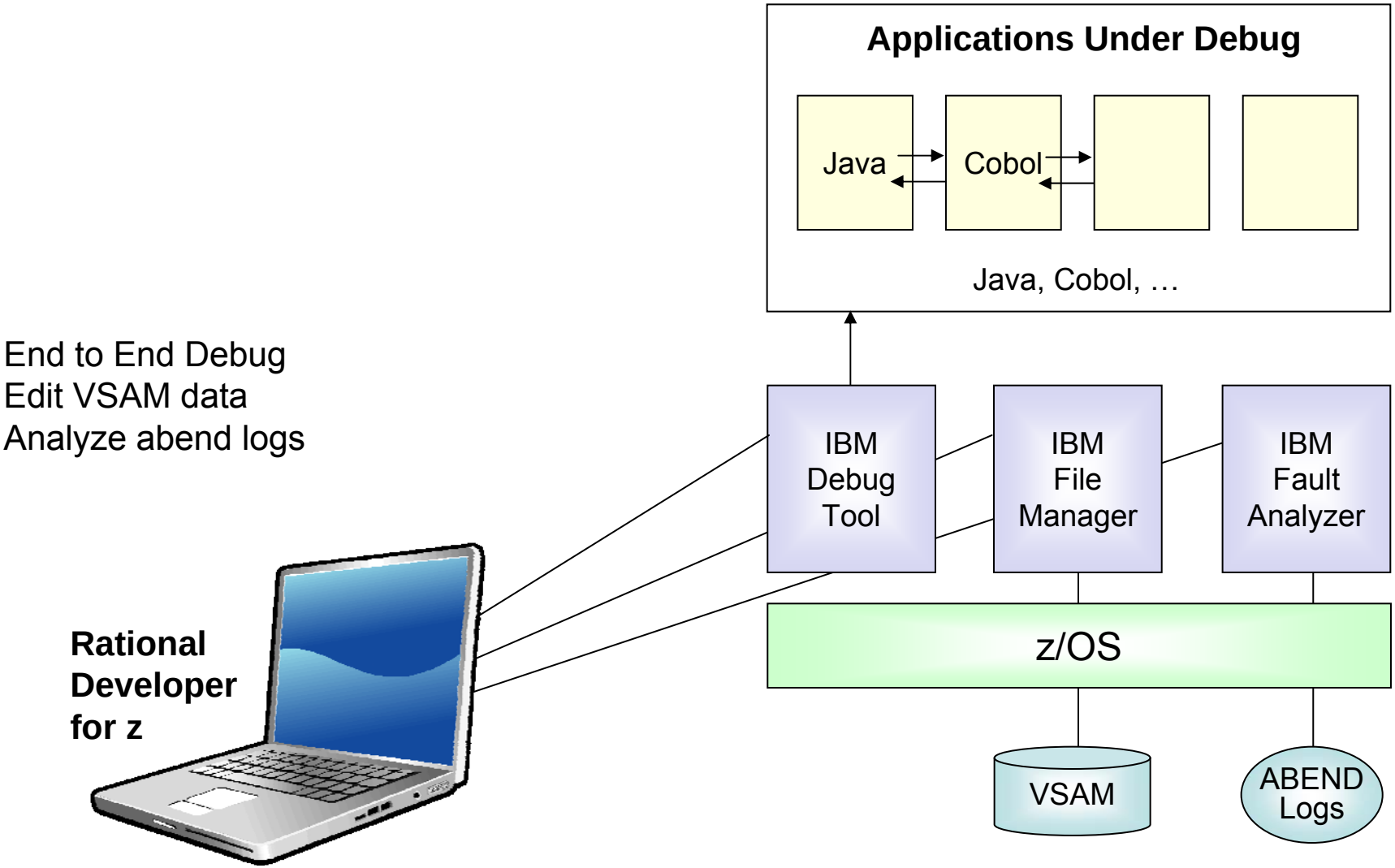
- Interactive, workstation-based environment
  - Interactive access to z/OS
  - Work with host files as though they are local
- Boosts developer productivity compared to “green screen” tools
  - Interactive edit/compile/debug on the workstation
    - Work offline or online
  - Interactive job generation, submission, monitoring, command execution
  - Supports different runtimes (CICS, IMS, Batch, USS, DB2, WAS)
  - Language sensitive editors
- Can access different host based Source Code Management systems through a unified interface
    - CARMA (Common Access Repository Manager)

DEMO: Introducing Rational Developer For System z

- Perspectives and views
- Remote System Explorer
- Working with host datasets
- Language-sensitive COBOL editor
- Works with DB2 on z/OS
- Productivity features
- Edit/Compile/Visual Debug



Interactive Problem Determination: RDz Integrates With Host-based PD Tools



Inexperienced Programmers Can Be Productive

- An independent study from Branham Group concluded:
  - Using RD/z, a developer with no mainframe experience can be **just as productive** as an experienced ISPF programmer
  - In addition, the RD/z developer achieved
    - 44% productivity advantage in COBOL and PL/1 edit, compile, debug activities
    - 3 times productivity advantage in creating web services
- Workstation based edit and unit test saves mainframe cycles
  - Customers at Fiducia, Deutsche, Nationwide observed an 80% reduction in the cost of compiles

http://www.branhamgroup.com/wdz_study

Customer Example

COMMERZBANK

Background:

- German bank providing financial services to private companies across Europe
- Provider of online banking services

Challenge:

- Upgrade teller workstations and ensure they continue to work with an existing third-party COBOL run-time environment

Solution:

- New application framework based on **IBM COBOL**
- **RDz** to design new COBOL and other code

"In one tool, we have a single development environment for multiple environments. I don't have to jump between different tools to do different tasks. The tool is very complete."
- Armin Schiller, transaction banking payments and cash transactions, Commerzbank AG

Service Oriented Finance Employees Want To Create Simple Solutions Quickly

I can imagine a simple application that would solve a short-term problem, but IT says it would take too long to create it.

Service Oriented Finance Business Analyst

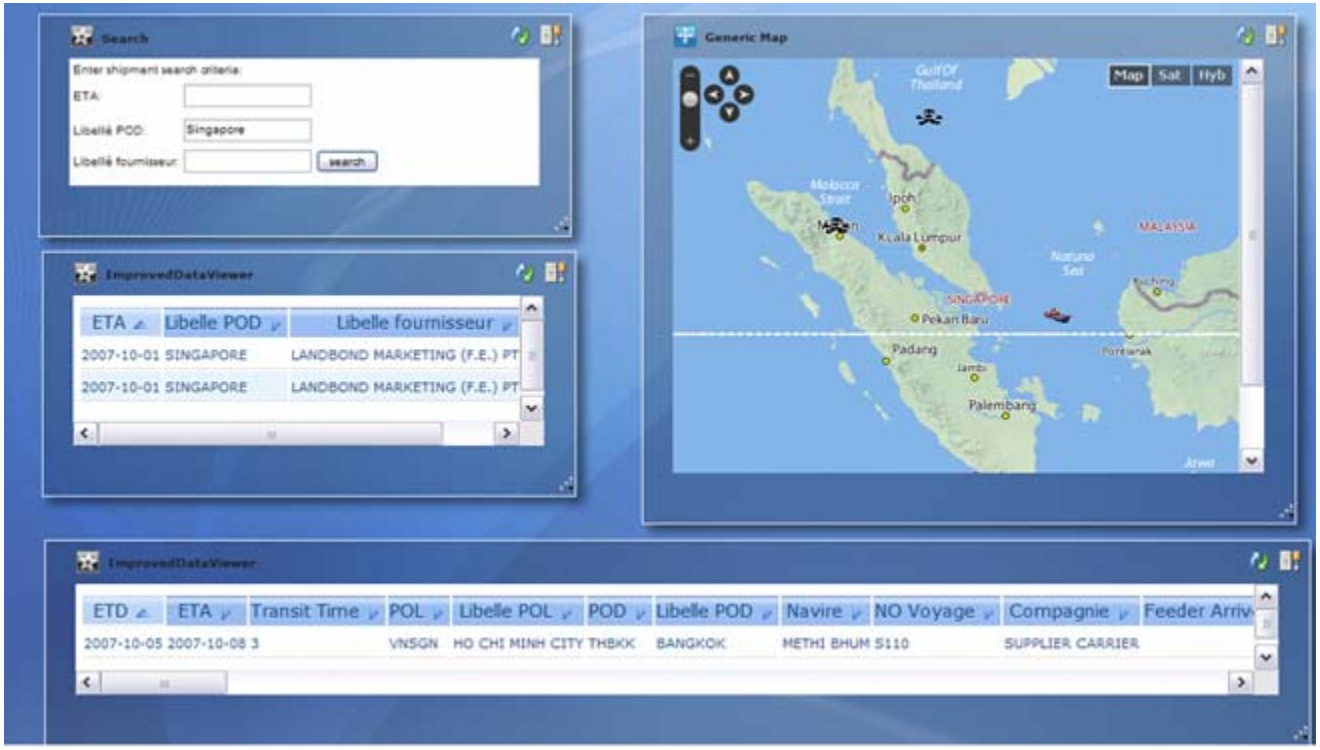
With IBM Mashup Center, you can give your users the power to innovate – by creating applications quickly and easily, mixing enterprise or external information.

IBM

Easier Way To Access Mainframe Information

A “**mashup**” is a lightweight Web application created by combining information from more than one existing source to deliver new functions and insights

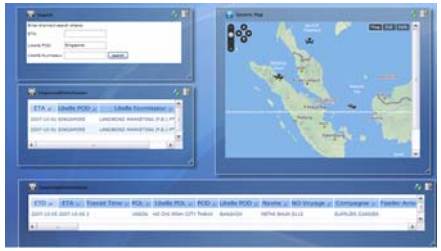
- Rapid creation (days, not months)
- Reuses existing capabilities, but delivers new functions and insights
- Requires limited to no technical skills
- Can mix internal and external sources



IBM Mashup Center – Key Components

- Lotus Mashups
  - A browser-based tool to create mashups
  - Assemble pages from wired-together widgets in the browser. Wiring sends data from one widget to another at runtime.
- InfoSphere MashupHub
  - A browser-based tool to create data feeds from various information sources
  - Provides the runtime environment for data feeds
- Lotus Mashups and InfoSphere MashupHub share a common catalog
  - Widgets, pages and feed definitions are stored in the catalog so they can be easily shared, searched, annotated, rated, and tagged

Competitive Advantage - IBM Offers The Best Mashup Connectivity To Enterprise Data



Lotus Mashups Applications

Office/Partner Applications

Mobile

Packaged Applications

Provide Enterprise Data to Situational Applications

Web

Web

Google Gadgets

amazon.com

kapow TECHNOLOGIES

YAHOO!

dapper

InfoSphere MashupHub

Departmental & Personal

Office

XML

Custom Adaptors

MySQL

Desktop

Enterprise Systems

Relational and Transaction Systems

ECM Systems

Information Server

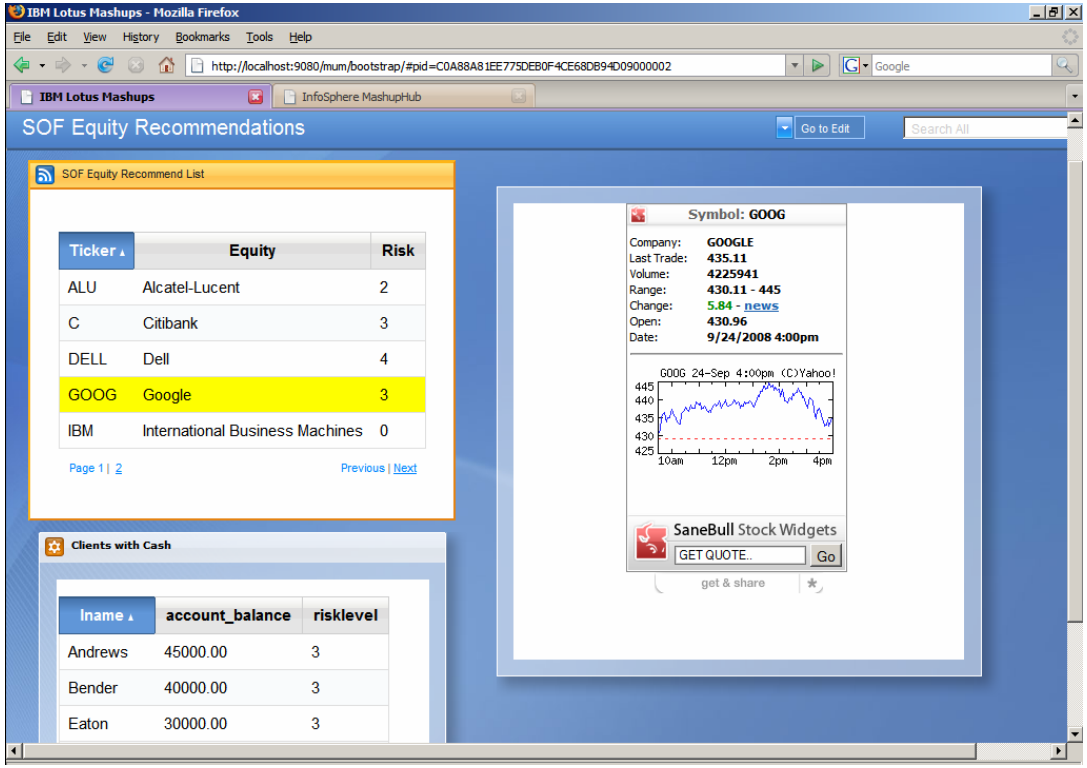
BI / BPM & Data Warehouses

ERP/CRM

MQ

Web services

DEMO: Create A Mashup For Easy Access To Mainframe Data



The result is a mashup application that delivers an insight for equity sale recommendations.

A securities broker:

- Uses a list of equities with their current risk estimates from his/her personal Excel spreadsheet
- Matches this information with the customer stock risk preferences stored in DB2 on System z ...
- Mashes this up with the current stock trend and other financial information from Internet services on the same page

Summary

- Improve the productivity of mainframe application developers with **Rational Developer for System z**
- Improve the quality of applications with **Rational Functional Tester, Rational Performance Tester,** and **IBM Workload Simulator**
- It's even easier to unlock enterprise data using **IBM Mashup Center**