



BALTIC, La plateforme de Gouvernance Rational v7.0

Emmanuel Vergé

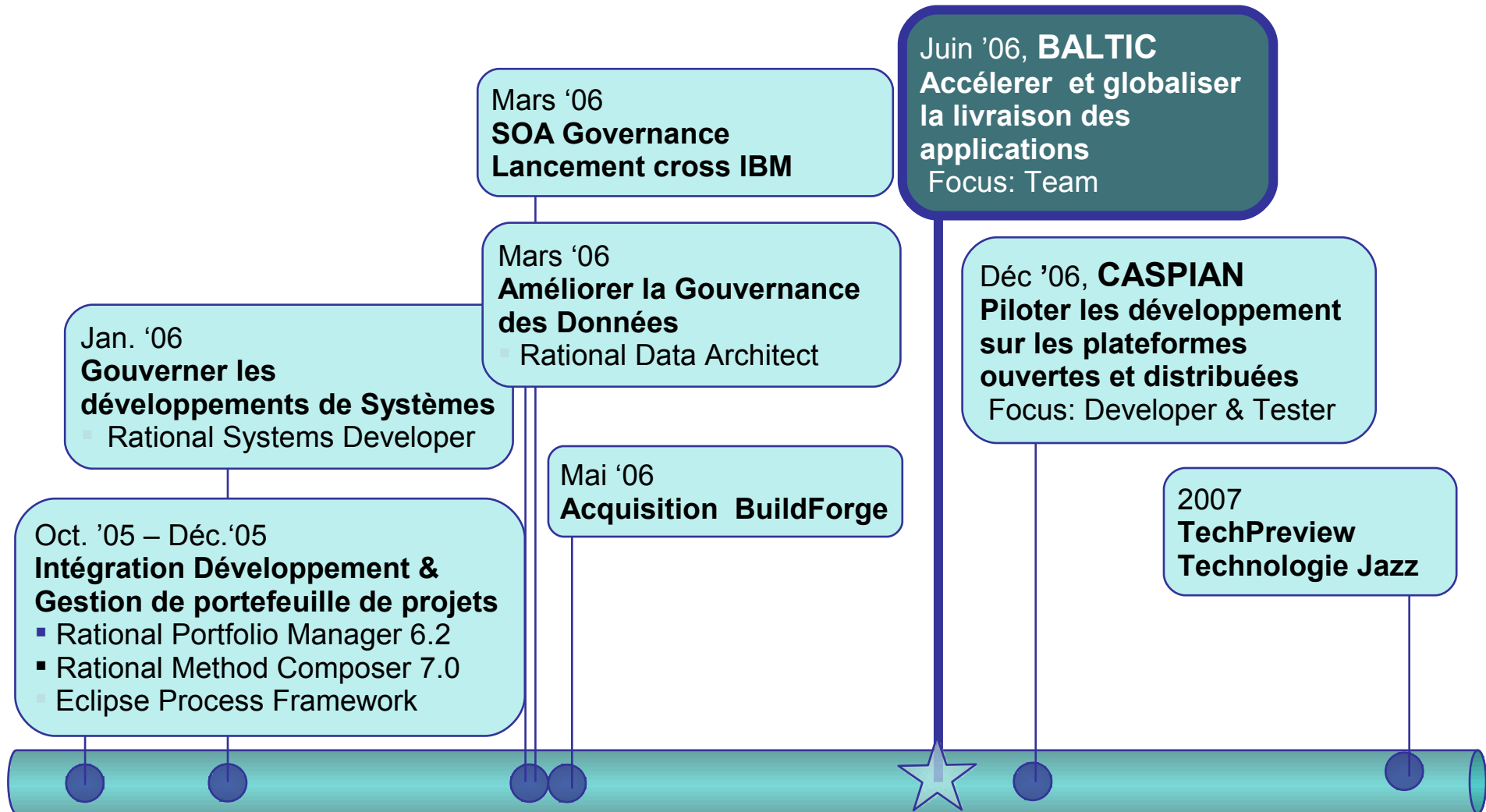
Responsable de marché Rational

France / Afrique du Nord



Lancement Rational en 2006

Le support de la plateforme de Gouvernance des projets





Les enjeux du développement : Globalisation et Gouvernance

Olivier Roubine

Directeur des produits Rational

France / Afrique du Nord





Les préoccupations de l'entreprise

- La **réactivité**: une compétence clé
- L'**efficacité** des employés: un facteur de succès fondamental
- La **croissance** du revenu avec la **maîtrise** des coûts



Les enjeux de l'informatique¹

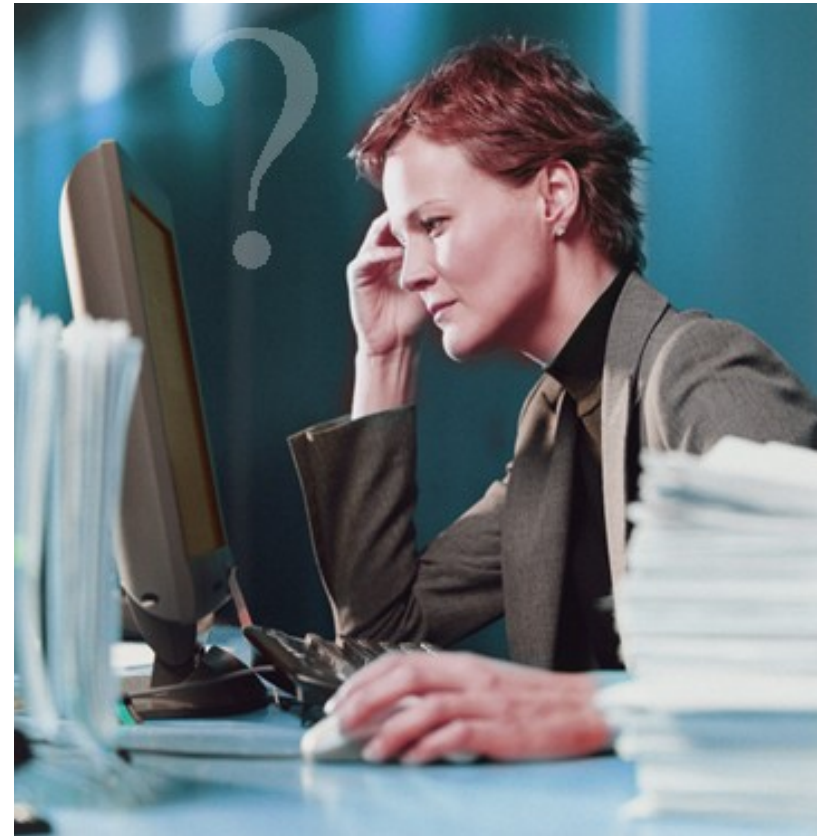
- Maintenir les projets logiciels **alignés** avec des priorités métiers qui changent.
- Améliorer les **résultats** sans augmenter l'investissement et en utilisant les compétences disponibles.
- Gérer les **risques** techniques et les risques métier.

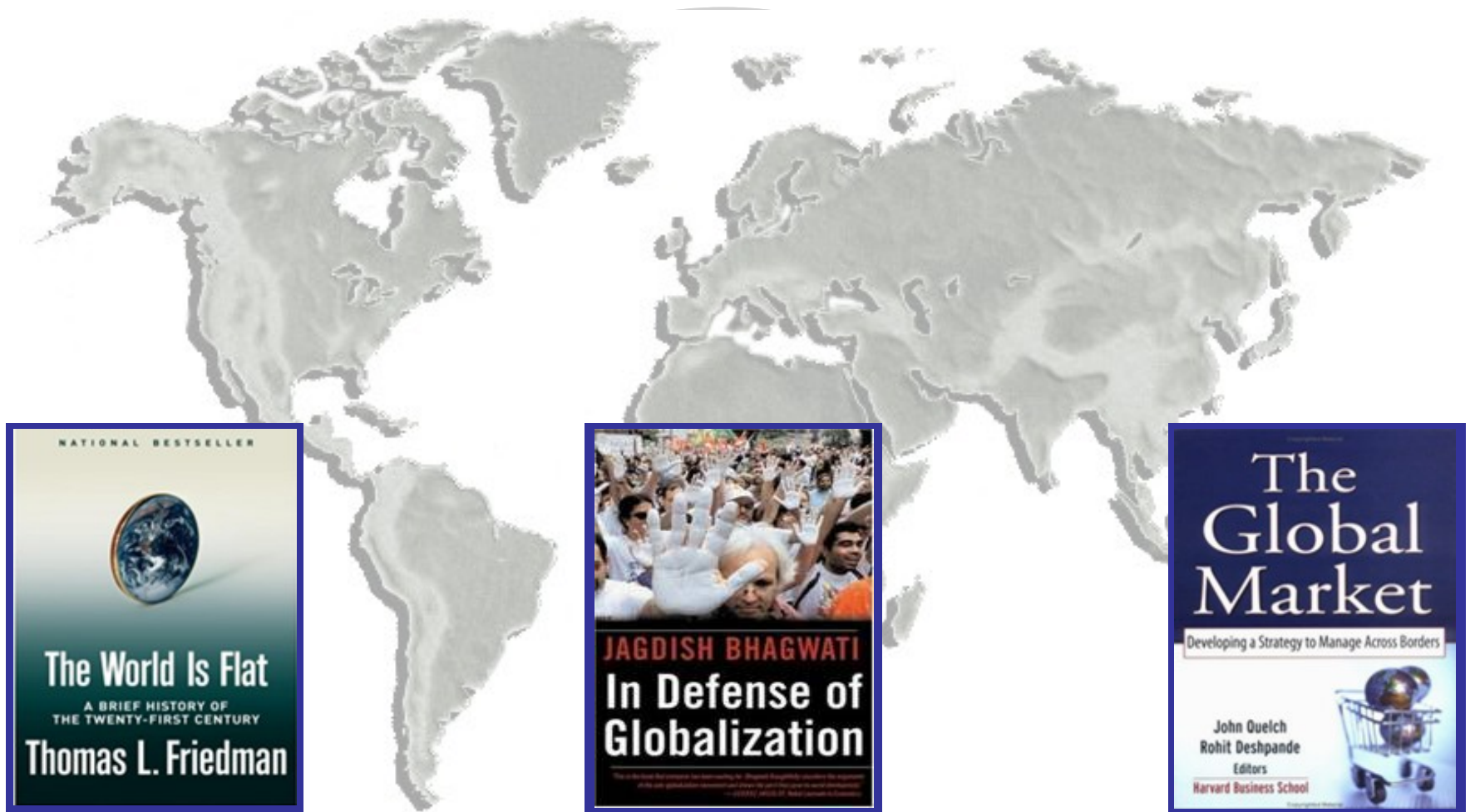
¹ Étude IBM Rational, Novembre 2005

Aujourd'hui, est-ce que je peux...



- *Aligner en permanence mes investissements logiciels avec les objectifs de mon entreprise?*
- *Tirer le meilleur avantage de toutes les ressources de développement; où qu'elles soient?*
- *Garantir la conformité des applications aux réglementations et standards?*
- *Etendre rapidement les processus métiers aux partenaires, aux fournisseurs et aux clients?*
- *Obtenir une visibilité sur le déroulement des projets sans gêner les équipes?*
- *Permettre à mes équipes logicielles d'innover tout en restant redevables sans perdre de vue la valeur fournie?*





« Right-Sourcing »

Standards

Règlementations

« Open Source »

Intégration

La mondialisation des affaires



La nouvelle norme

- **Se rapprocher des marchés et des clients**
 - Pour une croissance locale et une expansion globale
- **Évoluer vers le « right-sourcing »**
 - De l'externalisation des tâches non critiques...
 - Vers un approvisionnement optimisé de processus entiers (ex: centres d'appels, externalisation de machines)...
 - avec un accès aux meilleurs talents au meilleur coût (« near-shore », « off-shore »)
- **Tirer avantage du développement réparti**
 - Composants répartis
 - Nouveaux modèles pour la modernisation des applications et des architectures
(usines logiciel, composants métier, logiciels ouvert)

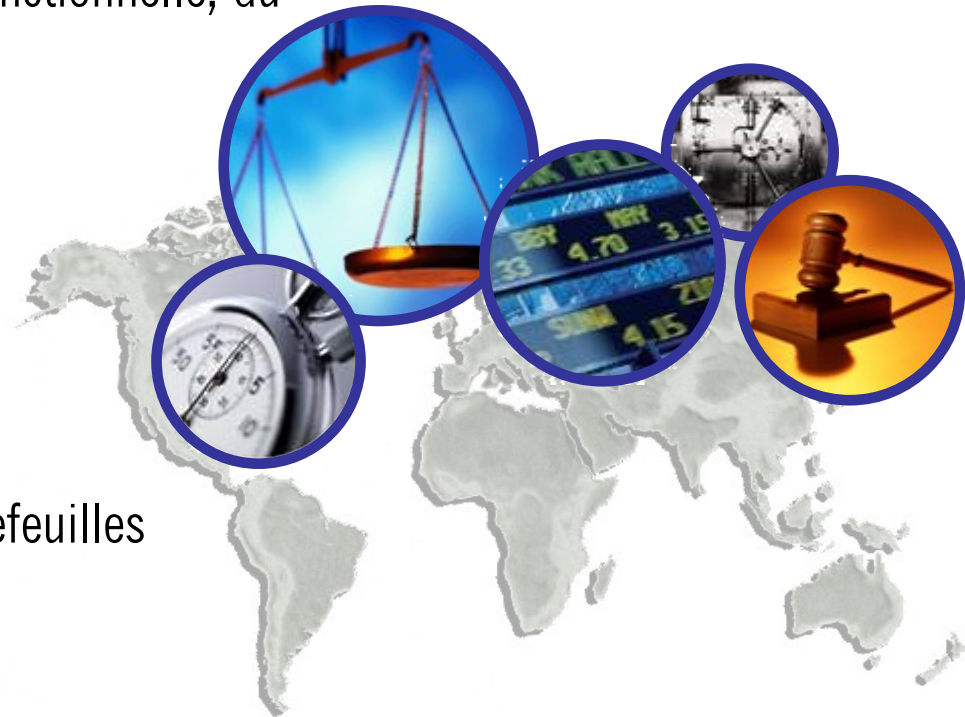


La conformité aux réglementations



La nouvelle nécessité

- **Un impact sur tous les niveaux des processus**
 - Au niveau de l'entreprise, de l'unité fonctionnelle, du développement
- **Au niveau de l'entreprise**
 - Tableaux de bords, processus d'audit
 - Sarbanes-Oxley, HIPAA, 21CFR11
 - Bale II, EASHW
- **Au niveau de l'exploitation informatique**
 - Responsabilité des projets et des portefeuilles
 - ITIL, COBIT, COSO
 - ISO 900x, Six Sigma
- **Au niveau des applications**
 - Gestion des changements, traçabilité
 - CMM/CMMII, RUP, DODAF



LA GOUVERNANCE: PRINCIPES

Des chaînes de responsabilité, de délégation et de communication claires pour permettre un **travail effectif**.

Des procédures de contrôle et de mesure pour permettre un **usage approprié des responsabilités**.



LA GOUVERNANCE: BUTS

Alignement stratégique

Soutenir et étendre la stratégie et les objectifs de l'organisation

Réduction des risques

Identifier et contenir les risques liés aux projets et aux opérations .

TABLEAU DE BORD DE GOUVERNANCE

Développement piloté par le métier

LA GOUVERNANCE: PRINCIPES

Des chaînes de responsabilité, de délégation et de communication claires pour permettre un **travail effectif**.

Des procédures de contrôle et de mesure pour permettre un **usage approprié des responsabilités**

LA GOUVERNANCE: BUTS

Alignement stratégique

Réduction des risques

TABLEAU DE BORD DE GOUVERNANCE

Processus piloté par le métier

Gestion de la valeur

- Aligner le métier et les applications
- Equilibrer risques et bénéfices
- Apporter clarté et responsabilité

Développement flexible

- Utiliser des ressources où qu'elles soient
- Permettre le choix des approvisionnements
- Choisir des architectures facilement évolutives

Gestion des risques et des changements

- Mesurer en permanence pour réduire les risques
- Permettre la gestion des changements pendant tout le cycle de vie
- Satisfaire tous les besoins de conformité

TABLEAU DE BORD DE GOUVERNANCE

Gestion de projet et de portefeuille Analyse et gestion des exigences Conception et réalisation

Processus piloté par le métier

Gestion de configuration et des changements

Qualité logicielle

Gestion de la valeur

- Analyses en temps-réel des informations financières et techniques
- Gestion des ressources en temps-réel
- Tableaux de bord et rapports complets

Développement flexible

- Méthodologie éprouvée
- Gestion intégrée des exigences
- Conception et réalisation d'architectures orientées services
- Environnement ouvert pour l'équipe

Gestion des risques et des changements

- Gestion des actifs et des changements pour tout le cycle de vie
- Audit de fabrication, état des actifs et de l'avancement des projets
- Test de performance
- Pilotage au niveau des services

Accélérer et globaliser la livraison des applications

Les nouvelles fonctionnalités de la plateforme de développement Rational v7.0

Nouveauté!

Gestion de la livraison d'applications en boucle fermée

- IBM Rational Build Forge pour automatiser la gestion des fabrications et des livraisons.
- Des intégrations entre IBM Rational et Tivoli pour assurer le suivi et l'audit des applications en production

Bénéfices

Amélioration de la qualité des fabrications, réduction du cycle de mise en production

Nouveauté!

Flexibilité et intégration de la gestion des tests parmi des équipes réparties

- Automatisation de la gestion globale des tests dans IBM Rational ClearQuest
- Processus de test configurables pour faciliter et systématiser la mise en place des pratique de gestion des tests

Bénéfices

Un point de vue unique sur les processus et les objets de test, avec des métriques intégrées

Nouveauté!

Extension du support à la globalisation

- Support global de la traçabilité dans IBM Rational ClearQuest
- Amélioration des performances de l'accès à distance pour la gestion des exigences, des changements et de la configuration
- Extension des langues supportées dans IBM Rational ClearQuest et Rational ClearCase

Bénéfices

Amélioration du développement réparti



***Highlights of the new
Rational v7.0 Platform
Reshaping Software Development***

***Martin Nally
Rational Chief Technical Officer***



- *Today's realities*
- *Reshaping Software Development*
- *Version 7 enhancements to Rational's Software Development Platform*
- *Future Directions*

Enterprise pressures and opportunities

commoditization pressures

new/increased competition

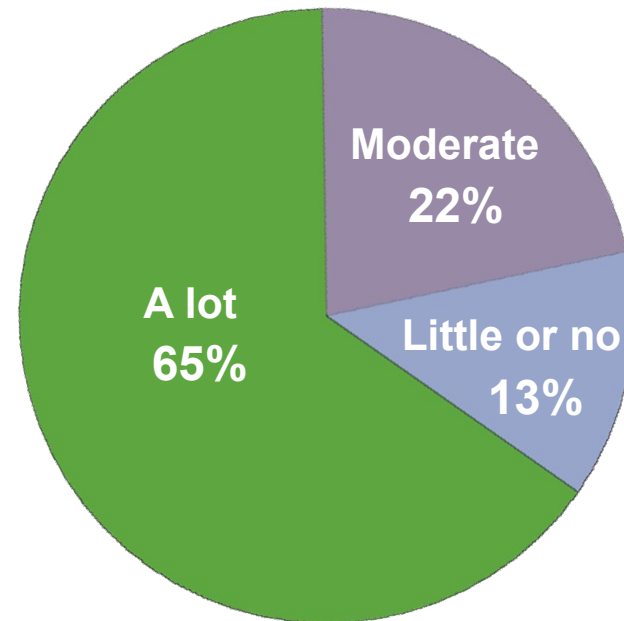
global market opportunities

adjacent market opportunities

global volatility & disruption

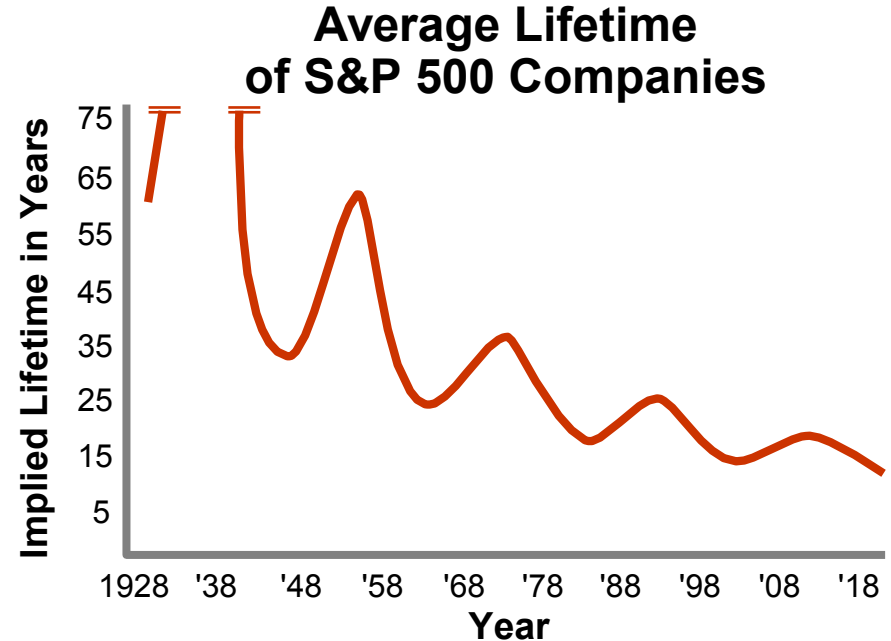
competing business models

CEOs: Extent of fundamental change needed over next two years



Innovation + global policy shifts are destabilizing the marketplace... and it's accelerating

- **Technology** systematically reduces interaction costs and extends global reach
- **Globalization** increases complexity of business requirements and IT agility
- Constant global policy shifts alter **regulatory** and competitive climates
- Intense pressure on **business models** drives focus on core competencies



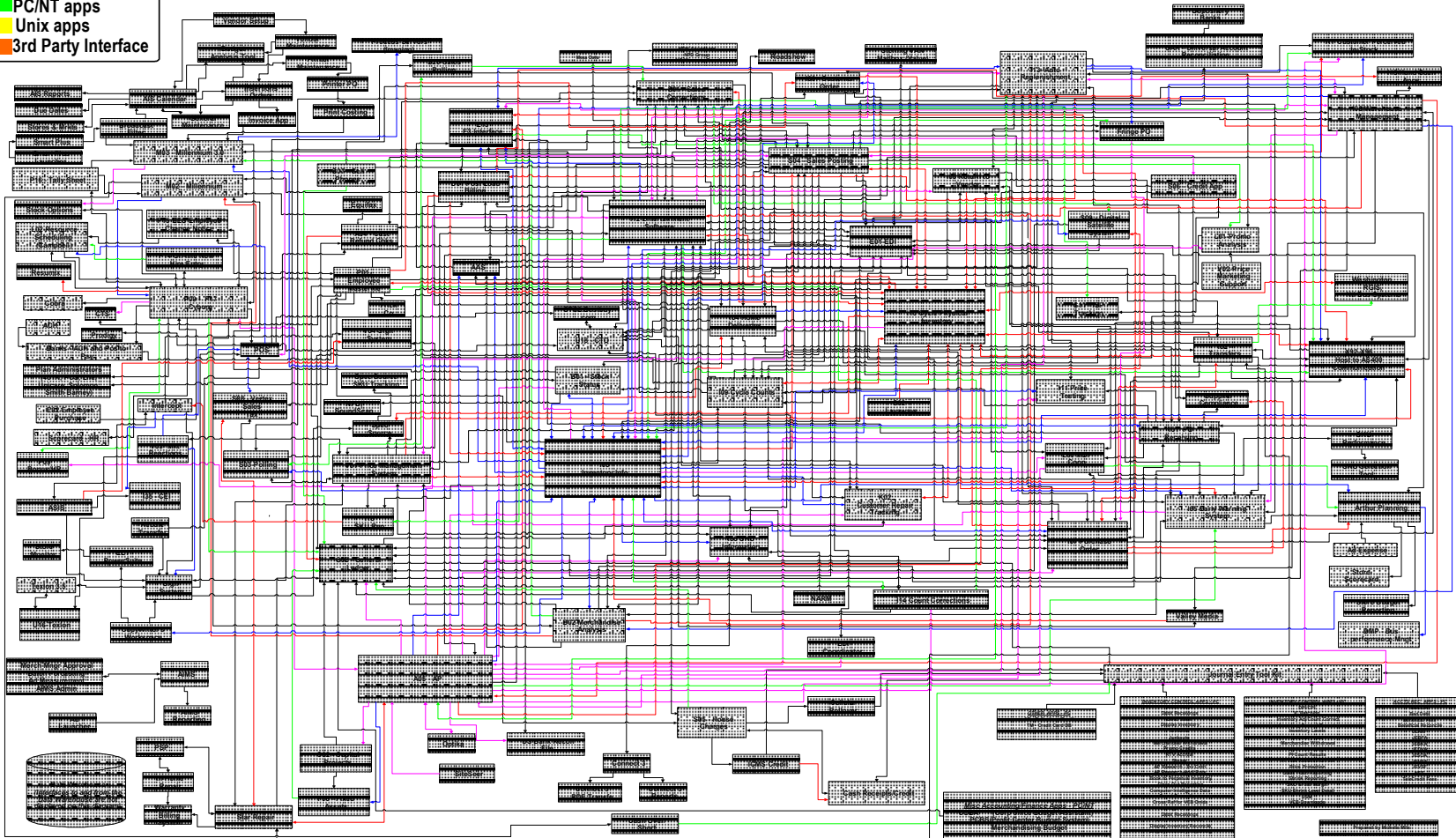
Source: *Creative Destruction*, by Richard Foster

Destabilizing forces converge to significantly intensify global competition

Software engineering realities



- Mainframe
- PC/NT apps
- Unix apps
- 3rd Party Interface



- *Software Development **Process** and **Discipline** must accelerate*

- *Today's realities*
- ***Reshaping Software Development***
- *Version 7 enhancements to Rational's Software Development Platform*
- *Future Directions*



Communities

- Leverage community effects from Open Source, Metcalf's law, social networking



Modularity

- Rethink modularity and granularity of software
- Focus on “granular decomposition” for re-composition



Empowerment and innovation via good governance

- Maximize value and flexibility of the knowledge-based workforce
- Minimize chaos while maximizing individual decision rights

- Our history was extreme “cathedral”-style development
- Moving to an open-source style was a difficult large cultural and practical challenge
- Cost of building community was outweighed by benefit of community
- Improvement in quality and predictability was significant

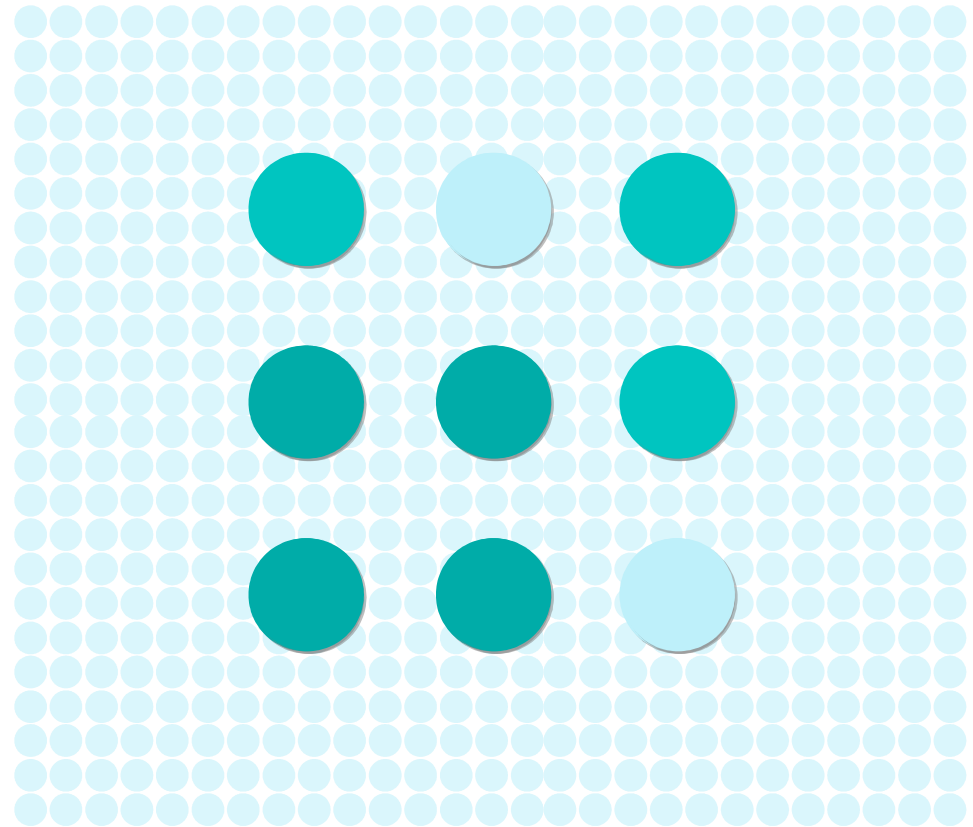
- Process
 - RUP
 - Agile
 - ...
- Community
 - Driven by the Internet
- Transparency
- Governance

Community source in IBM: 304 projects and growing (as of Oct 15 2005)

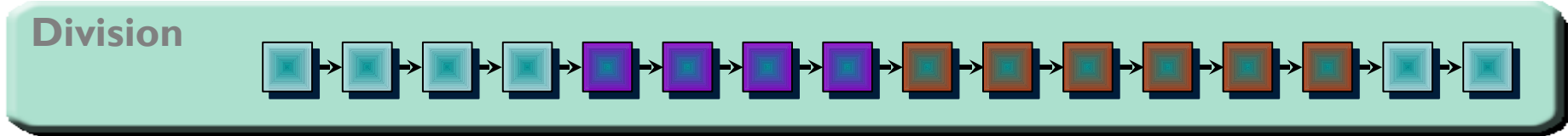
Group Name	Short Name	Register Date	m. Mem	Admins	Sponsoring Brands
WIM_WMM	wmm	2/6/2003	102	Michelle Proctor, Afshan A	AIM
SVG Chart and Topology Gene	svgwidgets	4/2/2003	25	CHRISTINE Knight, PRAFU	Rational
Opal (Visual Analysis Tool)	opal	5/8/2003	10	Genady Grabarnik	Research
ISMP Toolkit	ismptoolkit	5/16/2003	82	Julia Holloway, Christopher	AIM
Presentation Services	ps-web	5/29/2003	450	Jason Plurad, David Allen	Tivoli
Config Ant Scripts and Tasks	configtasks	6/3/2003	7	Steven Ims, Michael Gering	SWG Other
On Demand Clients	odc	6/19/2003	73	Rob Weir, Robert P. Zitelli,	Lotus
ABLE Product	ableproduct	6/26/2003	33	Jeffrey R. Pilgrim, Don Sci	Research, Server/Techn
SWG Community Source	swgcs	7/8/2003	9	Michael Gering, Andi Walla	SWG Other
AC Tools and Technologies	ac-tech	7/23/2003	115	Kathryn Fryer, Harm Sluim	Rational
Infrastructure Building Blocks	ifbpb	7/23/2003	172	Mike Starkey, Lynne Hans	SWG Other
WebSphere Studio Tools	webspherestud	7/29/2003	234	Jeff Turnham, SCOTT Ped	Rational
Abbot for SWT	abbotforswt	8/13/2003	9	Tom Roche	Rational
Depchecker	depchecker	9/8/2003	30	Ed Blackman	Tivoli
AAI	aai	9/30/2003	24	Nat Mills	Research
Abstract User Interface Markup	auiml	10/20/2003	52	ELIZABETH SILBERG, Jef	Server/Technology Grou
SI/SPX Enablement	sispxenable	10/29/2003	99	Kathleen Harlow, Michael Y	Tivoli
Application Analyzer	r2a	11/20/2003	14	STEVE Gutz, Emmanuel W	Rational
Corona	corona	12/4/2003	244	RUPAM Kuehner, CRAIG S	Rational
SNMP Stack	snmp	12/9/2003	15	Dinakaran Joseph, Lap Hu	Tivoli
orca	orca	12/10/2003	108	IVAN Yue, PETER Manaha	Rational
Rational Aurora Modeling Platfo	aurora	12/16/2003	166	FREDERIC Plante, ALAN Y	Rational
ISC Common Tasks	isccom	12/19/2003	28	Mark Anderson, Bob Moore	Tivoli
RationalFunctionalTester	rtnlfuncttstr	1/16/2004	236	Christina R. Carlson, Jan F	Rational

Modularity

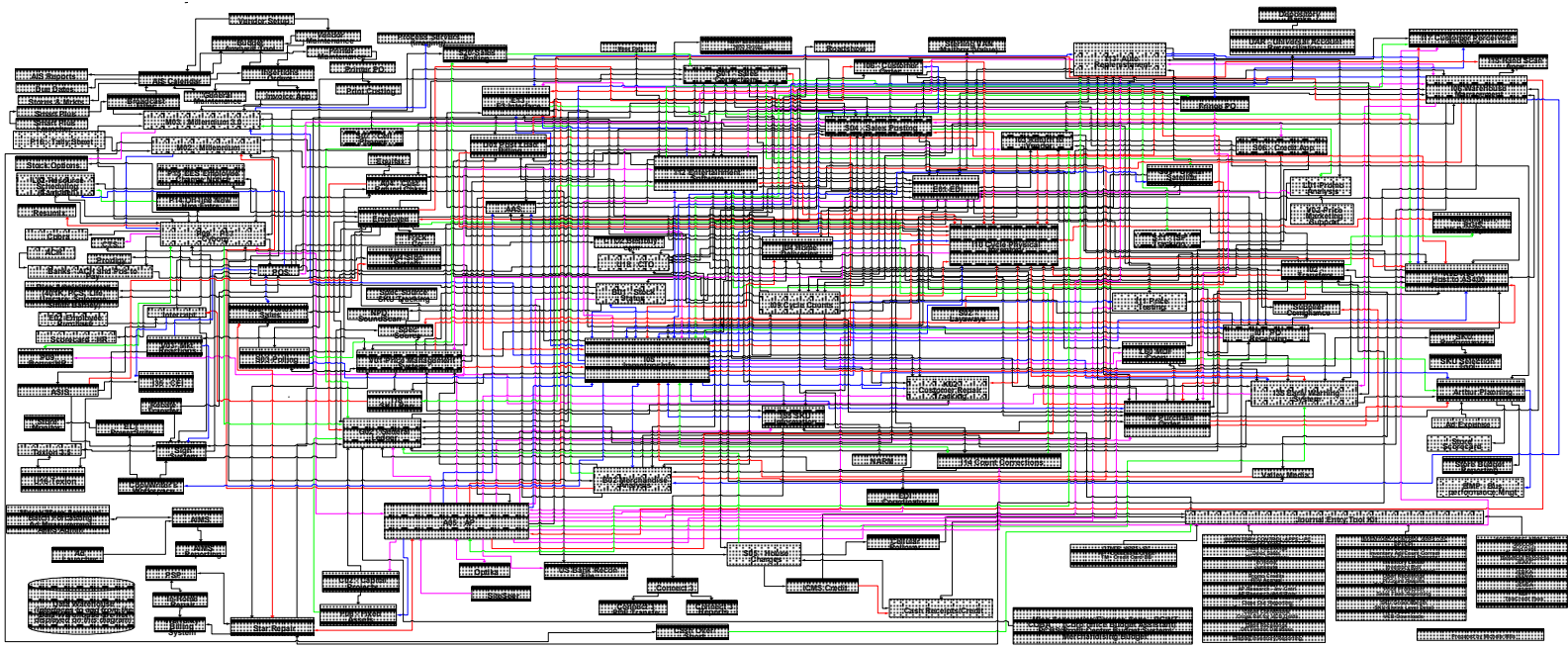
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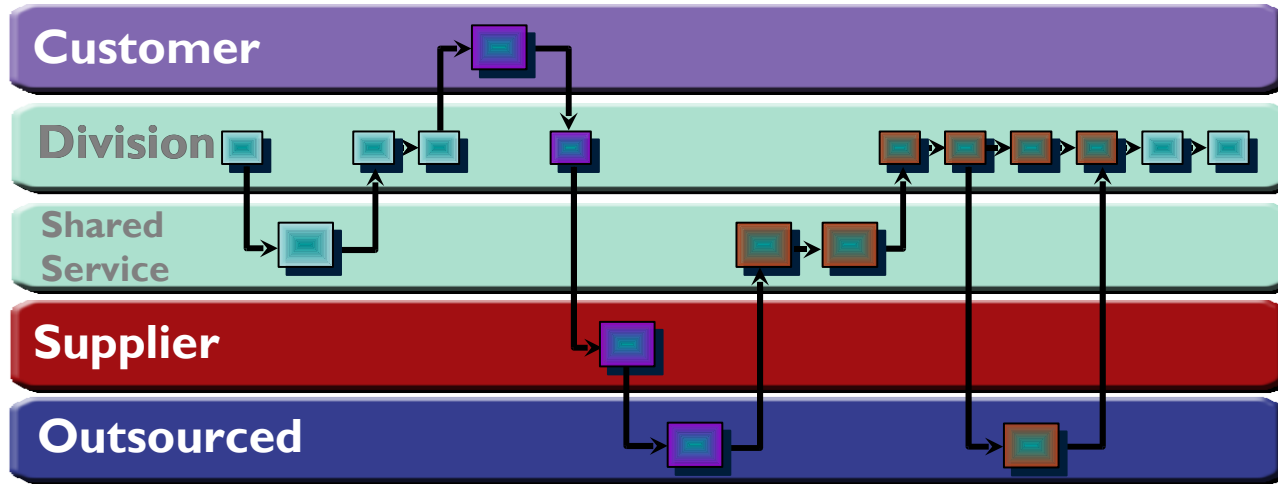
What we have



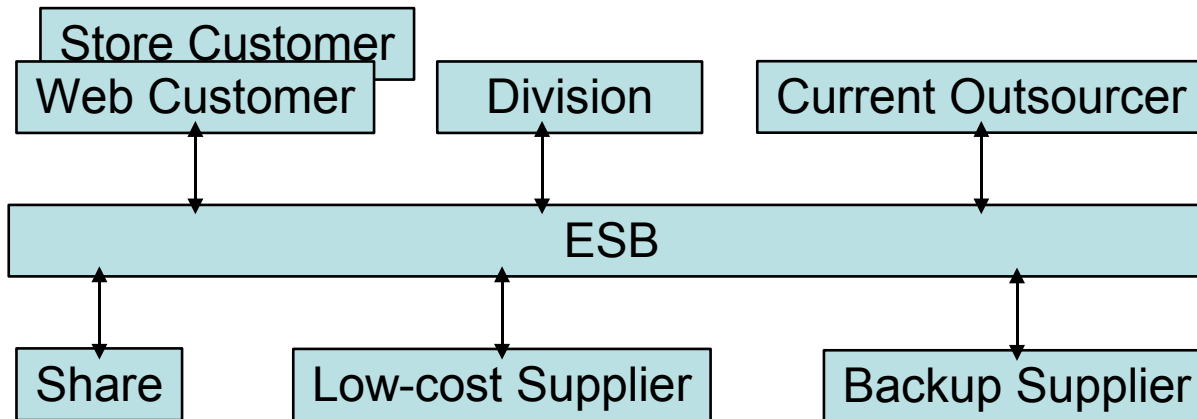
+



What we want



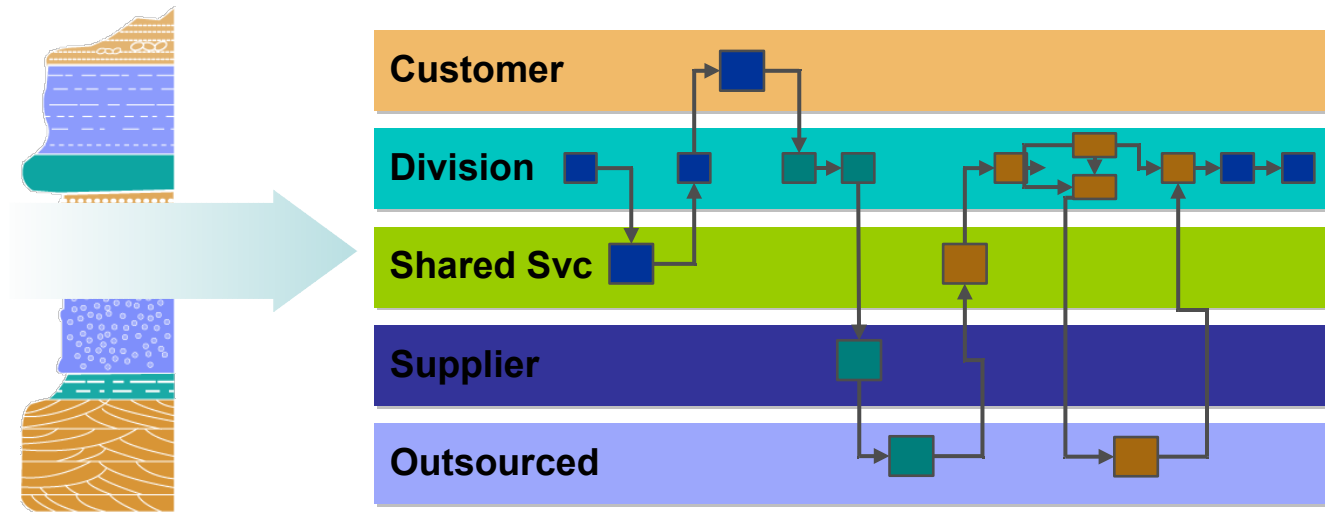
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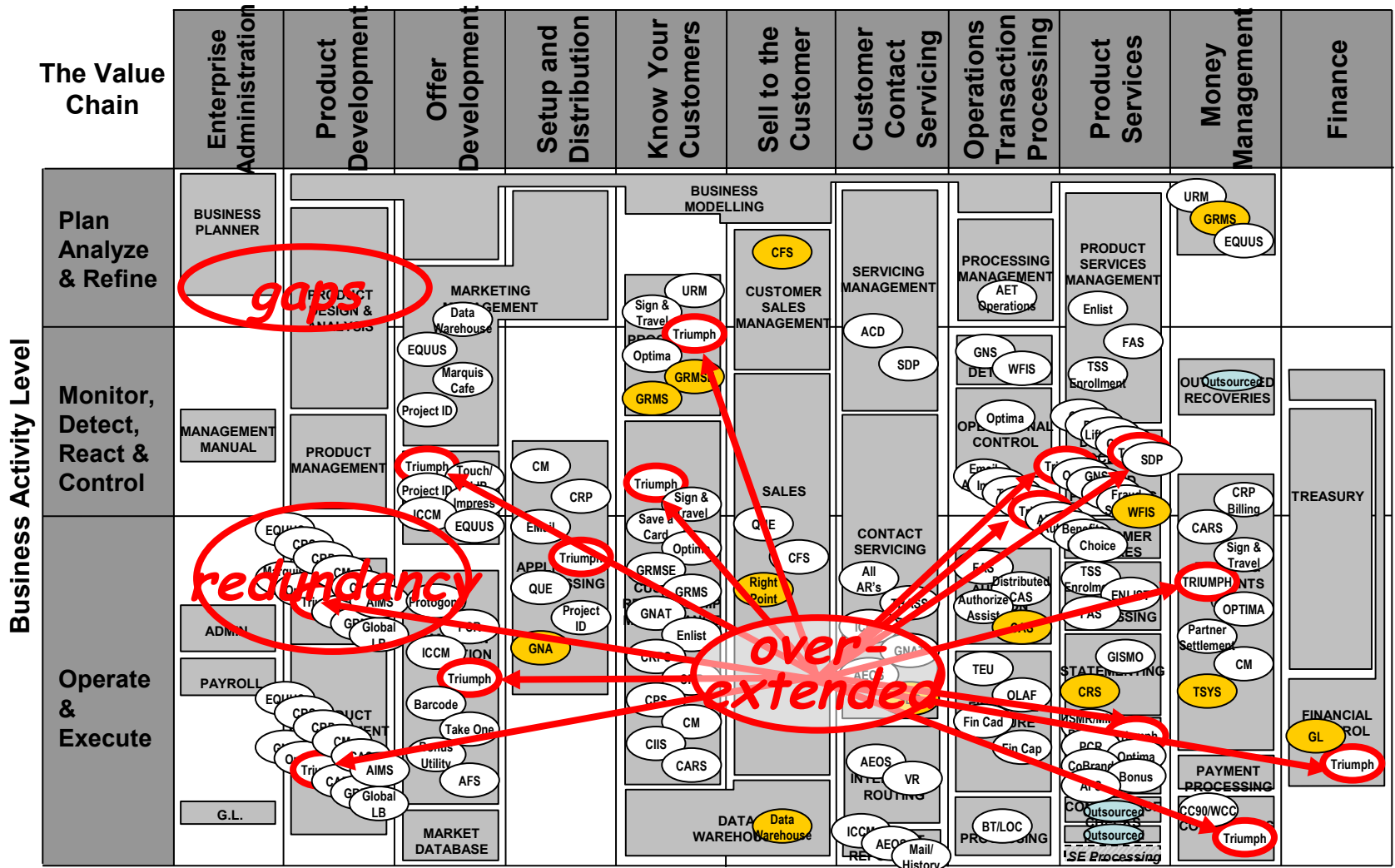
Modularity

Considerations for software development

- Reuse of existing highly **stable** legacy code
- Allows new service “suppliers” to be brought online quickly and efficiently
- Once secured, allows for transparency of software service supplier(s) and **predictability** of services
- Enables development of Communities of Interest which leads to great **agility** and **quality** in software delivery



Linking architecture to business value

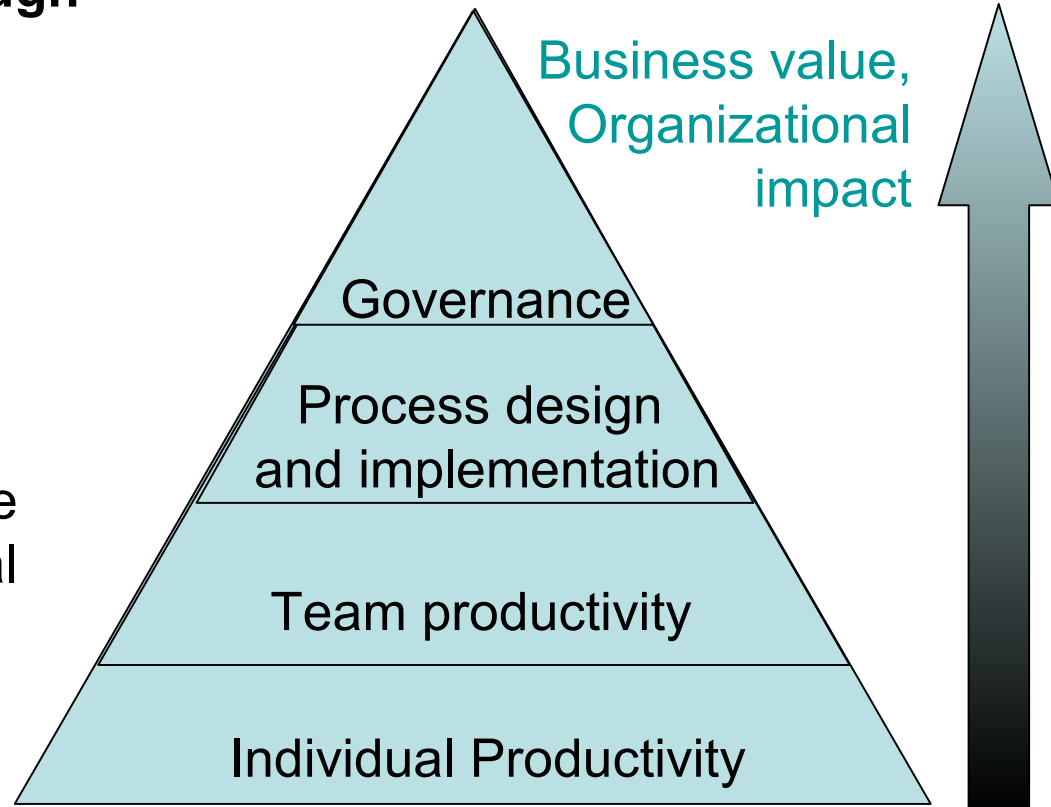


- Communication
- Processes and Policies
- Measurement, traceability, feedback
- Controls and decision-making

These are the key elements of Governance

Empowerment through Governance

- Maximize value and flexibility of a knowledge-based workforce
- Minimize chaos while maximizing individual decision rights



- Top-down imposed governance fails unless developers benefit too
- Process, governance, and auditing need to be part of the day-to-day activity, not “extra work”
- The keys:
 - Process
 - Automation
 - Information that supports decision making
 - Appropriate mechanisms for real-time guidance



Apache Governance Model:

- *Board of Directors*
 - Governs the Apache Foundation
- *Project Management Committees*
 - Composed of committers
 - Govern the projects
- *Centralized*
 - Infrastructure and security
 - Licensing
 - PR and liaison
- *Principles*
 - Meritocracy
 - Roles
 - Collaborative consensus-based process
 - Do-ocracy: Power of those who do



Source: www.apache.org/foundation/how-it-works.html

- *Today's realities*
- *Reshaping Software Development*
- *Version 7 enhancements to Rational's Software Development Platform*
- *Future Directions*

- *Challenge: **Collaboration between roles***
 - Solution: Integration of build, test and deployment process tools and data
- *Challenge: **Distributed Development***
 - Solution: Improved performance and capability of WAN-friendly clients
 - Solution: Improved support for international code-pages
 - Solution: Improved distribution and desktop management
 - Performance, ease-of-use,
- *Much more*
 - Olivier and Emmanuel have already covered some
 - Larry, Cheri will provide much more information

- *Today's realities*
- *Reshaping Software Development*
- *Version 7 enhancements to Rational's Software Development Platform*
- ***Future Directions***

Beyond Version 7

Themes



- Further improvements in lifecycle management
- Working in a distributed environment
 - WAN performance
 - Web client functional parity (RPM, ReqPro, CQ)
 - Improved web server infrastructure
- Security
- Consumability
- Total cost of ownership

- *Jazz is **new technologies** to take our team platform to the next level*
- An **out-of-the-box integrated multi-role** collaborative life-cycle development environment
 - integration of versioning, defects, build, unit test, project health metrics (code quality and coverage, defect trends, test results) and project planning
- Defines, Automates, Logs, measures and controls lifecycle processes
 - **IDE behavior that adapts to process definitions**
- Exploits new internet technologies for global communication and collaboration
 - Instant Messaging, RSS feeds, Wiki, Blog, VOIP, ...
- Leverages **standards-based open-source and commercial Web-era middleware**
 - Scaling from Tomcat and Derby to WebSphere Application Server and DB2
 - Scalable consumability



IBM Rational Partner Products

IBM Rational Jazz-based Products
Open Commercial Software Development

**Other Jazz-based
Tools and Frameworks**

Jazz Core Infrastructure
Open Source

Eclipse And Other Open Technologies
Ajax, J2EE, Tomcat¹, Derby¹, Web Services, ...

¹High-end scalability through WebSphere, DB2, and other commercial high performance application server and database technologies.

Drill Down Session – this afternoon

- Session *Le futur avec Jazz*
- Vision, Strategy and Jazz Technology platform presentation

12:30 - 14:00	<i>Déjeuner & Démo Center</i>
14:15 - 15:30	<i>Le futur avec Jazz</i> <i>Salon France (niveau -1)</i>

- Good governance
 - Creates business advantage,
 - Empowers and enable practitioners
- Process and governance should become part of the organization's culture and day-to-day work
 - A key enabler is process automation and information integrated into productivity tools
- We're investing for both evolution and revolution
 - Jazz technology inspiring new capabilities in existing products
 - New capabilities



***Highlights of the new
v7.0 capabilities
Application Development Lifecycle***

***Larry Gerard
Product Manager Leader
ClearCase - ClearQuest***



Rational Software Development Conference 2006 ***June 4-8, 2006 – Orlando, Florida US***

- *New! Accelerating Global Software Delivery*
 - New business driven development capabilities for the IBM Rational Software Development Platform
- Version 7.0 products:*
- IBM Rational Team Unifying Platform
 - IBM Rational Build Forge
 - IBM Rational ClearCase, Rational ClearCase MultiSite
 - IBM Rational ClearQuest, Rational ClearQuest MultiSite
 - IBM Rational ClearQuest and Functional Testing package
 - IBM Rational RequisitePro
 - IBM Rational TestManager
 - IBM Rational SoDA
 - IBM Rational PurifyPlus
 - IBM Rational Robot
 - IBM Rational Rose, Rational Rose RT
 - IBM Rational Test RealTime

ClearCase and ClearQuest 7.0

New features and capabilities

- **Quality and Supportability**

- 15000+ Defects fixed
- Wellness programs across Team: APAR reduction
- IBM Support Assistant

- *ClearCase 7.0*

- ClearCase Remote Client / Eclipse Plugin
 - Version Tree Browser
 - Project Lead Use cases
 - Support for ClearQuest web forms (UCM)
 - Base ClearCase Support
 - Create Label
 - Apply Label
 - Create Branch type
 - Visual Studio support
- Large File Support
 - Checkin/Checkout for files up to 32 GB
 - CQMS support / packets maxsize 2GB
- UCM enhancements
 - Scalability, Usability, Performance
 - Element Copy
 - Renaming Baselines
 - Rebase improvements (up to 60% faster)
- ANT build auditing
- CC web LDAP authentication
- Shared Memory Lock Manager per VOB
 - Solaris, HP-UX updated
 - Linux x86 - New
- Rational Common Licensing (FlexLM)

- *ClearQuest 7.0*

- New ClearQuest Client / Eclipse Plugin
 - Connection management
 - Export utility/Export XML
 - UCM support
 - Find record history
- Globalization improvements
 - Mismatched code pages
 - 5 new code pages
 - 121 locales supported
 - Simplified Chinese translation
- Eliminated need for DB2 client
- ClearQuest Test Manager
 - Planning, Authoring, execution & reporting
 - Integrated with Eclipse /TPTP testing tools, Rational testing tools (RMT, RFT& RPT), SPI Dynamics
 - Integration with Mercury testing tools by Ring-Zero
- Increased number of records in a Database
- LDAP authentication with SSL
- ClearQuest Web Improvements
 - Min/Max on results & forms
 - New URL format
 - New Create URL dialog
 - Export to excel
- Documentation Updates
 - HTML format
 - Test Manager quick start
 - Cheat Sheets
 - Glossary & Index

- **CC & CQ**

- RWP updated
- Perl upgraded
- Install & Upgrade improvements
 - Product Specific install
 - Launch pad
 - Eliminated mixed media issue
- Deployment Tracking
 - Integration with TPM
 - Build tracking
 - Release tracking
 - Deployment tracking
- New OS
- Team API (Java based)
 - TechPreview for CC, CQ & RP

Accelerating Global Software Delivery

New Business Driven Development Capabilities
in the Rational Software Development Platform Version 7.0

▶ New!

Flexible and integrated test management across distributed teams

- Global test management automation on IBM Rational ClearQuest
- Configurable test workflows to easily enable and enforce consistent test management best practices

Results

Single point view of test processes and assets with built-in analytics

▶ New!

Closed-loop software delivery management

- IBM Rational Build Forge for automated build and release management
- IBM Rational and Tivoli integrations for tracking and auditing assets in production

Results

Faster, higher quality build and production cycle time

▶ New!

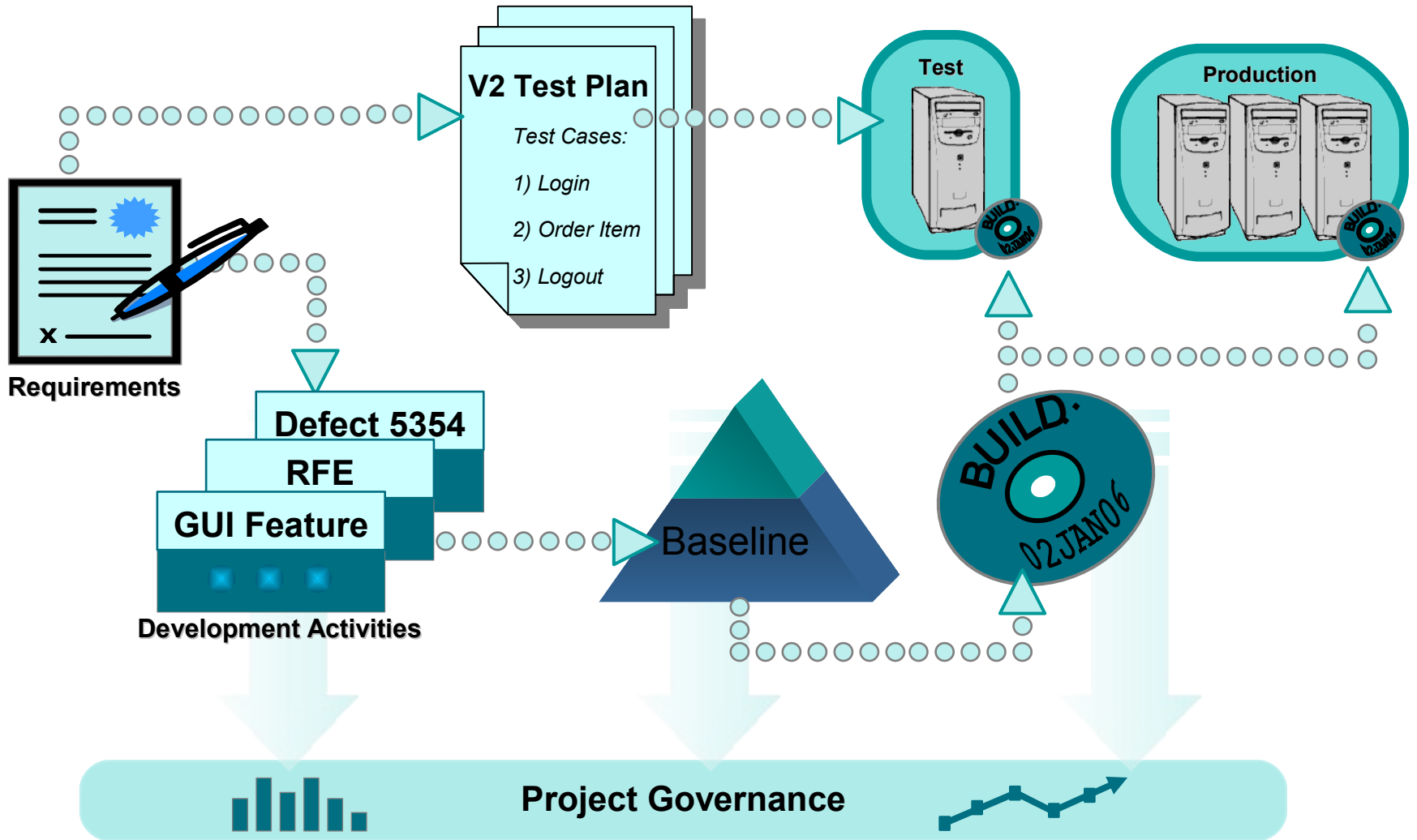
Extended global development support

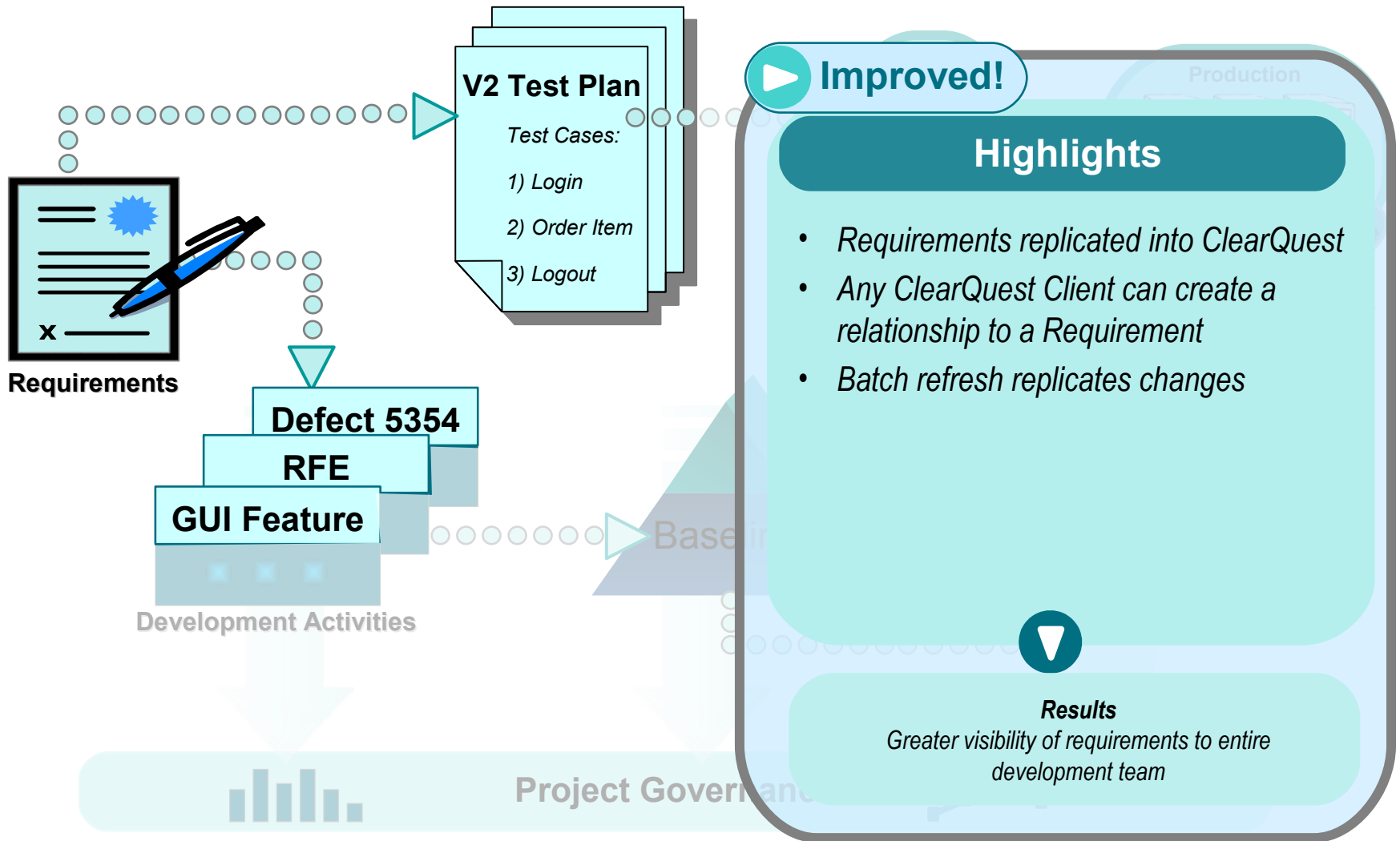
- Global traceability support in IBM Rational ClearQuest
- Improved remote client performance for requirements management and change and configuration management
- Improved language support in IBM Rational ClearQuest

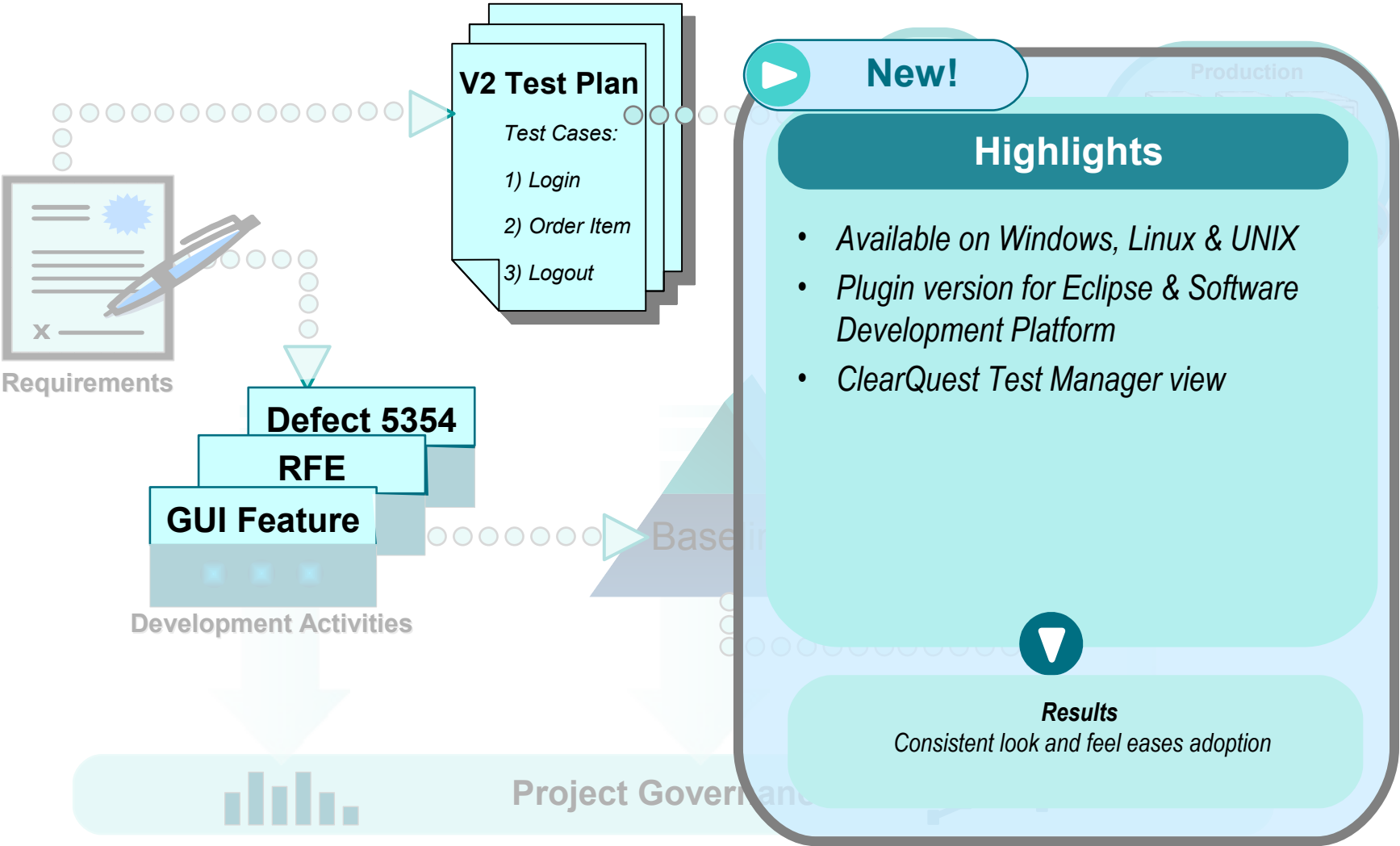
Results

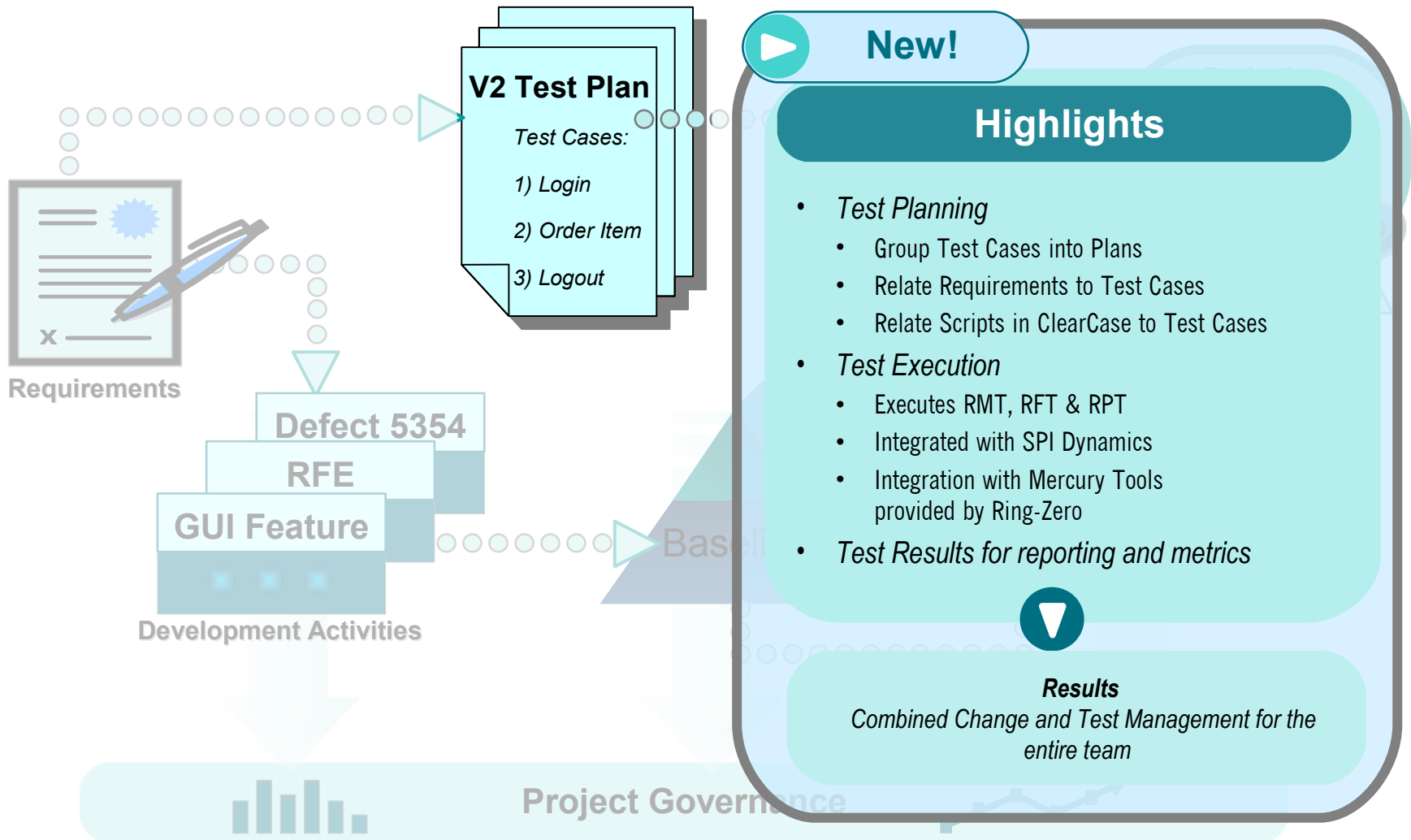
Greater sourcing flexibility in global development

Lifecycle Traceability



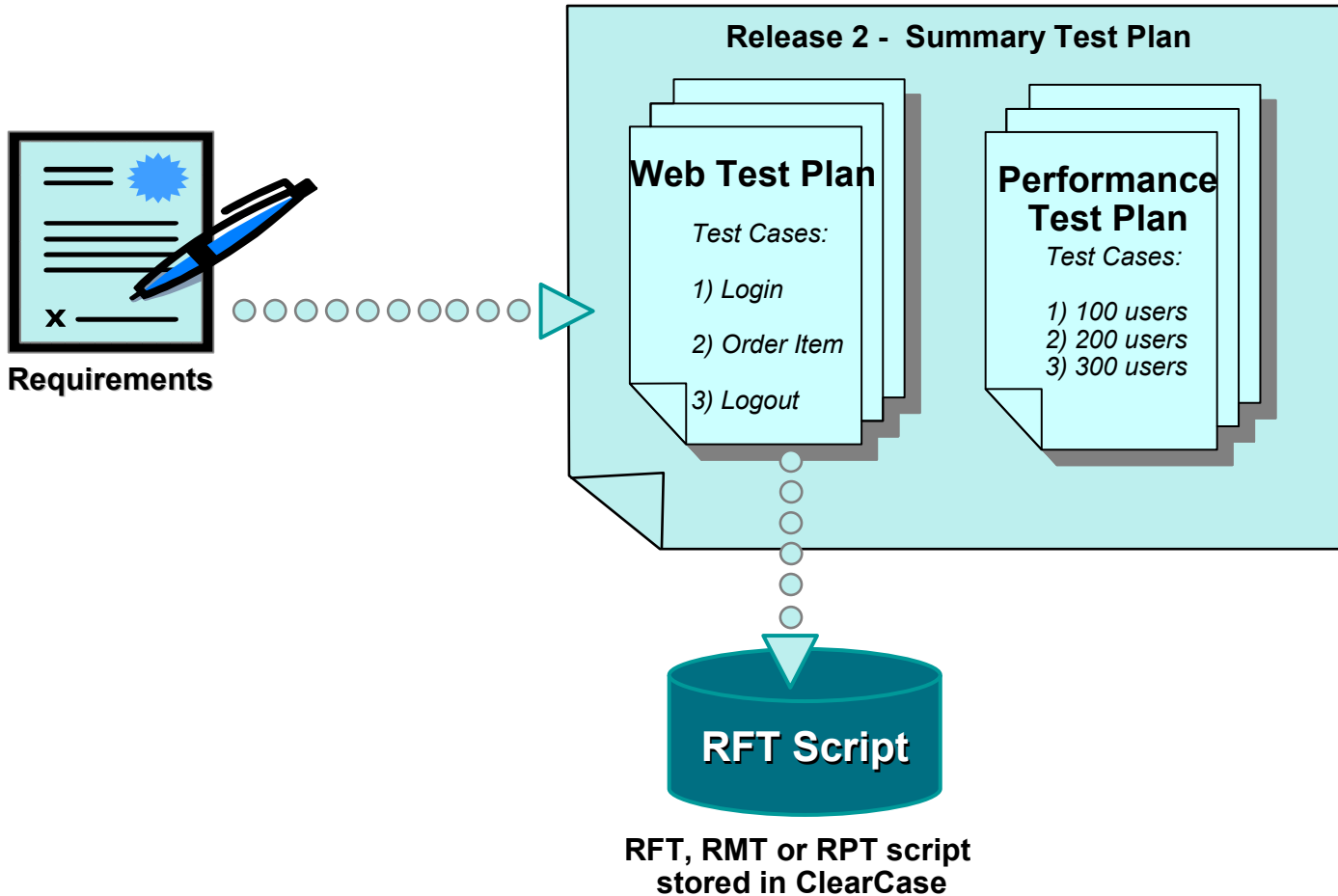


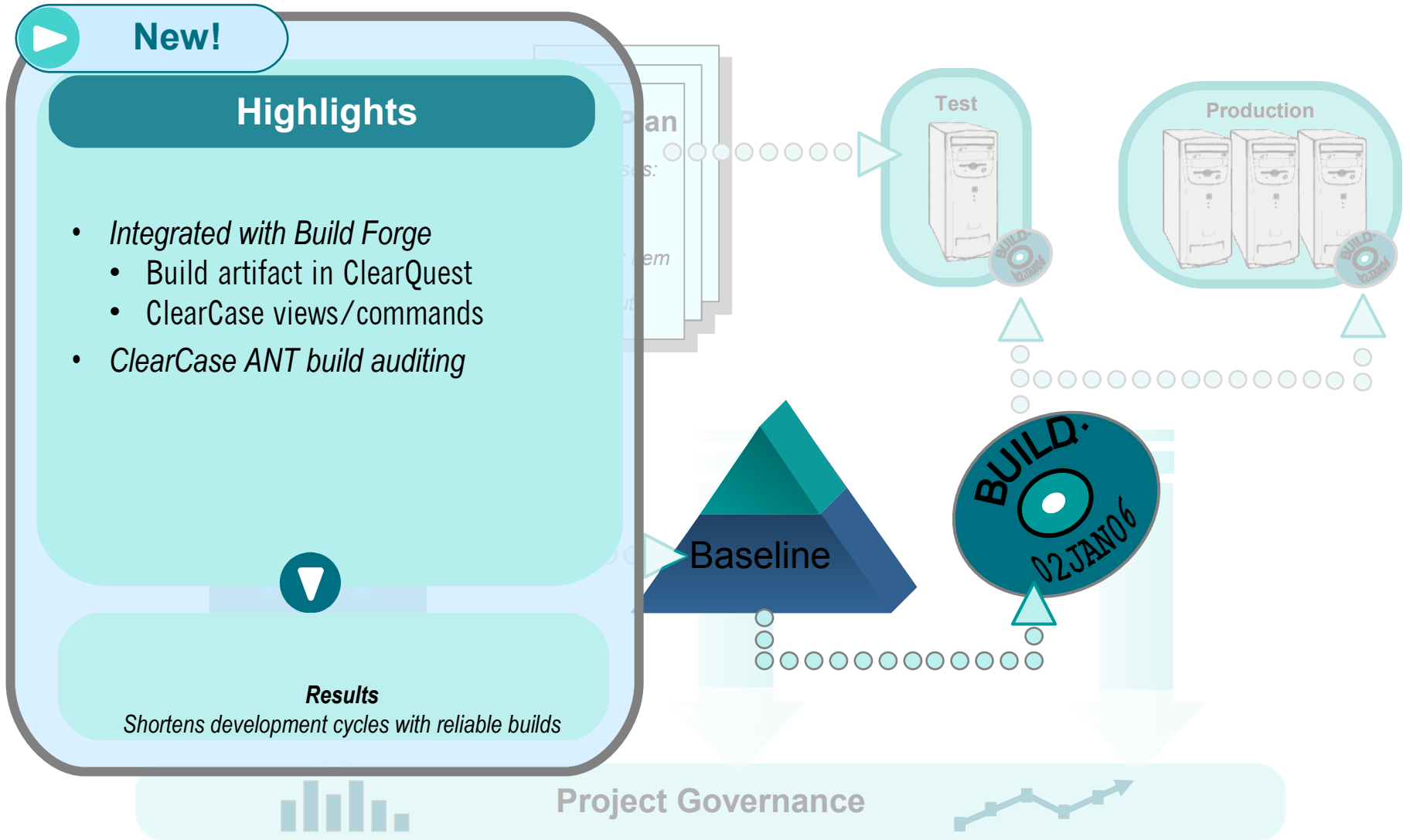


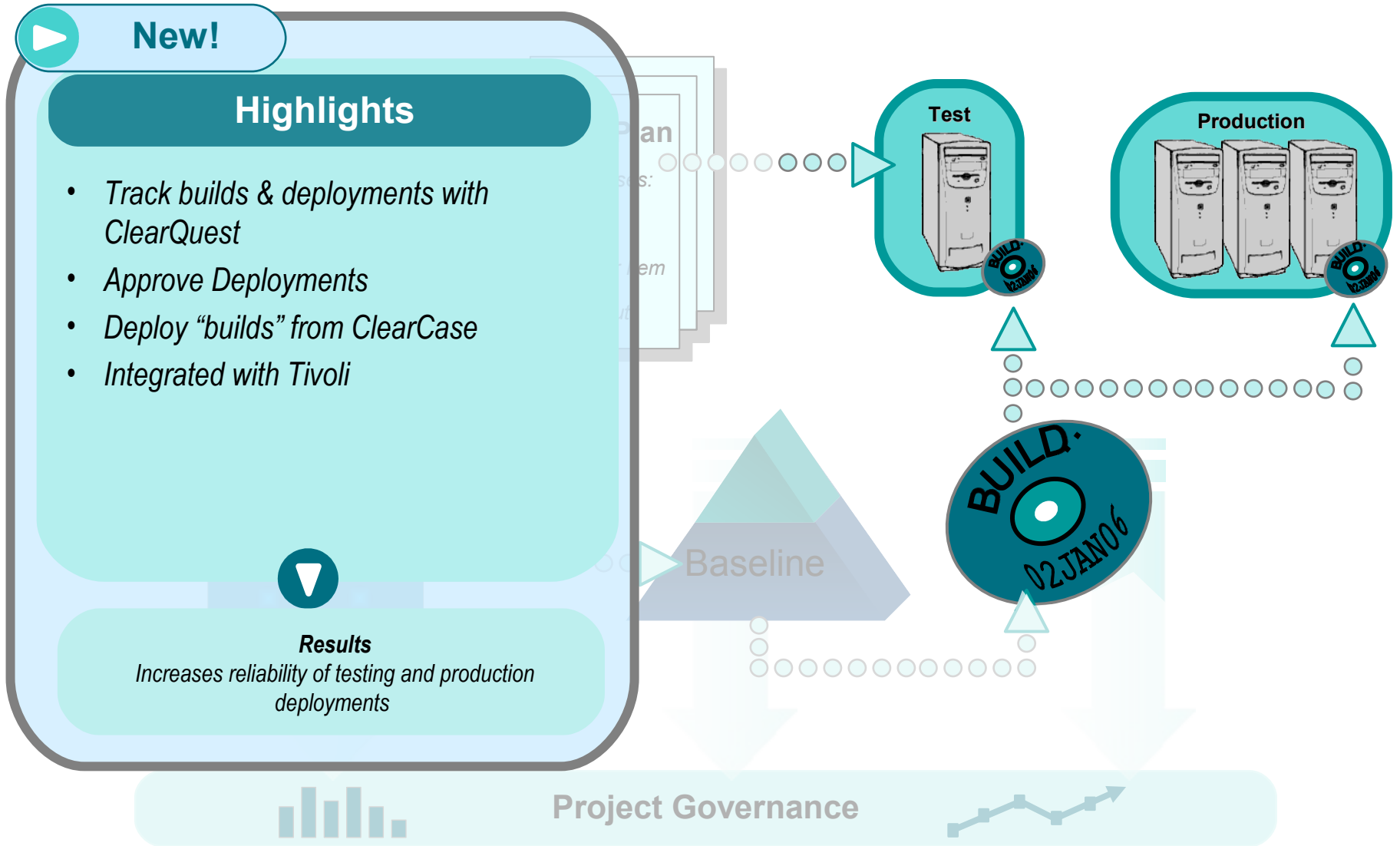


ClearQuest Test Manager

Test Planning



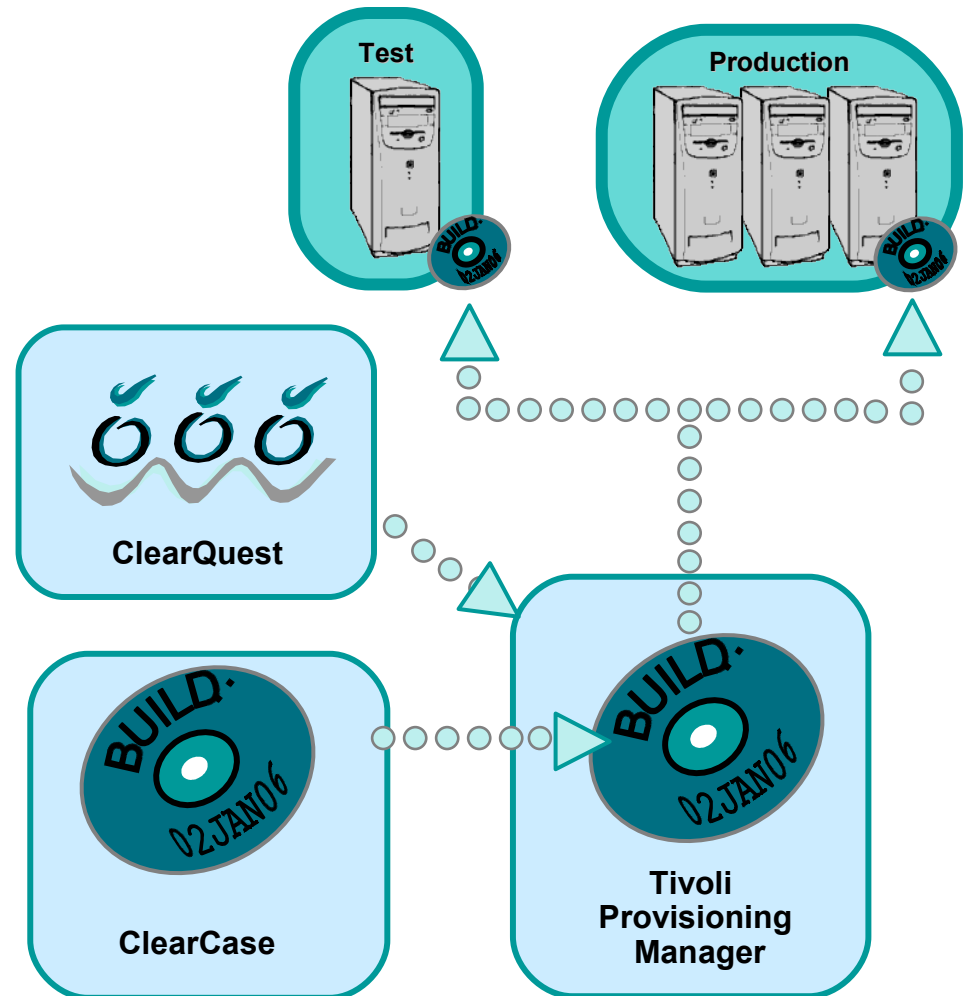


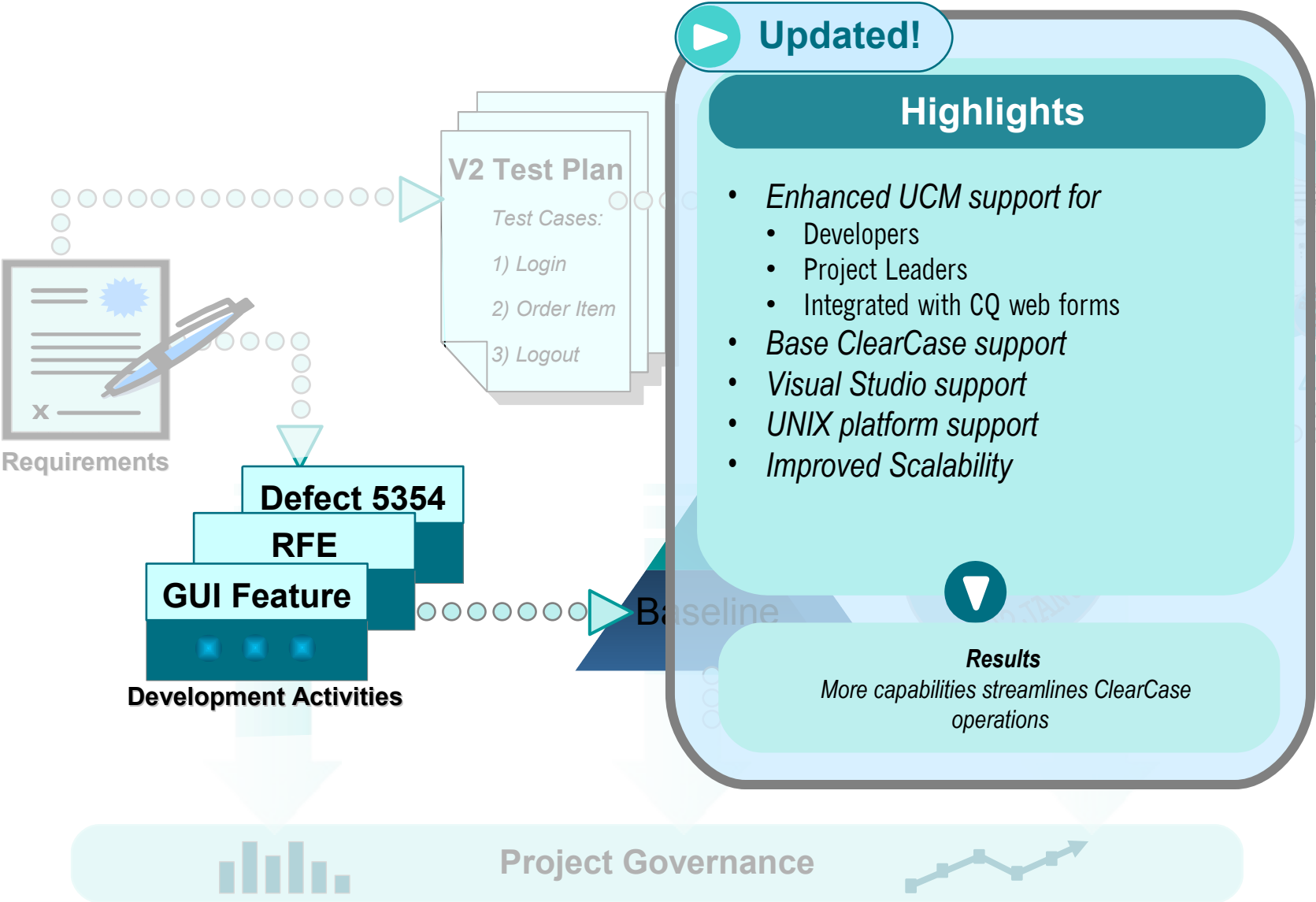


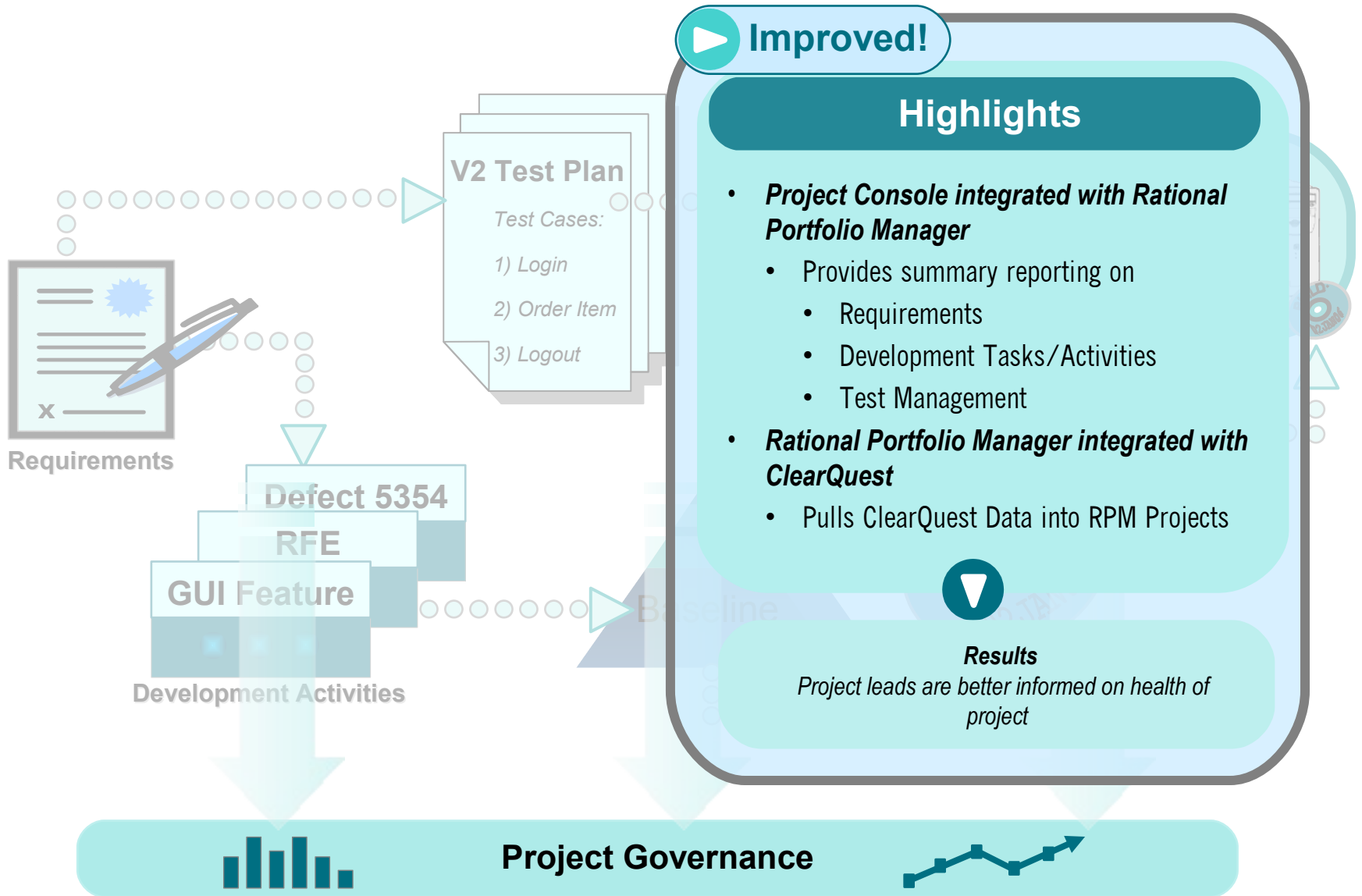
Deployment Tracking

New!

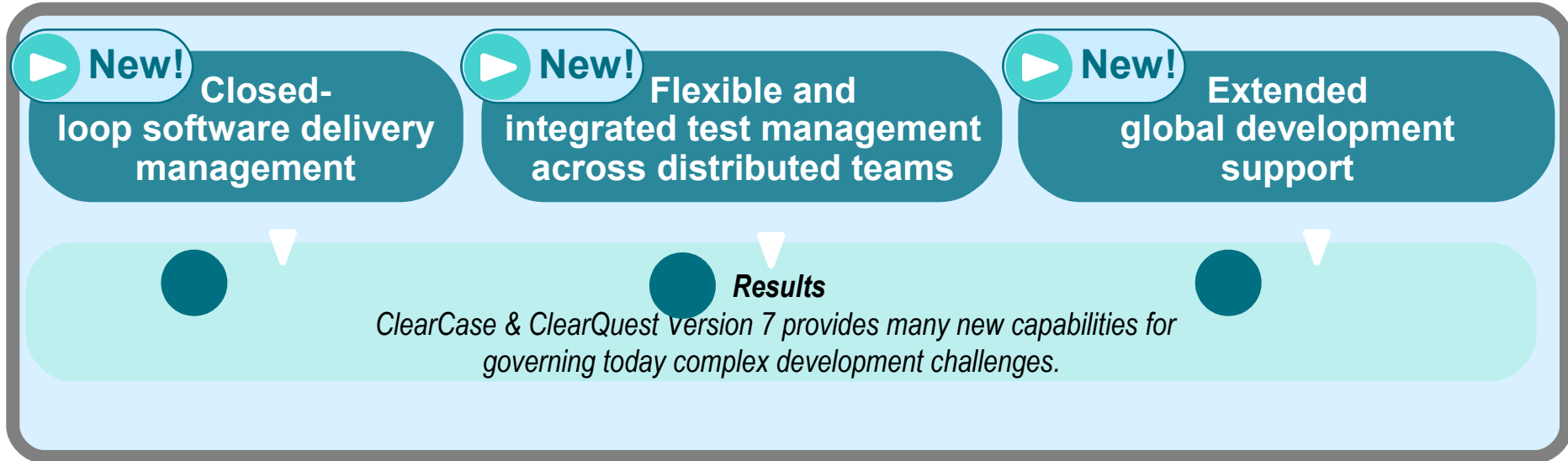
- **ClearQuest Manages the process**
 - Deployment record identifies the work
 - Records required approvals
 - Initiates the deployment
 - Records the deployment
- **ClearCase Manages the artifacts**
 - Versions source code and build artifacts
- **Tivoli Deploys to target**
 - Deploy complex software applications to data centers and distributed systems
 - Copies build artifacts from ClearCase
 - Simplify & trace deployments into production
 - Schedule & automate the installation & configuration of test and production servers







Version 7.0 Solves the challenges of today with new and Improved features



CCM Drill Down Session – this afternoon

- Session *Gestion des tests avec ClearQuest*
- See ClearQuest Test Management in action !

15:30 - 16:00

*Gestion des tests
Avec
ClearQuest*

Salon France (niveau -1)



***Accelerating Global
Software Delivery
with Build Forge v7.0***

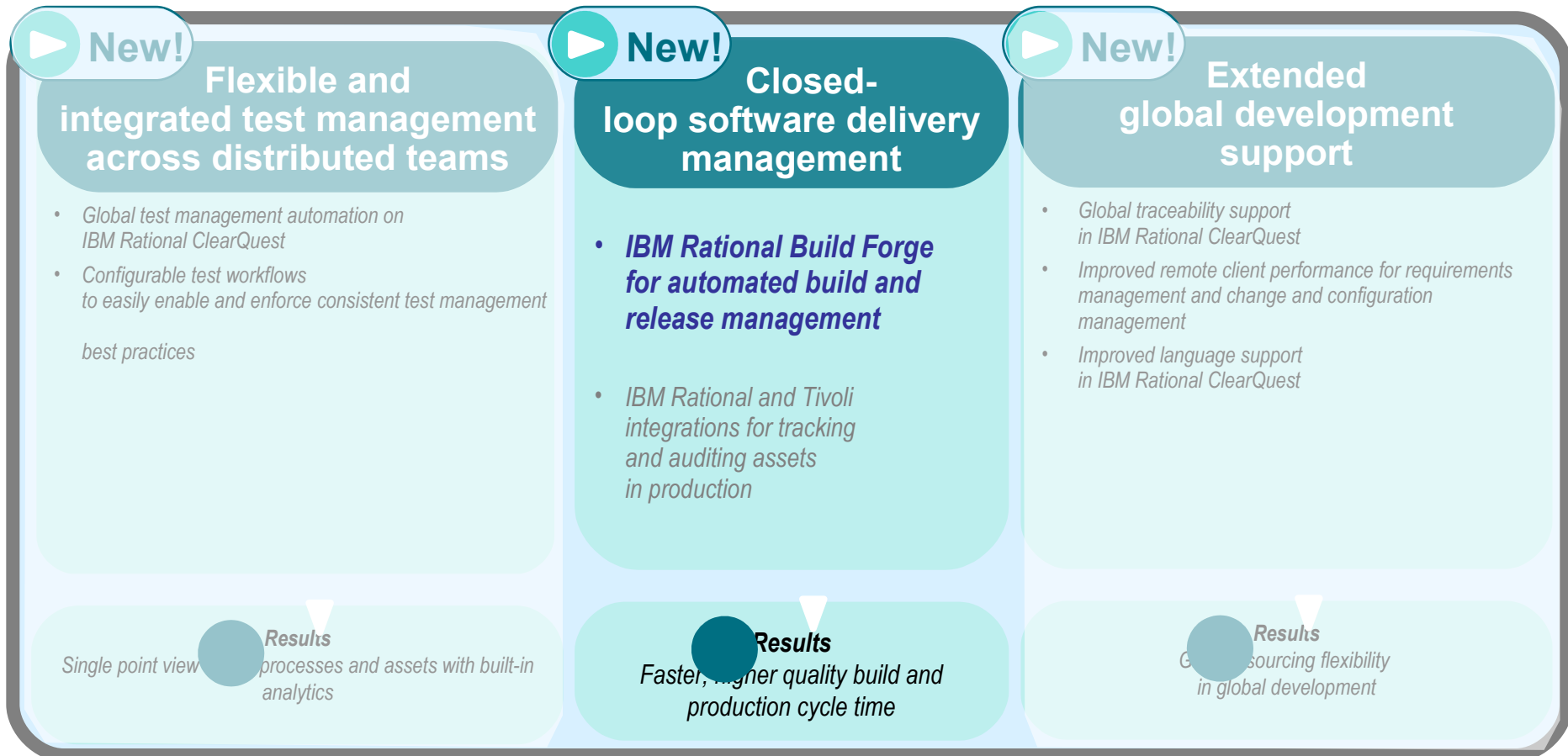
***Cheri Bergeron
Build Forge Evangelist***



Accelerating Global Software Delivery

New Business Driven Development Capabilities

in the Rational Software Development Platform Version 7.0



Critical gaps in the Build and Release process

No shared process, artifacts or controls

“Over the wall” communication

Constant reinvention
Minimal reuse

Uncertainty of release contents

Time-consuming troubleshooting



Developer



Build Engineer



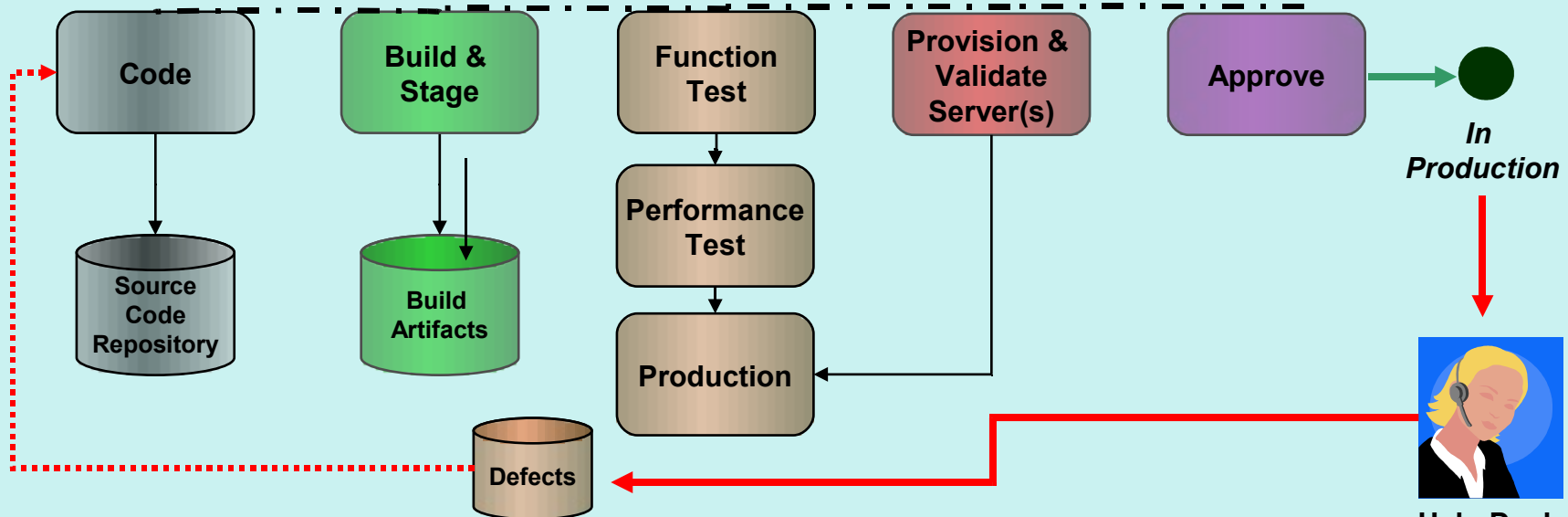
Tester



Deployer

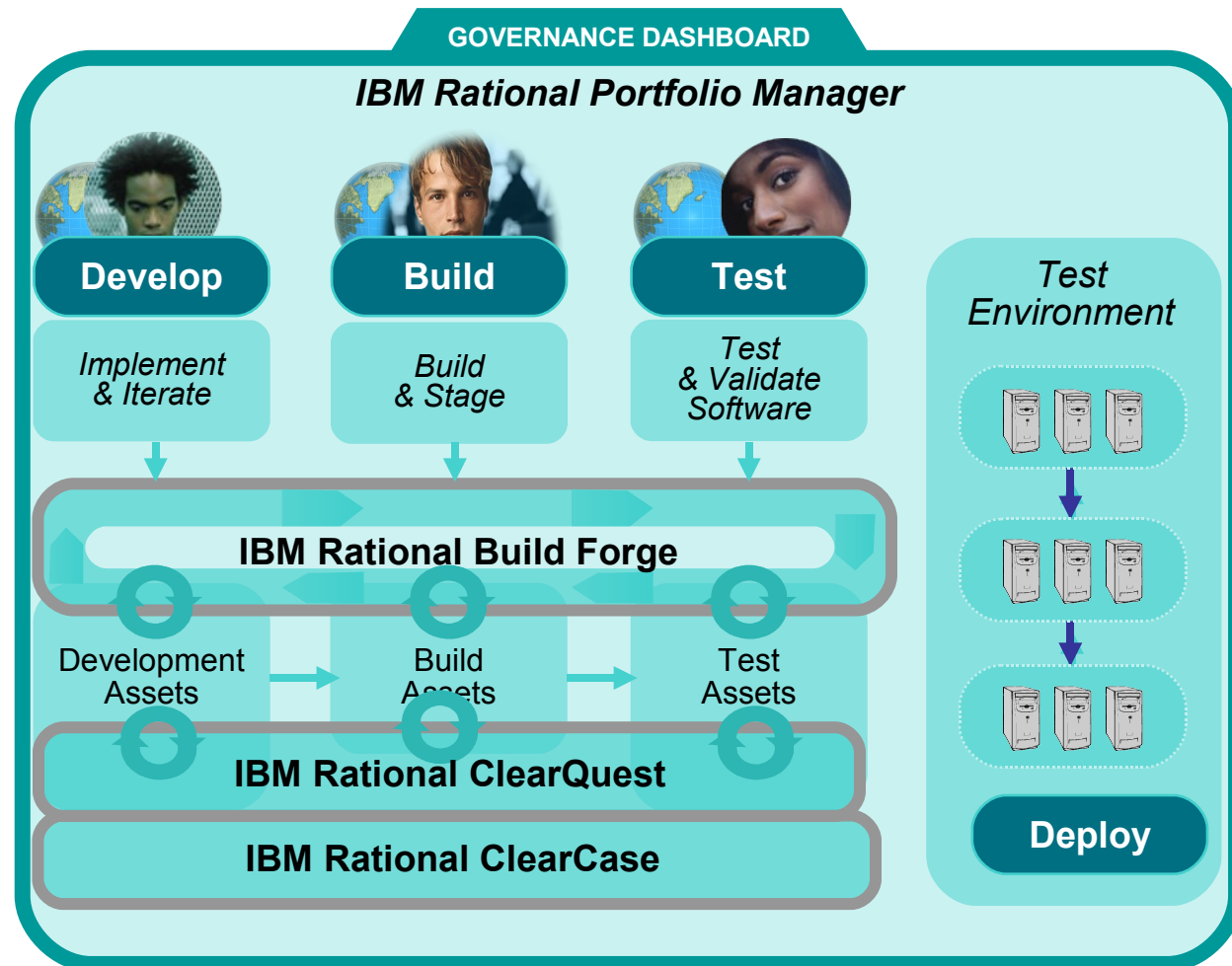


Project Manager

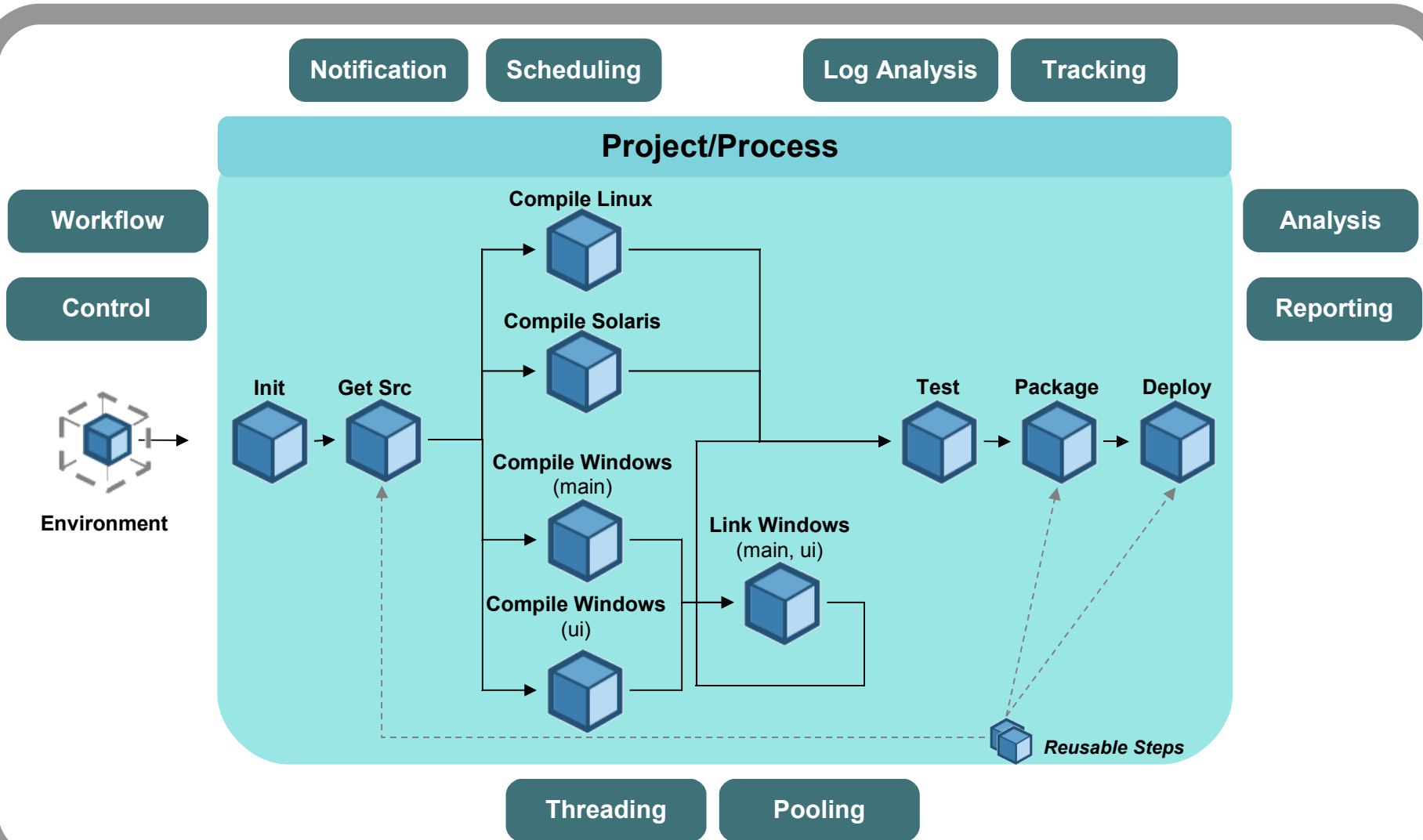


IBM Rational Build Forge improves automation, team coordination, tracking, performance

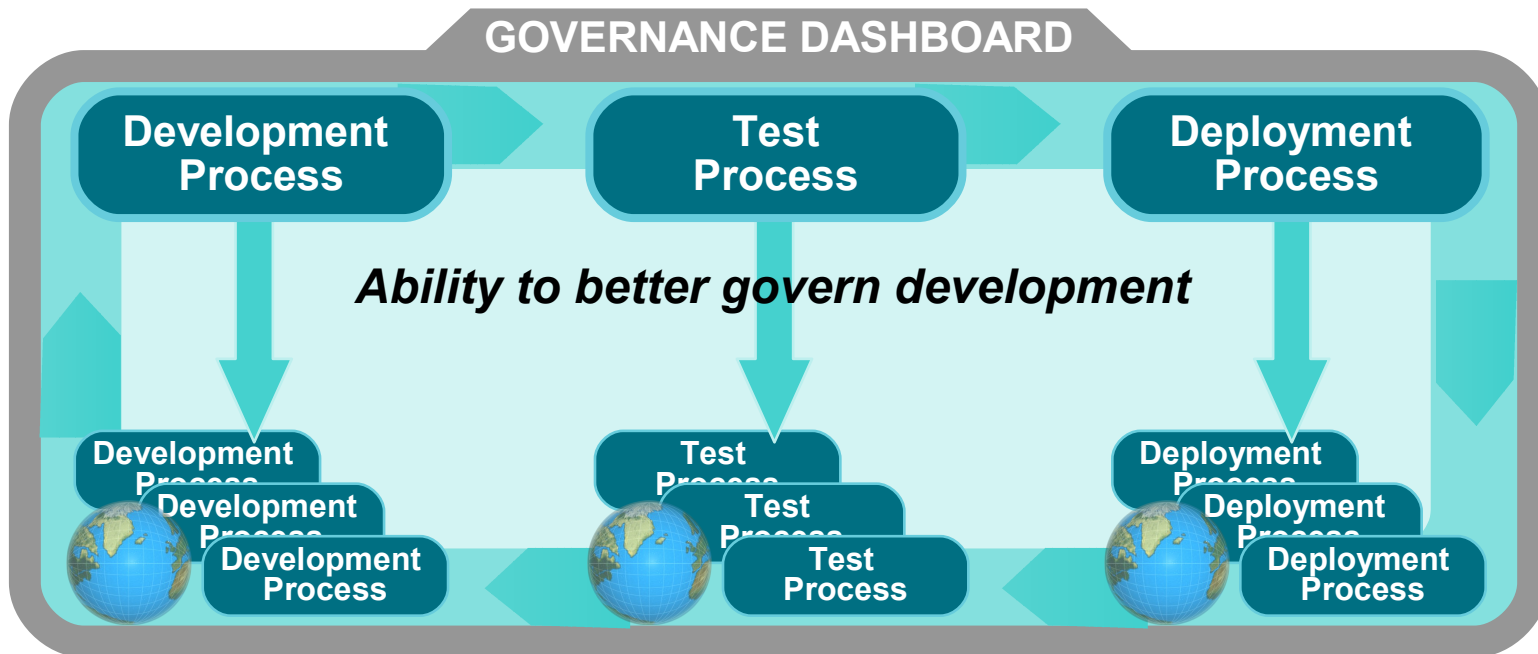
- Streamlines development by automating handoffs
- Orchestrates complex product assembly tasks for consistent results each time
- Launch testing on build success and log test results in build record
- Interfaces with IBM Rational ClearQuest to automatically update state information
- Integrates flexibly with existing scripts and technologies for rapid results
- Provides detailed bill of materials with audit history of complete release contents



Orchestrating complex development processes



Solution: Accelerate global software delivery
Break down the silos!


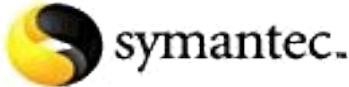





Result: A more effective software supply chain

- Reduce risk and costs with better traceability and visibility
- Reuse assets and speed cycle times with better process automation and integration
- Free geographically distributed contributors to participate productively

Rational Build Forge - Operational Impact

Annual savings ranging from \$250,000-\$25M

Customer	CM Efficiency	Developer Efficiency	Quality / Error Reduction	Return on Investment
 ELECTRONIC ARTS	Over 90%	10-15%	51-70%	< 3 months
	Over 90%	10-15%	51-70%	< 3 months
 where information lives™	80-90%	20-25%	80-90%	< 6 months
	21-25%	5-10%	26-50%	< 6 months
	51-70%	26-50%	51-70%	< 3 months

CCM Drill Down Session – immediately following this session

- Session *Développement Distribué*
- See ClearCase/ClearQuest & Build Forge in action !

11:00	11:30	<i>Pause & Démo Center</i>		
11:30	12:30	<i>Développement distribué Salon France (niveau -1)</i>	<i>TechPreview: CASPIAN Salon Parisien (niveau 1)</i>	<i>Gouvernance de projets Salon 1 (niveau 1)</i>
12:30	14:00	<i>Déjeuner & Démo Center</i>		

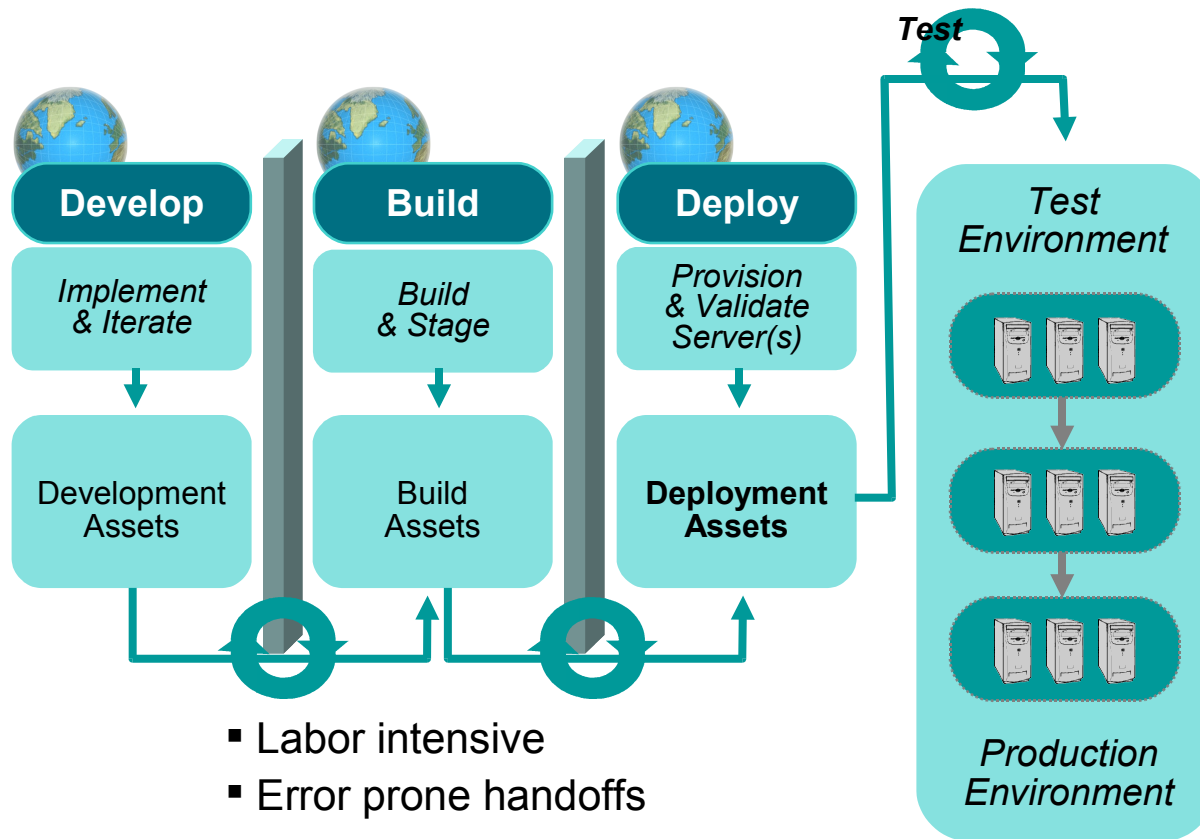
Thank
YOU

MERC

- Teams are **empowered to execute** and be risk takers through clear governance (not an oxymoron)
- **Greater efficiencies** through reuse
- **Clearly defined goals** and measurements drive clear ROI
- **Greater line of sight** drives management efficiencies from project level to CxO levels
- **Increased efficiencies** of globally distributed development environments

Challenge

- Integrating roles for better governance



Challenge



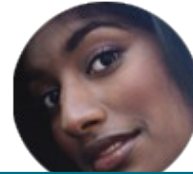
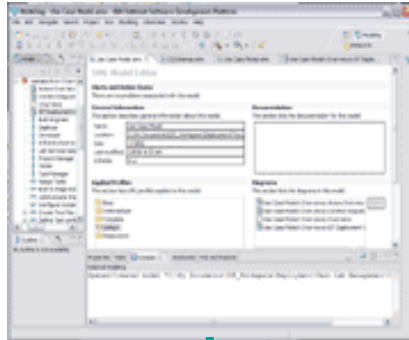
Why I am I always the last to know that the build broke?

I wish I knew immediately when a build breaks and could restart it from there!!

Hello! I need to get some testing done!!!



Developer



Build Engineer

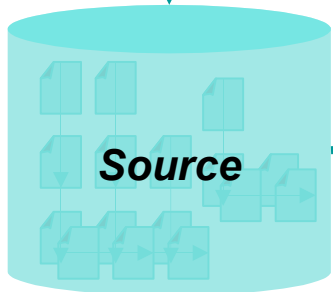


Deployer



Tester

Manually Configure the server, the Test Framework and the build... what environments on how many servers?



Source

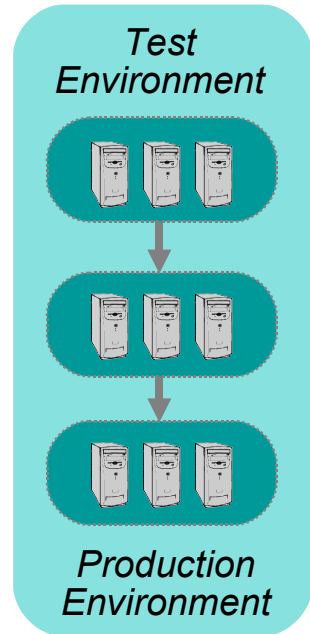
Source

+

Build Scripts

=

Build Results



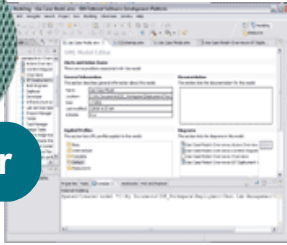
Version 7: Managing and automating the process



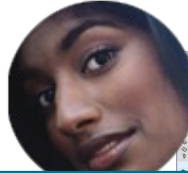
IBM Rational Application Developer



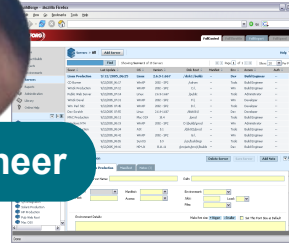
Developer



IBM Rational Build Forge



Build Engineer



IBM Tivoli Provisioning Manager



Deployer



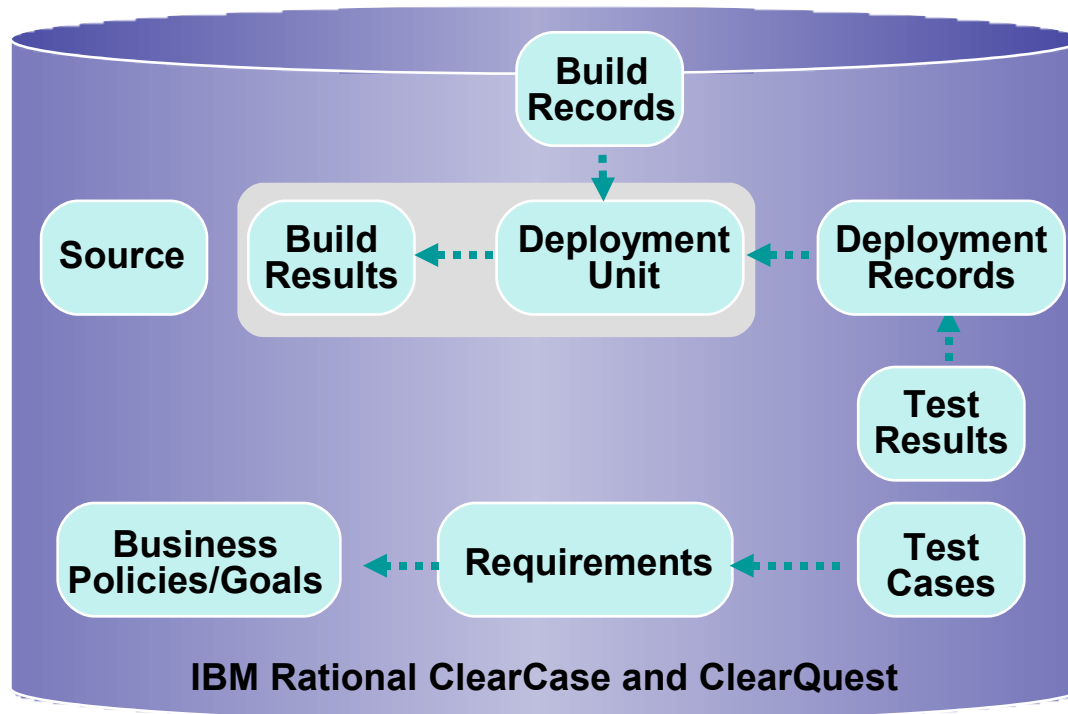
Analyst

IBM Rational RequisitePro



Tester

IBM Rational ClearQuest



Challenge

Geographic distribution



- Performance over wide-area networks
- Tool deployment costs
- Local language support
- Team communication and visibility