IBM Rational Software Development Conference 2008

WHERE TEAMS ARE R-HEROES

IBM Rational Change and Release Management

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Rational. software

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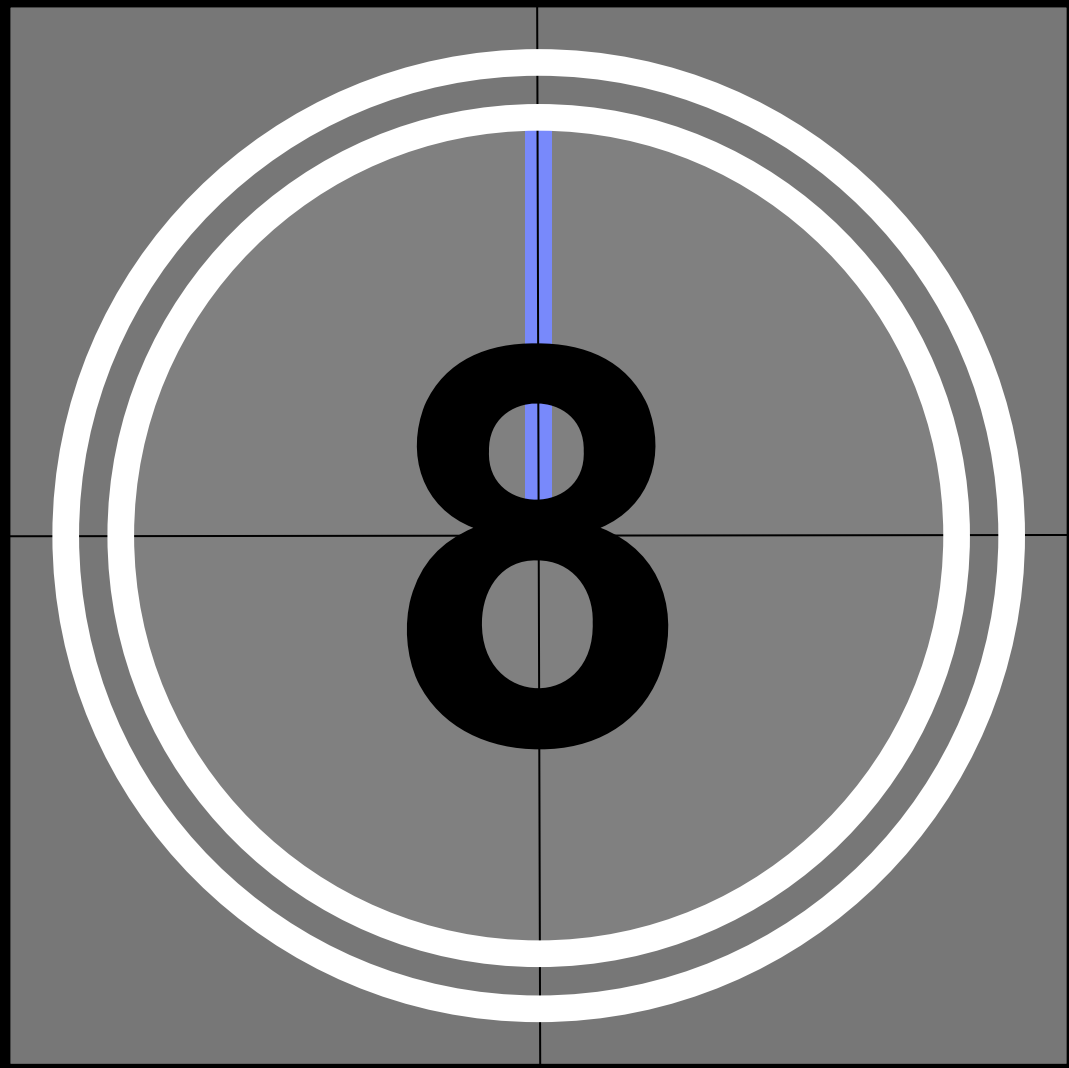
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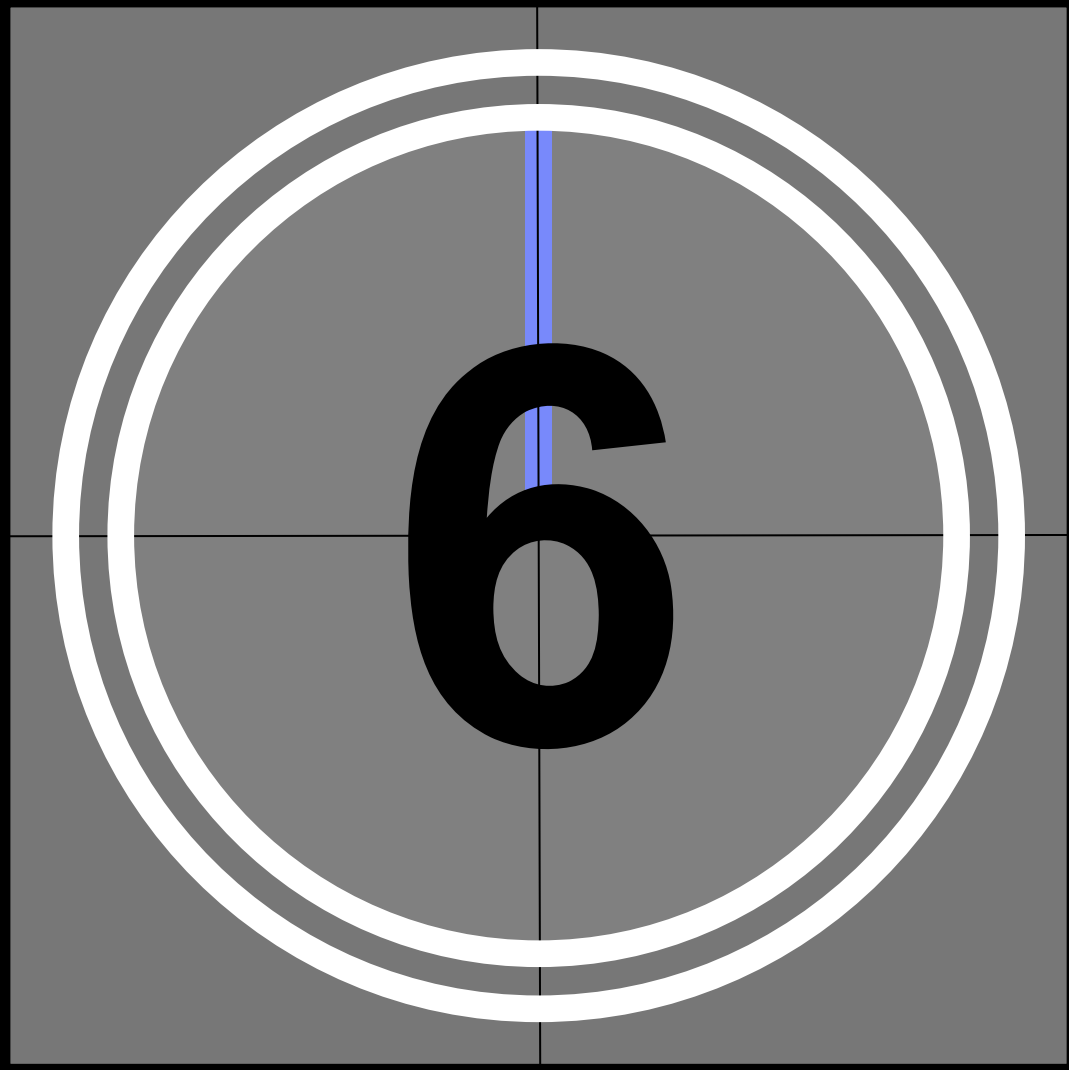
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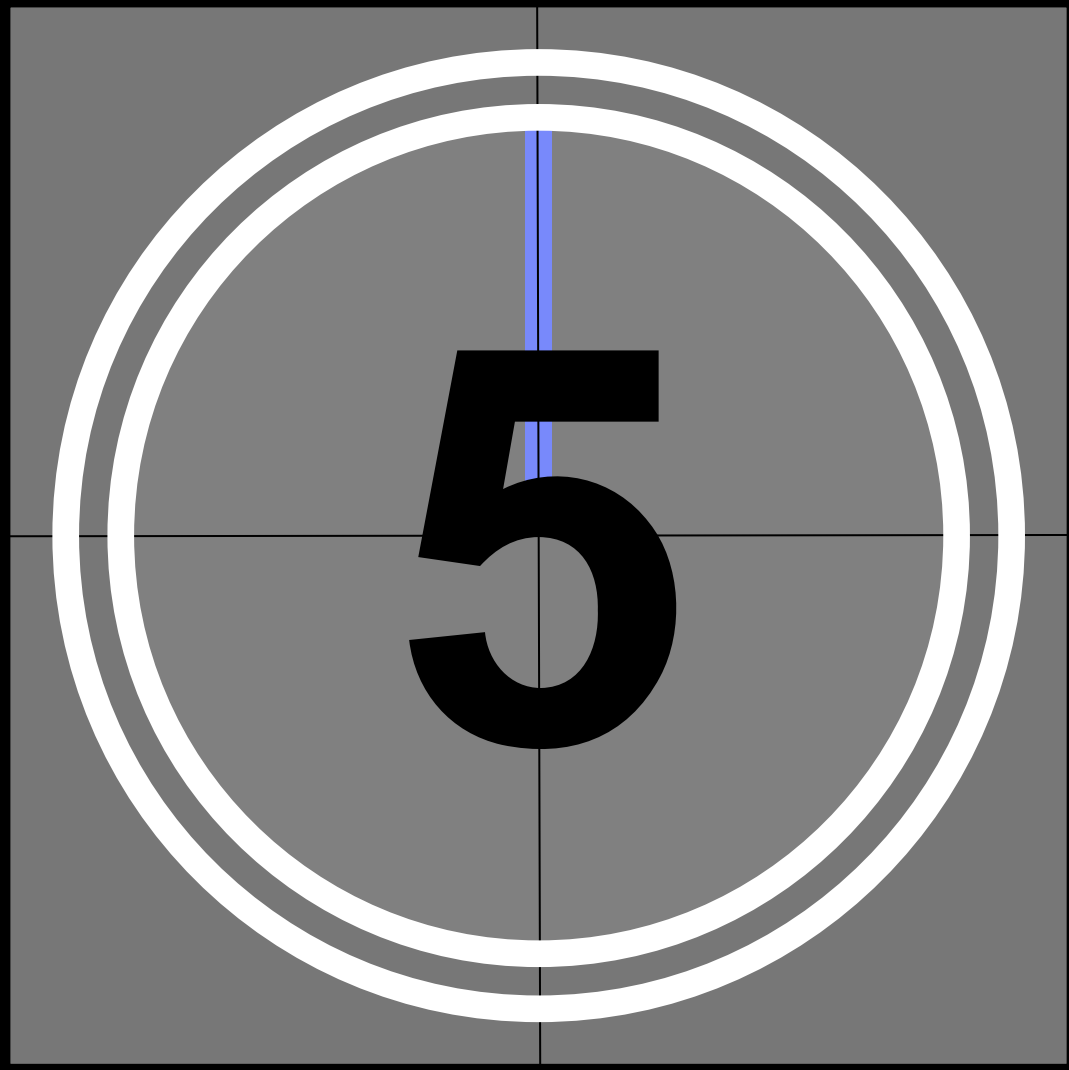
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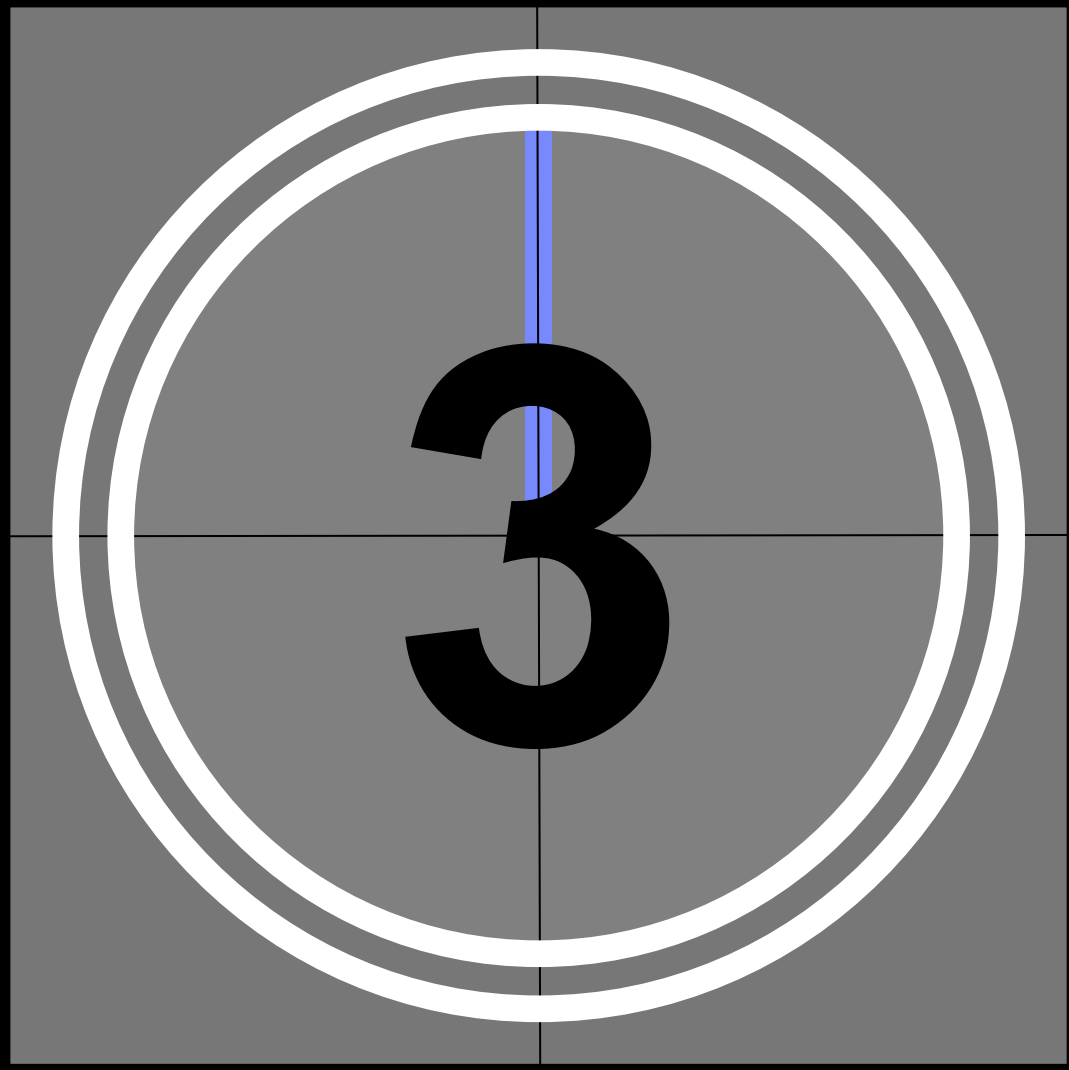
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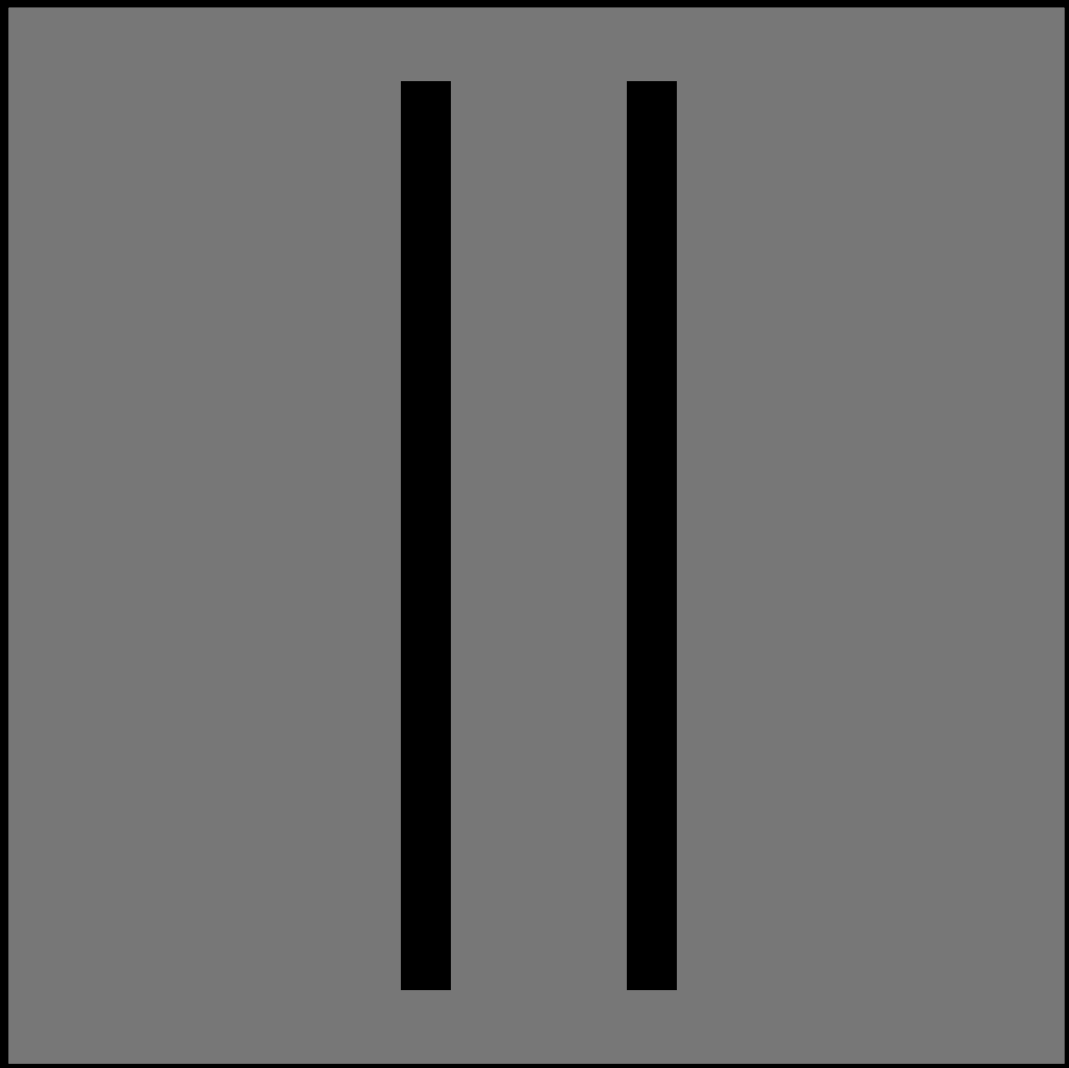
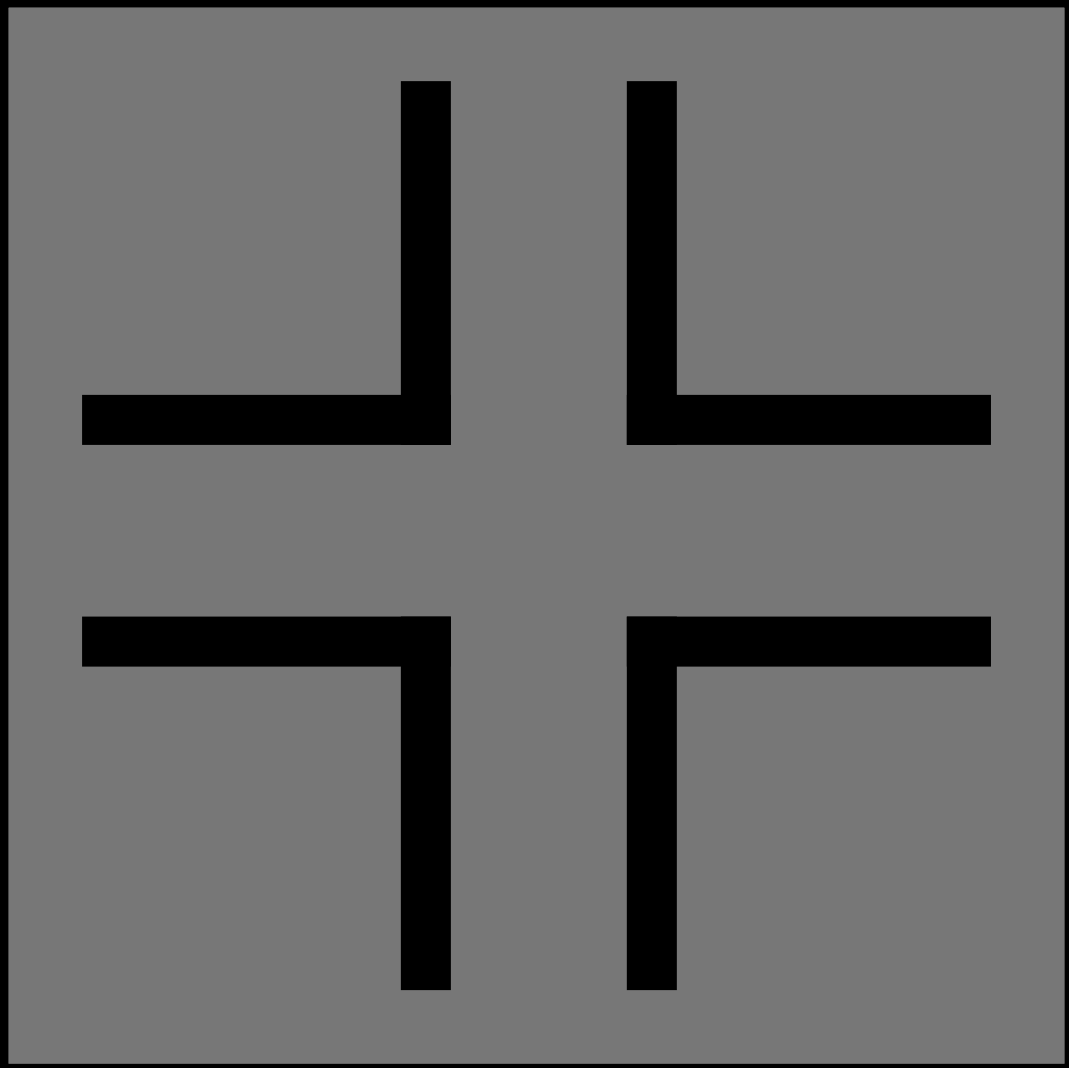
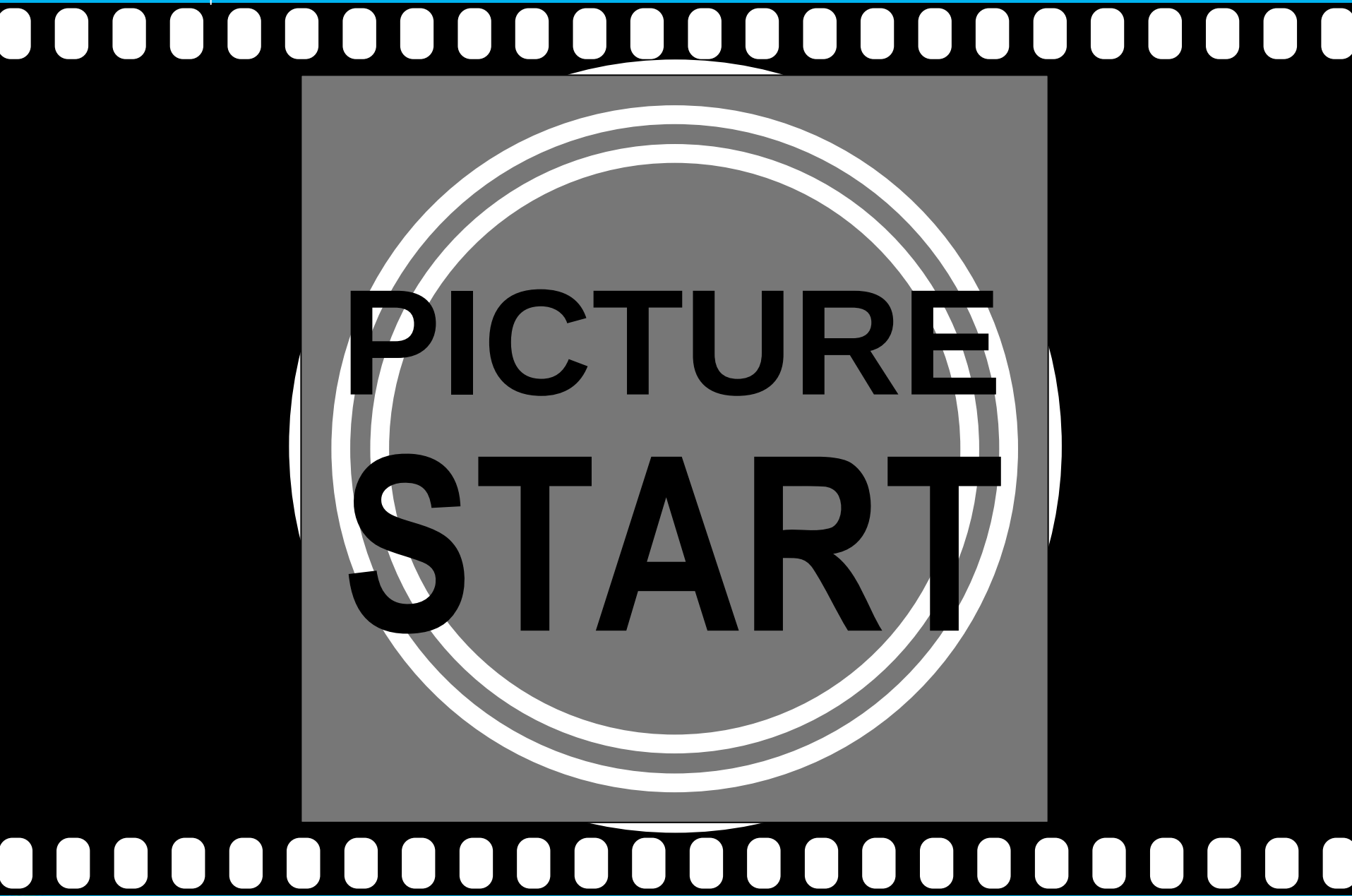





PICTURE
START

Meet Cathy...

…Chris…

and **Julie.**

They **are** as **busy** as **a**...

and **don't** have **much**...

and **they** sometimes **feel** really…

They all want to be a...

But tend to **feel** more **like**...

But **why?**

Because instead of **this...**

they **live** with **this...**

Application **performance** isn't this...

but is closer to **this...**

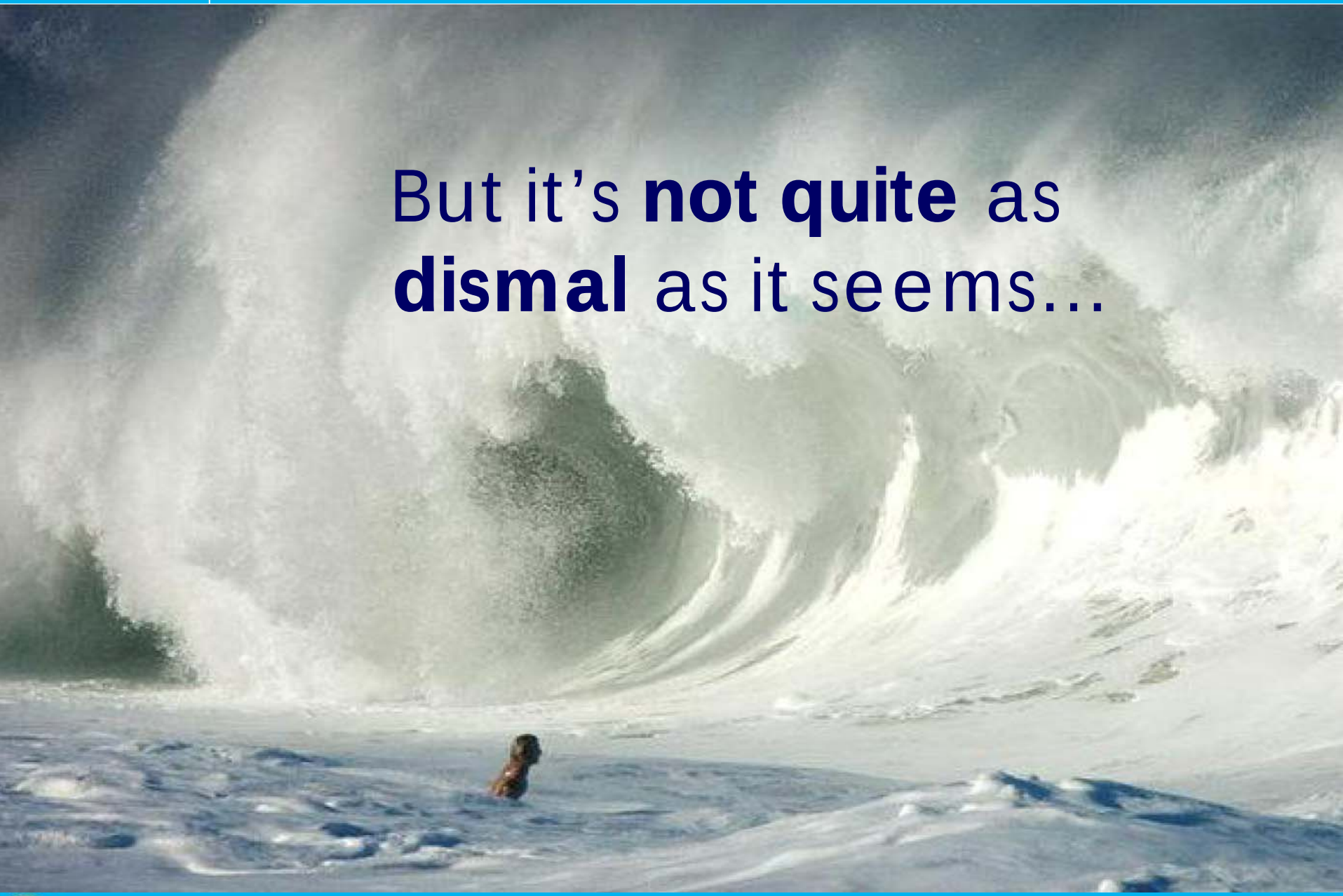
Upgrades and installs **aren't...**

Globally distributed
development **feels like...**

TCO isn't getting **better...**

And **internal** customers...**well...**

And **this guy** surely doesn't **understand...**


But it's **not quite** as
dismal as it seems...

You **see**, there's an **elephant** in the **room**...

What if you could **unlock** the **puzzle** of **GDD...**

TCO was **something** to **smile** about**...**

Install…**simple…**
upgrade**…fast…**

What if there was an environment where…

collaboration
is everything

Where applications **perform** the way your **customers** expect...

Where you can show **business value** in terms of **productivity** or **savings...**

Where **everyone** can see **project status** in **real time…**

Then **this guy**…
remember **him?**

He's **happier...** and **thinks** his **team** (and he) are **geniuses...**

And **Julie**, **Chris** and **Cathy?**

Doing well
thank you…

Because they **heard** about the **2008** Rational **CRM deliverables!**

Agenda

- Iris – Amazing CRM Vision
- Terminator - Superior ClearQuest Skills
- Dynamo – Improve ClearCase Scale
- Auto – Fast Build Forge Control
- Code – Deep Software Analyzer Knowledge
- Transform – Driving Team Concert Collaboration

Fighting Against:

- Poor collaboration between distributed teams
- [illegible]

Iris – Amazing CRM Vision

What if Your Tools Knew…

Your Software Artifacts…

- ✓ **Circumstances Under Which Code Can Be Delivered**

Who is on Your Team…

- ✓ **How to assist new team members in getting started**

When a Build Breaks…

- ✓ **How to Automatically Fix it and Exactly What Artifacts are Associated with it.**

Your Favorite Work Items

- ✓ **How They are Tied to IP, Traceability, Code Quality and Overall Schedule.**

We Call This "Collaborative ALM"

The defining challenge in collaborative software delivery

Failure to communicate and collaborate across silos

2/3 of stakeholders are dissatisfied with the speed or quality of corporate software development

50% of outsourced projects are expected to underperform

Silos of people, process, and projects inhibit collaboration

Geographic Barriers

- Poor communication
- Language, culture and time differences
- Lengthy project and team member on-boarding
- High degree of friction across teams

Organizational Barriers

- Lack of meaningful stakeholder input
- Process gaps resulting in errors and rework
- Poor LOB oversight
- Weak project governance

Infrastructure Barriers

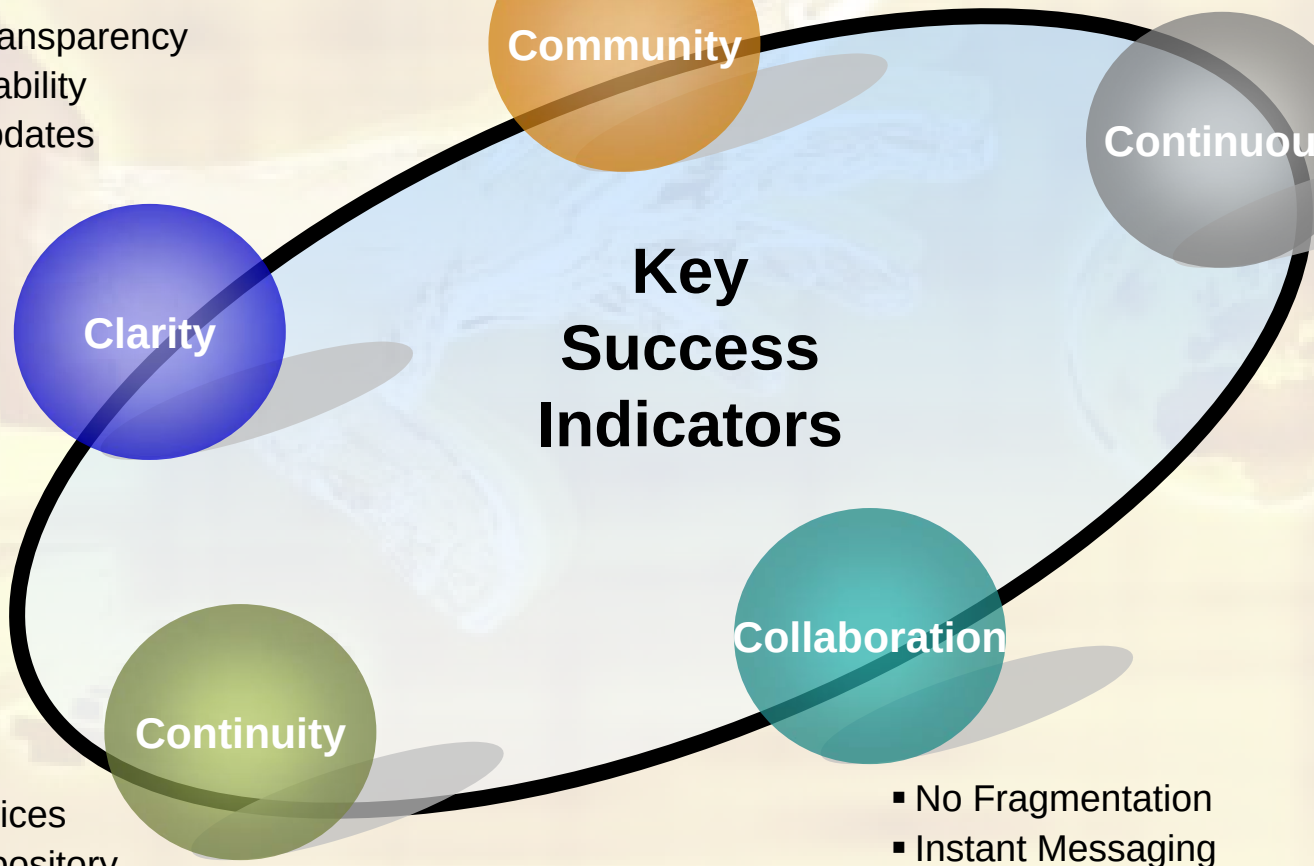
- Incompatible tools and repositories
- Unreliable access to common artifacts
- Brittle and inflexible tooling integrations

*Forrester, Gartner

5 C's of Collaborative ALM

- Open Course Correction
- Incubators
- More, but controlled development

- Pervasive Transparency
- 2-way Traceability
- Real-time Updates

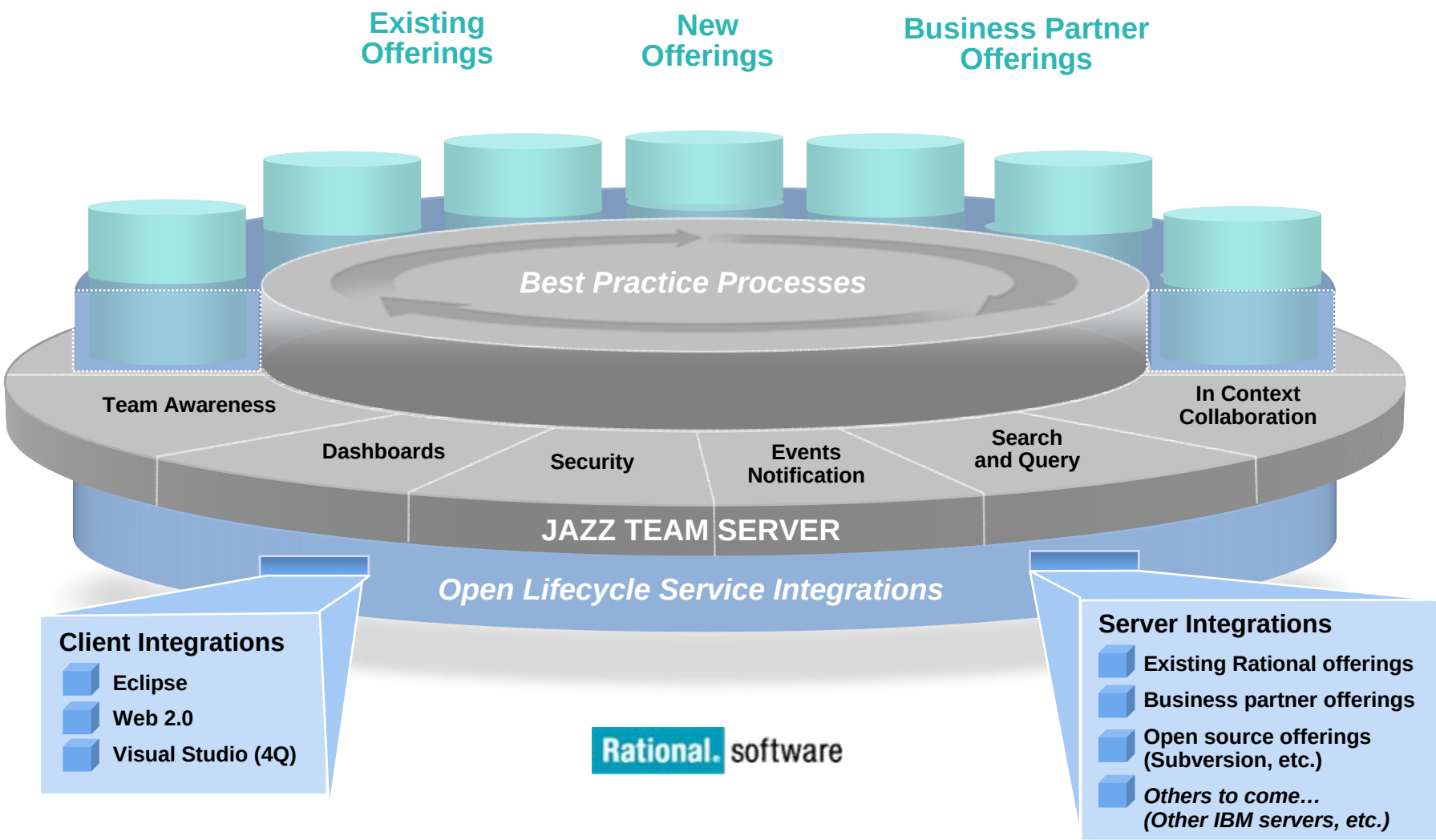


- Integration
- Feedback
- Planning
- Testing

- Common Services
- Integrated Repository
- Workflow Governance

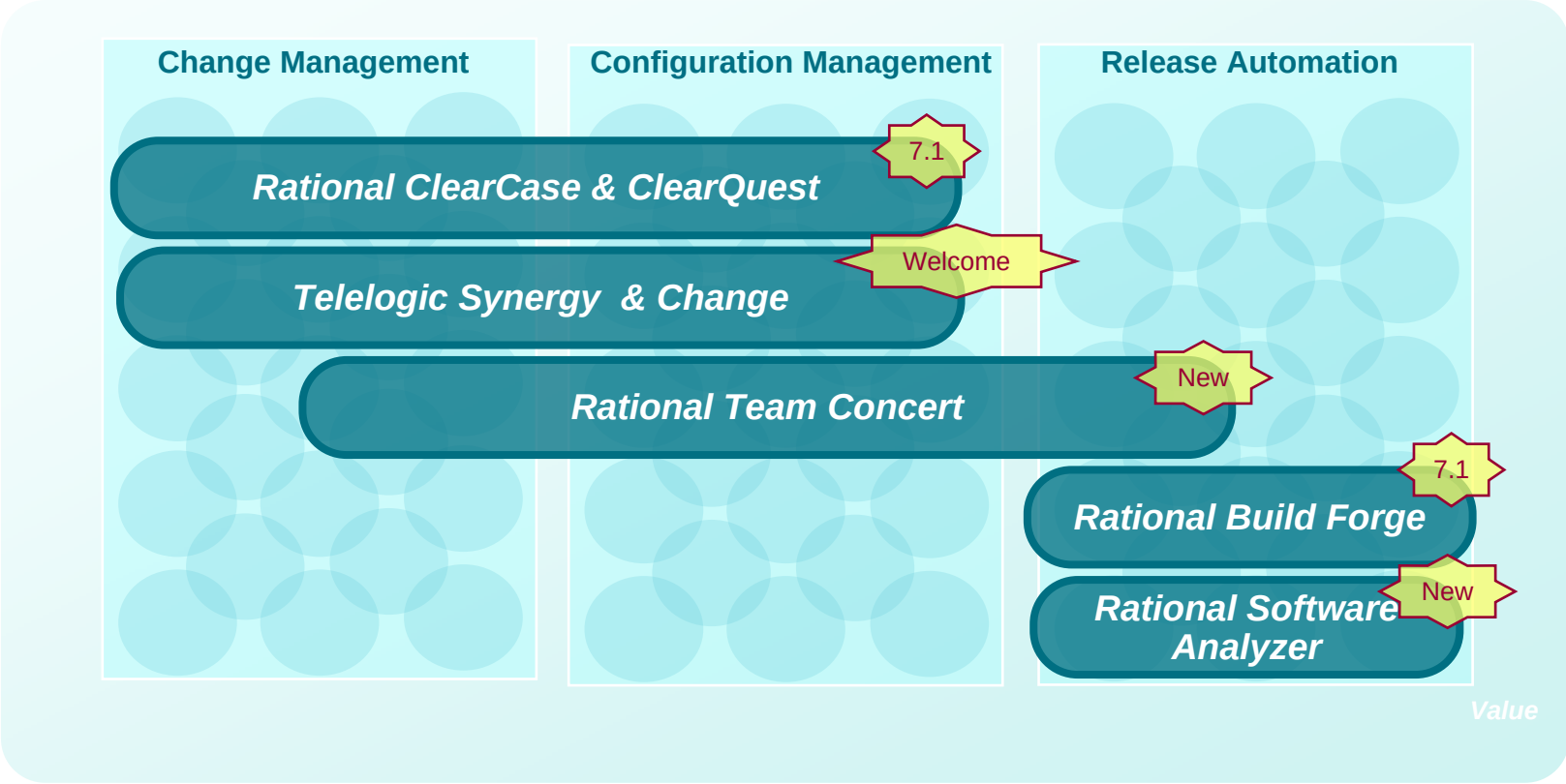
- No Fragmentation
- Instant Messaging
- Process-Aware

How Will We Do It?

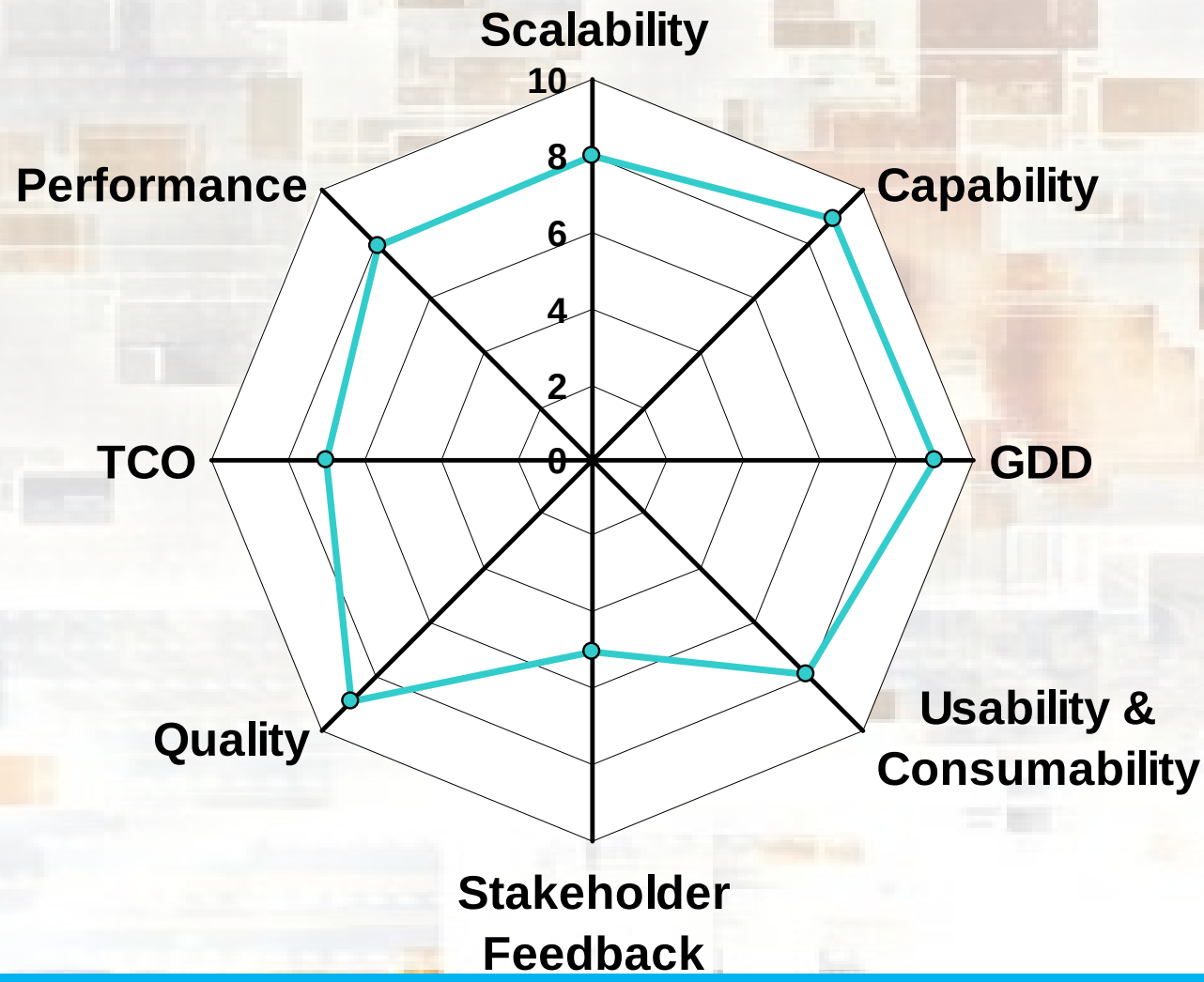


Rational Solutions for Change & Release Management

- New product and releases for 2008!



Measured Capability Improvement (MCI)



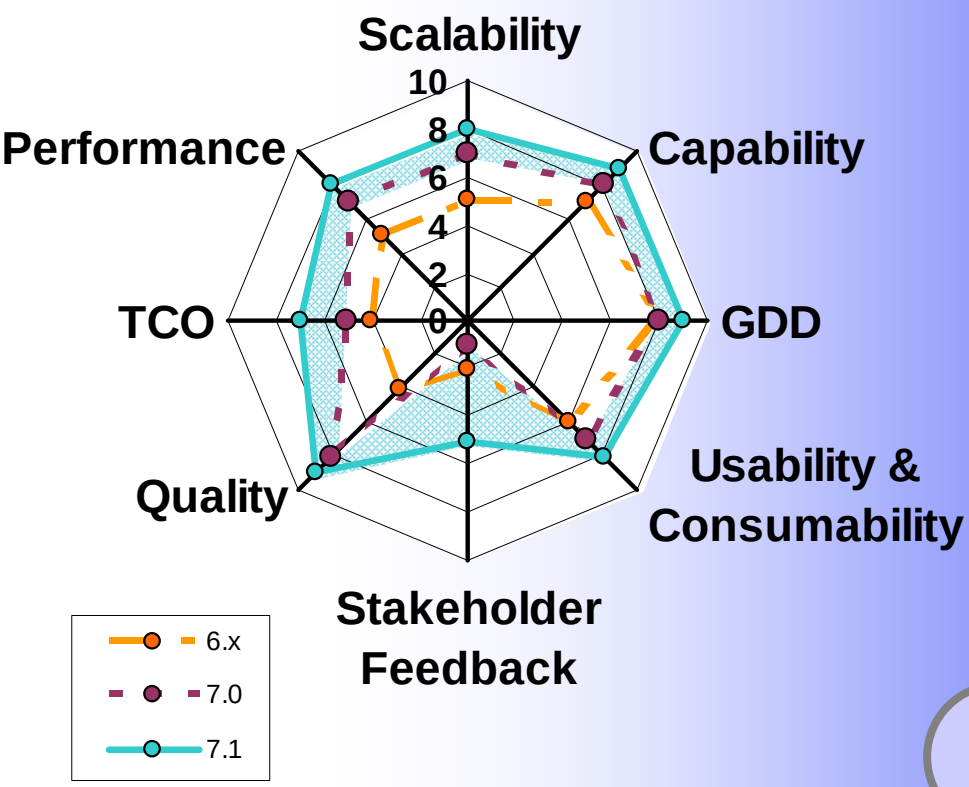
Fighting Against:

- Po[illegible]t[illegible]-the-Box Experiences
- U[illegible]t[illegible]lse[illegible]erien[illegible]

BAM!

Terminator - Superior ClearQuest Skills

ClearQuest MCI



Increased capability with full text search, report authoring and over 100 new features in CQ web

Better GDD with CQ web report management

100 new features In CQ Web, and IIM 1 Click Patch streamlines usability and consumability

New RFE process incorporates stakeholder feedback by delivering 314 RFEs

CQALM lowers schema development TCO by 60%.

ClearQuest v7.1 Customer Value

Improved Time to Value

- Ease of Use
- Consumability & Productivity
- Globalization

Increased Compliance, Governance, & Lifecycle

- Lifecycle Integrations
- Security & Compliance Management
- On Demand Governance

Lower TCO

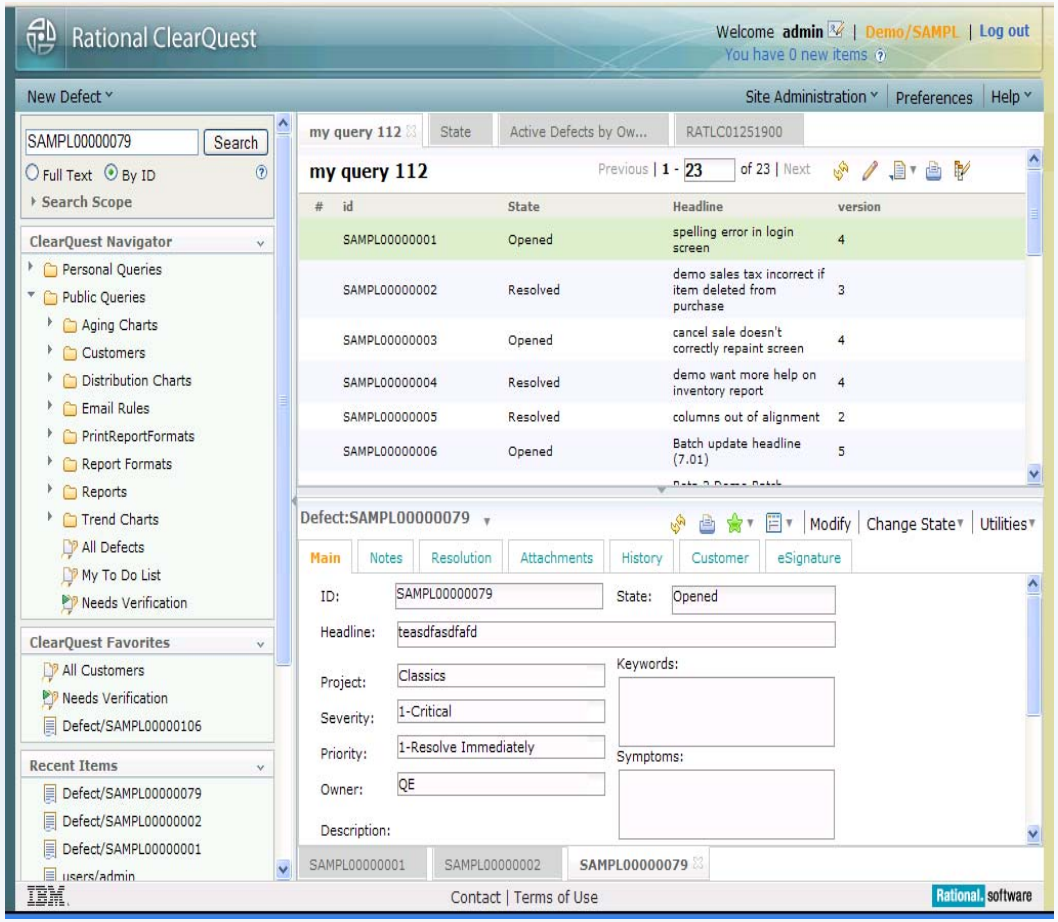
- ClearQuest Web
- Infrastructure
- CQALM Schema

ClearQuest v7.1 – Improved Time-To-Value

Consumability and Productivity - ClearQuest Web

ClearQuest Web reduces TCO for a Globally Distributed team!

- New capabilities include:
  - Persistent personalization of forms
  - CQ favorites
  - Column sorting and resizing
- Multi-tasking capabilities
  - Responsive UI
  - Multiple form/query display
- Report management
- Atom feeds
- REST API



ClearQuest v7.1 – Compliance, Governance & Lifecycle

Unlock the Power of your Information

Full Text Search

Powerful search engine

Search across record types

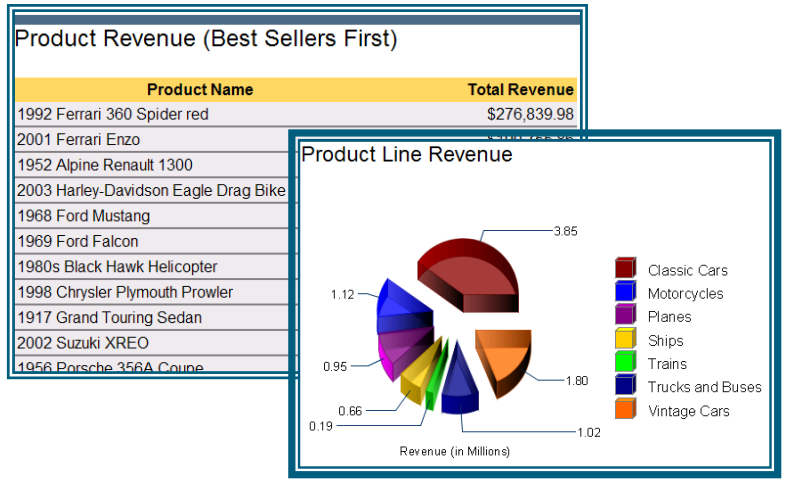
Industry standard syntax

Reporting

Pull data model

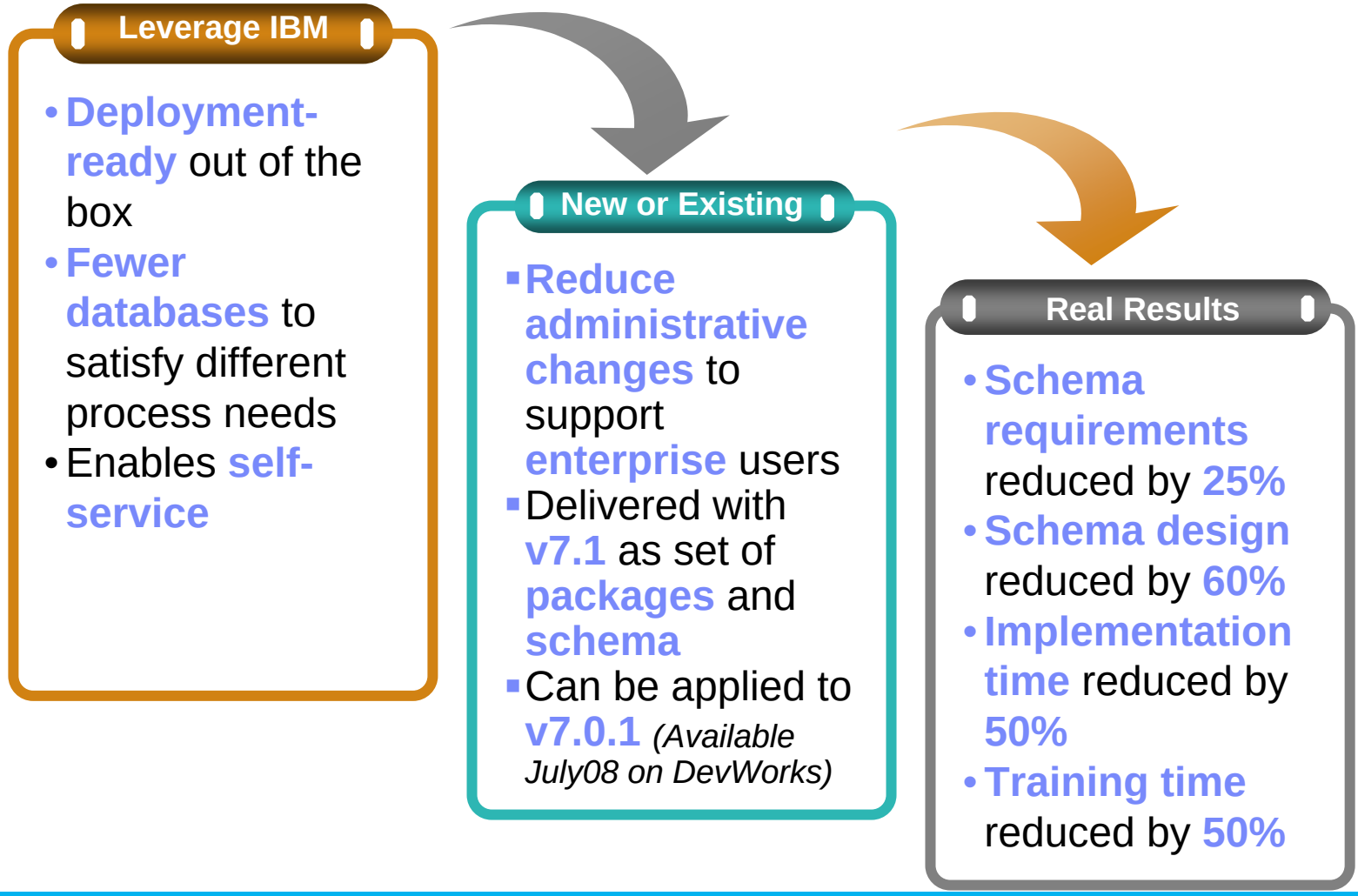
Multiple data sources

BIRT-based report designer



ClearQuest v7.1 – Lowering Total Cost of Ownership

Application Lifecycle Manangment (CQALM) Schema



ClearQuest Beyond 2008

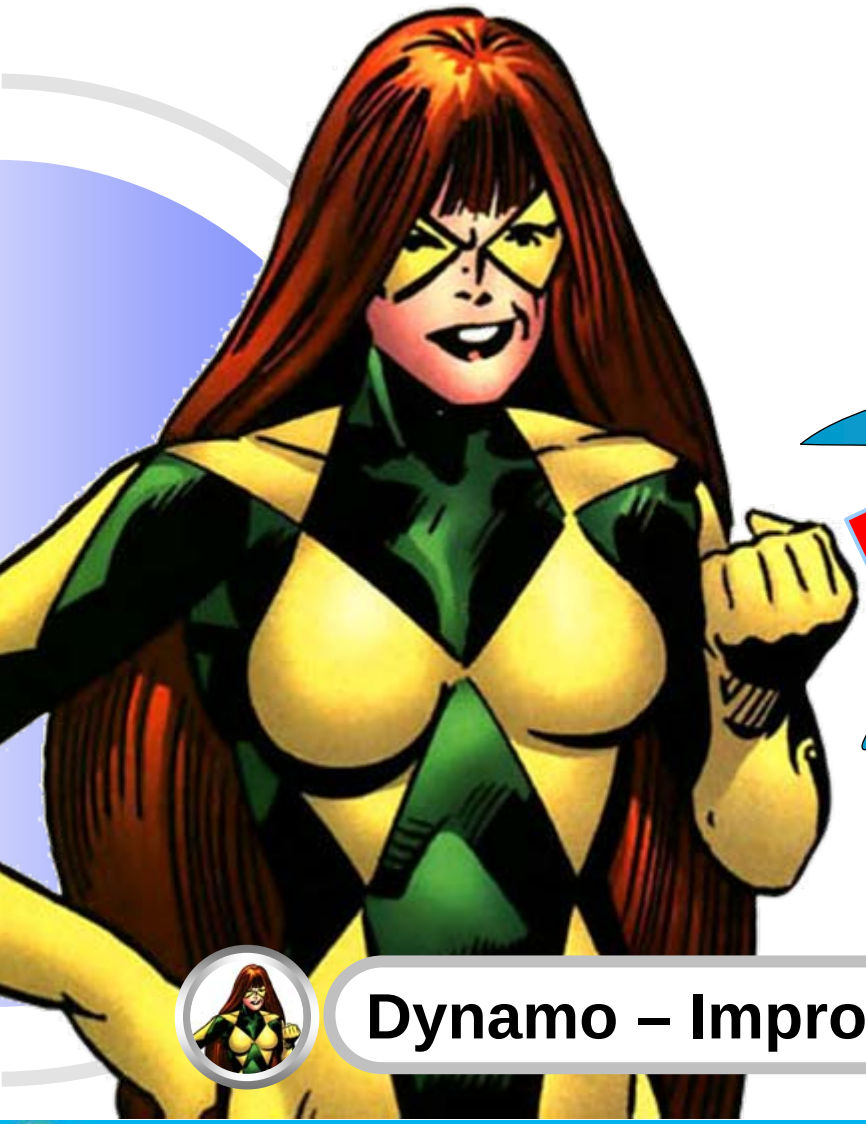
- **Trusted – ClearQuest capabilities on Jazz**
  - Fundamental and familiar ClearQuest value
  - Upgrade tools and utilities from ClearQuest v7.1
  - Superior technology

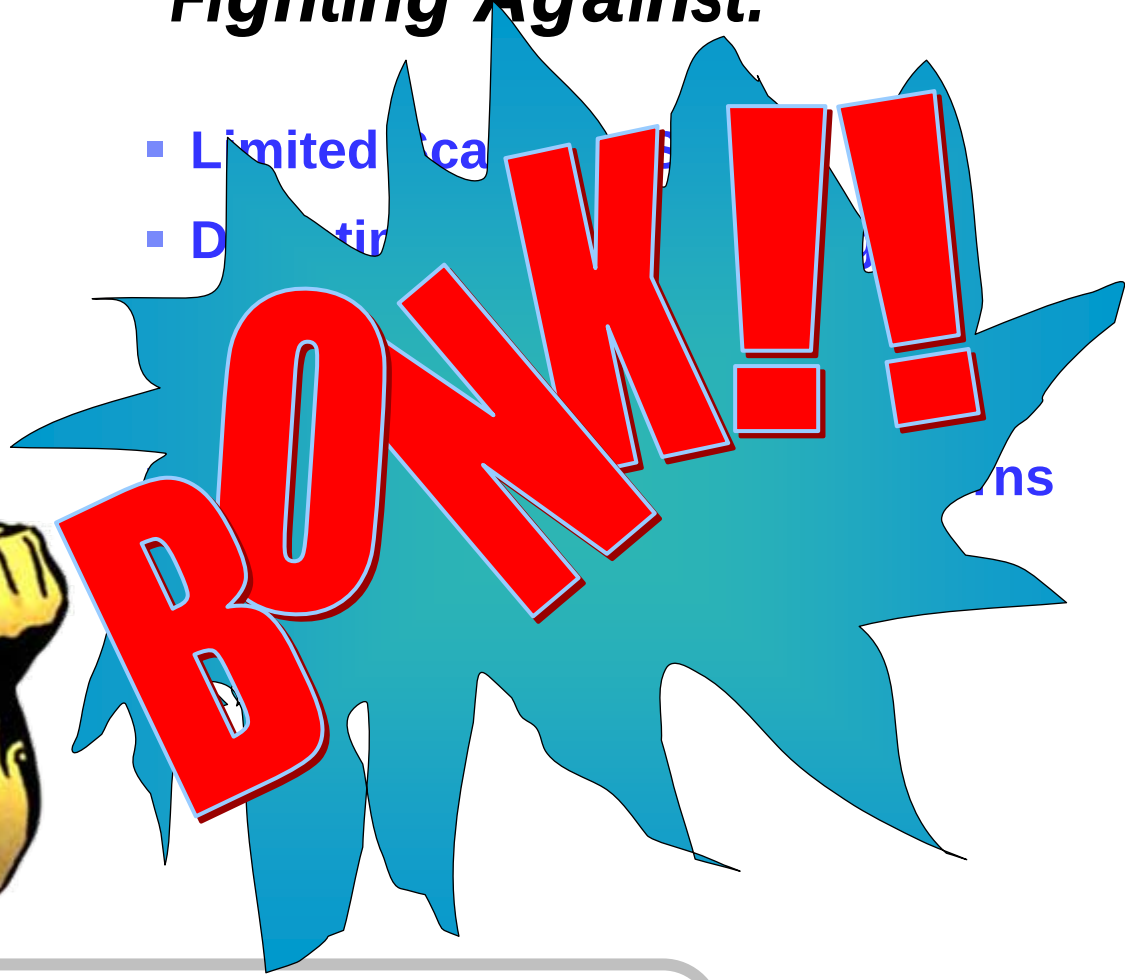
- **Leveraged – Gained from Jazz Platform**
  - Open integrations
  - Improved time-to-value
  - Lower TCO

- **New! – Only available with ClearQuest on Jazz**
  - Work Items extended for ClearQuest
  - Customization engine
  - Dashboards/news feeds

Fighting Against:

- Limited [illegible]ca[illegible]
- D[illegible]tir[illegible]





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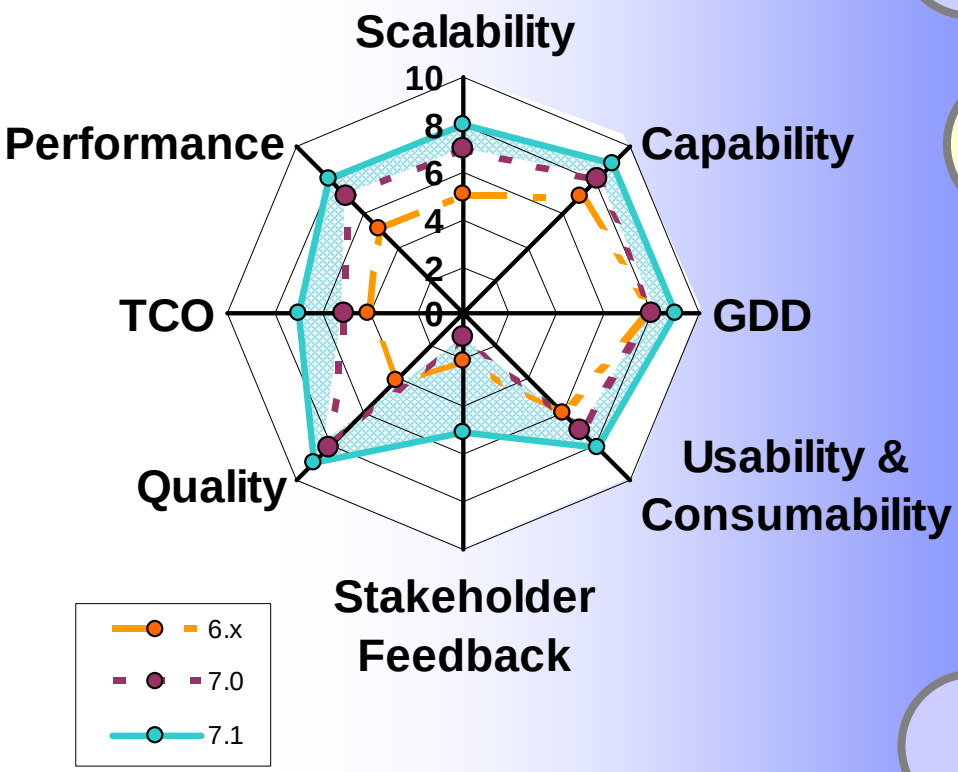
Dynamo – Improve ClearCase Scale

ClearCase MCI



MS Global Monitor increases capability with 24 x 7 server monitoring.

CCRC CQ WAN forms simplifies GDD with a unified client for developers

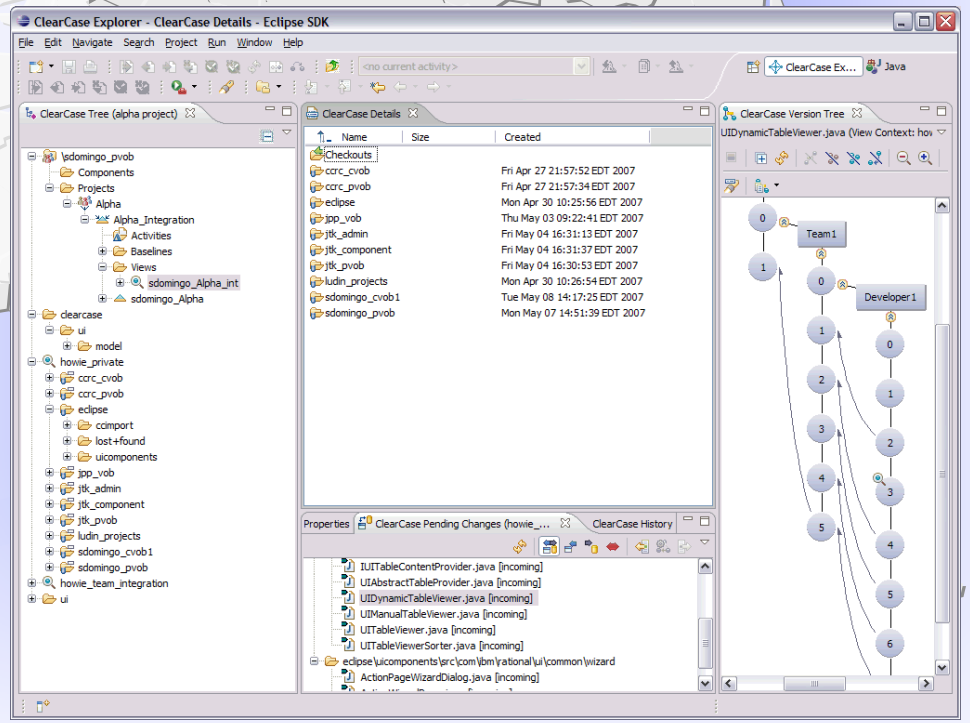
Improved usability with CCRC preferences and consumability with side by side server installs

CM server lowers TCO combining CCRC and CQ web server infrastructures

20X performance improvement in ALBD RPC throughput under heavy load, 3000x improvement Registry View lookup

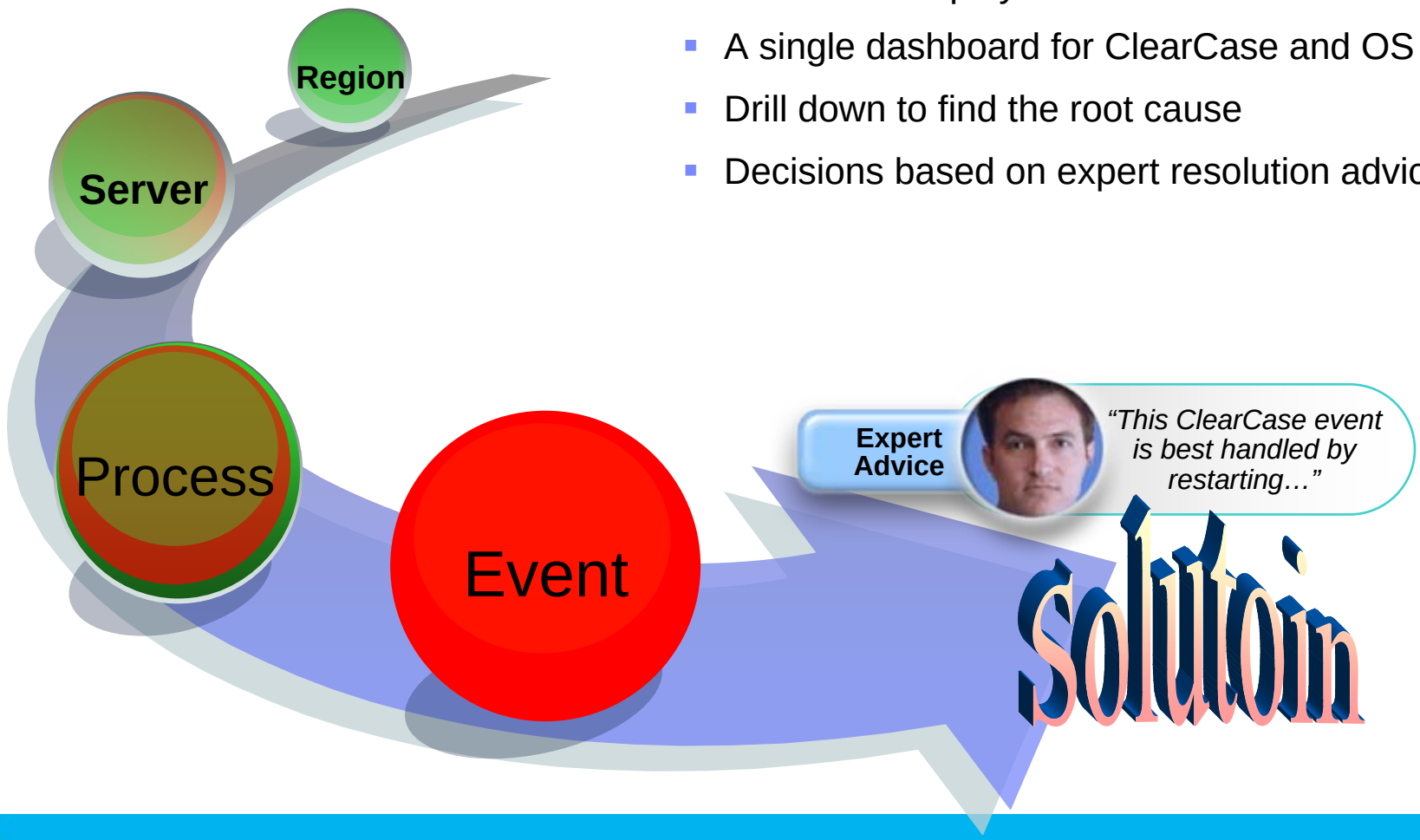
ClearCase Remote Client 7.1 (CCRC)

- **Increases developer productivity with:**
  - Preferences and workspace filters
  - One click deliver and rebase
  - Recursive check-in
- **Increases team productivity with:**
  - Integrated CQ forms and queries
  - Pending changes view



ClearCase Multisite 7.1 - Global Monitor

- 24 x 7 status of your globally distributed ClearCase deployment
- A single dashboard for ClearCase and OS events
- Drill down to find the root cause
- Decisions based on expert resolution advice



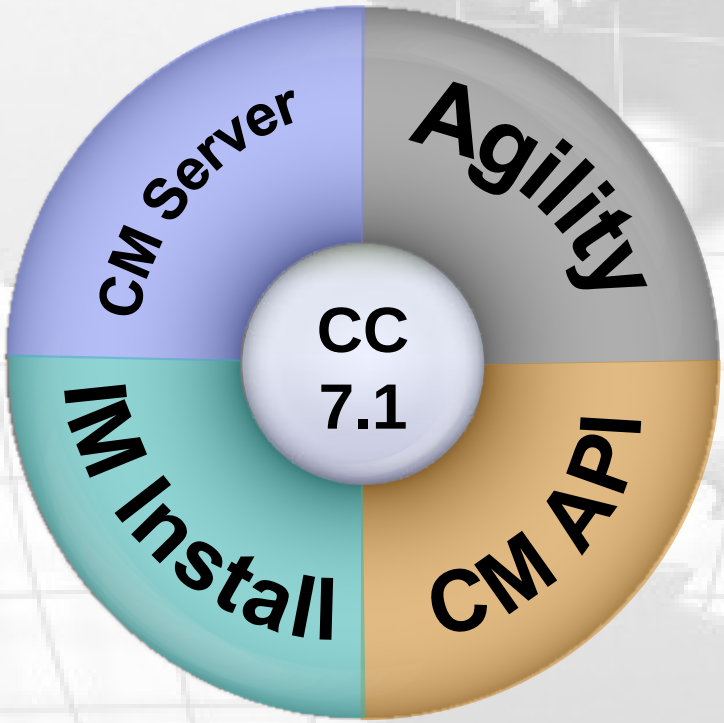
ClearCase 7.1 Capabilities

CM Server

- High-performing server-based deployment model
  - Highly scalable
  - Easily managed
  - Easily administered

Agility

- Show “buried” changes
  - Common operations take advantage
- Recursive add to source control
- Pending changes View



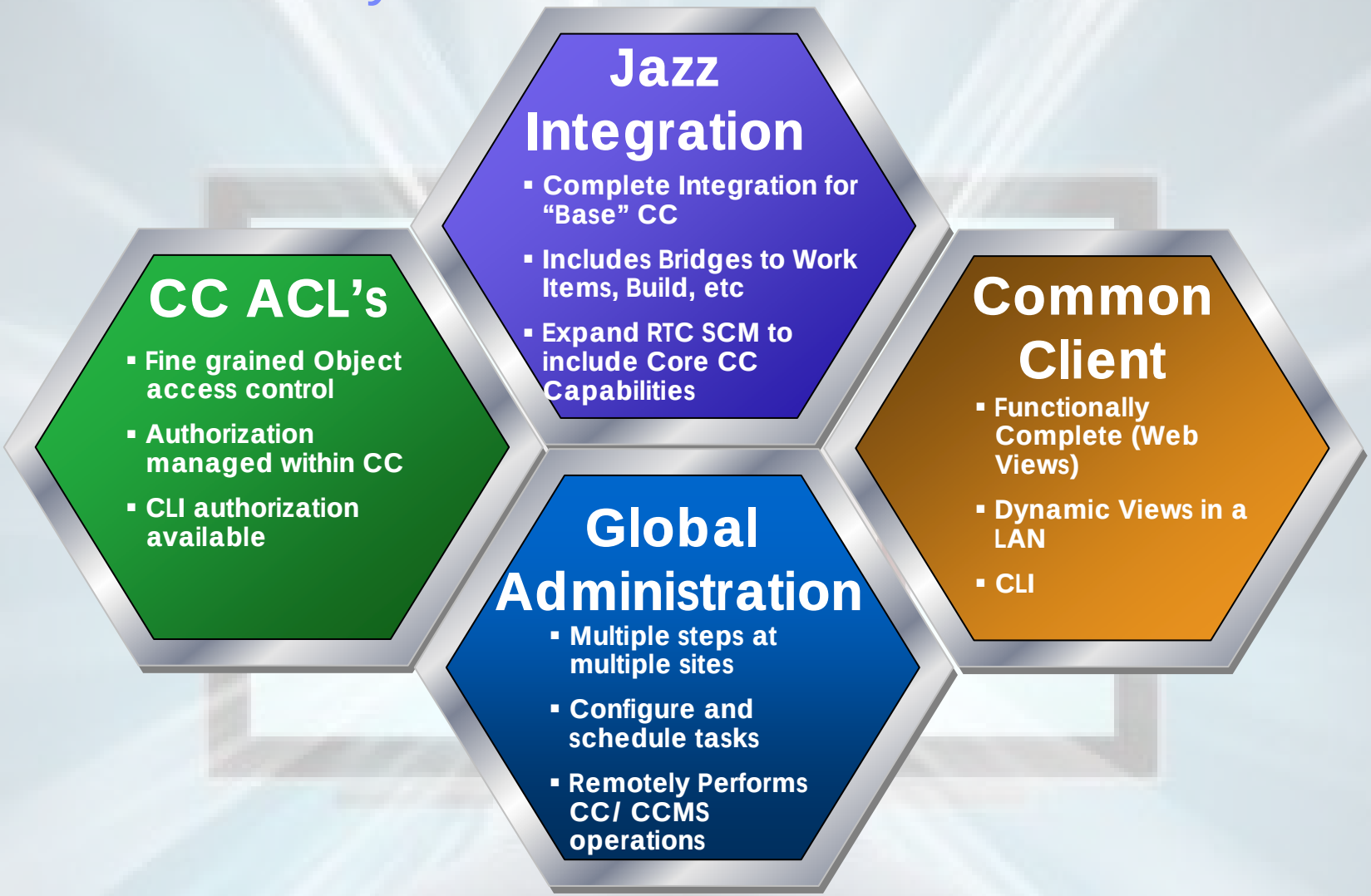
IM Install

- Streamlined patches, updates and rollback
- Side-by-side UNIX Installs
- Enhanced deployment management

CM API

- Unified client-side Java API
- Based on JSR 147
- OS/Platform-independent
- Supports customer and partner ecosystem

ClearCase – Beyond 2008



Fighting Against:

- Cross-platform
- n
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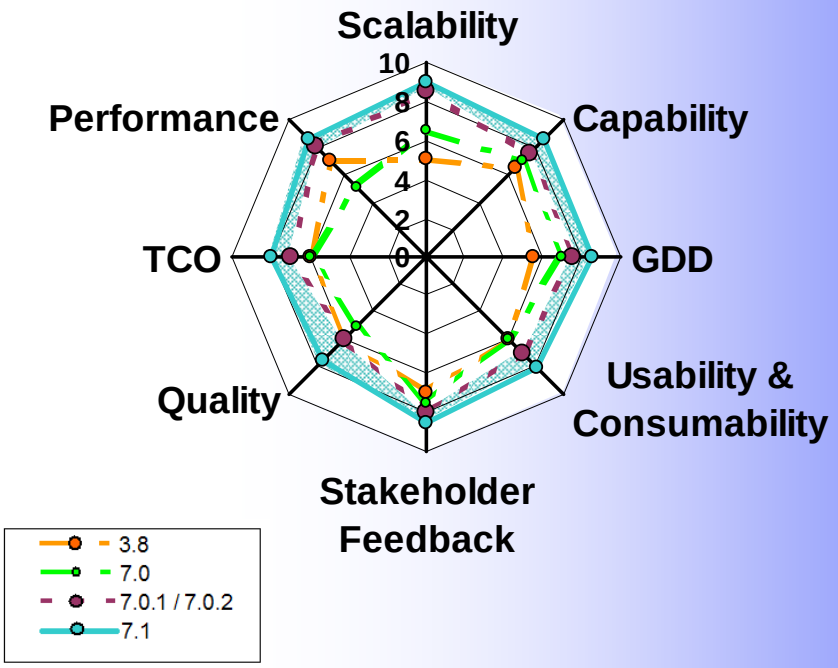
- es

THWACK!

Auto – Fast Build Forge Control

Build Forge MCI



Job process optimization increases capabilities for managing dependencies

Project snapshots improve consumability by enabling reuse and reproducability.

New RFE process incorporates stakeholder feedback by delivering 132 RFEs

Deliver high quality release with no DS1/2s

Reduced TCO with examples, tools, community-produced docs on developerWorks

Job Process Optimization

Project Definition Enhancements

- Enhancements to the Job Execution Flow
- More options for controlling project execution

Step Avoidance

- Ability to dynamically determine which steps to skip based on some condition evaluation

Step Iteration

- Loop through a set of steps until a condition is met

Intelligent Virtualization and Team Concert Integration

Intelligent Virtualization

- Build Forge leverages an outside service to provision a required virtual machine to use as an agent.
  - Useful if a currently required server cannot be found
- Provisioning service can create a virtual or physical server

Team Concert Integration

- Build Forge becomes RTC resource
  - RTC User can pick Build Forge from Build Engines list
  - Connection info stored in Jazz for smooth flow
- Build Forge objects matched to Jazz equivalents
- Jazz Build Requests will fire Build Forge Jobs
- Build Forge Job results available directly in Jazz

Other Build Forge 7.1 Capabilities

Project Configuration Snapshots

- Ability to Manage Snapshots of Project Configurations
  - Cloning and Management of Snapshots over Time
- Easier Manageability of Build Forge Projects
  - Protects “known good” configurations

Security Improvements

- Embedded Support for Encryption / Enablement of other products
- Credential Uniformity
  - SSO Integration Framework / Integration with external systems
- Easier Security Parameter Configuration / Permission Refinements

IBM Installation Manager

- Same Installer on both Windows & Unix
  - Convenience Bundle of Open Source prerequisites on all platforms
- Based on IBM Installation Manager

Additional Platform Support

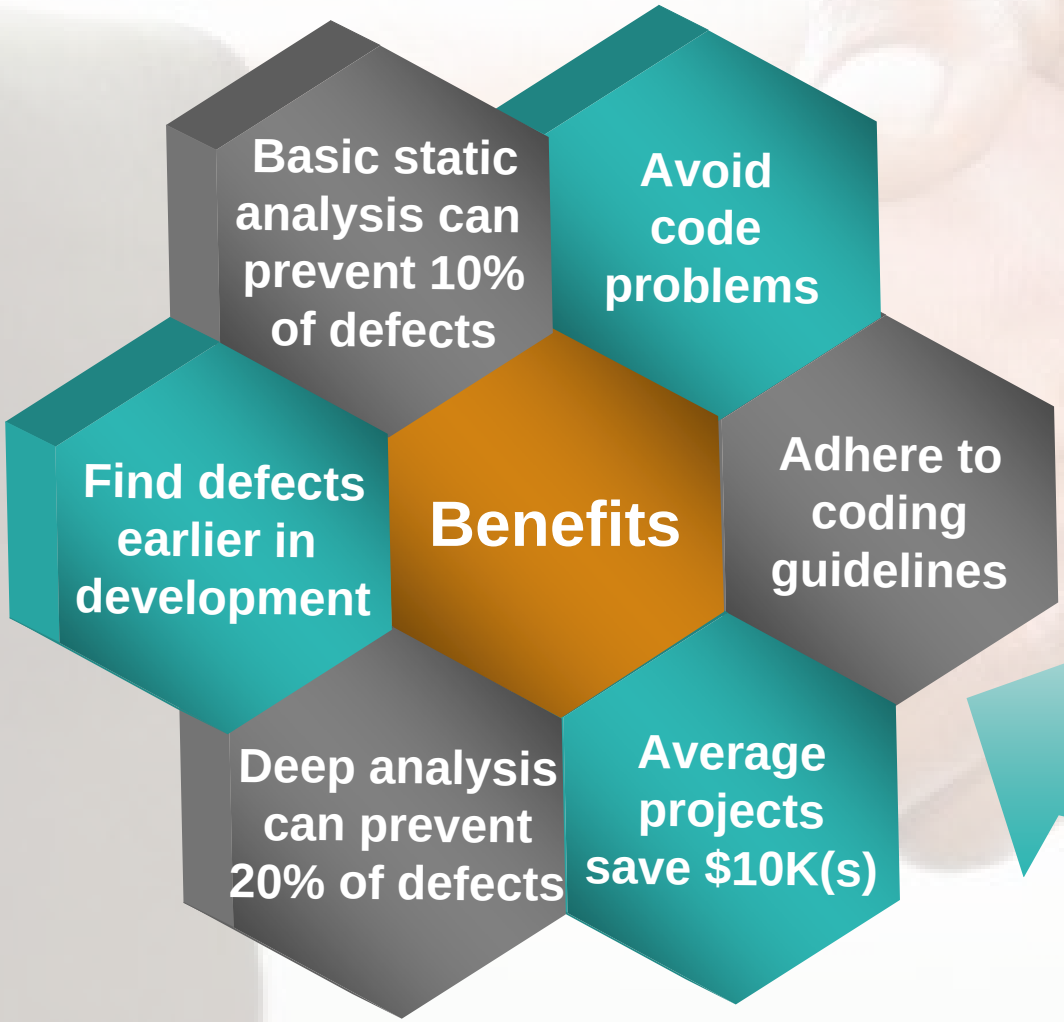
- New Platforms – 64 Bit Windows Agents, Linux on Z for the Core
- Improved Use Cases on Legacy Systems
  - JCL, Endeavor, and ChangeMan

Fighting Against:

- Po Co eal
- No ct
- P nce

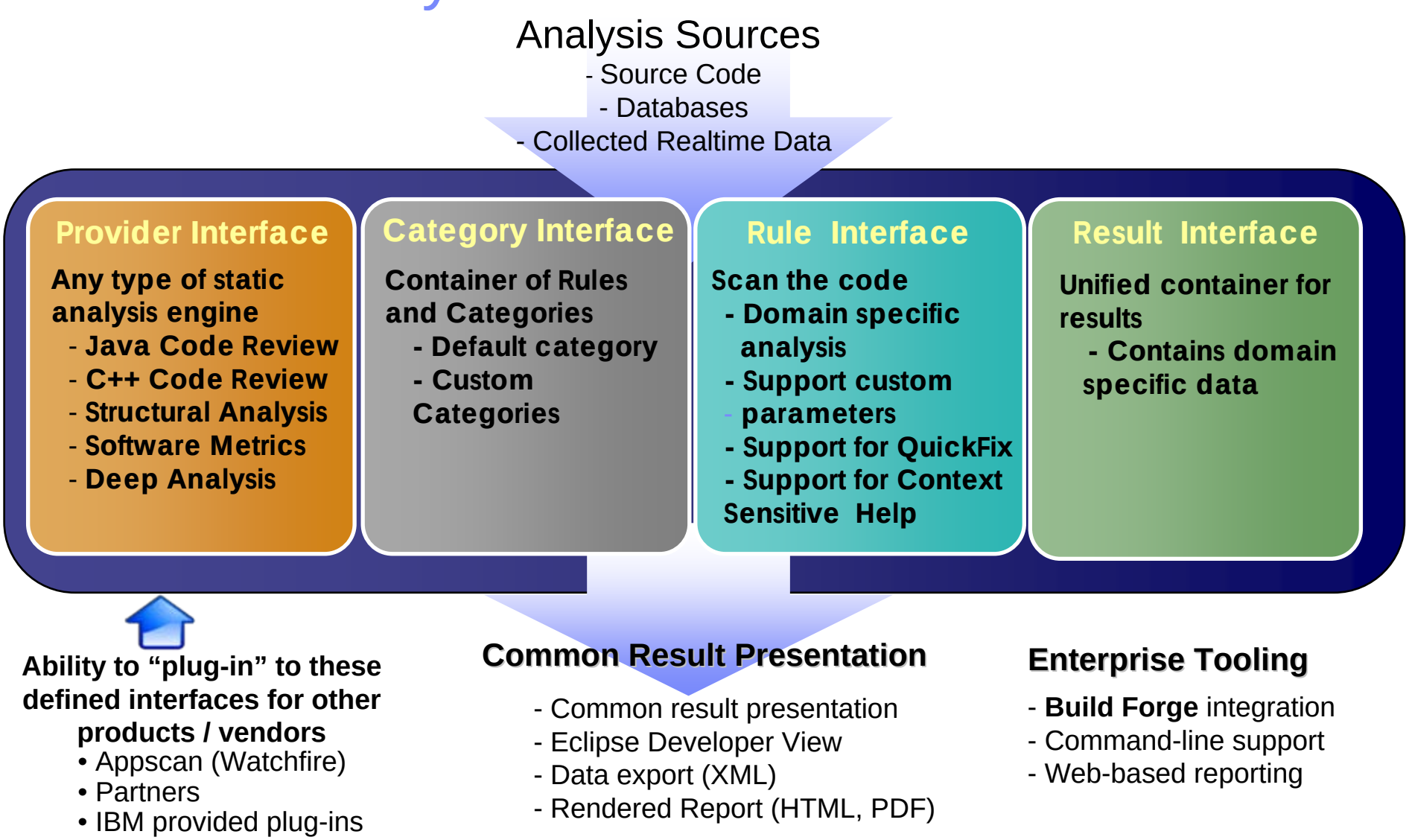
Code – Deep Software Analyzer Knowledge

Rational Software Analyzer - Available now!



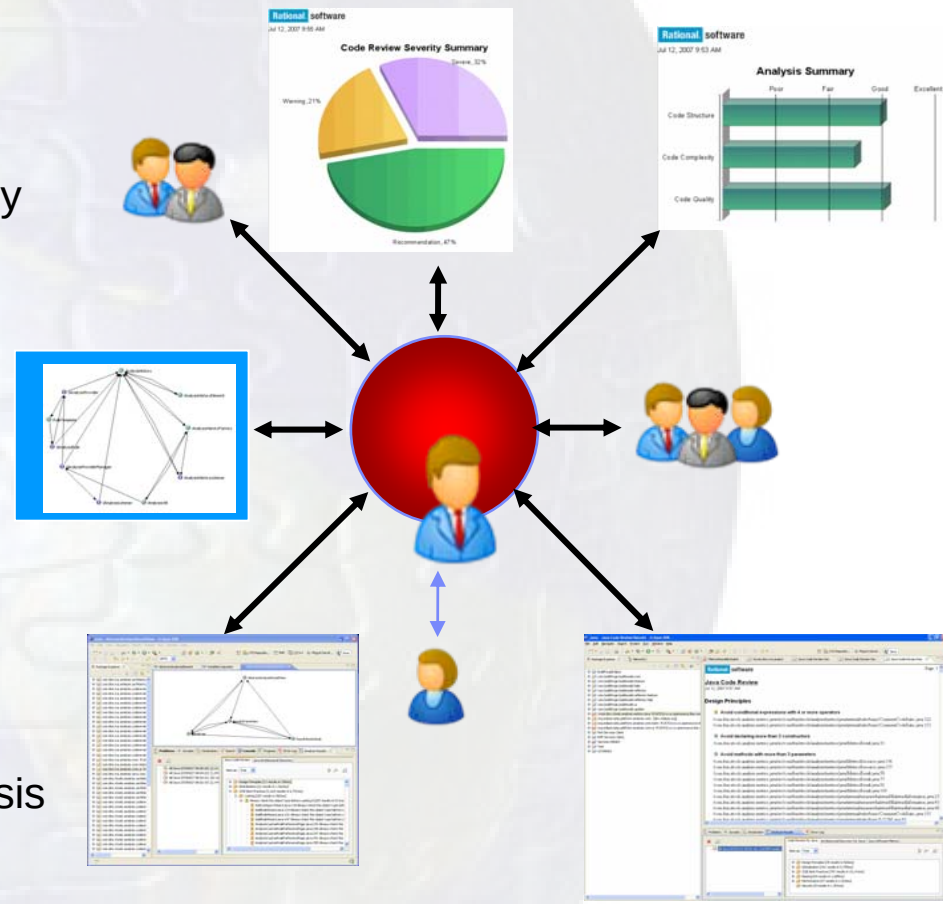
- Automated examination of Code for quality problems
- Find code dependency issues through architectural examination
- Evaluate code complexity
- Simulate data movement for security problem Identification
- Decrease in development and defect costs identification of bugs early in the SDLC

Software Analyzer Architecture Overview



Key Values of Utilizing Software Analyzer

- Enables software development teams to **consistently catch potential software defects in real time earlier** in the software development life-cycle
- Enables project team leads to more effectively manage **governance and compliance objectives** through customizable reporting framework
- Automates code reviews and incorporates **static analysis into the existing software pre-build process** across the lifecycle empowering teams to deliver more value
- Provides a **common static analysis framework** creating customizable and consistent work-flow for all forms static analysis rules within a single session



Fighting Against:

- Lack of Free
  - E
  - M
- elopment
  - as Iterative

Transform – Driving Team Concert Collaboration

How Team Concert 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

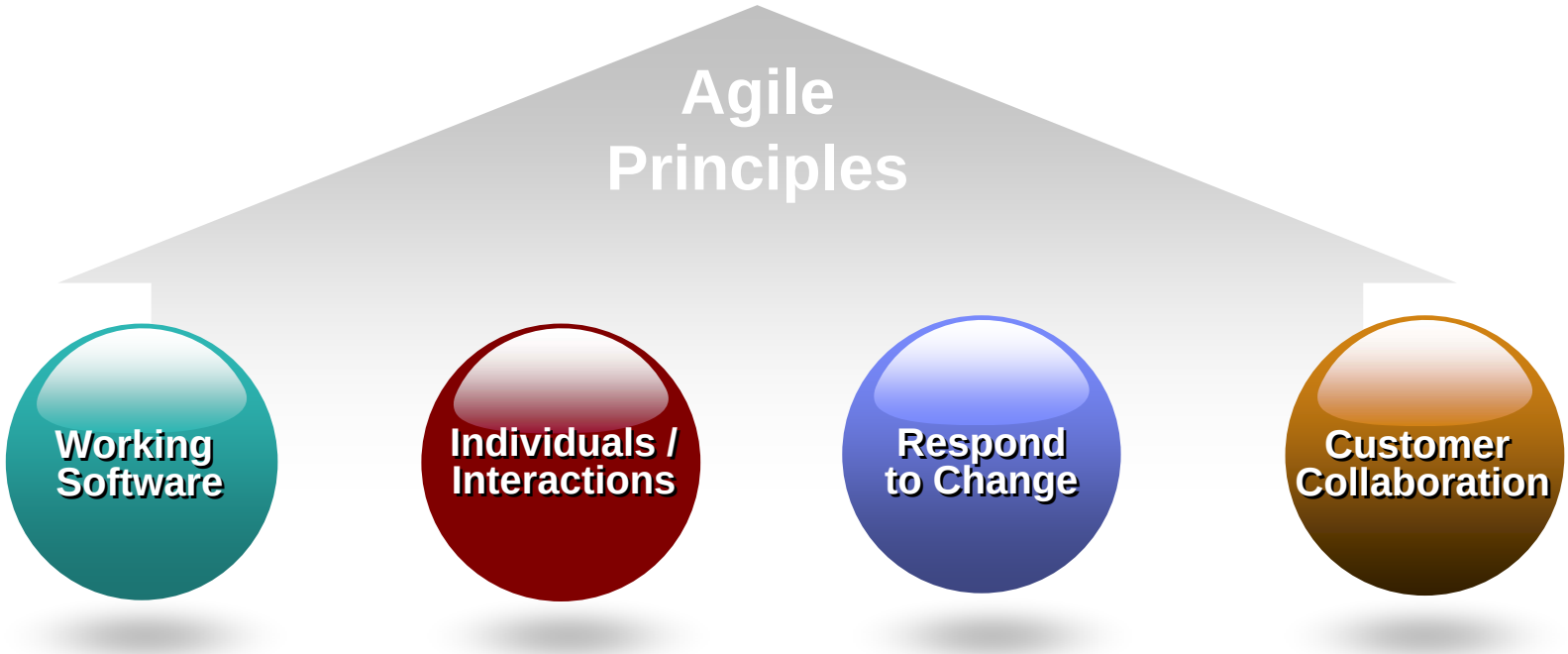
Rational Team Concert Capabilities

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

Support Agile teams – and agile businesses

IBM Rational Team Concert



- Continuous integration
- Manage team assets
- Change driven development
- Integrated / traceable

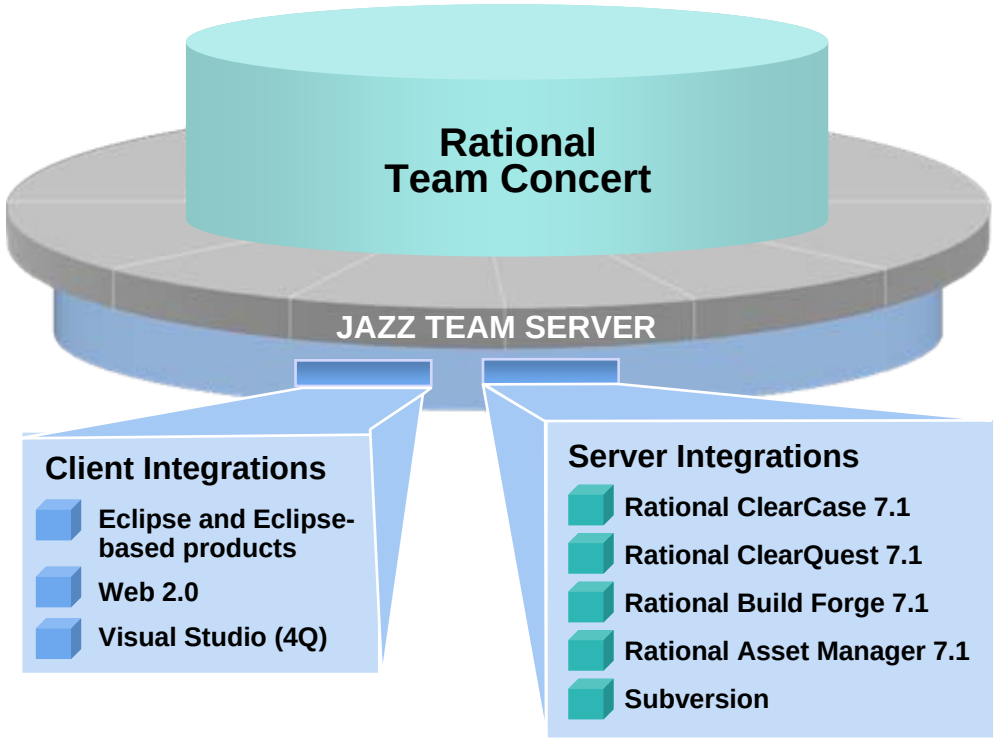
- Starting ad-hoc teams
- Team awareness
- Process awareness
- Ad-hoc sharing of changes

- Process flexibility
- Iterative planning and execution
- Multiple releases
- JIT code reviews

- Transparent teams
- Approvals / validations
- Project status / health
- Context driven discussions

Extend team collaboration to a broader range of users, from business to software professional

- Extend team collaboration today
  - Unify team members using a variety of Eclipse or Web clients
  - Support *any* Eclipse-based product, including Rational and open source products*
  - Extend the value of Rational tools in enterprise deployments
  - Interoperate with Subversion change management solution
- Broaden your options in the future
  - Unify teams in .Net environments
    - Visual Studio Client (Q408)
  - Expand access to team documents and workflows
    - Microsoft SharePoint integration (Q408)
    - Lotus Quickr integration (Q408)
    - Support Lotus Mashups (Q408)
  - Add enterprise build management
    - Build Forge integration (Q408)



* This applies to Eclipse 3.3 and above

QUESTIONS

Collaborate with us

Design Partner Program

Lab Advocacy Program

Board of Advisors

Voice of the Customer Events

Rational Software Development Conference

jazz.net

developerWorks

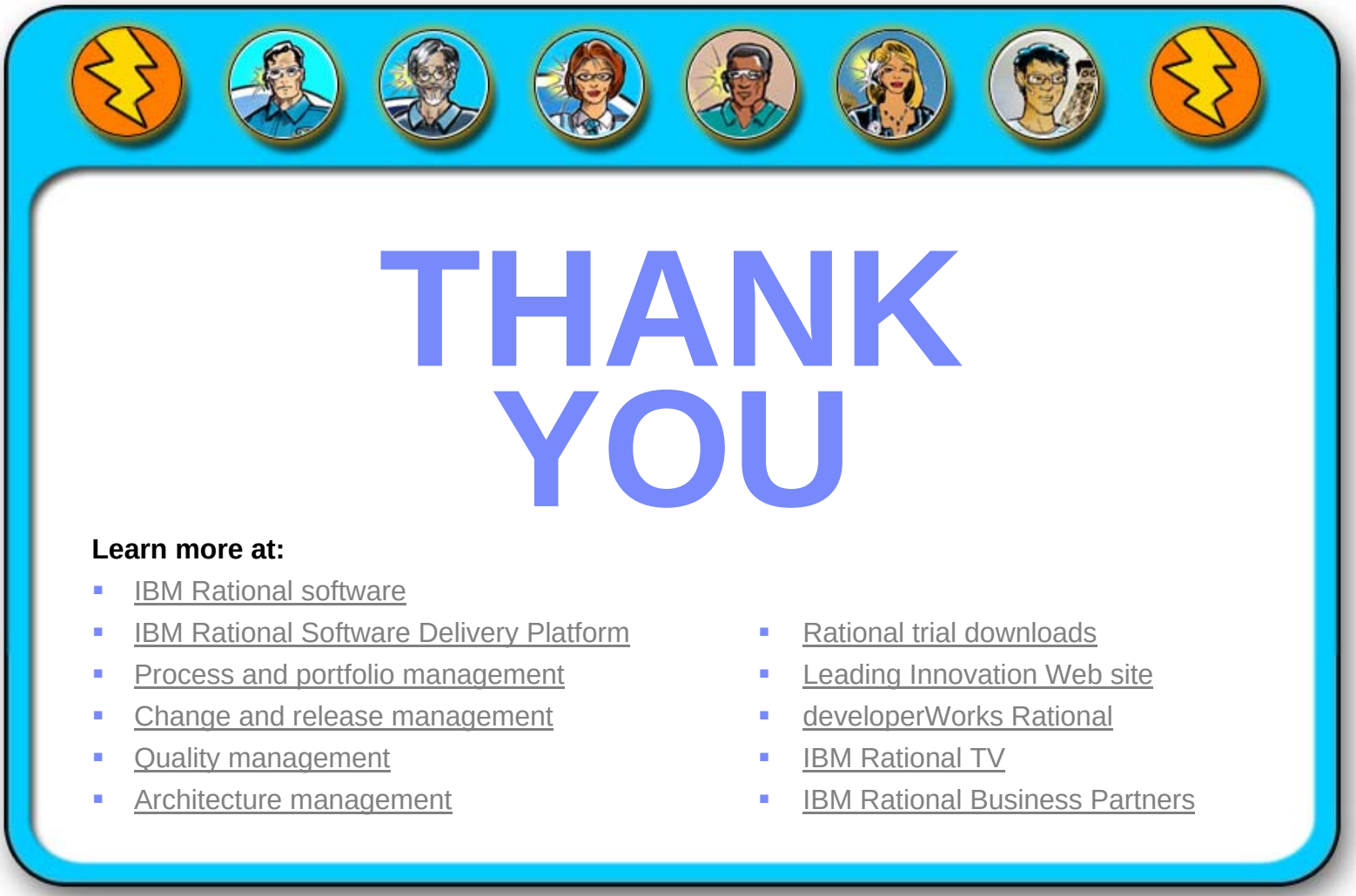
Beta Programs

RFE Community

Rational User Groups

Customer Acceleration Program

➔ Learn more at www.ibm.com/software/rational/collaborate



THANK YOU

Learn more at:

- IBM Rational software
- IBM Rational Software Delivery Platform
- Process and portfolio management
- Change and release management
- Quality management
- Architecture management
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