

# NTU SDM EDUCATION

Clement Su / 蘇志文

Jim Yu / 游景麟

Jeffrey Liu / 劉智雄

# THINGS WE WILL SHARE..



**Experience**



**Tools**



**Design Patterns**

# AGENDA

## **Week 1 - 9/30**

---

Rational Team Concert Concept  
Design Document

Web Application Development

## **Week 2 - 10/14**

---

Rational Software Architect  
Design Patterns - Creational Patterns

## **Week 3 - 10/21**

---

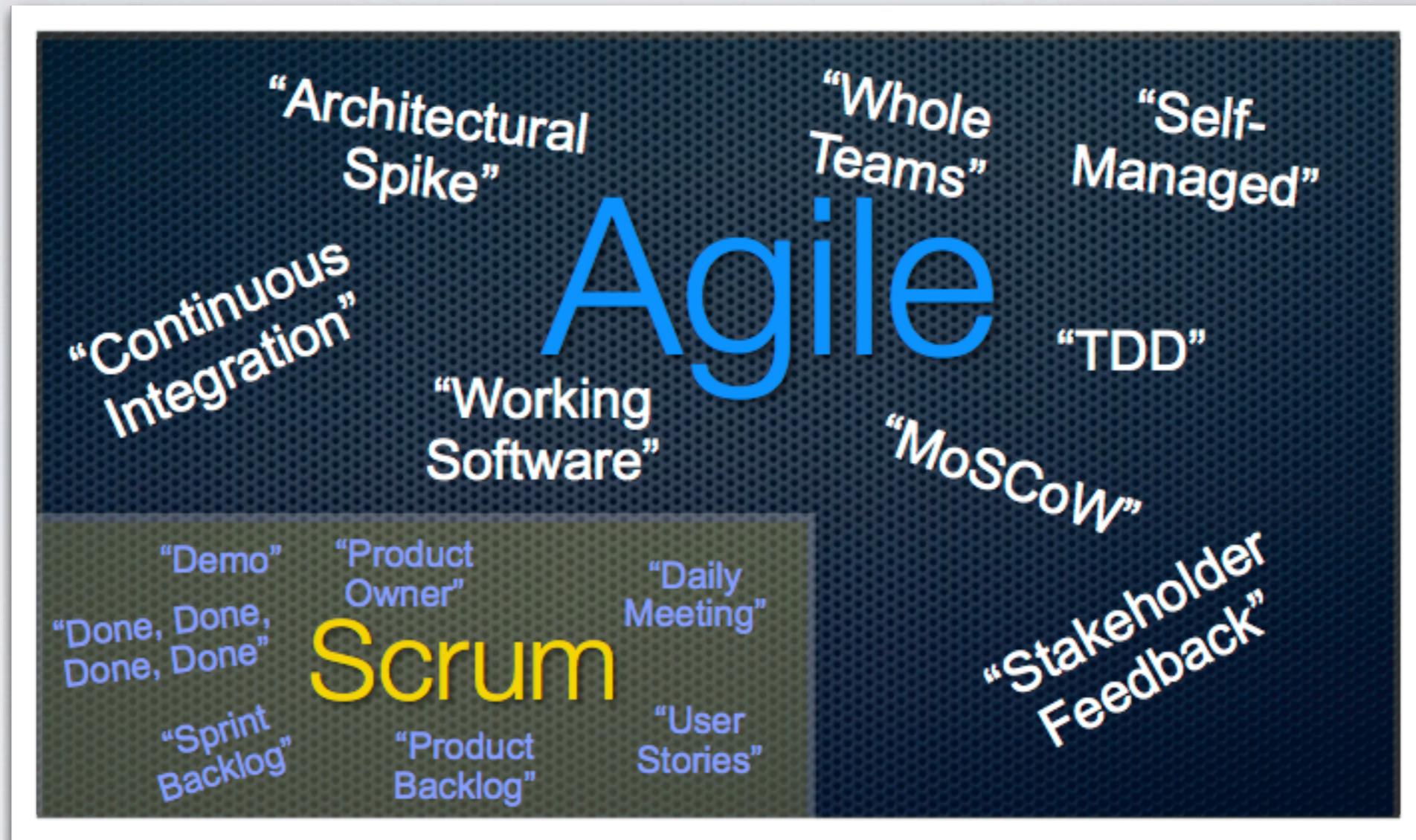
Design Patterns - Structural Patterns

## **Week 4 - 10/28**

---

Design Patterns - Behavioral Patterns

# AGILE DEVELOPMENT



# RTC SHARING

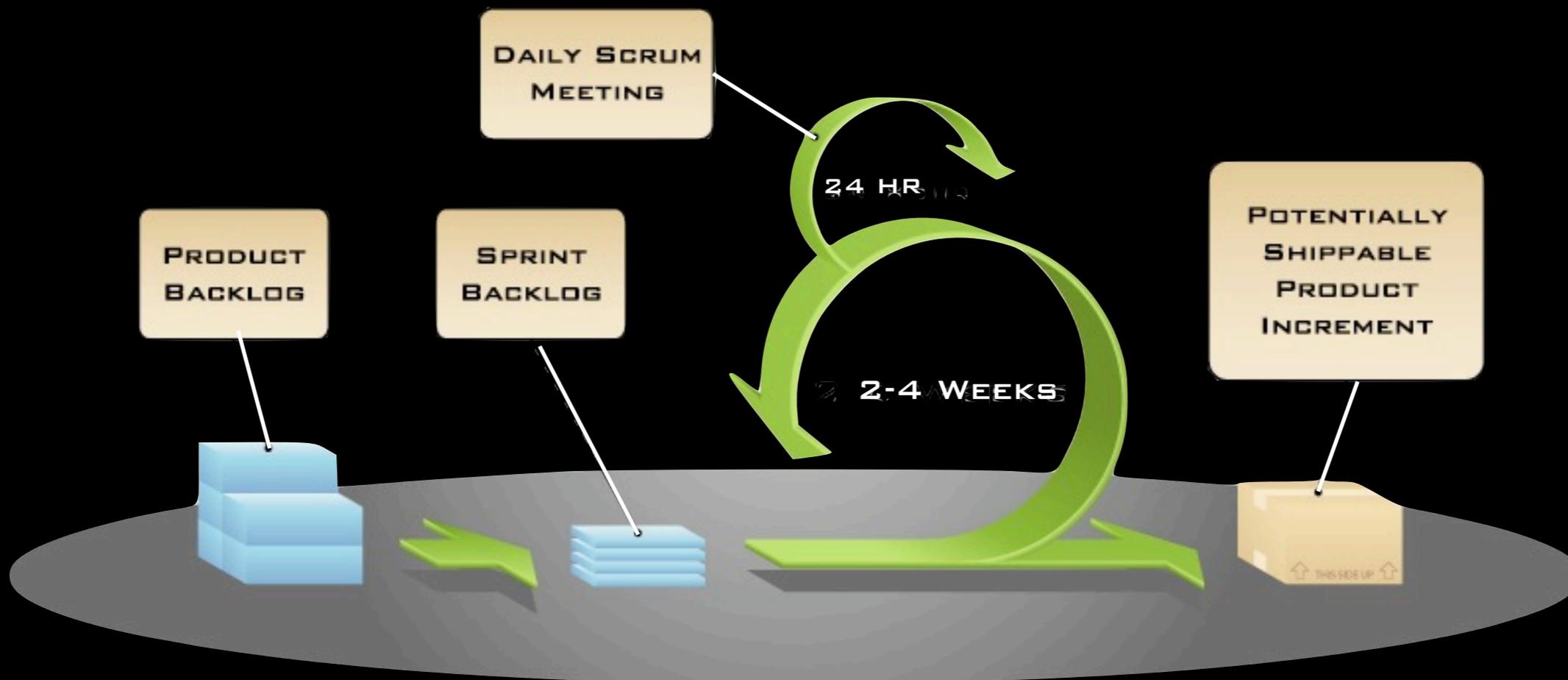
# What is scrum ?



**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 possession. 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

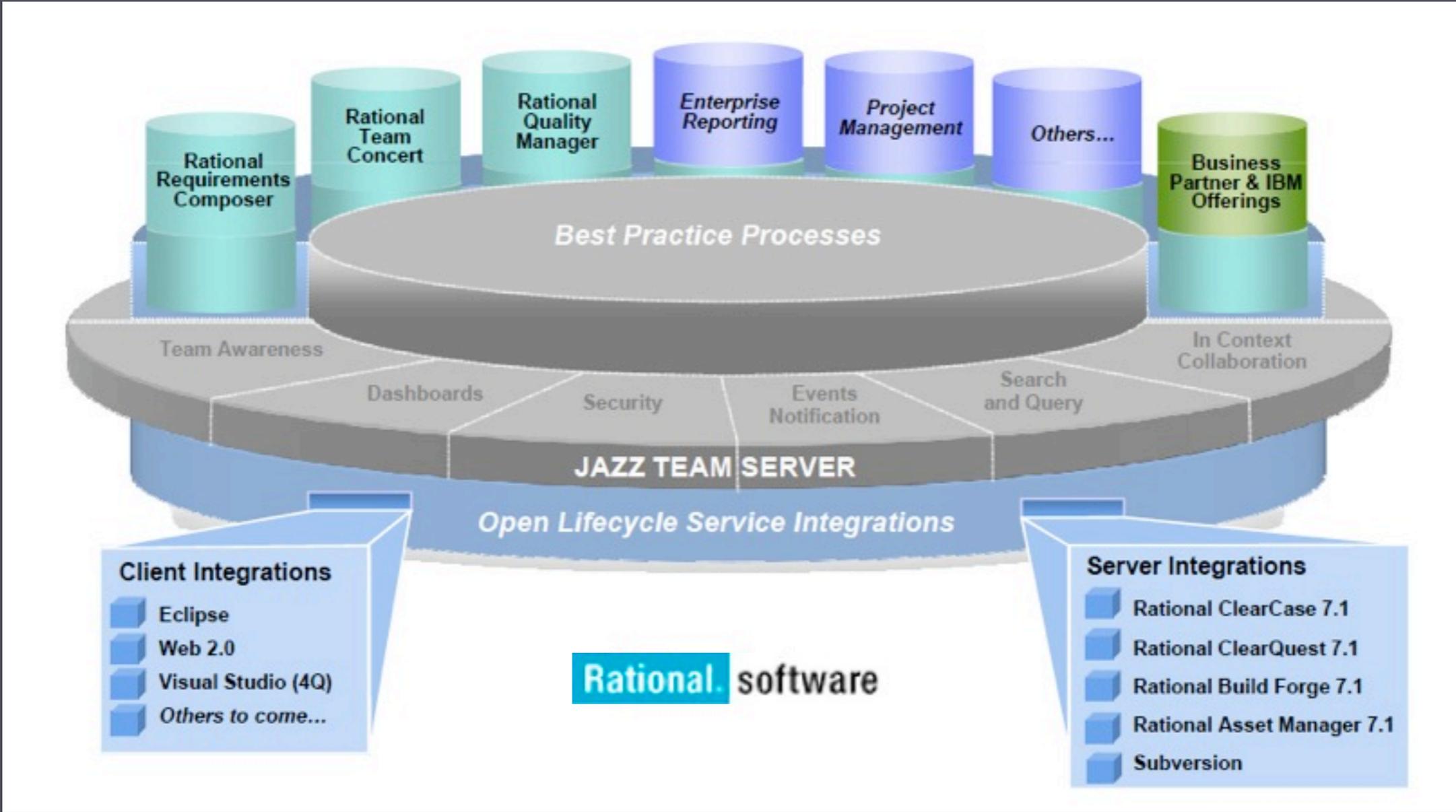
## CEREMONIES

SPRINT PLANNING  
 DAILY SCRUM  
 SPRINT REVIEW  
 SPRINT RETROSPECTIVE

## ARTIFACTS

PRODUCT BACKLOG  
 SPRINT BACKLOG

# Jazz Architecture



# MEMBER



**Profile**

**Availability**

**Preference**

# TEAM



**Team Members**  
**Development Line**  
**Process**

# PROJECT



**Teams**

**Release**

**Process**



# Process

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

# Release



# 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 <input type="text" value="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 <input type="text" value="75%"/>

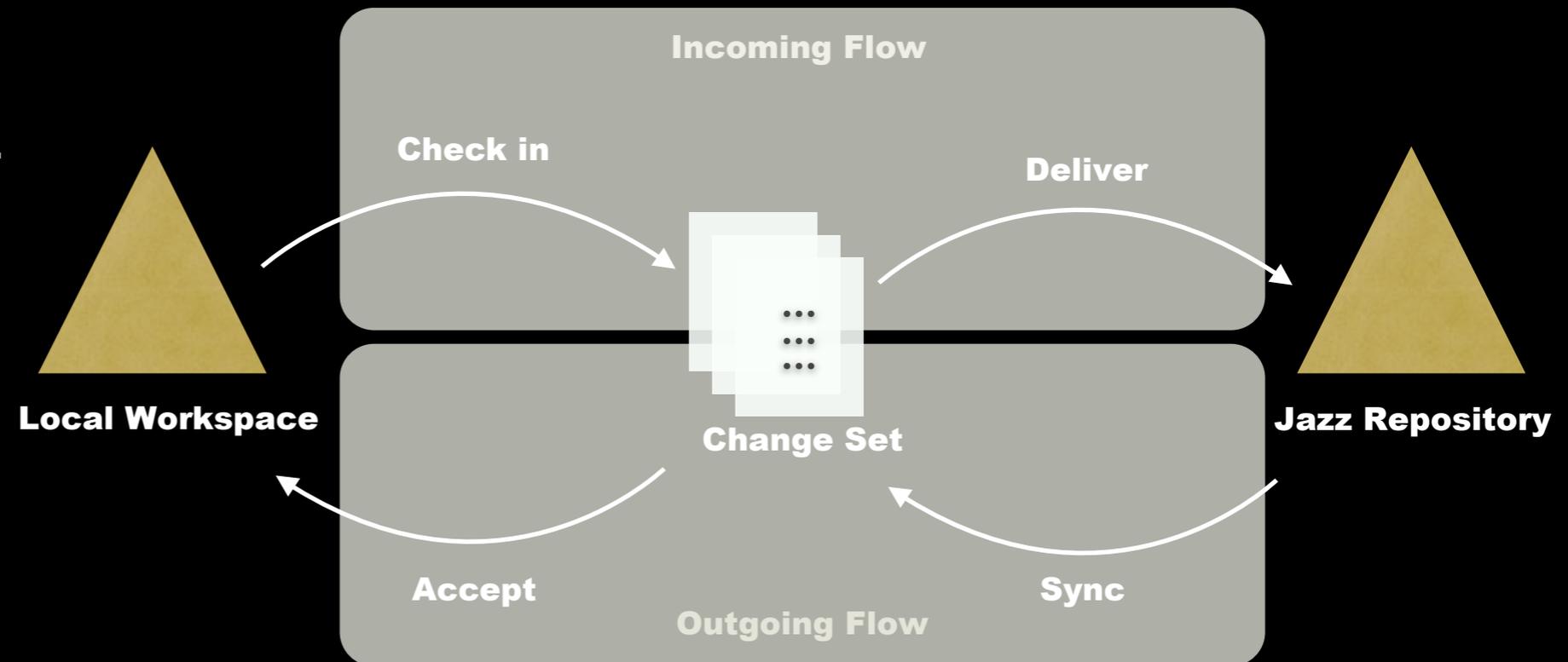
  

4.4 May 19, 2008 - no end date		
Name	Team Area	Progress
JUnit Release Plan	JUnit Team	0 / 0 h <input type="text"/>

	<b>Bill Cassavelli</b> Closed Items: 8   Open Items: 0	<input type="text" value="Progress: 25 / 25   - h"/> Estimated: -
	<b>Jason Mitchell</b> Closed Items: 1   Open Items: 0	<input type="text" value="Progress: 0 / 0   - h"/> Estimated: -
	<b>Markus Kent</b> Closed Items: 13   Open Items: 1	<input type="text" value="No Open Work Estimated"/> Progress: 54 / 54   - h Estimated: 0%

# VERSION CONTROL

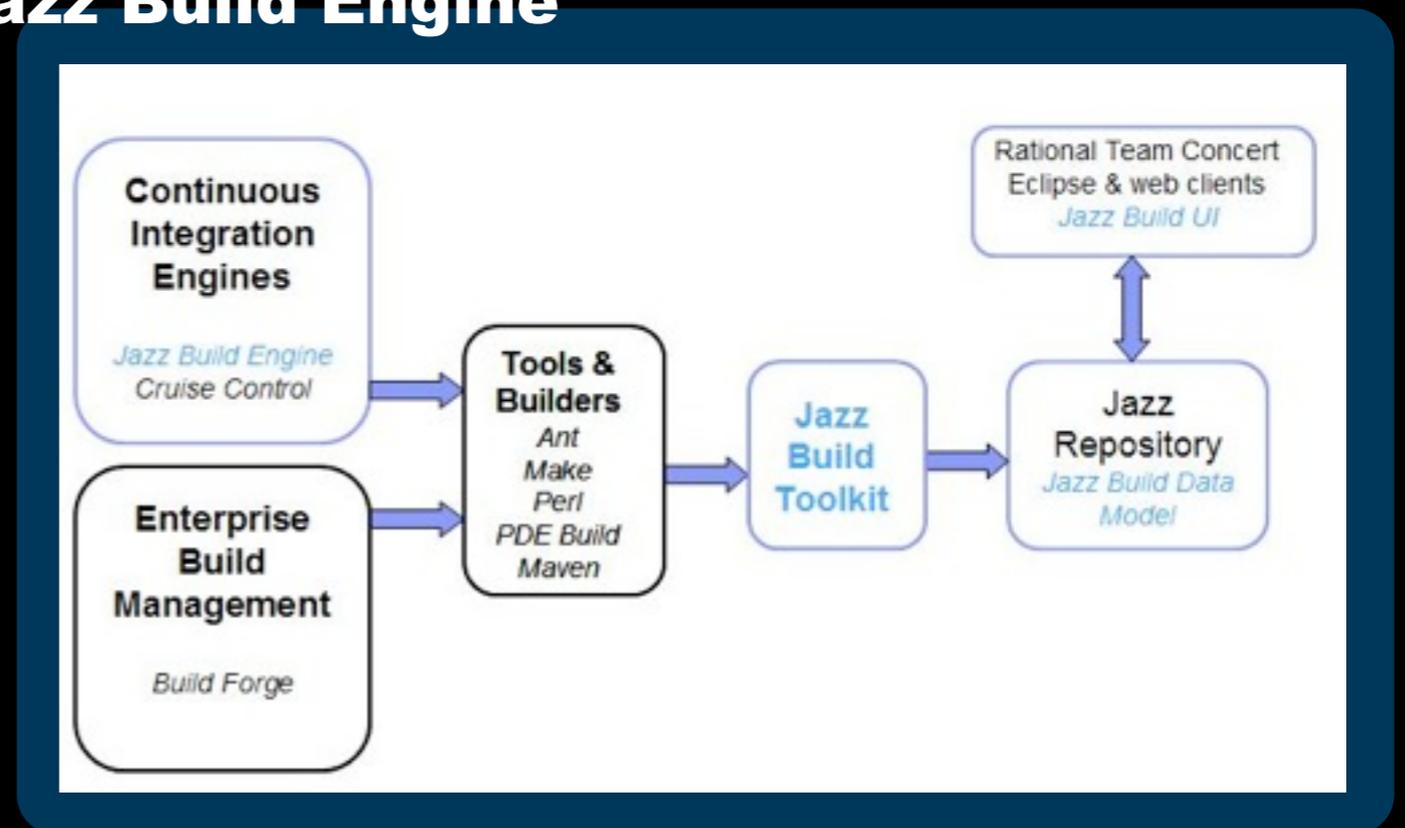
- Stream
- Component
- Change Set
- Baseline
- Snapshot



# CONTINUOUS INTEGRATION

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

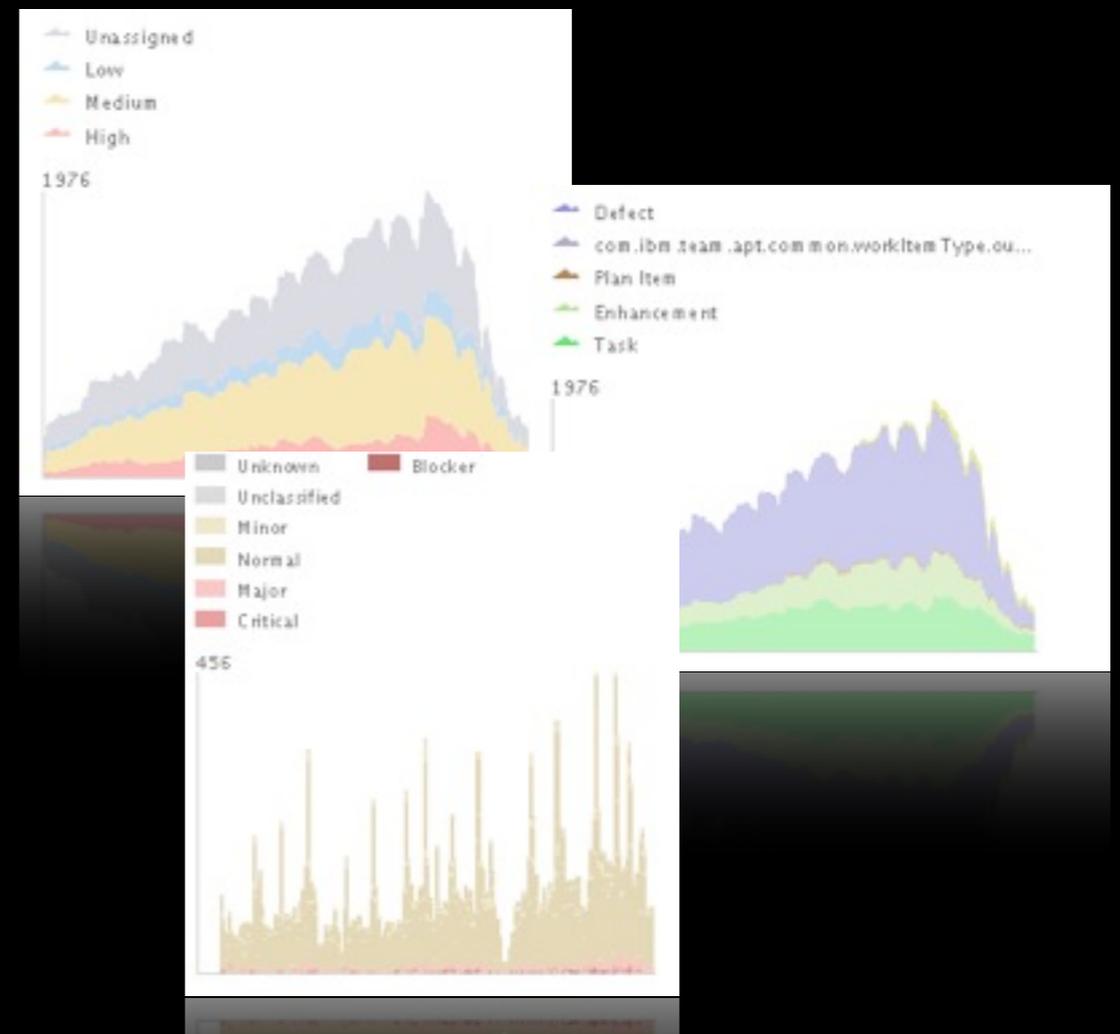
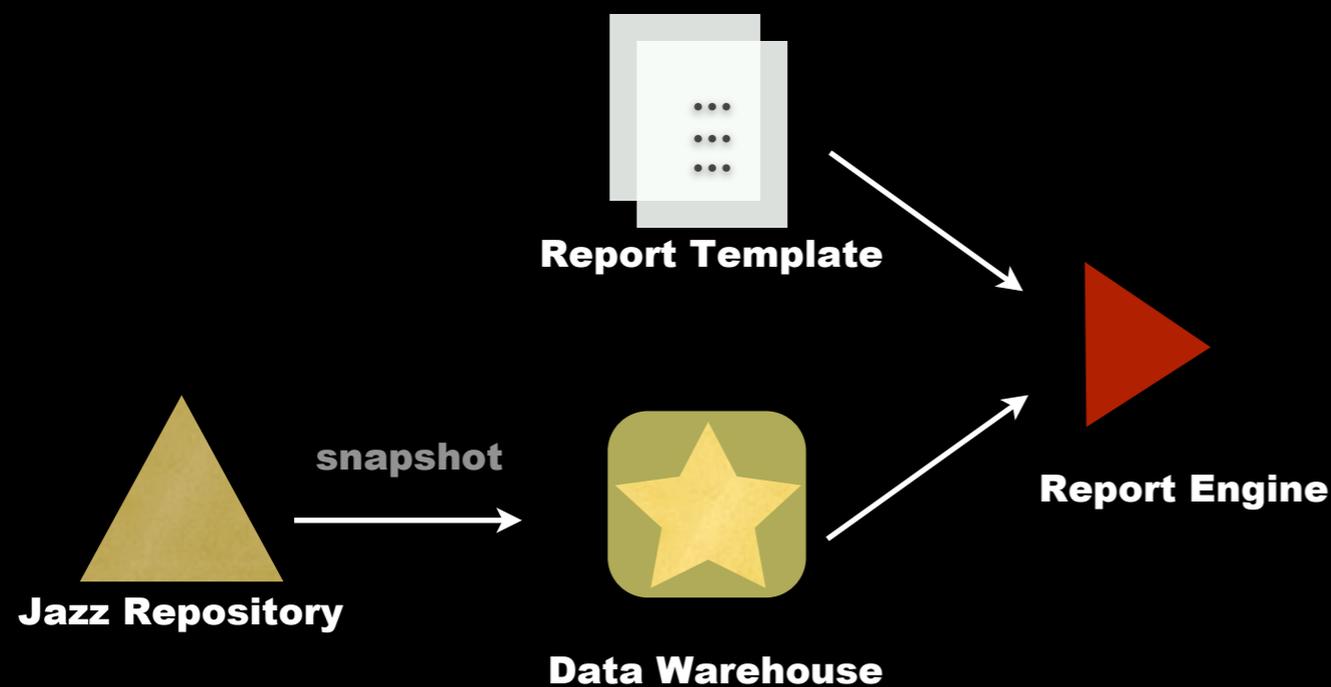
## Jazz Build Engine



# REPORT

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.





# Measurable **Productivity**



**Work Assignments**

**Working Hours**



**People**

**Scheduled Absences**

**Priority**

**Release/Iteration**

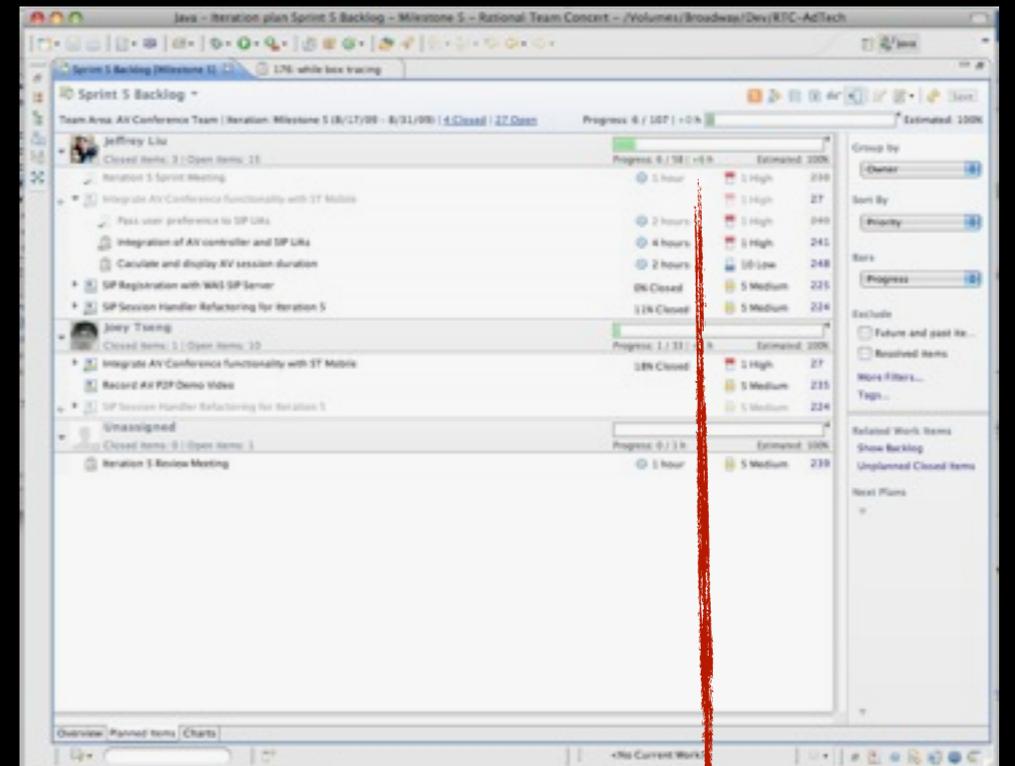
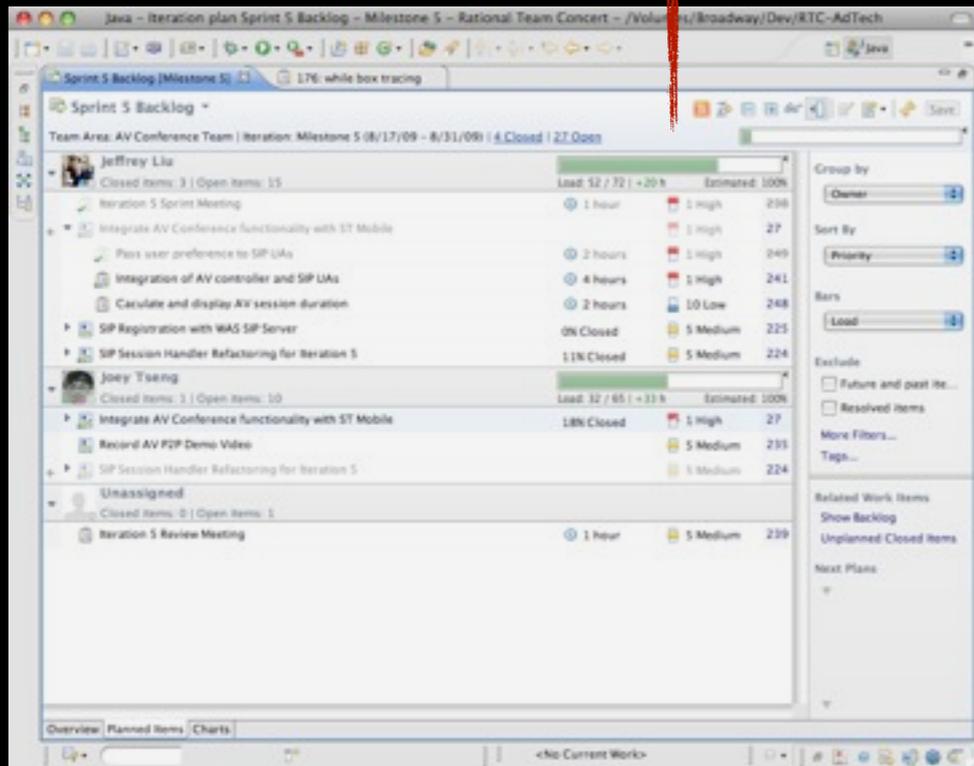
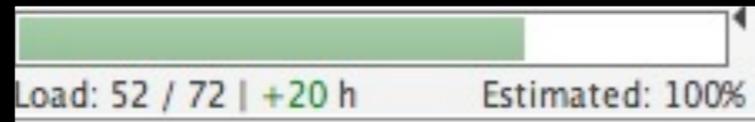


**Work**

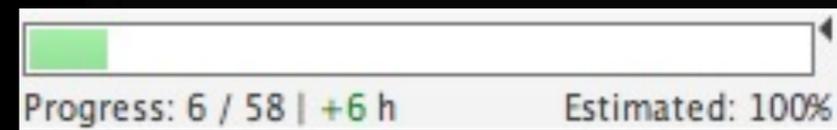
**Estimate**

**Assignee**

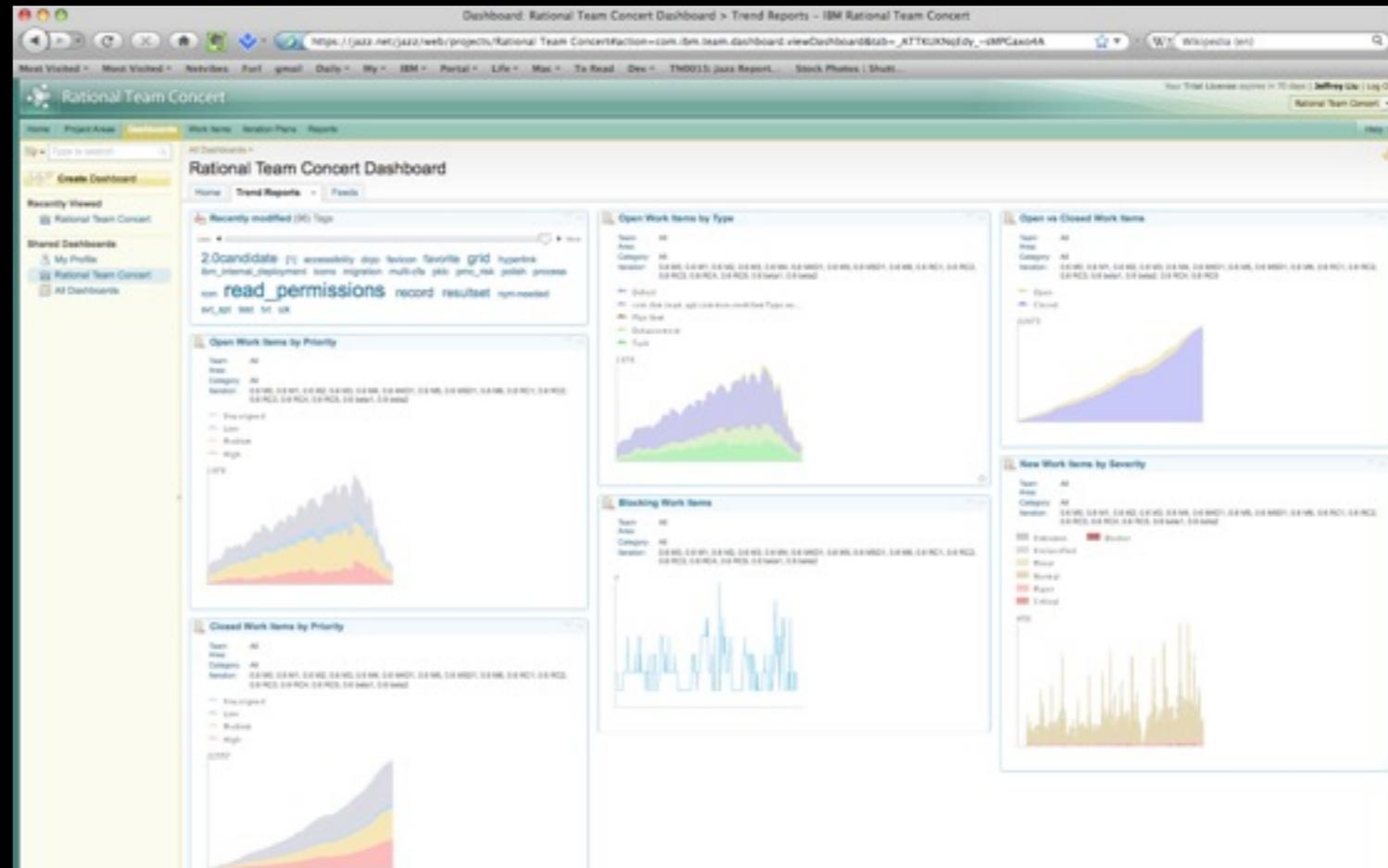
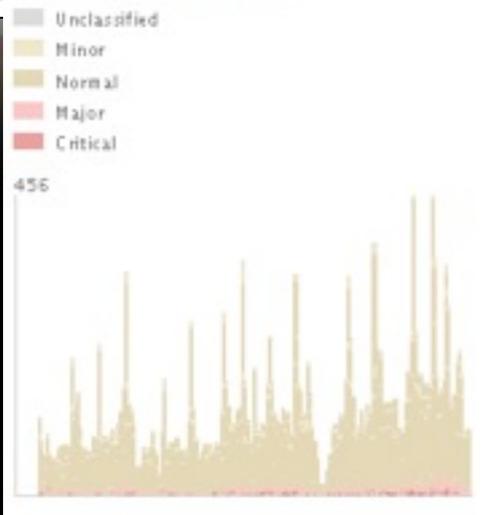
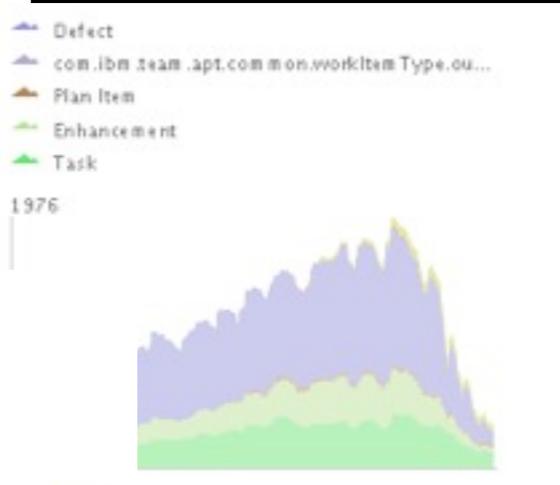
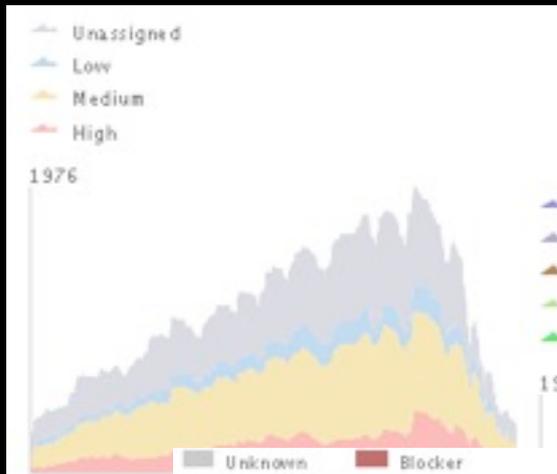
# Work Load



# Work Progress



# Development Velocity



**How it feels like ?**



The screenshot shows the IBM Rational Team Concert web interface. The browser address bar displays `https://127.0.0.1:9443/jazz/web/projects/JUnit Project?debug=true#action=com.i`. The application header includes the Rational Team Concert logo, a trial license expiration notice, the user name "Jason Mitchell", and a "Log Out" link. The main navigation bar contains "Dashboards", "Project Areas", "Work Items", "Plans", and "Source Control". The "JUnit Project" is selected in the top right.

The left sidebar contains a search bar, a "Create Plan" button, and sections for "Recently Viewed" (listing "JUnit Product Backlog [4.4]" and "JUnit Sprint Backlog [4.4 s2]") and "Plans" (listing "My Current Plans", "Current Plans", and "All Plans").

The main content area is titled "JUnit Product Backlog" and shows "Team Area: JUnit Team | Iteration: 4.4 | 1 Closed | 4 Open". It features a progress bar for "Progress: 2/11 pts" and "Estimated: 100%". The "View As:" dropdown is set to "Iterations".

Iteration	Closed Items	Open Items	Progress	Estimated	Item	Points	Open Points	Priority	Score
4.4	1	4	2/11 pts	100%	Provide set of annotations to annotate tests	3	0/0	Medium	63
4.4 s1	0	1	0/1 pts	100%	Improve documentation for 4.4	1	0/0	Medium	55
4.4 s2	1	1	2/7 pts	100%	Annotation processor to run tests at compile time	2	0/0	High	62
					Provide improved Assertion syntax	5	0/0	Low	60
4.4 s3	0	0	0/0 pts	—	No Work				
4.4 s4	0	0	0/0 pts	—	No Work				

# Feel The Rhythm

# References

- ✦ **jazz.net**

<http://jazz.net/projects/rational-team-concert/>

- ✦ **IBM Information Center**

<http://publib.boulder.ibm.com/infocenter/rtc/v2r0m0/index.jsp>

- ✦ **RTC in developerWorks**

[http://www.ibm.com/developerworks/views/rational/libraryview.jsp?product\\_by=All+Rational](http://www.ibm.com/developerworks/views/rational/libraryview.jsp?product_by=All+Rational)

[+Products&search\\_by=Scrum+project+management+with+IBM+Rational+Team+Concert+Version+2](http://www.ibm.com/developerworks/views/rational/libraryview.jsp?product_by=All+Rational+Products&search_by=Scrum+project+management+with+IBM+Rational+Team+Concert+Version+2)