

技术维新 预见未来

2012 IBM 软件技术峰会

Next  NOW!



通过集成RTC和现有CCM解决方案来加速
敏捷开发

Rational 高级工程师

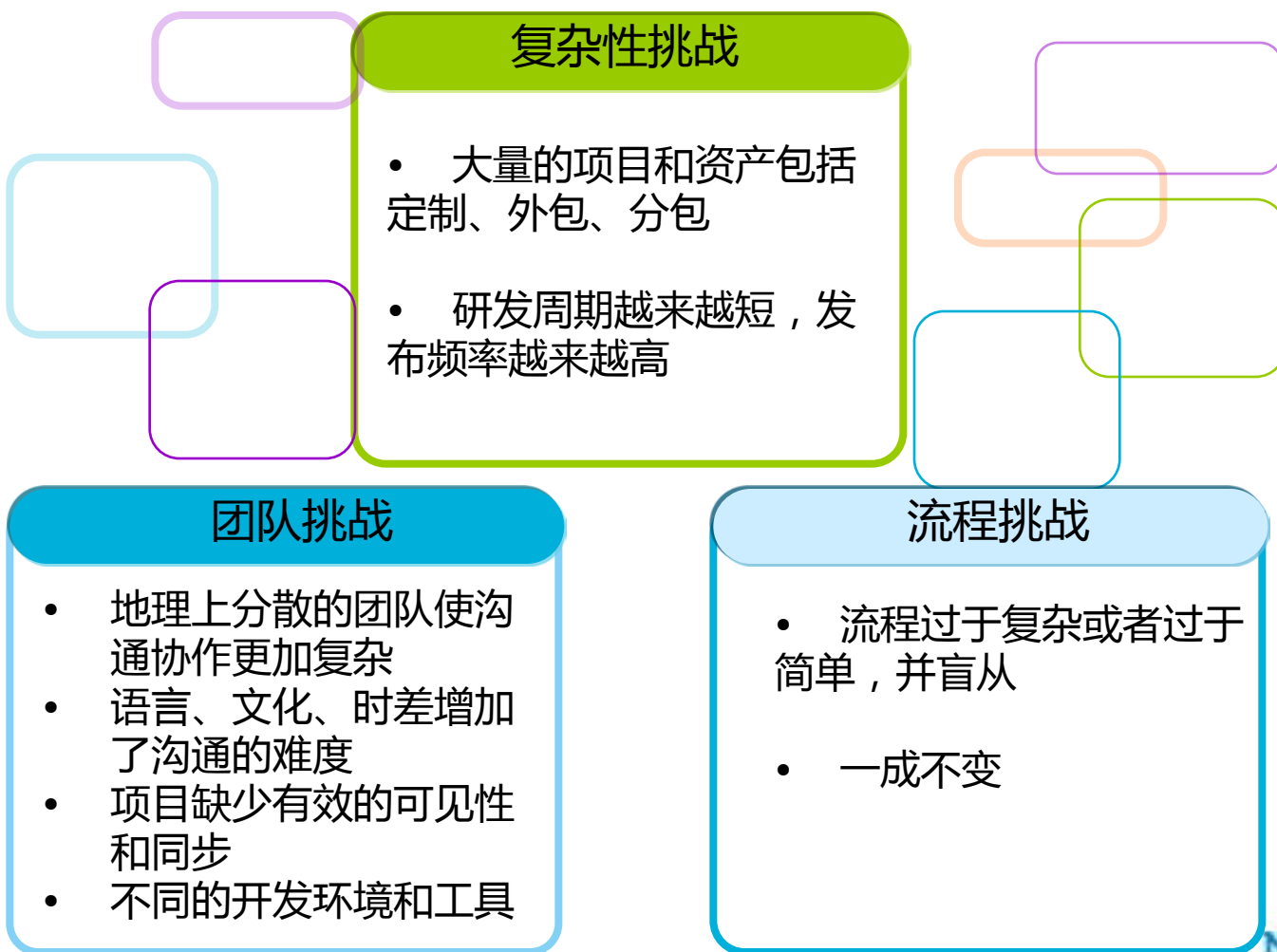
汪维敏

主要内容

- 全球化跨地域软件开发的挑战和应变
- 现有配置和变更管理解决方案如何融入CLM
- 敏捷实践案例
 - Rational CC CQ团队介绍
 - 敏捷中流程、人和工具
 - 敏捷实践
 - 自适应多级计划
 - 迭代式开发
 - 基于RTC、CTE和CQ的协作式开发
 - 高质量代码
 - 游戏结束
 - 持续集成和持续测试
 - 敏捷度量

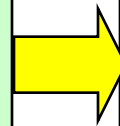


全球化跨地域软件开发的挑战



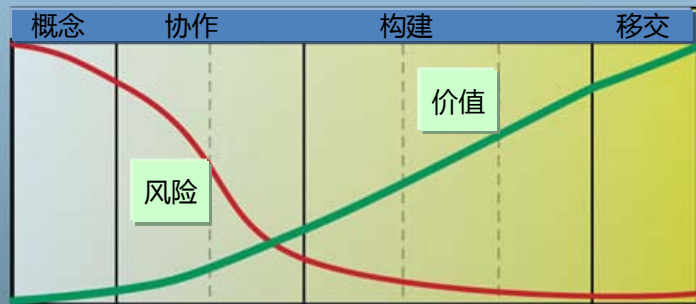
如何应对这些挑战？

- 一次性发布
- 复杂的变更流程
- 沟通低效，进度不可见
- 太多或者太少的流程并盲从
- 构建效率低，测试滞后、低效
- 技术驱动



- 频繁地发布、迭代式开发
- 实时计划、自适应多级计划
- 协作式开发
- 合理度量并持续改进
- 持续集成和持续测试
- 价值驱动

项目生命周期



将现有配置和变更管理解决方案融入CLM

GIT/SVN/
JIRA



开发人员

OSLC

RTC

ClearQuest

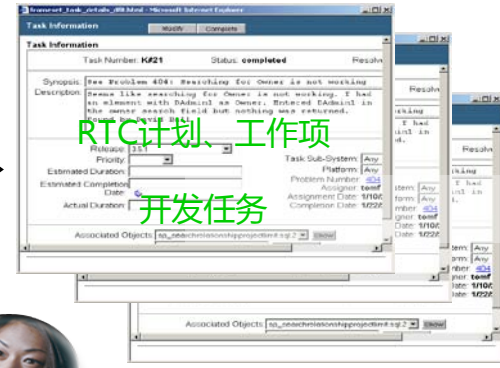


产品经理



项目经理

OSLC

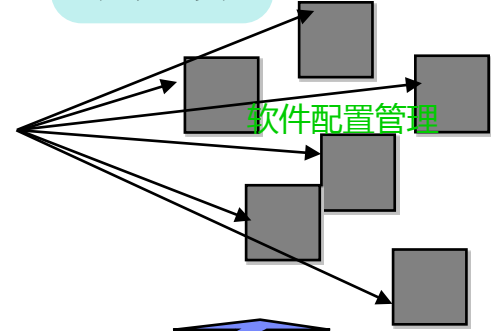


项目经理



开发人员

ClearCase



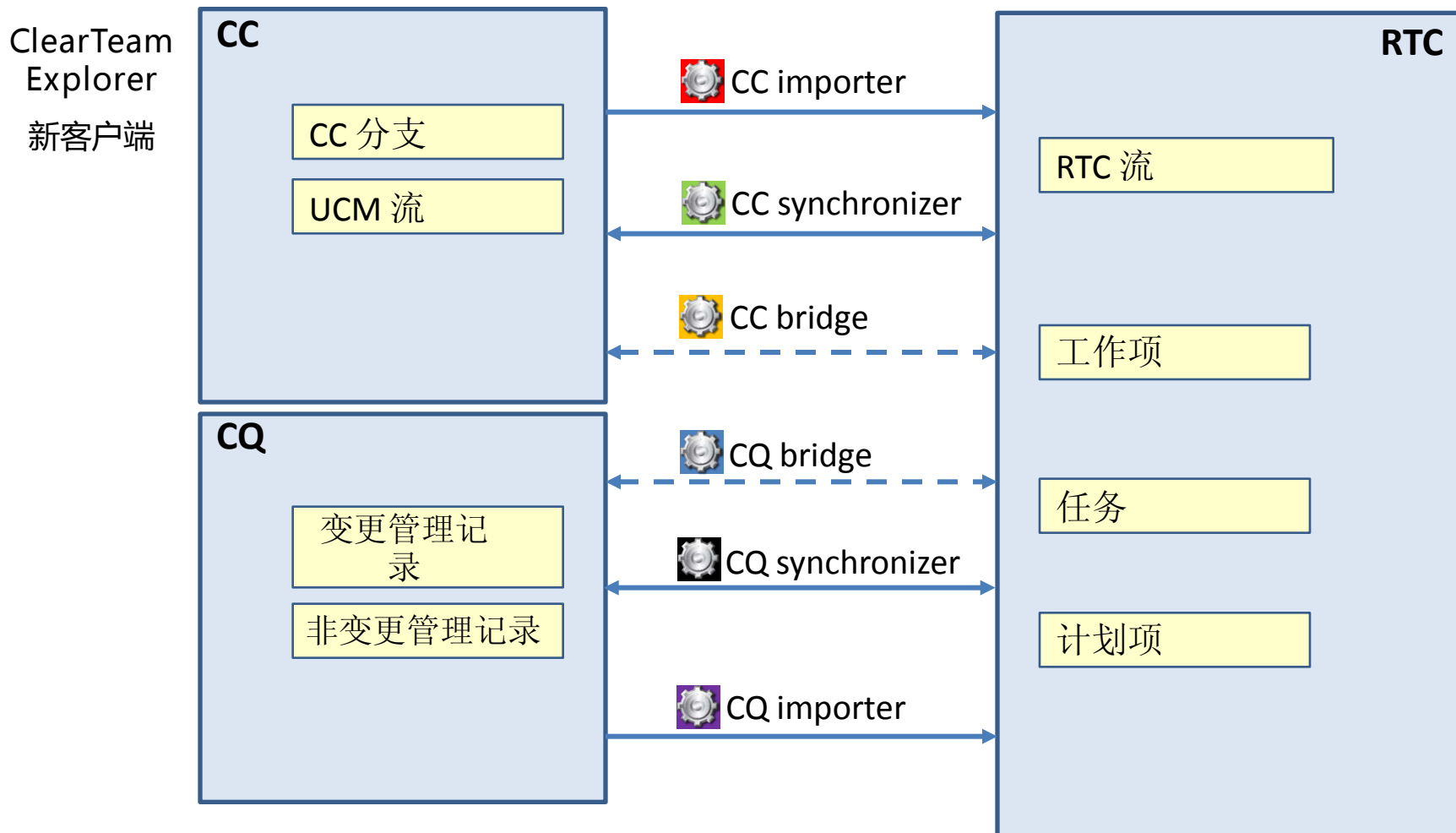
软件配置管理

RTC工作项-UCM活动 桥接器



协作生命周期管理平台

CC CQ通向RTC的“时空隧道”——连接器





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敏捷实践案例

让我们敏捷起来

Rational CC CQ团队--全球化、跨地域、规模化和规范化的敏捷

100+ 开发和测试工程师

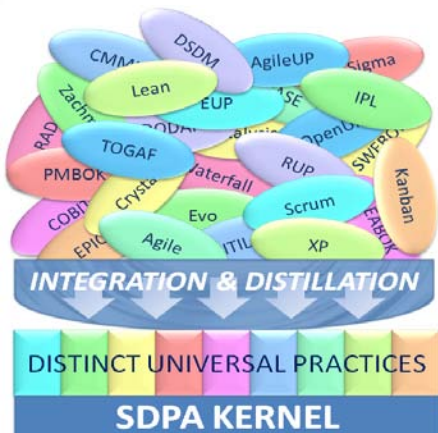
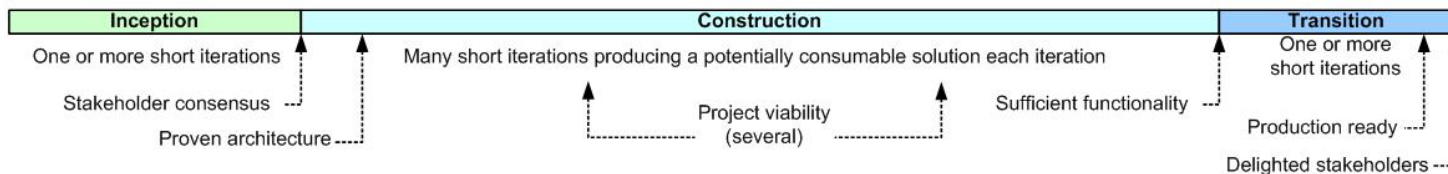
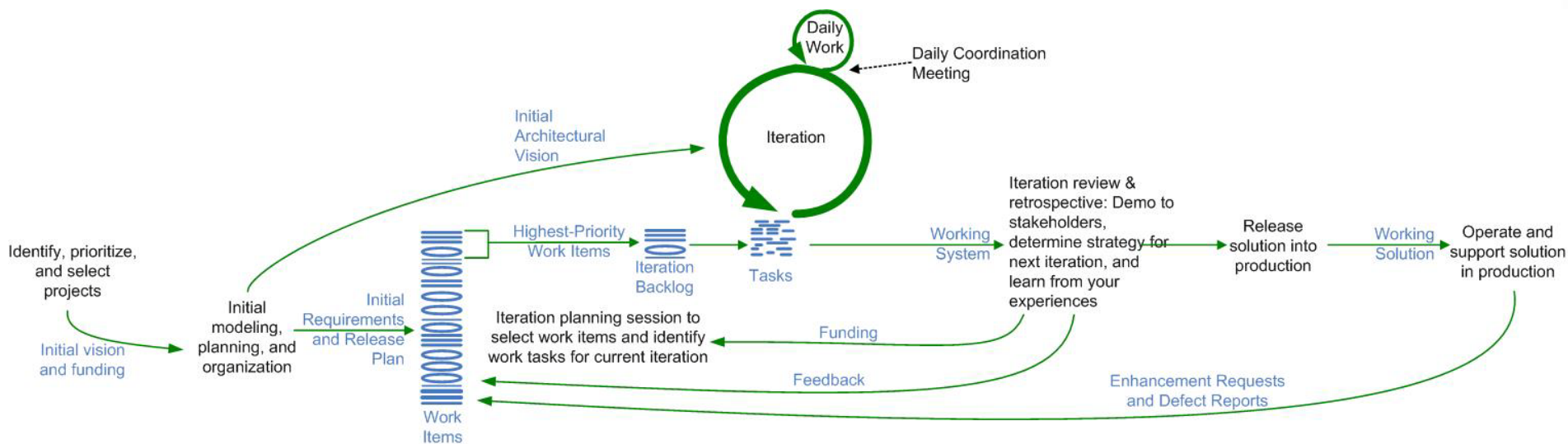
10+ 同时进行的项目

不同的模块或者任务分散在10+不同的地方

每天100+ 构建 按需进行集成构建和内部部署



DAD实现敏捷开发全生命周期监管



规范敏捷交付 (DAD)是现有敏捷方法的混血 (Scrum, XP, UP等)

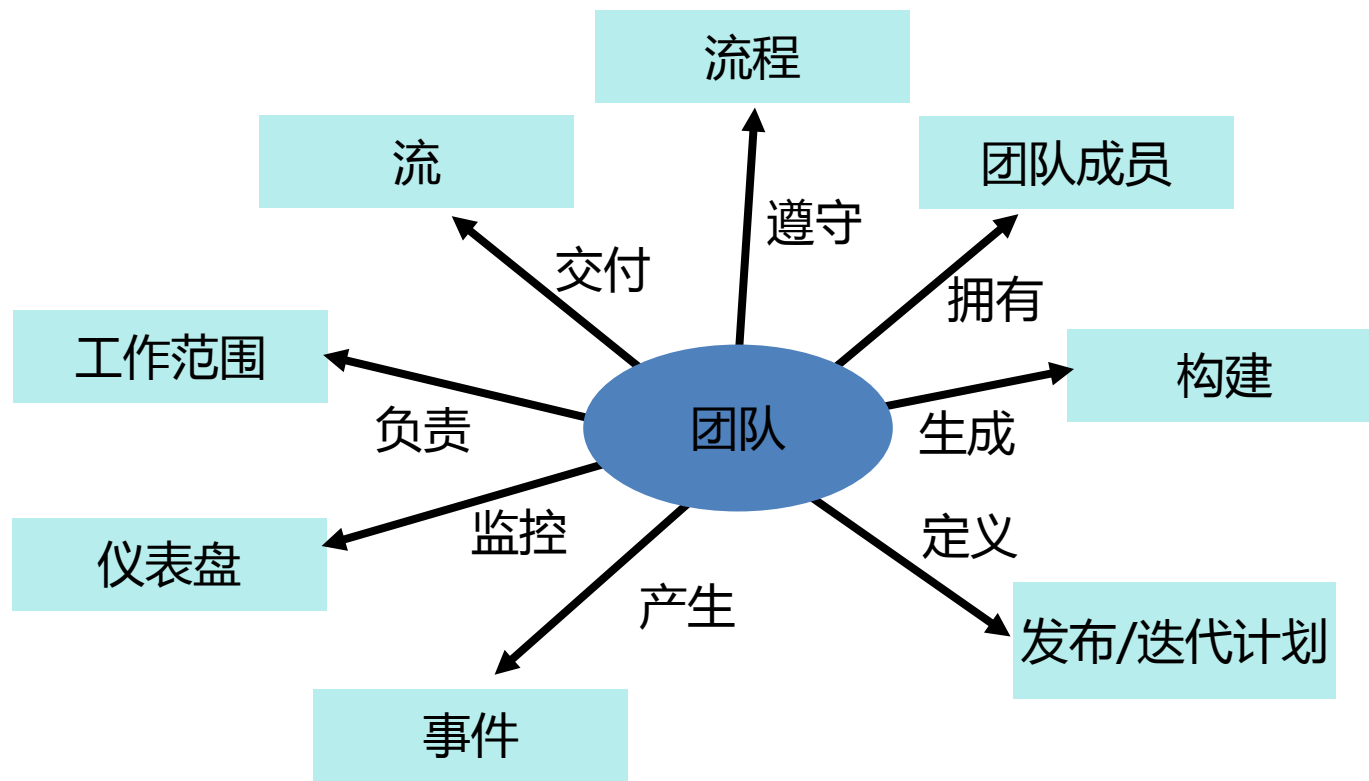
是敏捷规模化(Agility@Scale)的基础

覆盖敏捷开发全生命周期

识别项目阶段和轻量级里程碑

解决企业对敏捷项目的监管和授权

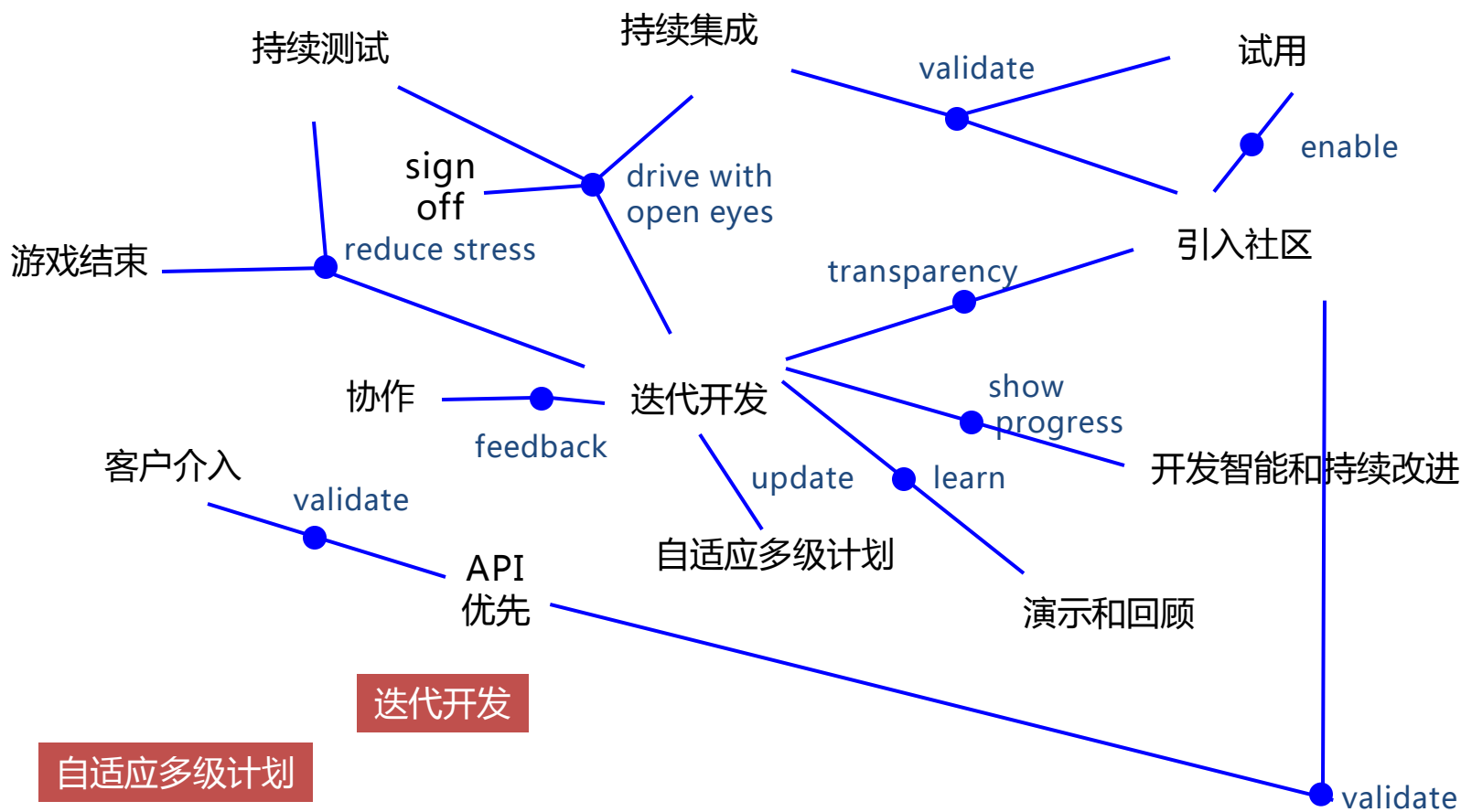
团队为中心



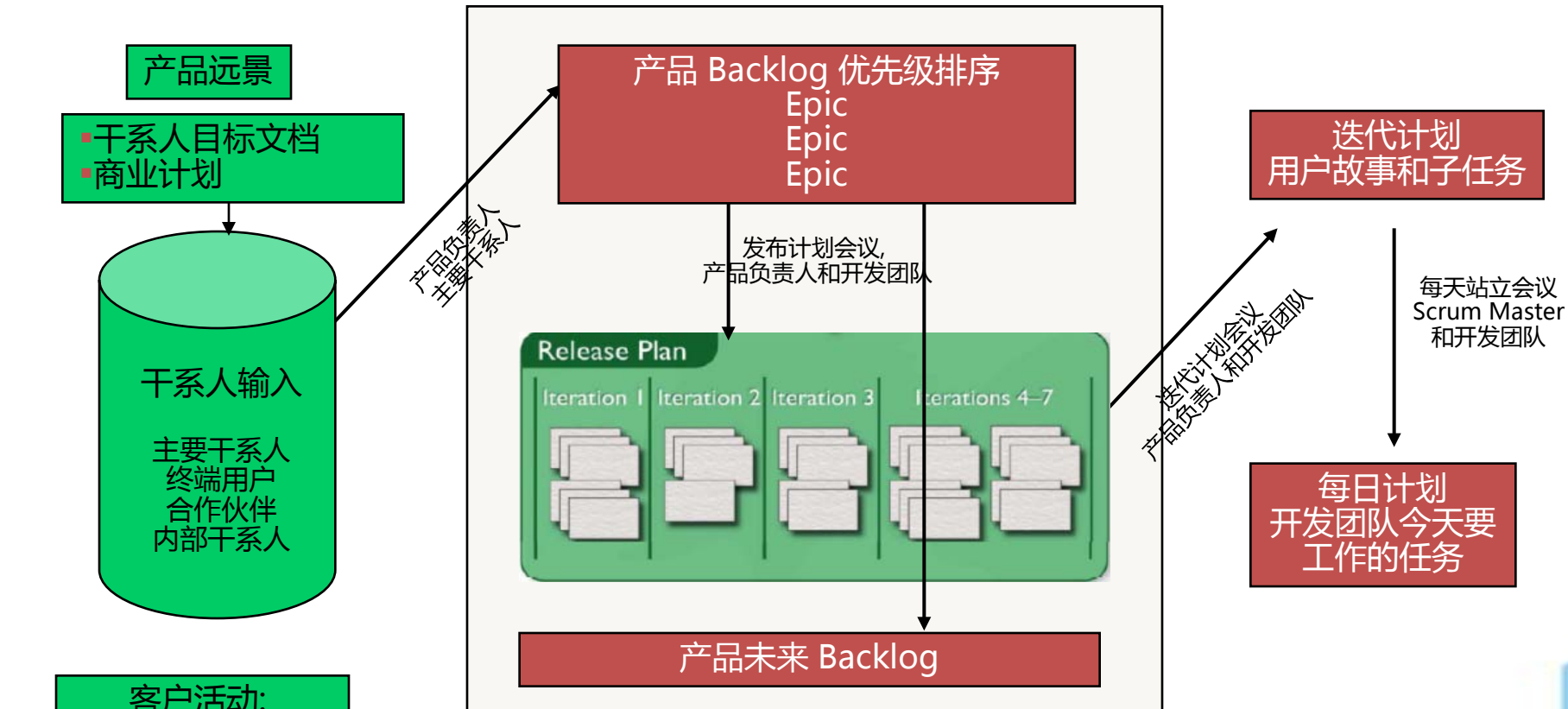
- ▶ Build
- ▶ ClearCase Connectors
- ▶ ClearQuest Connector
- ▶ Client for Visual Studio
- ▶ Dashboard Viewlets
- ▶ Enterprise Extensions
- ▶ Feature Teams
- ▶ FVT Team
- ▶ Incubator
- ▶ Install
- ▶ Performance and Reliability (PRT)
- ▶ PMC
- ▶ Process RTC
- ▶ Release Engineering
- ▶ Reports
- ▶ Repository
- ▶ RTC Commons
- ▶ Sandbox
- ▶ Source Control
- ▶ SVT Team
- ▶ Tracking and Planning
- ▶ UI Design
- ▶ User Assistance

团队是自我导向的 但是有一个统一的节奏

敏捷实践



基于RTC的自适应多级计划



- 发布计划 □ 所有团队
- 迭代预先计划 □ 每个团队
- 迭代计划 □ 每个团队
- 每日计划 □ 开发人员个人

- 客户活动: VoiCE, DPP, Beta
- 社区
- 用户缺陷和扩展

发布计划

- 主题
- 分解 成大小合适的用户故事
- 估算
- 优先级排序
- 产品范围 用户故事
 - 状态
 - 计划
 - 完成
 - 延迟
 - 属性
 - 对其他团队有影响吗?
 - 复杂性

Backlog	
Closed Items: 6 Open Items: 53	
🔄	Provide project level read permissions
🔄	Load Scalability improvements
🔄	Provide RESTstyle APIs and resource formats for work items
🔄	Add a Visual Studio Client
▶ 🔄	Support to bundle the RTC components in different ways
🔄	Remove dependencies on the Eclipse SDK
🔄	Project restructuring on the same and across servers
🔄	Dashboard support that viewlets can show data from other repositories
🔄	Work items functional parity between eclipse and web UI
🔄	Provide a web UI for the RTC build functionality
🔄	Extend the available process preconditions, follow-up actions
🔄	Support planning in the web UI
🔄	Support process configuration in the web.
▶ 🔄	Reports administration/deployment in the web UI
🔄	Web UI User Assistance: context help, local help for the web
▶ 🔄	SCM: Better control of what & where content can be loaded
🔄	Improve agile planning support
🔄	Improve work item customizability
🔄	Support reports across project areas
🔄	Support work item queries across project areas
▶ 🔄	SCM: Logical model support
🔄	SCM file locking
▶ 🔄	SCM: Cross repository deliver
🔄	ClearQuest connector set-up improvements
🔄	Provide ClearQuest Importer
🔄	CC importer
🔄	Query editor usability improvements
🔄	Add support for higher ceremony process templates
🔄	CC connector improve management of sync streams
▶ 🔄	Improve reporting support
🔄	Improve approval for change sets
🔄	Provide richer text descriptions and comments for work items.
🔄	Simplify creation of rich dashboards, support dashboard templates, duplicate tabs, copy tabs across dashboards, role sensitive dashboard templates

迭代计划

BRM Sprint 2 (1.0) Plan

28 items: 25 open, 3 closed | Ends in: 10 days

Plan Details [Edit]

Planned Items [?] Links Snapshots Dashboard Notes

View As: Roadmap (3 items filtered)

Actions	Summary	Effective E	Owned By	Rank	March 2011	March 20, 2011
					S M T W T F S	S M T W T F
	Donors Can Choose to Support Multiple Organization	-	Deb	1		
	Donor Dividend Allocation Criteria	-	Marco	3	[Bar]	
	Widget Disposed Exception	1.2 weeks	Bob	-		
	Browser Exception	2 hours	Bob	-	[Bar]	
	Requests sent in form of email	-	Tanuj	4		
	Some messages are not externalized	3 days	Bob	-		[Bar]
	SWT Exception	1.5 days				
	Frequency of dividend transfer	-				

BRM Sprint 2 (1.0) Plan

30 items: 25 open, 5 closed | Ends in: 6 days

Plan Details

Planned Items Links Snapshots Dashboard Notes

View As: Taskboard

Story	Open	In Progress
Donor Dividend Allocation Criteria	Implement - Donor Dividend Allocation Criteria	
Frequency of dividend transfer		Implement - Frequency of dividend transfer

BRM Sprint 2 (1.0) Plan

30 items: 25 open, 5 closed | Ends in: 6 days

Plan Details

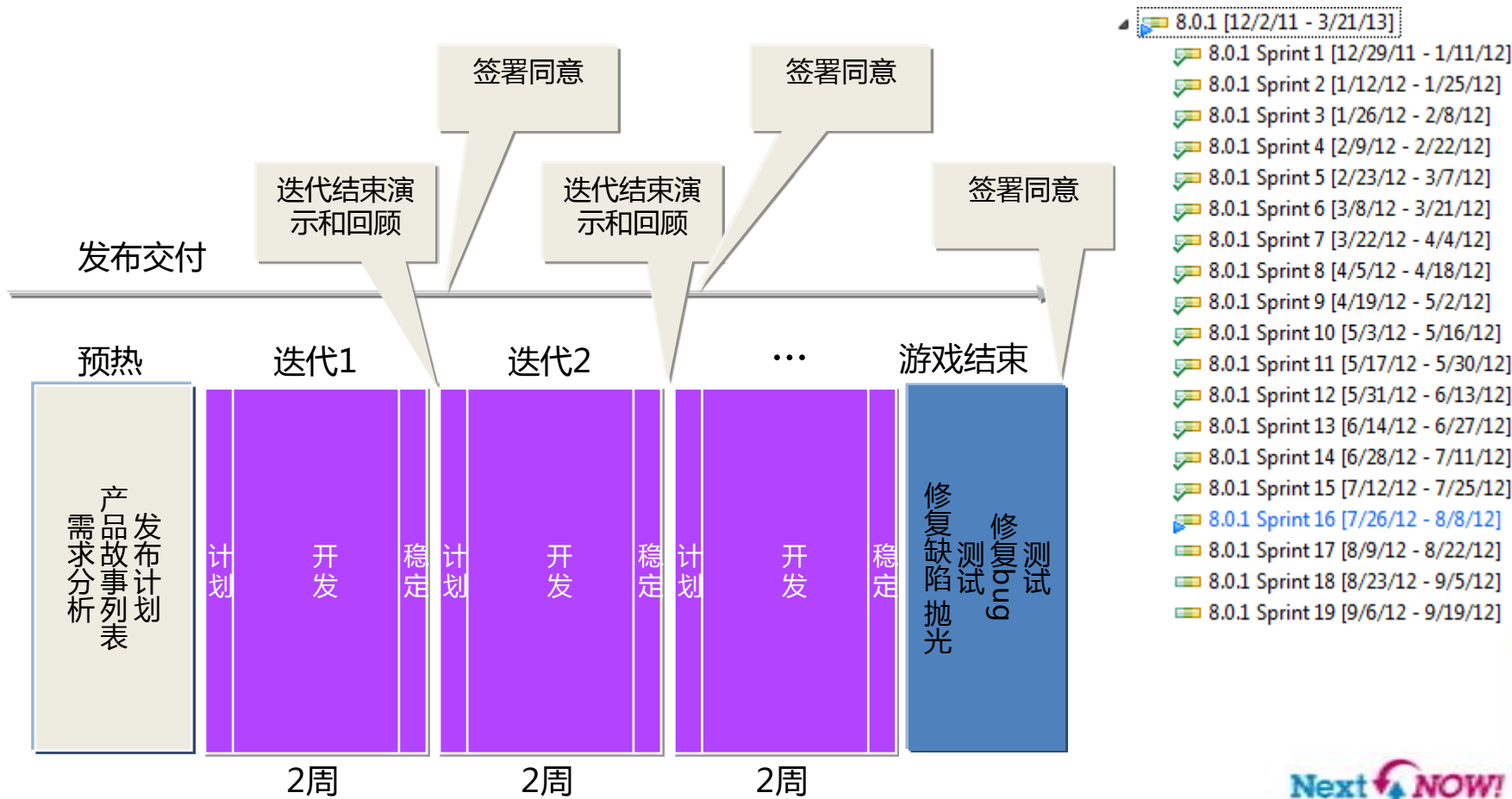
Planned Items Links Snapshots Dashboard Notes

View As: Planned Time

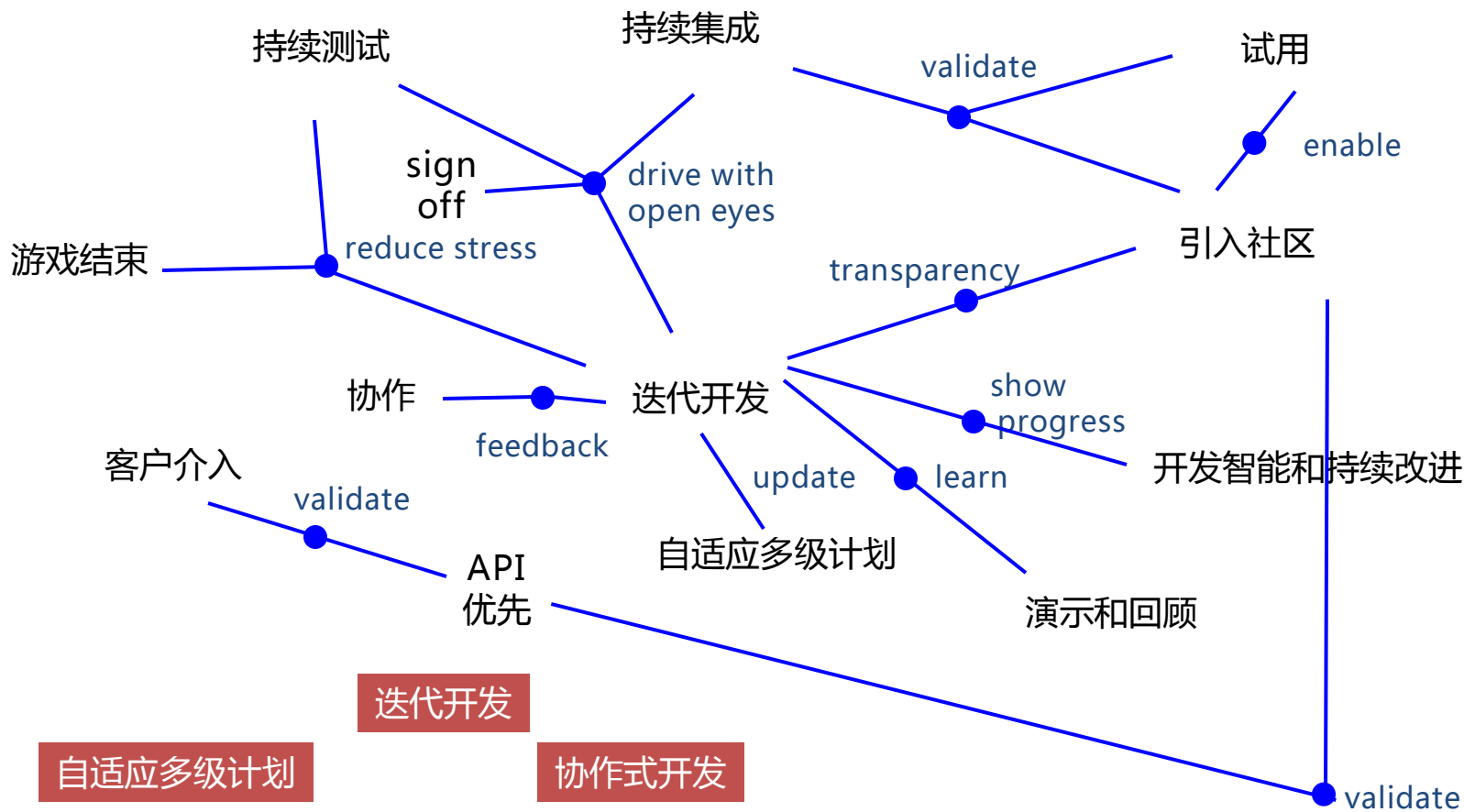
User	Closed Items	Open Items	Load
Bob	0	1	0/8 +8 h
cp	0	1	0/8 +8 h
Deb	3	5	168/8 -160 h
Marco	2	14	92/8 -84 h
Tanuj	0	0	0/8 +8 h

迭代式开发

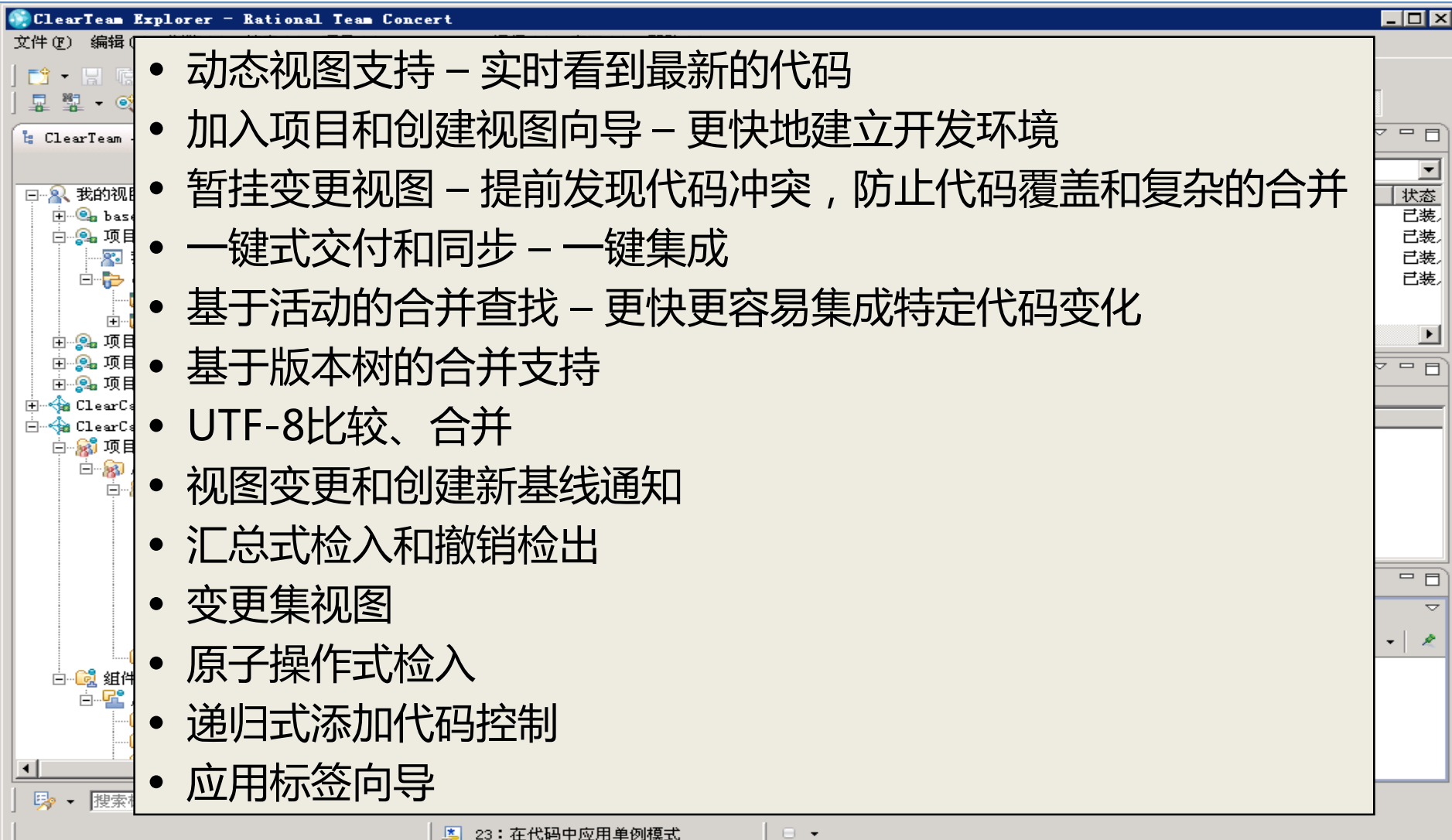
- 节奏和时间线事先确定
- 对准整个产品的里程碑计划



敏捷实践



新一代CC客户端CTE



ClearTeam Explorer - Rational Team Concert

- 动态视图支持 – 实时看到最新的代码
- 加入项目和创建视图向导 – 更快地建立开发环境
- 暂挂变更视图 – 提前发现代码冲突，防止代码覆盖和复杂的合并
- 一键式交付和同步 – 一键集成
- 基于活动的合并查找 – 更快更容易集成特定代码变化
- 基于版本树的合并支持
- UTF-8比较、合并
- 视图变更和创建新基线通知
- 汇总式检入和撤销检出
- 变更集视图
- 原子操作式检入
- 递归式添加代码控制
- 应用标签向导

文件(F) 编辑(E)

ClearTeam

我的视图

bas

项目

项目

项目

项目

ClearCe

ClearCe

项目

组件

状态

已装

已装

已装

已装

23: 在代码中应用单例模式

在CC和RTC之间建立关联

在执行CC操作（检入、检出、合并等）的时候，可以选择RTC工作项或者创建新的RTC工作项：

- CTE 自动创建一个UCM活动
- 活动 ID由工作项ID和用户定义的前缀确定
- 活动的描述自动填充为RTC的工作项的描述信息
- 活动自动连接到RTC工作项

创建工作项

填写工作项详细信息：

摘要：*

类型：缺陷

归档依据：* 未分配

严重性：普通

发现位置：未分配

项目区域：智能出行者

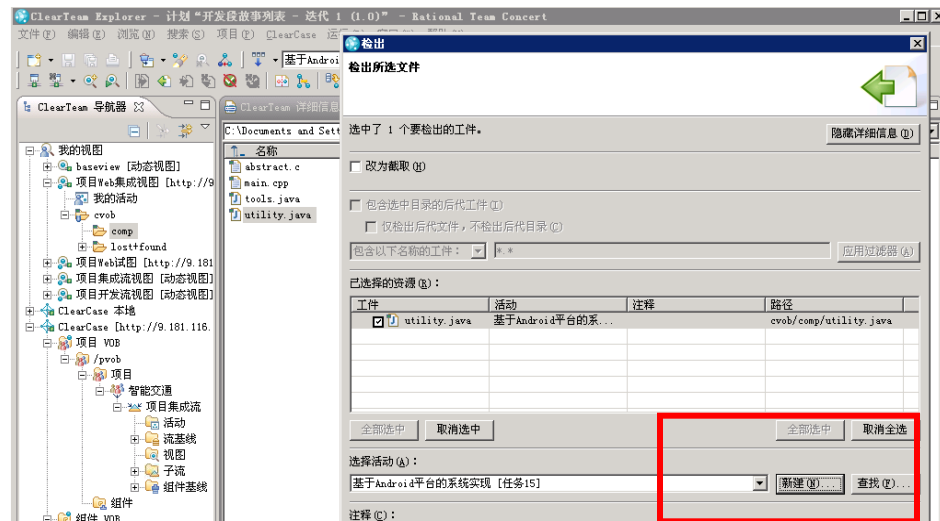
描述：

标记：

所有者：Patrick

计划目标：未分配

确定 取消



选择工作项

包含标识或文本(C): 配置和变更管理 [9.181.116.118]

与以下类型匹配的工作项(M): 任何

仅分配给我的工作项(A) 包括已解决的问题(R)

- 17: 部署到JBoss中间件平台
- 26: 编写性能测试代码
- 23: 在代码中应用单例模式
- 15: 基于Android平台的系统实现
- 18: 性能优化
- 12: 中间件部署和性能优化
- 7: 交通运行图在智能手机终端动态显示更新
- 19: 获取开源代码并内嵌到代码中
- 14: 基于iOS平台的系统实现
- 16: 部署到WebSphere中间件平台

创建工作项...

确定 取消

协作平台实现从计划到代码的全程追踪

Team Area: ClearCase Connector | Iteration: 2.0 MID1 (10/27/08 - 11/21/08) | 53 Closed | 39 Open

Brian Nelson
Closed Items: 10 | Open Items: 0
Load: 0 / 0 | 0 h | Estimated: 100%

- Broken externalized strings in connector.scm.ide.*
- Do a license check before deleting sync streams
- Exception when trying to change two different iniArgs at same time (one CC, one Jazz)
- change sync user is a two steps work instead of one
- Refactor 3 tableviewers=label providers/content providers in GUI into a set of one each of those classes
- Need to clean up after changes for 62361 and 62363
- Gray out "Finish" button on "Select Team Area" page
- Confirmation for synchronized stream deletion gives wrong number of streams to delete
- Error message about project folders not existing refers to ClearCase even when selecting files from Jazz
- ClearCase Provider Properties shows unqualified stream name

Carol Yutkowitz
Closed Items: 7 | Open Items: 21
Load: 0 / 0 | 0 h | Estimated: 0%

- Track Test Status of 2.0 MID1
- Provide project level read permissions
- Avoid mounting the PVCB
- MFE in "Change ClearCase user stream" from connector view when external "sync" as the

Defect 35465
Summary: * ClearCase Provider Properties shows unqualified stream name

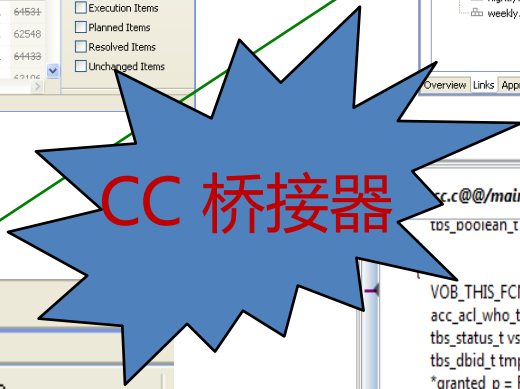
Attachments: [Table with columns: Id, Name, Created, Created by, Size, Type]

Subscribers: Brian Nelson, Carol Yutkowitz, Geoffrey Clemm

Links: Change Sets, ClearCase Activities, Included in builds

敏捷计划关联到工作项

工作项关联到CC UCM活动



ClearCase Details ClearCase Change Set

Activity: Fix name problem [Bug_Fix], View: caroly_Project1_int

Name	Version	Created On
carol_ucm_vob/C1	/main/Int1/3	May 31, 2009 3:02:28 PM...
carol_ucm_vob/C1/New...	/main/Int1/2	May 30, 2009 10:45:19 P...
carol_ucm_vob/C1/New...	/main/Int1/2	May 30, 2009 10:29:58 P...
carol_ucm_vob/C1/New...	/main/Int1/1	May 30, 2009 10:26:40 P...
carol_ucm_vob/C1/New...	/main/Int1/2	May 30, 2009 10:29:54 P...
carol_ucm_vob/C1/New...	/main/Int1/1	May 30, 2009 10:27:57 P...
carol_ucm_vob/C1/New...	/main/Int1/1	May 30, 2009 10:29:49 P...

UCM活动关联到变更集

```

acc.c@/main/ucm_main/8.0.1/8.1 windows
tos_pooiean_t`granted_p

VOB_THIS_FCN("acc_check_permission_acl");
acc_acl_who_t who;
tbs_status_t vst;
tbs_dbid_t tmp_dbid;
*granted_p = FALSE;

/* If EV is set to TRUE or true, and the current use
 * privileged user or vob owner, the ACL recovery
 * the operation will skip the common ACL permi
 */
if ((vst = map_is_privileged_and_local(vobh, TRUE
{
    if (map_get_acl_recovery_mode(vobh)) {
        *granted_p = TRUE;
        goto done;
    }
}

```

在CQ与RTC之间建立双向可视

- 将两个变更管理系统的记录关联起来
- 或令两个系统相互可视

RTC

Change and Configuration Management (Jazz)

Sam's Scrum Project

Project Dashboards Work Items Plans Source Control Builds Reports Search Work Items

Work **New Defect**

Defect: DEFTR00000109

ID: DEFTR00000109 State: Submitted

*Headline:

Project: Keywords:

*Severity: Priority: Symptoms:

Owner: Description:

Template: Load

IBM. Jazz

ClearQuest

Rational ClearQuest

Welcome admin | Links/SAMPL | Log out
You have 0 new items

New ALMRequest Site Administration Preferences Help

ALMRequest: SAMPL00000024

Request Project Related Records History Comments Attachments Links

Links:

Add: Related Artifact

Related Change Request

101: Investigate I

102: Configuration error on RedHat Linux

123: Support Load

28: Test Server S

Status: New

Resolution: Unresolved

Details

Type: Defect Tags:

Filled Against: Sam's Project Owned By: Unassigned

Severity: Normal Priority: Unassigned

Found In: Unassigned Planned For: Unassigned

Project Area: Sam's Project Estimate:

Creation Date: May 6, 2011 9:41 AM Time Spent:

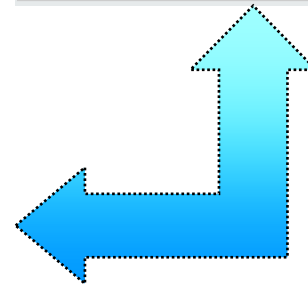
Created By: Sam Due Date: Unassigned

Quick Information

Subscribers (1): S Related Change Request (1): 1

Description

Open Item



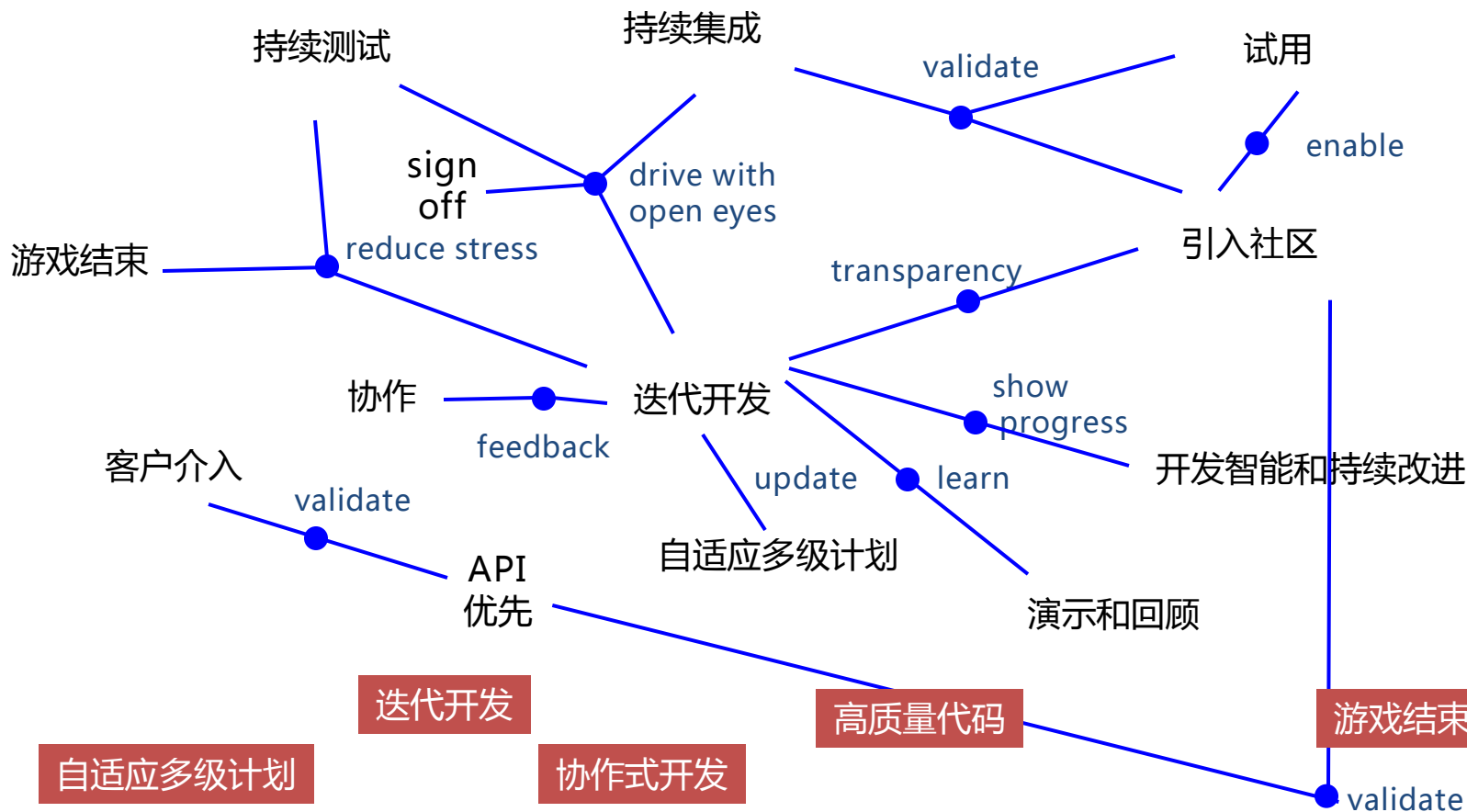
仪表盘让一切透明化

The dashboard displays several key metrics and reports:

- Current CQ Sustaining Engineering Plans:** Shows progress for various iterations (2012B Sprint 3) across different components like CDL, CQ, and Escalations.
- APARS planned for 2012A_CLOSED (35) Severity:** A horizontal bar chart showing the distribution of severity levels: Normal (approx. 28), Major (approx. 6), and Critical (approx. 1).
- APAR cleanup (32) - Component - CQMS.RATIONALC...:** A horizontal bar chart showing the number of APARs per component: OSLC (approx. 12), Integrations CQ (approx. 10), FullTextSearch (approx. 8), Documentation CQ (approx. 12), Core (approx. 10), and another component (approx. 10).
- 2011D All PRs (56) - CQMS.RATIONALC.LEXINGTO...:** A list of 56 PRs with titles such as "First five characters in UNC path disappear when viewing a record on cq web 7.1.2.1".
- CC Core, Native UIs and Integrations A... (28):** A list of 28 APARs with titles like "6589: [APAR RATLC01315178] LCC: Various db server errors related to time-out".
- CQ Technical Debt (excludes 7.1.2 & 2... (807) Tags:** A list of 807 tags including "2010b", "2010bdef", "2010cdef", "2011adef", "8.0.0.x", "apar", "consumability", "cq_devharness_failure", "cq_ihd", "cqbehavioral", "cqic_fix", "cqua_2011a_planning", "cqua_2011b_planning", "cqua_2011d_planning", "cqua_defect", "cqua_help", "cqua_wd".

Callouts indicate data sources: "From RTC" points to the Engineering Plans widget, "From CC" points to the APAR cleanup chart, and "From CQ" points to the PR list.

敏捷实践



代码评审和检查

1. 自我评审

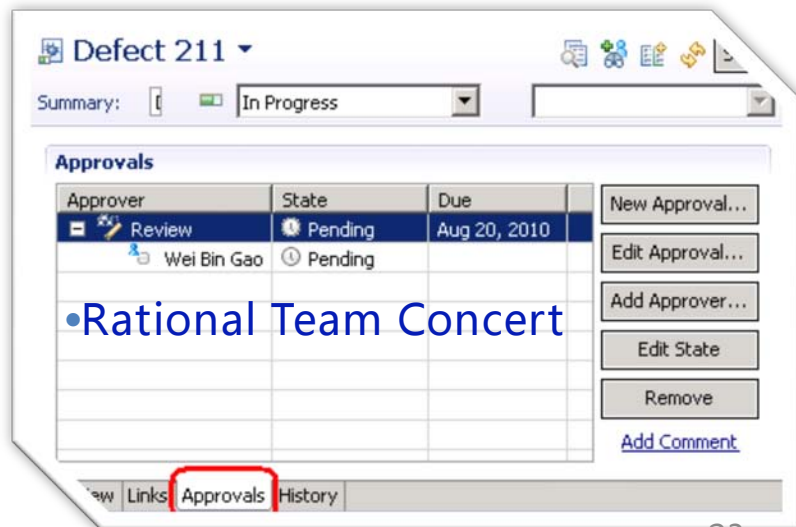
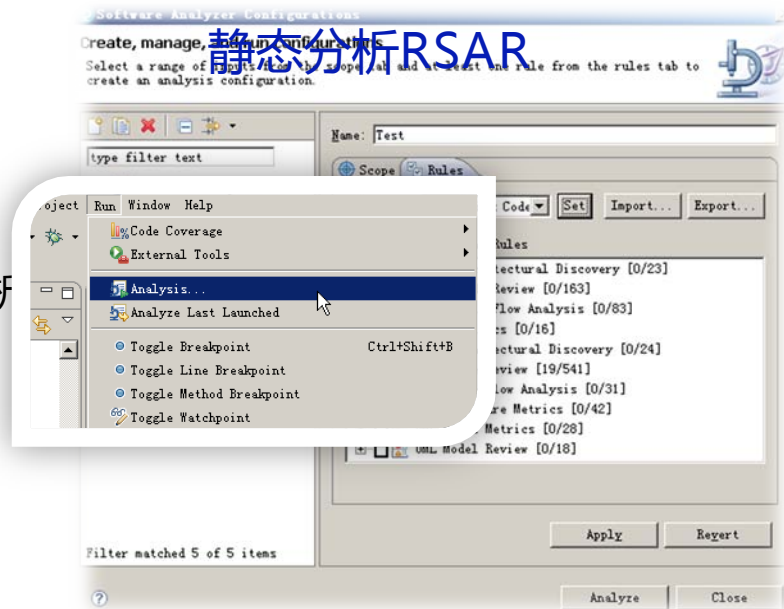
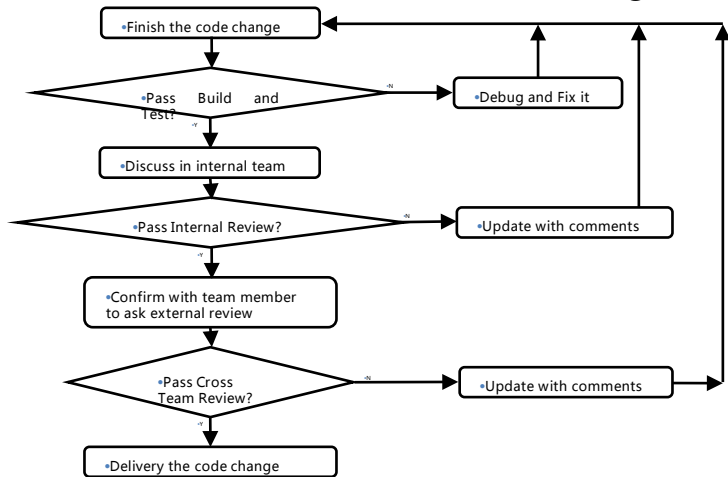
- ✓ 检查版权信息
- ✓ 验证更改的文件 (不要遗漏, 不要有垃圾)
- ✓ 运行 Rational Software Analyzer 进行代码静态分析

2. 团队内部评审

- ✓ 对复杂的大的修改要运行代码检查
- ✓ 可以使用 Rational Team Concert 评审功能

3. 跨团队评审

- ✓ 类似团队内部评审
- ✓ 使用 SameTime 和 Lotus Live meeting



内存泄露和性能瓶颈分析

- 使用 Rational Purify Plus+:
 - Purify : 定位内存问题, 例如内存泄露, 内存误操作
 - Pure Coverage : 寻找代码覆盖不全问题

Functions: DisplayLocalTime

Line Coverage	Line Number
0	14
15	15
0	16
0	17
0	18
0	19
0	20
0	21
0	22
0	23
0	24
0	25
0	26
0	27
0	28
0	29
0	30
1	31
1	32
1	33
1	34
1	35
1	36
1	37

```

void DisplayLocalTime(int nDays, int nHours, int nMinutes, int nSeconds, int nMilliseconds) {
    SYSTEMTIME SystemTime;
    char buf[30];
    int RetCode;

    GetLocalTime(&SystemTime);
    RetCode = wprintf(buf, "%kdk%k.2dk%k.2dk%k", "Currently ", SystemTime.wHour, SystemTime.wMinute, SystemTime.wSecond, " ");
    if (nDisplayFlag && ((int)strlen(buf) == RetCode)) {
        MessageBox(NULL, buf, "Local Time of Day",
            MB_OK | MB_ICONINFORMATION);
    }
}

WINAPI WinMain(HINSTANCE hInstance, HINSTANCE hPrevInstance, LPSTR lpszCmdLine, int nCmdShow) {
    int i, RetVal = MessageBox(NULL, "Do you want to see the time of day?", "Hello, World", MB_YESNO | MB_ICONQUESTION | MB_DEFBUTTON2);
    if (RetVal == IDYES)
        DisplayLocalTime(1, 1, 1, 1, 1);
}
  
```

Starting Purify'd hello.exe at 05/06/2002 15:16:04

Starting main

UMR: Uninitialized memory read in strlen (1 occurrence)

ABW: Array bounds write in WinMain (1 occurrence)

Writing 1 byte to 0x01c23992 (1 byte at 0x01c23992 illegal)

Address 0x01c23992 is 1 byte past the end of a 10 byte block at 0x01c23988

Address 0x01c23992 points to a malloc'd block in heap 0x01c20000

Thread ID: 0x5a0

Error location

WinMain [hello.c:30]

length = strlen(string2); // UMR because string2 is uninitialized

for (i = 0; string1[i] != '\0'; i++) {

string2[i] = string1[i]; // ABW's generated on this line

length = strlen(string2); // ABR generated on this line

Allocation location

malloc [malloc.obj]

WinMain [hello.c:25]

WinMainCRTStartup [vincrt0.obj]

ABW: Array bounds write in WinMain (1 occurrence)

ABW: Array bounds write in WinMain (1 occurrence)

ABW: Array bounds write in WinMain (1 occurrence)

ABW: Array bounds read in strlen (1 occurrence)

Displayed Errors: 5 of 5 Displayed Warnings: 2 of 2 Bytes leaked: 10+

- Quantify : 发现和分析性能瓶颈

Functions: mark_consonants(void)

Line time	L+D time	Percent of Function time	Percent of F+D time	Line number
0.01	0.01	0.01	0.00	200
37.86	9.943	4.43	16.44	98.10
				202
				203
				204

Function: mark_consonants

Called: 1

Function time: 230.3

F+D time: 10.13

Distribution to Callers:

Called 1 times, analyze_prosody

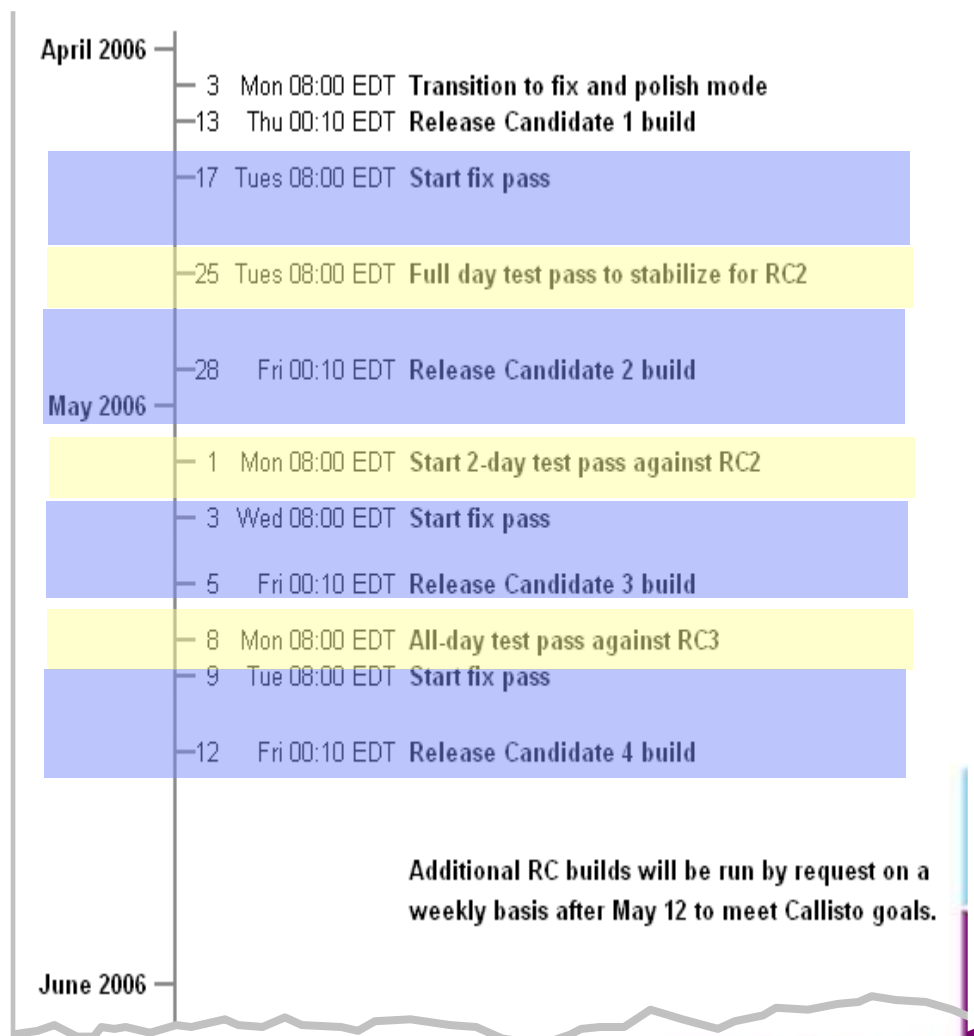
```

{
    int i;
    for (i=0; i<SPECIMEN_LENGTH(specimen); i++) {
        if (specimen_work_copy[i]!='c' || specimen_work_copy[i]!='d')
            mark_consonants(specimen_work_copy[i]);
    }
}
  
```

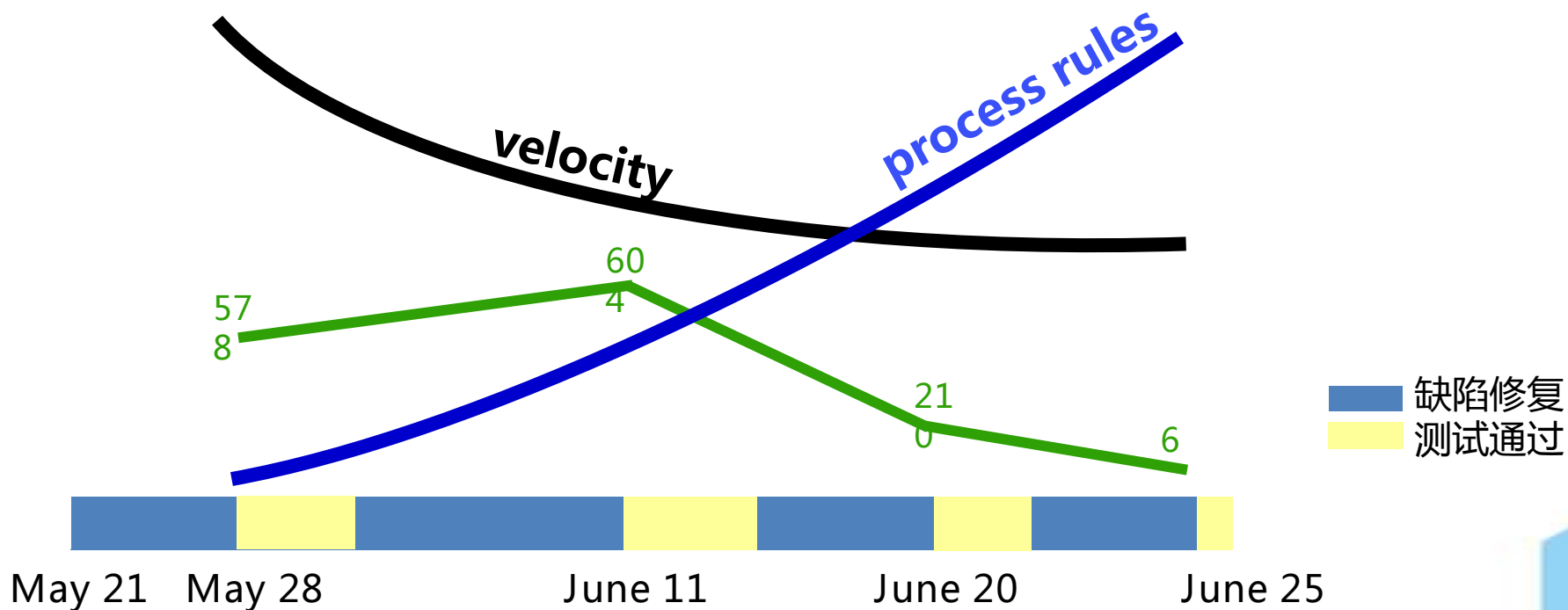


最后的迭代 – 黎明前的“黑暗”

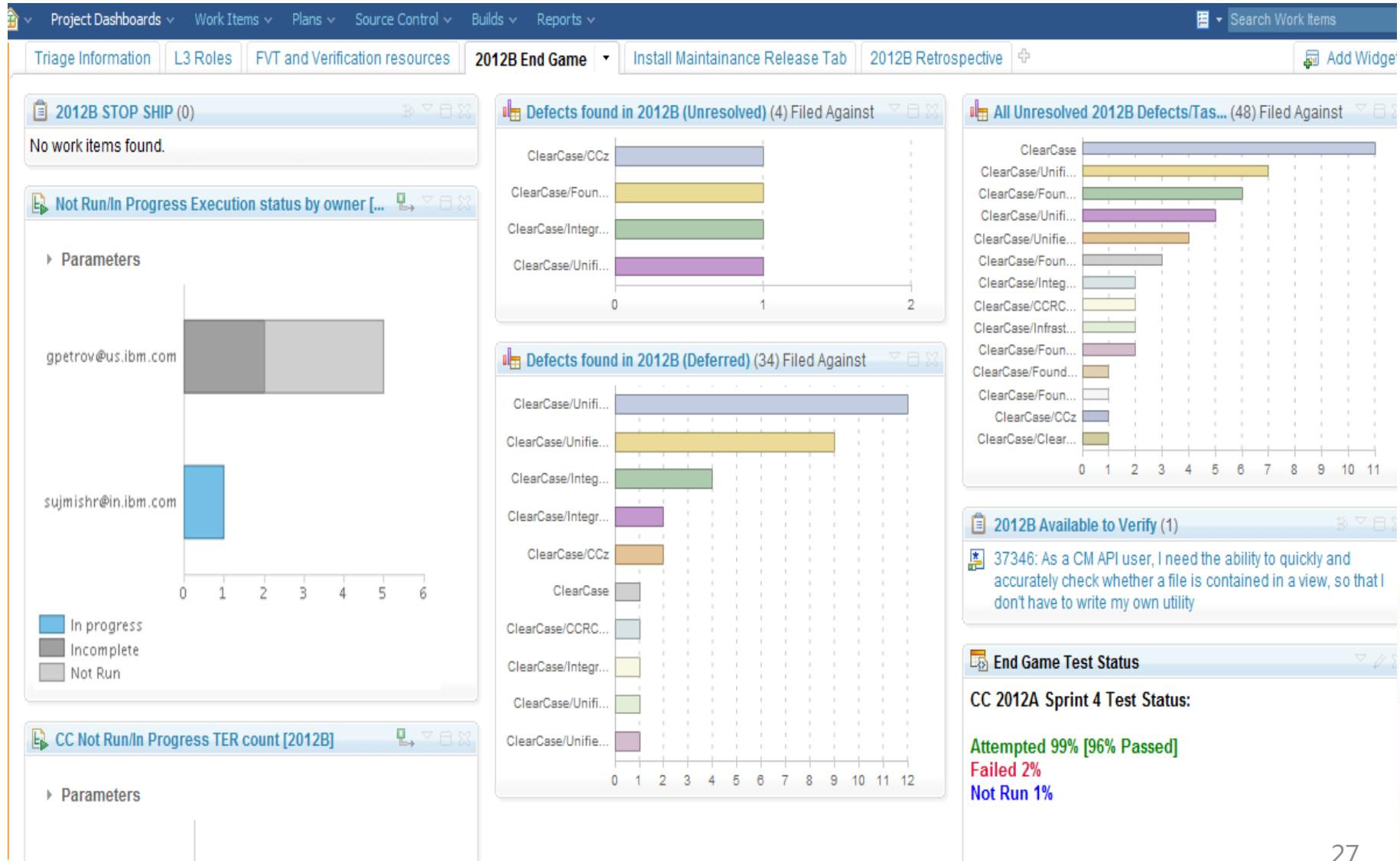
- 也叫游戏结束 (end game)
- 发布之前的收敛
- 一系列的测试--修复缺陷的过程
- 阶段
 - 功能冻结/代码冻结
 - 位冻结
 - 内部发布
 - 正式发布



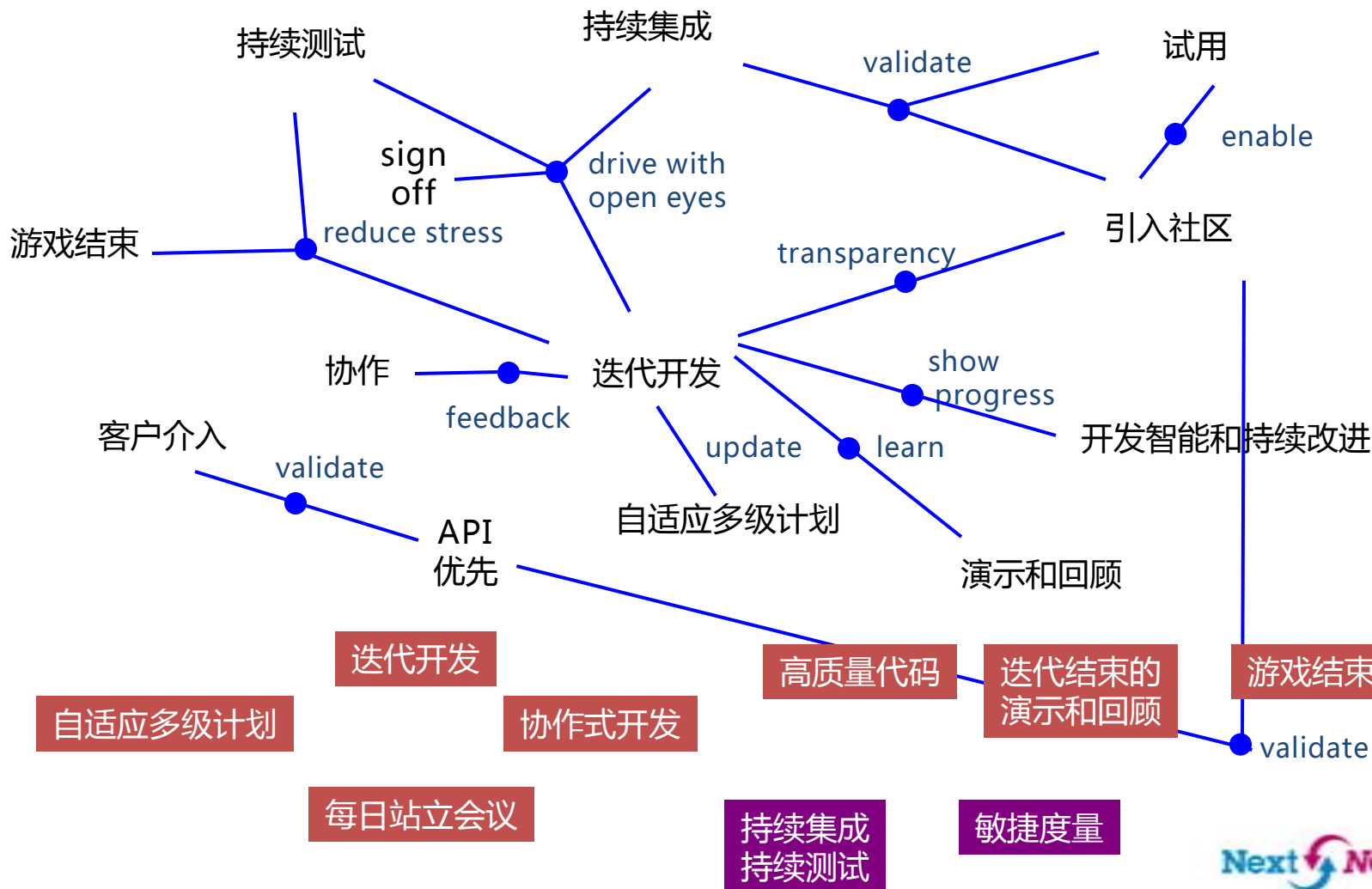
游戏结束阶段的开发收敛



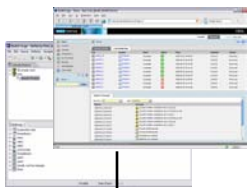
使用仪表盘跟踪游戏结束阶段



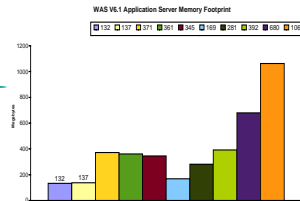
敏捷实践



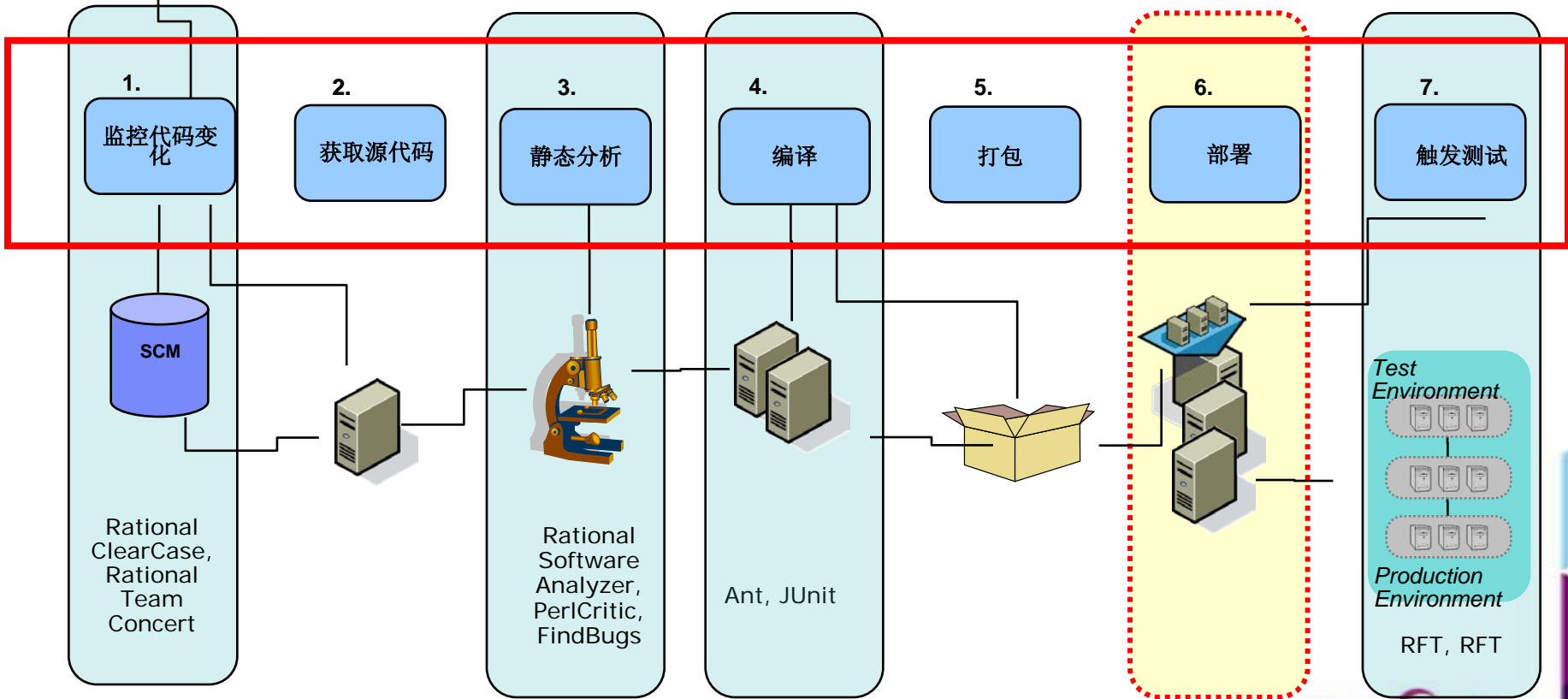
持续集成和持续测试



Build Forge Web 客户端
Build Forge IDE 插件



报表



挑战: 快速部署 快速发现问题

利用ClearMake提高构建效率

- 避免不必要的构建
 - 智能的构建审查算法，只执行必要的构建
 - 独一无二的Winkin功能，复用其他视图中的构建结果
- 并行分布式构建，能极大提升构建性能
 - 多进程并行构建，让每个处理器都“转”起来，充分发挥多核计算优势
 - 分布式构建与负载检测，让闲置的机器“跑”起来

构建和测试结果

Sign in
IBM

IBM Rational's RE BuildCentral

w3 Home BluePages BC Help Logout

Menu

- Wiki's
- Product SOS
- Useful Links
- Search Ratlc/Activity
- View Most Recent
- Baseline

Build Finder

search on: production feature | search by: product baseline

stream: 7.1.1.01.00_2010a | product: ClearCase |

Baseline	Detail	Comment																																								
<p>7.1.1.01.00_2010A.D100312</p> <p>[RE Announced] [changes]</p> <p>[patch fixes - windows]: RATLC01534394 RATLC01527513 RATLC01527448 RATLC01527222 RATLC01473994 RATLC01410866 RATLC01370615 RATLC01310424 RATLC01310340 RATLC01310160 RATLC01309342 RATLC01309243 RATLC01309109 RATLC01309012 RATLC01308874 RATLC01308545 RATLC01308423 RATLC01308412 RATLC01308387 RATLC01308155 RATLC01308041</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">platform</th> <th style="width: 15%;">build</th> <th style="width: 15%;">spin</th> <th style="width: 15%;">accept</th> </tr> <tr> <td>aix4_power</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>hp11 ia64</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>hp11 pa</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>linux_390</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>linux_ppc</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>linux_x86</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>nt_i386</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>sol_x86</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>sun5</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table>	platform	build	spin	accept	aix4_power	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	hp11 ia64	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	hp11 pa	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	linux_390	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	linux_ppc	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	linux_x86	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	nt_i386	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	sol_x86	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	sun5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Unit Test Results: All Tests</p>
platform	build	spin	accept																																							
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sun5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																																							

stream: 7.1.1.01.00_2010a | baseline: 7.1.1.01.00_2010A.D100312

product: ClearCase | platform: nt_i386

baseline	stream	component	platform	component status	host	log
7.1.1.01.00_2010A.D100312	7.1.1.01.00_2010a	cc.java	java	<input checked="" type="checkbox"/>	SAMADAMS	log
		- cc.java		<input checked="" type="checkbox"/>	SAMADAMS	log
		- cc		<input checked="" type="checkbox"/>	SAMADAMS	log
		- cc.i10n		<input checked="" type="checkbox"/>	SAMADAMS	log
		- cc.crc		<input checked="" type="checkbox"/>	herry.lexma.ibm.com	log

Designed for use with Rational Team group's customizations, [Unit 3.8.1](#) and [Ant 1.7](#).

Summary

Build ID: 7.1.1_PATCH_CM.D100310

Tests	Failures	Errors	Incomplete	ExFail	UnexPass	Success rate	Time(s)
13826	68	1298	6	6	0	90.03%	75460.374

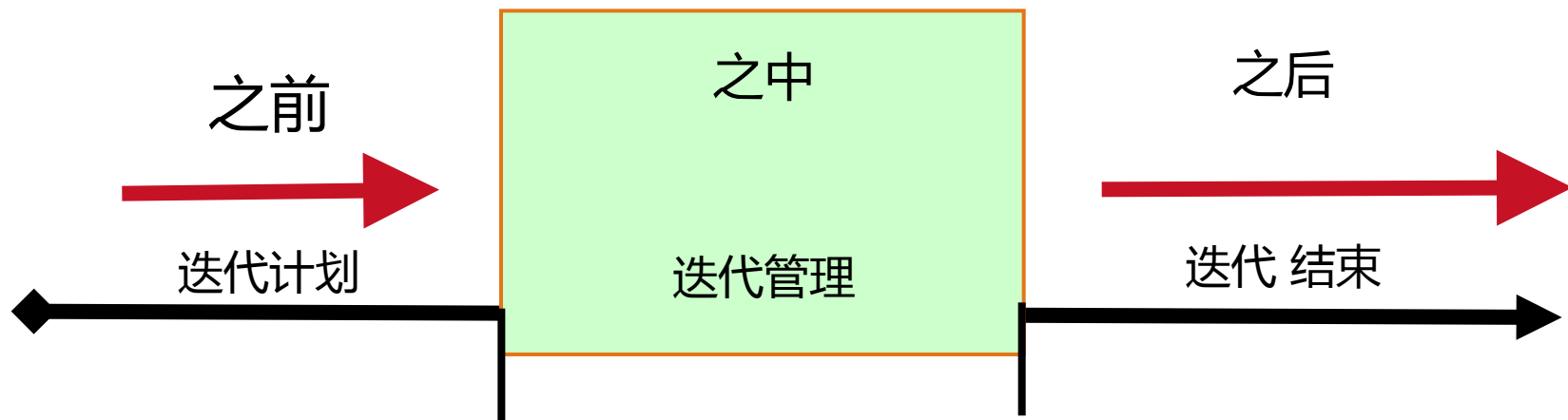
Note: *failures* are anticipated and checked for with assertions while *errors* are unanticipated. *ExFail* is an *Expected Failure* while *UnexPass* is an *Expected Failure* that passed unexpectedly. *Incomplete* is normally used for a placeholder test method that may have little or no implementation yet. The test run should have ZERO *failures* and ZERO *errors*. There may be some *ExFail* but they should be fixed as soon as possible. *UnexPass* tests usually should have the *Expected Failure* flag removed from them so that they pass normally.

All Test Runs

[Show/Hide Successes](#)

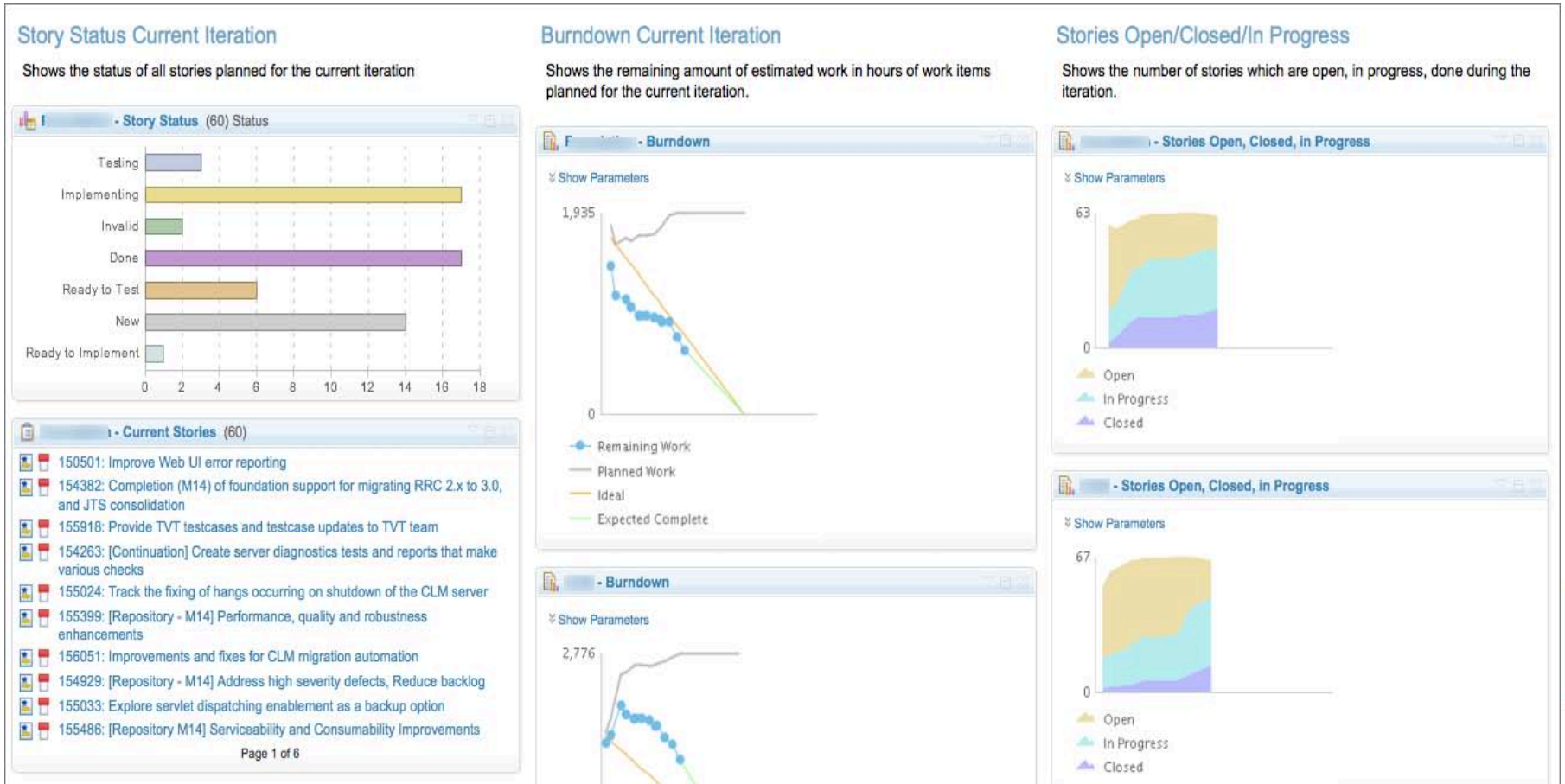
Name	Tests	Errors	Failures	Incomplete	ExFail	UnexPass	Success rate	Time(s)	Start
com.ibm.rational.stp.client.internal.cq_tests.AllDesktopTests	1	1	0	0	0	0	0.00%	0.000	10/03/10 22:02:18
CQJN Adapter [Windows]	1867	0	0	0	0	0	100.00%	4309.457	10/03/12 10:40:53
CC Adapter [Windows]	1367	0	2	0	0	0	99.85%	6216.436	10/03/12 11:52:45
COWS Adapter [Windows]	1449	0	0	0	0	0	100.00%	2628.608	10/03/12 13:36:26
Remote Core [Windows]	448	0	0	0	2	0	99.55%	3626.180	10/03/12 14:20:16
Team Server [Windows]	184	0	0	2	0	0	98.91%	5318.747	10/03/12 15:20:45
CQJN Adapter [rhat]	1732	0	0	0	0	0	100.00%	1892.055	10/03/12 11:52:45
COWS Adapter [rhat]	1395	0	0	0	0	0	100.00%	3013.868	10/03/12 12:24:20
CC Adapter [rhat]	1360	25	4	0	0	0	97.87%	4130.816	10/03/12 13:14:35
Remote Core [rhat]	453	0	0	0	2	0	99.56%	2475.806	10/03/12

敏捷度量



- 开发速度
- 技术债
- 发布计划
- 迭代燃尽图
- 故事点数进展
- 完成的故事点数
- 发布燃尽图
- 开发速度
- 技术债

使用仪表板提供一个项目健康状况视图



其他敏捷实践

- 每天站立会议 (Scrum meeting)
- Scrum of Scrum
 - 在稳定阶段每天都开
 - 会议内容放在迭代计划中
- 迭代结束
 - 演示工作成果
 - 回顾会议

धन्यवाद

Hindi

多謝

Traditional Chinese

ขอขอบคุณ

Thai

Спасибо

Russian

Thank

Gracias

Spanish

شكراً

Arabic

You

English

Obrigado

Brazilian Portuguese

多谢

Simplified Chinese

Danke

German

Grazie

Italian

Merci

French

நன்றி

Tamil

ありがとうございました

Japanese

감사합니다

Korean