



IBM Technical Summit 2013

Démarquez-vous

17 octobre | IBM Client Center Paris





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Plan de Convergence Pacbase – RPP 9.0

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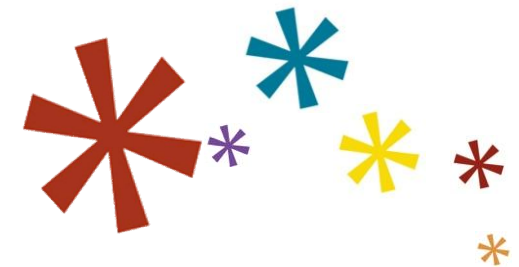
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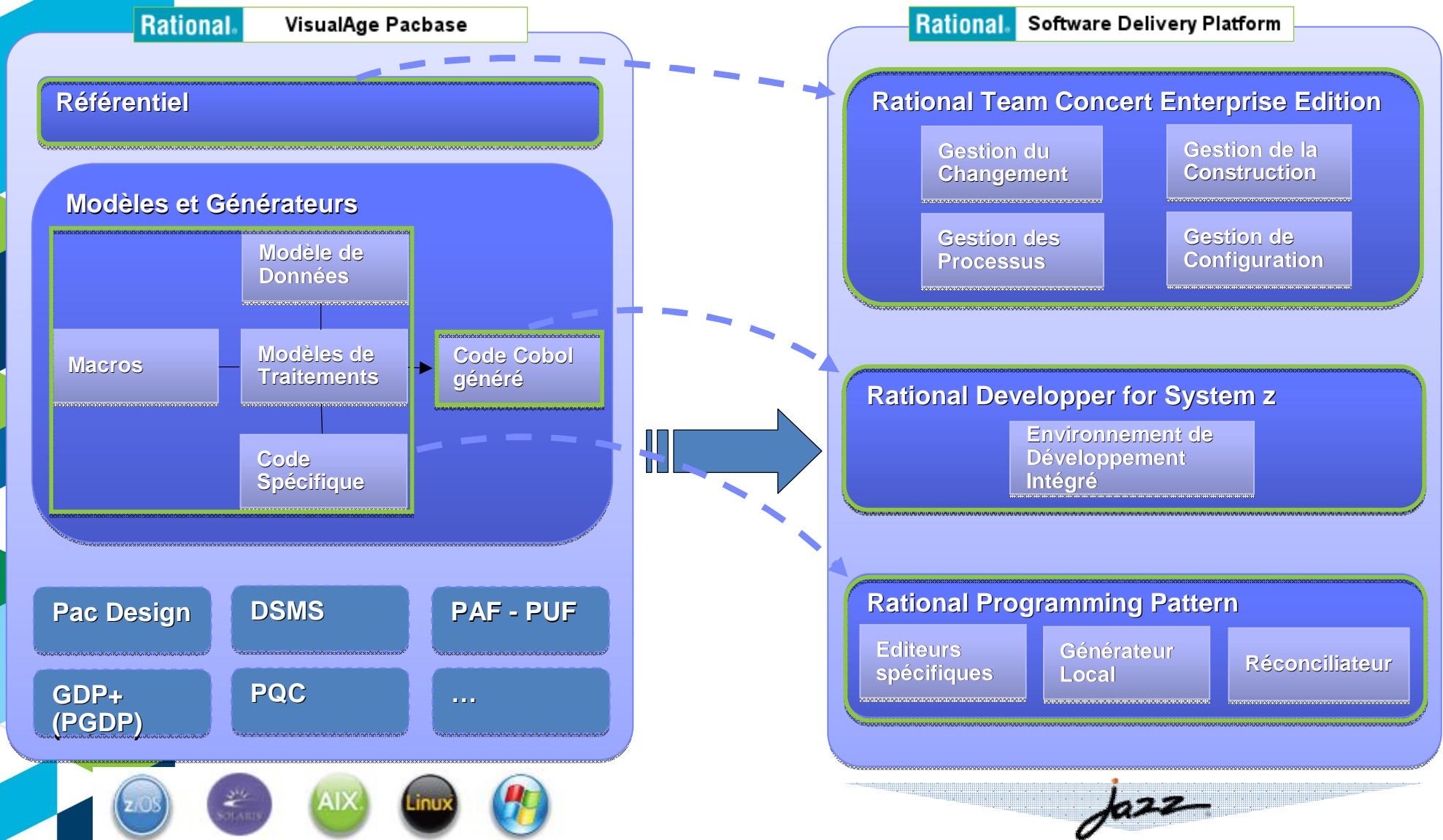
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Rational Programming Patterns

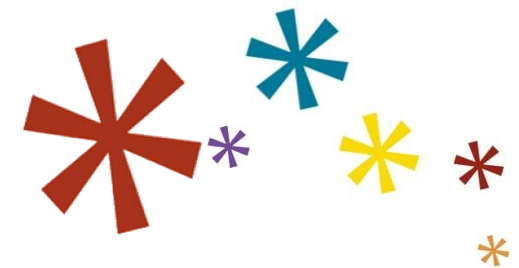


From Pacbase ... to RPP





RPP 9.0



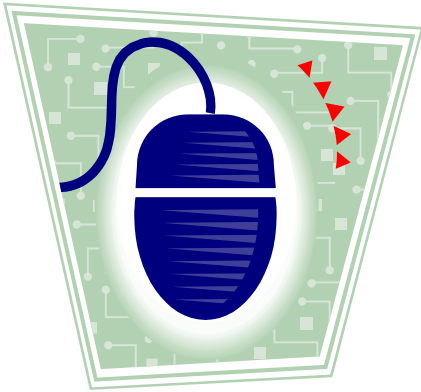
	2010	2011	2012	2013	2013	2014	2015
	8.0.1	8.0.3	8.5	9.0	9.0.1		
Migration completeness (supported entities)	X	X	X	X	X	X	
Design Methods						?	?
Generation targets extension		X		X		X	
PacTable DataStructure Generation						X	
Migration industrialization			X	X		X	X
Model & Code inheritance				X	X	X	
Source Code Quality Control		X	X	X		X	
Ecosystem integration				X		X	
Publishing Facilities						X	
Design Entities Administration						X	
Ergonomics improvements			X	X		X	X
Performance improvement			X				
API		X	X	X	X		
Repository Services	X		X		X		
Accessibility				X			

Objective : Improvement / Addition of functionalities

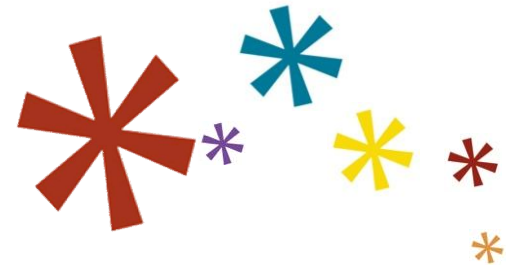
- Code Insertion Wizard
- Screen Simulation
- Comparison
- Dependence Relationships
- Quality Control
- Input Aid
- Migration
- Endeavor Integration



DEMONSTRATION

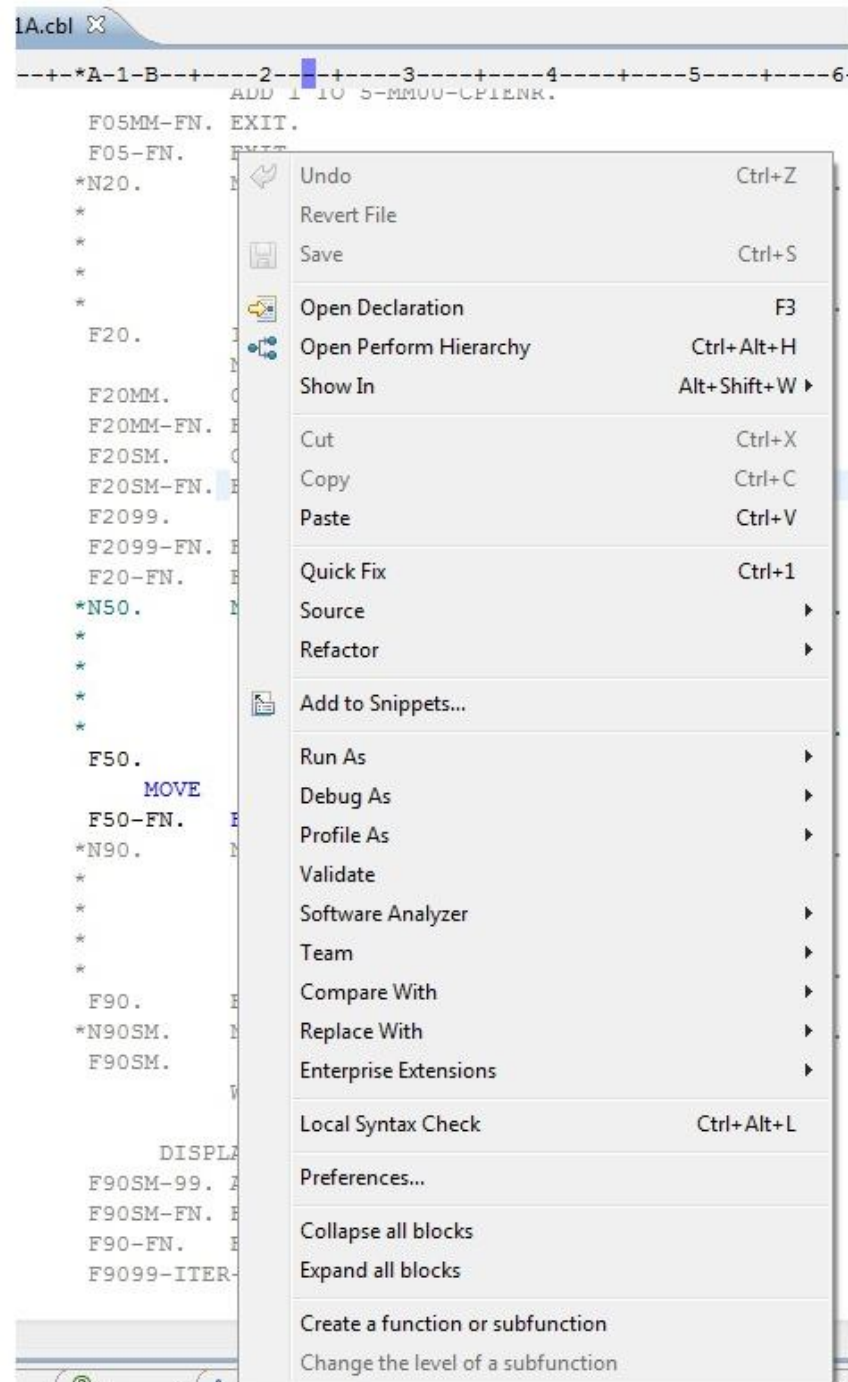


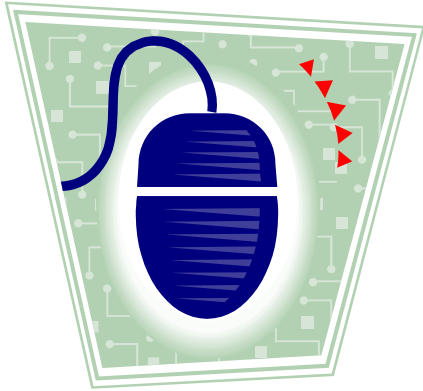
CODE INSERTION



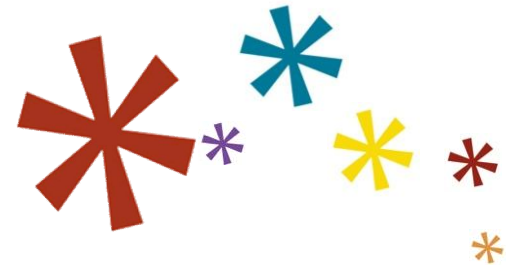
CODE INSERTION

- Function/Sub-function insertion wizard





CODE INSERTION BATCH PROGRAM



CODE INSERTION

- Function/Sub-function insertion wizard (Batch programs)

Create a function or a subfunction

Create a function or a subfunction

Function code: required

Function code

Subfunction code

Level

Title

Condition

None

Specific positioning

Model

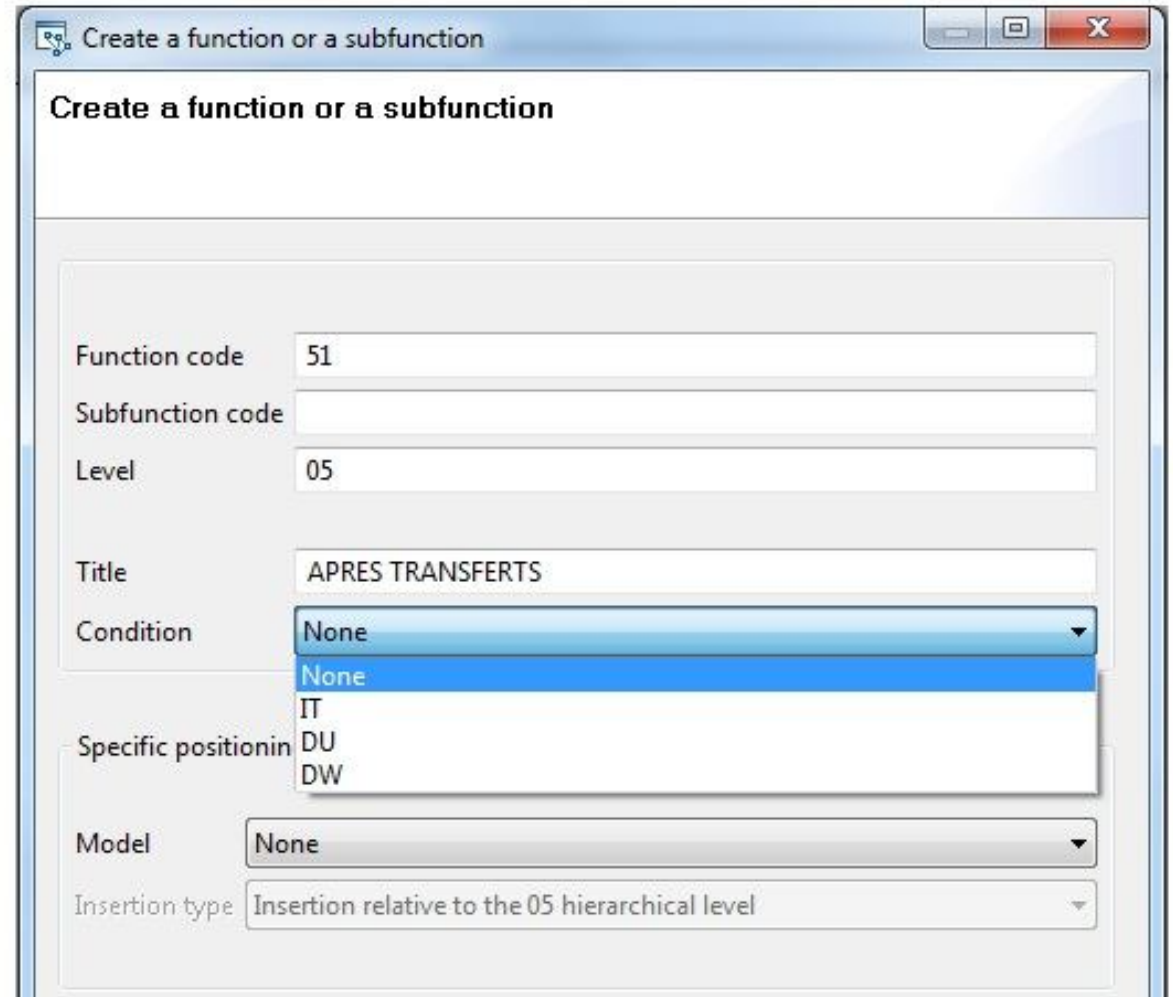
None

Insertion type

Insertion relative to the 05 hierarchical level

CODE INSERTION

- Function/Sub-function insertion wizard (Batch programs)



The screenshot shows a window titled "Create a function or a subfunction" with the following fields and options:

Function code	51
Subfunction code	
Level	05
Title	APRES TRANSFERTS
Condition	None (dropdown menu open showing None, IT, DU, DW)
Specific position in	DU (dropdown menu open showing DU, DW)
Model	None (dropdown menu)
Insertion type	Insertion relative to the 05 hierarchical level (dropdown menu)

CODE INSERTION

- Function/Sub-function insertion wizard (Batch programs)

The screenshot shows a window titled "Create a function or a subfunction" with the following fields and values:

Function code	51
Subfunction code	BB
Level	10
Title	Compl. Transferts
Condition	None
Specific position in	DU
Model	None
Insertion type	Insertion relative to the 05 hierarchical level

CODE INSERTION

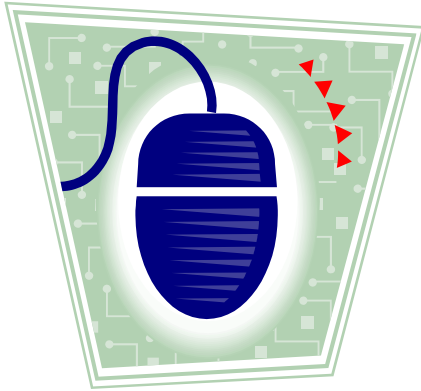
■ Function/Sub-function insertion wizard (Batch programs)

```
*N51.      NOTE *****
*          *                               *
*          * APRES TRANSFERTS             *
*          *                               *
*          * *****
*
F51.
*<insert code for F51 here>
*N51BB.    NOTE * Compl.Transferts        *.
F51BB.          GO TO      F51BB-B.
F51BB-A.
          IF      condition
          GO TO      F51BB-FN.

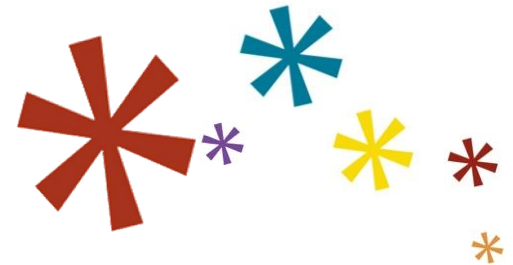
F51BB-B.
*<insert code for F51BB here>
F51BB-900. GO TO F51BB-A.
F51BB-FN. EXIT.
F51-FN. EXIT.
*N90.      NOTE *****
*          *                               *
*          *          ECRITURES          *
*          *                               *
```

lv05

lv10



CODE INSERTION DIALOG PROGRAM



CODE INSERTION

- Function/Sub-function insertion wizard (Dialog program)

The screenshot shows a dialog box titled "Create a function or a subfunction". The dialog contains the following fields and options:

- Function code: 20
- Subfunction code: BB
- Level: 10
- Title: Compl. Ctl. IDAUTH
- Condition: None
- Specific positioning section:
 - Model: Standard or client Dialog
 - Insertion type: Insertion relative to the 05 hierarchical level

CODE INSERTION

■ Function/Sub-function insertion wizard (Dialog program)

Create a function or a subfunction

Create a subfunction (Standard or client Dialog)

Subfunction code: 20BB Level: 10

Data Element code IDAUTH Browse...

Action type

Insert before Insert after Replace

CODE INSERTION

- Function/Sub-function insertion wizard (Dialog program)

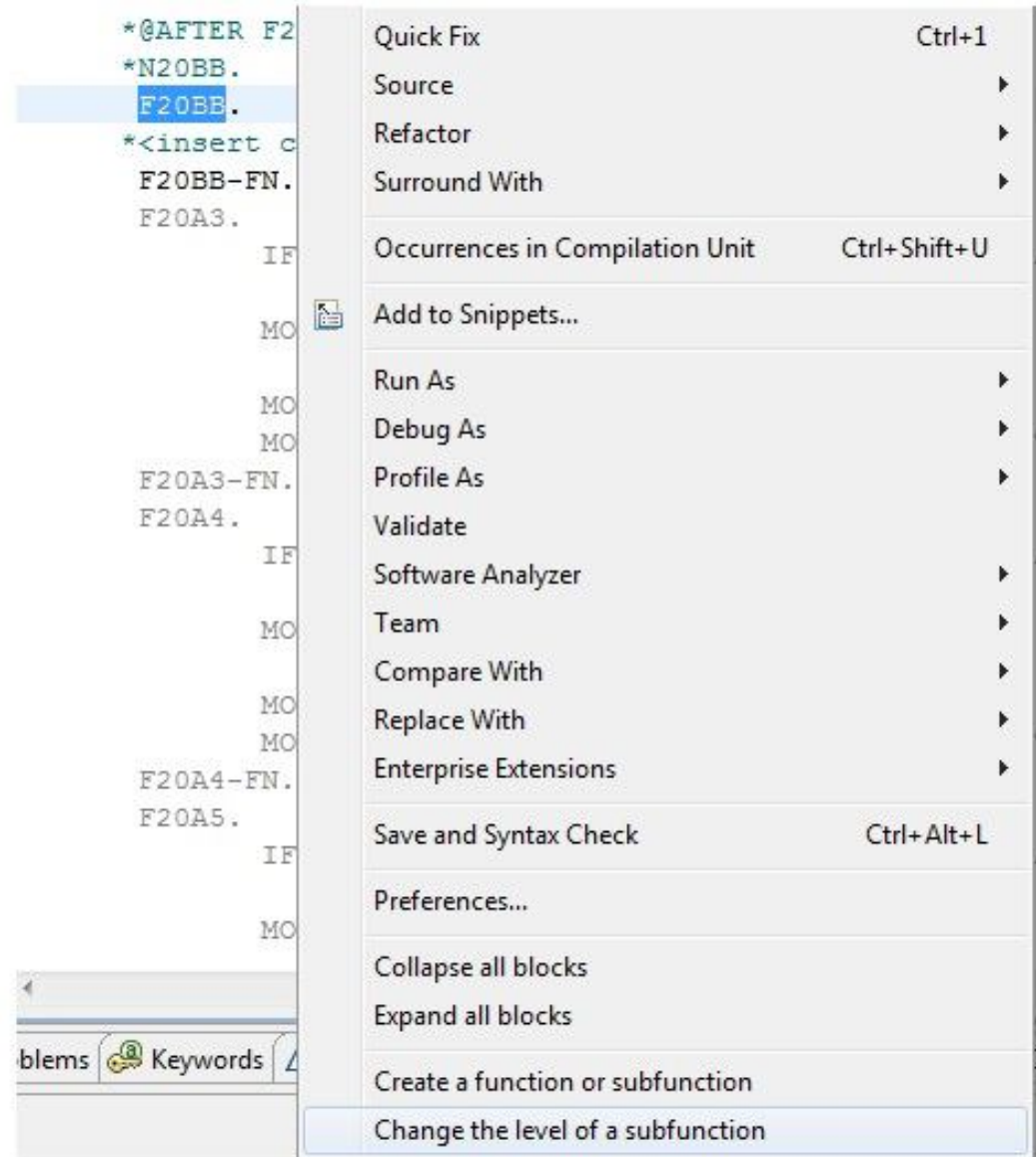
```
F20A2.
    IF CATM = SPACE
        IF I-002A-IDAUTH NOT = SPACE
            MOVE '1' TO PR-2A-IDAUTH
        ELSE
            MOVE '2' TO PR-2A-IDAUTH
        MOVE 'E' TO CATG
F20A2-FN. EXIT.
*@AFTER F20A-IDAUTH
*N20BB. NOTE * Compl. Ctl. IDAUTH
F20BB.
*<insert code for F20BB here>
F20BB-FN. EXIT.
F20A3.
    IF CATM = 'A' OR CATM = SPACE
        IF I-002A-LNAUT1 NOT = SPACE
            GO TO F20A2-FN.
            GO TO F20A2-FN.
            *.
            GO TO F20A3-FN.
```

lv10

- F1010
- F15 : POSITIONNEMENT CODE MOUVEMENT
- N15
- F20 : CONTROLE DES RUBRIQUES
 - N20
 - F20-BODY
 - F20A-IDAUTH
 - F20A-IDAUTH-BODY
 - F20A-IDAUTH-FN
 - F20BB : Compl Ctl IDAUTH
 - F20A-LNAUT1
 - F20A-LFAUT1
 - F20A-IDCTRY
 - F20A-CTAUTH
 - F20A-ZACTIO
 - F20A-CHOICE

CODE INSERTION

■ Function/Sub-function insertion wizard (Dialog program)



CODE INSERTION

- Function/Sub-function insertion wizard (Dialog program)

```
F20A2.
  IF CATM = SPACE                GO TO F20A2-FN.
  IF I-002A-IDAUTH NOT = SPACE
  MOVE '1' TO PR-2A-IDAUTH
  ELSE
  MOVE '2' TO PR-2A-IDAUTH
  MOVE 'E' TO CATG                GO TO F20A2-FN.
* @AFTER F20A-IDAUTH
*N20BB.  NOTE * Compl. Ctl. IDAUTH
F20BB.
* <insert code for F20BB here>
F20BB-FN. EXIT.
F20A2-FN.  EXIT.
F20A3.
```

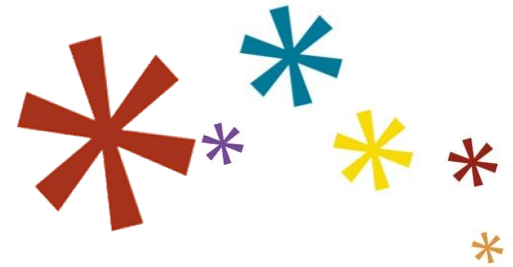
```
  IF CATM = 'A' OR CATM = SPACE  GO TO F20A3-FN.
  IF I-002A-LNAUT1 NOT = SPACE
  MOVE '1' TO PR-2A-LNAUT1
```

lv15

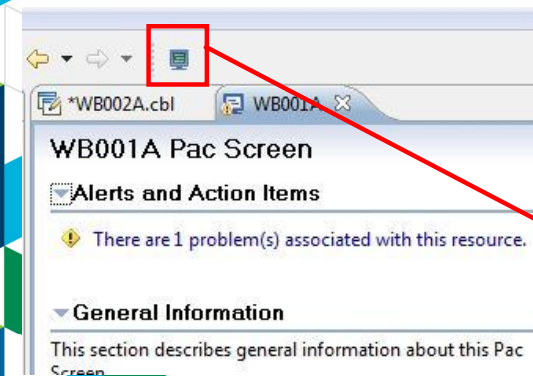
- F1010
- F15 : POSITIONNEMENT CODE MOUVEMENT
- N15
- F20 : CONTROLE DES RUBRIQUES
- N20
- F20-BODY
- F20A-IDAUTH
- F20A-IDAUTH-BODY
- F20BB : Compl Ctl IDAUTH
- F20A-IDAUTH-FN
- F20A-LNAUT1
- F20A-LFAUT1
- F20A-IDCTRY
- F20A-CTAUTH
- F20A-ZACTIO
- F20A-CHOICE
- F20-FN



SCREEN SIMULATION



SCREEN SIMULATION



The screenshot displays the IBM Workbench interface. The top window, titled 'WB002A', shows the 'Alerts and Action Items' and 'General Information' sections. The 'General Information' section includes fields for 'Working Context' (BVAP900.MIM), 'Name' (WB002A), and 'Label' (Author for update). The 'Generated Code Structure' window on the right shows a tree view of code elements. The bottom window, titled 'Screen Em', shows a simulated terminal window with the following text:

```
Author for update

Author Code.....: ALLENDE*I
Author's Name.....: ALLENDE
Author Firstname..: Isabel
Country Code.....: USA
Author type.....: NO

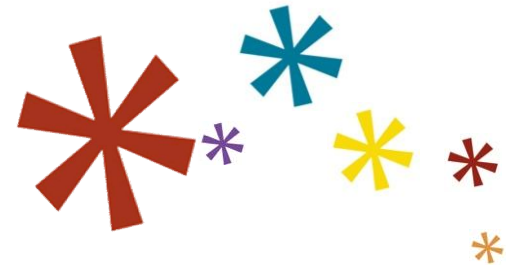
A.....: C

CHOICES ALLOWED :      UP=UPDATE      ME=Menu      EN=End of Work

Choice.....: UP
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
MA a 01/001
```




COMPARISON



COMPARISON

- Difference detection

New symbol : Model artifact updated Generation required

LOAD1A Pac Program

▶ Alerts and Action Items

▼ **General Information**

This section describes general information about this Pac Program.

Working Context: BVAP900.MDF

Name: LOAD1A

Label:

▼ **Definition**

The following definition is set for this Pac Program.

COBOL program ID:

▼ **Gener**

The followi
Pac Program

Set of para

▼ **-CD Lir**

The followi

[Input](#)

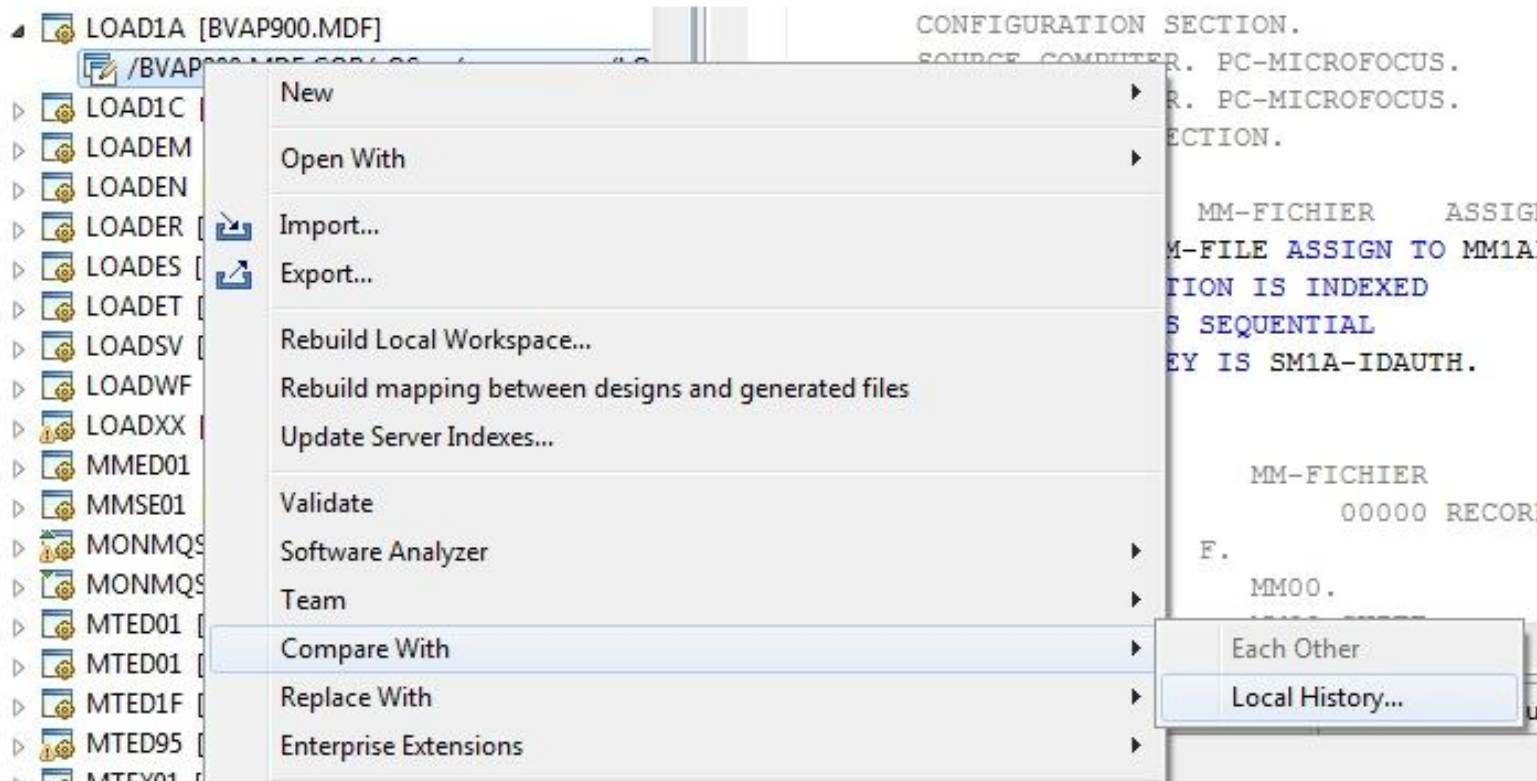
[Outp](#)

▼ **-CP Lir**

The followi

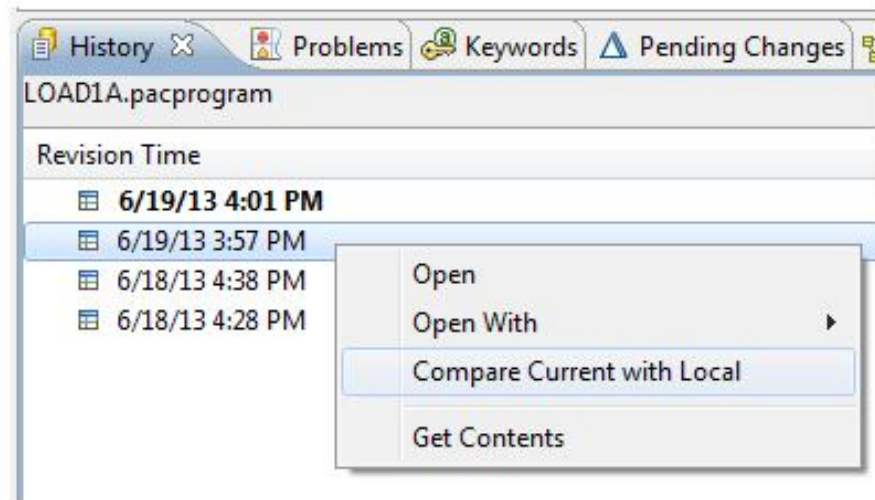
COMPARISON

- Compare to previous/former version



COMPARISON

- Version selection



COMPARISON

■ Model Comparison

The screenshot displays a software interface for comparing two versions of a program. The window title is "Compare LOAD1A.pacprogram Current and Local Revision". The interface is divided into several sections:

- Structural Changes:** A summary pane showing "1 change(s) in Program: LOAD1A". A specific change is listed: "Attribute 'programID' in Program: LOAD1A, changed from 'LOAD1A' to 'LOAD1AB'".
- Visualization of Structural Changes:** A pane with a dropdown menu and navigation icons.
- Local: LOAD1A.pacprogram:** A tree view showing the structure of the current program. It includes:
 - set of parameters -> PacLibrary: MDF
 - CD Lines
 - CD Line
 - commonDescription -> PacCommonLineDescription
 - dataStructureCalls
 - PacDataStructureCall
 - dataStructure -> Data Structure: SM
 - segmentCalls
 - PacSegmentCall
 - segment -> Segment: SM1A
 - CD Line
 - commonDescription -> PacCommonLineDescription
 - dataStructureCalls
 - PacDataStructureCall
- Local history: LOAD1A.pacprogram Jun 19, 2013 3:57:44 PM:** A tree view showing the structure of the previous revision. It includes:
 - set of parameters -> PacLibrary: MDF
 - CD Lines
 - CD Line
 - commonDescription -> PacCommonLineDescription
 - dataStructureCalls
 - PacDataStructureCall
 - dataStructure -> Data Structure: SM
 - segmentCalls
 - PacSegmentCall
 - segment -> Segment: SM1A
 - CD Line
 - commonDescription -> PacCommonLineDescription
 - dataStructureCalls

COMPARISON

■ Source Code Comparison

LOAD1A *>LOAD1A.cbl *Compare LOAD1A.cbl Current and Local Revision

COBOL Structure Compare

- PROGRAM: LOAD1A
- PROGRAM: LOAD1AB

COBOL Source Compare

Local: LOAD1A.cbl Local history: LOAD1A.cbl Jun 18, 2013 4:38:45 PM

```
IDENTIFICATION DIVISION.  
PROGRAM-ID. LOAD1A.  
*AUTHOR. Load MM1A for SEQ/IX.  
*DATE-COMPILED. 19/06/13.  
ENVIRONMENT DIVISION.  
CONFIGURATION SECTION.  
SOURCE-COMPUTER. PC-MICROFOCUS.  
OBJECT-COMPUTER. PC-MICROFOCUS.  
INPUT-OUTPUT SECTION.  
FILE-CONTROL.  
  
01 ---  
01 CONSTANTES-PAC.  
05 FILLER PICTURE X(87) VALUE  
"9999 MDF19/06/13LOAD1ADMIN  
- "19/06/20133.5 V0407/06/201216/05/2011".  
01 PAC-CONSTANTES REDEFINES CONSTANTES-PAC.  
05 NUGNA PICTURE X(5).  
05 APPLI PICTURE X(3).
```

```
IDENTIFICATION DIVISION.  
PROGRAM-ID. LOAD1AB.  
*AUTHOR. Load MM1A for SEQ/IX.  
*DATE-COMPILED. 18/06/13.  
ENVIRONMENT DIVISION.  
CONFIGURATION SECTION.  
SOURCE-COMPUTER. PC-MICROFOCUS.  
OBJECT-COMPUTER. PC-MICROFOCUS.  
INPUT-OUTPUT SECTION.  
FILE-CONTROL.  
  
01 ---  
01 CONSTANTES-PAC.  
05 FILLER PICTURE X(87) VALUE  
"9999 MDF18/06/13LOAD1ADMIN  
- "18/06/20133.5 V0407/06/201216/05/2011".  
01 PAC-CONSTANTES REDEFINES CONSTANTES-PA  
05 NUGNA PICTURE X(5).  
05 APPLI PICTURE X(3).
```

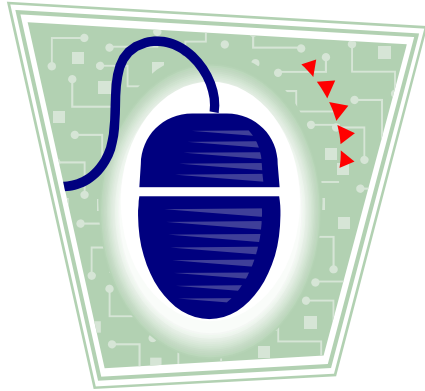
COMPARISON

■ Comparison between two entities

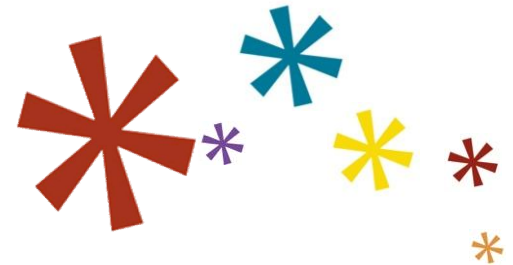
The screenshot displays the SAP comparison tool interface. The title bar indicates the comparison is between 'BVAP900.MDF/rpp/LOAD1A.pacprogram' and 'BVAP900.MDF/rpp/LOAD1C.pacprogram'. The 'Structural Changes' pane lists the following differences:

- 10 change(s) in Program: LOAD1A
 - Attribute 'label' in Program: LOAD1A, changed from 'Load MM1C for SEQ/IX' to 'Load MM1A for SEQ/IX'
 - Attribute 'name' in Program: LOAD1A, changed from 'LOAD1C' to 'LOAD1A'
 - Attribute 'programID' in Program: LOAD1A, changed from 'LOAD1C' to 'LOAD1AB'
- 4 change(s) in -CD Line
 - Attribute 'externalName' in -CD Line, changed from 'MM' to 'SSMM1A'
 - 1 change(s) in PacCommonLineDescription
 - Attribute 'organization' in PacCommonLineDescription, changed from '_W' to '_S'
 - 2 change(s) in PacDataStructureCall
 - PacSegmentCall added
 - PacSegmentCall removed

The 'Visualization of Structural Changes' pane shows a side-by-side comparison of the two programs. The left pane shows 'Program: LOAD1A' and the right pane shows 'Program: LOAD1C'. Both panes display a tree structure of the program's components, including parameters, CD lines, common descriptions, data structure calls, segment calls, and segments. The comparison highlights differences in the 'PacSegmentCall' and 'segment' attributes.

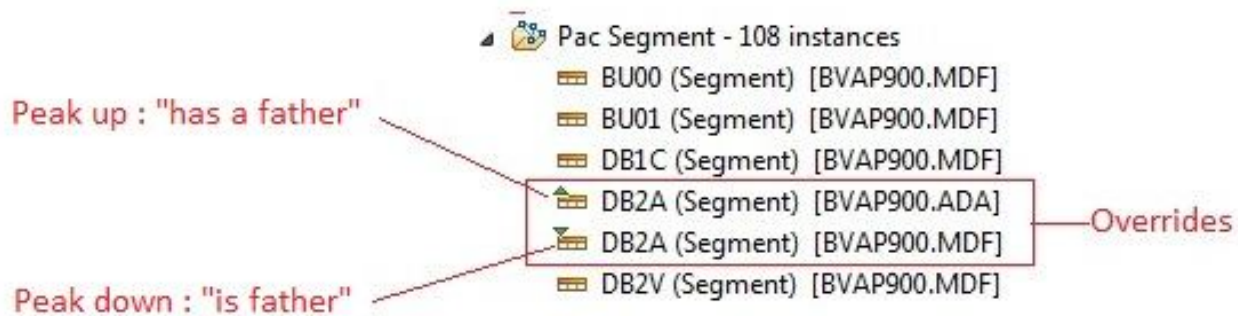


DEPENDENCE RELATIONSHIPS



DEPENDANCE RELATIONSHIPS - OVERRIDES

- Visualization in Design Explore view



DEPENDANCE RELATIONSHIPS - OVERRIDES

■ De-synchronization

"Child" segment with warning sign telling not in synch anymore

The screenshot shows the IBM Design Explorer interface. On the left, the Design Explorer tree displays a hierarchy of segments. The 'DB2A (Segment) [BVAP900.MDF]' entry is highlighted and has a yellow warning icon next to it. A red arrow points from the text 'Child segment with warning sign telling not in synch anymore' to this entry. On the right, the 'DB2A Segment - CE Lines' window is open, showing a table of CE Lines. The table has three columns: Name, Label, and Internal Format. The row for 'ZZZZZZ Data element model' is highlighted, and a red arrow points from the text 'Data Element added in the Father description' to this row.

Name	Label	Internal Format
IDAUTH	Author Identifier	X(10)
LNAUTH	Author Name	X(60)
LFAUTH	Author First Name	X(60)
IDCTRY	Country Identifier	X(3)
CTAUTH	Author Type	XX
YRBRTH	Birth Year	S9999
YRDETH	Death Year	S9999
CTNOBL	Nobel prize	X
YRNOBL	Nobel Prize Year	S9999
ZZZZZZ	Data element model	X(10)

Data Element added in the "Father" description

DEPENDANCE RELATIONSHIPS - OVERRIDES

■ De-synchronization

The screenshot shows the Design Explorer interface with a tree view on the left and a detailed view on the right. The tree view lists various segments, with 'DB2A (Segment) [BVAP900.ADA]' highlighted. The right pane shows the 'DB2A Segment' details, including an 'Alerts and Action Items' section with a warning icon and the text 'There are 1 problem(s) associated with this resource.' Below this is the 'General Information' section. At the bottom, the 'Problems' tab is active, showing a table with one warning item.

Description	Resource	Path	Location	Type
Warnings (1 item)				
The Pac Segment 'DB2A'	DB2A.dataaggregate	/BVAP900.ADA/rpp	BVAP900.ADA	Design Synchronization

Child marked with warning

Warning on the overview tab of the Child

Message in the Problem tab

DEPENDANCE RELATIONSHIPS - OVERRIDES

■ Comparison (1/3)

The screenshot shows a software interface with a table and a context menu. The table has columns for 'Name', 'Label', and 'Internal Fo:'. The context menu is open over the table, and the 'Compare With' option is selected. A sub-menu is open for 'Compare With', showing options: 'Each Other', 'Local History...', and 'Master'.

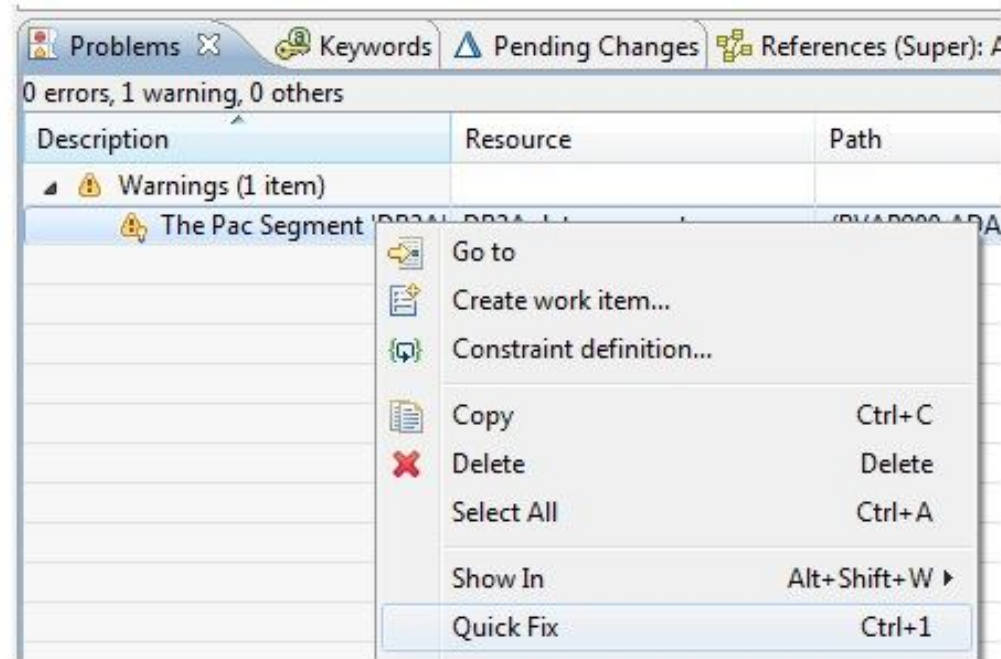
Name	Label	Internal Fo:
Identifier		X(10)
ne		X(60)
st Name		X(60)
Identifier		X(3)
oe		XX
c		S9999
c		S9999
ze		X
ze Year		S9999
ent model		X(10)

Context Menu Options:

- New
- Open (F3)
- Open With
- Copy (Ctrl+C)
- Paste (Ctrl+V)
- Delete
- Refactor (Alt+Shift+T)
- Import...
- Export...
- Dispatch Macros...
- References
- Rebuild Local Workspace...
- Rebuild mapping between designs and generated files
- Update Server Indexes...
- Validate
- Software Analyzer
- Team
- Compare With (Selected)
 - Each Other
 - Local History...
 - Master (Highlighted)
- Replace With
- Enterprise Extensions

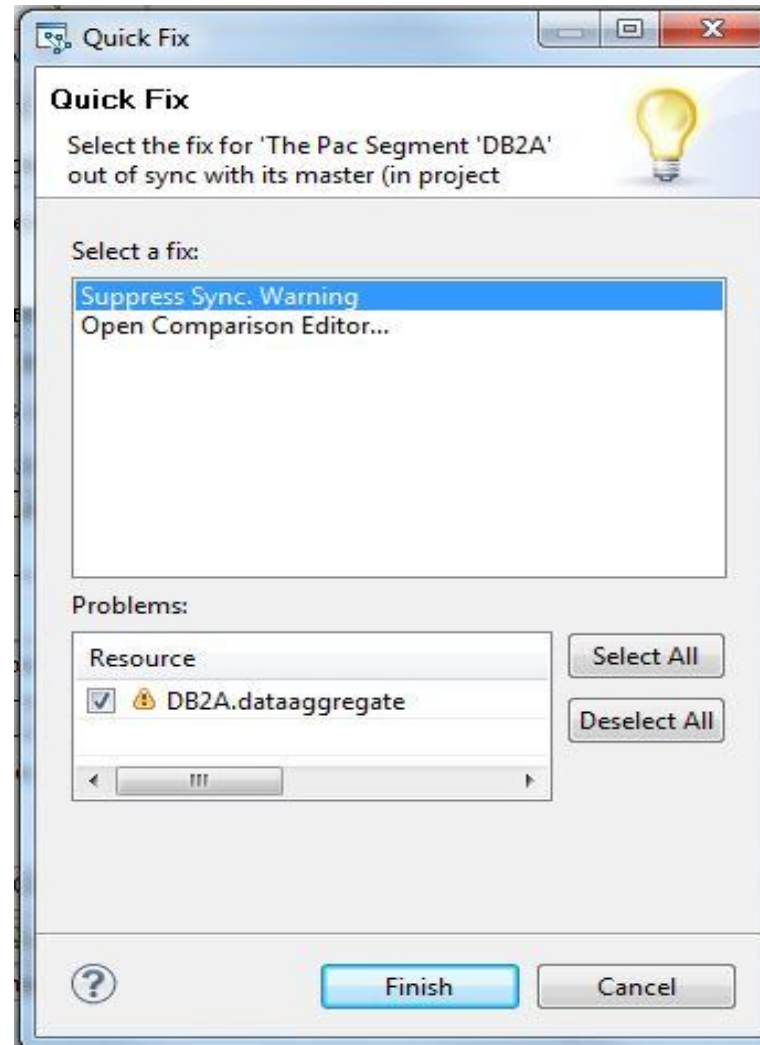
DEPENDANCE RELATIONSHIPS - OVERRIDES

■ Comparison (2/3) – Quick Fix



DEPENDANCE RELATIONSHIPS - OVERRIDES

■ Comparison (3/3) – Quick Fix



DEPENDANCE RELATIONSHIPS - OVERRIDES

■ Synchronization

The screenshot displays the 'Compare' window in IBM Business Partner Center, comparing a Master data aggregate ('BVAP900.MDF/rpp/DB2A.dataaggregate') with a Subordinate data aggregate ('BVAP900.ADA/rpp/DB2A.dataaggregate').

Structural Changes:

- 4 change(s) in Segment: DB2A
 - 1 change(s) in Pac Definition
 - Relation 'set of parameters' in Pac Definition, changed from PacLibrary: ADA to PacLibrary: MDF
 - 3 change(s) in Segment Description
 - Data Element: CTNOBL added
 - Data Element: CTNOBA removed
 - Data Element: ZZZZZZ added

Visualization of Structural Changes:

The window is split into two panes: Master and Subordinate. Both panes show the 'Segment: DB2A' structure under 'description -> Segment Description'.

Master Pane:

- CE Lines
 - Data Element: IDAUTH
 - Data Element: LNAUTH
 - Data Element: LFAUTH
 - Data Element: IDCTRY
 - Data Element: CTAUTH
 - Data Element: YRBRTH
 - Data Element: YRDETH
 - Data Element: CTNOBL
 - Data Element: YRNOBL
 - Data Element: ZZZZZZ
- facets
- keywords

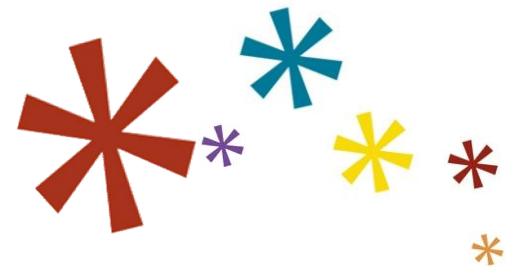
Subordinate Pane:

- CE Lines
 - Data Element: IDAUTH
 - Data Element: LNAUTH
 - Data Element: LFAUTH
 - Data Element: IDCTRY
 - Data Element: CTAUTH
 - Data Element: YRBRTH
 - Data Element: YRDETH
 - Data Element: CTNOBA
 - Data Element: YRNOBL
- facets
- keywords

A tooltip 'Copy Current Change from Left to Right' is visible over the right pane, and an arrow points from the 'Data Element: ZZZZZZ' in the Master pane to the 'facets' in the Subordinate pane.

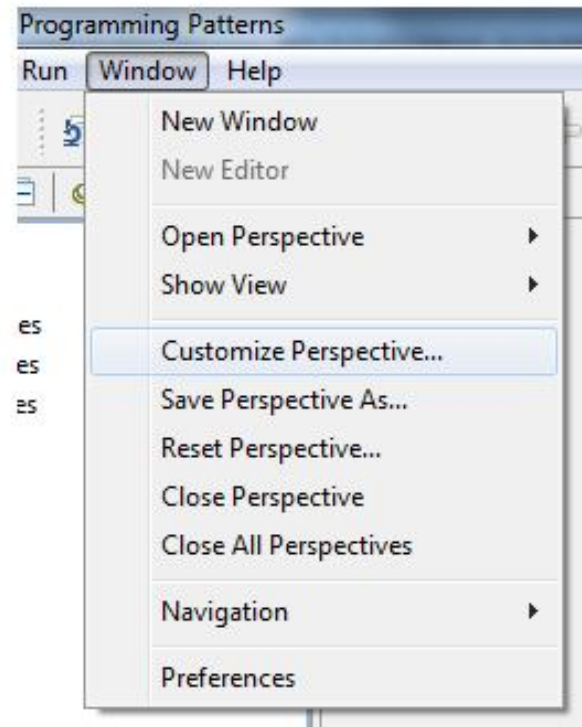


REMINDER QUALITY CONTROL



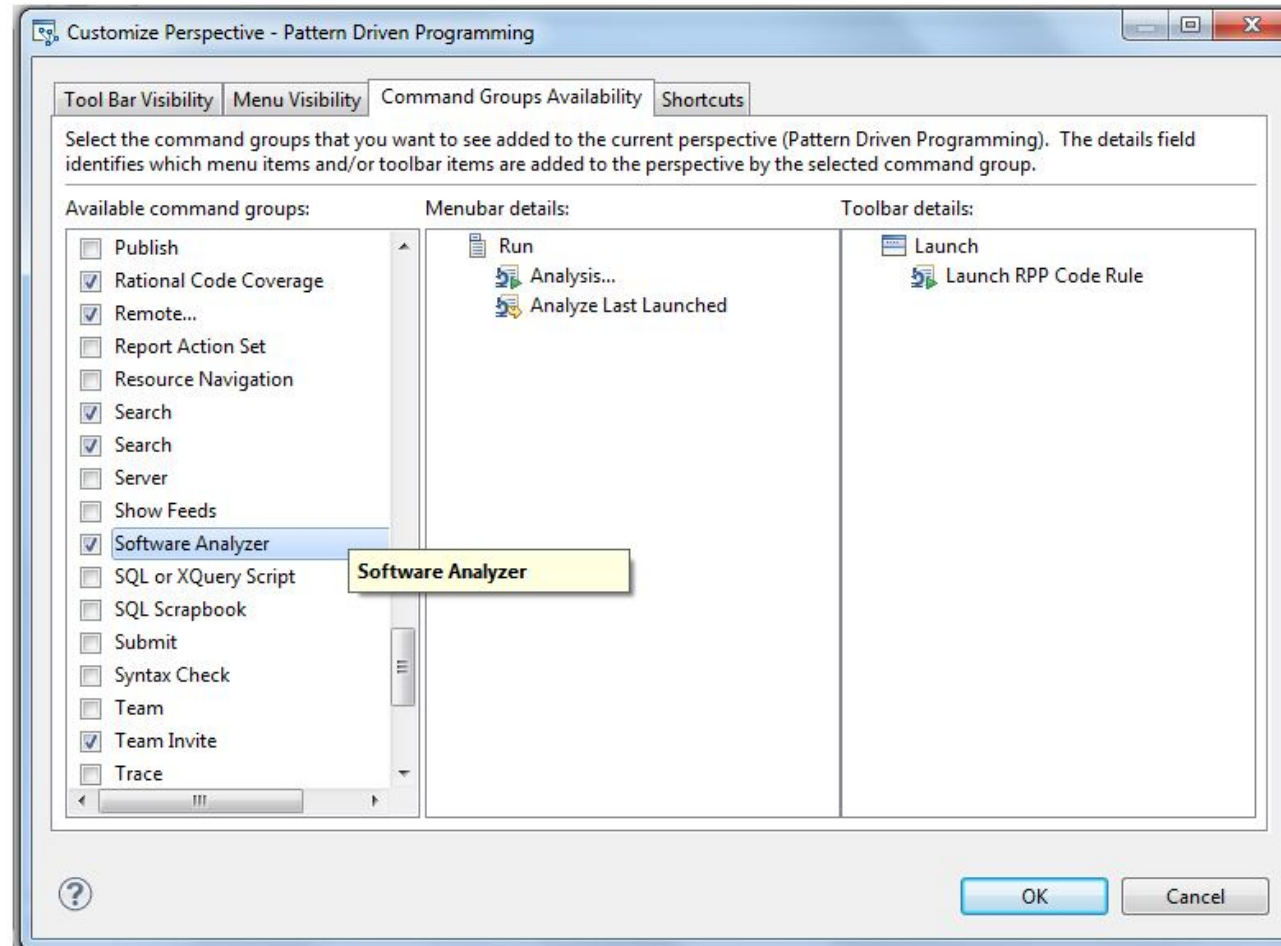
QUALITY CONTROL

- Customize tool bar



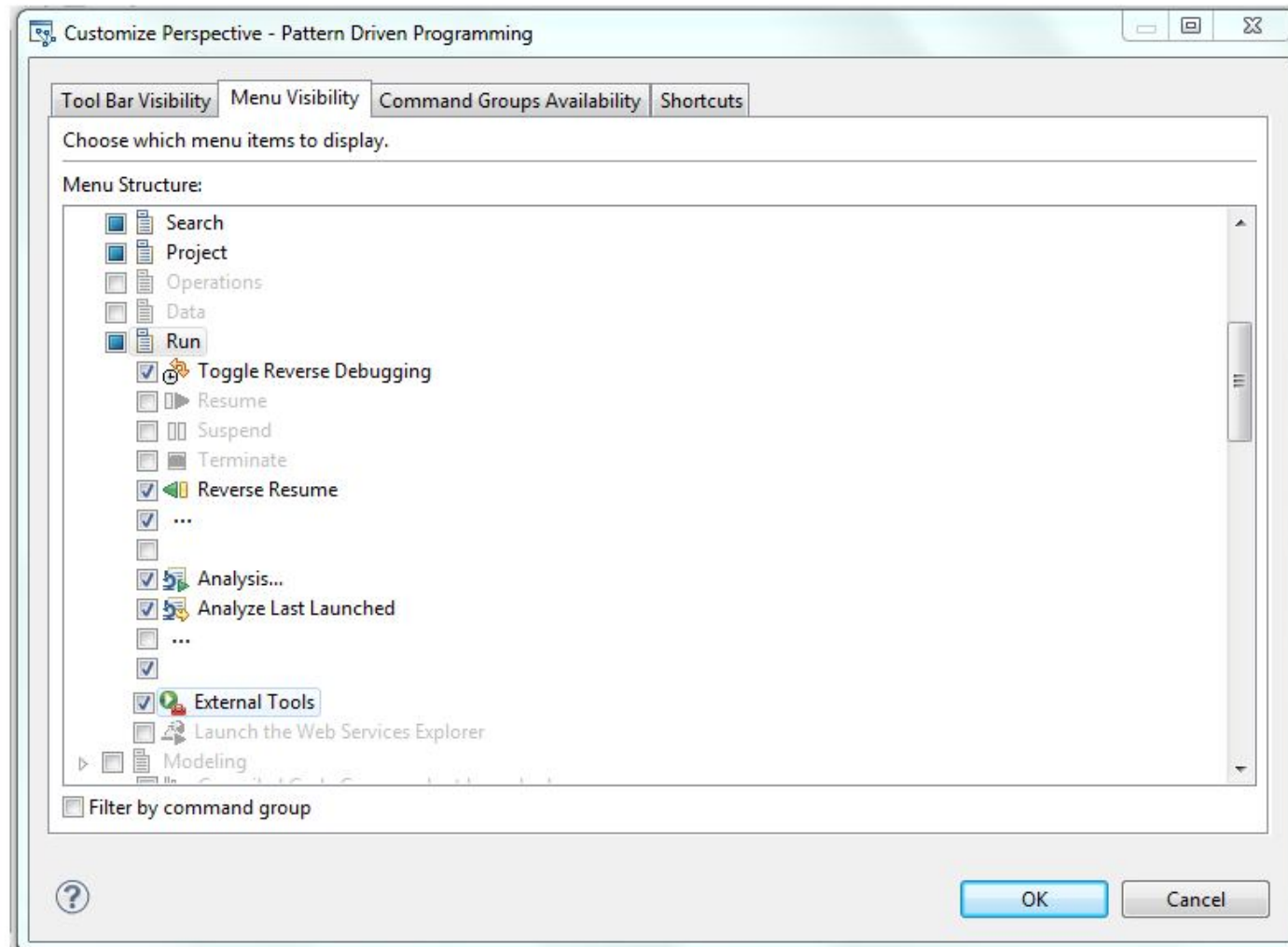
QUALITY CONTROL

- Ensure Software Analyzer is available



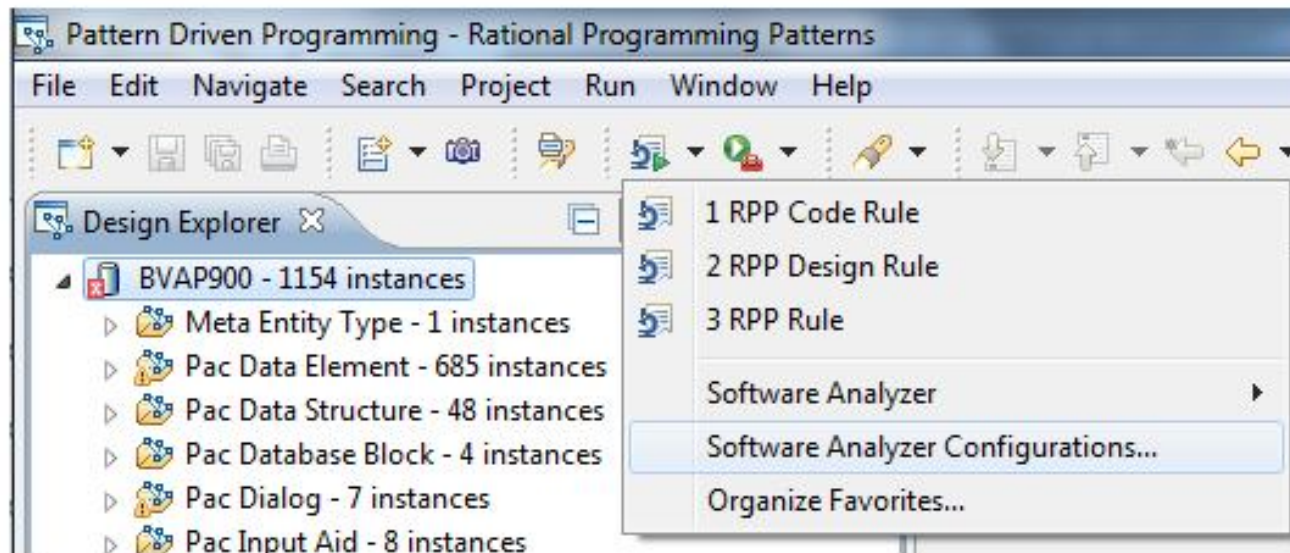
QUALITY CONTROL

- Ensure Software Analyzer is available



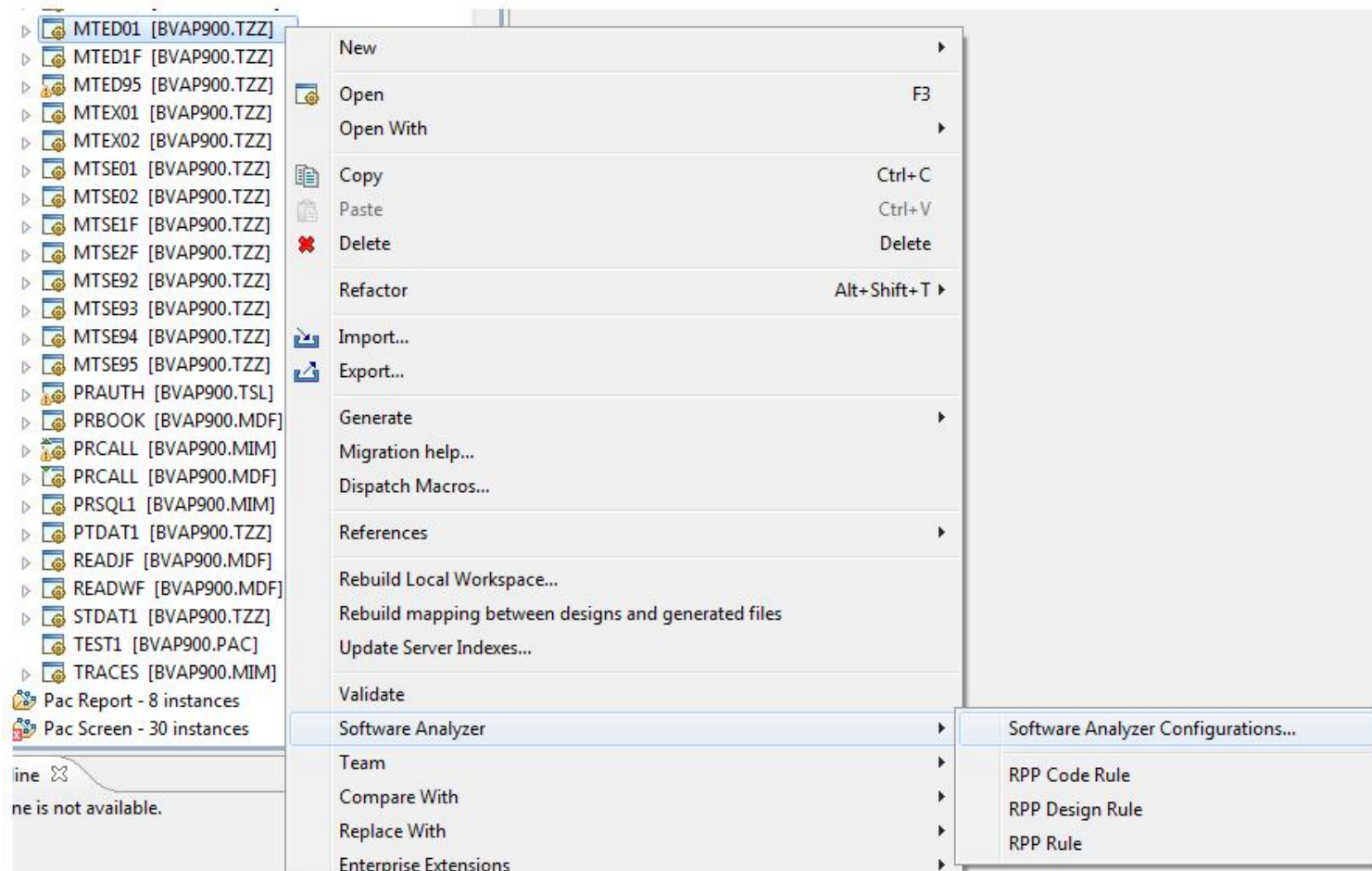
QUALITY CONTROL

- Create rules – from tool bar



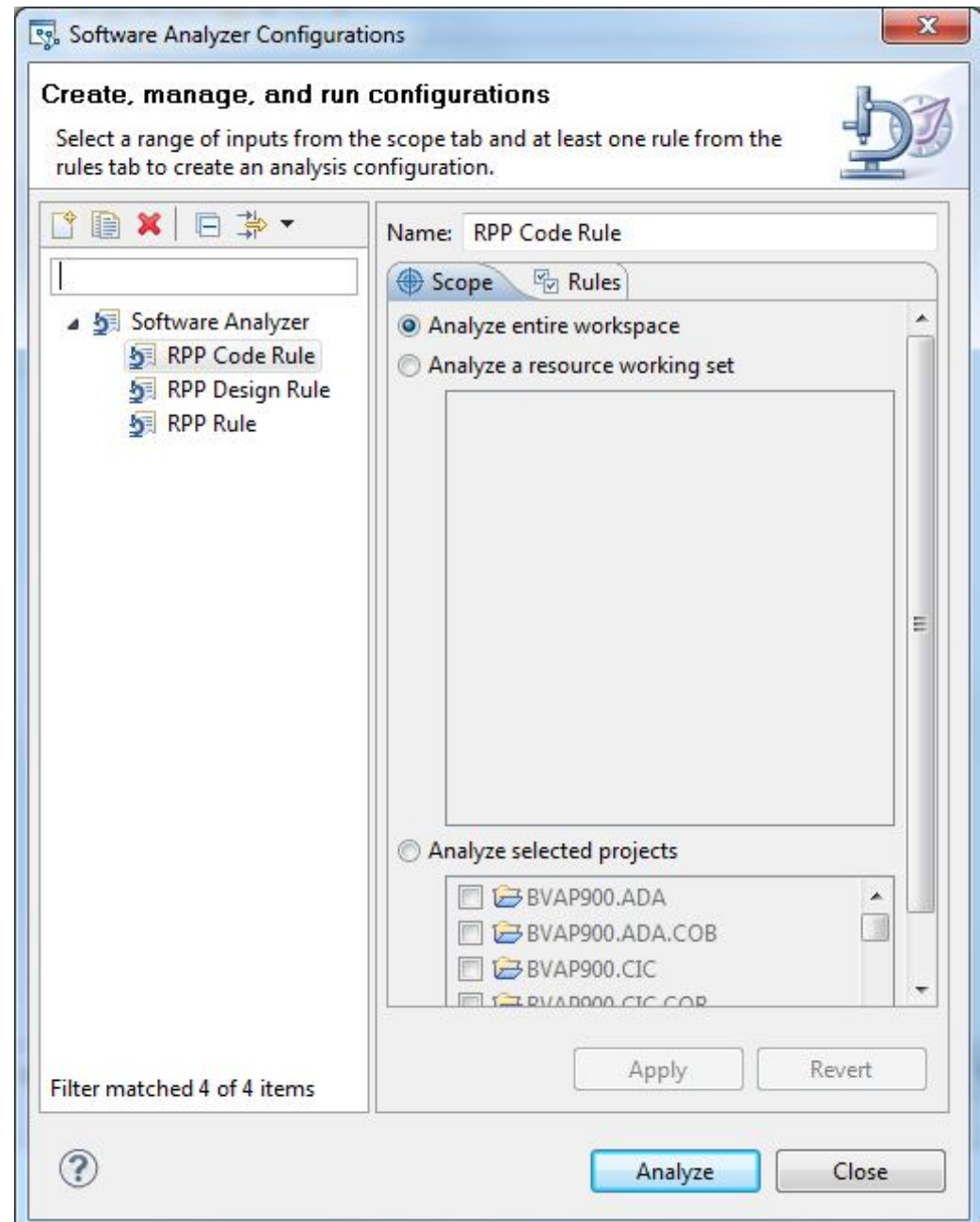
QUALITY CONTROL

- Create rules – from Contextual menu



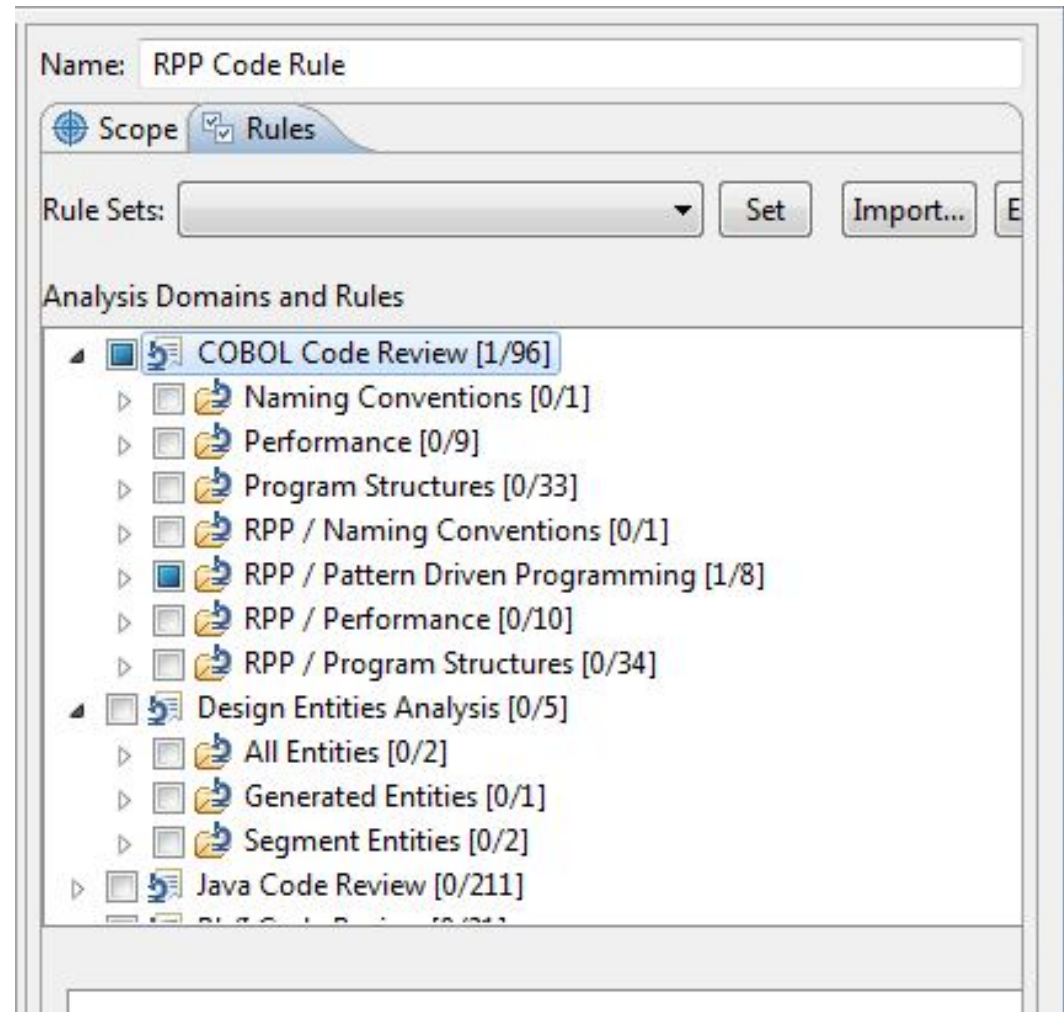
QUALITY CONTROL

- Create rules
 - Define scope



QUALITY CONTROL

- Create rules
- Select rule



QUALITY CONTROL

- Run – From Tool bar or Software Analyzer window on the entire scope

The screenshot displays the IBM Software Analyzer interface. The top toolbar includes icons for History, Problems, Keywords, Pending Changes, References (Super): A, and Macro Code Structure. The main window is divided into two panes. The left pane, titled 'Design Entities Analysis', shows a list of RPP rule execution results:

- RPP Rule (13/06/20 10:41:05) [35 results in 976ms]
- RPP Rule (13/06/20 09:47:34) [14 results in 1,171ms]
- RPP Rule (13/06/20 09:46:30) [1 result in 244ms]

The right pane, titled 'COBOL Code Review', shows a detailed view of an RPP rule:

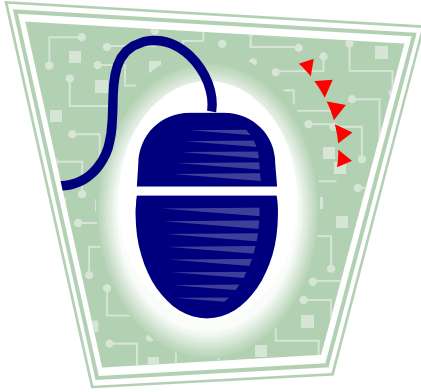
- RPP / Pattern Driven Programming [34 results in 266ms]
 - RPP / Never override a line coming from a Macro [6 results in 263ms]
 - MMSE01.cbl:429 RPP / Never override a line coming from a Macro
 - WB002A.cbl:899 RPP / Never override a line coming from a Macro
 - MTSE01.cbl:397 RPP / Never override a line coming from a Macro
 - MTSE1F.cbl:397 RPP / Never override a line coming from a Macro
 - PTDAT1.cbl:145 RPP / Never override a line coming from a Macro
 - PTDAT1.cbl:174 RPP / Never override a line coming from a Macro
 - RPP / User code must be in a user function [28 results in 3ms]

QUALITY CONTROL

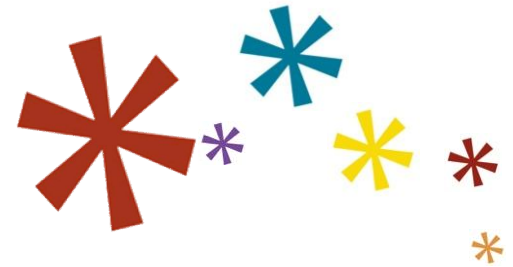
- Run – From Contextual menu in Design Explorer View

The screenshot displays the IBM Design Explorer interface. On the left, a project tree shows a folder structure for 'MTSE02 [BVAP900.TZZ]'. A contextual menu is open over the project, listing various actions such as 'New', 'Open With', 'Import...', 'Export...', 'Rebuild Local Workspace...', 'Rebuild mapping between designs and generated files', 'Update Server Indexes...', 'Validate', 'Software Analyzer', 'Team', 'Compare With', 'Replace With', and 'Enterprise Extensions'. The 'Software Analyzer' option is selected, and a sub-menu is visible with 'Software Analyzer Configurations...', 'RPP Code Rule', 'RPP Design Rule', and 'RPP Rule'. The 'RPP Code Rule' option is highlighted. In the background, the main workspace shows a toolbar with 'Pending Changes', 'References (Super): A', and 'Macro Code Structure'. Below the toolbar, a results pane displays the following information:

- RPP / Pattern Driven Programming [1 result in 244ms]
- RPP / User code must be in a user function [1 result in 244ms]
- MTSE02.cbl:279 RPP / User code must be in a user function

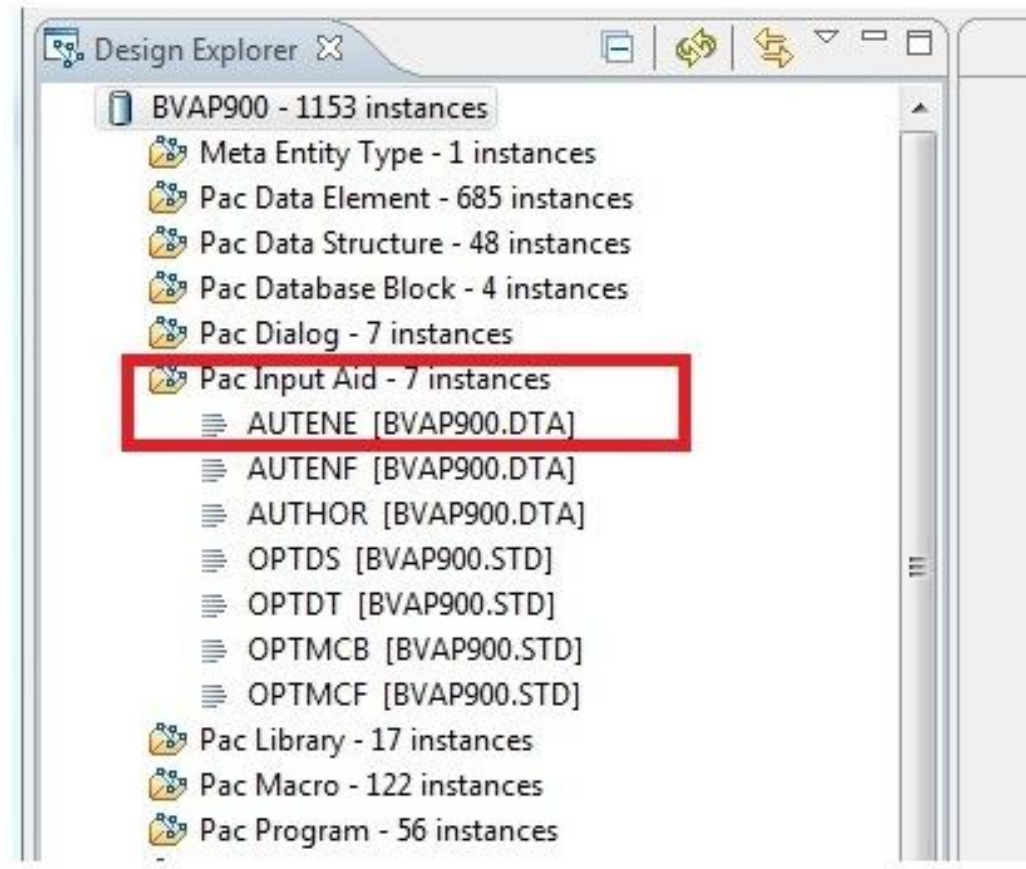


INPUT AID



INPUT AID

- New entry in the list of entities presented in Design Explorer view



INPUT AID

- Overview tab : -D and Symbolic Values migrated

The screenshot displays the AUTENE software interface. On the left, the **Design Explorer** shows a tree view of the project structure, including 1153 instances of BVAP900 and various other components like Meta Entity Type, Pac Data Element, and Pac Input Aid. The **Outline** window below it shows the current selection: **PacInputAid: AUTENE** with a label of **AUTHOR OF ENTITY**.

The main window, titled **AUTENE Pac Input Aid**, is currently on the **Overview** tab. It provides detailed information about the input aid, including:

- Alerts and Action Items**: A section for notifications and actions.
- General Information**: Describes the input aid's context and name. The **Working Context** is **BVAP900.DTA**. The **Name** is **AUTENE** and the **Label** is **AUTHOR OF ENTITY**.
- Definition**: Specifies the definition for this input aid. The **Type** is set to **C: Comments**.
- Keywords**: Lists defined keywords, including **ADPS** and **ENGLISH**.
- D Lines**: Lists defined -D lines, such as **Date of creation :MM-JJ-S**, **Author's name : 30**, **Title : 20**, **C \$AD :Administrat**, **C \$CP :Project man**, **C \$AN :Analyst 0**, and **C \$AP :Programmer**.
- Symbolic Values Lines**: Lists defined Symbolic Values Lines, including **SYA Yao Assou**, **SRB Rémy Baranger**, **SFB Fernand Bonaguidi**, and **SMB Maurice Boudot**.

At the bottom of the main window, a tabbed interface allows switching between **Overview**, **-D Lines**, **Symbolic Values**, **-G Lines**, **Lignes -CR**, and **Keywords**.

INPUT AID

■ -D tab

AUTENE x

AUTENE Pac Input Aid - D Lines

► Description Alert

-D Lines

The following -D lines are defined for this Pac Input Aid.

Type	Fixed label	Variable label	Symb. val.	Lgth	Call type	Xref key
	Date of creation	: MM-JJ-SSAA		10		
	Author's name	:		30		
	Title	:		20		
C	\$AD	: Administrator		0		
C	\$CP	: Project manager		0		
C	\$AN	: Analyst		0		
C	\$AP	: Programmer		0		

Overview -D Lines Symbolic Values -G Lines Lignes -CR Keywords

INPUT AID

- Symbolic Values tab

*AUTENE X

AUTENE Pac Input Aid - Symbolic Values Lines

Symbolic Values Lines

The following Symbolic Values Lines are defined for this Pac Input Aid.

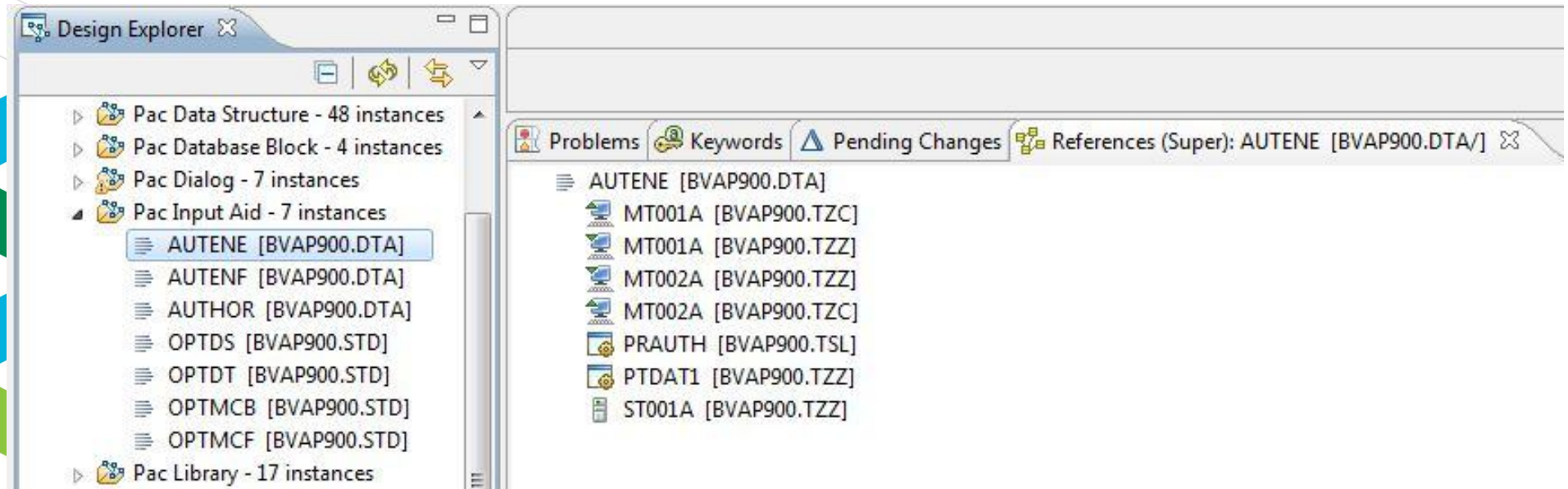
Parameter	Value	
\$BE	Bernard Etienne	
\$AD	Administrator	
\$CP	Project manager	
\$AN	Analyst	
\$AP	Programmer	

Add...
Remove
▲
▼

Overview -D Lines **Symbolic Values** -G Lines Lignes -CR Keywords

INPUT AID

- Super References



INPUT AID

- Update Warning

AUTENE Pac Input Aid - D Lines

Description Alert

⚠ This input aid has references in local workspace.
Modification is not allowed when the input aid is used.

-D Lines

The following -D lines are defined for this Pac Input Aid.

Type	Fixed label	Variable label	Symb. val.
☞	Date	DATE	SAA
☞	Auth	AUTH	
☞	Title	TITLE	
☞	C		trator
☞	C		manager
☞	C		
☞	C		mer

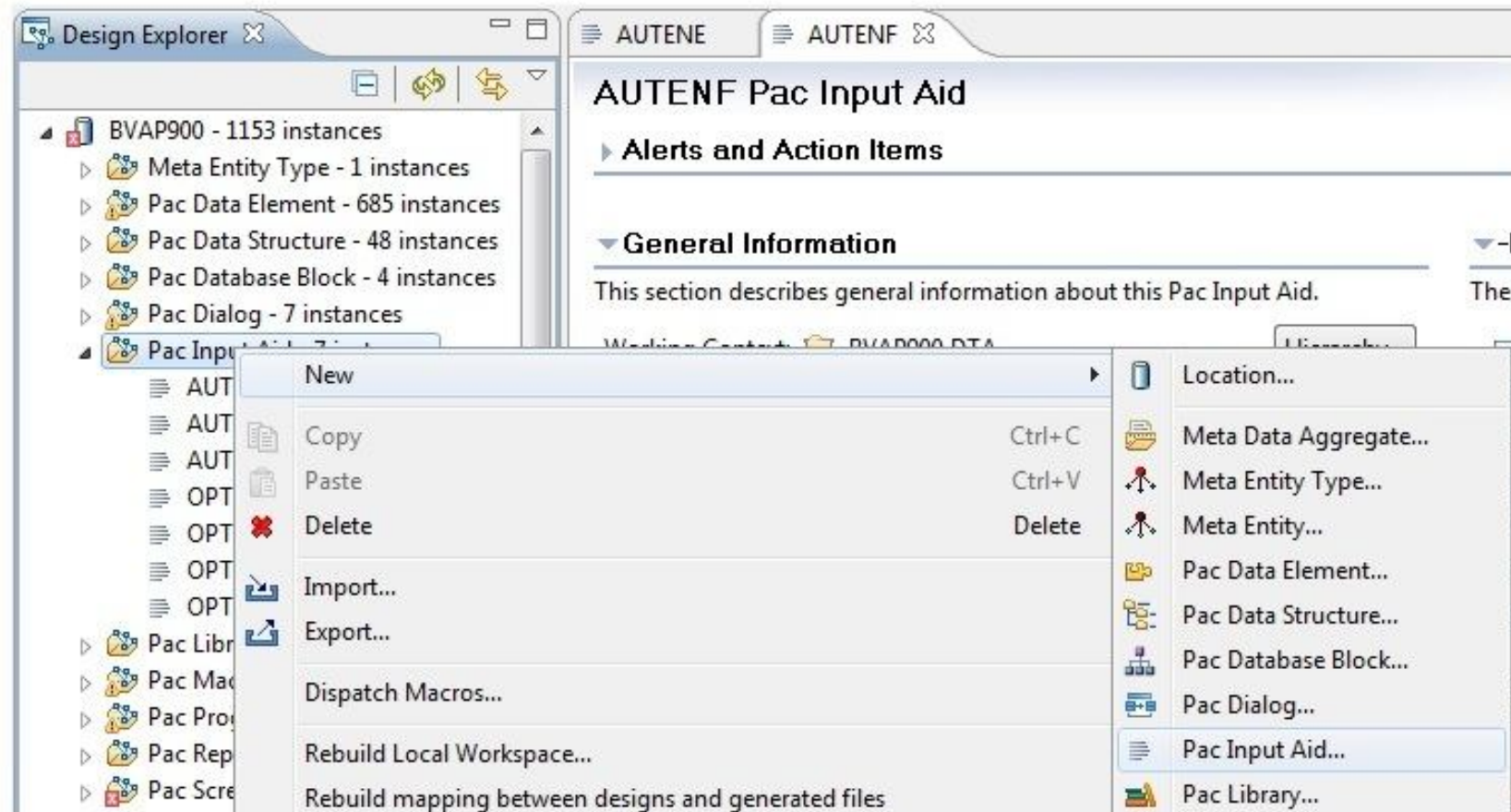
Overview -D Lines

Problems 52 errors, 36 warnings

References (Super): All

INPUT AID

■ Creating a new Input Aid (1/5)



INPUT AID

- Creating a new Input Aid (2/5)

New Pac Input Aid

Pac Input Aid definition
Create a new Pac Input Aid

Project: BVAP900.DTA

Package:

Type: C: Comments

Name: Format Guide de demo

Label: Format Guide utilisé pour la Démonstration

Open editor on finish

Finish Cancel

INPUT AID

- Creating a new Input Aid (4/5)

*FORMAT GUIDE DE DEMO

FORMAT GUIDE DE DEMO Pac Input Aid - D Lines

▶ Description Alert

-D Lines

The following -D lines are defined for this Pac Input Aid.

Type	Fixed label	Variable label	Symb. val.	Lgth	C
	DATE :	JJ/MM/AAAA		10	
	ACTION :			30	
C	\$VA :	Validation		0	
C	\$RL :	Relecture		0	

▼ Description line

This section provides information about the selected line.

Type:

Fixed label:

Variable part

Symbolic value:

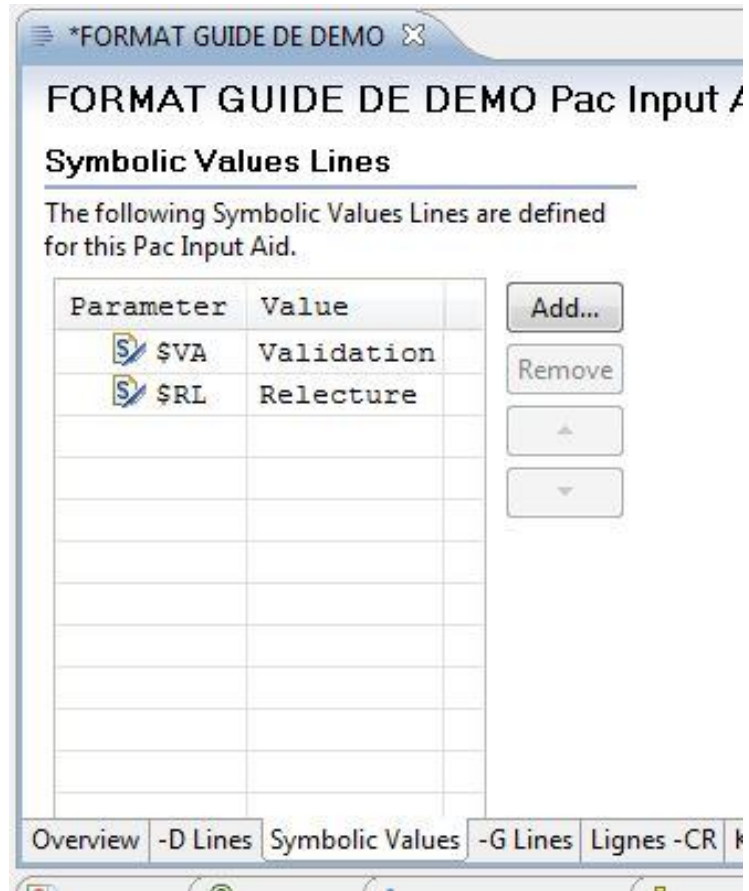
Variable label:

Length:

Overview -D Lines Symbolic Values -G Lines Lignes -CR Keywords

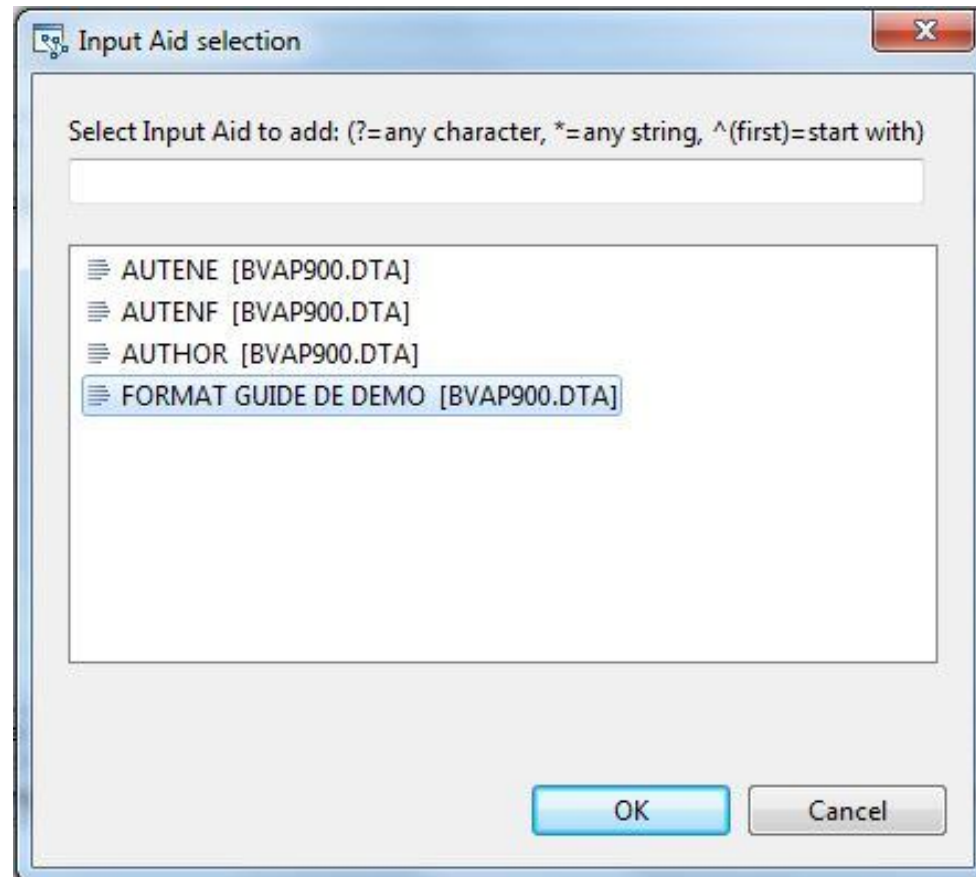
INPUT AID

- Creating a new Input Aid (5/5)



INPUT AID

■ Calling Input Aid (2/6) - Selection



INPUT AID

- Calling Input Aid (3/6) - Open


FORMAT GUIDE DE DEMO *AABOOK X

AABOOK Pac Macro - G Lines

-GC Lines -GE Lines

-GC Lines

Specify the -GC lines for this Pac Macro.

Error	Type	Description	...	Input Aid
.	I	[JJ/MM/AAAA,]		DE DE DEMO 

Open Input Aid

INPUT AID

- Calling Input Aid (5/6) – Enter values

The screenshot displays two overlapping windows from an IBM system. The background window is titled "Input Aid Call FORMAT GUIDE DE DEMO detail for AABOOK". It contains a table with the following data:

Error	Type	Fixed label	Variable label	Symb. val.
.		DATE :	26/06/2013	
.		ACTION :		
.		\$VA :	Validation	
.		\$RL :	Relecture	

The foreground window is titled "Symbolic value selection" and prompts the user to "Select a symbolic value". It lists three options:

- No symbolic value
- \$VA Validation
- \$RL Relecture

Buttons for "OK" and "Cancel" are visible at the bottom of the dialog.

INPUT AID

■ Calling Input Aid (6/6) – Enter values

The screenshot displays the IBM Input Aid interface. The main window is titled "AABOOK Pac Macro - G Lines" and shows a table for specifying -GC lines. A dialog box titled "Input Aid Call FORMAT GUIDE DE DEMO detail for AABOOK" is open, showing a table of parameterized description lines.

Main Window: AABOOK Pac Macro - G Lines

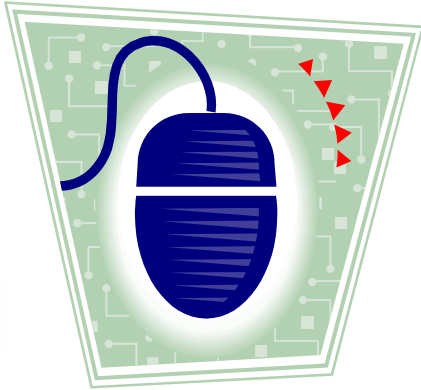
Specify the -GC lines for this Pac Macro.

Error	Type	Description	...	Input Aid
.	I	[26/06/2013, \$VA]		...

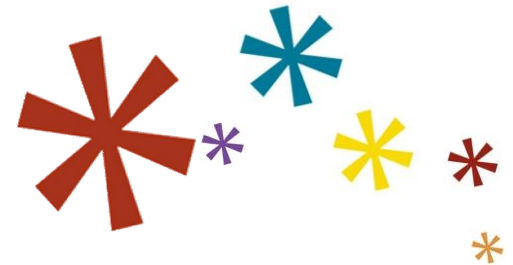
Dialog: Input Aid Call FORMAT GUIDE DE DEMO detail for AABOOK

Parameterized description lines

Error	Type	Fixed label	Variable label	Symb. val.
.		DATE :	26/06/2013	
.		ACTION :	Validation	\$VA
.		\$VA :	Validation	
.		\$RL :	Relecture	



MIGRATION



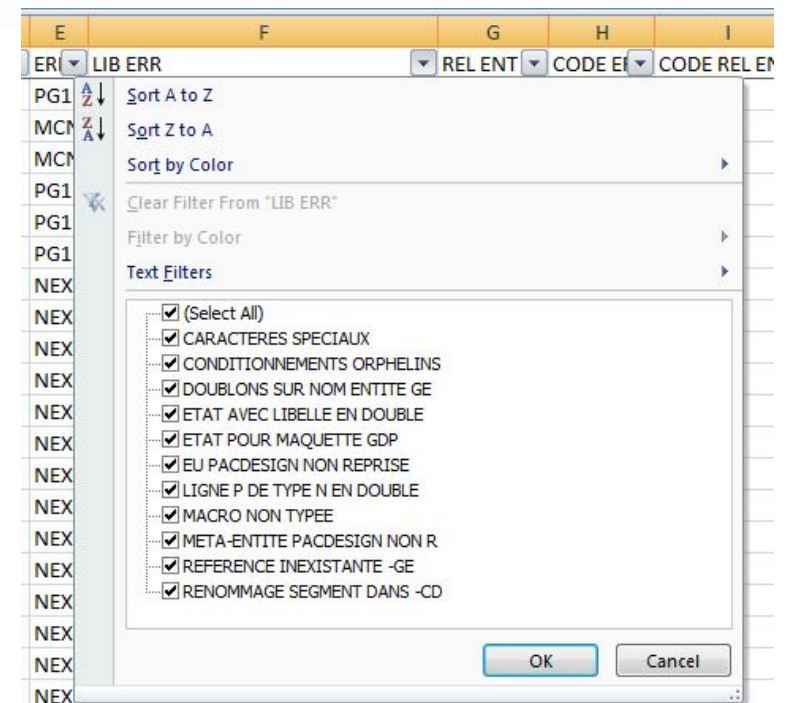
Objective : Improvement of Migration

- Action scope of MIAM refined
 - ▶ Special characters, reserved words,
 - ▶ Entities not to be migrated,
 - ▶ MSP coding,
 - ▶ Miscellaneous errors,

BIBDIAXX	F
BIBECRXX0010	F
BIBDIAYY	FV
BIBECRY0010	FV
BI1ETAAAA	
BI1ETAAAB	
BI2PGMXAA000	
BI3PGMXAA000	
BI1MEC.AGE	
BI2\$1GXXXXXX	.AGE
BI1MEC.ZZZZ	
BI3\$1KYYYYYY	.ZZZZ

Name

- MIAMCSPE
- MIAMNR
- MIAMPMAC
- MIAMRQR



Objective : Improvement of Migration

- Management of entities counter in MIBR
 - ▶ Number of entities per type
 - ▶ Overrides taken into account
- Obsolete generation Variants
- Post migration controls optimized
 - ▶ No more validation step if no difference is detected

```
OSVA Pac 3.5 V08          COMPTE RENDU D'EXTRACTION
RECAPITULATIF PAR TYPE D'ENTITE
-----
I TYPE  NB OCC I
-----
I BIB           61 I
I MET          2624 I
I TXT          16312 I
I SDO           2340 I
I SEG          19691 I
I ETA           2560 I
I DBD            347 I
I DIA            141 I
I ECR           6021 I
I PGM          15454 I
I FOG            215 I
I RAP           4552 I
I MEC            38 I
I $TT           1504 I
I RLC            153 I
I RUB          41518 I
-----
```

Objective : Improvement of Migration

■ Generation of batch command files for migration

- `--generate` : commande de génération COBOL.
- `--import` : commande d'import.
- `--importJournal` : commande d'import du journal.
- `--migrationHelp` : commande d'aide à la migration.
- `--automaticMigration` : commande d'automatisation de la migration.
- `--generateErrorMsgs` : commande de génération des libellés d'erreur.
- `--generateDataBlockBase` : commande de génération des Blocs Base de Données.
- `--generateCopyBook` : commande de génération des Copybooks.
- `--dispatchMacro` : commande de répartition des Macros.
- `--copy` : commande de copie.
- `--refresh` : commande d'actualisation de l'espace de travail,
- `--zCompCreation` : commande de création des projets et dossiers zComponent.
- `--commands` : exécution d'une liste de commande.

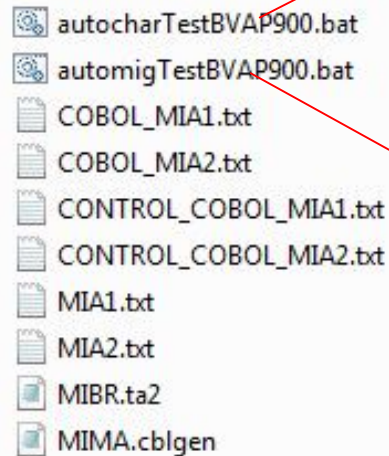
Options	Commentaires
<code>--data</code>	Option Rational Developer for System z pour l'espace de travail utilisé
<code>--log</code>	Nom du fichier journal
<code>--project</code>	Nom du projet
<code>--name</code>	Nom de l'instance dans le référentiel
<code>--type</code>	Type d'entité
<code>--cobolFolder</code>	Répertoire des fichiers COBOL
<code>--controlCobolFolder</code>	Répertoire des fichiers COBOL de contrôle
<code>--reportFolder</code>	Répertoire des rapports de génération
<code>--csvSep</code>	Séparateur pour rapports <code>csv</code>
<code>--csvTextSep</code>	Séparateur de texte pour rapports <code>csv</code>
<code>--clean</code>	Suppression des fichiers <code>.cbl</code> et <code>.cblpdp</code>
<code>--cleanTemplates</code>	Réinitialisation des fichiers de modèles de modifications (appelés <i>templates</i>)
<code>--flowposition</code>	(Option cachée) Uniquement pour un fichier de commandes Optimisation de la lecture et de l'écriture des fichiers
<code>--destProject</code>	Nom du projet COBOL en sortie
<code>--destFolder</code>	Nom du répertoire COBOL en sortie
<code>--verbose</code>	Augmentation de la prolixité de la sortie

■ Options migrationHelp command

- ▶ zProject and zComponent
- ▶ Separation of design files and Cobol sources files

MIGRATION

- Input : Command files



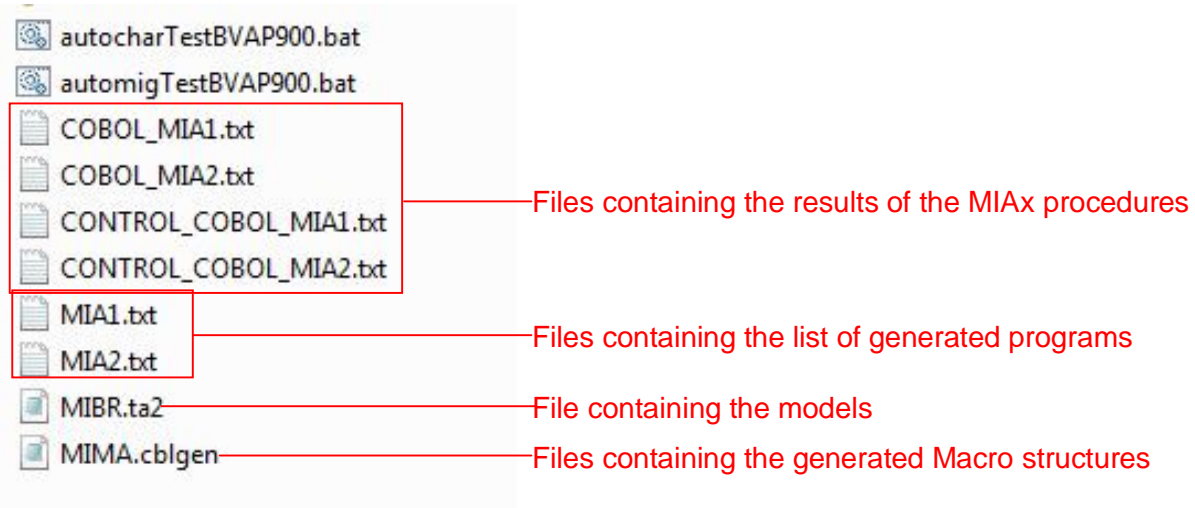
autocharTestBVAP900.bat
automigTestBVAP900.bat
COBOL_MIA1.txt
COBOL_MIA2.txt
CONTROL_COBOL_MIA1.txt
CONTROL_COBOL_MIA2.txt
MIA1.txt
MIA2.txt
MIBR.ta2
MIMA.cblgen

```
rpp --commands --data "C:\Bee\Workspace\BVAP"  
--log "C:\bee\Output\TestBVAP900\Chargt.log"  
--file "C:\Bee\Softwares\Sources\BVAP\TestMigr\TestBVAP900.txt"
```

```
rpp --automaticMigration --data "C:\Bee\Workspace\BVAP"  
--log "C:\bee\Output\TestBVAP900\automatic.log"  
--from "C:\Bee\Softwares\Sources\BVAP\TestMigr"  
--location BVAP --separateCobolProject  
--cobolProjectType Z  
--separateMetadataFiles  
--pdpRootPath design  
--scmtoolsEntriesFile "C:\Bee\Softwares\Sources\BVAP\TestMigr\scmtoolsEntries.bat"
```


MIGRATION

■ Input : Data



The screenshot shows a file explorer window with the following files listed:

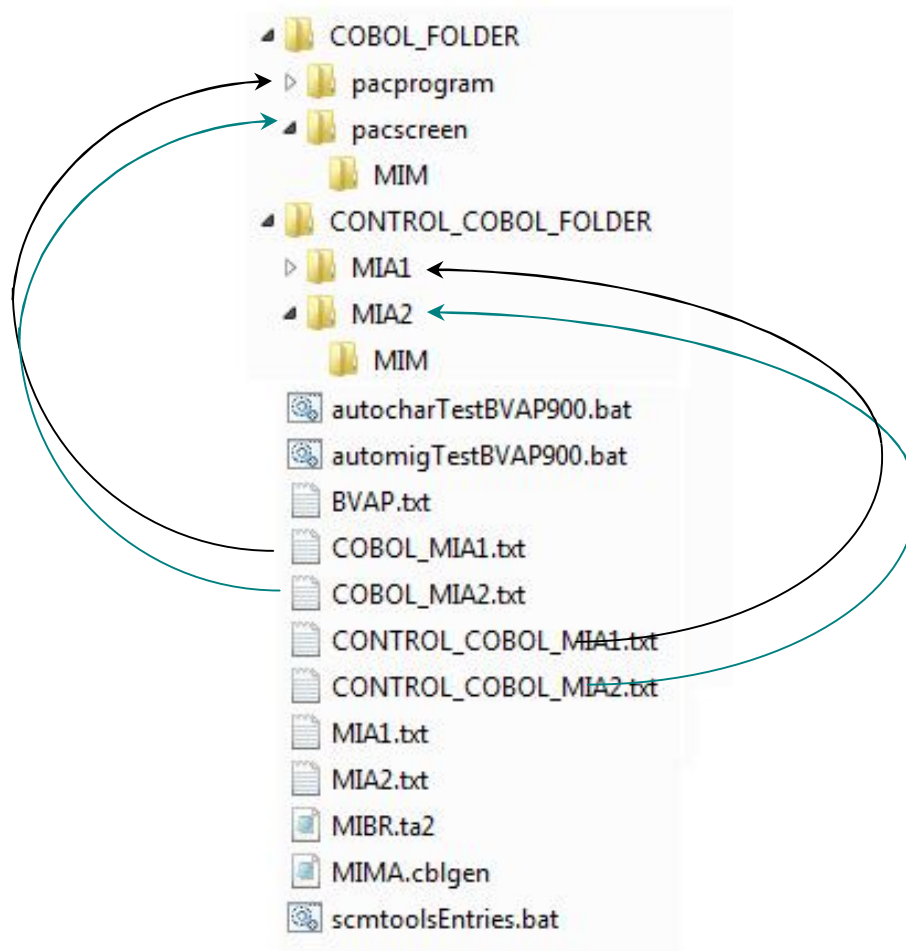
- autocharTestBVAP900.bat
- automigTestBVAP900.bat
- COBOL_MIA1.txt
- COBOL_MIA2.txt
- CONTROL_COBOL_MIA1.txt
- CONTROL_COBOL_MIA2.txt
- MIA1.txt
- MIA2.txt
- MIBR.ta2
- MIMA.cblgen

Red boxes highlight the following files, with red lines pointing to their descriptions:

- COBOL_MIA1.txt, COBOL_MIA2.txt, CONTROL_COBOL_MIA1.txt, and CONTROL_COBOL_MIA2.txt are grouped together and described as "Files containing the results of the MIAx procedures".
- MIA1.txt and MIA2.txt are grouped together and described as "Files containing the list of generated programs".
- MIBR.ta2 is described as "File containing the models".
- MIMA.cblgen is described as "Files containing the generated Macro structures".

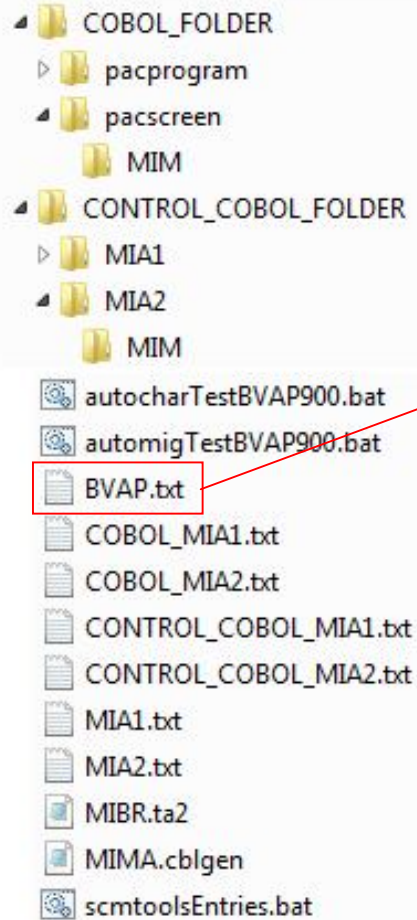
MIGRATION

- Result of automaticMigration command – Split of sources in directories



MIGRATION

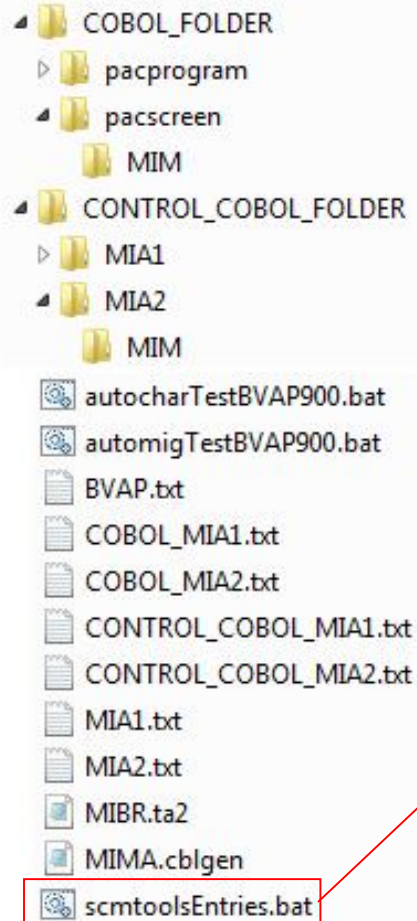
- Result of automaticMigration command – Command lines for Workspace loading



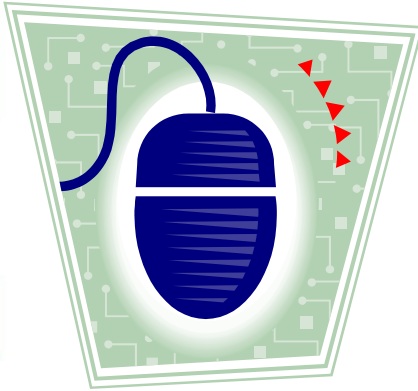
```
--import --fromFile "C:/Bee/Softwares/Sources/BVAP/TestMigr/MIBR.ta2" --location BVAP --importType  
--dispatchMacro --fromFile "C:/Bee/Softwares/Sources/BVAP/TestMigr/MIMA.cblgen" --location BVAP  
--zCompCreation --zProject "BVAP.TZZ.COB" --zFolder "pacprogram" --separateMetadataFiles --pdpRoot  
--zCompCreation --zProject "BVAP.TMB.COB" --zFolder "pacprogram" --separateMetadataFiles --pdpRoot  
--zCompCreation --zProject "BVAP.TZC.COB" --zFolder "pacdialog" --separateMetadataFiles --pdpRootP  
--zCompCreation --zProject "BVAP.TSL.COB" --zFolder "pacprogram" --separateMetadataFiles --pdpRoot  
--zCompCreation --zProject "BVAP.CIC.COB" --zFolder "pacprogram" --separateMetadataFiles --pdpRoot  
--zCompCreation --zProject "BVAP.ADA.COB" --zFolder "pacprogram" --separateMetadataFiles --pdpRoot  
--zCompCreation --zProject "BVAP.MDF.COB" --zFolder "pacprogram" --separateMetadataFiles --pdpRoot  
--zCompCreation --zProject "BVAP.MIM.COB" --zFolder "pacprogram" --zFolder "pacscreen" --separateM  
--migrationHelp --project BVAP.ADA --name "BATCHA" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.ADA --name "BATCHB" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.ADA --name "BATCHC" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.ADA --name "BATCHD" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.ADA --name "BATCHE" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.ADA --name "BATCHF" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.ADA --name "BATCHG" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.ADA --name "BATCHH" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.CIC --name "GVSE01" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.MDF --name "JPNATB" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.MDF --name "JPNATC" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.MDF --name "JPNATD" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.MDF --name "JPNATF" --type pacprogram --cobolFolder "C:/Bee/Softwar  
--migrationHelp --project BVAP.MDF --name "JPNATG" --type pacprogram --cobolFolder "C:/Bee/Softwar
```

MIGRATION

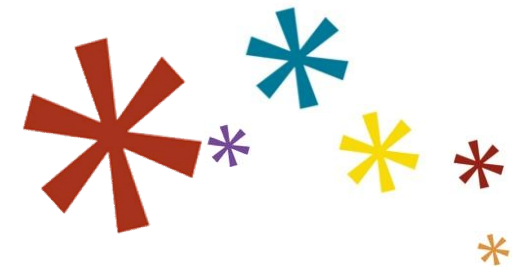
- Result of automaticMigration command – Command lines for RTC loading



```
REM Fill the following line to add the folder containing the lscm command
SET path="C:\Program Files\IBM\SDP\scmtools\eclipse";%PATH%
REM Name of the repository workspace
SET jazz_wsp=RepWks001
REM Fill the following line with your Jazz user id
SET jazz_id= your_Jazz_user_ID
REM Fill the following line with the Jazz uri
SET jazz_uri=https://localhost:9443/ccm/
REM Fill the following line with the project area name
SET project_area=""
REM Fill the following line with the Jazz stream
SET jazz_Stream=
REM Fill the following line with the snapshot name
SET Snapshot=
REM Fill the following line with the changeset comment
SET Comment="xx"
SET LocalLWS=C:\Bee\Workspace\BVAP
CD %LocalLWS%
IF EXIST %LocalLWS%\metadata\scmtoolsentries.log DEL %LocalLWS%\metadata\scmtoolsentries.log
time /T >> %LocalLWS%\metadata\scmtoolsentries.log
CALL lscm login -r %jazz_uri% -n Batch -u %jazz_id% -c
SET jazz_uri=Batch
CALL lscm create ws -u %jazz_id% -r %jazz_uri% -s "%jazz_Stream%" "%jazz_wsp%" >> %LocalLWS%\metadata\..
IF %ERRORLEVEL% NEQ 0 ECHO La creation de l'espace de travail a echoue : %jazz_wsp%
ECHO Creation du composant BVAP.INTER.
CALL lscm create comp -r %jazz_uri% "BVAP.INTER" "%jazz_wsp%" >> %LocalLWS%\metadata\scmtoolsentries.l
IF %ERRORLEVEL% EQU 0 GOTO PROPERTY_BVAP.INTER
IF %ERRORLEVEL% EQU 3 GOTO WARNING_BVAP.INTER_EXISTS
ECHO La creation du composant BVAP.INTER a echoue. : Code %ERRORLEVEL%.
ECHO La creation du composant BVAP.INTER a echoue. : Code %ERRORLEVEL% >> %LocalLWS%\metadata\scmto
GOTO CREATE_BVAP.INTER_END
:PROPERTY_BVAP.INTER
CALL lscm component propertyset visibility public BVAP.INTER -r %jazz_uri% >> %LocalLWS%\metadata\scm
CALL lscm component propertyset visibility public BVAP.INTER -r %jazz_uri% >> %LocalLWS%\metadata\scm
```



ENDEVOR INTEGRATION



ENDEVOR INTEGRATION

- Migration of \$7N and \$7M
- Call of a Micro Pattern containing all needed Endevor Information
 - ▶ *!RPPinfo **Endevor**
 - *USER=
 - *PROJECT=BPCEMIBR.FRX
 - *ENTITY=90BE20
 - *TYPE=pacprogram
 - *DATE=2013/04/16
 - *TIME=10:36:18
 - ***ENVIRONMENT=HFW**
 - ***SYSTEM=HUB**
 - ***SUBSYSTEM=FG**
 - ***TYPEPAC=COBOLP**
 - ***COMMENT=Intégration V2 V210**
 - ***CCID=191018**
- Activation of build.

Participez à l'aventure Code Rally

Code Rally n'est certainement pas un jeu de course classique !

Venez découvrir ce jeu spécialement conçu pour la communauté des développeurs (règlement consultable sur place).

Montrez vos talents en développement, amusez-vous et que le meilleur gagne !

Pourquoi participer ?

Rencontrez des développeurs dans un environnement « fun et social ».

Découvrez de façon ludique les outils de développement IBM.

Utilisez votre savoir-faire au profit de la création et de l'animation d'un véhicule.

Participez aux courses et gagnez des Raspberry !

Prêts à vous lancer ?

Venez-vous en salle Châtelet :

Les 28 et 29 août : de 10h30 à 16h

Le 30 août : de 9h45 à 12h45

La grande finale aura lieu, chaque jour, pendant le cocktail de clôture.

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