

# IBM Rational Day

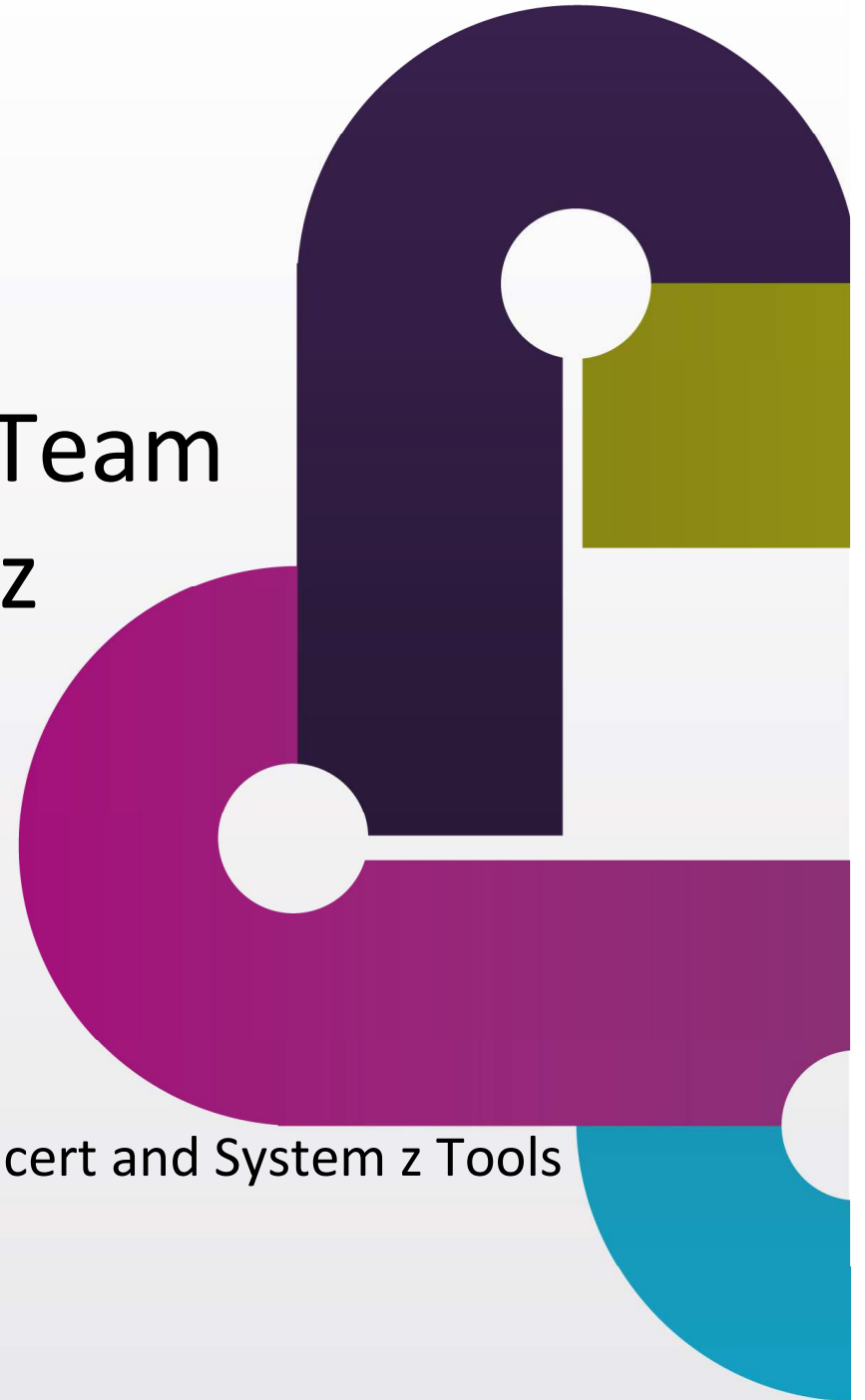
Jeudi 25 octobre 2012 - 8h30 à 17h00,  
Pullman Bercy

## Les nouveautés de Rational Team Concert pour le System z (4.0 and 4.0.1)

session EM 3

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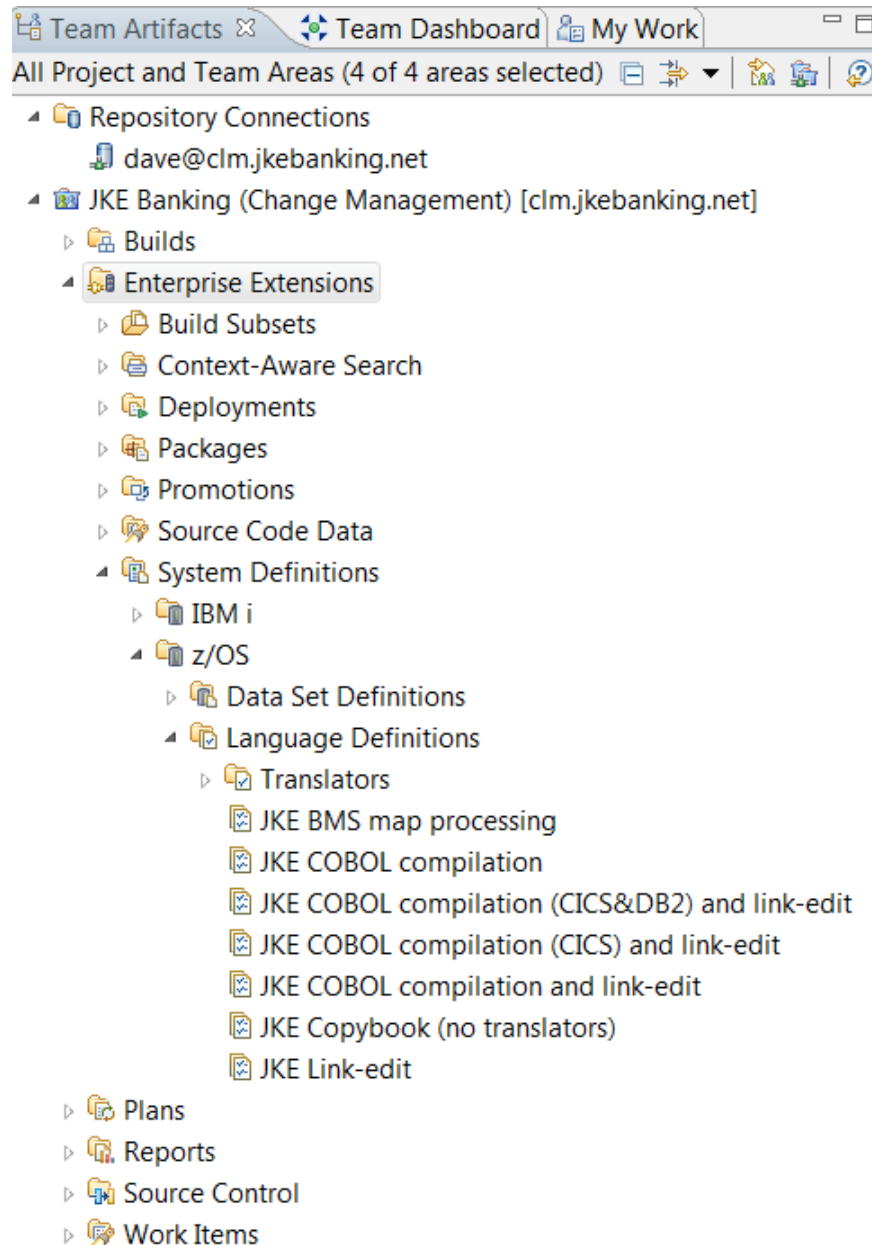


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## Agenda

- Introduction to Enterprise Extensions
- Dependency build
- Promotion
- Deployment
- RDz Integration

## Rational Team Concert Enterprise Extensions



- Dependency Build
- Promotion
- Deployment
- ISPF Client
- Integration with Rational Developer for System z
- Integration with Rational Developer for IBM i

# Dependency Build

- Build changed and impacted programs only

- Options:

- Build subsets
- Personal build
- Preview build
- Ignore changes
- Rebuild

Build Definition

ID: mortgage.dev Project or Team Area: JKE Banki

General | Dependency Options

**Build File and Targets**

Generate a build file from these language definitions

JKE BMS map processing	Add... Remove Move Up Move Down
JKE COBOL compilation	
JKE COBOL compilation and link-edit	
JKE COBOL compilation (CICS) and link-edit	
JKE COBOL compilation (CICS&DB2) and link-edit	

Use an existing build file

Specify a custom build file and the targets to be invoked. Properties can be referenced using \${propertyName}.

Build file:\*

Build targets:

Trust build outputs

Choose to build all programs or a custom subset of buildable artifacts.

Build workspace

Build subset

Build changed items only

# Source Code Data

mortgage.dev
JKE Banking (Change Management) | JKECMORT.cbl

## Source Code Data

Save

Namespace:

▶ **Jazz SCM Properties** <<http://www.ibm.com/xmlns/prod/rational/rtc/metadata/sourcefile/scm/>>

▼ **Dependency Properties**

The following properties were produced by the associated scanner and may be edited. To add properties or to create additional instances of existing properties use the Add button in the User-defined Data section.

**dependency** ✖

dependencyLogical...	dependencyFileType	dependencyPath	dependencyRefere...
SQLCA	INCL	SYSLIB	SQL INCLUDE
JKENBRPM	INCL	SYSLIB	COPY
JKEMTCOM	INCL	SYSLIB	COPY
JKEMORT	INCL	SYSLIB	COPY

fileType:

language:

logicalName:

▼ **User-defined Data**

User-defined data is not produced by the source code scanners and will persist even after resetting the scanner data.

Fred:  true  false

Bob:

Overview

# Source Code Data Query Editor

mortgage.dev JKE Banking (Change Management) All Main Programs With JKE in Name

**Source Code Data Query** Run Save Save Copy

Name: All Main Programs With JKE in Name

Scope

All streams

Stream: Mortgage Development Stream Browse...

**AND All must match**

fileType is MAIN

fileName contains JKE

Conditions Result Layout

Work Items Problems Builds Team Advisor Select Result V Pending Chan Source Code

Found: 6 resources

fileName	fileType	filePath	language	componentName
JKECSMRT.cbl	MAIN	/MortgageApplica...	COB	Mortgage
JKECMORT.cbl	MAIN	/MortgageApplica...	COB	Mortgage
JKENBRVL.cbl	MAIN	/MortgageApplica...	COB	Mortgage
JKECSMRD.cbl	MAIN	/MortgageApplica...	COB	Mortgage
JKEMPLIST.cbl	MAIN	/MortgageApplica...	COB	Mortgage
JKEMPMT.cbl	MAIN	/MortgageApplica...	COB	Mortgage



# Impact Analysis

**Impact Analysis Search**

Search for files that this file depends on, or for files that depend on this file.

Search Type

- Show files that this file depends on
- Show files that depend on this file

Stream: Mortgage Development Stream Browse...

Advanced

- Apply search path

Language Definition: JKE COBOL compilation (CICS&DB2) and link-ed Browse...

Build Definition: Browse...

Finish Cancel

---

**Tasks** | Source Code Data

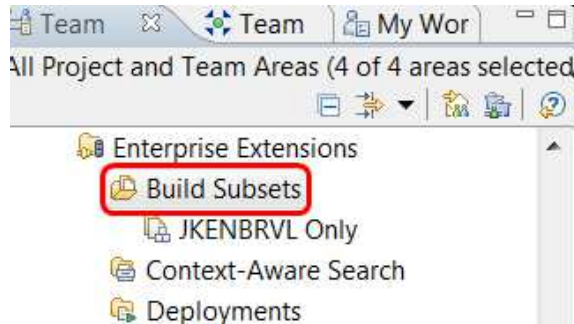
Found 2 files that JKECMORT.cbl potentially depends on. (Logical def

fileName	filePath	componentName
JKENBRPM.cpy	/MortgageAp...	Mortgage Common
JKEMTCOM.cpy	/MortgageAp...	Mortgage Common



# Dependency Build – What’s New!

- Build subsets are first class objects



- Pre and post-build script support

Pre-build script:

Post-build script:

Always run post-build script

- Build reports for non-preview builds

Component name: Mortgage						
Project	Source	Reason to build	Code	Language Definition	Output	Max Return Code
MortgageApplication-JKEMPMT	RYEHLE.DEVRC2B.COBOL (JKEMPMT)	2	COB	JKE COBOL compilation and link-edit	RYEHLE.DEVRC2B.LOAD (JKEMPMT)	0
MortgageApplication-JKECMORT	RYEHLE.DEVRC2B.COBOL (JKECMRT)	2	COB	JKE COBOL compilation (CICS) and link-edit	RYEHLE.DEVRC2B.LOAD (JKECMRT)	4

## Compiler output error/warning listings in build result

**Build mortgage.dev 20120420-1129370688**

Name	Errors	Warnings
MortgageApplication-JKECMORT	11	3
COBOL	11	3
JKECMRT	11	3

**Compile output**

Select a compile source to see its compilation errors and warnings.

Errors  Warnings

```

x Line 1 IGYSC0207 - 2 - Severe message(s) were issued during library phase processing. Re
x Line 29 IGYLI0048 - 2 - The member "JKEPDATX" was not found in the "COPY" library. Skipp
x Line 39 IGYPS2121 - 2 - "JKEPDATA-PRINCIPLE-DATA" was not defined as a data-name. Th
x Line 40 IGYPS2121 - 2 - "JKEPDATA-NUMBER-OF-YEARS" was not defined as a data-name.
    
```

Overview | Activities | **Compilation** | Downloads | Logs | Properties

# Dependency Build – What’s New!

- Advanced load options

The screenshot shows a web browser window with a tab labeled 'mortgage.dev'. The main content area is titled 'Build Definition' and contains the following fields and options:

- ID:** mortgage.dev
- Project or Team A:** Project or Team A
- Load Options:** Specify file extraction details. Properties can be referenced using `${propertyName}`.
- Load directory:\*** `${directory.root}/dev`
- Delete directory before loading
- Resource prefix:\*** RYEHLE.DEVRC2B
- Load workspace to the load directory at the beginning of the build.
- Load workspace to the resource with the resource prefix at the beginning of the build.
- Create folders for components
- If only some of the components in the workspace are to be built, exclude the ones that do not need to be loaded.
- Components to exclude:** [text input] [Select...] [Clear...]
- The components to exclude will be available as the build property "team.enterprise.scm.loadComponents".
- Select load rule files describing how to load the build workspace.
- Load rules:** [text input] [Select...] [Clear...]
- The load rules will be available as the build property "team.enterprise.scm.componentLoadRules".

# Dependency Build – What’s New!

- Variable overrides

**Translator**

Name: PL/I compilation

**Call Method**

Called program

Data set definition: IBMZPLI

Default options: **&LISTING** OBJECT

DD names list:

ISPF command or exec

Command/member:

TSO command or exec

Command/member:

Maximum return code: 0

Variables:

Name	Value
<b>LISTING</b>	LIST

Explorer

Properties for IBMJSO1.pli

Enterprise Extensions

Language definition: PL/I

Always load this file during dependency build

Variables

Define variables and their values to be used by this file.

Name	Value
<b>LISTING</b>	<b>NOLIST</b>

# Dependency Build – What’s New!

- Load with dependencies

**Source Code Data Query**

Name:

Scope

All streams

Stream: Mortgage Development Stream

**AND All must match**

logicalName contains

fileType is

Conditions | Result Layout

Tasks | Pending Changes | Team Advisor | History | Console | Source

Found: 6 resources

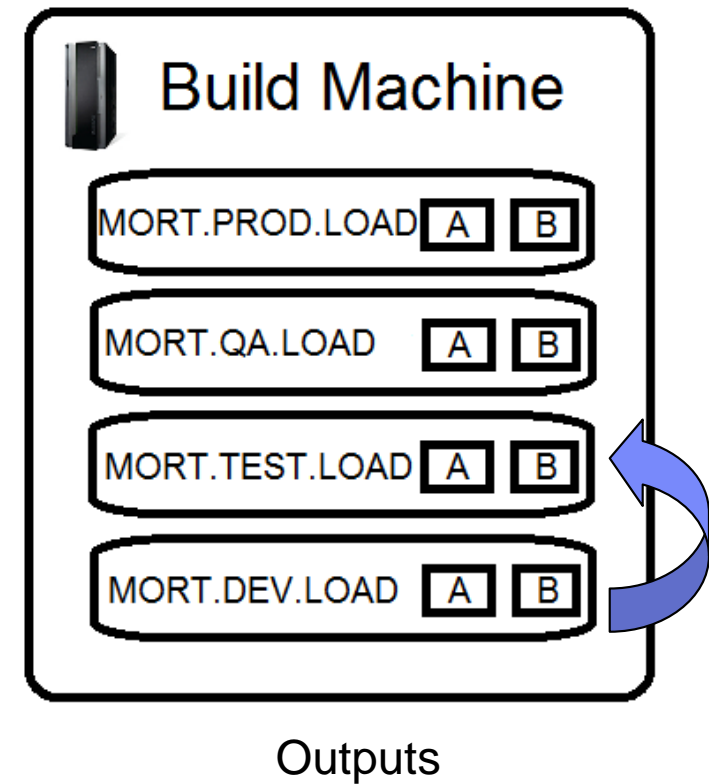
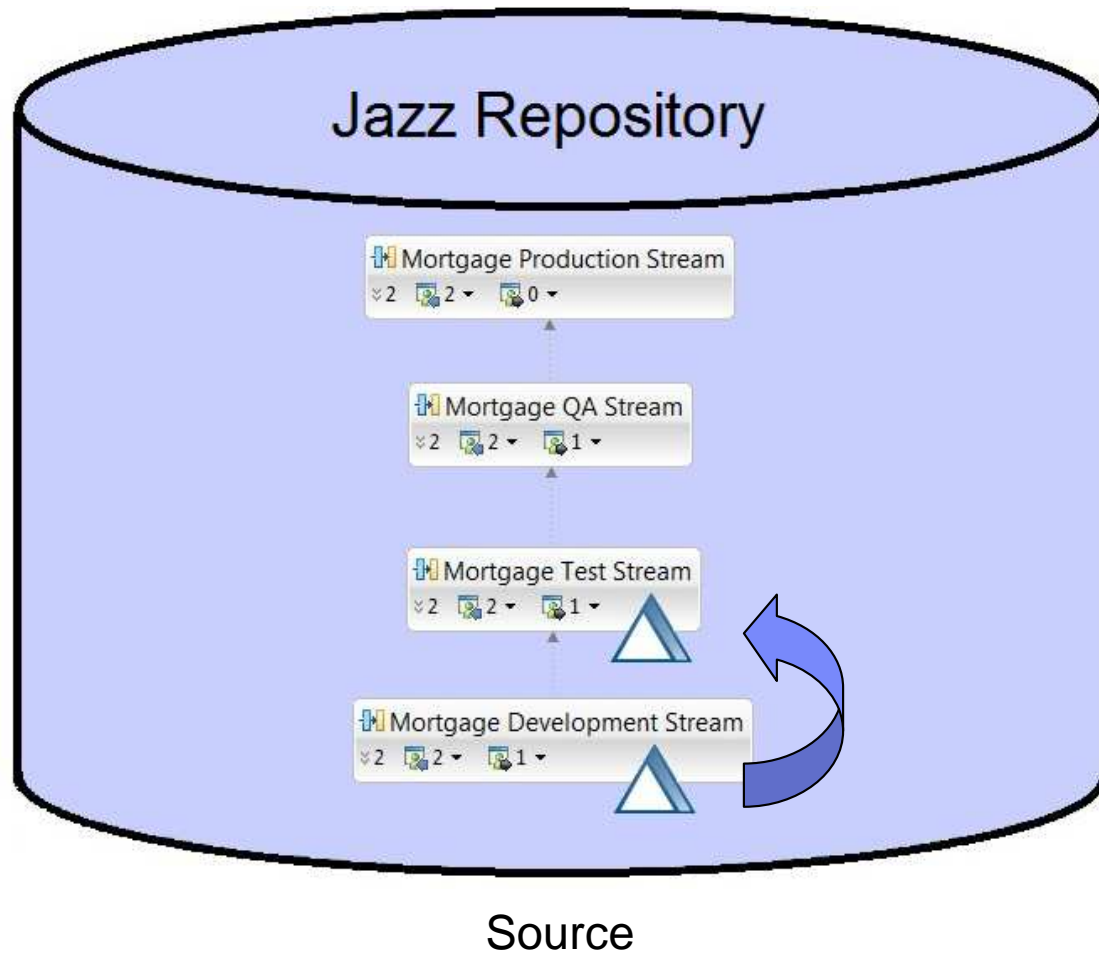
fileName	fileType	filePath	language	componentName
JKEMLIST.cbl	MAIN	/Mortgag...	COB	Mortgage
JKENBRVL.cbl	MAIN	/Mortgag...	COB	Mortgage
JKECMORT.cbl				Mortgage
JKECSMRD.cbl				Mortgage
JKEMPMT.cbl				Mortgage
JKECSMRT.cbl				Mortgage

Context menu for selected row:

- Open local file
- Open remote file
- Open source code data
- Load...
- Load with dependencies...**
- Impact Analysis...

# Promotion

- Flow source code changes and build outputs through the development hierarchy



# Promotion – What’s New!

- Option to skip timestamp check during output promotion

promote.mortgage.devtotest

**Promotion Definition**

ID: promote.mortgage.devtotest

**Enterprise Promotion**  
Define enterprise promotion configuration properties.

Source build definition:\* mortgage.dev

Target build definition:\* mortgage.test

Select components from the source build definition workspace to promote.

- Mortgage
- Mortgage Common

Skip timestamp check when build outputs are promoted

- Option to allow promotion of outputs built with back-level or up-level inputs if delta state is non-impacting

**Promote Work Items**

**Work Item Selection**  
Select the work items to be promoted and specify any additional options.

Definition: promote.mortgage.devtotest

**Promotion options**

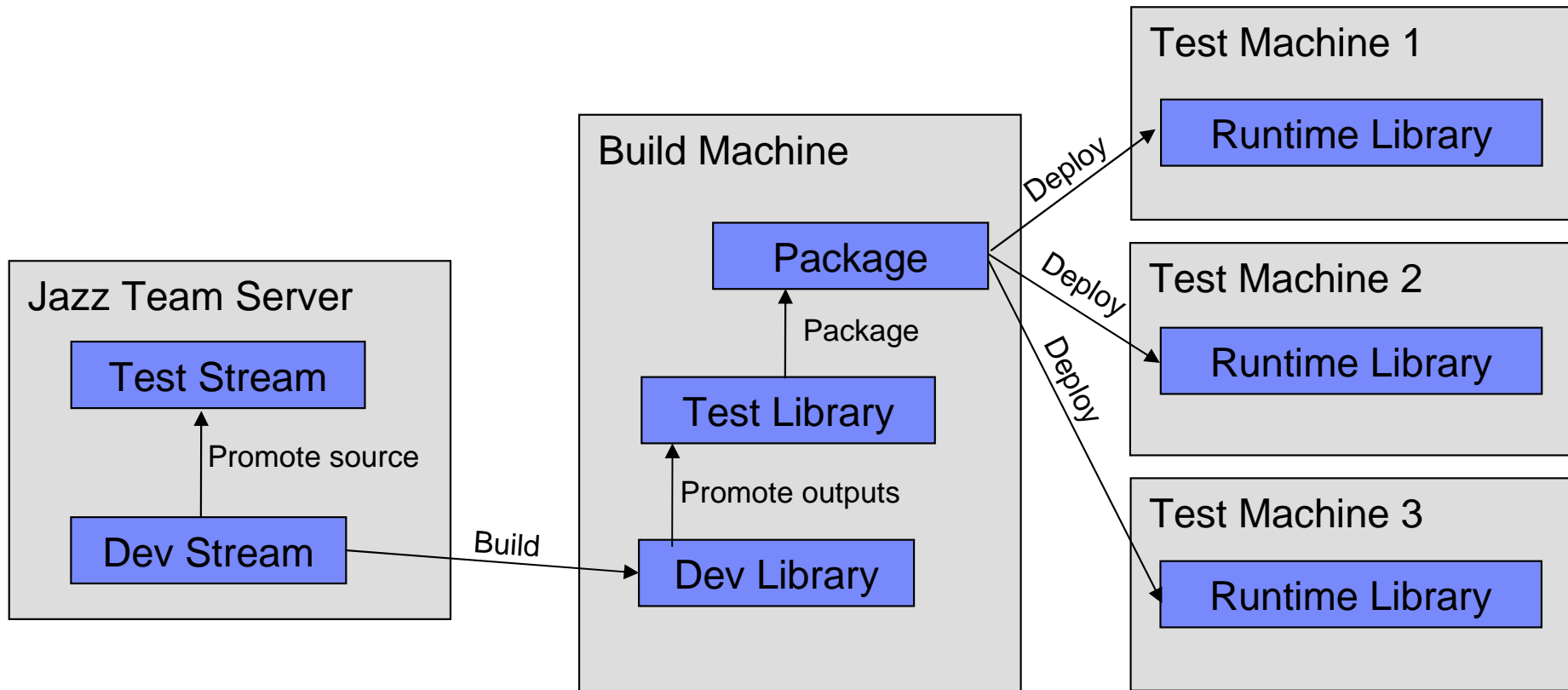
- Promote source and outputs
- Promote source only
- Include children of selected work items
- Consider ignored changes

Select Work Items:

ID	Summary
<input checked="" type="checkbox"/> 75	Implement - Validate Loan Term and Amount

# Deployment

- Package build outputs and deploy to various runtimes





# Deployment – What’s New!

- Create shiplists in package editor

**Package Definition**

ID: package.mortgag Project or Team Area: Business Recovery Matters

Include	Exclude
RYEHLE.DEV.LOAD(*)	

Buttons: Add..., Edit..., Remove

Overview | Properties | z/OS Packaging | Ant

- Create restore mapping file in package editor

**Package Definition**

ID: package.mortgage.dev Project or Team Area: Business Recovery

Package Options

Specify the PDS to package, and where to deploy them in the restore mapping table.

From PDS	To PDS
RYEHLE.DEV.LOAD	RYEHLE.TESTENV1.LOAD

Overview | Properties | z/OS Packaging | Ant

## Non-sequential deployment

**Request Deployment**

Request a deployment using the Load, Deploy, Load and deploy or Rollback options.

Build: deploy.mortgage.test

- Build Options
- Build Agent Authentication Override
- Deployment Options
  - Select deployment type: Load and deploy
  - Package: 20120423-2211240422

## Personal deployment

**Personal deployment**

Deployment Options

Select deployment type: Load and deploy

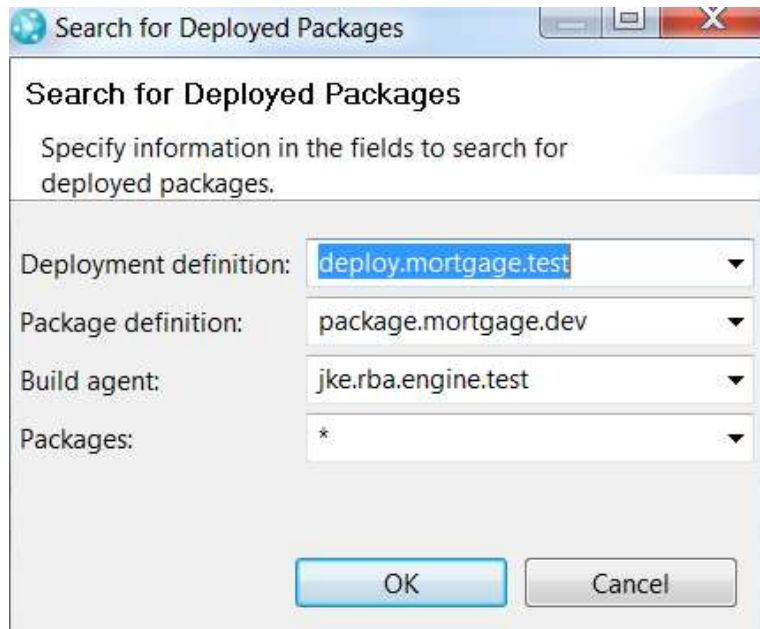
Package: 20120423-2211240422

Personal Deploy

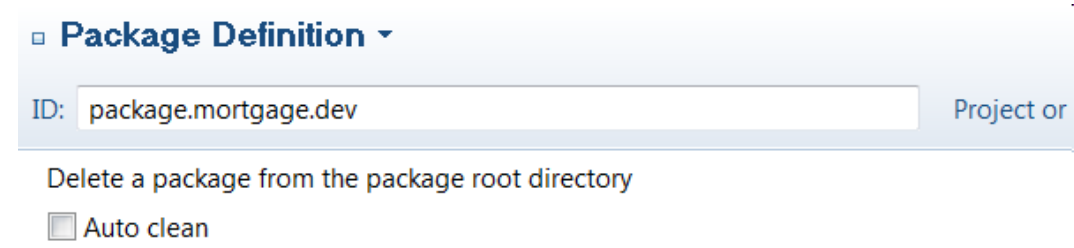
From PDS	To PDS
RYEHLE.DEV.LOAD	RYEHLE.PERS.LOAD

# Deployment – What's New!

- Query deployed packages

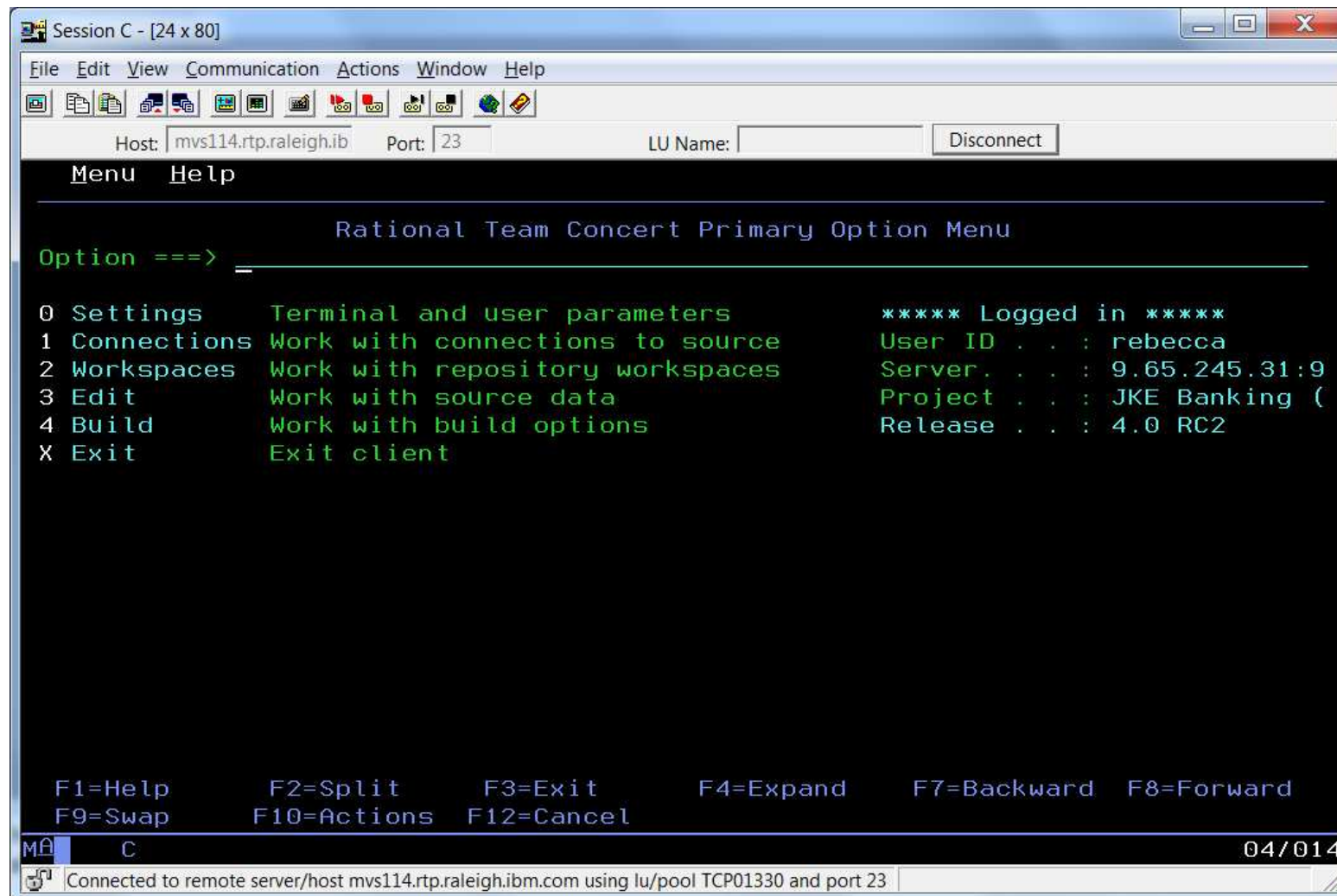


## Auto clean packages



# ISPF Client

- Full function SCM client



# ISPF Client – What’s New!

- Conflict resolution: compare and merge

```

VIEW          RYEHLE.REB.COBO(LJKENBRVL) - 01.01          Changes are shown
=NOTE= Lines which exist only in the local file are shown with a label on the
=NOTE= line , for example .OAAAA. Lines which exist only in the remote file are
=NOTE= shown as information lines (====) and are shown in white.
- - - - - 37 Line(s) not Displayed
000038          05 FILLER          PIC 99 VALUE 5.
000039          05 FILLER          PIC X(80)
000040          VALUE 'ZERO OR LESS MONTHS'.
000041          05 FILLER          PIC 99 VALUE 6.
000042          05 FILLER          PIC X(80)
=====          VALUE 'LOAN YEARS MUST BE 10, 20, 30 OR 40'.
.OAAAA          VALUE ' '.
    
```

- Create work items for change sets

```

----- New Change Set -----

Enter "*" in Work Item field to list available work items

Work Item . . . _____
Comment . . . _____ +

Command - Enter "/" to select action
/ Create work item

F1=Help      F2=Split      F3=Exit      F4=Expand      F7=Backward
F8=Forward   F9=Swap        F10=Actions  F12=Cancel
    
```

# ISPF Client – What’s New!

- Sparse loading: project, folder, and file level

```
Load Component List Actions

Component Mortgage

Load Component Action
=  1. Select zComponent projects
   2. Search for zFile/member
   3. Load all component's files

Select a choice and press ENTER to process action.
```

```
Search for zFiles or Files

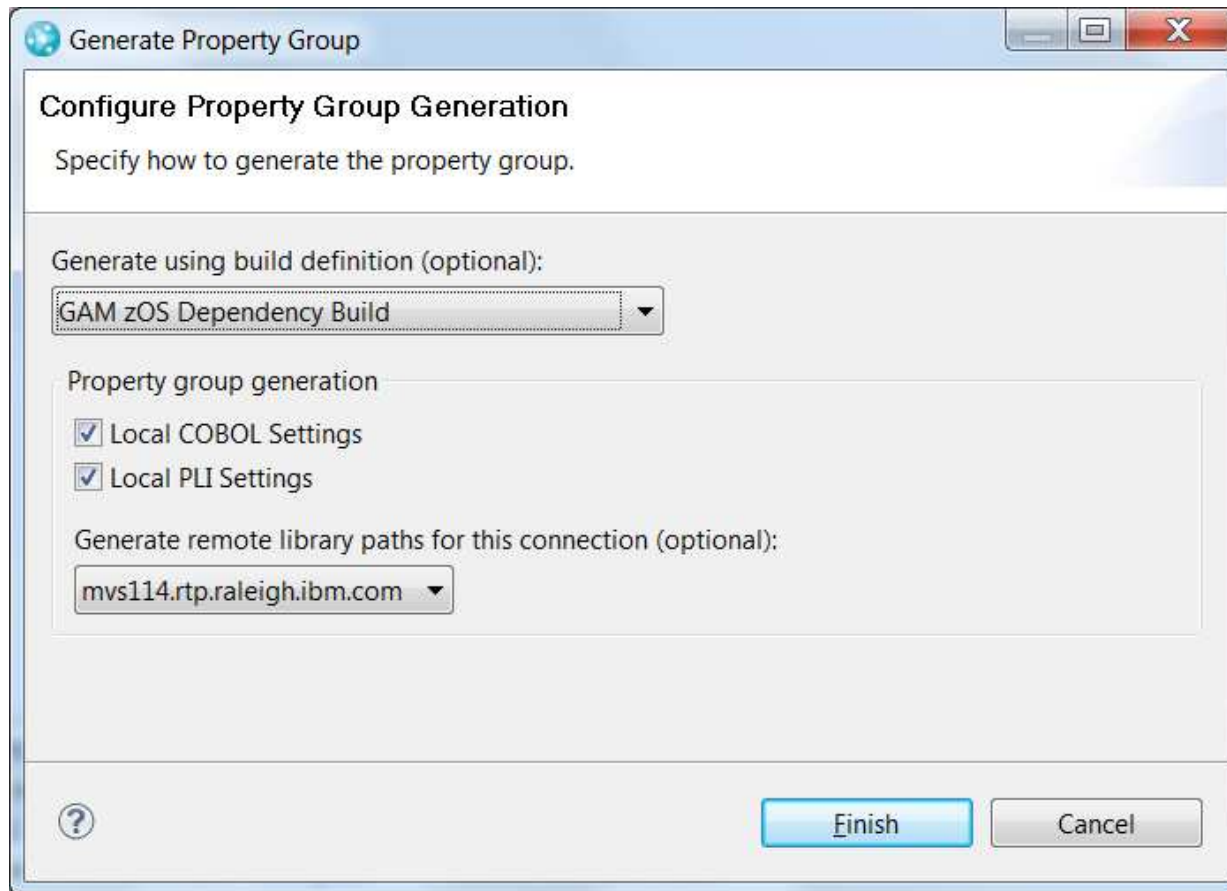
Repository Workspace : Rebecca's
Stream . . . . . : Mortgage Development Stream
Component . . . . . : Mortgage
zComponent project . : *

zComponent Specification
zFolder/Type . . . . . : COBOL
zFile/Member . . . . . : JKE*

General Specification (Overrides zComponent Specification)
Folder/File pattern . . : _____
```

## Integration with Rational Developer for System z – What's New!

- Generate property groups for your local project and option to specify remote path



## RTC 4.0.1 .... 4Q 2012

We are currently wrapping up the 4.0.1 RTC release.

This is functionally a small release while the development teams experienced and learnt from working in the new 8 week cadence environment.

8 week cadence is the next step on our Agile development process journey.

Learn more about how we are approaching development of the RTC product by visiting <https://jazz.net/wiki/bin/view/Main/RTCContinuousDeliveryPlanning>

The following slides briefly describe the functionality improvements made to the EE functionality in this upcoming 4.0.1 release



# Dependency Build – What’s New in 4.0.1

## Override Translator Output Names

In the translator editor, you now can specify a pattern or a variable to override the names of the outputs. During a dependency build for z/OS and IBM i, the pattern will be applied to the input name to generate a new output name.

**Output Object**  
Specify the type and name for target output objects.

Object type: \*PGM

Rename output object

Pattern or variable: ====ABCD==

Example of above: ORDENTR becomes ORDEABCD

**Variables**  
Define variables and values used by this translator.

Name	Value
MODULE_ATTRIBUTE	MODULE(defaults)
BNDSRVPGM_ATTRIBUTE	BNDSRVPGM(defaults)
BNDDIR	*none
VAR1	*

**Data Set Properties**

DD concatenations:

DD Name	Data Set Definitions
SYSLIB	Object decks,CEE.SCEELKE

DD allocations:

DD Name	Data Set Defini...	Member	Output Member Name	Keep
SYSLIN	<INPUT>	no		no
SYSLMOD	Program objects	yes	====ABCD	no
SYSPRINT	Temporary file	no		no
SYST1	Temporary file	no		no

## ISPF Client – What's New in 4.0.1

Build result management in ISPF client

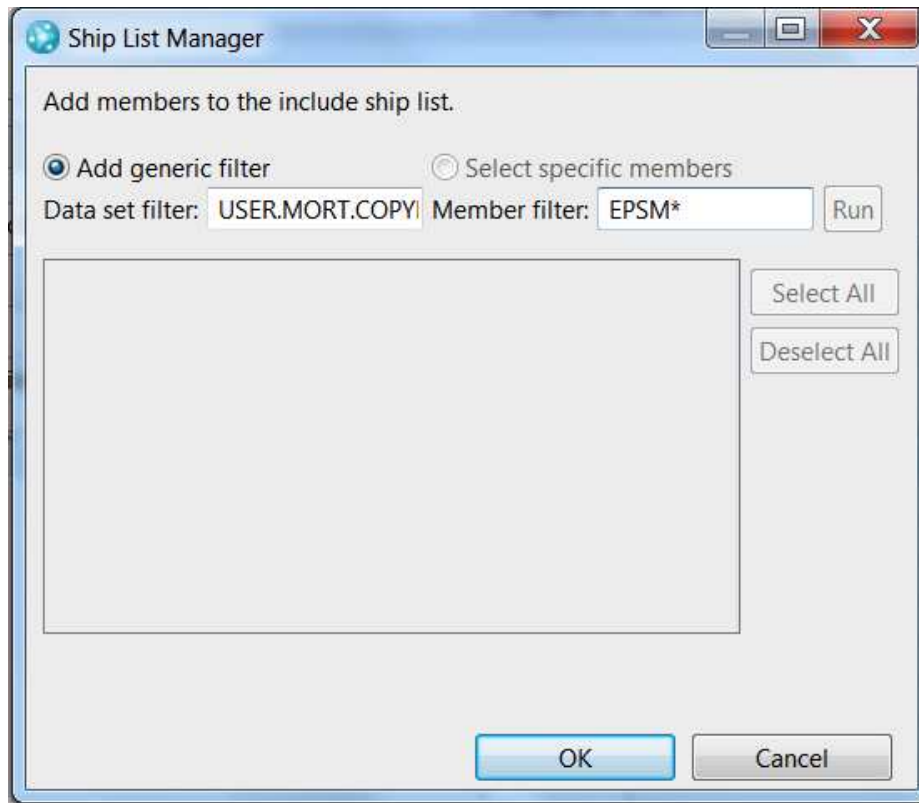
You can now use the ISPF client to abandon a build, cancel a pending build request, delete build results, and view the log files for a build.

```
Build Result List Actions
Build Result : zOS.integration.dependency 20120905-1030390953
More: +
Build Result Action
- 1. Rebuild
  2. Abandon Build
  3. Cancel Build Request
  4. Delete Build Result
  5. View Build Log Files
F1=Help      F2=Split    F3=Exit     F7=Backward F8=Forward
F9=Swap      F12=Cancel
```

## Deployment – What's New in 4.0.1

### z/OS Ship List Member Filters With Partial Member Filter and Wildcard

In the Package Definition for z/OS, the Ship List Manager dialog has the new ability to add a generic member filter with a partial member name and wildcard. All members matching the specified filter will be packaged.



# QUESTIONS

[www.ibm.com/software/rational](http://www.ibm.com/software/rational)



<http://www.ibm.com/software/fr/rational/>

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