Agile Development with Rational Team Concert

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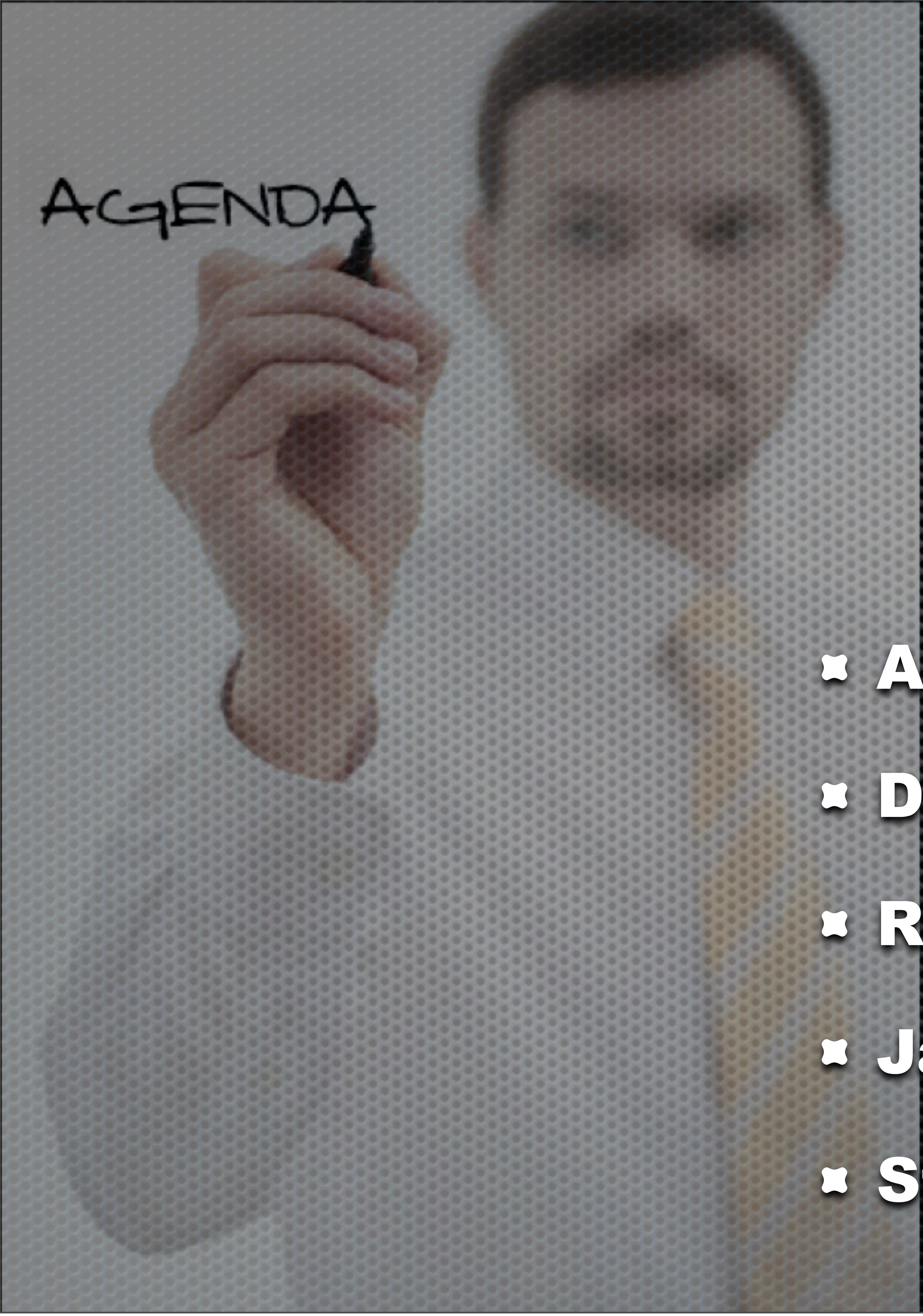
Feb. 2009



- Agile spirits and Scrum
- Demo ?!
- RTC concepts
- Jazz Platform
- Starter’s Kit

What is Agile ?

Agile means different things to different people

IBM Agile Defined

Uses continuous stakeholder feedback to deliver high-quality,consumable code through use cases and a series of short, stable, time-boxed iterations

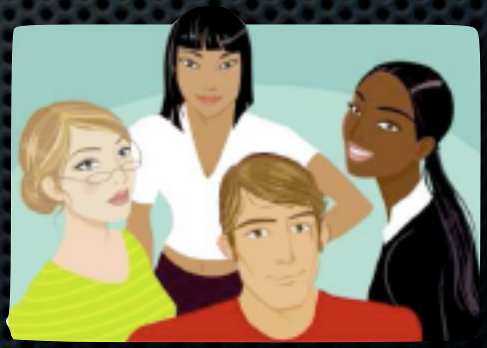
Key Characteristics of Successful Agile Projects at IBM

Stable, Short Time-Boxed Iterations

StakeHolder Feedbacks

Self-Directed Teams

Sustainable Pace



Scrum in 10 min

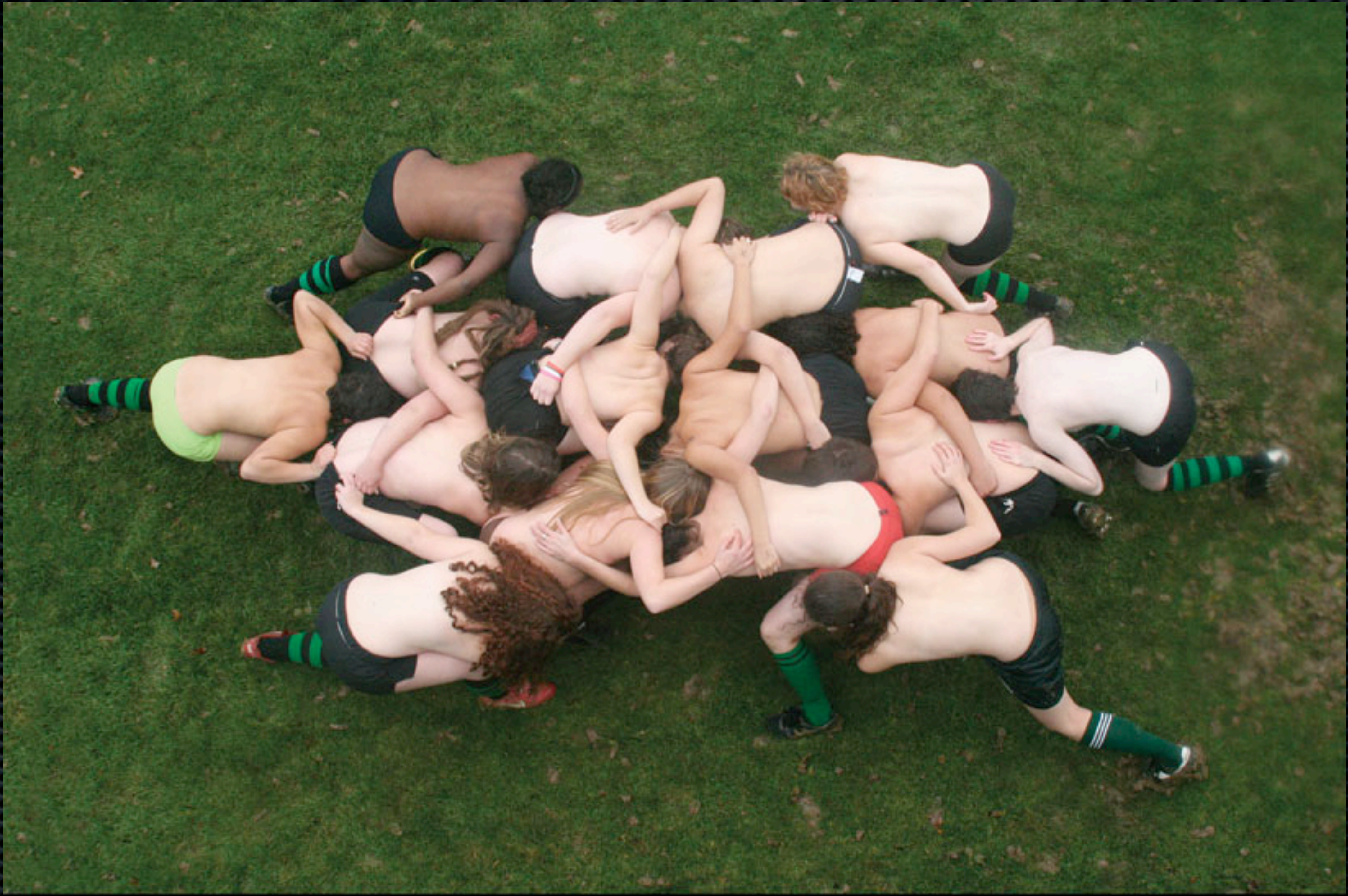
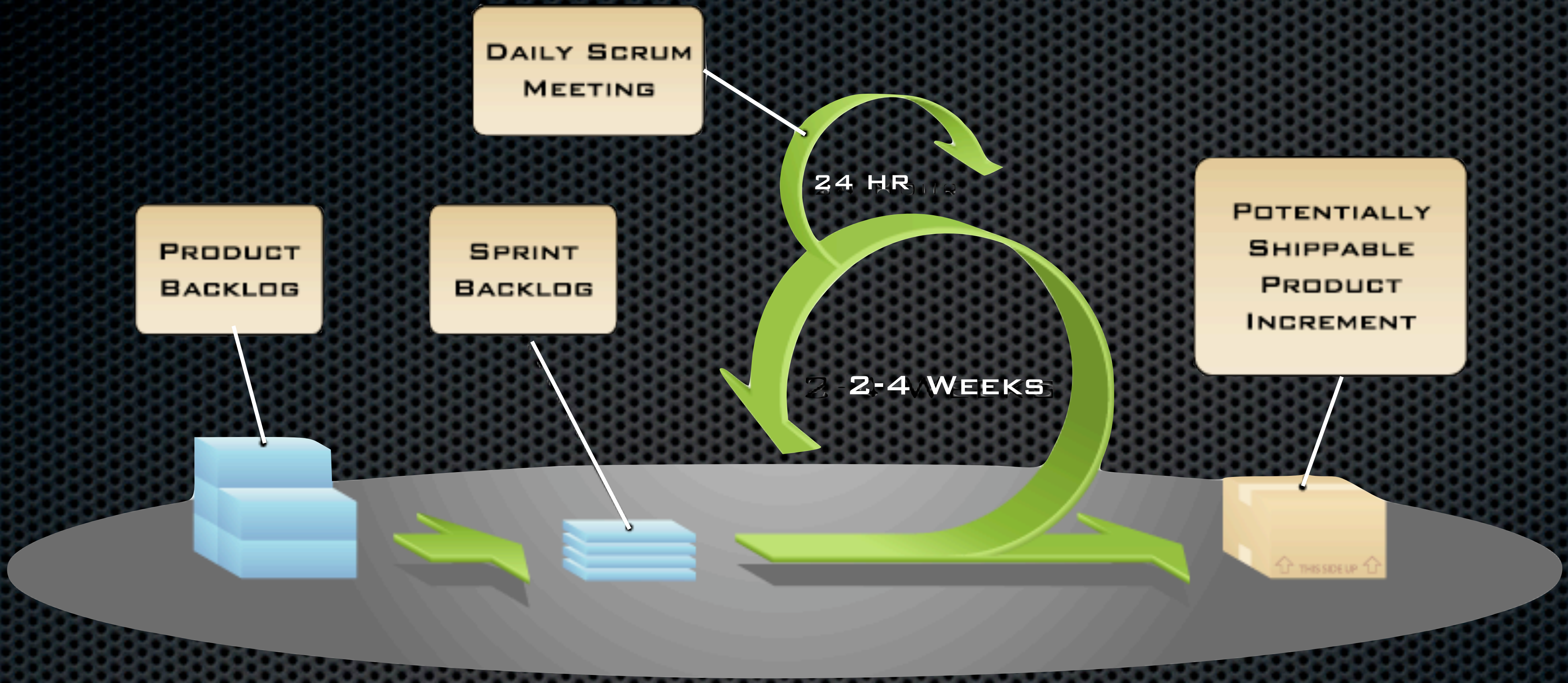


Fig. 6: The Scrum
The scrum is a pushing contest between two teams of eight players. The ball is fed in from the side by the scrumhalf and the team that drives their opponent backwards and hooks the ball out past the last foot of their own scrum wins posession. A scrum down is used to restart play after certain infractions such as a "knock on" or a forward pass.

http://www.oberlin.edu/stuorg/womrugby



Roles

Product Owner

Scrum Master

Team Member

Ceremonies

Sprint Planning

Sprint Review

Sprint retrospective

Daily Scrum

Artifacts

Product Backlog

Sprint Backlog

Software Dev Pain Points

- **Team awareness**
  - Get environment configured to be productive
  - What happen to my team
  - collaboration / sharing of changes
  - Collecting project data/metrics
- **Build awareness**
  - is the fix in this build ?
  - Tracking of broken build
  - When will be the next build ?
- **Project awareness**
  - tracking iteration progress
  - How healthy of a particular component ?

What if your tools knows...

- You and Your team
- Who is responsible for what
- All the rules and disciplines your team agreed upon
- Your favorite work item types and their transition
- When the build runs and what to do when it **breaks**
- How to reach you when ~~shits~~ bad things happened

What previously we have...

Bugzilla

SUBVERSION

Rational. ClearQuest®

see me on hive bee

cruisecontrol™

Rational. ClearCase (R)

fringe

BUILDFORGE™ ADVANCING DEVELOPMENT

Will it blend ?

RTC in a Nutshell

- Enable flexible, agile software development cycle management
- Transparency of status and trends through automated data gathering and reporting
- Integrate essential “units” you need during development

Demo Scenario

Lab 1. Setup Project

1. Create User
2. Create Project
3. Config Team Area
4. Release Planning

Lab 2. Iteration Planning

1. Create Product Backlog
2. Define Stories
3. Create Sprint Backlog
4. Generate work items

Lab 3. Version Control

1. Create Java Project
2. Check-in Jazz Repository
3. Review Change Set

Lab 4. Continuous Integration

1. Generate ant files
2. Create Build Definition
3. Create Build Engine
4. Launch Build Engine
5. Submit Build Request

Lab 1. Setup Project

1. Create User
2. Create Project
3. Config Team Area
4. Release Planning

Member

Profile

Availability

Preference

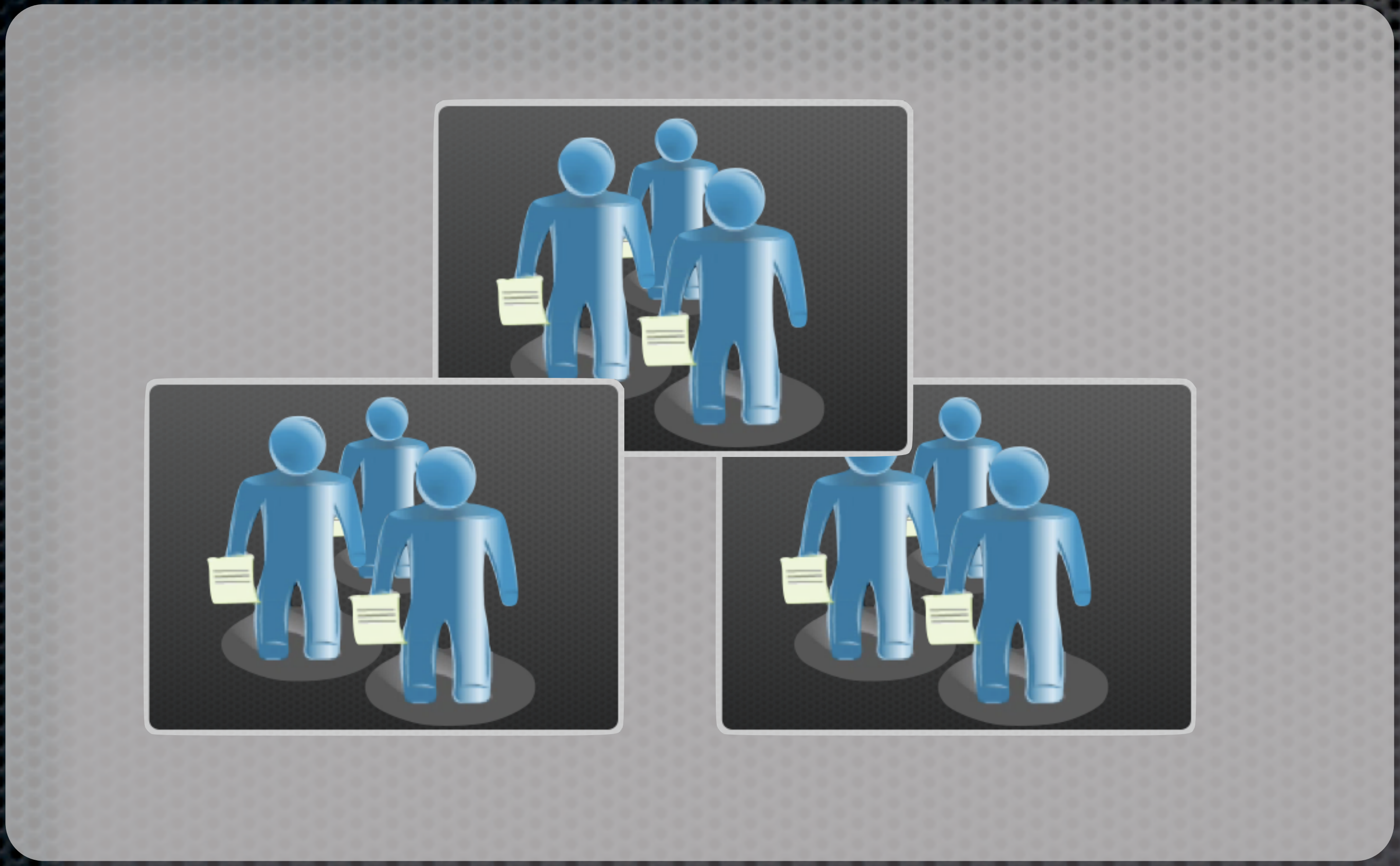
Team

Team Members

Development Line

Process

Project



Teams

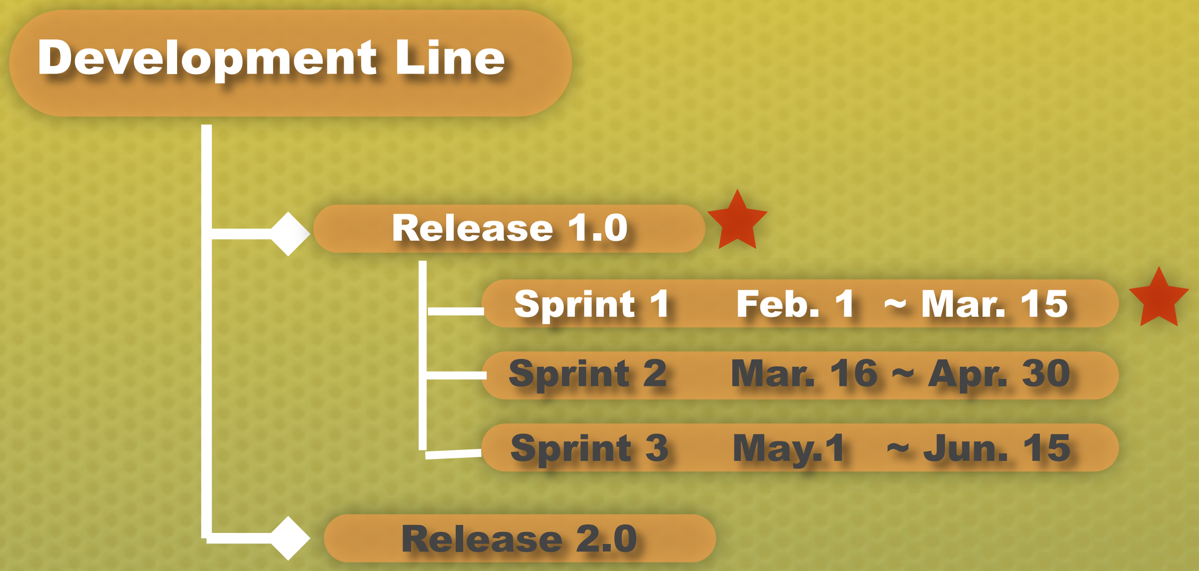
Release

Process

Process

Naming	Product Backlog , Sprint
Roles	Scrum Master, Product Owner
Permissions	Only Scrum Mater Can create iteration plan
Precondition	All code must be code reviewed before checkin
Follow up	When bug fixed, QA will be notified to verify the fix

Release



Development Line

Release 1.0 ★

Sprint 1 Feb. 1 ~ Mar. 15 ★

Sprint 2 Mar. 16 ~ Apr. 30

Sprint 3 May.1 ~ Jun. 15

Release 2.0

Lab 2. Iteration Planning

1. Create Product Backlog
2. Define Stories
3. Create Sprint Backlog
4. Generate work items

Work item

Work Item

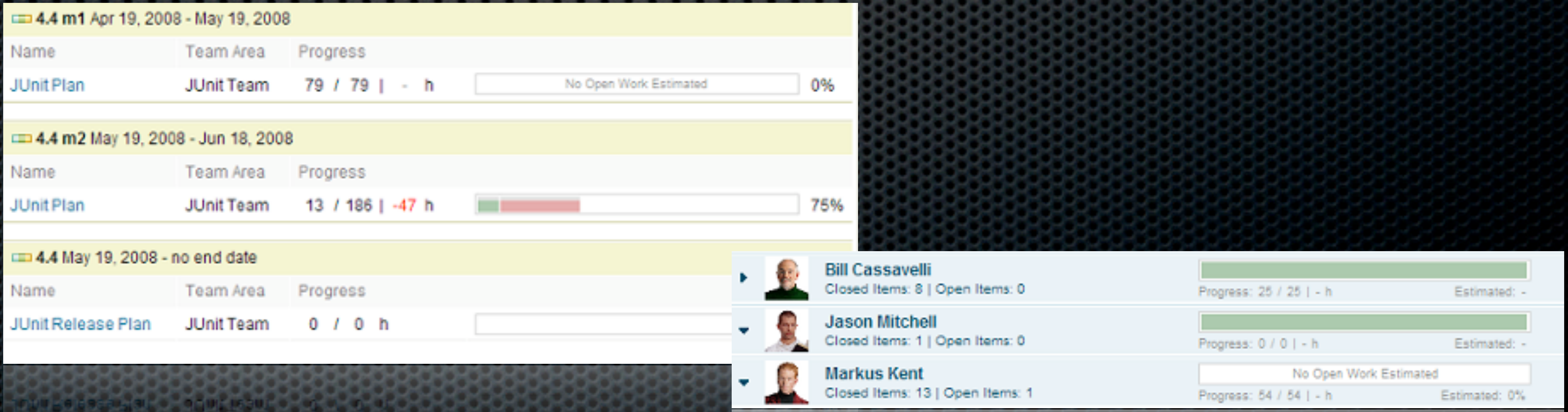
- **Task**
- Defect
- Story
- Retrospective

Action	Status
Open	New
Start Working	In Progress
Resolve	Resolved
Reopen	Reopened
Verified	Closed

Work Flow Transition

Work item

- Each Work item will be associated with an estimate
- Along with team member’s available resource, the progress and loading of each individual/team/iteration plan could be transparently tracked
- Supported notification mechanisms : mails , event views, RSS , pop-up



4.4 m1 Apr 19, 2008 - May 19, 2008

Name	Team Area	Progress		
JUnit Plan	JUnit Team	79 / 79 | - h	No Open Work Estimated	0%

4.4 m2 May 19, 2008 - Jun 18, 2008

Name	Team Area	Progress		
JUnit Plan	JUnit Team	13 / 186 | -47 h		75%

4.4 May 19, 2008 - no end date

Name	Team Area	Progress
JUnit Release Plan	JUnit Team	0 / 0 h

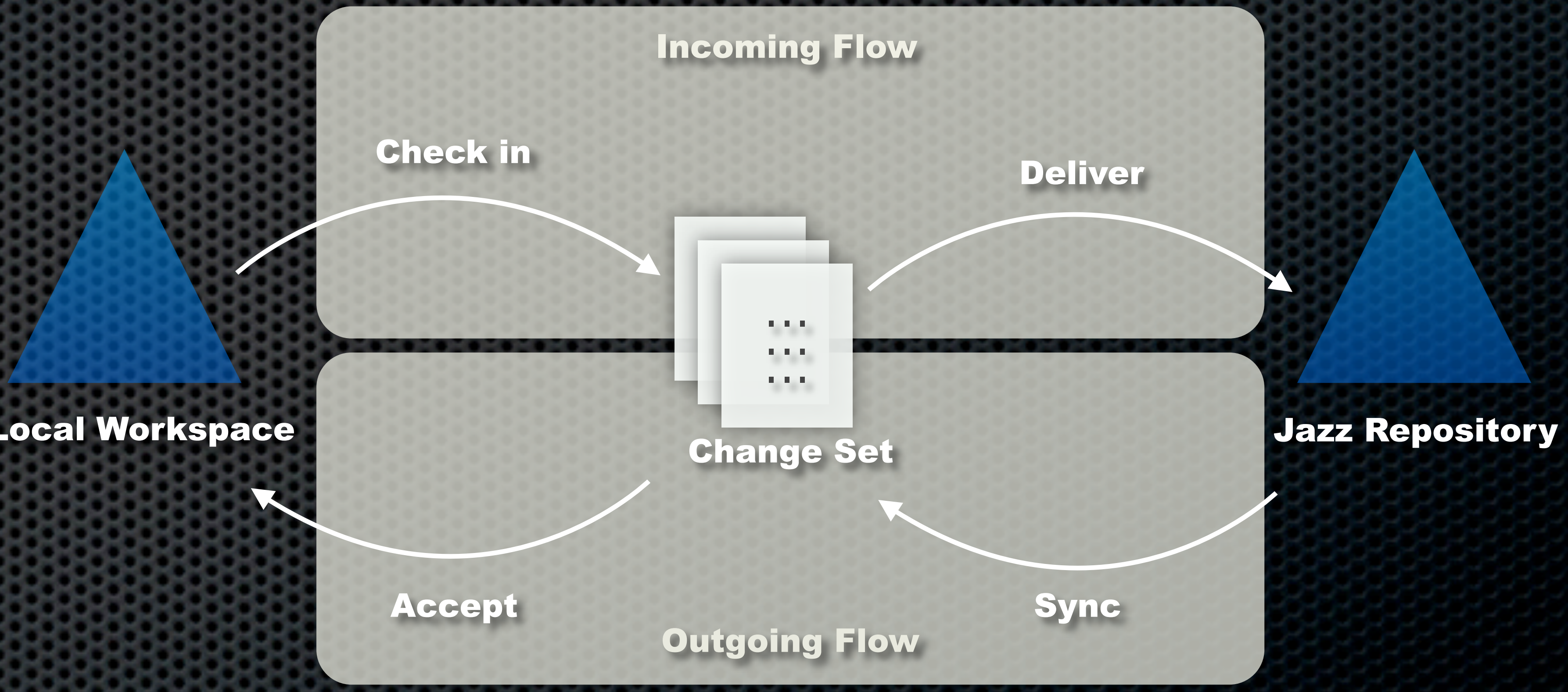
Bill Cassavelli Closed Items: 8 | Open Items: 0	Progress: 25 / 25 | - h	Estimated: -
Jason Mitchell Closed Items: 1 | Open Items: 0	Progress: 0 / 0 | - h	Estimated: -
Markus Kent Closed Items: 13 | Open Items: 1	No Open Work Estimated Progress: 54 / 54 | - h	Estimated: 0%

Lab 3. Version Control

1. Create Java Project
2. Check-in Jazz Repository
3. Review Change Set

Version Control

- Stream
- Component
- Change Set
- Baseline
- Snapshot



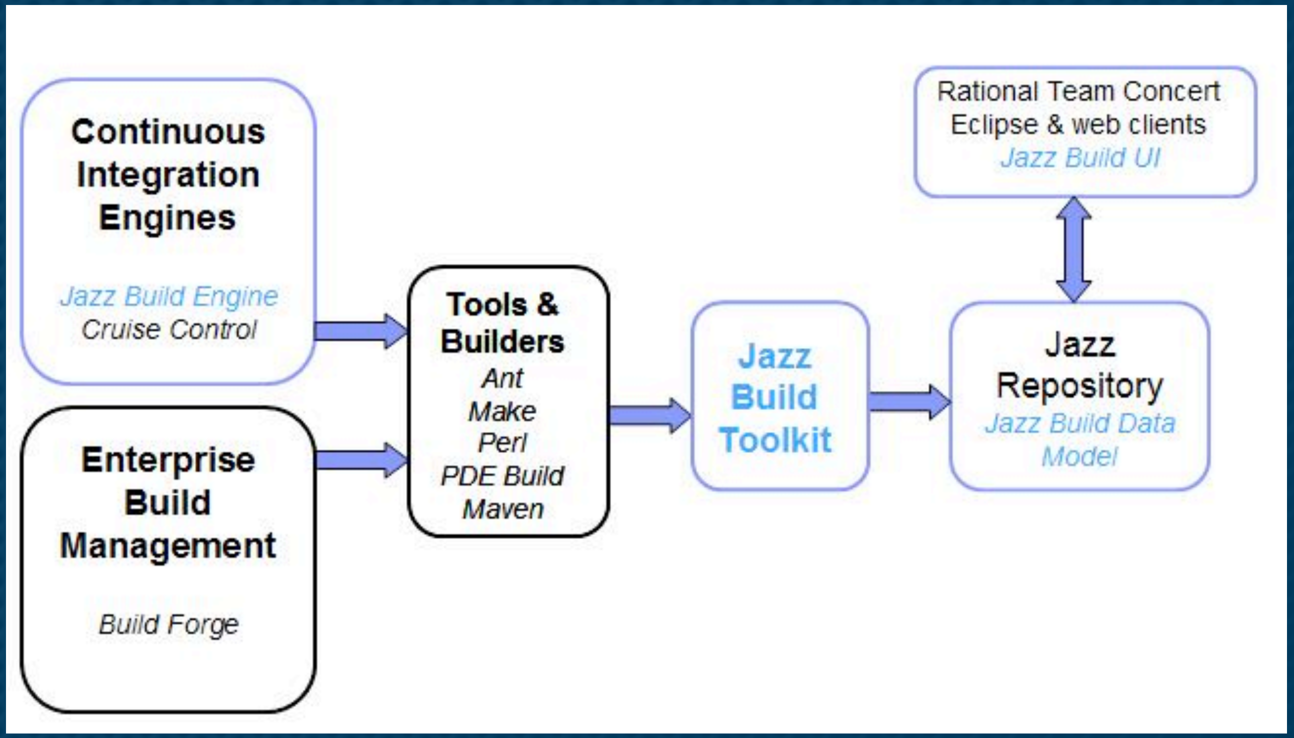
Lab 4. Continuous Integration

1. Generate ant files
2. Create Build Definition
3. Create Build Engine
4. Launch Build Engine
5. Submit Build Request

Continuous Build

- Build Scheduling
- Build Progress monitoring
- Build Alert
- Build Result Viewing
- Regression Testing
- Coverage Testing
- Linkage with other artifacts
  - Work items
  - Change Sets

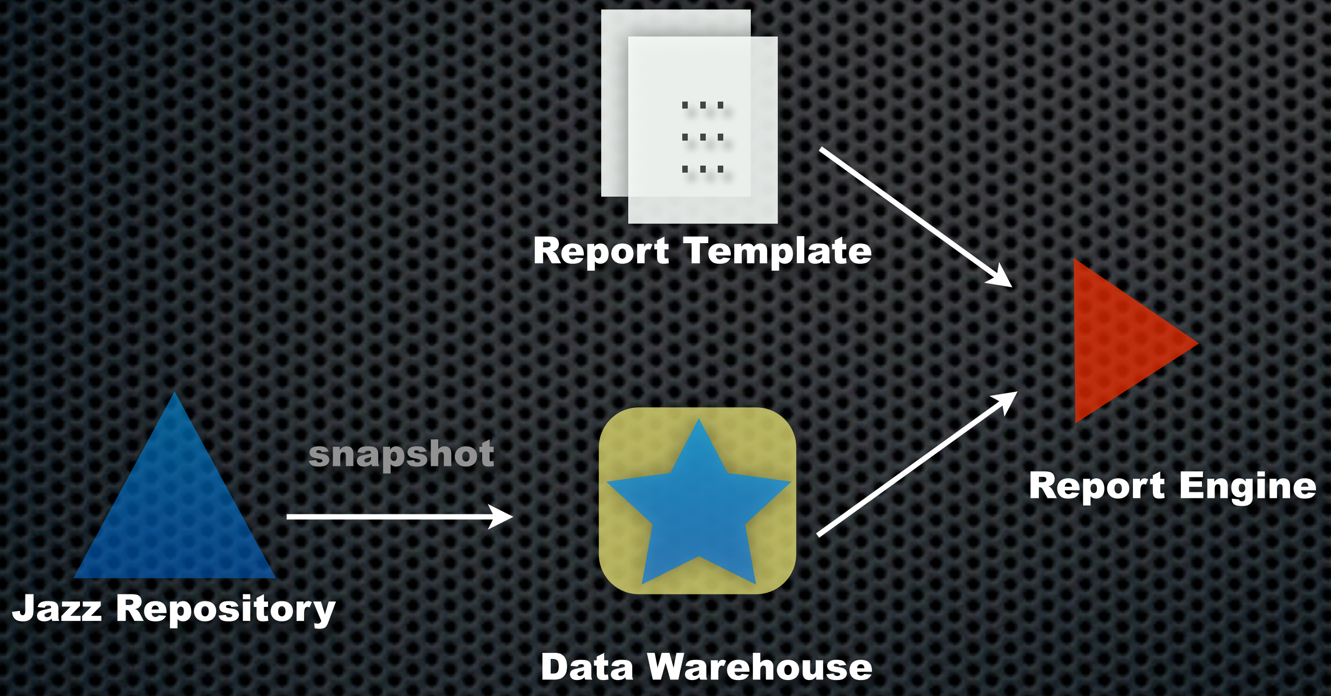
Jazz Build Engine

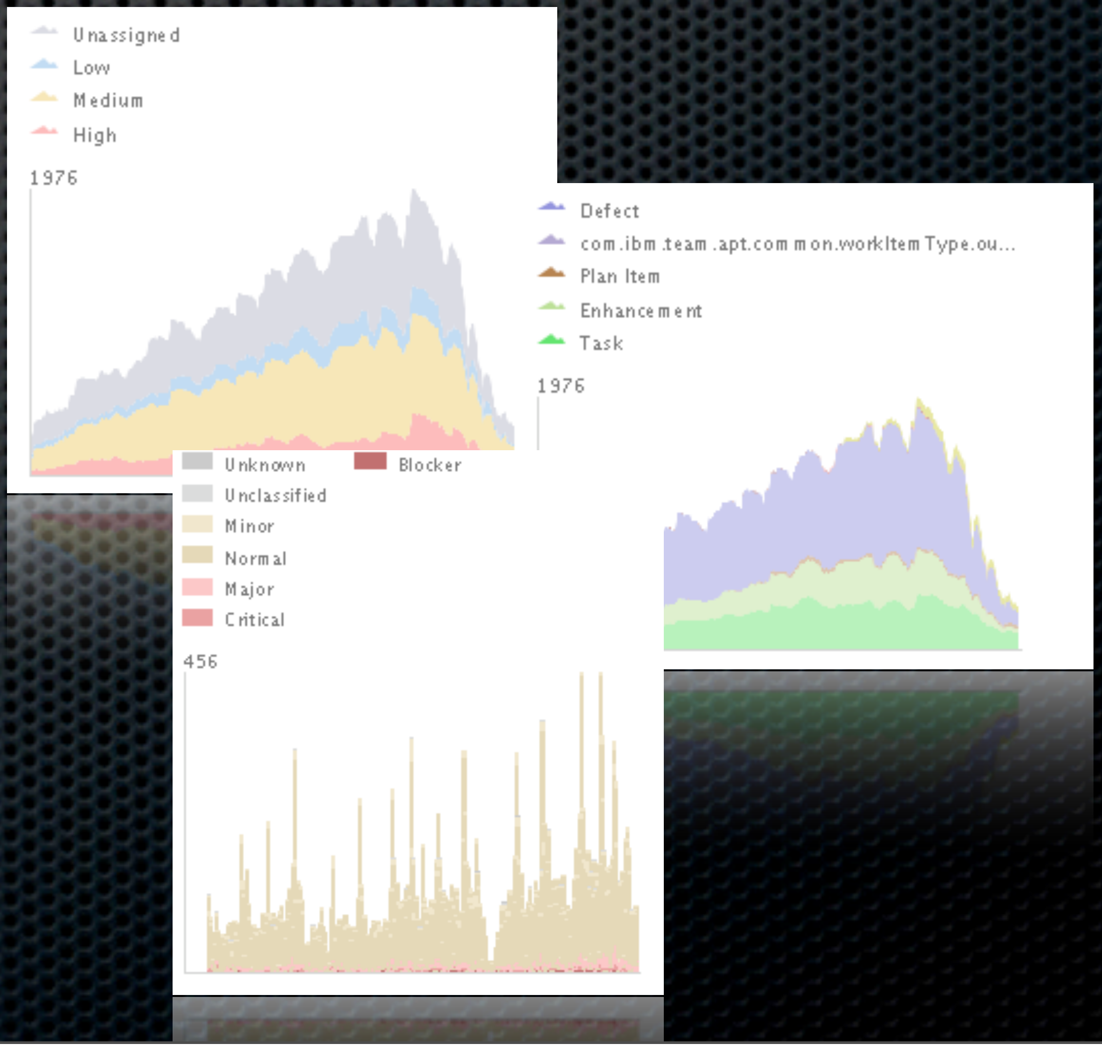


Reporting

Various project artifacts make it expensive to create report on-the-fly

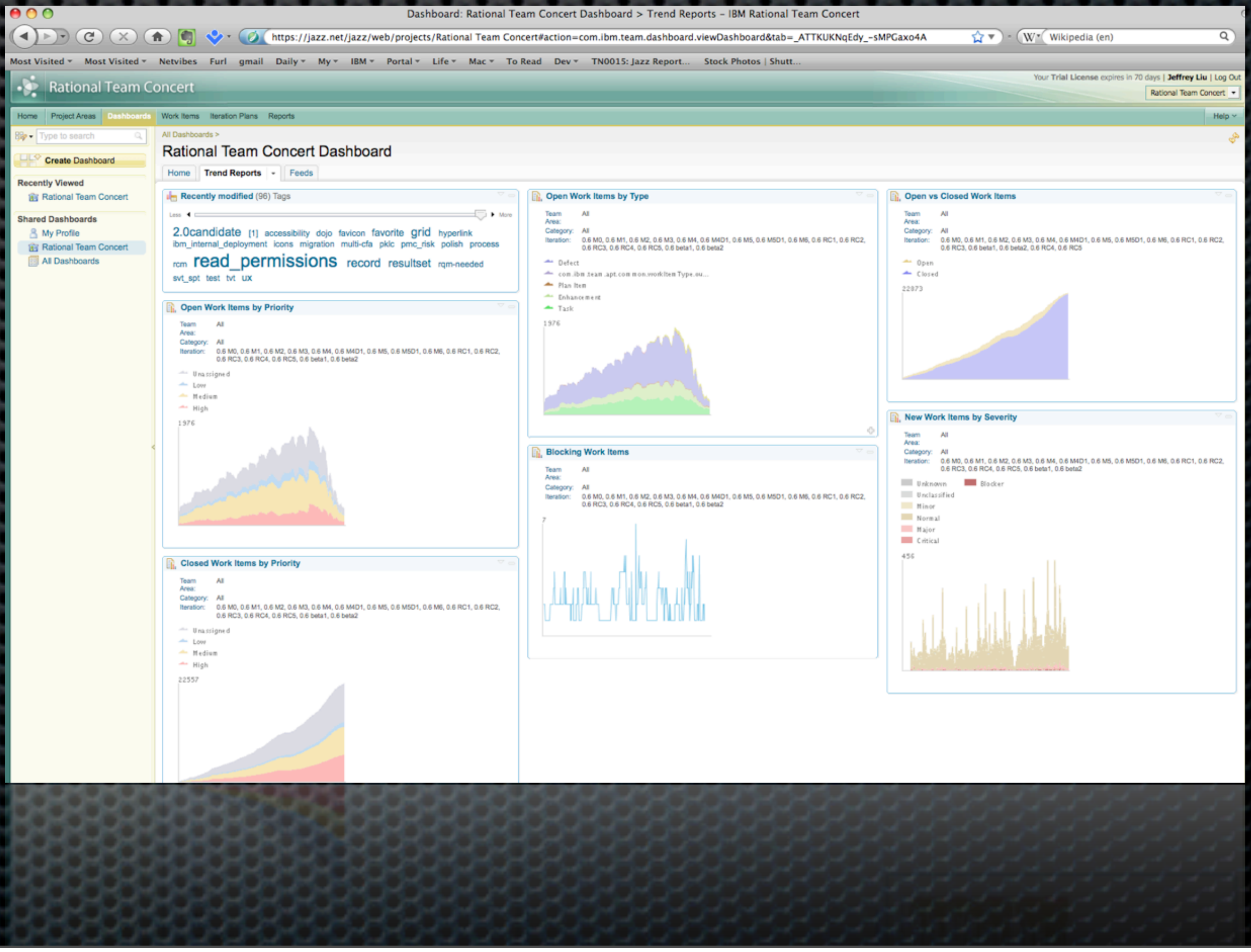
A data warehouse is a storage facility for read-only, historical and aggregated data.





That’s all ?

- **Wiki Syntax** for rich text editing
- **Sametime Integration** for realtime communication
- **Web Interface and Dashboard** for lightweight access


Dashboard: Rational Team Concert Dashboard > Trend Reports - IBM Rational Team Concert
https://jazz.net/jazz/web/projects/Rational Team Concert#action=com.ibm.team.dashboard.viewDashboard&tab=_ATTKUKNqEdy_-sMPGaxo4A
Wikipedia (en)
Most Visited
Most Visited
Netvibes
Furl
gmail
Daily
My
IBM
Portal
Life
Mac
To Read
Dev
TN0015: Jazz Report...
Stock Photos | Shutt...
Rational Team Concert
Your Trial License expires in 70 days | Jeffrey Liu | Log Out
Rational Team Concert
Home
Project Areas
Dashboards
Work Items
Iteration Plans
Reports
Help
Type to search
Create Dashboard
Recently Viewed
Rational Team Concert
Shared Dashboards
My Profile
Rational Team Concert
All Dashboards
All Dashboards >
Rational Team Concert Dashboard
Home
Trend Reports
Feeds
Recently modified (96) Tags
Less
More
2.0candidate [1] accessibility dojo favicon favorite grid hyperlink ibm_internal_deployment icons migration multi-cfa pklc pmc_risk polish process rcm read_permissions record resultset rqm-needed svt_spt test tvt ux
Open Work Items by Type
Open vs Closed Work Items
Open Work Items by Priority
Closed Work Items by Priority
Blocking Work Items
New Work Items by Severity
Team Area: All
Category: All
Iteration: 0.6 M0, 0.6 M1, 0.6 M2, 0.6 M3, 0.6 M4, 0.6 M4D1, 0.6 M5, 0.6 M5D1, 0.6 M6, 0.6 RC1, 0.6 RC2, 0.6 RC3, 0.6 RC4, 0.6 RC5, 0.6 beta1, 0.6 beta2
Defect
com.ibm.team.apt.common.workItemType.eu...
Plan Item
Enhancement
Task
1976
Open
Closed
22873
Unassigned
Low
Medium
High
22557
Unknown
Blocker
Unclassified
Minor
Normal
Major
Critical
456

What jazz is all about ?

Eclipse Experience

Web 2.0

ALM

Agile Practice

Jazz

Innovation

A major investment by IBM to create a scalable, extensible team collaboration platform for seamlessly integrating tasks across the software lifecycle

Rational Products

A commercial project led by the IBM team that brought you the Eclipse Platform. ***Rational Team Concert*** will be the first product built on Jazz and feature tooling the agile practices.

Innovative Software Engineering

Community

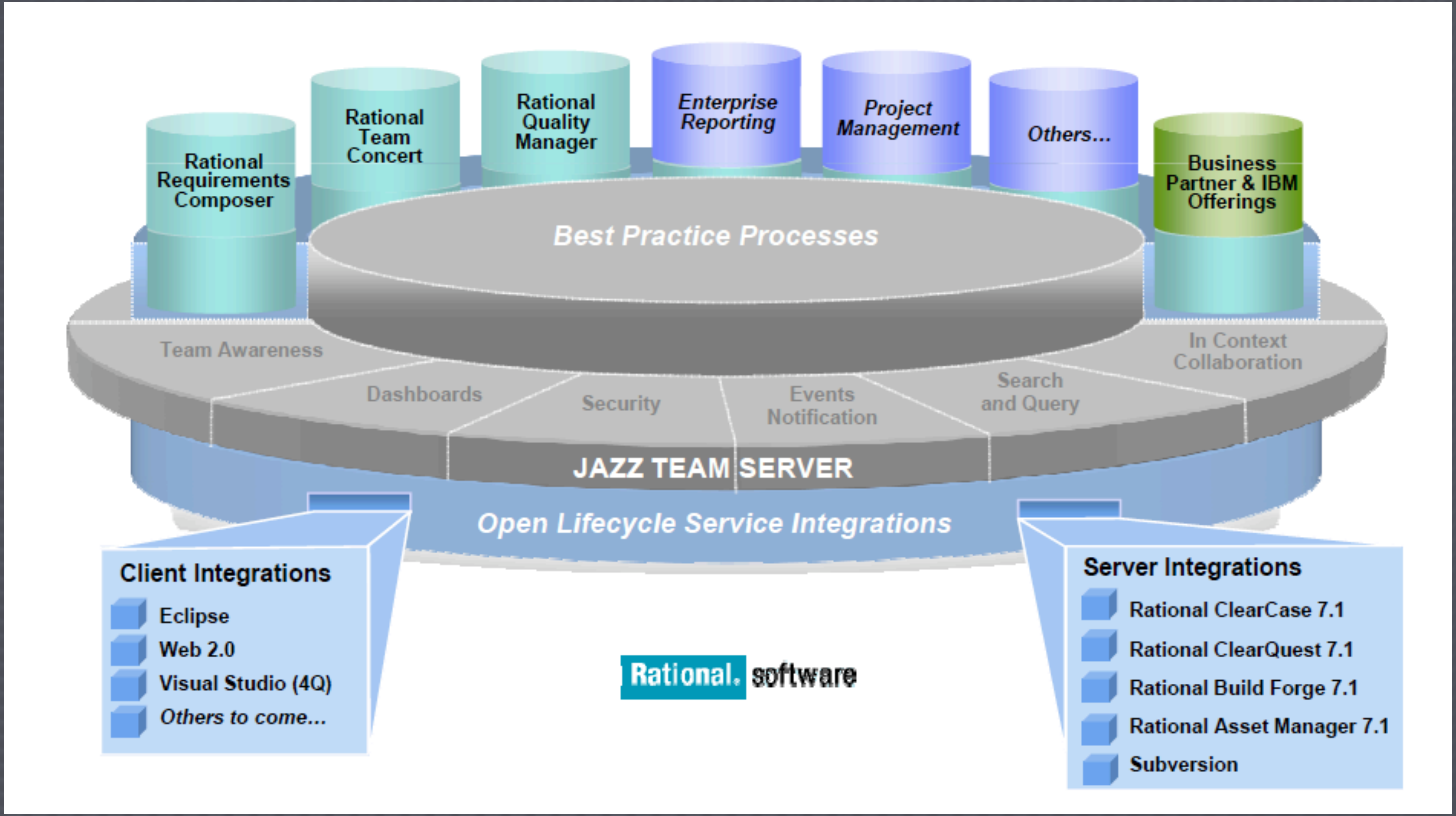
Jazz.net – Jazz project venue for open commercial development of Jazz platform and Jazz-based products and an extension of the world wide Eclipse ecosystem

Community
Modularity
Empowerment
via Passive Governance

Vision

A vision for the value and experience that future Rational products can bring to software and systems delivery teams

Jazz Architecture



Client Integrations

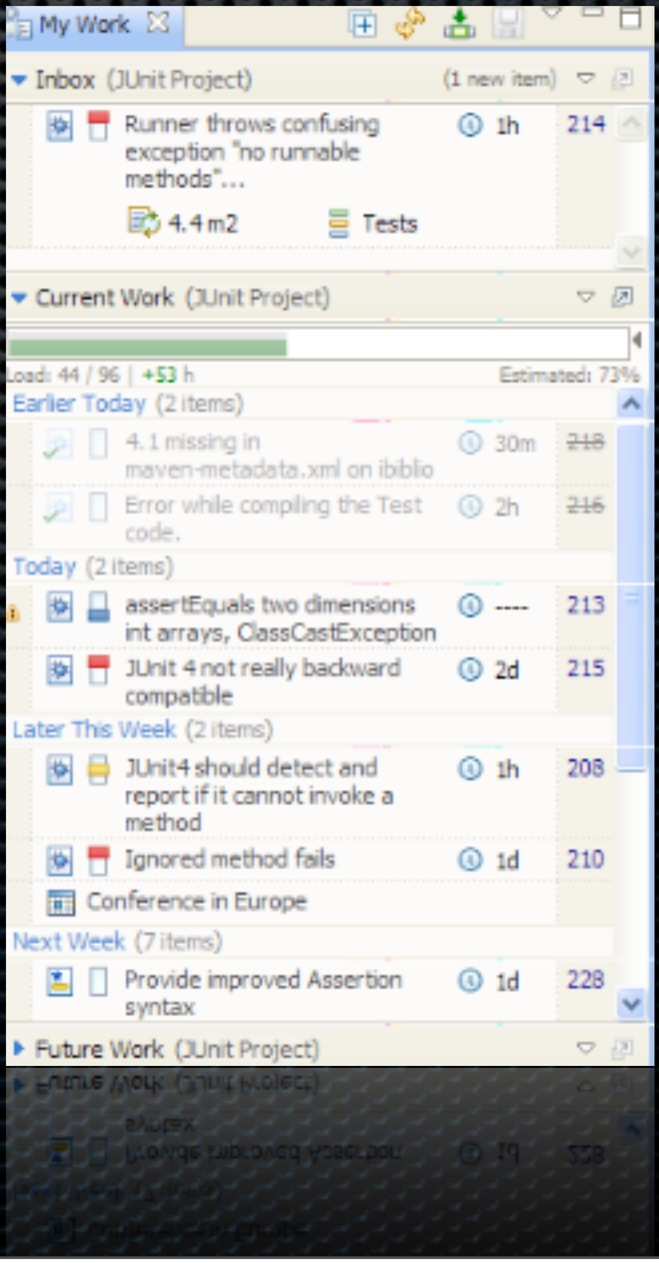
- Eclipse
- Web 2.0
- Visual Studio (4Q)
- *Others to come...*

Server Integrations

- Rational ClearCase 7.1
- Rational ClearQuest 7.1
- Rational Build Forge 7.1
- Rational Asset Manager 7.1
- Subversion

Benefits to Developers

- Quick Access of all activities around you and your team
- Manage work item everywhere
- One server that rule them all
- Encourage self-directed team



My Work

Inbox (JUnit Project) (1 new item)

Runner throws confusing exception "no runnable methods"... 1h 214

4.4 m2 Tests

Current Work (JUnit Project)

Load: 44 / 96 | +53 h Estimated: 73%

Earlier Today (2 items)

4.1 missing in maven-metadata.xml on ibiblio 30m ~~218~~

Error while compiling the Test code. 2h ~~216~~

Today (2 items)

assertEquals two dimensions int arrays, ClassCastException ---- 213

JUnit 4 not really backward compatible 2d 215

Later This Week (2 items)

JUnit4 should detect and report if it cannot invoke a method 1h 208

Ignored method fails 1d 210

Conference in Europe

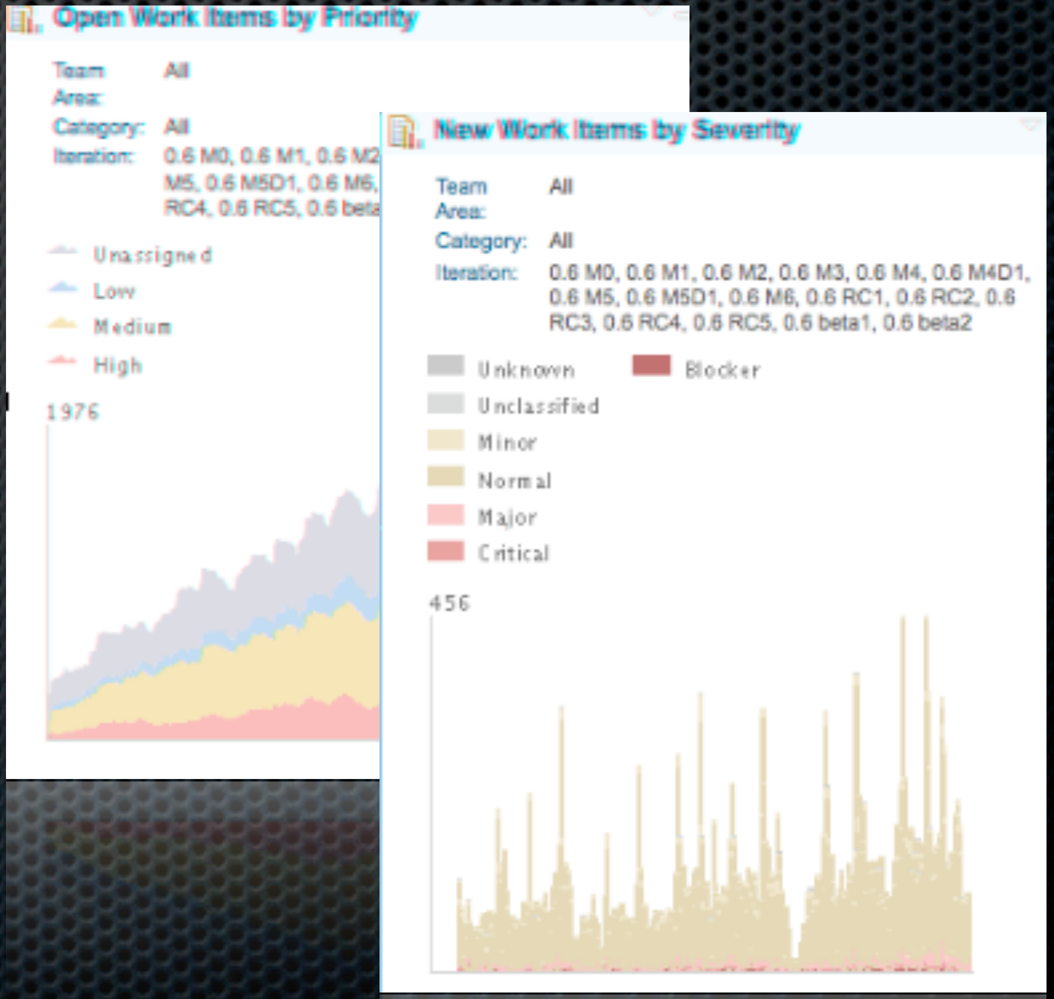
Next Week (7 items)

Provide improved Assertion syntax 1d 228

Future Work (JUnit Project)

Benefits to Leaders

- **Transparency of project status and trends**
  - **progress and load**
  - **open versus close , all the metrics**
  - **build healthiness**
  - **team velocity**
- **Process directed project area**
  - **precondition and followup action**



Open Work Items by Priority

Team Area: All

Category: All

Iteration: 0.6 M0, 0.6 M1, 0.6 M2 M5, 0.6 M5D1, 0.6 M6, RC4, 0.6 RC5, 0.6 beta

New Work Items by Severity

Team Area: All

Category: All

Iteration: 0.6 M0, 0.6 M1, 0.6 M2, 0.6 M3, 0.6 M4, 0.6 M4D1, 0.6 M5, 0.6 M5D1, 0.6 M6, 0.6 RC1, 0.6 RC2, 0.6 RC3, 0.6 RC4, 0.6 RC5, 0.6 beta1, 0.6 beta2

Wrap up

- RTC is a new Rational product that based on Jazz Platform
- RTC is all about integration and collaboration
- Encourage and facilitate agile process

Questions

Starter's Kit

Starter's Kit

Installation

- Download Source

Express-C	10 users + 3 dev licenses
Express	50 users + 3 dev licenses + DB2 support
Standard	250 users + 3 dev licenses + DB2 support + Dashboard support

- Jazz.net : https://jazz.net/downloads/rational-team-concert/releases/

  eXtreme Leverage : https://w3-104.ibm.com/software/xl/download/ticket.do?openform

- Download License

Server License

To activate standard edition

Developer Client Access License

complete access to all the developer capabilities and additional capabilities within Rational Team Concert

- internal license download : https://w3-104.ibm.com/software/xl/download/ticket.do?openform

detail about license : https://jazz.net/learn/LearnItem.jsp?href=content/tech-notes/rational-team-concert-1_0-licensing-and-editions/index.html

Starter's Kit

Tutorials

- Setup Project
- Join a team
- Explore work items
- User iteration plans
- Check out team work
- Save and share code
- Use the Jazz Web user interface
- Examine a Jazz build

Starter’s Kit

Documentation

- Jazz.net
- Jazz Team Wiki
- Jazz space on DeveloperWorks
- Master Jazz Basics
- Jazz InfoCenter

People

not organization

build great software