



IBM Software Group

Introduction to the IBM Rational Software Development Platform

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Rational. software

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Agenda

- ● ● IT Lifecycle Management challenges
- ● ● Business Driven Development
- ● ● “P” is for Platform
- ● ● Process and Standards



Una gestione comune della soluzione

Business View

- Clear view of technology ROI
- Top-down and bottom-up visibility into technology projects
- Objective decision-making support

Operations View

- Improved service and quality compliance
- Predictable deployments
- Accelerated diagnosis and repair



Application Development View

- Rapid application development and deployment
- Improved collaboration
- Asset reuse

The IBM Rational Software Development Platform

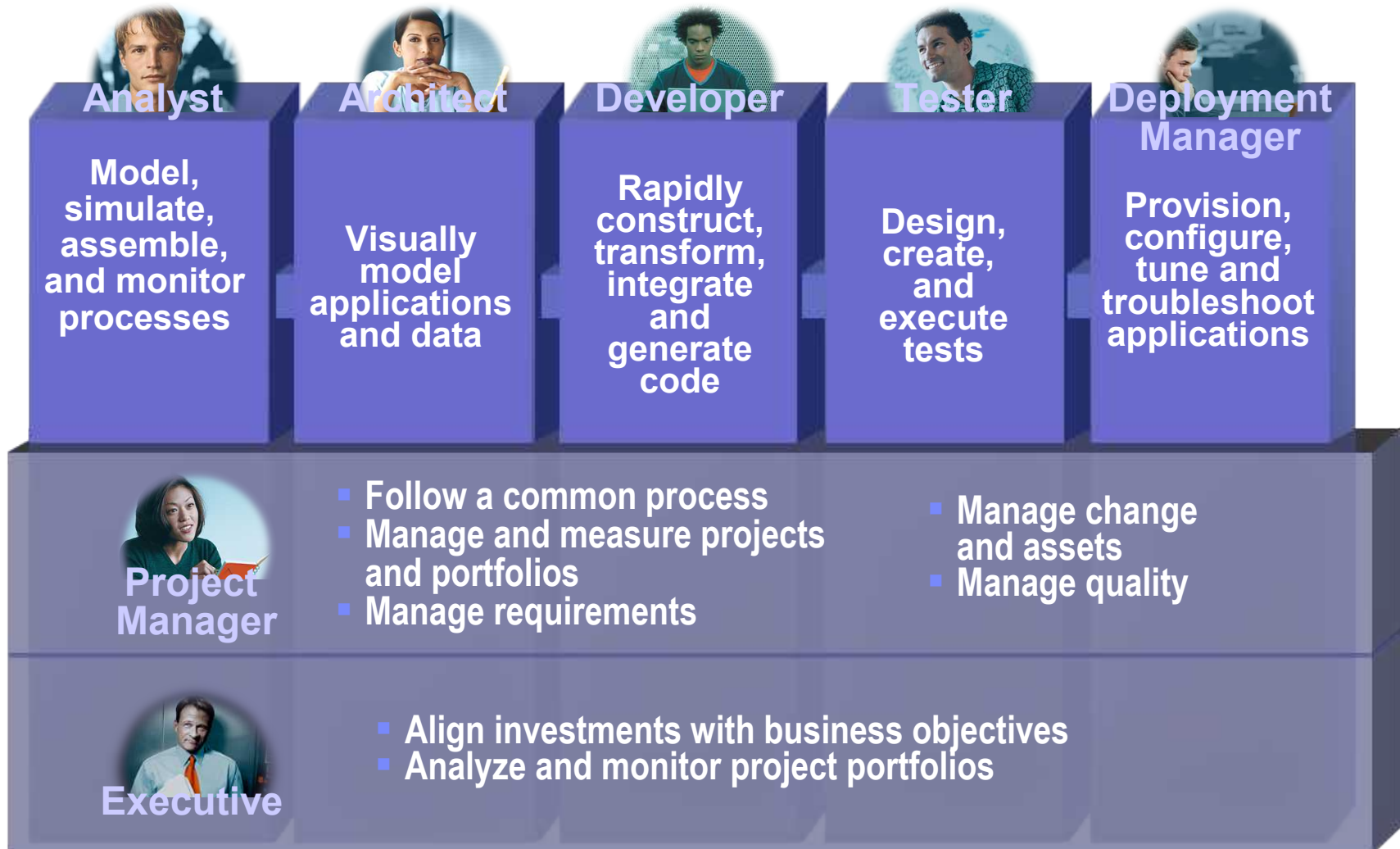
Prioritize Plan Manage Measure



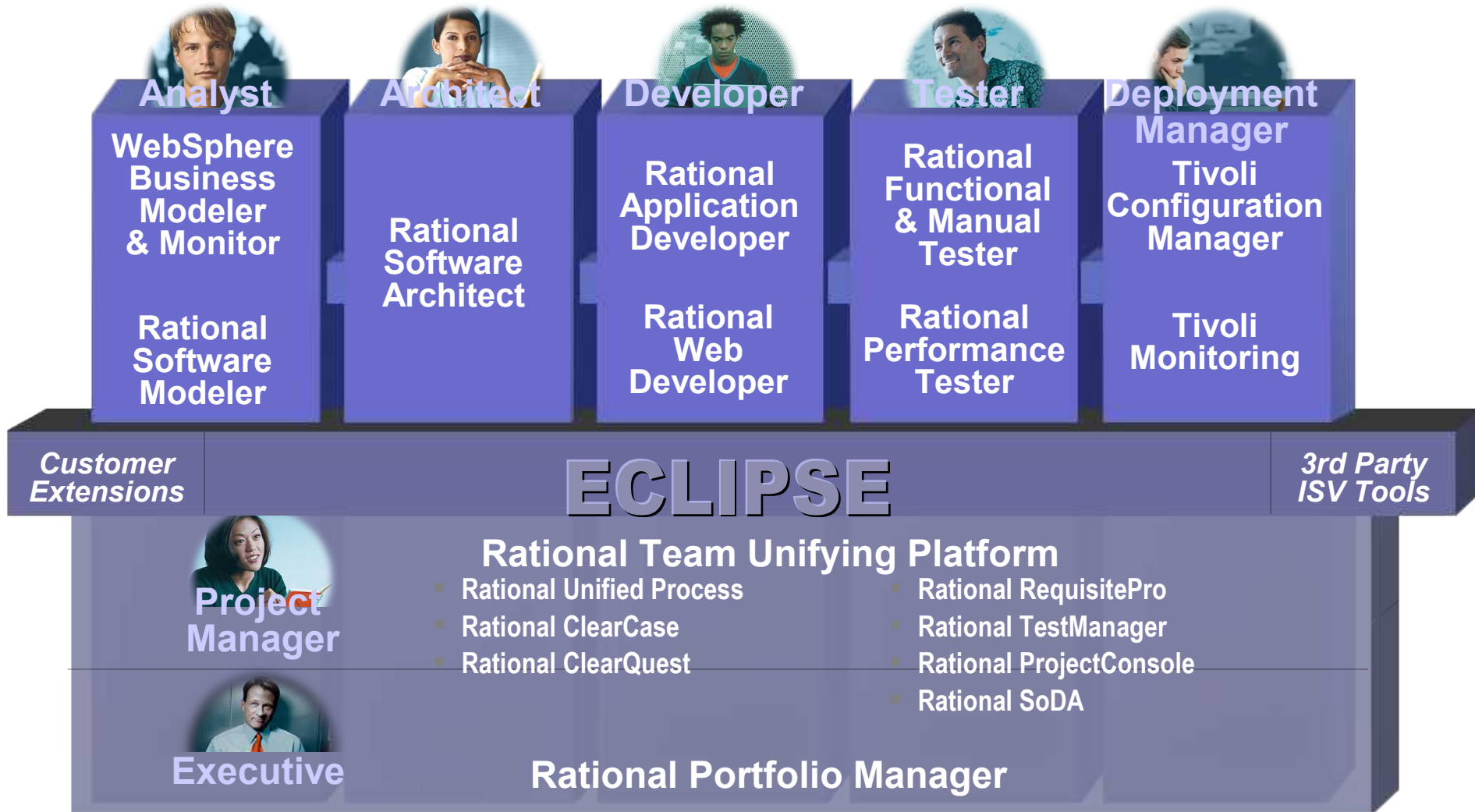
Optimize Iterate

- **Discover business & technology assets**
 - ▶ Business priorities
 - ▶ Requirements
 - ▶ Middleware and software assets
- **Develop at the speed of business**
 - ▶ Rapid application development
 - ▶ Model-driven architecture
 - ▶ Asset-based development
- **Deploy to closed-loop environments**
 - ▶ Automated applications deployment
 - ▶ Streamlined composite application management
 - ▶ Direct-to-operations productivity

The IBM Rational Software Development Platform



The IBM Rational Software Development Platform

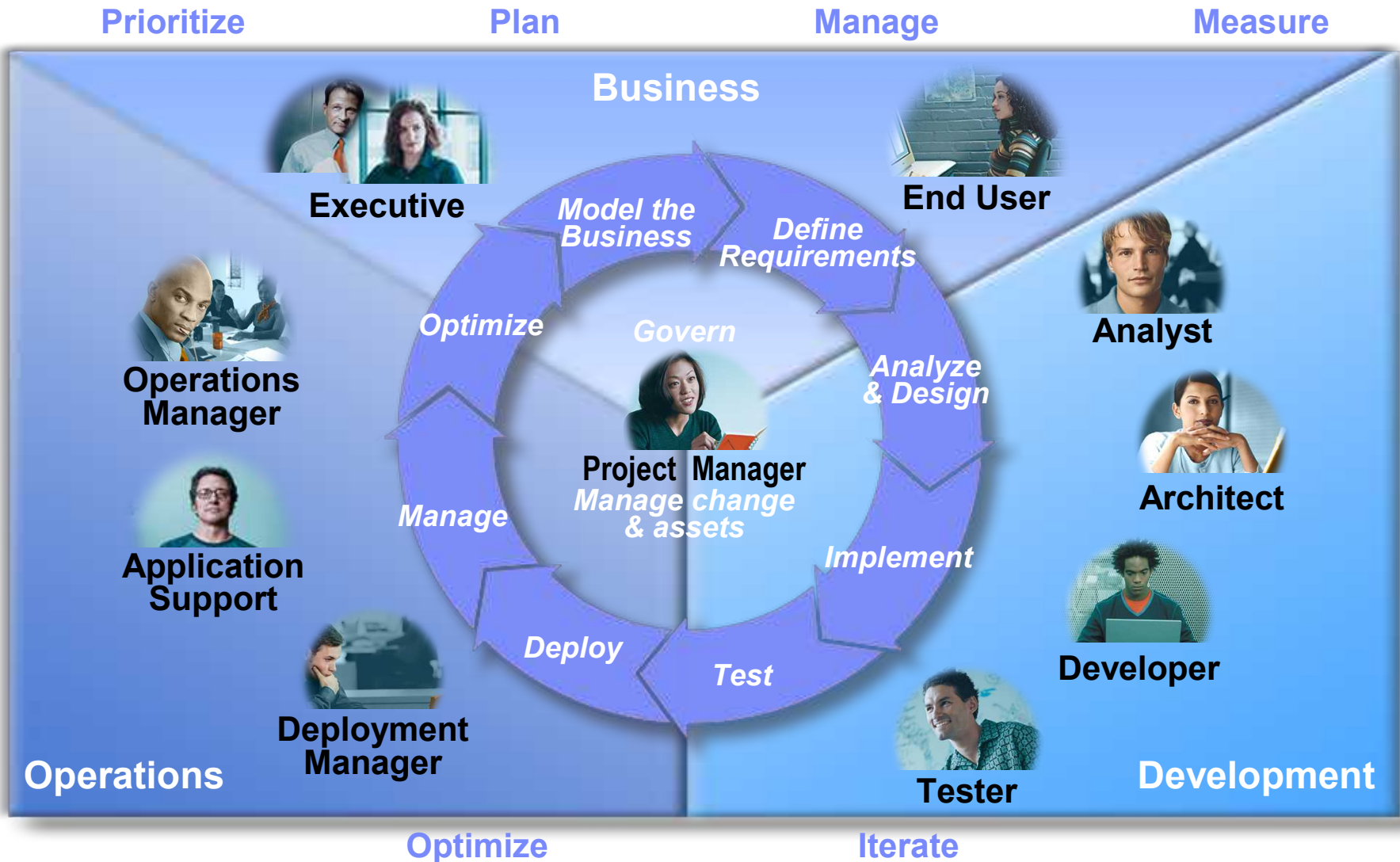


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- ● ● **Business Driven Development**
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Cosa significa creare una soluzione



Governare: Prioritizzare, Pianificare, Gestire

Gestire le priorità, il progetto, le persone

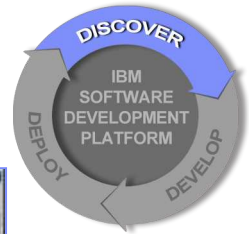
- For executives
 - ▶ Visualize and balance portfolios
 - ▶ Make objective “save/kill” decisions
 - ▶ Move smoothly from initiatives to measurable programs and projects
- For project and program managers
 - ▶ Quickly ramp projects with reusable processes based on best practices
 - ▶ Balance workload and manage demand
 - ▶ Manage skills inventory and usage
 - ▶ Actively manage risks and issues
- For team members
 - ▶ Communicate, coordinate and collaborate globally



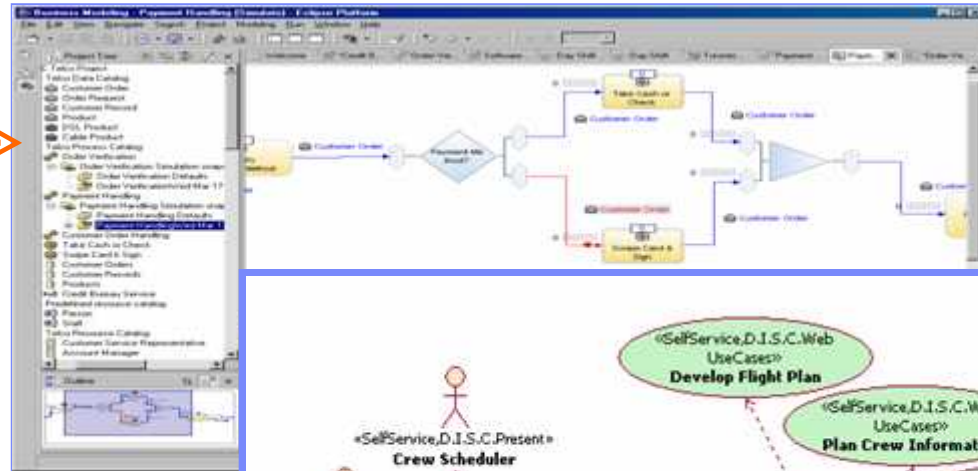
IBM Rational Portfolio Manager

Modellare il business

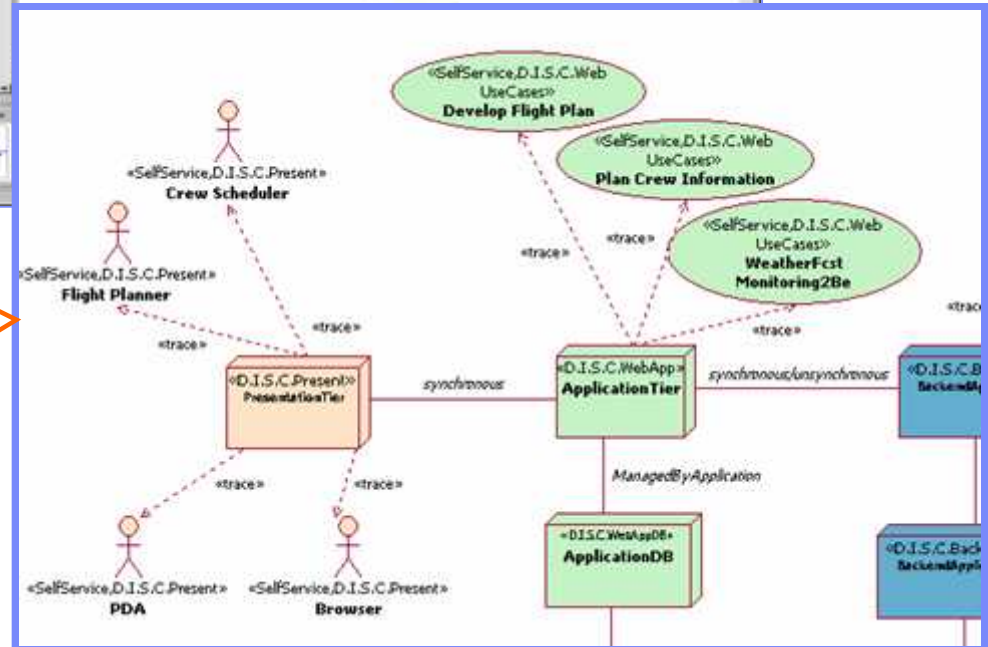
Documentare i processi di business le interazioni utente



Analyst models “as is” business process and explores alternative “to be” business processes

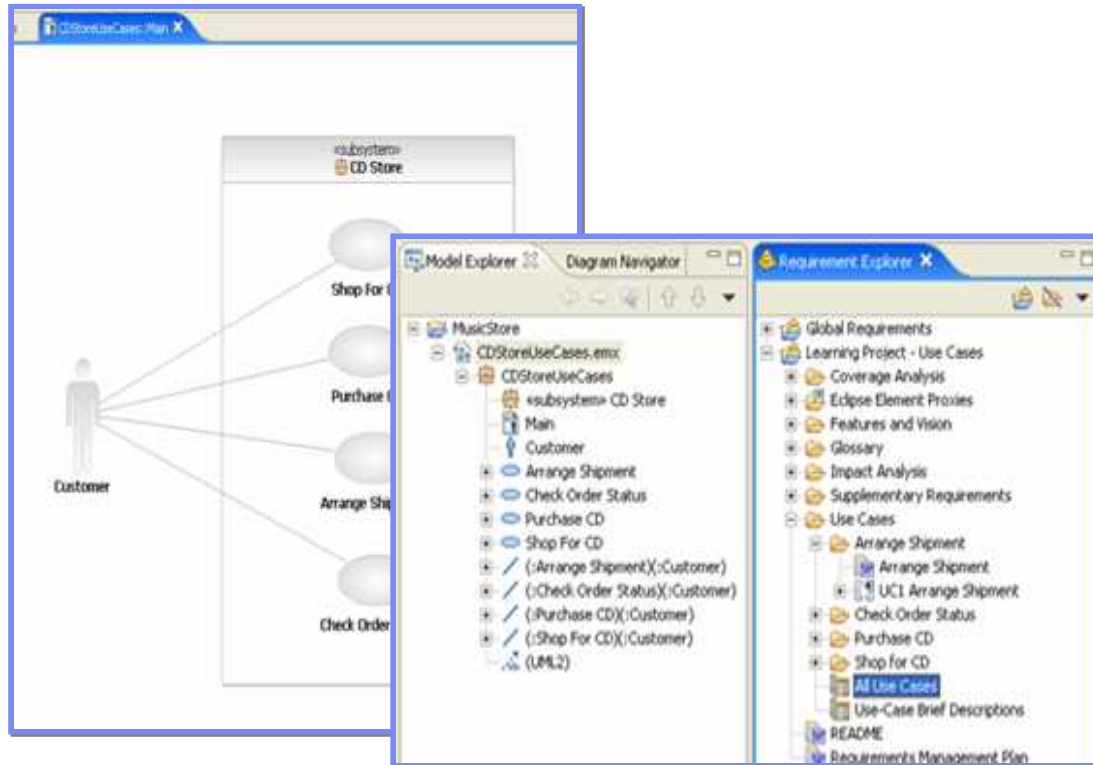
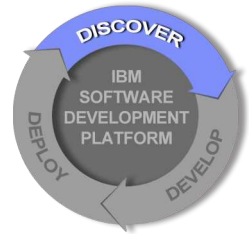


Analyst models “as is” and “to be” user interactions through use cases



IBM WebSphere Business Modeler
IBM Rational Software Modeler

Definire i requisiti

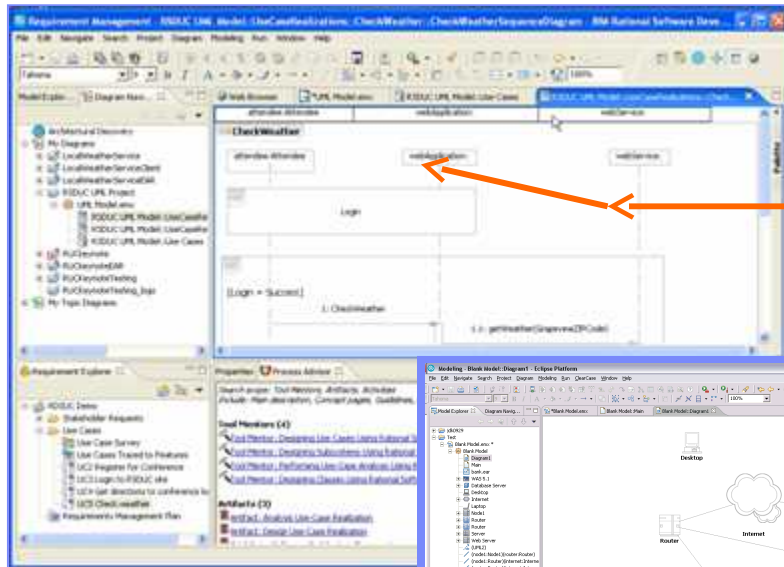
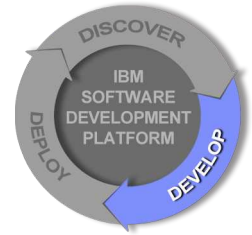


Analyst defines business requirements and refines them into software requirements and use cases

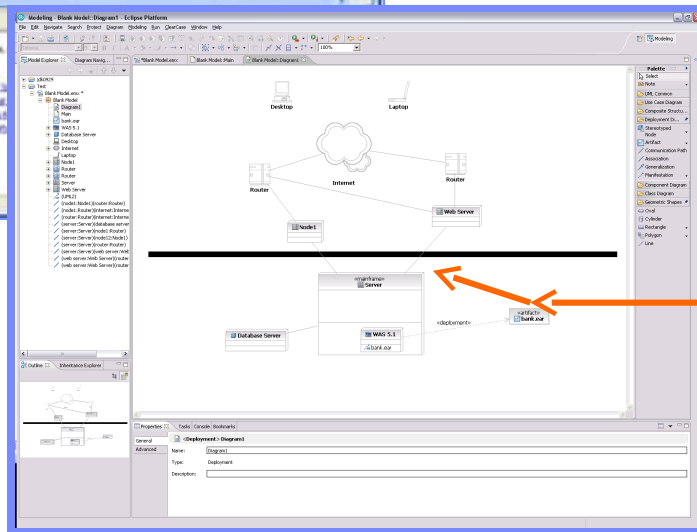
Requirement Query Results										
Requirement Link Problems Properties										
Requirement	Property	Affects Architecture	Priority	Status	Difficulty	Contact	EnhancementR...	Defect	Unique ID	Location
UC1 Arrange Shipment	Name	False	Should	Proposed	Medium				342	Arrange
UC2 Check Order Status	Name	False	Should	Proposed	Medium	Rob Z.			320	Check Or
UC3 Purchase CD	Name	False	Must	Approved	High	Catherine Q.			309	Purchase
UC4 Shop For CD	Name	False	Must	Proposed	Medium	Jim X.			296	Shop For

Analizzare e disegnare l'applicazione

Minimizzare i rischi gestendo l'architettura

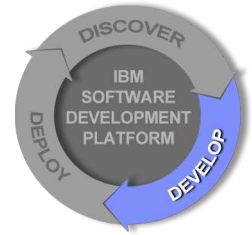


Architect imports business processes and refines application design, based on best practices, and existing assets

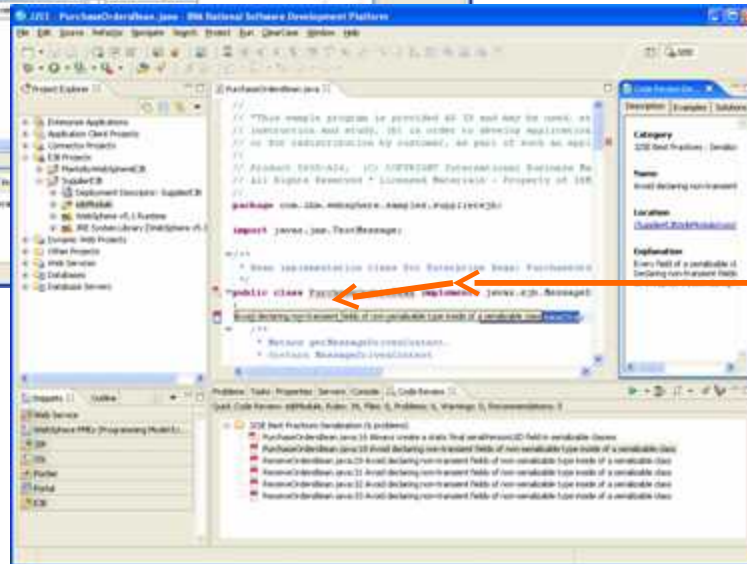
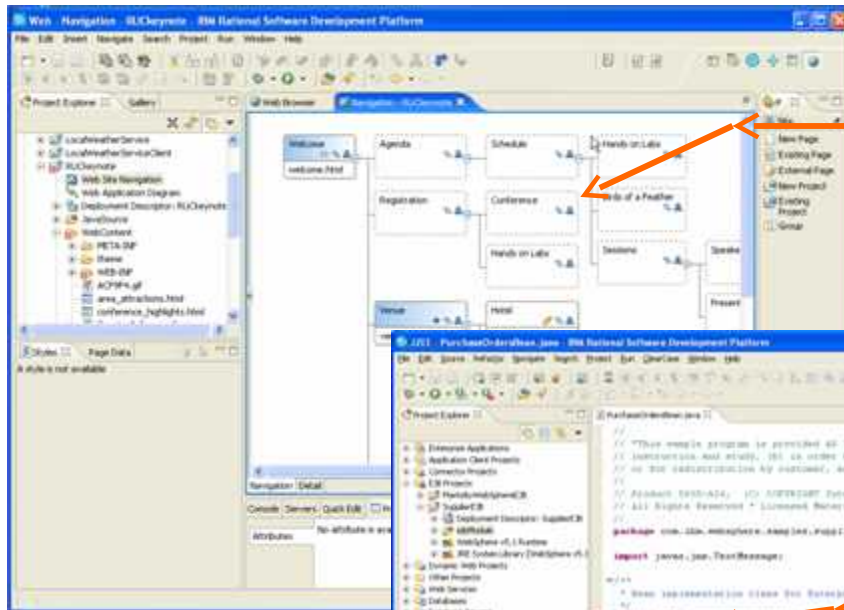


Architect models operational model

Costruire applicazioni di qualità ottimizzando i tempi



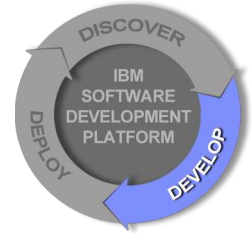
Developer implements application leveraging highly productive J2EE capabilities (JSF, SDO)



Developer leverages code analysis & unit testing to fix functional, performance, and security problems at the component level

Effettuare i Test

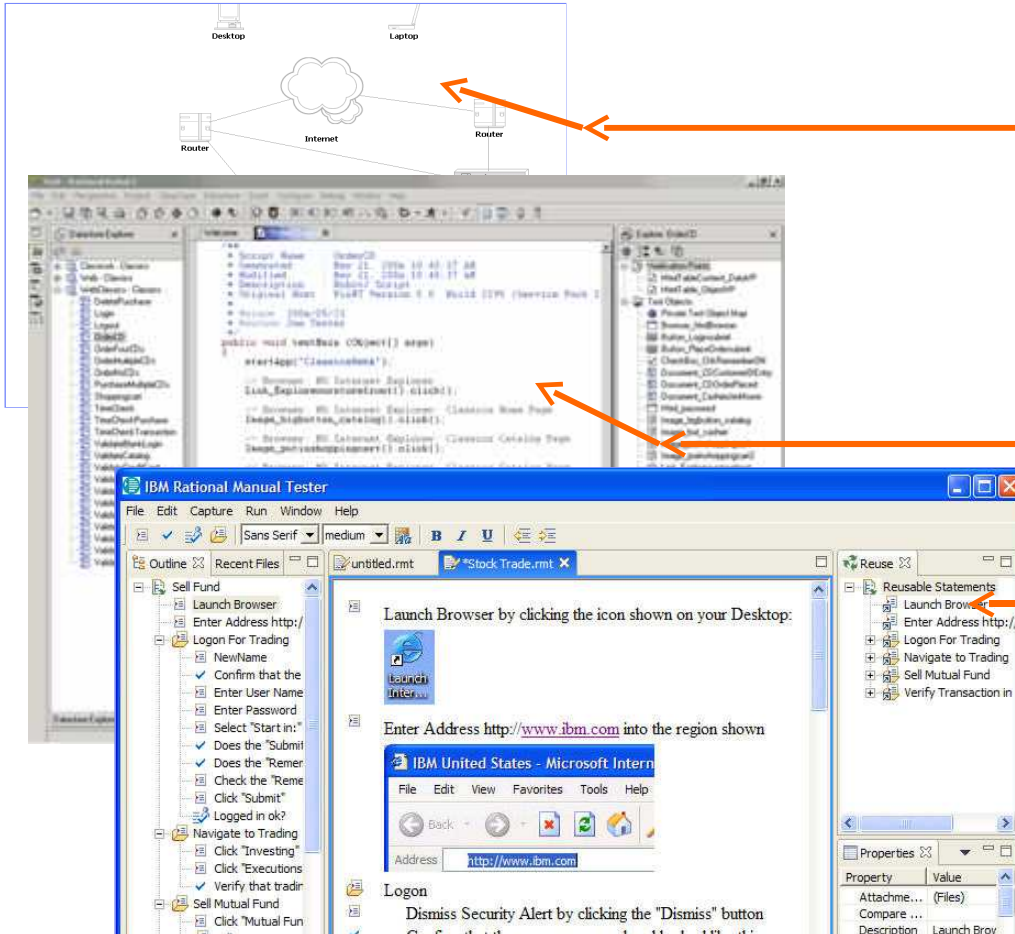
Validare i requisiti funzionali



Deployment Manager leverages operational model to provision the test lab



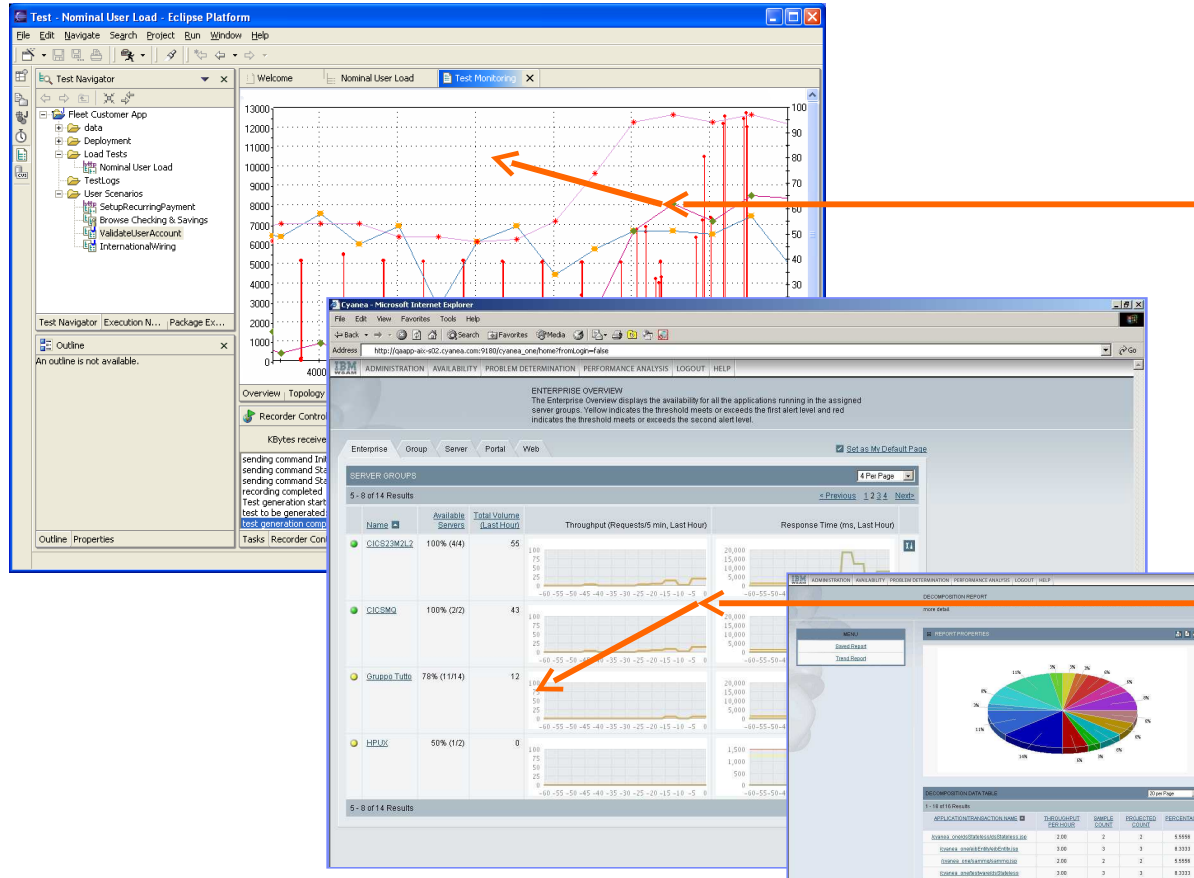
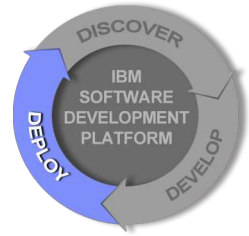
Tester performs automated and manual functional testing based on use cases derived from business requirements



IBM Rational Functional Tester
IBM Rational Manual Tester

Deploy

Pianificare i rilasci garantendo livelli di servizio



Tester evaluates the scalability of the new application based on Service Level Agreements captured in business model

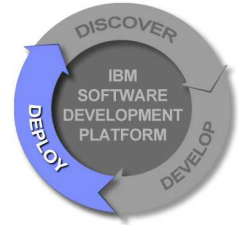


Deployment team builds capacity plans based on performance tests

*IBM WebSphere Studio Application Monitor
IBM Rational Performance Tester*

Manage

*Monitorare i livelli di servizio con un sistema centralizzato
Network, Sistemi, middleware, prestazioni delle applicazioni*



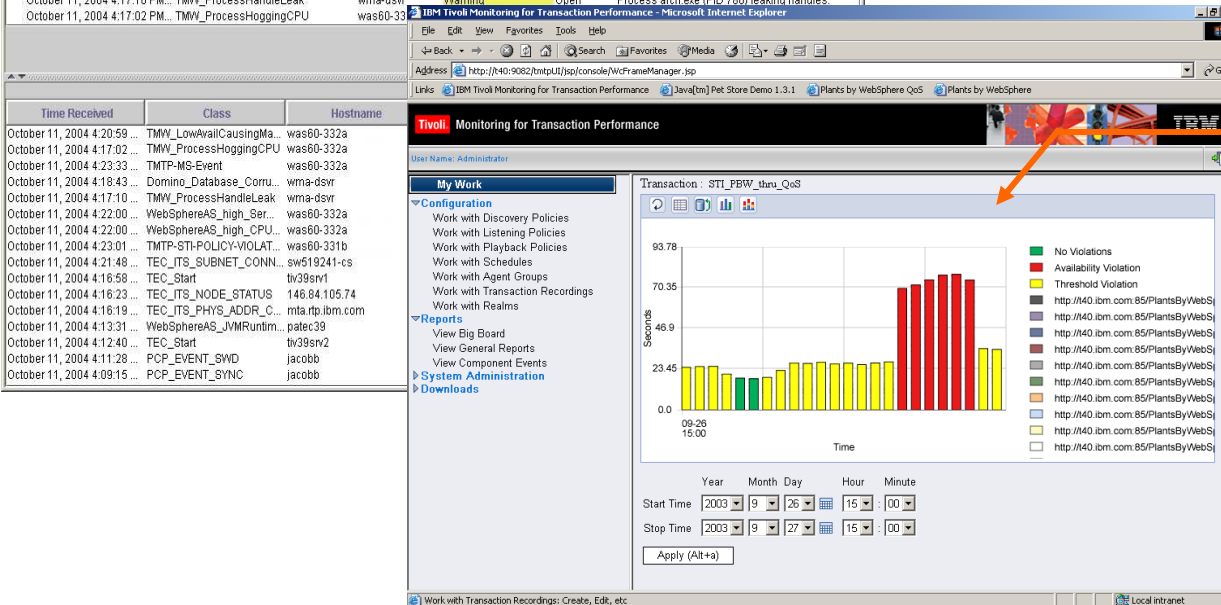
Event Viewer: Group All - All

File Edit Options Selected Automated Tasks Help

Working Queue

Total: 9 Selected: 0

Time Received	Class	Hostname	Severity	Status	Message
October 11, 2004 4:23:33 PM...	TMTP-MS-Event	was60-332a	Minor	Open	The ViewAccountHistory transaction of the Home...
October 11, 2004 4:23:01 PM...	TMTP-STI-POLICY-VIOLATION	was60-331b	Warning	Open	Policy Name=...
October 11, 2004 4:22:00 PM...	WebSphereAS_high_Servlet_Resp...	was60-332a	Warning	Open	The servlet response time (17521 ms) of the ins...
October 11, 2004 4:22:00 PM...	WebSphereAS_high_CPU_Utilizati...	was60-332a	Warning	Open	The CPU utilization (91.450000) percent of the pr...
October 11, 2004 4:21:48 PM...	TEC_ITS_SUBNET_CONNECTIO...	sw519241-cs	Warning	Open	Subnet unreachable
October 11, 2004 4:20:59 PM...	TMW_LowAvailCausingManyProble...	was60-332a	Critical	Open	The amount of committed memory is approachin...
October 11, 2004 4:18:43 PM...	Domino_Database_Corruption	wmia-dsvr	Warning	Open	One or more views of a database has corruption ...
October 11, 2004 4:17:10 PM...	TMW_ProcessHandleLeak	wmia-dsvr	Warning	Open	Process arch.exe (PID 780) leaking handles.
October 11, 2004 4:17:02 PM...	TMW_ProcessHoggingCPU	was60-33	Warning	Open	

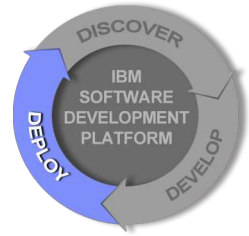


Operations Manager monitors application performance and is automatically notified of problems, enabling fast triage to the right stakeholders (application, DB, network, etc.)

*IBM Tivoli Enterprise Console
IBM Tivoli Monitoring for Transaction Performance*

Ottimizzare

Verificare i benefici; fine-tune sui processi di business



Workflow Dashboard

Randomize by % Views Save as Default

[Select Business Measures](#) [Set Filter](#) Process [Process Diagram](#)

1-5 of 5 Jump to #

Activity Instance	Admin Action	PI Diagram	State	Starting Time	Working Duration	Eloped Duration	Cost	Is Delayed	Account ID	Customer ID
			Running	2002-06-26 12:04 PM	2.82 h	50.50 h	\$0		1234	DOE
			Running	2002-06-26 02:39 PM	5.5 s	47.92 h	\$0		45435	SMITH
			Running	2002-06-26 02:39 PM	0.26 s	47.91 h	\$0		2147483647	BASRAI
			Running	2002-06-26 02:40 PM	0.24 s	47.89 h	\$0		3454353	WEAVER
			Running	2002-06-26 05:43 PM	0.26 s	44.85 h	\$0		0	MARIA111

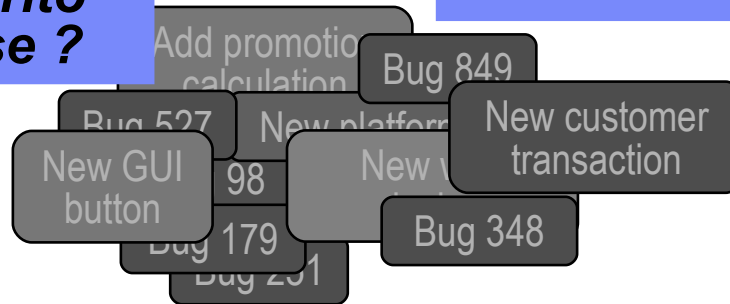
Analyst compares projected to actual improvement in business performance, and fine-tunes business process to optimize results

Manage Change and Assets: Project Challenges



Il requisito 462 va inserito nella release ?

Analyst



Dov'è il problema?

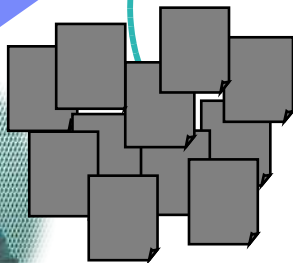


Project Manager

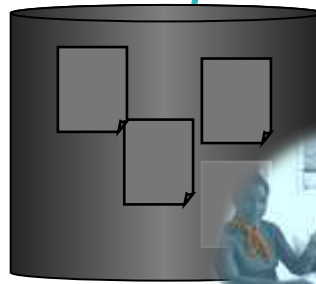
Quel file è importante



Developers

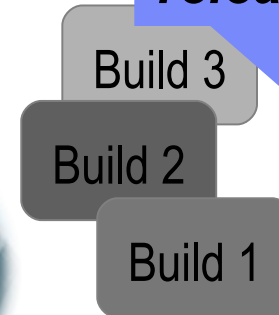


Gestiamo la release ?



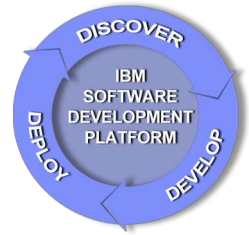
Integrator

Che test dobbiamo fare in questa release?



Testers

Gestire tutto il progetto di sviluppo

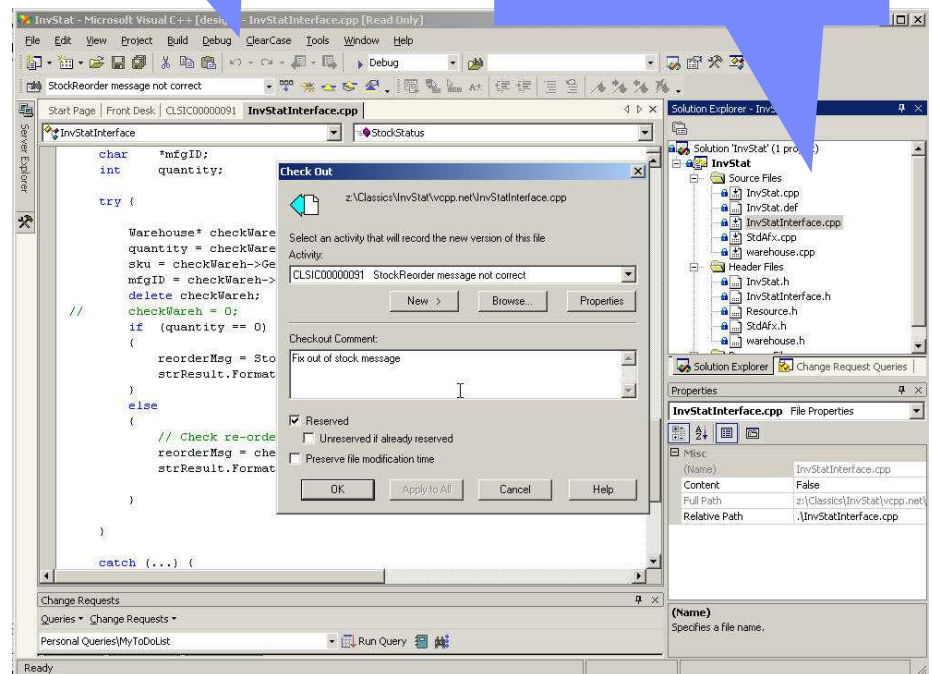
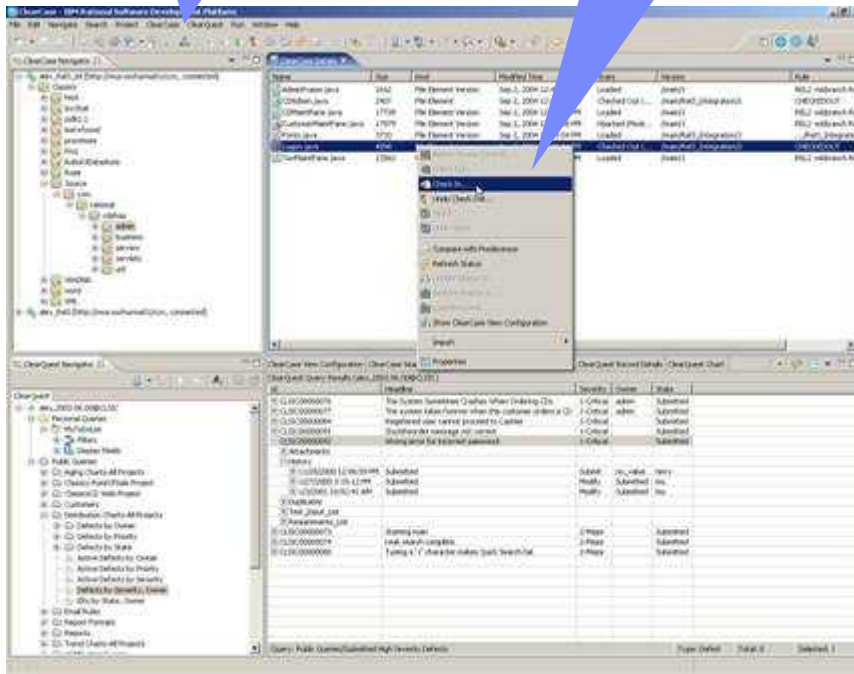


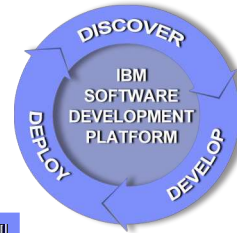
Rational ClearCase and Rational ClearQuest Menu and Toolbar

Context sensitive menus

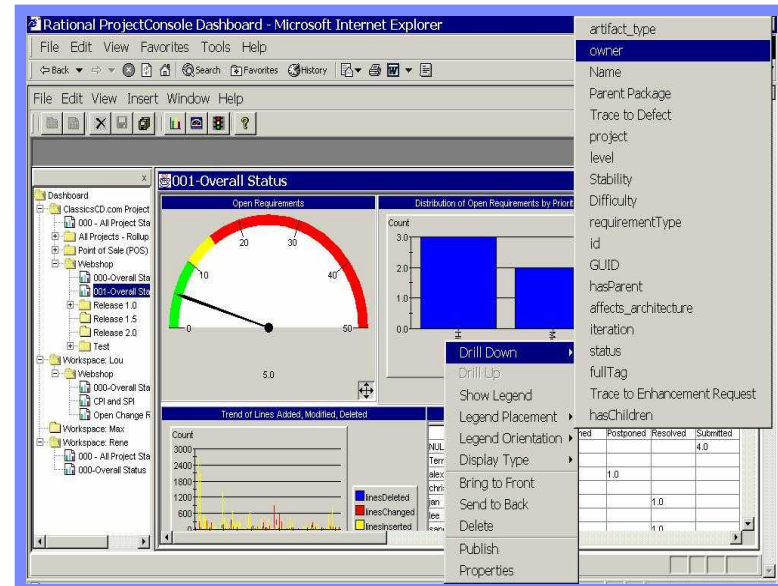
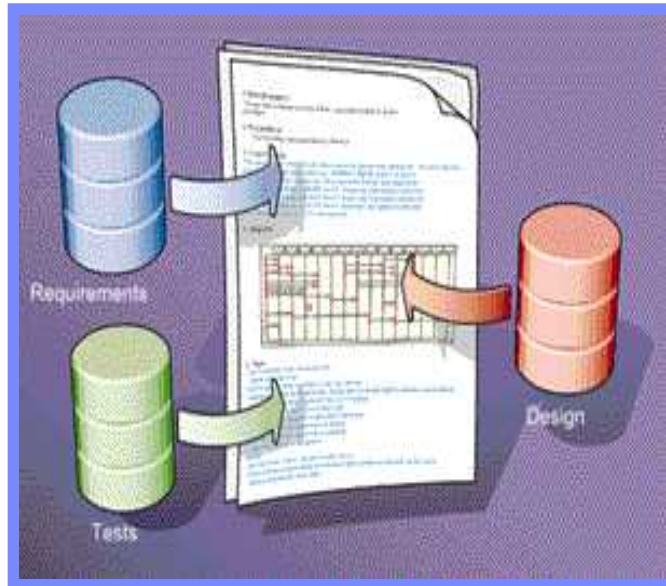
Rational ClearCase and Rational ClearQuest Menu and Toolbar

Context sensitive menus





Tracciare lo stato del progetto, la qualità della soluzione e la documentazione



➤ **Document Process**

➤ **Measure Progress and Quality**

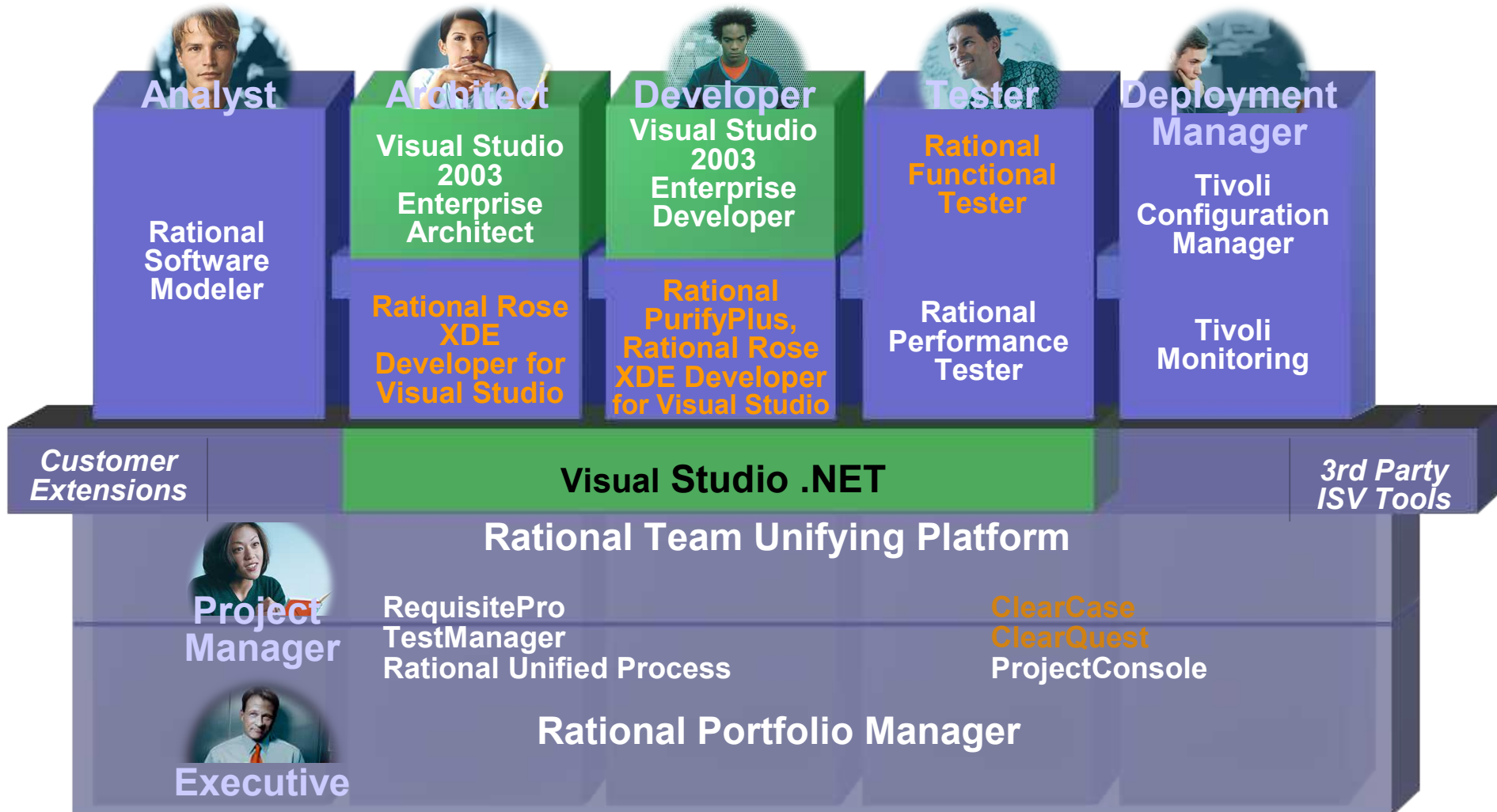
IBM Rational SoDA and IBM Rational Project Console

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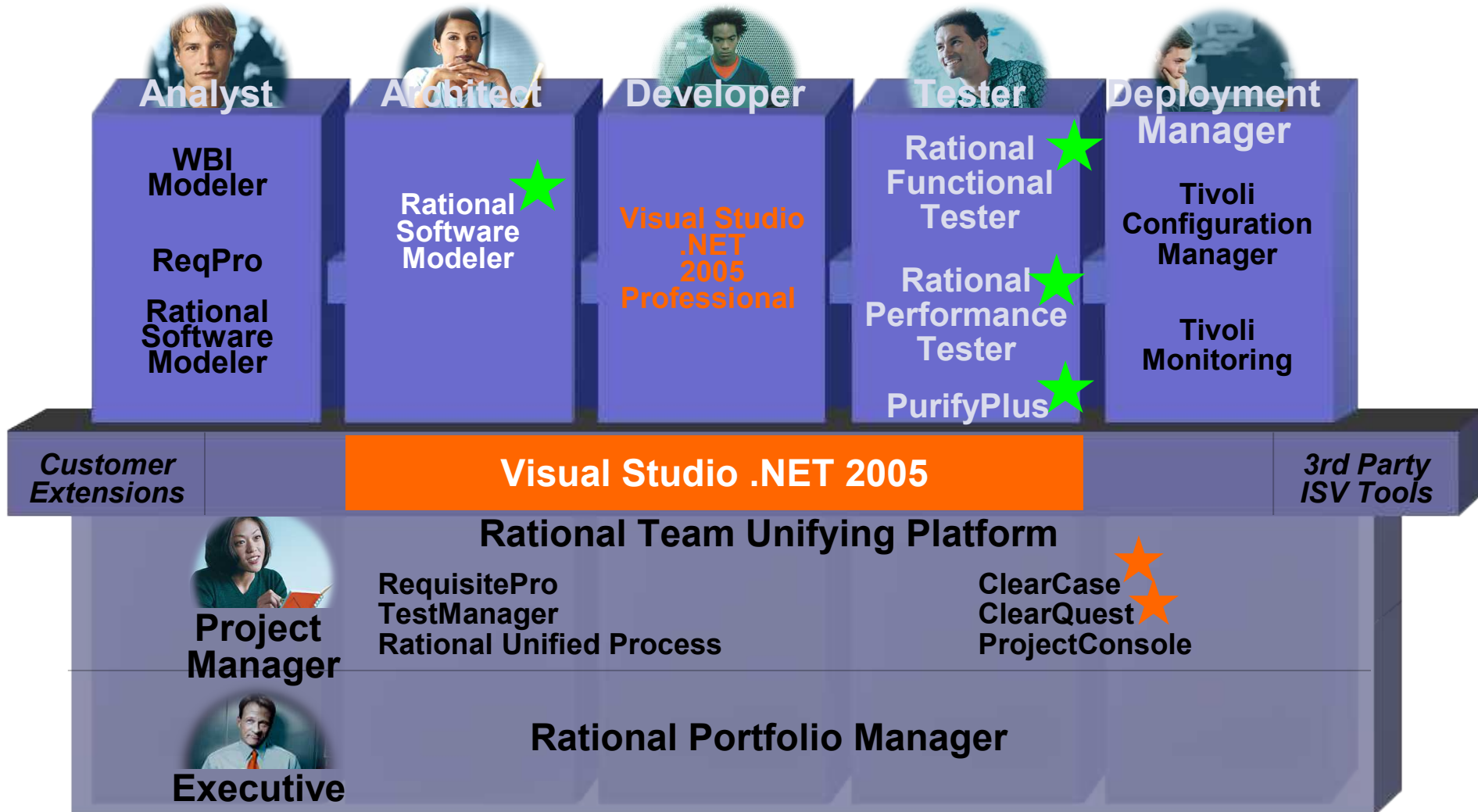


Supporto a Microsoft Visual Studio 2003

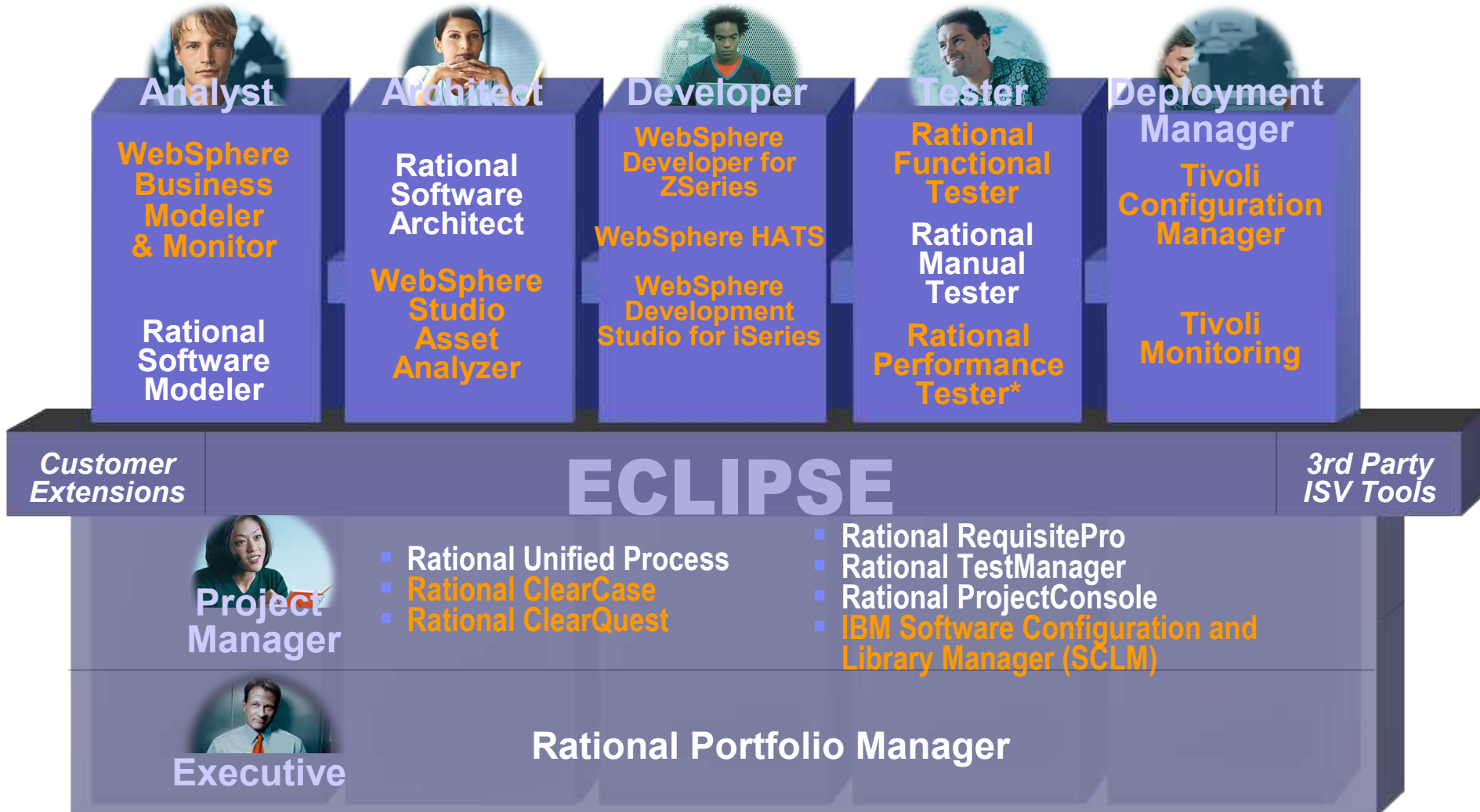


IBM Rational Software Development Platform per VS 2005

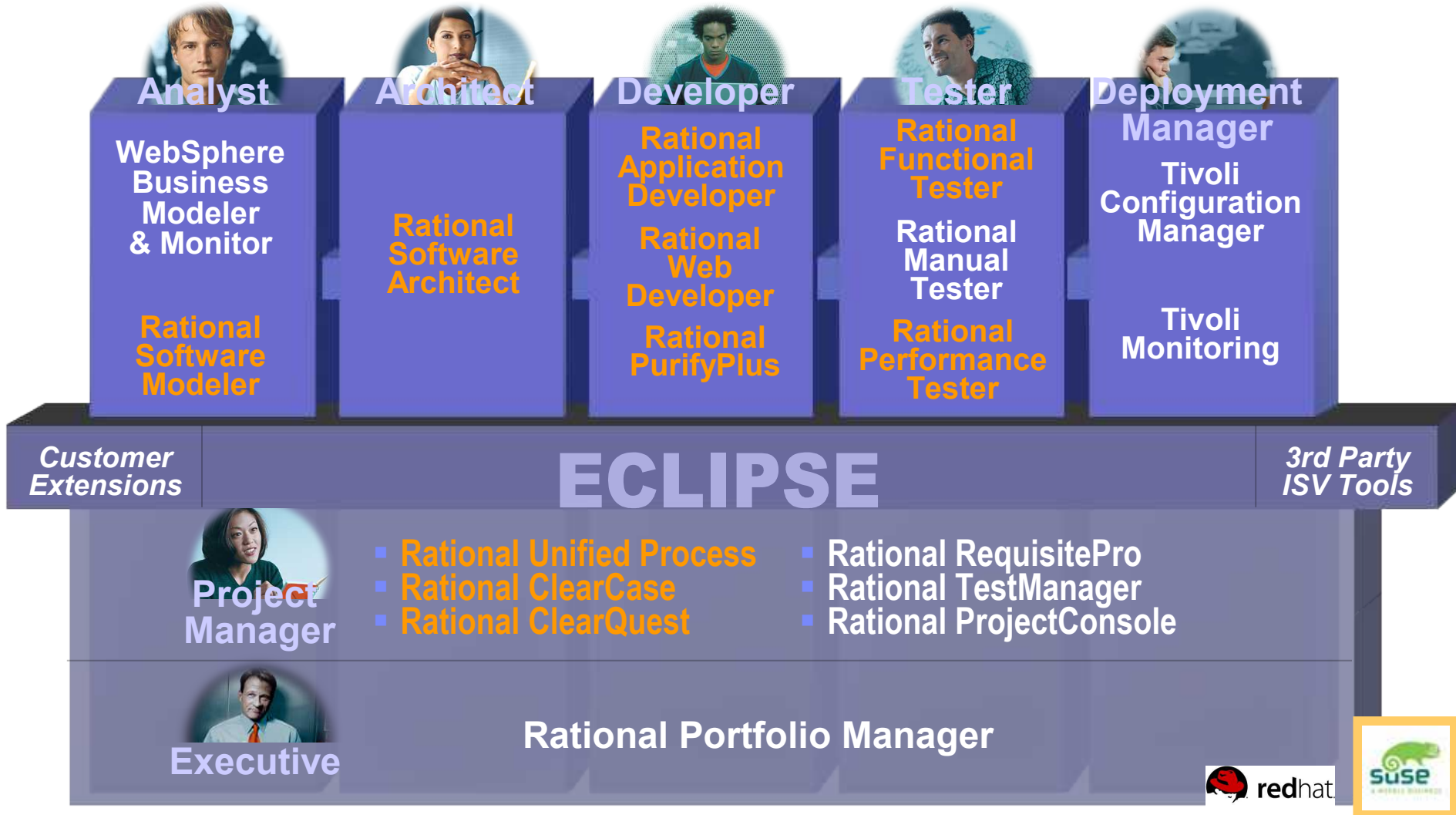
★ *Integration exposed within Visual Studio 2005 GUI* ★ *Other integration with VS 2005*



Supporto per zSeries e iSeries



Supporto per Linux



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IBM Software Development Platform e Eclipse

