

Collaborative Software Development

Introducing Rational Team Concert

Derek F Holt
WW Jazz SME, IBM Rational
dfholt@us.ibm.com



IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**



Today's reality: An intense focus on business outcomes



Align *IT* investments with rapidly evolving business priorities



Manage value and mitigate risks by improving project management



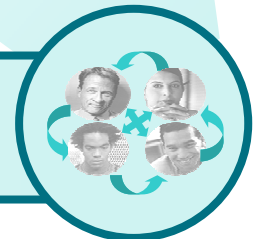
Control costs & improve global operational efficiencies



Ensure security and compliance in a changing global environment



Integrate value in organizationally diverse environments



Everyone encounters these challenges



CIO

There is no visibility back. It takes 2 weeks of effort to pull a consolidated view from 5 lines of businesses.



Legal counsel

I'd like to get involved early. Can't keep up with open source software licensing issues across multiple projects



Project Manager

Each tool comes with it's own repository. We need to connect and trace items and assets in a meaningful way.



Developer

Collaboration, sure but today these are just brittle point integrations and not scalable.



Security Director

I simply can't keep up. It would help if test and dev can do more



Testing Team Lead

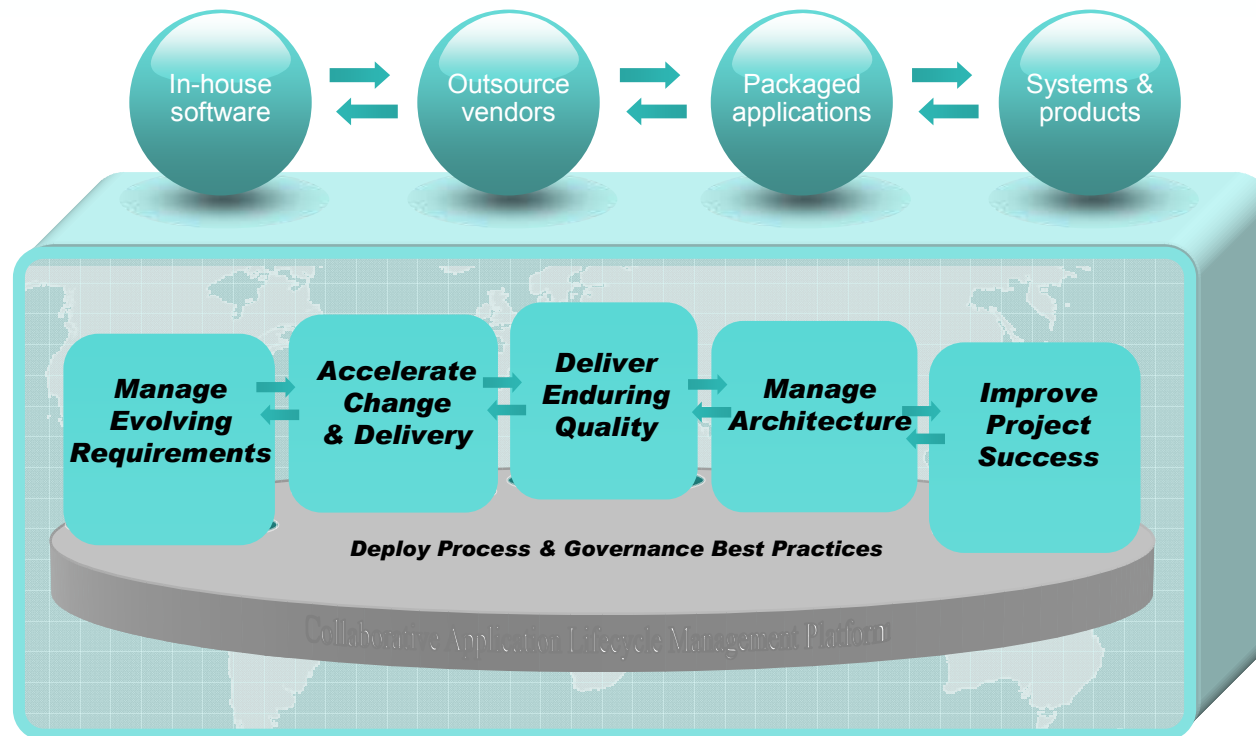
We're ramping fast with our distributed teams Transition and training is a huge cost.



IBM Rational Software Delivery Platform

Rational. software

Solutions to help customers achieve greater value and performance from their investments in delivering software



- Enterprise Modernization and Transformation
- Organizational Governance
- Skill Development and Community
- Implementation Services

[Go to IBM](#)

Envisioning a platform that can transform software delivery

Jazz is a project and platform for *transforming how people work together* to deliver greater value and performance from their software investments.



- robust, extensible and scaleable
- globally distributed, fluid & dynamic
- community-based & open at Jazz.net

Collaborate in Context

- Enable team transparency of “who, what, when, why”
- Build team cohesion and presence
- Automate hand-offs – so nothing falls through the cracks

Right-size Governance

- Automate team workflow improving productivity
- Automate data collection eliminating administrative overhead
- Real time reporting and alerts reduces project risk

Day One Productivity

- Dynamic provisioning of projects and teams
- Real-time iteration planning and workload balancing
- Unify teams with tools choice

Dynamic integration of people, process and projects across the lifecycle

How Jazz is different

Dynamic integration of

People

- Desktop/database integration → Global integration
- Function first → Team first
- Pre-determined tool function → Dynamically extensible

Process

- Rigid rules → Creative collaboration
- Manual tasks → Process aware and transparent
- Proprietary infrastructure → Internet standards

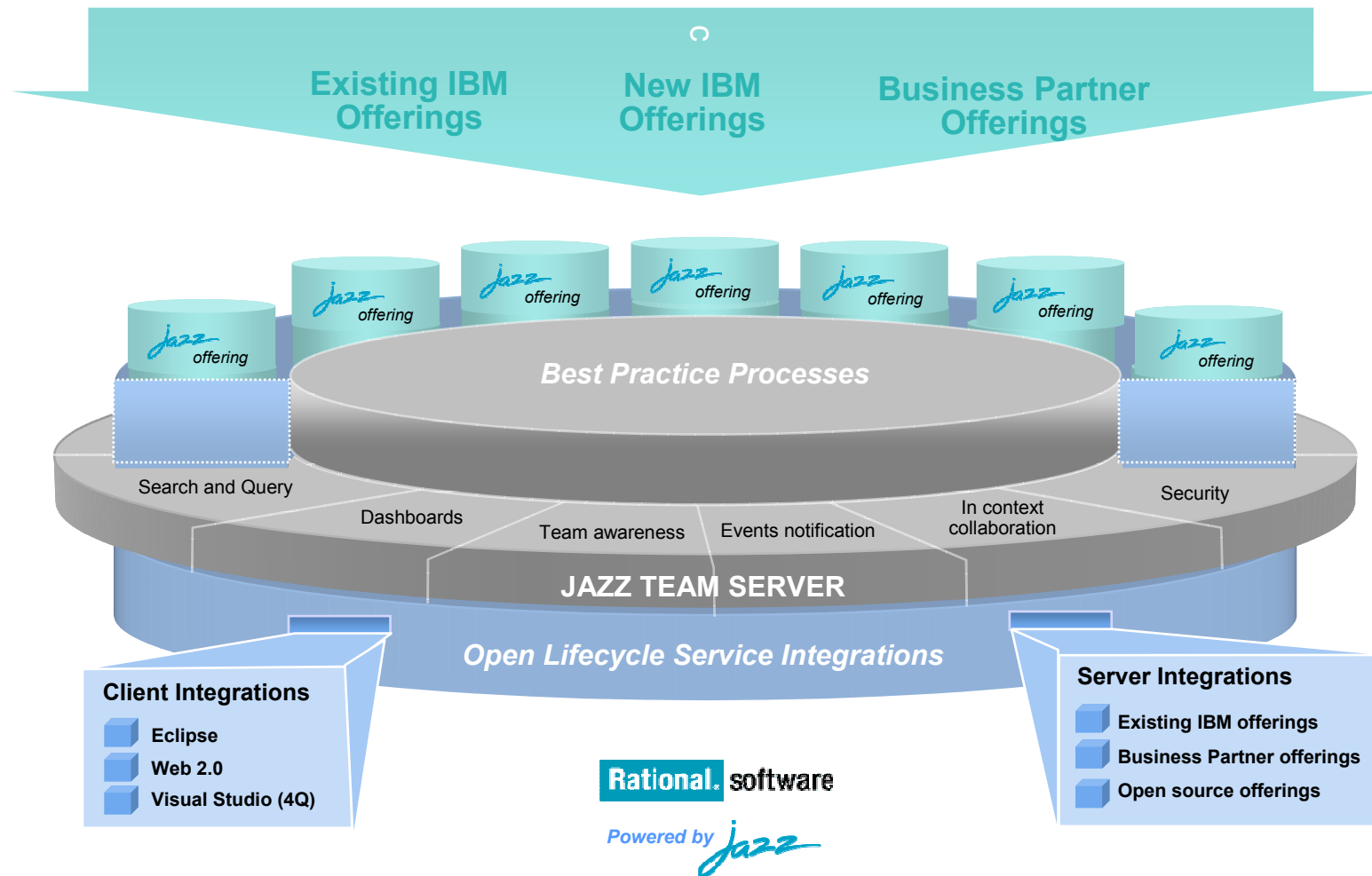
Projects

- Lengthy project onboarding → Day one productivity
- Hindsight analysis → Continuous steering
- Status guesstimates → Real-time insight

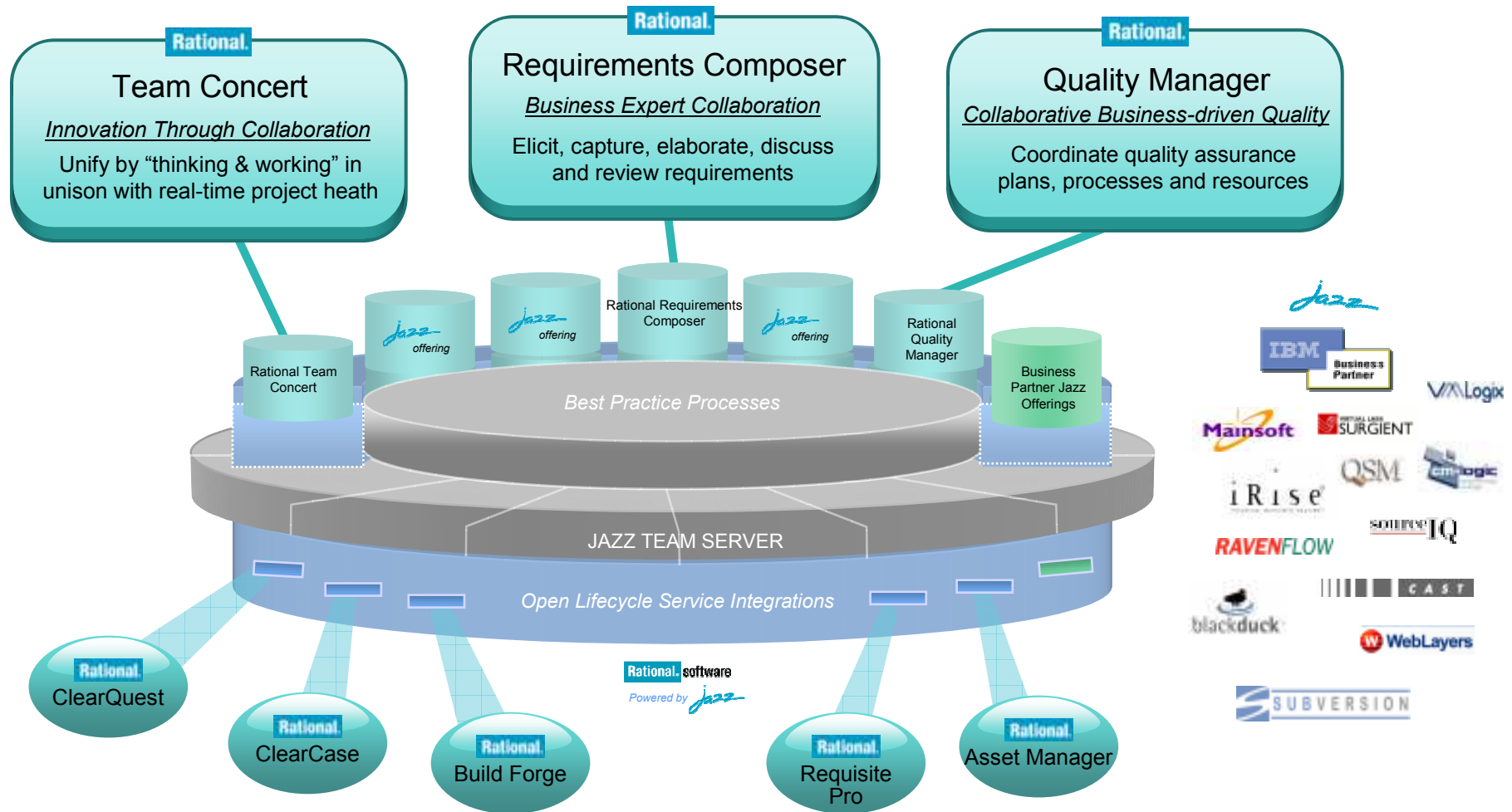
...across the software lifecycle



An evolution of value in collaborative ALM bringing forward existing investments and delivering new innovative capabilities



Introducing the first wave of new Jazz offerings



Business Expert Collaboration

- **Consensus building with business stakeholders**
 - Collaborate to capture, elaborate & review requirements
- **Use well-know expressive techniques**
 - Define requirements iteratively with business storyboards, sketches, scenarios and models
- **Visualize commitments to reduce rework**
- **Easily organize, query & track requirements**
 - Traceable links to related requirements, test cases, design models, change requests, etc.
 - Synchronized links put requirements in context
- **Productive and extensible**
 - Web access with Web 2.0 style collaboration
 - Quick team ramp-up and provisioning



Open and extensible on

- ✓ Collaborate in context
- ✓ Right-size governance
- ✓ Day one productivity

Public Beta available June 2008
on

Collaborative business-driven Quality

- **Business-driven quality portal with automated test plan enactment**
 - A 'hub' unifying the end-to-end team
 - Traceability across business objectives, skills, resources, defects and exit criteria
- **Contextual insight**
 - Dynamically prioritize risk resolution by role
- **Painless quality process governance and pattern analysis lowers costs**
 - Capture data automatically and unobtrusively eliminating manual documentation
 - Improve utilization with automated test lab management
- **Productive and extensible**
 - Web access with Web 2.0 style collaboration
 - Reuse homegrown, other vendor and partner test assets
 - Extensible plug-in architecture



Open and extensible on

- ✓ Collaborate in context
- ✓ Right-size governance
- ✓ Day one productivity

Software innovation through collaboration

- **Real time, in-context team collaboration**
 - ▶ Make software development more automated, transparent and predictive
- **"Think and work in unison"**
 - ▶ Integrated source control, work item and build management
- **Assess real-time project health**
 - ▶ Capture data automatically and unobtrusively
- **Automate best practices**
 - ▶ Dynamic processes accelerate team workflow
 - ▶ Out-of-the-box or custom processes
- **Unify software teams**
 - ▶ Integrate a broad array of tools and clients
 - ▶ Extend the value of ClearQuest and ClearCase
 - ▶ Visual Studio Client (coming soon)
 - ▶ Support for System z and System i servers (2H08)

Open and extensible on



- ✓ Collaborate in context
- ✓ Right-size governance
- ✓ Day one productivity

IBM Rational Team Concert



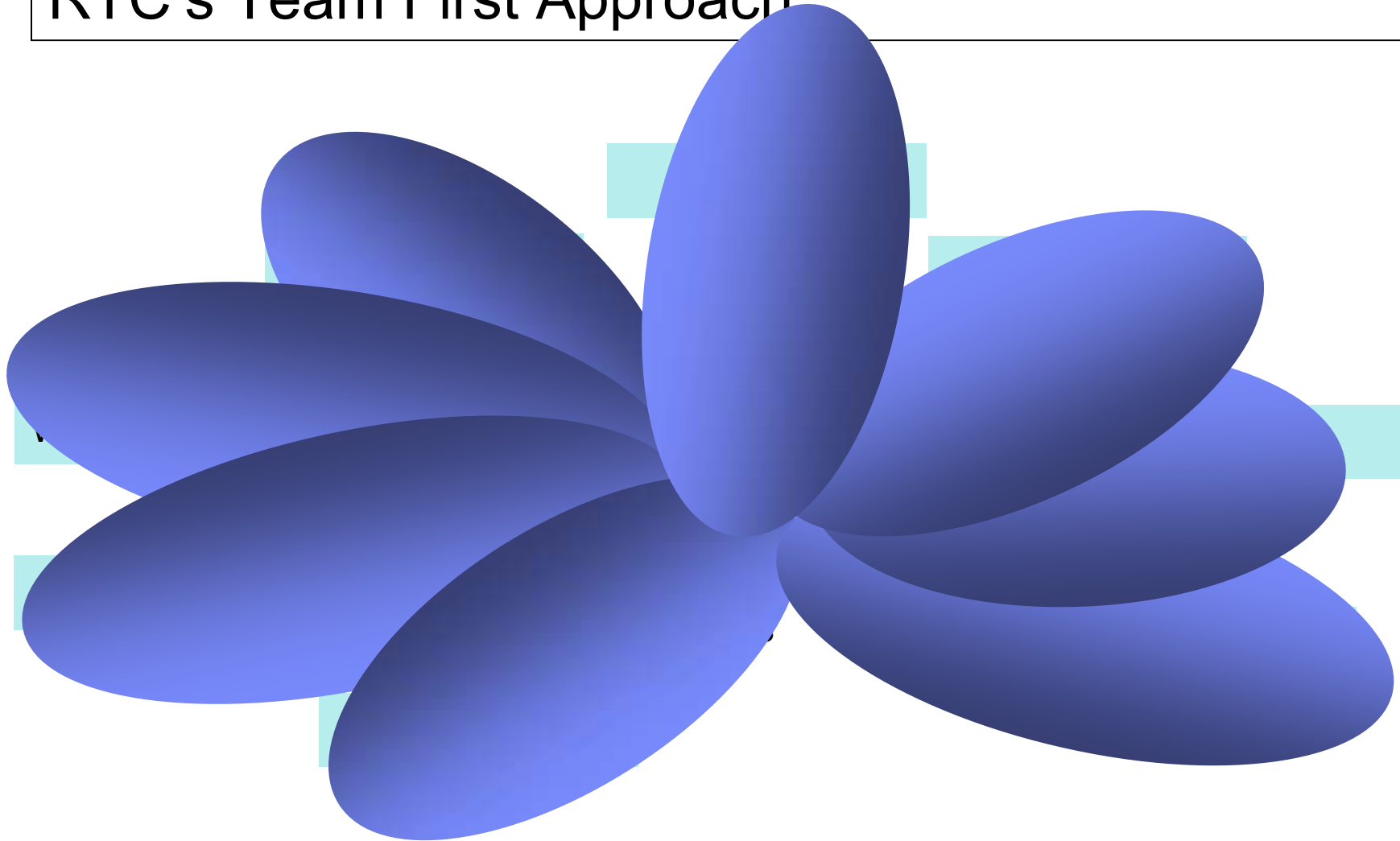






transparent *integrated presence*
 wikis OPEN real-time reporting
 chat automated hand-offs Web 2.0
custom dashboards automated data gathering
EXTENSIBILITY Eclipse plug-ins services
 architecture **FREEDOM TO CREATE**

RTC's Team First Approach



Rational Team Concert

Iteration Planning

- Integrated iteration planning and execution
- Task estimation linked to key milestones
- Out of the box agile process templates

Project Transparency

- Customizable web based dashboards
- Real time metrics and reports
- Project milestone tracking and status

SCM

- Integrated stream management with flow relationships
- Component level baselines
- Server-based sandboxes
- Identifies component in streams and available baselines
- ClearCase connector

Work Items

- Defects, enhancements and conversations
- Query results view and share queries with team or member
- Support for approvals and discussions
- ClearQuest connector
- Query editor interface

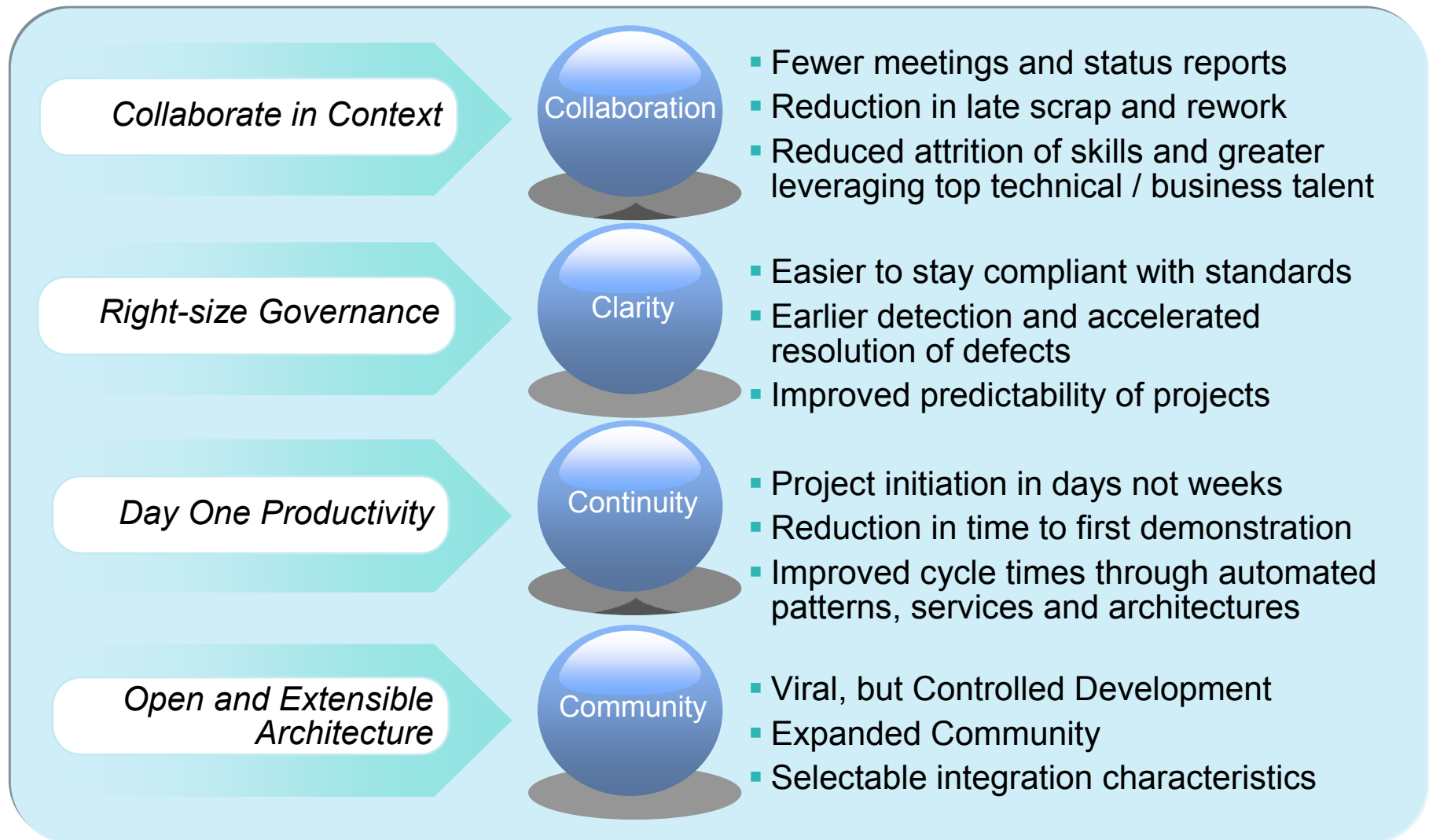
Build

- Work item and change set traceability
- Local or remote build servers
- Supports ant and command line tools
- Integration with build forge
- Build definitions for team and private builds

Jazz Team Server

- Single structure for project related artifacts
- World-class team on-boarding / offboarding including team membership, sub-teams and project inheritance
- Role-based operational control for flexible definition of process and capabilities
- Team advisor for defining / refining “rules” and enabling continuous improvement
- Process enactment and enforcement
- In-context collaboration shows team members and status of their work

Translating words to actions



The Rational Team Concert family 2008

Statement of
Direction (2009)

Express-C

Entry Level Teams

- In-context collaboration
- Open source middleware
- Up to 10 users per server

Express

Mid-sized & departmental

- Transparent development
- Out-of-the-box processes
- Commercial middleware
- Up to 50 users per server

Standard

Corporate teams

- Customizable process
- Real-time project health
- LDAP admin
- Enterprise scale and extensibility
- Up to 250 users per server

Enterprise

Enterprise Deployments

- Enterprise optimized extensions
- Enterprise scale, security, governance & provisioning

Eclipse™, Linux®, MS Windows®, UNIX® - z/OS® (1H 09) & i5/OS (3Q) w/ native asset & work item mgmnt

Leveraging Rational Team Concert independently

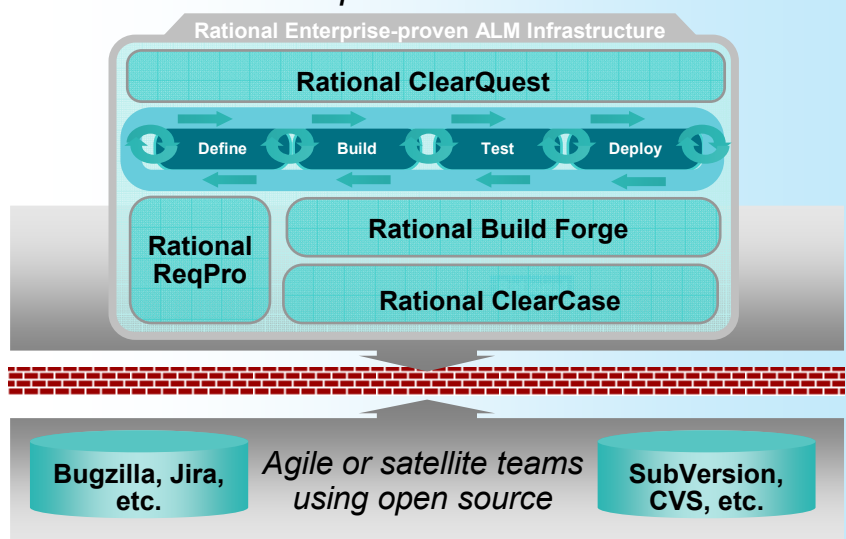


- ✓ **Rational Team Concert Standard, Express, Express-C**
 - ✓ A standalone development environment optimized for small and mid-sized teams
 - ✓ All the collaborative capabilities of the Jazz platform – plus integrated work items, SCM and build management
 - ✓ Dashboards and real-time reports
 - ✓ Team and Process-aware

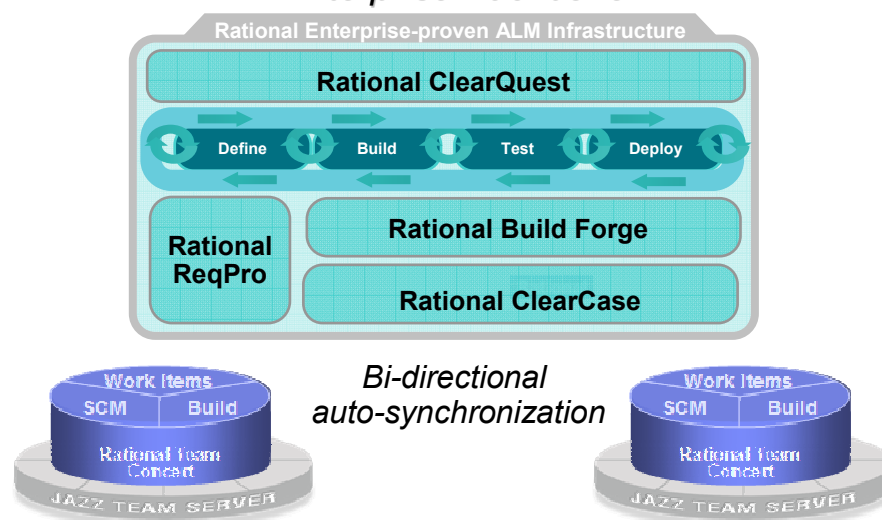
Rational Team Concert in the enterprise

Gain business transparency while supporting agile teams

Without Rational Team Concert Enterprise Backbone



New Reality with Rational Team Concert Enterprise Backbone



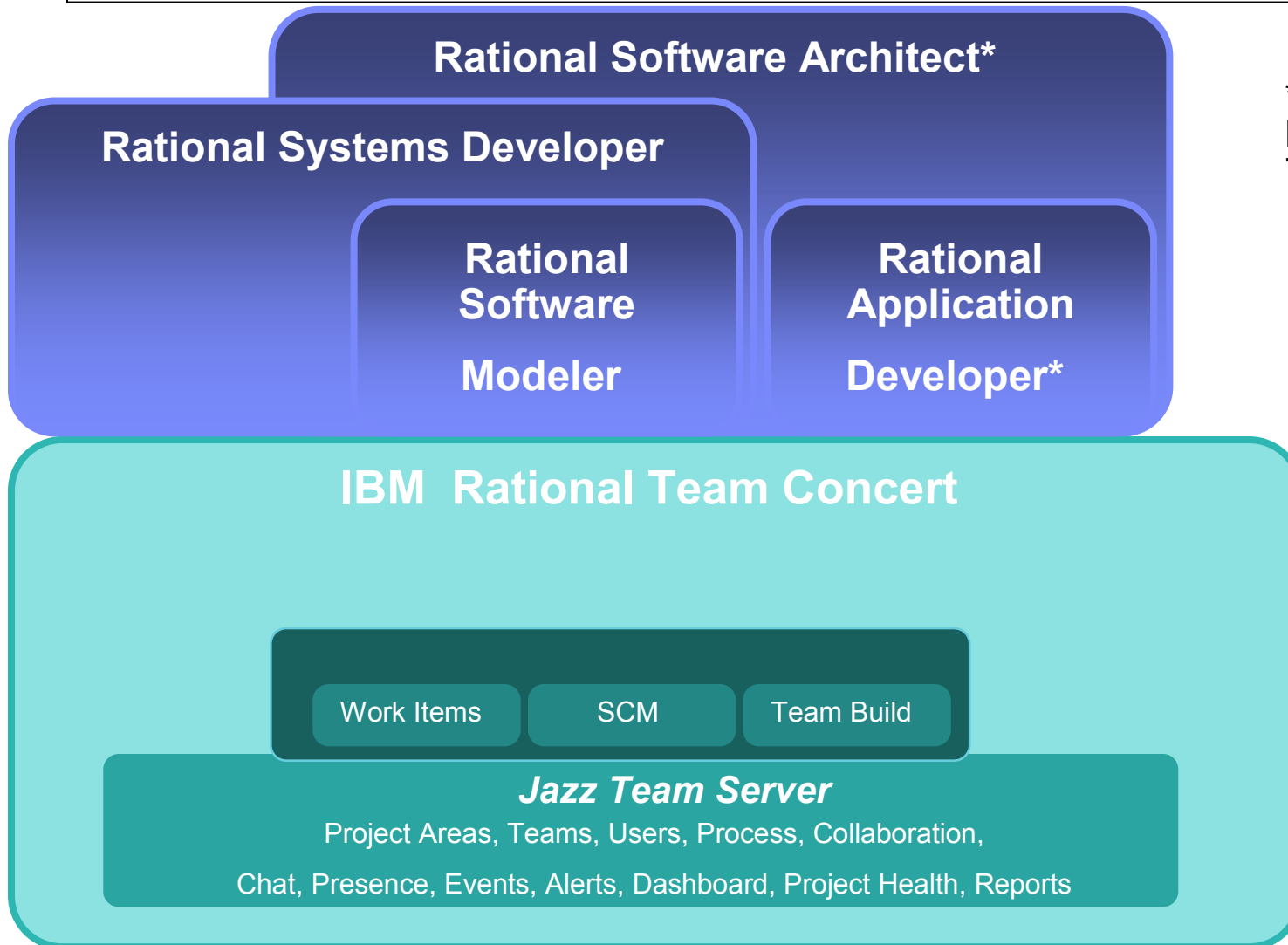
Challenges

- No single, consolidated view into project status and health
- Enterprise unaware of development artifacts in Bugzilla and SVN
- No control or insight into future direction of solutions used by agile or satellite teams
- Agile or satellite teams potentially provide poor support models
- Hidden costs of client integrations with open source team solutions
- Complexities for new team members

Value

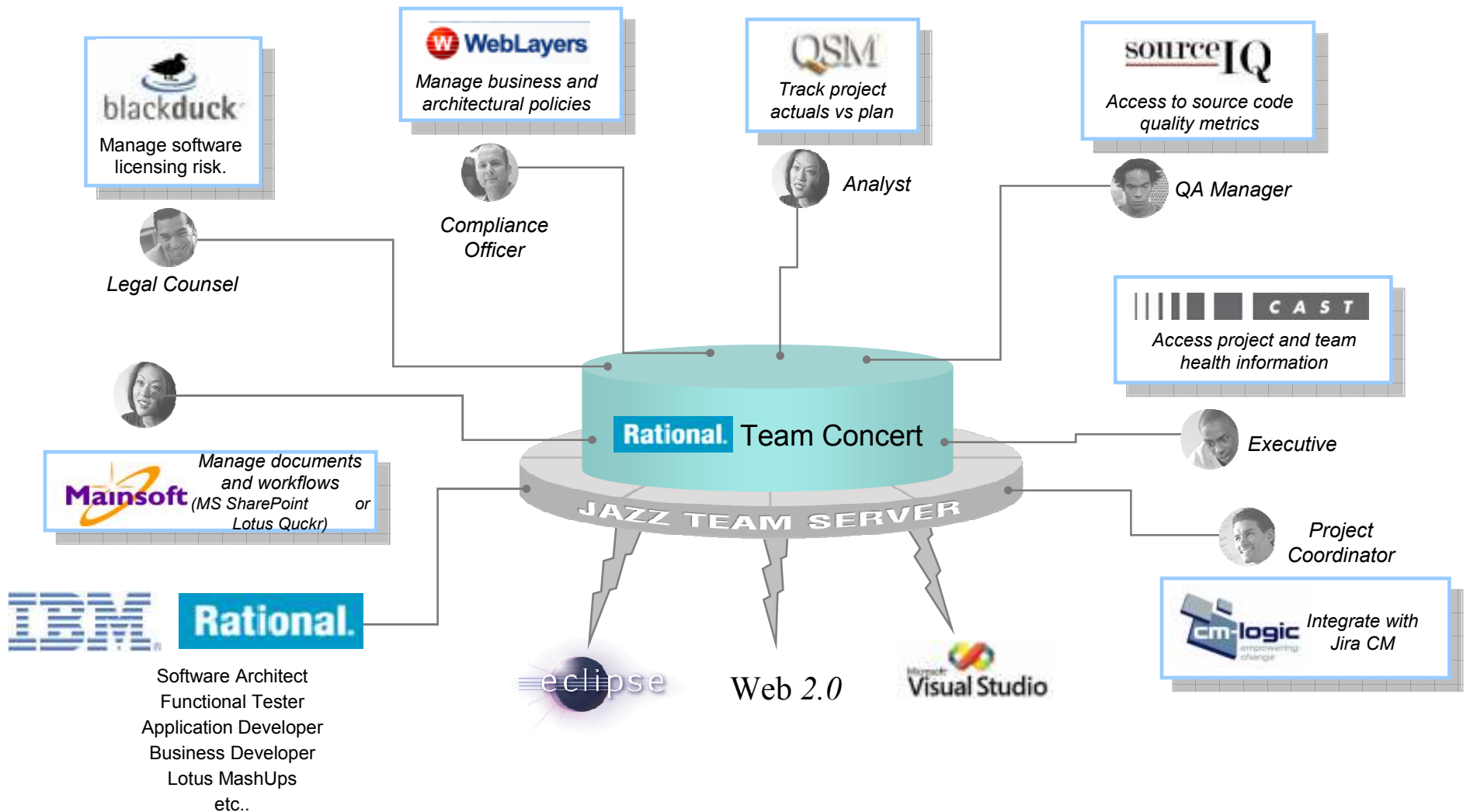
- ✓ Enterprise can maintain a consolidated view of all projects including teams using ClearCase/ClearQuest native and satellite teams leveraging Rational Team Concert via bi-directional synchronization
- ✓ Industry leading enterprise backbone in the form of ClearCase/ClearQuest
- ✓ Agile and satellite teams acquire cutting edge team collaboration solutions that integrate work items, SCM and building capabilities that think and work in unison
- ✓ Iteration planning and execution capabilities along with process-aware tooling in Rational Team Concert optimized for Agile teams
- ✓ Easy on-boarding/off-boarding support for agile/fluid teams

RTC and Rational Desktop products



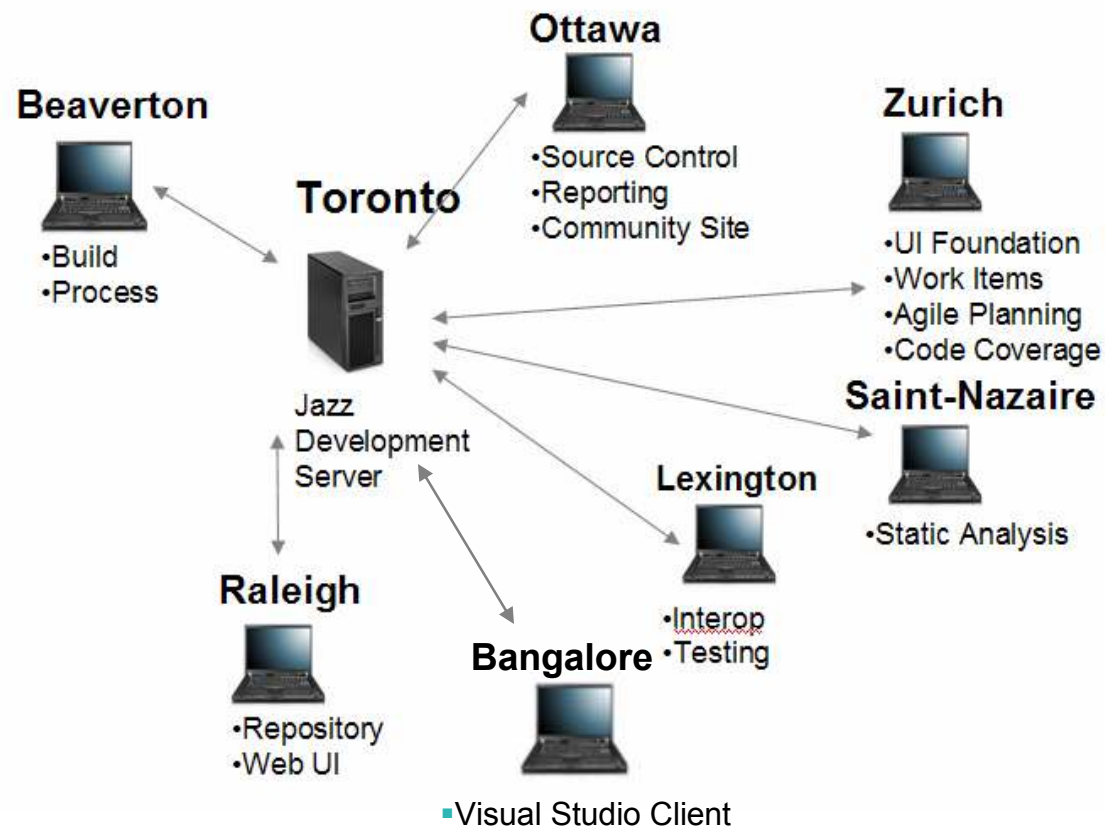
*Available at
RSA/RSM/RSD/RAD
7.5 launch 3Q08

Extend team collaboration to a broad range of software professionals



How the Jazz team uses Rational Team Concert

- 2-way Xeon Server running application server (WAS) and another running DB2
- Jazz Project – Using bi-weekly iteration builds
 - Jazz and Rational Team Concert self hosting since 4Q06
 - Global team in 7 locations in NA Europe and India
 - ~100 developers, plus jazz.net webclient access
 - Repo > 10G, 66K files, 43K work items
- Over 35 internal Rational teams using RTC including over 700 unique users over various Jazz Team Servers



What about other experiences? IBM Hursley

➤ CICS



➤ WebSphere



➤ MQ

➤ Message Broker

➤ ESB

▪ Agile@IBM

▪ Locally developed tooling



Rational Team Concert – Three case studies

- CICS SVT team
- Project 24 – An internal project
- WebSphere MQ development

First experience of RTC - CICS SVT

- Needed for small infrastructure project
- 'Downloaded it and its there!'
 - Tomcat and Derby out of the box (migrated to DB2)
- Migrated entire SVT library system in minutes (40 years of legacy!)
- 2 hours to re-organise to better leverage RTC
- **21** developers and **95** contributors
- Multiple project areas
- Customised plug ins – Great API
- Sprint control/planning
- Internal source repository used
- Java, COBOL, Web Services, z/OS based

Project 24

- Another small infrastructure team
 - 5 people for 4 iterations of 1 week
- Installed, configured and set up 1st iteration stories in 1 day
- Team chose RTC after demo from CICS team

- Linux server and clients for team
- Web UI for stakeholders
- Seamless and intuitive
 - New user creation
- Benefits of concurrent changes, auto merge and private workspaces
- Rapid response from Jazz.net support forums

- Burndown chart lesson learned

WebSphere MQ

- Kicks off September
- 100 person delivery team
- Initially for task management
- Aim to replace CMVC (will require build investment)
- Investigating tie in with RMC for process control

Hursley Infrastructure

- Centrally supported servers for RTC
- 5 projects (2 in production)
- AIX P570 with LDAP authentication (IBM Internal 'BlueGroups')

Hursley benefits

- **Developer buy in**

'Willing to make it work, rather than willing to make it fail'

- **Lower running cost of infrastructure**

Centralised, common tooling

- **Up to date control of delivery**

Everything is very visible to the whole team

Final quote

“In the last 10 years there are two pieces of technology that have impressed me:

Sky+ and RTC”

CICS System Tester 2008

Additional resources

- Find out more about Rational Team Concert
<http://ibm.com/rational/rtc>
- Download the trial and participate in the open commercial development project
<http://jazz.net>
- Explore Rational Team Concert tutorials, demos and other developer learning resources
<http://ibm.com/developerworks/spaces/jazz>
- Learn more about the Jazz technology and the future IBM Rational product roadmap
<http://ibm.com/rational/jazz/roadmap>



IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**

LUNCH SPONSORED BY:



IVAR JACOBSON
INTERNATIONAL