

Découvrez ARCAD Pack for Rational

Le nouveau standard dans la Gestion du Cycle de Vie des Applications sur IBM i

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Pourquoi les dirigeants d'entreprise ont des difficultés à maîtriser le ROI de leurs projets de modernisation du SI ?

Des années d'investissement applicatifs



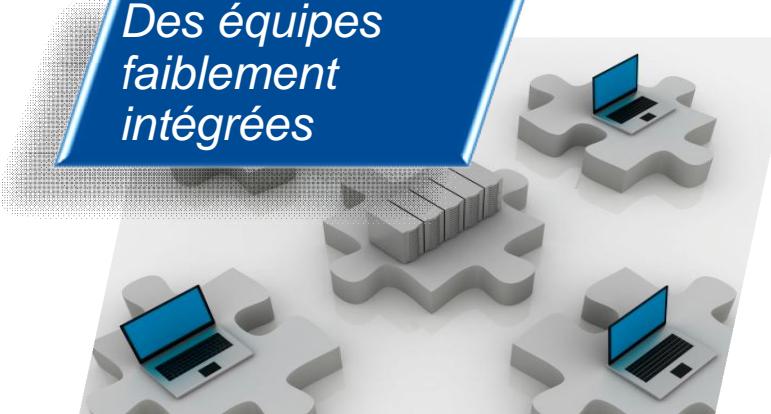
"We don't understand the effort, risk and impact of modernizing our legacy applications."

Des îlots séparés de connaissances, langages et plateformes



"Our skills gap keeps growing. How do we stay current with all the language and technology changes?"

Des équipes faiblement intégrées



"We need to enable our teams to collaborate across platforms, languages, and environments."

Les entreprises veulent...

Augmenter la productivité de leur équipe de développement , et également attirer de nouvelles ressources à ces postes.

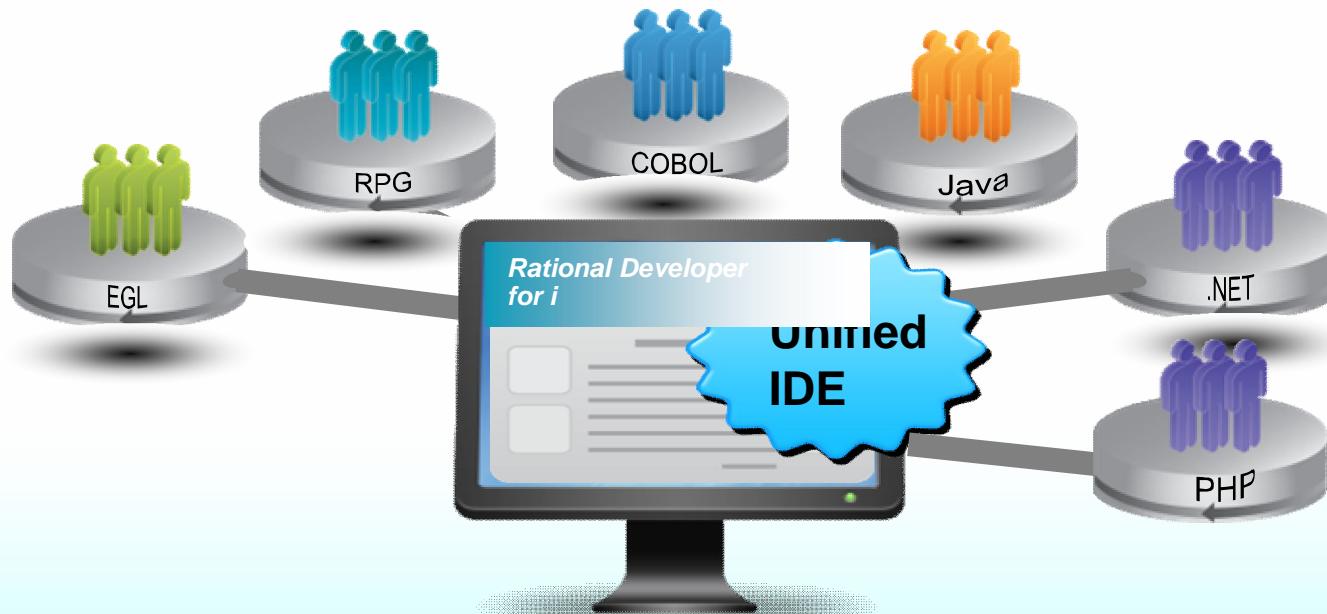


Mais...

Ils disposent d'outils de développement relativement anciens ce qui engendre un manque de productivité. Ces outils étant également peu familier voire rébarbatifs auprès des jeunes générations.

La solution: Un IDE global et multiplateforme

Migration vers des outils modernes basés sur Eclipse, pour développer et maintenir les applications métiers reposant sur des plateformes, langages, et technologies disparates.



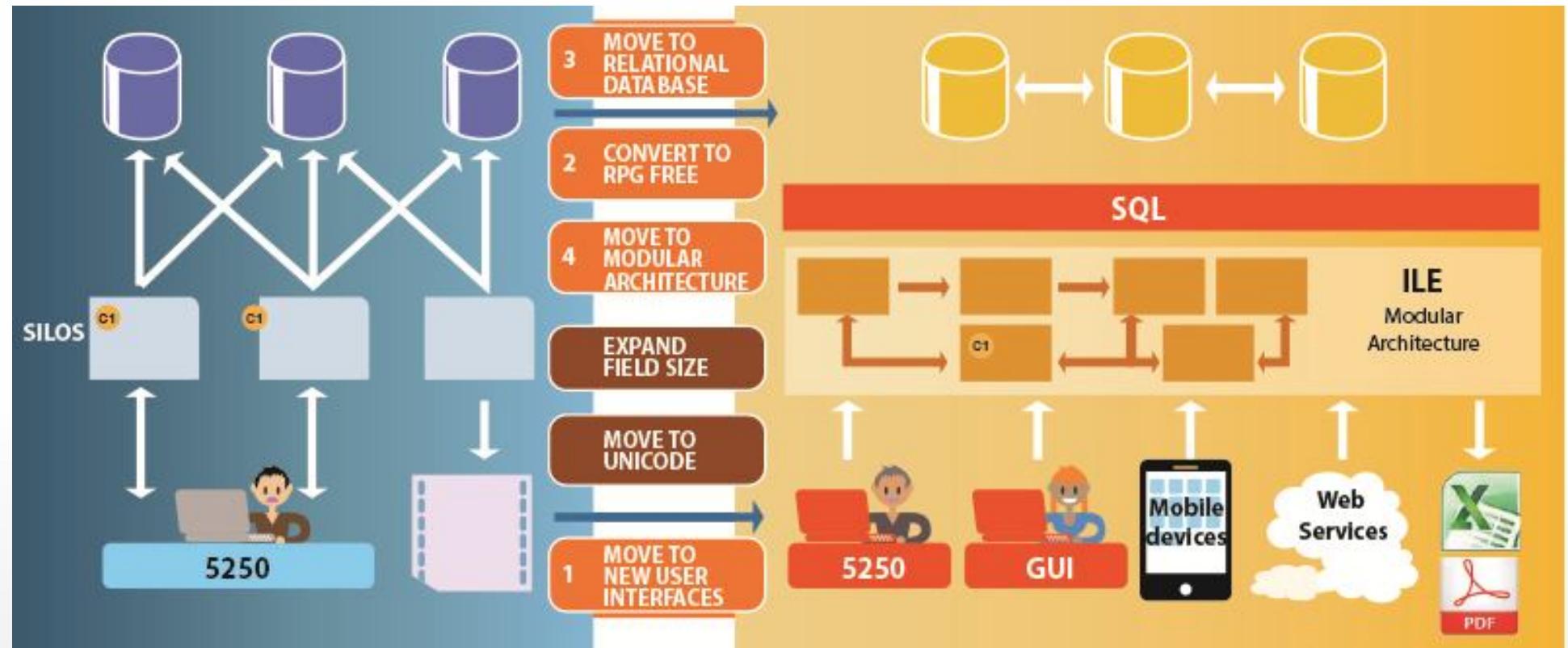
- Rational Developer for i v 9.0

Les entreprises veulent...

Construire des applications multiplateformes modernes, en rassemblant l'équipe existante et les nouvelles recrues.

Allant de là....

...A ici

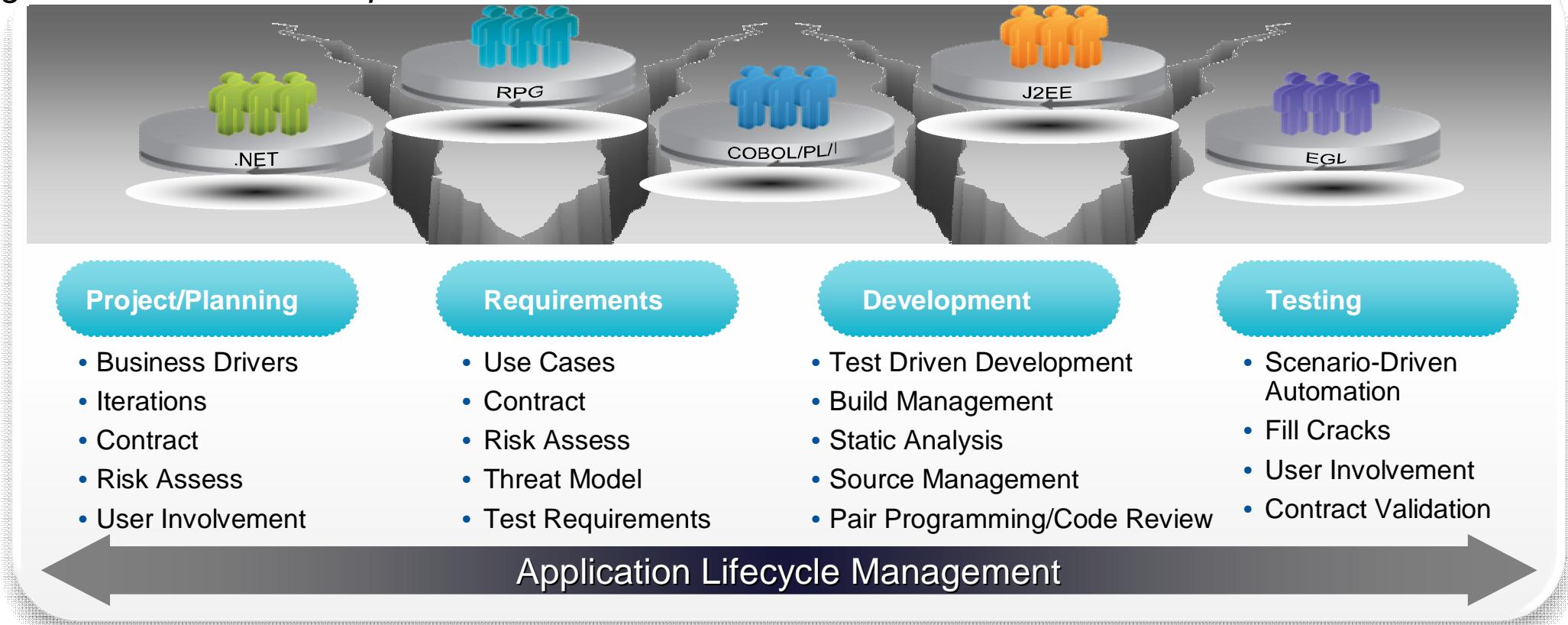


Mais...

Elles ont des équipes de développement disparates selon les plateformes, et les former aux nouvelles technologies est couteux, consommateur de temps et souvent irréalisable.

Les entreprises veulent...

Délivrer sur le marché plus vite et moins cher grâce aux méthodes agiles et à des techniques de développement orientée tests, traquant efficacement les besoins d'un bout à l'autre, réduisant les coûts d'infrastructures d'équipes, et augmentant la collaboration géographiquement étendue et la gouvernance informatique.

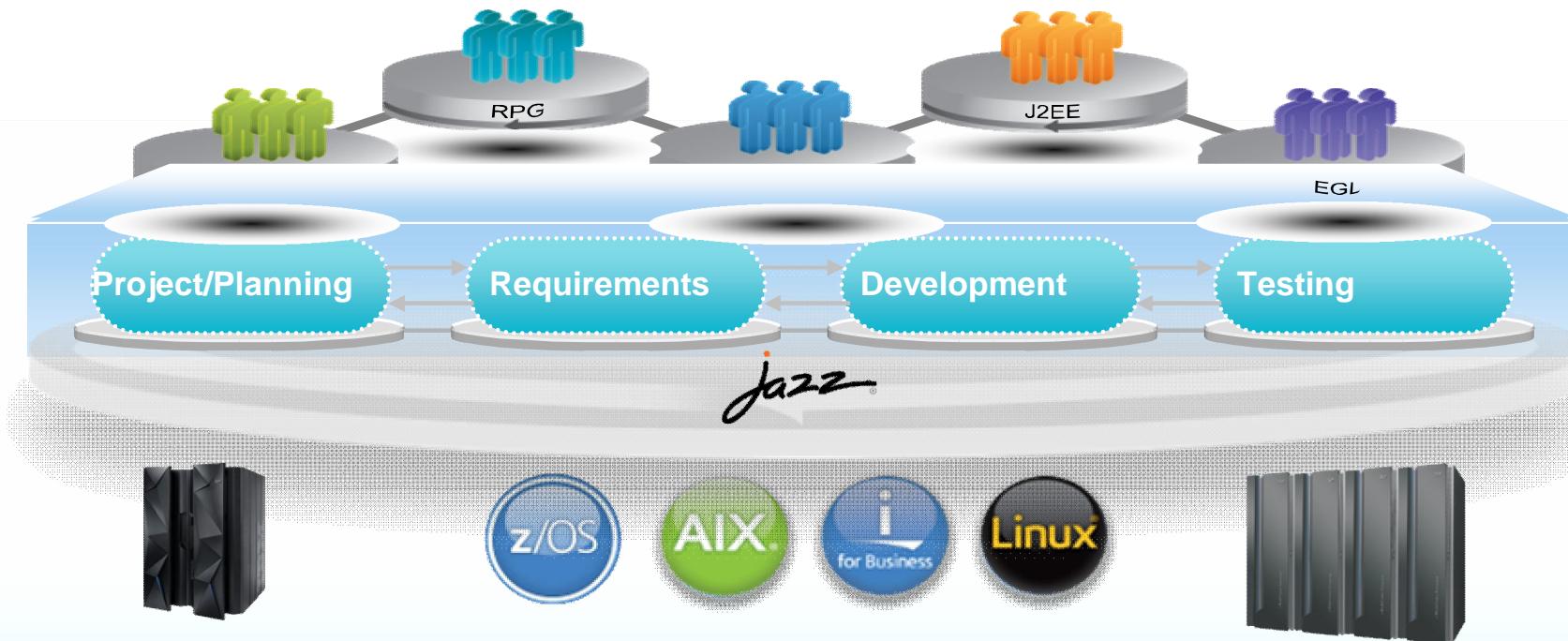


Mais...

Elles ont des “îlots” de développements, disposant chacun d’outils et procédés distincts rendant impossible la collaboration en temps réel, l’intégration, la supervision globale ou la traçabilité du cycle, ce qui engendre une réduction de la qualité et du temps de livraison sur le marché.

La Solution: Une gestion collaborative du cycle de vie des applications

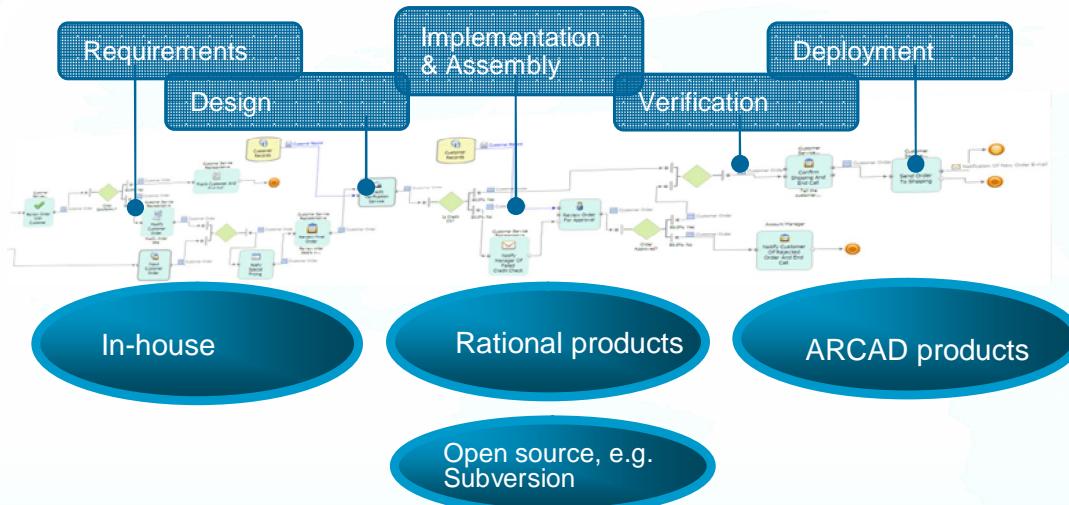
Déployez de nouvelles *infrastructures d'équipes communes* pour le contrôle des sources, le change management, et « le build » et obtenir une équipe plus performante, avec une collaboration intégrée, un processus d'automatisation et des fonctionnalités de reporting.



- ✓ Réduction du temps de développement de 15 à 20 %

La Solution: Une gestion collaborative du cycle de vie des applications

Déployez de nouvelles infrastructures d'équipes communes pour le contrôle des sources, le change management, et « le build » et obtenir une équipe plus performante, avec une collaboration intégrée, un processus d'automatisation et des fonctionnalités de reporting.



Livraison...

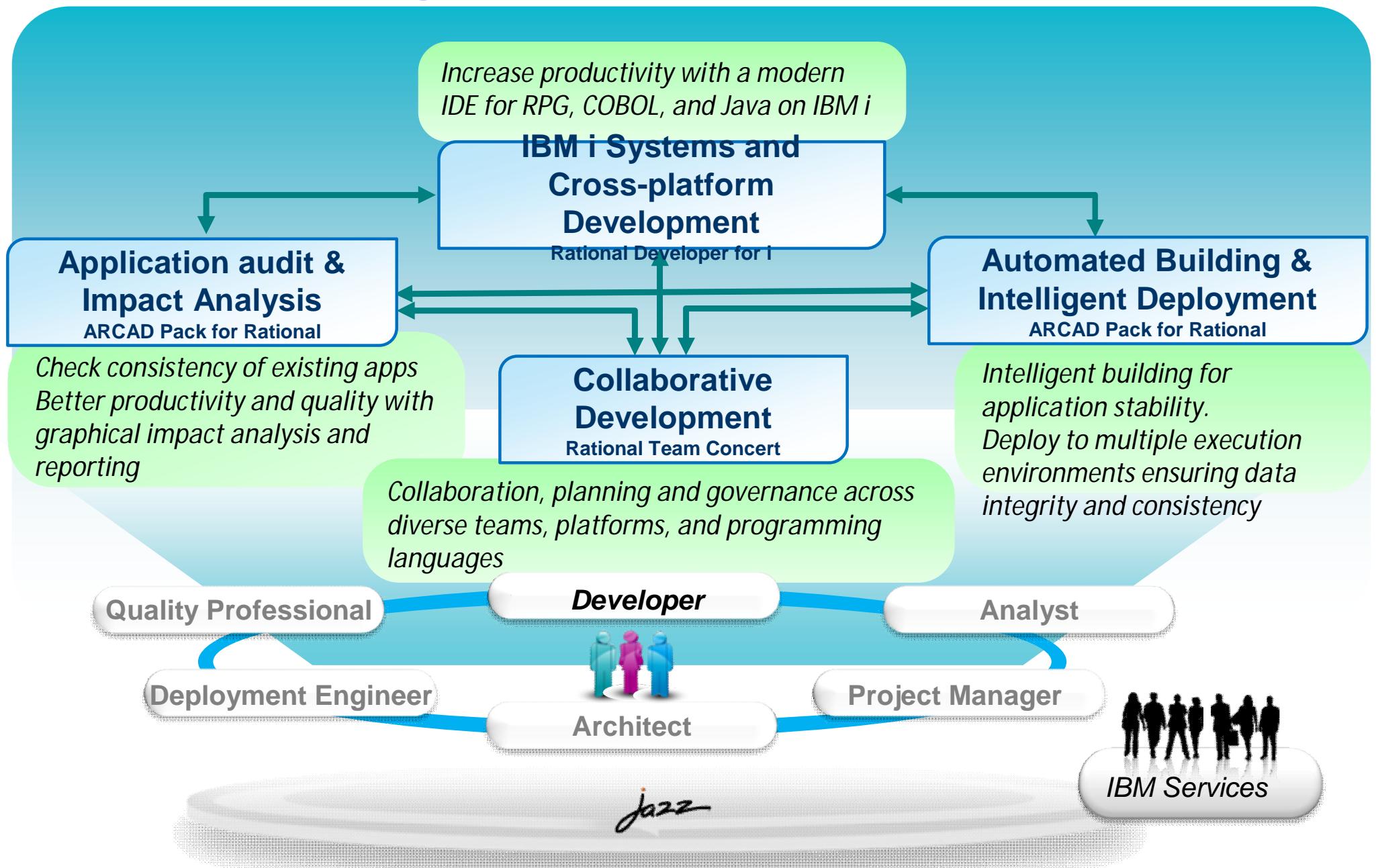
- Une seule plateforme intégrée pour gérer la livraison des projets multiplateformes.

Tous vos outils étroitement liés et travaillant pour vous sur une plateforme:

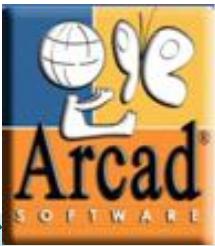


- Rational Team Concert v4.0.2
- Rational Requirements Composer v4.0.2
- Rational Software Architect Design Manager v4.0.2
- Rational Quality Manager v4.0.2
- Rational Build Forge v7.1.3.5

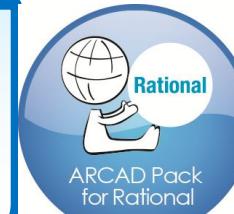
La solution IBM intégrée pour les développements IBM i



L'ARCAD Pack for Rational...



Advanced IBM i Development Assistance **ARCAD Pack for Rational**



A Powerful Integrated Toolset for Rational Developer for i and Rational Team Concert

Audit and restructure applications before loading into Rational Team Concert

Application Clean-Up ARCAD-Audit

Modernize applications By converting them to free-format RPG

Application Modernization ARCAD-Converter

Application Analysis ARCAD-Observer

Analyse and visualise application structures and dependencies in Rational Developer for i

Intelligent Deployment ARCAD-Deliver

Deploy to multiple execution environments ensuring data integrity and consistency

Automated Building ARCAD-Builder

Intelligent building of complex applications directly from Rational Team Concert

SUIVEZ LE CHEMIN...

Commencez avec Rational Developer for i

Optimise les tâches essentielles du développement

- Outils de développement moderne, basés sur Eclipse, pour IBM i,
- Editeurs visuels, vues outline, assistant de contenu, aide au langage intégrée
- Gestion de fichiers intégrée, avec les fonctions search, edit, compile/build, et debug
- Outils analytiques (diagramme d'application, hiérarchies d'appels, hiérarchies de types)
- Batch debug facile, interactif, applications Web et Web services dotées d'un debug visuel commun
- Outils de design visuel : Ecran et Report Designer
- Intégration avec Rational Team Concert , ARCAD Pack for Rational et HATS

```

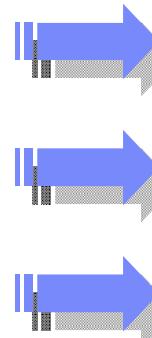
dbgaix3.torolab.ibm.com - PuTTY
On failure 0 is returned.

long CFSUtils::DirGetFirstFile(const char *dirpath, char *filename, int maxfilen
ame)
{
    long handle = 0;
    char *dirpathbuff;

    if (dirpath == NULL)
        return(0);

    if ((dir
    retu
    strcpy(c
    Columns . . . : 6 76          Edit          YANTZI/QRPGLESRC
    in a slash (   SEU==>      FMT * . 1 ....+.... 2 ....+.... 3 ....+.... 4 ....+.... 5 ....+.... 6 ....+.... 7 ....+
    CheckSla
    #ifdef W
    long K
    struct
    0006.00 * This program allows a user to enter and confirm an order. It sends
    0007.00 * a print request to a batch job via a data queue. The program only
    if ((h
    fi
    re
    0008.00 *
    handles District 1 and Warehouse '0001'.
    0009.00 *
    0010.00 * Don was here
    0011.00 *
    0012.00 * INDICATOR USAGE:
    if (fi
    0013.00 * 03 - F3=Exit
    0014.00 * 04 - F4=Prompt
    0015.00 * 06 - F6=Accept order
    0016.00 * 12 - F12=Cancel

    F3=Exit  F4=Prompt  F5=Refresh  F9=Retrieve  F10=Cursor  F11=Toggle
    F16=Repeat find  F17=Repeat change  F24=More keys
    (C) COPYRIGHT IBM CORP. 1981, 2005.
  
```



The screenshot shows the Rational Developer for i interface. On the left, the 'Remote System Explorer' displays a file tree for 'Remote Systems' and 'Local'. A context menu is open over a file named 'F386.cpp'. The menu includes options like 'Open', 'Edit', 'Search...', 'Compare With', and 'Replace With'. In the center, the 'Code Editor' shows the source code for 'F386.cpp'. The code is a C++ implementation of a utility function. On the right, the 'Outline' view shows the structure of the code, including various functions and variables. At the bottom, the 'Properties' view is visible.

```

// Gets information about a file.
// [in] filepath : Path to the file.
// [out] infoptr : Structure containing the file information.
// Return : On success 1 is returned. 0 is returned if there was an
// error accessing the file or the file does not exist.
int CFSUtils::getFileStats(char *filepath, futilFileInfo_t *infoptr)
{
    int len, flagslashend = 0;

    if (filepath == NULL || infoptr == NULL)
        return(0);

    //remove any trailing slashes if necessary
    len = strlen(filepath);
    if (len > 0)
        if (*filepath+len-1) == '\\' || *(filepath+len-1) == '/'
            //only remove the trailing slash if it is not the only slash
            if (strchr(filepath,'\\') != (filepath+len-1) && strchr(filepath,'/') != (filepath+len-1))
                flagslashend = 1;
}

#endif WIN32
  
```

Nettoyez vos applications natives IBM i : ARCAD-Audit

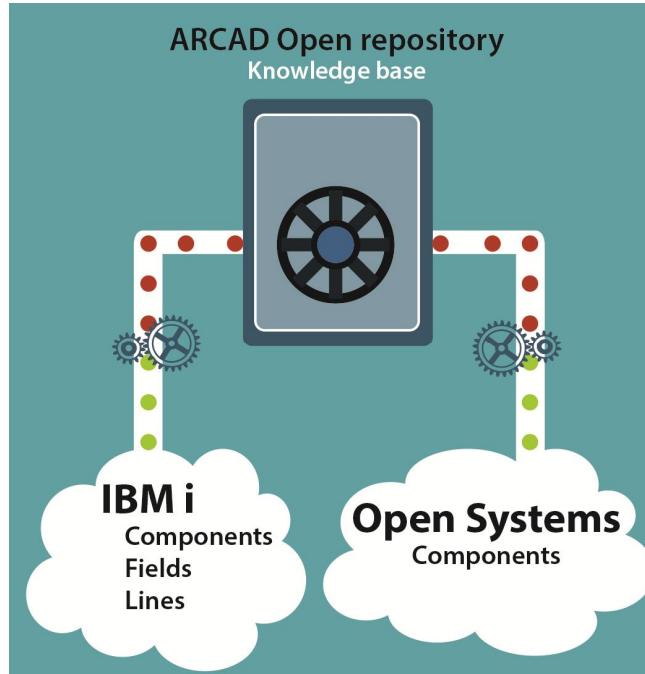
AUDIT



Identifiez et nettoyez :

- **Occurrences multiples du même source,**
- **Quels objets sont réellement utilisés dans les environnements de production,**
- **Source sans objets – soit objets perdus ou source non nécessaire,**
- **Objets sans source - un problème si vous souhaitez modifier un composant lié,**
- **Sources avec date ultérieure à l'objet – les composants qui exécutent les objets ne sont pas au même niveau que le source,**
- **Et, bien sûr, objets obsolètes**

Ajoutez ARCAD-Observer : Analyse d'applications références croisées multi-plateformes, visualisation et reporting



Recense toutes les inter-dépendances entre les composants IBM i (programmes ou fichiers) et les autres composants open-system (Windows, AIX, or Linux) depuis votre IDE.

Workflow
Diagram

NEW

Sources/object fields cross references

Cross references:Field only

Query level: Application : STD Version : V 1.01.A [D] (Integration DEMO)

Analysed elements: ECUST (HSPCUST [PF/FILE])

Information on source element

Name	Qualification
HSPCUST	0
HSPREF	0
HSR200	0
HSR200E	0
HSR400	0
HSR400E	0
HSR400ES	0

Call parameters

Parameters: Value

Inter-application links: *USED Usage type: *USED

Format/Procedure nb.: Field detail

i Project access view

Information on source element

Analysis results

Name	Application	Type de ...	Type
CompanyListServlet.java	STC	_STMF	*PGM
frmCustomer.frm	STC	_STMF	*PGM
HSR200	STD	RPG	*PGM
HSR200E	STD	RPGLE	*PGM
HSR200ES	STD	SQLRPGLE	*PGM

Call parameters

Properties: Info, derived, editable, last modified, linked

Inter-application links: Include ILE calls, Include modules, Include commands

Element count: 5

Access key:

Calling chain: HSR200 (Sales Order Entry / Maintenance / Inquiry)

Query level: Application : STD Version : V 1.01.A [D] (Integration DEMO)

Information on source element

Analysis results

Name	Appli... HSC200	Comp... CLP	Object... *PGM	Text
HSC200	STD	CLP	*PGM	Sales Order Processing
HSC200A	STD	RP6	*PGM	Sales Order Entry / Ma
HSC200B	STD	CLP	*PGM	Sales Order Processing
HSC200C	STD	RP6	*PGM	Invoice Print Processin
HSC200D	STD	RP6	*PGM	Delivery Note Print Pro
HSC200E	STD	RP6	*PGM	F4 Search Window
QCMDEXC	STD	*PGM	*PGM	Window for Allocation
HSC200F	STD	RP6	*PGM	Remove message(s) fr
QCMDEXC	STD	*PGM	*PGM	Send message to prog

Sources/objects (multi-platform) cross references files

RPG program calling chain

Calling chain: HSR200 (Sales Order Entry / Maintenance / Inquiry)

Query level: Application : STD Version : V 1.01.A [D] (Integration DEMO)

Information on source element

Analysis results

Name	Appli... HSC200	Comp... CLP	Object... *PGM	Text
HSC200	STD	CLP	*PGM	Sales Order Processing
HSC200A	STD	RP6	*PGM	Sales Order Entry / Ma
HSC200B	STD	CLP	*PGM	Sales Order Processing
HSC200C	STD	RP6	*PGM	Invoice Print Processin
HSC200D	STD	RP6	*PGM	Delivery Note Print Pro
HSC200E	STD	RP6	*PGM	F4 Search Window
QCMDEXC	STD	*PGM	*PGM	Window for Allocation
HSC200F	STD	RP6	*PGM	Remove message(s) fr
QCMDEXC	STD	*PGM	*PGM	Send message to prog

Data relationship model

Diagram showing relationships between various data objects like FRSSTART, FRSMAINX, LOGON, FRSODDY, FRSWU, FRS401, AGENTS, and CUSTOMERINFO.

Further information

Name: FLIGHT400C
Component Type: PP
Xref level: V 1.00.A

Object layer: 19.E
Last version: V 1.00.A

NEW

Convertissez votre ancien code RPG en RPG Free Format : ARCAD-Transformer RPG



Permet aux jeunes développeurs de gérer et maintenir vos applications
en les convertissant en RPG Free Format

ARCAD-Skipper - RemoteSystemsTempFiles/ARCAD07D/QSYS.LIB/FLGHT400C.LIB/QRPGLESRC.FILE/FRS005.RPGL - IBM Rational Developer for Power Systems Software

File Edit Source Compile(G) Navigate Search Project Run Window Help

FRS005.RPGL

```

Line 133 Column 1 Replace Browse
013300 I*
013400 C*
013500 C *ENTRY      PLIST
013600 C PARM
013700 C PARM          AGENT#
013800 C*
013900 C*             RESETFRSFAX
014000 C EXSR        INZSR
014100 C*
014200 C @EXIT       DOUEQ  @TRUE
014300 C*
014400 C WRITE       MSGCTL
014500 C EXFMT       FRSFAX
014600 C*
014700 C KEY         CASEQ  @F03      @F03SR
014800 C KEY         CASEQ  @F09      @F09SR
014900 C KEY         CASEQ  @F12      @F12SR
015000 C CAS
015100 C ENDCS
015200 C*
015300 C KEY         IFEQ   @F10
015400 C *INLR      ANDNE  *ON
015500 C *IN50      ANDEQ  *OFF
015600 C EXSR       @F10SR
015700 C ENDIF
015800 C*
015900 C ENDDO
016000 C*
016100 C END        TAG
016200 C*
016300 C MOVE       *ON      *INLR
016400 C*
016500 C*

```

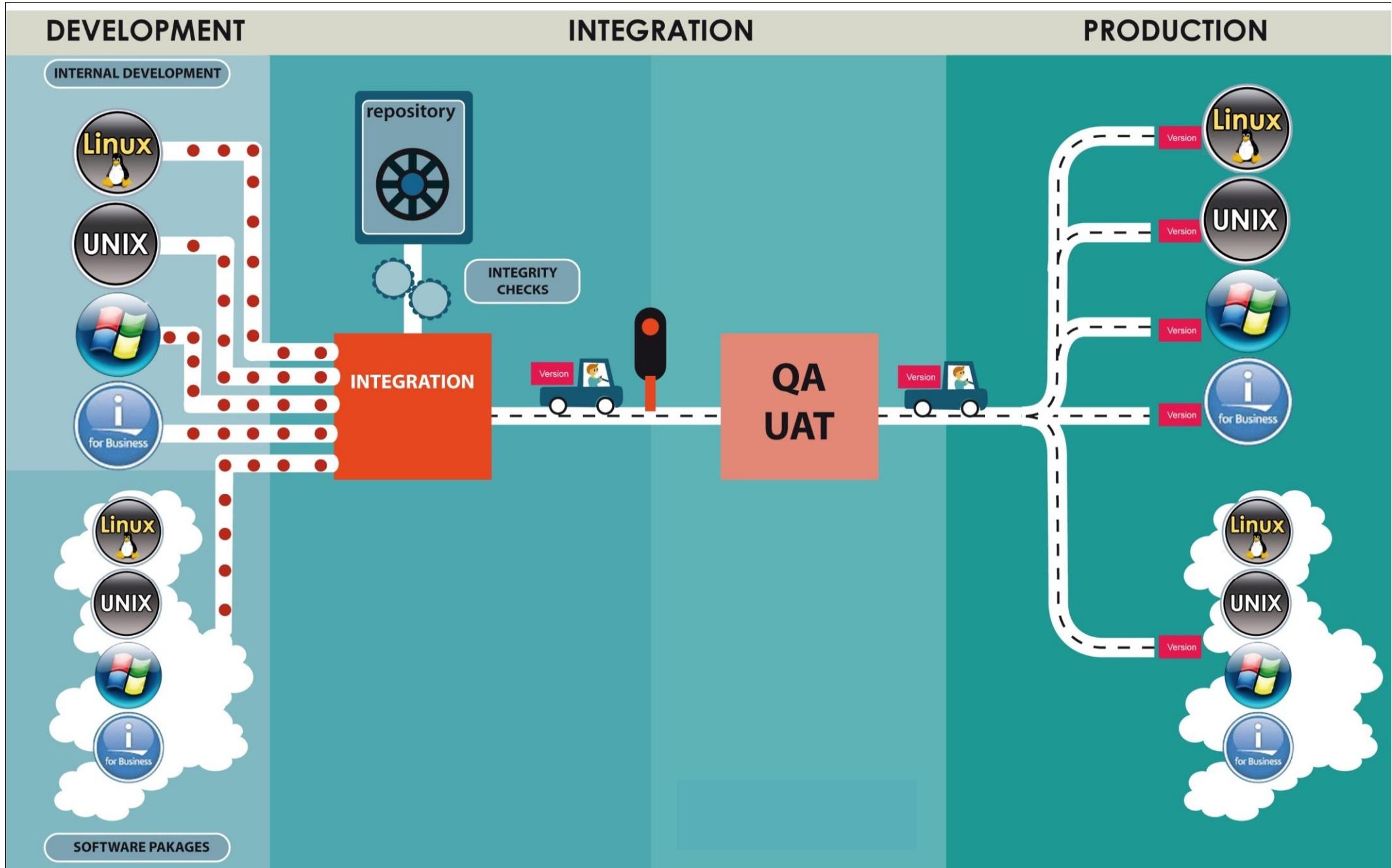
FRS005.RPGL

```

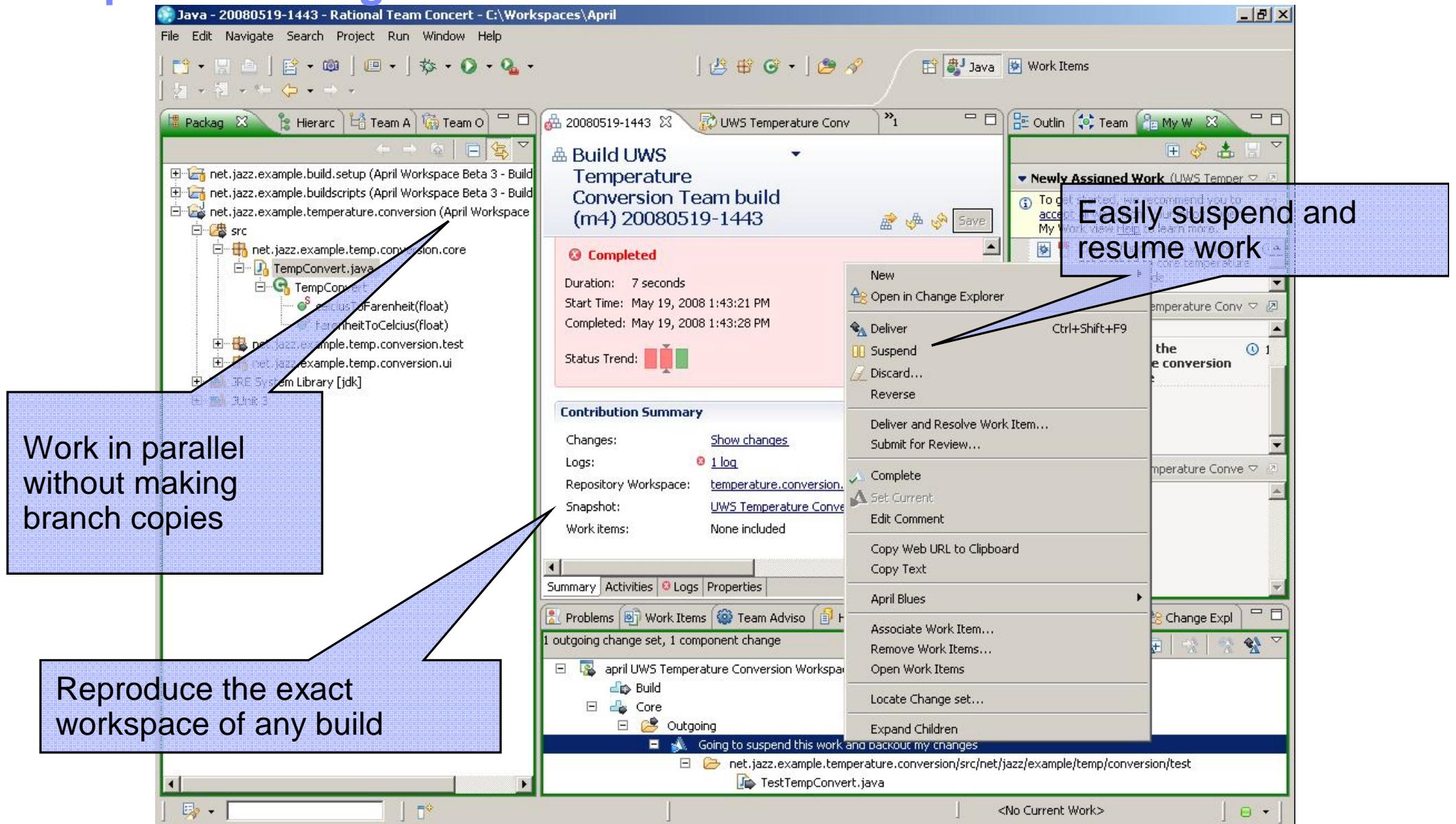
Line 186 Column 1 Replace
013300 I*
013400 C*
013401 C /Free
013800 // 
013900 // 
014000 Exsr INZSR;
014100 //
014200 DoU @EXIT = @TRUE;
014300 //
014400 Write MSGCTL;
014500 Exfmt FRSFAX;
014600 //
014601 Select;
014700 When KEY = @F03;
014701 Exsr @F03SR;
014800 When KEY = @F09;
014801 Exsr @F09SR;
014900 When KEY = @F12;
014901 Exsr @F12SR;
015000 Other;
015001 Exsr @ERRCK;
015100 EndSl;
015200 //
015300 If KEY = @F10
015400 and *INLR <> *ON
015500 and *IN50 = *OFF;
015600 Exsr @F10SR;
015700 EndIf;
015800 //
015900 EndDo;
016000 //
016200 //
016300 *INLR = *ON;

```

... Et construisez votre propre chaîne logistique logicielle ...

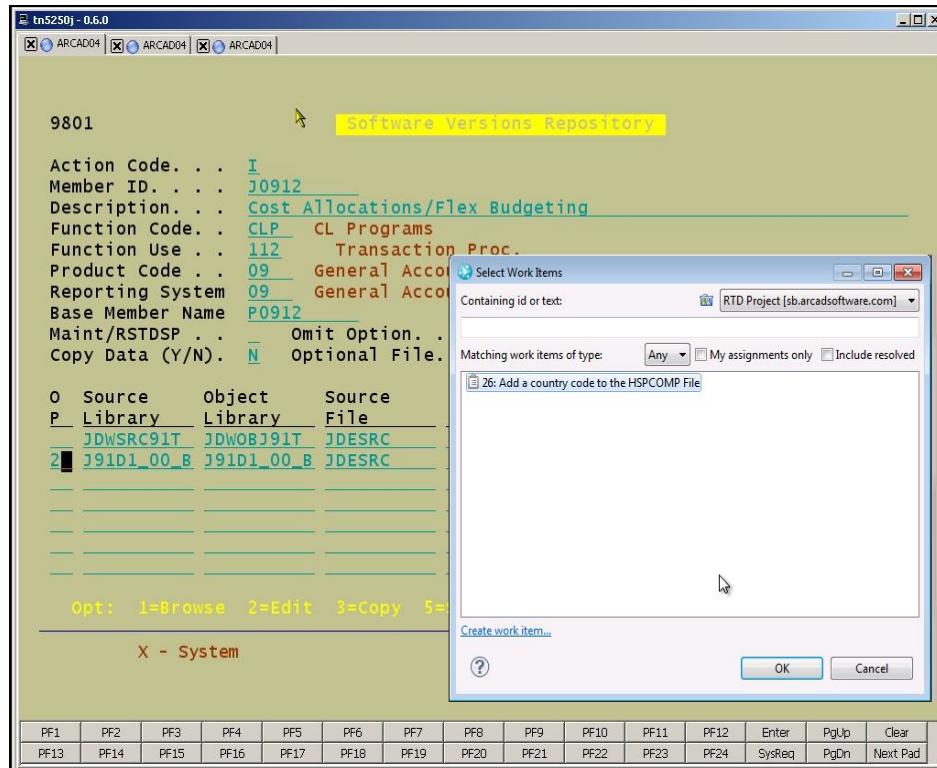


Rational Team Concert : Gestion du code source intégrée Traque les changements dans leur contexte



ARCAD Pack for Rational 5250 et Gestion des AGL

Gère le 5250 et les environnements AGL en même temps que les autres applications



- Intégration avec les outils AGL communs du marché
- Gestion des « CASE tool » et des AGL simultanément avec RPG, Cobol et les applications Java.

Environments supportés :

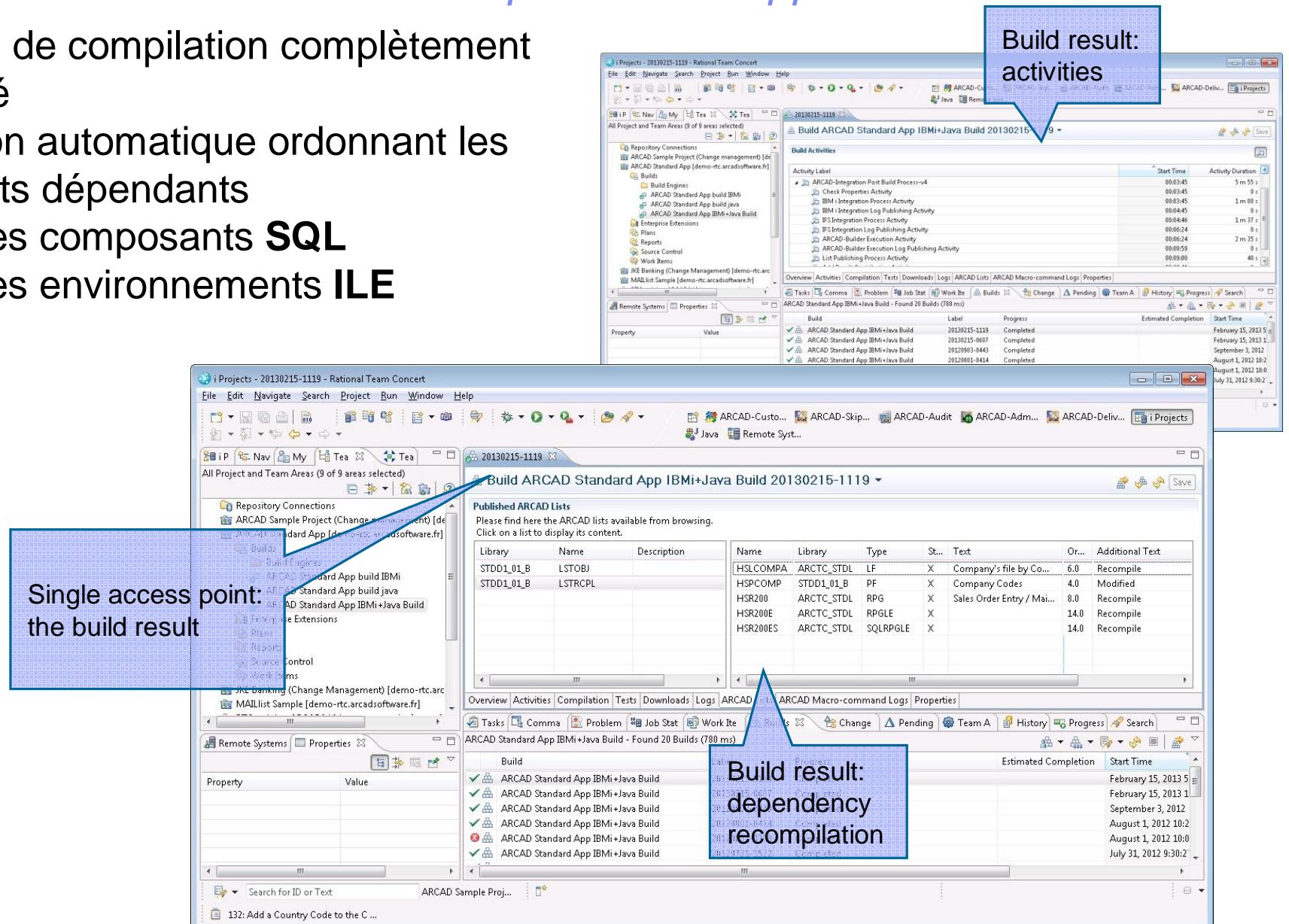
CA2E (Synon)
LANSA
JDE (JD Edwards)
BCD Websmart

- Liens avec les Work Items de RTC pour la planification et l'approbation
- Intégration fine avec les outils spécifiques de développement d'environnements.

ARCAD-Builder : Automatisation des “Build”

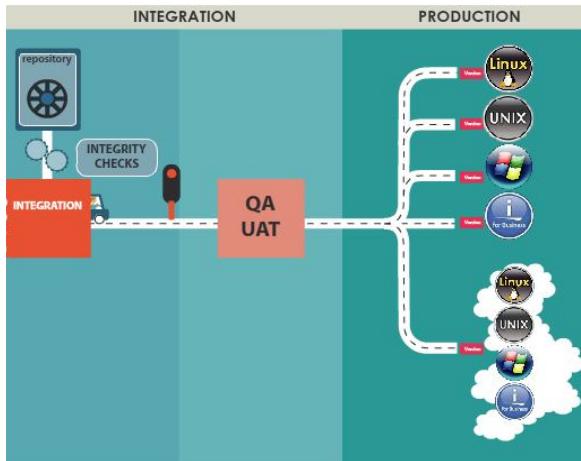
réduit les efforts nécessaires à la compilation des applications

- Processus de compilation complètement automatisé
- Compilation automatique ordonnant les composants dépendants
- Gestion des composants **SQL**
- Gestion des environnements **ILE**



ARCAD-Deliver : Release Management

Déploiement flexible pour IBM i et “Systèmes distribués”



Augmente la qualité et la fiabilité de vos systèmes avec :

- Transferts en production automatisés
- Déploiements synchronisés vers diverses plateformes
- Logging complet et Traçabilité
- Rollback

Site	L.	Version	Type	Sending date	Installation date
PRODUCTION	0	V1.01A	*APP	06/26/2012 13:12:51	
PRODUCTION	X	V1.01A	*APP	06/26/2013 13:12:03	
PRODUCTION	P	V1.01B	*PTF	02/15/2013 11:32:44	02/15/2013
PRODUCTION	P	V1.01A	*PTF	02/12/2013 05:45:10	02/12/2013
PRODUCTION	P	V1.01C	*PTF	02/15/2013 06:44:55	02/15/2013
PRODUCTION	P	V1.00.C	*PTF	10/05/2012 07:09:13	10/05/2012
PRODUCTION	P	V1.00.C	*PTF	05/03/2012 02:24:59	05/03/2012
PRODUCTION	P	V1.00.B	*APP	05/03/2012 02:19:40	05/03/2012

Application	L.	Version	Type	Sending date	Installation date
MAI	P	V1.00.A	*APP	02/29/2012 08:32:51	02/29/2012 08:32:51
STC	P	V1.00.I	*PTF	02/26/2013 05:01:37	02/26/2013 05:01:37
STD	0	V1.01B	*PTF	12/14/2012 04:02:00	
STD	X	V1.01A	*APP	06/26/2012 13:12:51	
STD	P	V1.01A	*APP	06/26/2012 13:12:03	
STD	P	V1.01B	*PTF	02/15/2013 11:32:44	02/15/2013 11:32:44

Application Sites/Environment installation

Utilise la même méthode, les mêmes règles et les mêmes produits pour déployer toutes vos applications quel que soit le système ciblé.

Ready to be deployed releases

Rational Team Concert : Collaboration

En temps réel et pour maximiser la collaboration

The screenshot shows the Rational Team Concert interface. On the left, the 'Work Items - Jazz Project - Team Concert' window displays a list of work items, including 'Story 45274'. The main pane shows the details of this story, including its summary, progress (11% complete), and a discussion section. A context menu is open over the story, with 'Chat...' highlighted. To the right, a chat window titled 'Kevin_Haaland@ca.ibm.com [started: 18:28:50]' shows a conversation between Kevin Haaland and Kartik. A callout arrow points from the 'Chat...' menu option to the chat window. Another callout arrow points from the 'Discussion' section in the main pane to the same chat window.

Avoid Duplication

- Find potential duplicates
- Subscribe team members
- Move / Copy work between projects

Team Awareness

- Shows team members and their online status
- Discussions kept with work for all time

Change Awareness

- Automatically links to changes if mentioned in chat
- Drag and drop any work item or query into chat

Markus Kent mentioned you in: JUnit4 should detect and report if it cannot invoke a method (38)

Rational Team Concert : Planning Dynamique intégré avec la prise en compte des méthodes à la fois traditionnelles et agiles

The screenshot displays the Rational Team Concert interface, showing a integrated planning environment.

Left Panel (Work Breakdown):

- Sprint 3:** Owner: Call Center | Iteration: Sprint 3 (11/30/09 - 1/15/10) | 5 Closed | 19 Open
- View As:** Work Breakdown
- Planned Items:**
 - Jean-Michel Lemieux: Backport call hang-up fix to Sprint 1 (New, 157), Fix up unit tests to avoid having to re-initialize for each suite (2 days), Update blocked listed table (5 minutes)
 - Jennifer Guinness: Prepare sample data for call demos (New, 156), Allow adding features via addons that can be (5 minutes)
 - Markus Kent: Adding new content to the server (New, 155)

Top Right Panel (Taskboard):

- Planned Items:** Andrew Hoo (Closed Items: 1 | Open Items: 4)
 - Exposé rendering for registrations (In Progress, 2 hours)
 - Exposé rendering for users (Resolved, 1 day)
 - Pick nice colors (Planned, 4 hours)
- Heather Fraser-Dube:** Exposé rendering for donations (In Progress, 1 hour), Implement the figure colors (Resolved, 1 hour)
- Jean-Michel Lemieux:** Finish the javadoc in our server APIs (Planned, 4 hours)

Bottom Panel (Phase Plan):

- Plan Details:** Auto-Save checked
- Planned Items:**
 - Write the rules down (Owned By: Jean-Michel Lemieux, Effective Estim: 1 day, Predecessor: None, ID: 28)
 - Add more items to our list (Owned By: Heather Fraser-Dube, Effective Estim: 1 day, Predecessor: None, ID: 22)
 - Create the schedule for the team (Owned By: Jean-Michel Lemieux, Effective Estim: 3 days, Predecessor: None, ID: 23)
 - Write the requirements (Owned By: Heather Fraser-Dube, Effective Estim: 2 days, Predecessor: Task <03:30, ID: 21)
 - Prepare the milestone plans (Owned By: Heather Fraser-Dube, Effective Estim: 2 days, Predecessor: None, ID: 24)
 - Setup more work for the team (Owned By: Heather Fraser-Dube, Effective Estim: 1 week, Predecessor: 24: Prepare, ID: 26)
 - WAN access from WTP site is slow - need to invest (Owned By: Jean-Michel Lemieux, Effective Estim: 1 day, Predecessor: None, ID: 27)
- Gantt Chart:** Shows tasks scheduled from November 10 to January 2, 2010.

Rational Team Concert : Transparence et état des lieux pour tout le monde

Toutes les parties prenantes connaissent l'état du projet sans avoir à le demander

Jazz Project Description

Process enabled team collaboration platform

The goal of the Jazz project is to build a scalable, extensible team collaboration platform for seamlessly integrating tasks across the software lifecycle. The new technology is called the Jazz Platform. The Jazz project is defining the overall architecture of the Jazz Platform, and building an initial set of Jazz components that plug in to the Jazz Platform.

The work in the Jazz project is divided into development work and maintenance work. Development work produces a consecutive line of releases. Maintenance work produces bug fix releases of the released produced by the development work.

Development as well as maintenance work is overseen by the PMC. The team members listed in this project area constitute the PMC.

Jazz Project Members (11)

CQ Connector Account	connector
Dejan Glogic	dashboardadmin
Erich Gamma	dashboardadmin, projectadmin, PMC, contributor
Jean-Michel Lemieux	dashboardadmin, projectadmin, PMC, contributor
John Vasta	connectoradmin
Kai-Uwe Maetzel	PMC, contributor
Kevin Haaland	PMC, contributor
Kim Moir	projectadmin
Peter Klenk	PMC, contributor
Scott Rich	PMC, contributor

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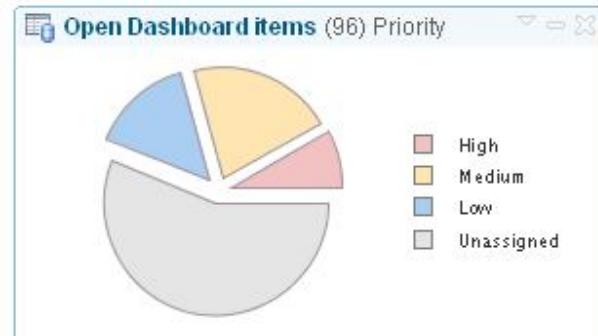
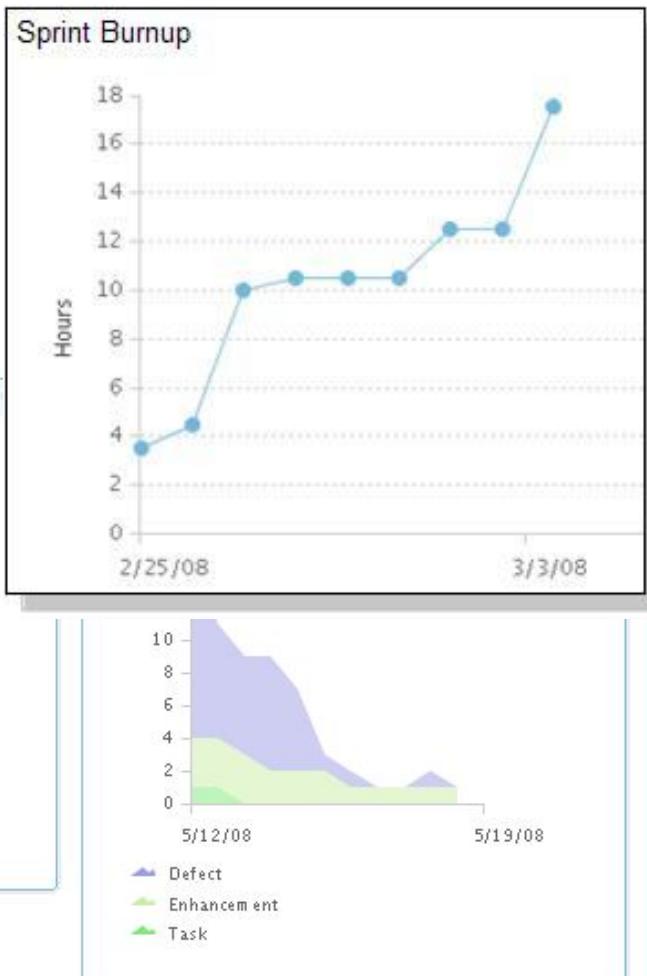
Jazz Project

- Jazz Devl
 - Agile P
 - Build
- ClearC
- ClearQ
- Comm
- Dashbu
- Develo
- Improv
- Incubat
- Install
- Jumps
- Proces
- Releas
- Report:
- Reposi
- Source
- System
- UI Des
- User A:
- Web UI
- Work It!
- X-Tear

Open vs Closed Work Items

Team Area: /Jazz Development/Dashboard
Category: Dashboards
Interval: 0.6 RC3

Legend: Open (Yellow), Closed (Blue)



Open Dashboard items (96) Priority

Priority	Count
High	8
Medium	20
Low	14
Unassigned	54

QUESTIONS

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