



TAURUS

Integrating Tools in RDz
IBM SCLM Integration

June 20, 2011

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- **Focus**

- SoforTe is specialized in optimizing mainframe based application development processes and team collaboration
- RDz, RTC, RAA,
- SCLM, Endeavor, ChangeMan, ...

- **Clients**

- Mainframe customers across all industries

- **Technology**

- TAURUS



- **Lessons learned**

- Integrating existing development processes in RDz is time consuming and requires special skills
- Risk – Implementation is not done to the full extend and developers reject RDz
- Current “out of the box” solutions are not sufficient for 80% of European RDz implementations

- **Consequence**

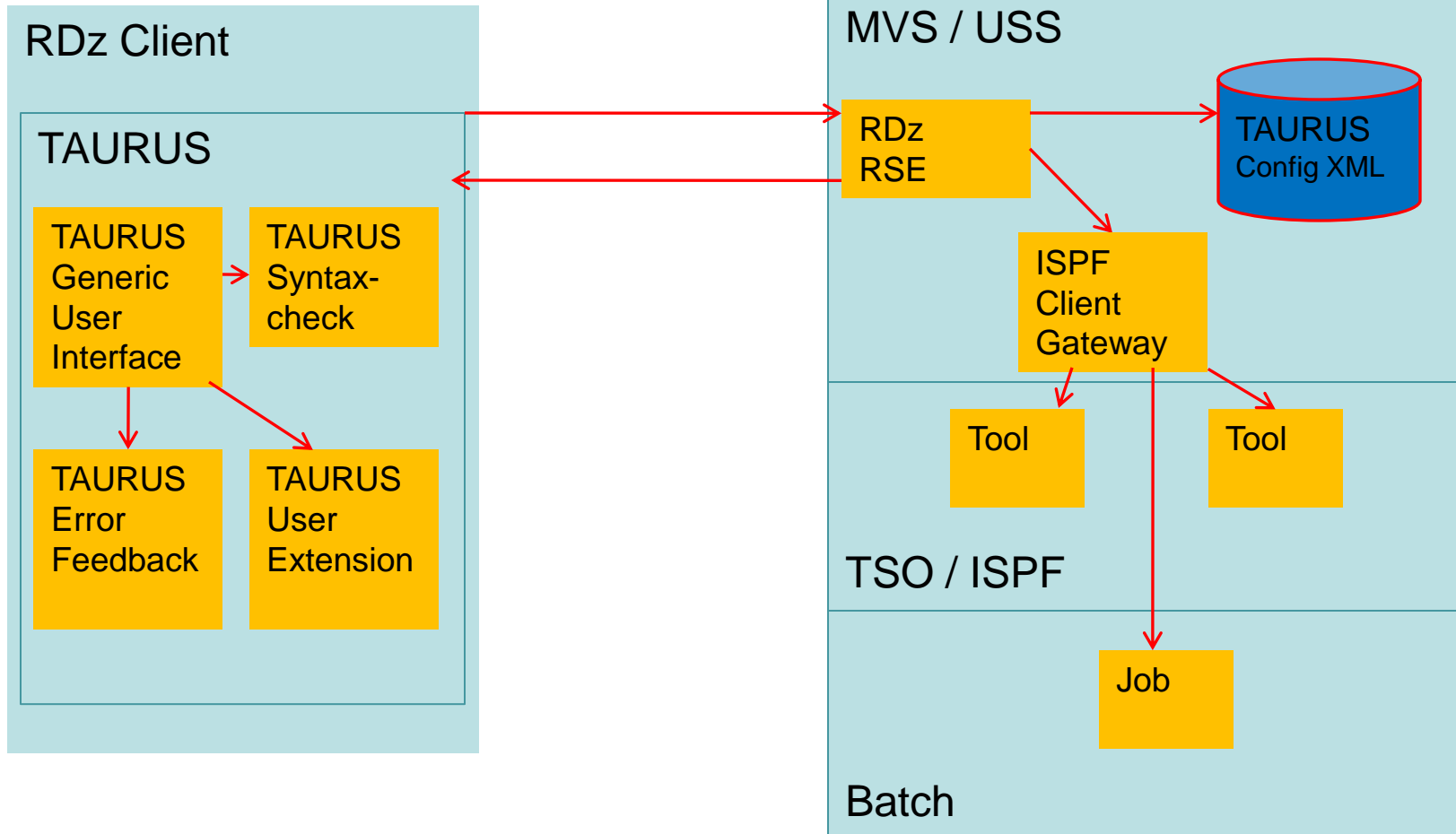
- RDz Implementations need to be simplified and easily customizable for the customers existing development process
- => development of TAURUS Integration toolkit

- **Model driven tool integration**
 - Modeling of user interfaces and tool integration
 - Supports integration of SCLM, Endeavor, ChangeMan, ...
 - Fully customizable
 - Fully integrated into Eclipse and RDz
- **Reducing effort**
 - Integration with major SCM systems out of the box
 - Predefined models for different development processes
 - Integration with all kinds of tools like RAA, RTC, ...
 - Existing skill is sufficient – no plug-in development skill required
- **10 times faster compared to plug-in development**
 - Plug-in development becomes obsolete
 - Complete and deep integration becomes affordable
 - High functionality and quality of UI increase developer acceptability and productivity
 - The financial hurdle for RDz implementations is reduced significantly

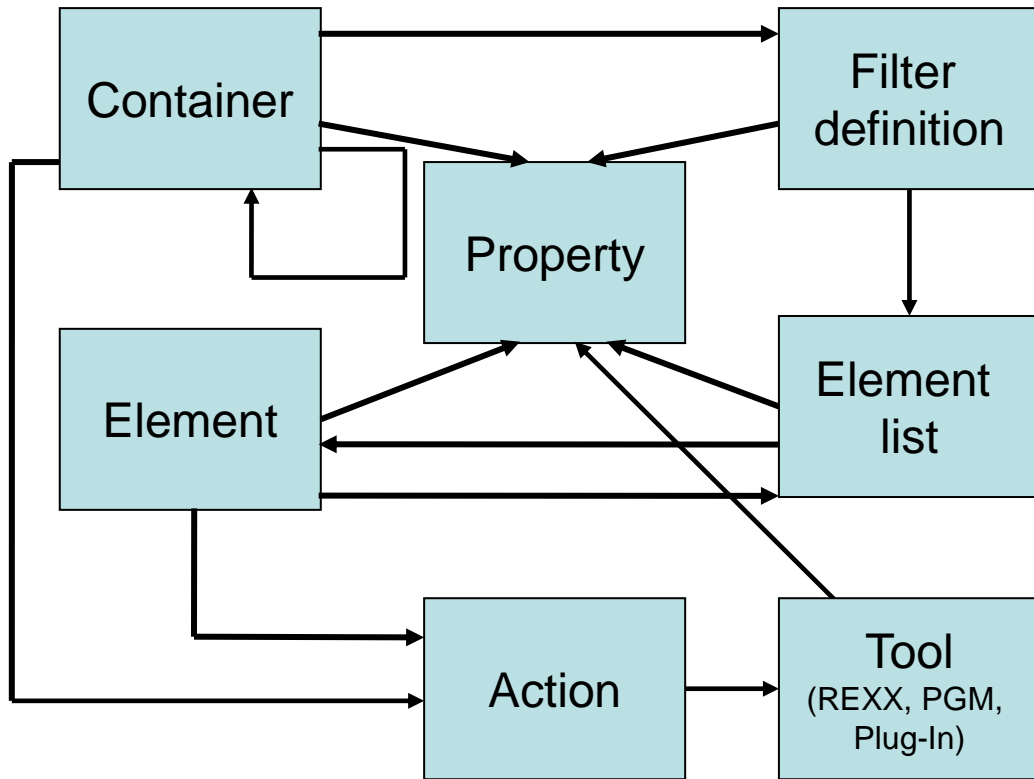
SoforTe – TAURUS – architecture

Windows / Linux

z/OS



SoforTe – TAURUS – modeling

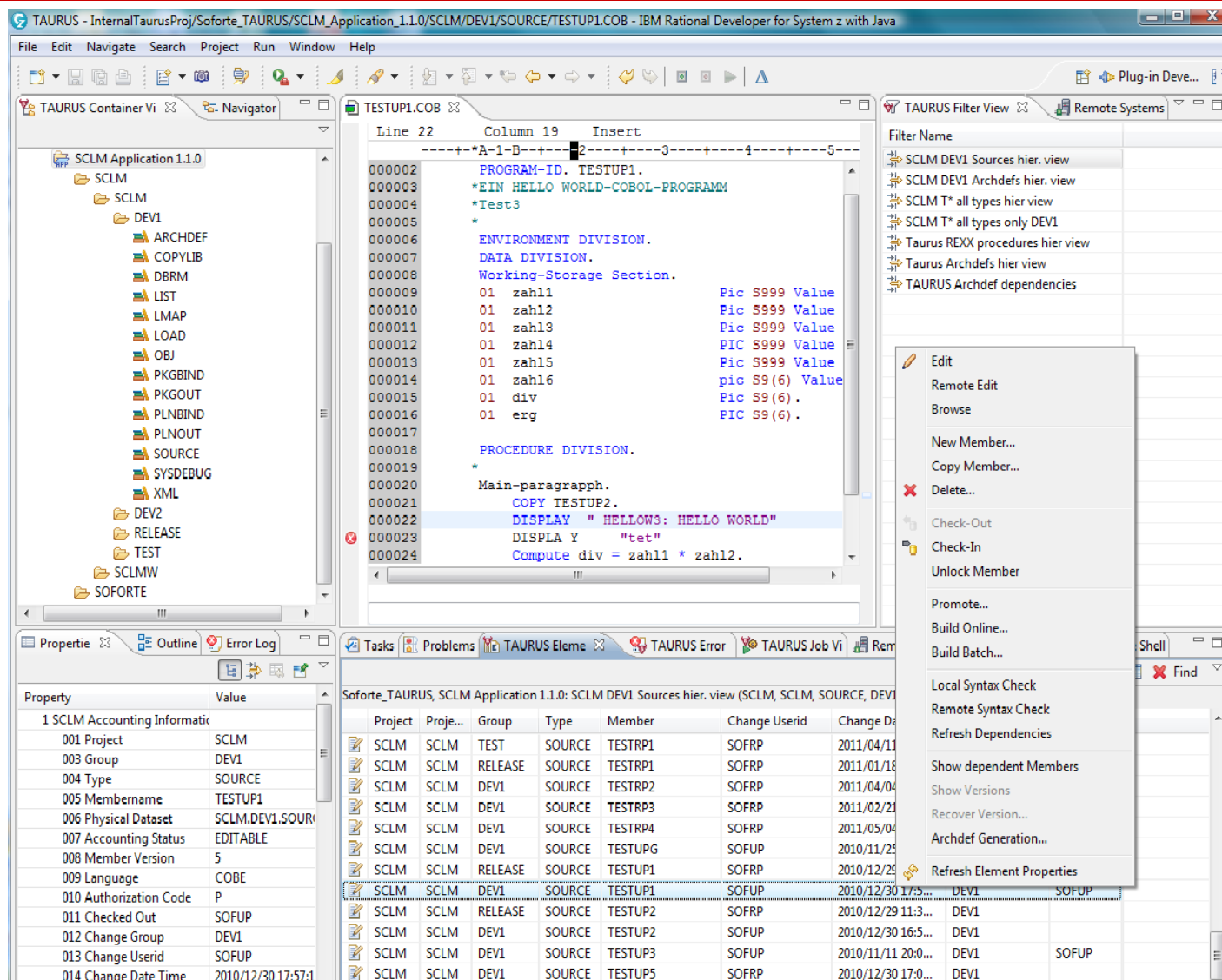


SCLMCONF.taurus

- platform:/resource/InternalTaurusProj/Soforte_TAURUS/SCLM_Application
 - Document Root
 - TAURUS Configuration
 - Application Options 1.1
 - Error View
 - ID Definitions
 - Action Descriptors
 - Container Types
 - Container Type CONTProj
 - Container Type CONTProjDef
 - Container Type CONTGroup
 - Contains ContainerType -> CONTType
 - Has Property #1 -> PROPProj
 - Has Property #2 -> PROPProjdef
 - Has Property #3 -> PROPGROUP
 - Has Filter #1 -> FILTMemFilter
 - Container Type CONTType
 - Element Types
 - Elementlist Structures
 - File Descriptors
 - Filter Types
 - Filter Type FILTMemFilter - Default FilterType
 - Filter Type FILTDependenciesFilter
 - Properties
 - Tool Descriptors
 - Tool Descriptor TOOL_Plugin_TestPlugin
 - Category REX tools
 - Category Integrated tools
 - Category Container retrieval tools
 - Category Value retrieval tools
 - Category I/O dialogs

Property	Value
Essential	
Seq No	3
Target ID	Property (String) PROPGROUP
Misc	
Sort Direction	Ascending
Optional	
Category	
Label	Group

SoforTe – TAURUS – SCLM Integration

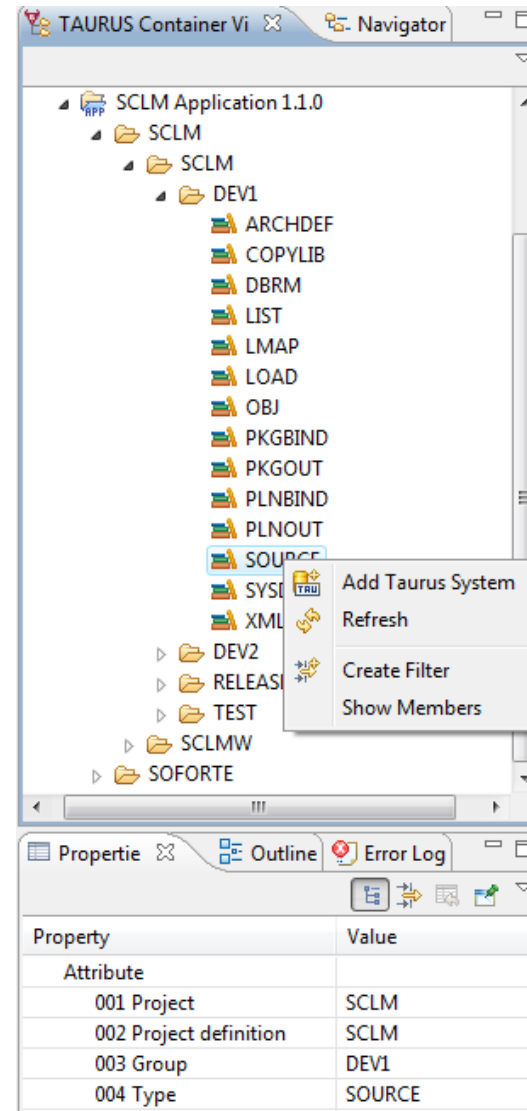


The screenshot displays the IBM Rational Developer for System z with Java interface. The main window shows the SCLM Application 1.1.0 project structure in the Navigator, including SCLM, DEV1, ARCHDEF, COPYLIB, DBRM, LIST, LMAP, LOAD, OBJ, PKGBIND, PKGOUT, PLNBIND, PLNOUT, SOURCE, SYSDEBUG, XML, DEV2, RELEASE, TEST, SCLMW, and SOFORTE. The central editor displays the COBOL source code for TESTUP1.COB, showing program details, environment divisions, working-storage sections, and procedure divisions. The right-hand side features a TAURUS Filter View and a context menu with options like Edit, Remote Edit, Browse, New Member..., Copy Member..., Delete..., Check-Out, Check-In, Unlock Member, Promote..., Build Online..., Build Batch..., Local Syntax Check, Remote Syntax Check, Refresh Dependencies, Show dependent Members, Show Versions, Recover Version..., Archdef Generation..., and Refresh Element Properties. The bottom panel shows the TAURUS Element table with columns for Project, Group, Type, Member, Change Userid, and Change Date.

Project	Group	Type	Member	Change Userid	Change Date
SCLM	SCLM	TEST	SOURCE	TESTRP1	SOFRP
SCLM	SCLM	RELEASE	SOURCE	TESTRP1	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTRP2	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTRP3	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTRP4	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTUPG	SOFUP
SCLM	SCLM	RELEASE	SOURCE	TESTUP1	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTUP1	SOFUP
SCLM	SCLM	RELEASE	SOURCE	TESTUP2	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTUP2	SOFUP
SCLM	SCLM	DEV1	SOURCE	TESTUP3	SOFUP
SCLM	SCLM	DEV1	SOURCE	TESTUP5	SOFRP

Taurus - SCLM Tree View

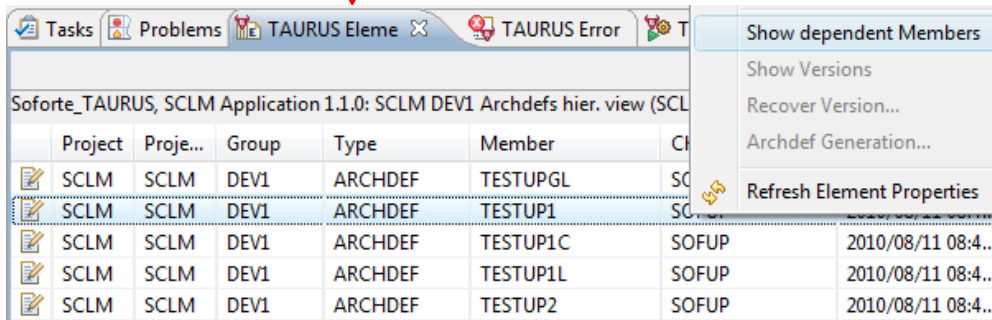
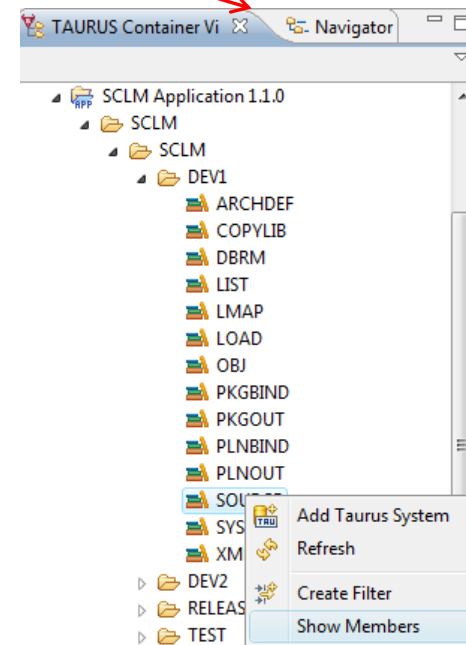
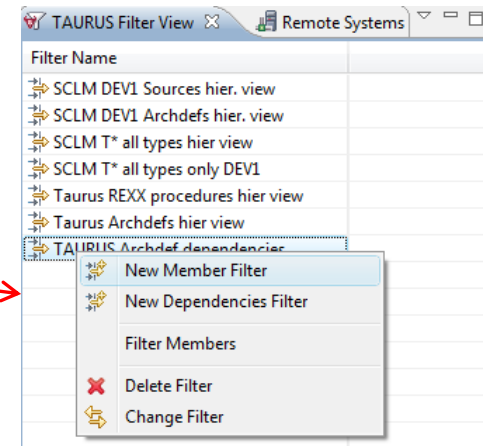
- **Supports a hierarchical view to:**
 - Projects
 - Project Definitions
 - Groups
 - Types



TAURUS – Create a SCLM Member List

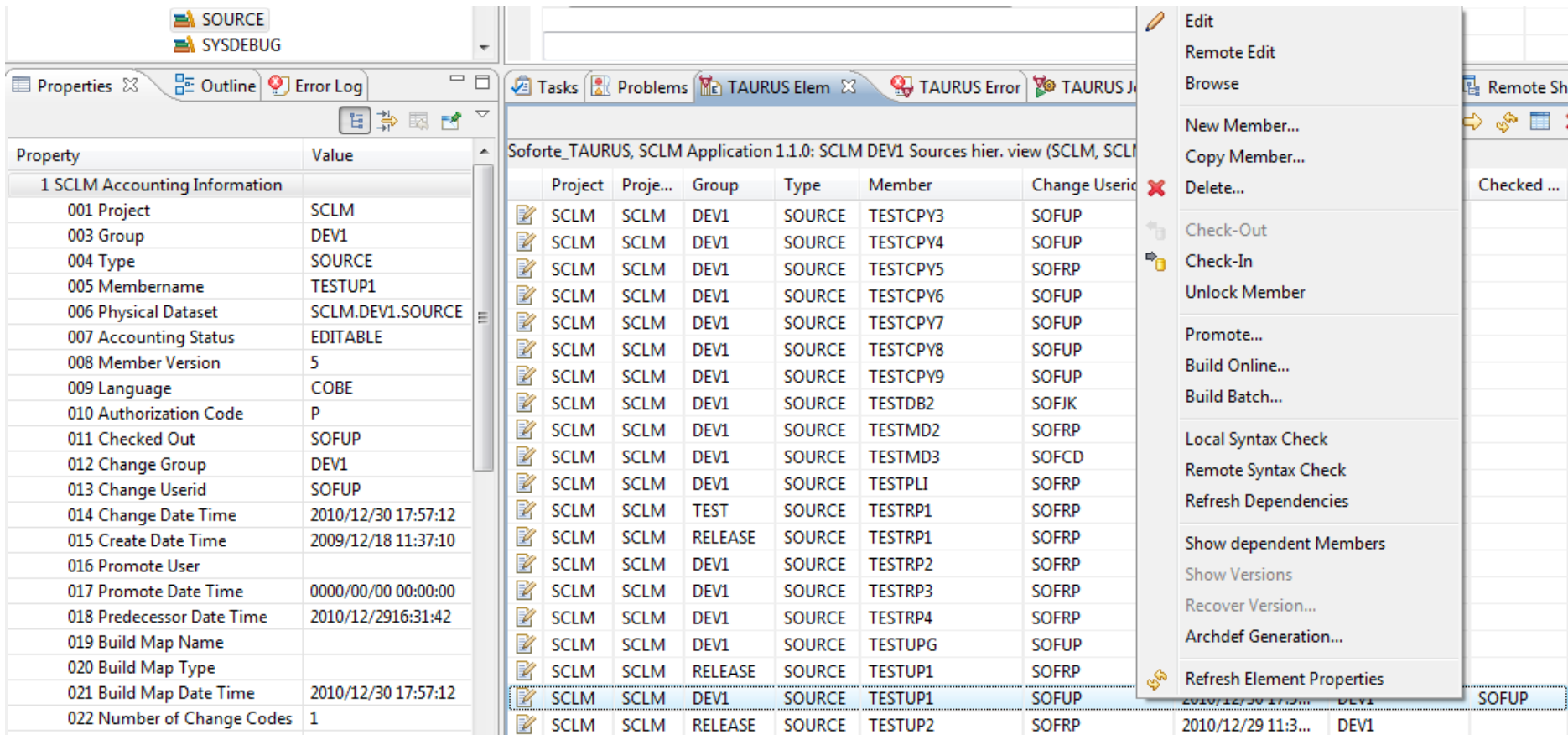
- **Several ways to create a member list:**

- From the filter view
- From the tree view
- From another member list



Project	Proje...	Group	Type	Member	Ch...
SCLM	SCLM	DEV1	ARCHDEF	TESTUPGL	SC...
SCLM	SCLM	DEV1	ARCHDEF	TESTUP1	SC...
SCLM	SCLM	DEV1	ARCHDEF	TESTUP1C	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUP1L	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUP2	SOFUP

TAURUS – SCLM Member Functions



The screenshot displays the SCLM interface with a context menu open over a source member. The left pane shows the 'Properties' window for '1 SCLM Accounting Information'. The main pane shows a table of source members. The context menu includes options like 'Edit', 'Delete...', 'Check-Out', 'Promote...', and 'Refresh Element Properties'.

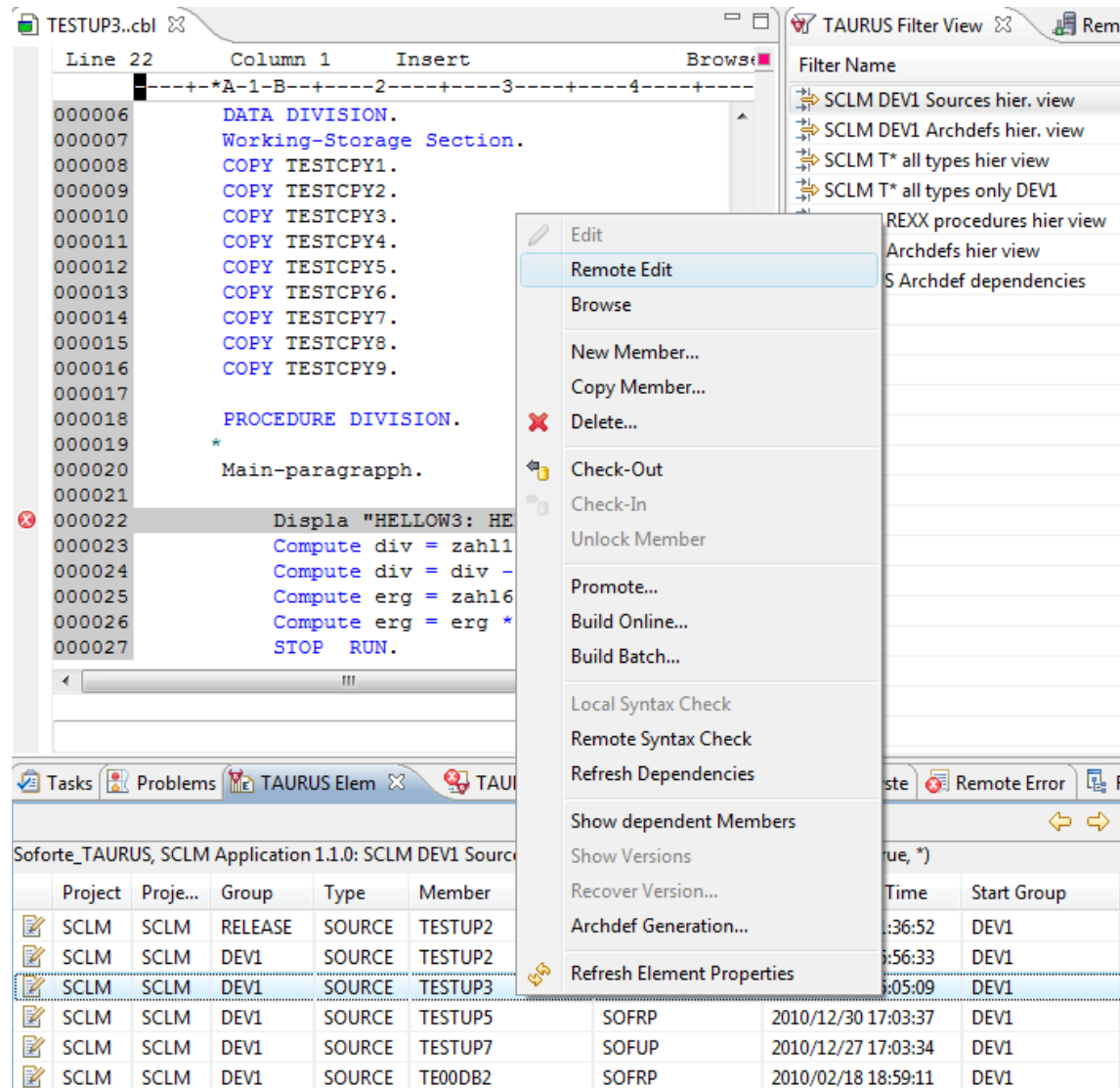
Property	Value
1 SCLM Accounting Information	
001 Project	SCLM
003 Group	DEV1
004 Type	SOURCE
005 Membername	TESTUP1
006 Physical Dataset	SCLM.DEV1.SOURCE
007 Accounting Status	EDITABLE
008 Member Version	5
009 Language	COBE
010 Authorization Code	P
011 Checked Out	SOFUP
012 Change Group	DEV1
013 Change Userid	SOFUP
014 Change Date Time	2010/12/30 17:57:12
015 Create Date Time	2009/12/18 11:37:10
016 Promote User	
017 Promote Date Time	0000/00/00 00:00:00
018 Predecessor Date Time	2010/12/2916:31:42
019 Build Map Name	
020 Build Map Type	
021 Build Map Date Time	2010/12/30 17:57:12
022 Number of Change Codes	1

Project	Proje...	Group	Type	Member	Change Userid
SCLM	SCLM	DEV1	SOURCE	TESTCPY3	SOFUP
SCLM	SCLM	DEV1	SOURCE	TESTCPY4	SOFUP
SCLM	SCLM	DEV1	SOURCE	TESTCPY5	SOFUP
SCLM	SCLM	DEV1	SOURCE	TESTCPY6	SOFUP
SCLM	SCLM	DEV1	SOURCE	TESTCPY7	SOFUP
SCLM	SCLM	DEV1	SOURCE	TESTCPY8	SOFUP
SCLM	SCLM	DEV1	SOURCE	TESTCPY9	SOFUP
SCLM	SCLM	DEV1	SOURCE	TESTDB2	SOFJK
SCLM	SCLM	DEV1	SOURCE	TESTMD2	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTMD3	SOFCD
SCLM	SCLM	DEV1	SOURCE	TESTPLI	SOFRP
SCLM	SCLM	TEST	SOURCE	TESTRP1	SOFRP
SCLM	SCLM	RELEASE	SOURCE	TESTRP1	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTRP2	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTRP3	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTRP4	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTUPG	SOFUP
SCLM	SCLM	RELEASE	SOURCE	TESTUP1	SOFRP
SCLM	SCLM	DEV1	SOURCE	TESTUP1	SOFUP
SCLM	SCLM	RELEASE	SOURCE	TESTUP2	SOFRP

Taurus – Editing an SCLM Member

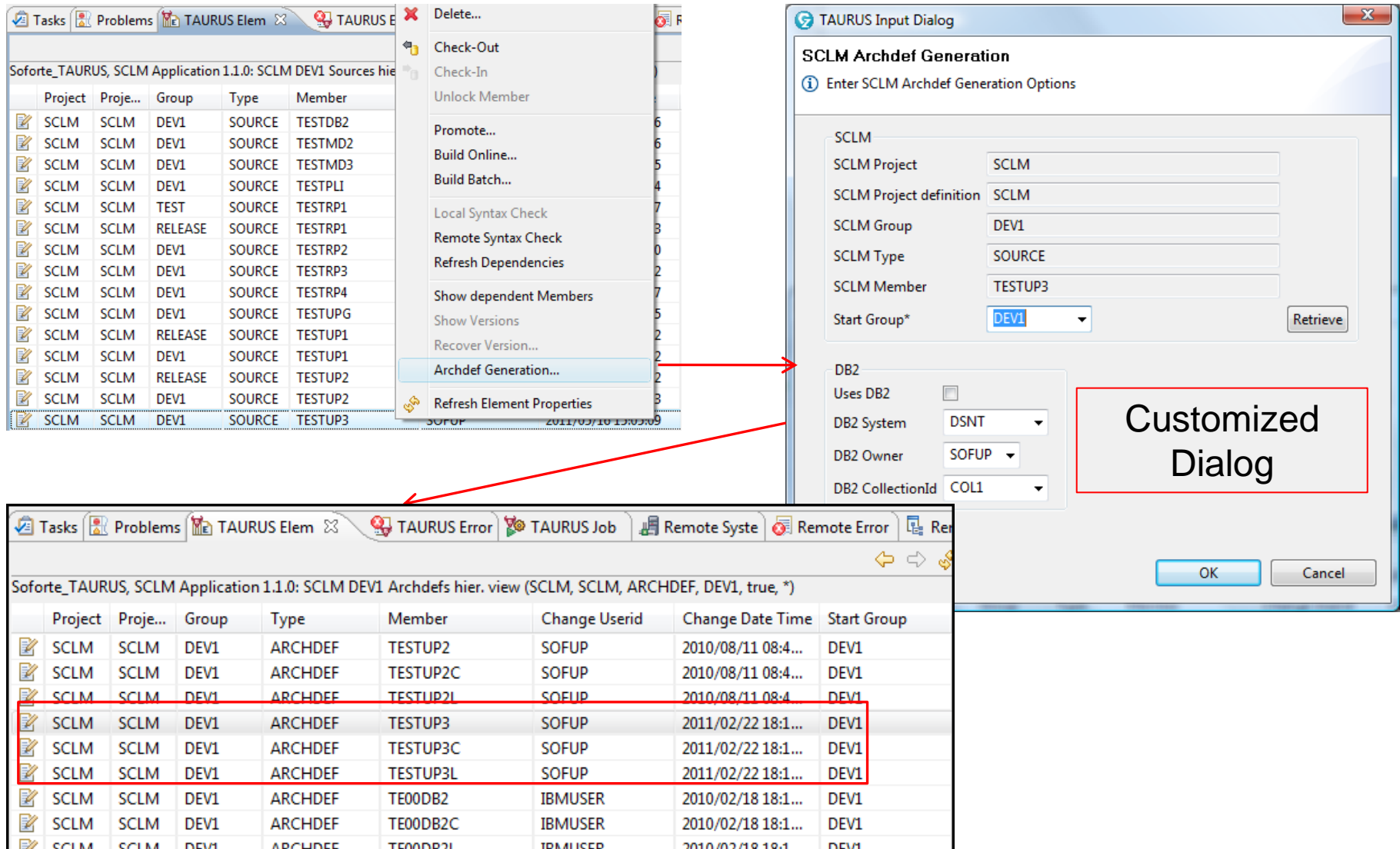
- **Modeling your own Edit Scenario:**
 - Scenario A:
 - Remote Edit
 - Scenario B:
 - Check-Out from SCLM to the RDz workspace
 - Local Edit
 - Check-In
 -

- **Support of the local and remote syntax check**



Project	Proje...	Group	Type	Member			
SCLM	SCLM	RELEASE	SOURCE	TESTUP2			
SCLM	SCLM	DEV1	SOURCE	TESTUP2			
SCLM	SCLM	DEV1	SOURCE	TESTUP3			
SCLM	SCLM	DEV1	SOURCE	TESTUP5	SOFRP	2010/12/30 17:03:37	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTUP7	SOFUP	2010/12/27 17:03:34	DEV1
SCLM	SCLM	DEV1	SOURCE	TE00DB2	SOFRP	2010/02/18 18:59:11	DEV1

Taurus – Generate SCLM Archdefs (custom.)



Source Browser Table:

Project	Proje...	Group	Type	Member
SCLM	SCLM	DEV1	SOURCE	TESTDB2
SCLM	SCLM	DEV1	SOURCE	TESTMD2
SCLM	SCLM	DEV1	SOURCE	TESTMD3
SCLM	SCLM	DEV1	SOURCE	TESTPL1
SCLM	SCLM	TEST	SOURCE	TESTRP1
SCLM	SCLM	RELEASE	SOURCE	TESTRP1
SCLM	SCLM	DEV1	SOURCE	TESTRP2
SCLM	SCLM	DEV1	SOURCE	TESTRP3
SCLM	SCLM	DEV1	SOURCE	TESTRP4
SCLM	SCLM	DEV1	SOURCE	TESTUPG
SCLM	SCLM	RELEASE	SOURCE	TESTUP1
SCLM	SCLM	DEV1	SOURCE	TESTUP1
SCLM	SCLM	RELEASE	SOURCE	TESTUP2
SCLM	SCLM	DEV1	SOURCE	TESTUP2
SCLM	SCLM	DEV1	SOURCE	TESTUP3

TAURUS Input Dialog - SCLM Archdef Generation

Enter SCLM Archdef Generation Options

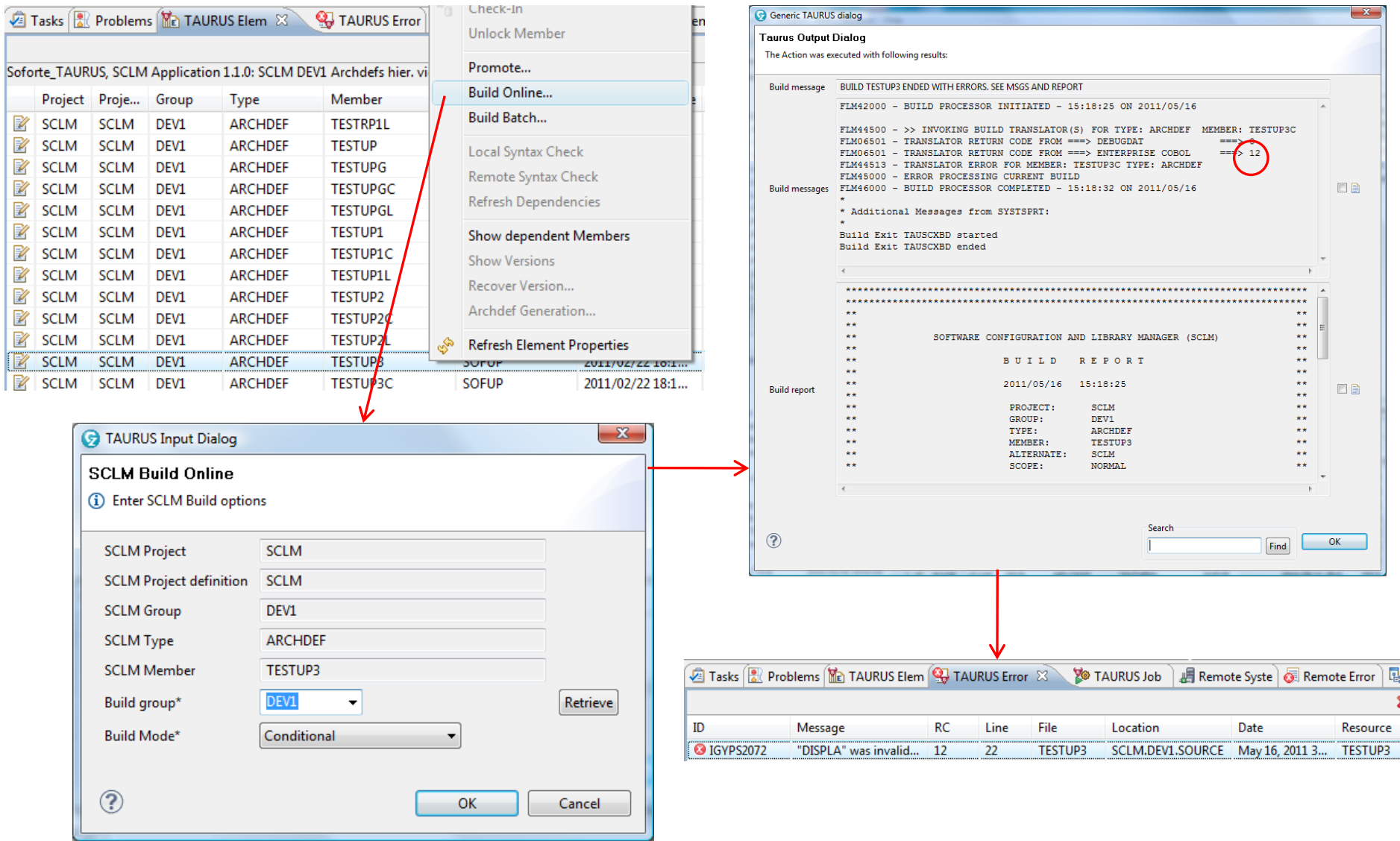
SCLM Project: SCLM
 SCLM Project definition: SCLM
 SCLM Group: DEV1
 SCLM Type: SOURCE
 SCLM Member: TESTUP3
 Start Group*: DEV1

DB2 Uses DB2:
 DB2 System: DSNT
 DB2 Owner: SOFUP
 DB2 CollectionId: COL1

Archdefs hier. view Table:

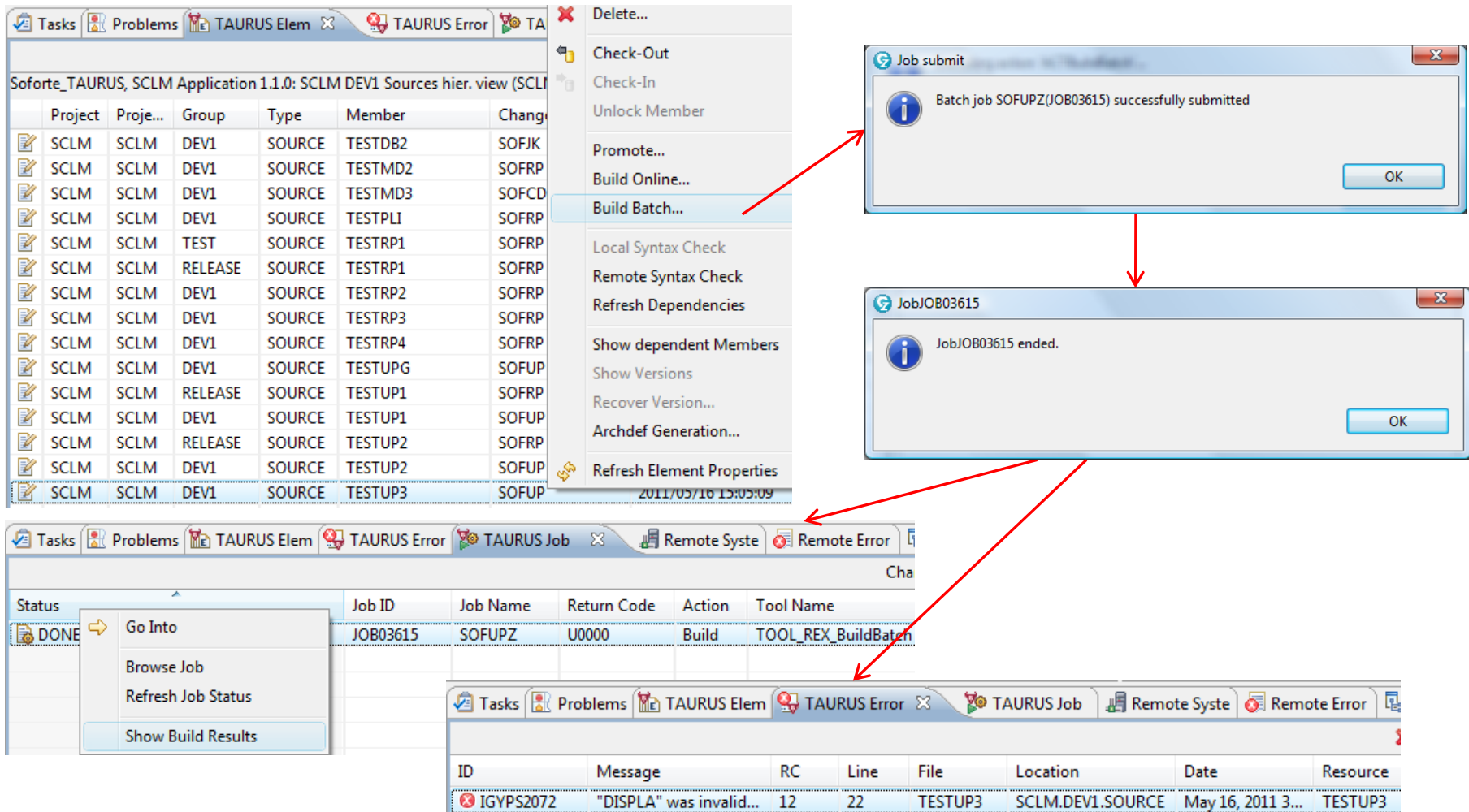
Project	Proje...	Group	Type	Member	Change Userid	Change Date Time	Start Group
SCLM	SCLM	DEV1	ARCHDEF	TESTUP2	SOFUP	2010/08/11 08:4...	DEV1
SCLM	SCLM	DEV1	ARCHDEF	TESTUP2C	SOFUP	2010/08/11 08:4...	DEV1
SCLM	SCLM	DEV1	ARCHDEF	TESTUP2L	SOFUP	2010/08/11 08:4...	DEV1
SCLM	SCLM	DEV1	ARCHDEF	TESTUP3	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	ARCHDEF	TESTUP3C	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	ARCHDEF	TESTUP3L	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	ARCHDEF	TE00DB2	IBMUSER	2010/02/18 18:1...	DEV1
SCLM	SCLM	DEV1	ARCHDEF	TE00DB2C	IBMUSER	2010/02/18 18:1...	DEV1
SCLM	SCLM	DEV1	ARCHDEF	TE00DB2L	IBMUSER	2010/02/18 18:1...	DEV1

Taurus – Build an SCLM Archdef



The screenshot illustrates the workflow for building an SCLM Archdef in Taurus. It shows the project list, the 'Build Online...' option in the context menu, the 'SCLM Build Online' dialog box with fields for Project, Group, Type, Member, Build group, and Build Mode. The 'Taurus Output Dialog' displays the build process, including messages and a 'SOFTWARE CONFIGURATION AND LIBRARY MANAGER (SCLM) BUILD REPORT'. The report shows the build was completed on 2011/05/16 at 15:18:25 for project SCLM, group DEV1, type ARCHDEF, member TESTUP3. The 'Taurus Error' window at the bottom shows an error message: 'IGYPS2072 "DISPLA" was invalid... 12 22 TESTUP3 SCLM.DEV1.SOURCE May 16, 2011 3... TESTUP3'.

Taurus – SCLM Batch support (e.g. batch build)



The screenshot illustrates the workflow for submitting and monitoring a batch build in Taurus. It is divided into three main sections:

- Top Left:** The SCLM Sources hierarchy view. A context menu is open over a source member, with "Build Batch..." selected. The menu also includes options like "Delete...", "Check-Out", "Check-In", "Unlock Member", "Promote...", "Build Online...", "Local Syntax Check", "Remote Syntax Check", "Refresh Dependencies", "Show dependent Members", "Show Versions", "Recover Version...", "Archdef Generation...", and "Refresh Element Properties".
- Top Right:** A "Job submit" dialog box with the message: "Batch job SOFUPZ(JOB03615) successfully submitted". An "OK" button is present.
- Bottom Left:** The "TAURUS Job" view showing a table of job details. A context menu is open over the job row, with "Show Build Results" selected. The table has the following data:

Status	Job ID	Job Name	Return Code	Action	Tool Name
DONE	JOB03615	SOFUPZ	U0000	Build	TOOL_REX_BuildBatch

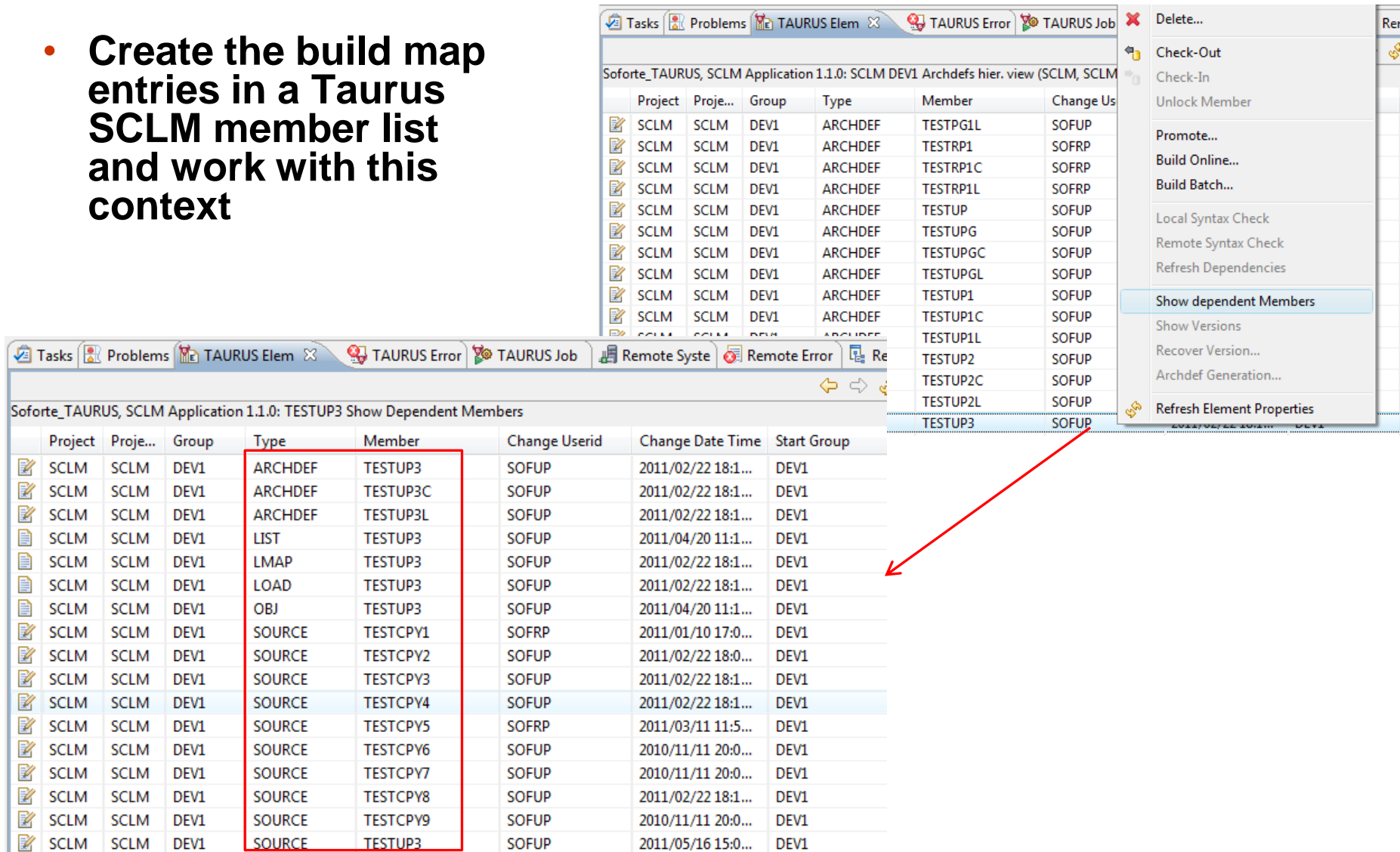
- Bottom Right:** The "TAURUS Error" view showing a table of error messages. The table has the following data:

ID	Message	RC	Line	File	Location	Date	Resource
IGYPS2072	"DISPLA" was invalid...	12	22	TESTUP3	SCLM.DEV1.SOURCE	May 16, 2011 3...	TESTUP3

Red arrows indicate the flow of the process: from the "Build Batch..." menu item to the "Job submit" dialog, then to the "JobJOB03615" dialog, and finally to the "Show Build Results" menu item in the job view.

Taurus – Create a Dependency Member List

- **Create the build map entries in a Taurus SCLM member list and work with this context**

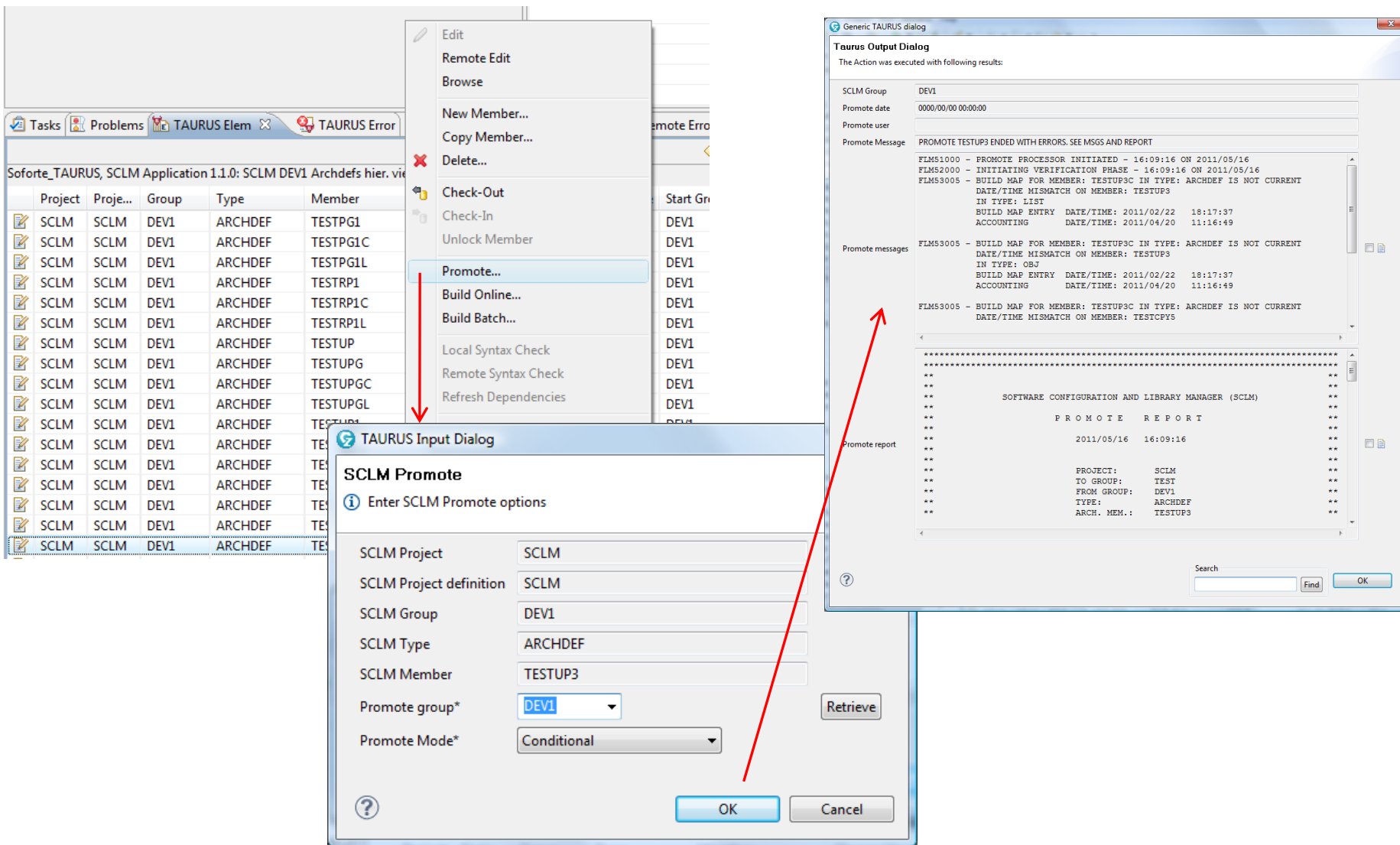


The screenshot displays the Taurus SCLM interface. The top window shows a table of members with columns: Project, Proj..., Group, Type, Member, and Change Us. The bottom window shows a table of dependent members with columns: Project, Proj..., Group, Type, Member, Change Userid, Change Date Time, and Start Group. A red box highlights the 'Type' and 'Member' columns in the bottom table. A context menu is open over the 'TESTUP3' member in the bottom table, with 'Show dependent Members' highlighted. A red arrow points from the 'Show dependent Members' option to the 'TESTUP3' member in the bottom table.

Project	Proj...	Group	Type	Member	Change Us
SCLM	SCLM	DEV1	ARCHDEF	TESTPG1L	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTRP1	SOFRP
SCLM	SCLM	DEV1	ARCHDEF	TESTRP1C	SOFRP
SCLM	SCLM	DEV1	ARCHDEF	TESTRP1L	SOFRP
SCLM	SCLM	DEV1	ARCHDEF	TESTUP	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUPG	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUPGC	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUPGL	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUP1	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUP1C	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUP1L	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUP2	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUP2C	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUP2L	SOFUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUP3	SOFUP

Project	Proj...	Group	Type	Member	Change Userid	Change Date Time	Start Group
SCLM	SCLM	DEV1	ARCHDEF	TESTUP3	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	ARCHDEF	TESTUP3C	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	ARCHDEF	TESTUP3L	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	LIST	TESTUP3	SOFUP	2011/04/20 11:1...	DEV1
SCLM	SCLM	DEV1	LMAP	TESTUP3	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	LOAD	TESTUP3	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	OBJ	TESTUP3	SOFUP	2011/04/20 11:1...	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTCPY1	SOFRP	2011/01/10 17:0...	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTCPY2	SOFUP	2011/02/22 18:0...	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTCPY3	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTCPY4	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTCPY5	SOFRP	2011/03/11 11:5...	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTCPY6	SOFUP	2010/11/11 20:0...	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTCPY7	SOFUP	2010/11/11 20:0...	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTCPY8	SOFUP	2011/02/22 18:1...	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTCPY9	SOFUP	2010/11/11 20:0...	DEV1
SCLM	SCLM	DEV1	SOURCE	TESTUP3	SOFUP	2011/05/16 15:0...	DEV1

Taurus – Promote an SCLM Archdef



SCLM Archdefs hier. view

Project	Proje...	Group	Type	Member
SCLM	SCLM	DEV1	ARCHDEF	TESTPG1
SCLM	SCLM	DEV1	ARCHDEF	TESTPG1C
SCLM	SCLM	DEV1	ARCHDEF	TESTPG1L
SCLM	SCLM	DEV1	ARCHDEF	TESTRP1
SCLM	SCLM	DEV1	ARCHDEF	TESTRP1C
SCLM	SCLM	DEV1	ARCHDEF	TESTRP1L
SCLM	SCLM	DEV1	ARCHDEF	TESTUP
SCLM	SCLM	DEV1	ARCHDEF	TESTUPGC
SCLM	SCLM	DEV1	ARCHDEF	TESTUPGL
SCLM	SCLM	DEV1	ARCHDEF	TESTUP1
SCLM	SCLM	DEV1	ARCHDEF	TESTUP1C
SCLM	SCLM	DEV1	ARCHDEF	TESTUP1L
SCLM	SCLM	DEV1	ARCHDEF	TESTUP2
SCLM	SCLM	DEV1	ARCHDEF	TESTUP2C
SCLM	SCLM	DEV1	ARCHDEF	TESTUP2L
SCLM	SCLM	DEV1	ARCHDEF	TESTUP3
SCLM	SCLM	DEV1	ARCHDEF	TESTUP3C
SCLM	SCLM	DEV1	ARCHDEF	TESTUP3L

TAURUS Input Dialog

SCLM Promote

Enter SCLM Promote options

SCLM Project: SCLM
SCLM Project definition: SCLM
SCLM Group: DEV1
SCLM Type: ARCHDEF
SCLM Member: TESTUP3
Promote group*: DEV1
Promote Mode*: Conditional

Retrieve

OK Cancel

TAURUS Output Dialog

The Action was executed with following results:

SCLM Group: DEV1
Promote date: 0000/00/00 00:00:00
Promote user:
Promote Message: PROMOTE TESTUP3 ENDED WITH ERRORS. SEE MSGS AND REPORT

Promote messages:

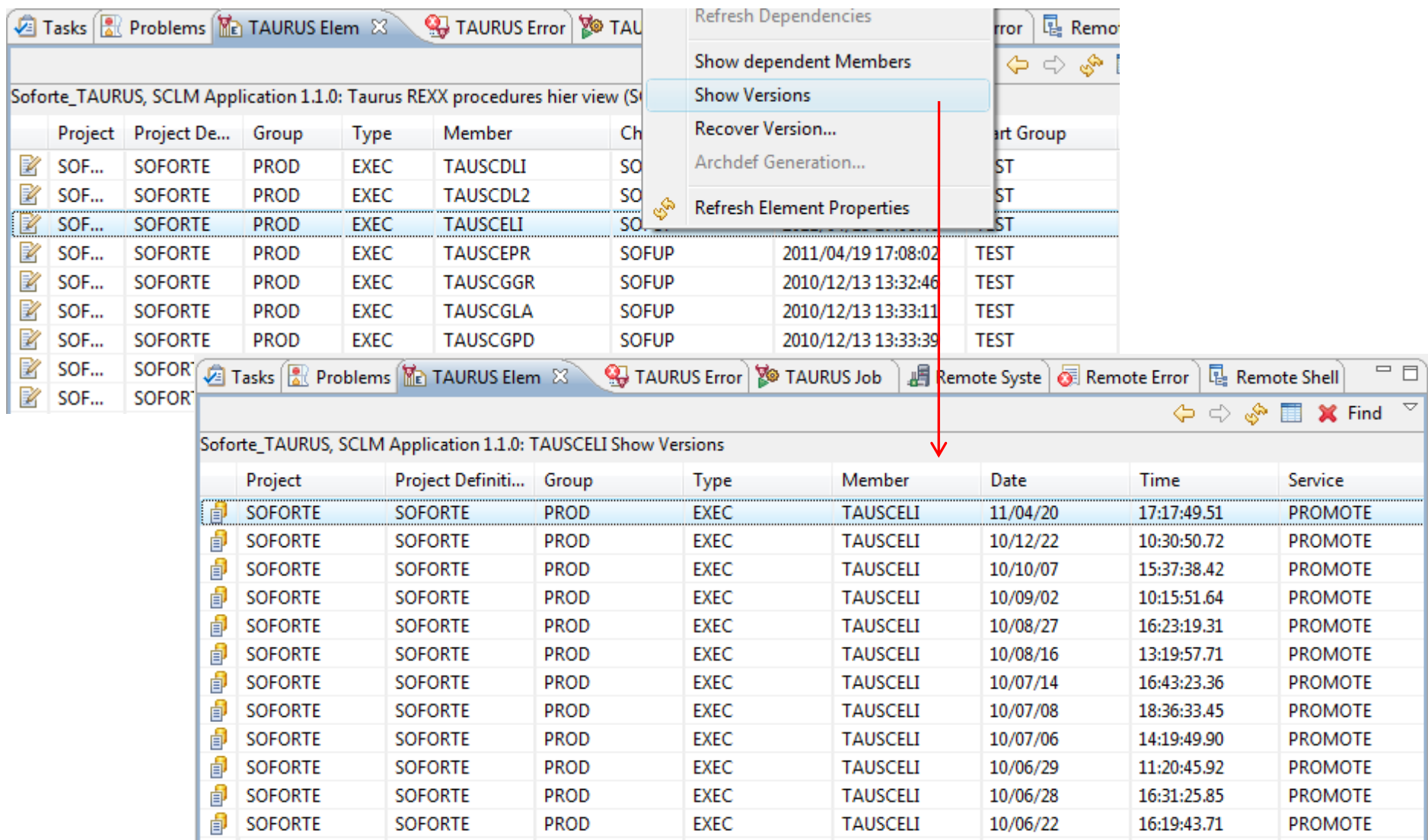
```
FLM51000 - PROMOTE PROCESSOR INITIATED - 16:09:16 ON 2011/05/16
FLM52000 - INITIATING VERIFICATION PHASE - 16:09:16 ON 2011/05/16
FLM53005 - BUILD MAP FOR MEMBER: TESTUP3C IN TYPE: ARCHDEF IS NOT CURRENT
DATE/TIME MISMATCH ON MEMBER: TESTUP3
IN TYPE: LIST
BUILD MAP ENTRY DATE/TIME: 2011/02/22 18:17:37
ACCOUNTING DATE/TIME: 2011/04/20 11:16:49
FLM53005 - BUILD MAP FOR MEMBER: TESTUP3C IN TYPE: ARCHDEF IS NOT CURRENT
DATE/TIME MISMATCH ON MEMBER: TESTUP3
IN TYPE: OBJ
BUILD MAP ENTRY DATE/TIME: 2011/02/22 18:17:37
ACCOUNTING DATE/TIME: 2011/04/20 11:16:49
FLM53005 - BUILD MAP FOR MEMBER: TESTUP3C IN TYPE: ARCHDEF IS NOT CURRENT
DATE/TIME MISMATCH ON MEMBER: TESTUP3C
```

Promote report:

```
*****
**                                     **
**          SOFTWARE CONFIGURATION AND LIBRARY MANAGER (SCLM)          **
**                                     **
**          PROMOTE REPORT          **
**                                     **
**          2011/05/16 16:09:16          **
**                                     **
**          PROJECT: SCLM          **
**          TO GROUP: TEST          **
**          FROM GROUP: DEV1          **
**          TYPE: ARCHDEF          **
**          ARCH. MEM.: TESTUP3          **
**                                     **
*****
```

Search Find OK

Taurus – Create a version member list



The screenshot displays the SoforTe Taurus interface. The top window shows a table of REXX procedures. A context menu is open over the 'TAUSCELI' member, with 'Show Versions' selected. A red arrow points from this menu item to the 'Show Versions' window below.

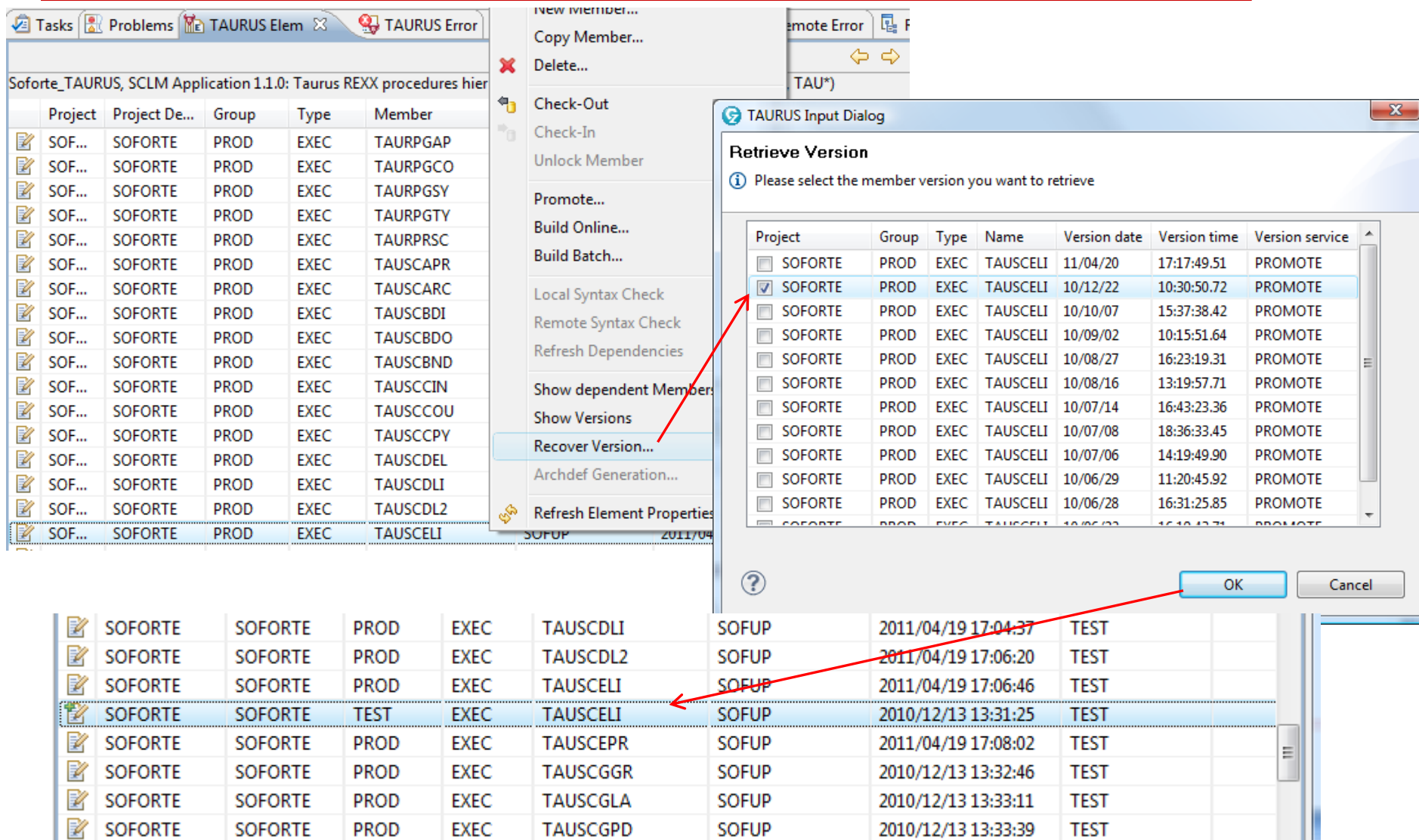
Top Window: Soforte_TAURUS, SCLM Application 1.1.0: Taurus REXX procedures hier view (S)

Project	Project De...	Group	Type	Member	Ch		
SOF...	SOFORTE	PROD	EXEC	TAUSCDLI	SO		
SOF...	SOFORTE	PROD	EXEC	TAUSCDL2	SO		
SOF...	SOFORTE	PROD	EXEC	TAUSCELI	SO		
SOF...	SOFORTE	PROD	EXEC	TAUSCEPR	SOFUP	2011/04/19 17:08:02	TEST
SOF...	SOFORTE	PROD	EXEC	TAUSCGGR	SOFUP	2010/12/13 13:32:46	TEST
SOF...	SOFORTE	PROD	EXEC	TAUSCGLA	SOFUP	2010/12/13 13:33:11	TEST
SOF...	SOFORTE	PROD	EXEC	TAUSCGPD	SOFUP	2010/12/13 13:33:39	TEST

Bottom Window: Soforte_TAURUS, SCLM Application 1.1.0: TAUSCELI Show Versions

Project	Project Definiti...	Group	Type	Member	Date	Time	Service
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	11/04/20	17:17:49.51	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/12/22	10:30:50.72	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/10/07	15:37:38.42	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/09/02	10:15:51.64	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/08/27	16:23:19.31	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/08/16	13:19:57.71	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/07/14	16:43:23.36	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/07/08	18:36:33.45	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/07/06	14:19:49.90	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/06/29	11:20:45.92	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/06/28	16:31:25.85	PROMOTE
SOFORTE	SOFORTE	PROD	EXEC	TAUSCELI	10/06/22	16:19:43.71	PROMOTE

Taurus – Recover an SCLM version member



The screenshot shows the Taurus software interface. On the left, a tree view displays 'Soforte_TAUROS, SCLM Application 1.1.0: Taurus REXX procedures hier'. Below it is a table of members. A context menu is open over the 'TAUSCELLI' member, with 'Recover Version...' selected. A red arrow points from this menu item to the 'TAURUS Input Dialog' window. The dialog has a 'Retrieve Version' section with a table of version members. Another red arrow points from the 'OK' button in the dialog to the 'TAUSCELLI' member in the bottom table.

Project	Group	Type	Name	Version date	Version time	Version service	
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	11/04/20	17:17:49.51	PROMOTE
<input checked="" type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/12/22	10:30:50.72	PROMOTE
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/10/07	15:37:38.42	PROMOTE
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/09/02	10:15:51.64	PROMOTE
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/08/27	16:23:19.31	PROMOTE
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/08/16	13:19:57.71	PROMOTE
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/07/14	16:43:23.36	PROMOTE
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/07/08	18:36:33.45	PROMOTE
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/07/06	14:19:49.90	PROMOTE
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/06/29	11:20:45.92	PROMOTE
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/06/28	16:31:25.85	PROMOTE
<input type="checkbox"/>	SOFORTE	PROD	EXEC	TAUSCELLI	10/06/23	16:10:13.71	PROMOTE

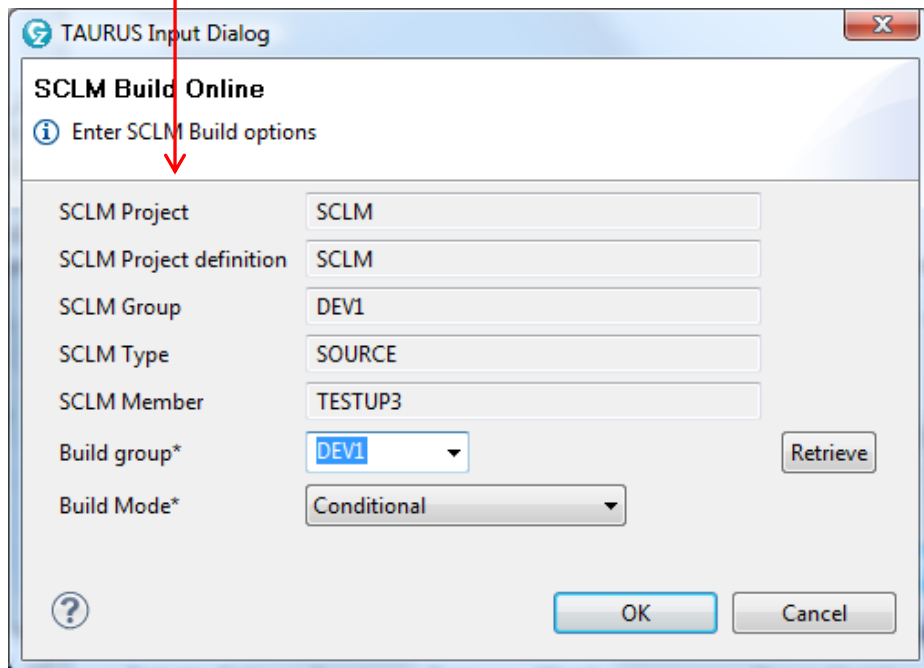
<input type="checkbox"/>	SOFORTE	SOFORTE	PROD	EXEC	TAUSCDLI	SOFUP	2011/04/19 17:04:37	TEST
<input type="checkbox"/>	SOFORTE	SOFORTE	PROD	EXEC	TAUSCDL2	SOFUP	2011/04/19 17:06:20	TEST
<input type="checkbox"/>	SOFORTE	SOFORTE	PROD	EXEC	TAUSCELLI	SOFUP	2011/04/19 17:06:46	TEST
<input checked="" type="checkbox"/>	SOFORTE	SOFORTE	TEST	EXEC	TAUSCELLI	SOFUP	2010/12/13 13:31:25	TEST
<input type="checkbox"/>	SOFORTE	SOFORTE	PROD	EXEC	TAUSCEPR	SOFUP	2011/04/19 17:08:02	TEST
<input type="checkbox"/>	SOFORTE	SOFORTE	PROD	EXEC	TAUSCGGR	SOFUP	2010/12/13 13:32:46	TEST
<input type="checkbox"/>	SOFORTE	SOFORTE	PROD	EXEC	TAUSCGLA	SOFUP	2010/12/13 13:33:11	TEST
<input type="checkbox"/>	SOFORTE	SOFORTE	PROD	EXEC	TAUSCGPD	SOFUP	2010/12/13 13:33:39	TEST

Taurus – How to model the SCLM build action

- **(1) Define a property for each dialog field**

Model
Result

Model
Definition



TAURUS Input Dialog

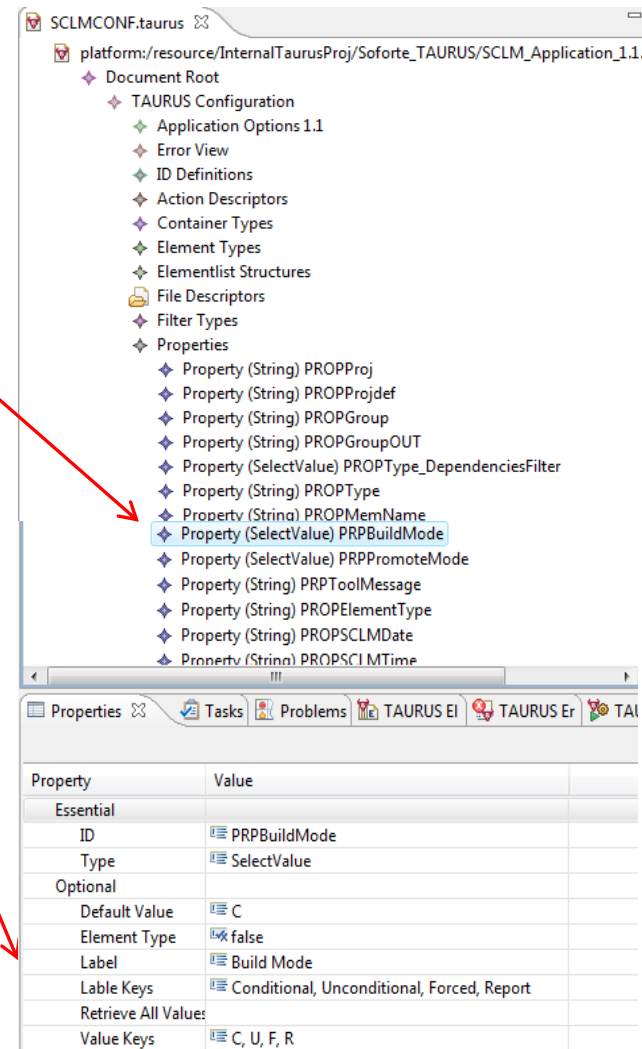
SCLM Build Online

Enter SCLM Build options

SCLM Project	SCLM
SCLM Project definition	SCLM
SCLM Group	DEV1
SCLM Type	SOURCE
SCLM Member	TESTUP3
Build group*	DEV1
Build Mode*	Conditional

Retrieve

OK Cancel



SCLMCONF.taurus

platform:/resource/InternalTaurusProj/Soforte_TAUROS/SCLM_Application_1.1.

- Document Root
 - TAURUS Configuration
 - Application Options 1.1
 - Error View
 - ID Definitions
 - Action Descriptors
 - Container Types
 - Element Types
 - Elementlist Structures
 - File Descriptors
 - Filter Types
 - Properties
 - Property (String) PROPProj
 - Property (String) PROPProjdef
 - Property (String) PROPGROUP
 - Property (String) PROPGROUPOUT
 - Property (SelectValue) PROPTYPE_DependenciesFilter
 - Property (String) PROPTYPE
 - Property (String) PROPMemName
 - Property (SelectValue) PRPBuildMode**
 - Property (SelectValue) PRPPromoteMode
 - Property (String) PRPToolMessage
 - Property (String) PROPElementType
 - Property (String) PROPSCLMDate
 - Property (String) PROPSCLMTime

Properties

Property	Value
Essential	
ID	PRPBuildMode
Type	SelectValue
Optional	
Default Value	C
Element Type	false
Label	Build Mode
Label Keys	Conditional, Unconditional, Forced, Report
Retrieve All Values	
Value Keys	C, U, F, R

Taurus – How to model the SCLM build action

- **(2) Define the dialog and associate the dialog fields**

Model Result

Model Definition

TAURUS Input Dialog

SCLM Build Online

Enter SCLM Build options

SCLM Project	SCLM
SCLM Project definition	SCLM
SCLM Group	DEV1
SCLM Type	SOURCE
SCLM Member	TESTUP3
Build group*	DEV1
Build Mode*	Conditional

Retrieve OK Cancel

SCLMCONF.taurus

- TAURUS Configuration
 - Application Options 1.1
 - Error View
 - ID Definitions
 - Action Descriptors
 - Container Types
 - Element Types
 - Elementlist Structures
 - File Descriptors
 - Filter Types
 - Properties
 - Tool Descriptors
 - Tool Descriptor TOOL_PlugIn_TestPlugIn
 - Category REX tools
 - Category Integrated tools
 - Category Container retrieval tools
 - Category Value retrieval tools
 - Category I/O dialogs
 - Tool Descriptor TOOL_UI_InputArchgenOptions
 - Tool Descriptor TOOL_UI_InputBuildOptionsOnline
 - Input Parameter #1 -> PROProj
 - Input Parameter #2 -> PROPProjdef
 - Input Parameter #3 -> PROPGROUP
 - Input Parameter #4 -> PROPTYPE
 - Input Parameter #5 -> PROPMemName
 - Input Parameter #6 -> PROPStartGrp
 - Input Parameter #7 -> PRPBuildMode
 - ISA Plug In SCLM Build Online de.soforte.taurus.inputdialo

Properties

Property	Value
Essential	
Parameter From	User_Input
Seq No	7
Target ID File	
Target ID Parm	Property (SelectValue) PRPBuildMode
Type	Property (SelectValue) PRPBuildMode
Optional	Property (SelectValue) PRPPromoteMode
Default Value	Property (String) PROPDB2CollId
Static Value	Property (String) PROPDB2Owner
UI	Property (String) PROPDB2System
Label	Build Mode

Taurus – How to model the SCLM build action

- (3) Define the REXX tool which calls the SCLM Build and associate the dialog fields as input parameters.

Model Definition

Output Parameter #8 -> PROPElementType
 Output Parameter #9 -> PROPReadyonly
 ISA ISPF Tool REXX TAUSCBDO

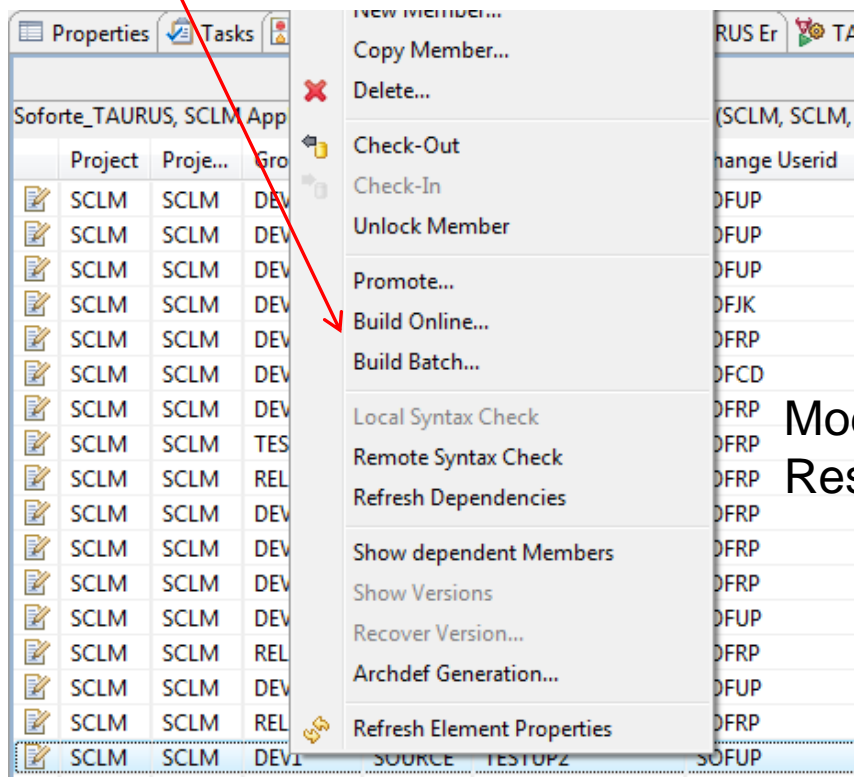
Property	Value
Essential	
In Parm Separator	" "
Invoke Form	REXX
Out Parm Separator	","
Program ID	TAUSCBDO

Filter Types
 Properties
 Tool Descriptors
 Tool Descriptor TOOL_Plugin_TestPlugin
 Category REX tools
 Tool Descriptor TOOL_REX_Archgen
Tool Descriptor TOOL_REX_BuildOnline (TOOL_DEFINED)
 Input Parameter #1 -> PROPProj
 Input Parameter #2 -> PROPProjdef
 Input Parameter #3 -> PROPGROUP
 Input Parameter #4 -> PROPTYPE
 Input Parameter #5 -> PROPMemName
 Input Parameter #6 -> PROPStartGrp
 Input Parameter #7 -> PRPBuildMode
 Output Parameter #1 -> PRPToolMessage
 Output Parameter #2 -> FILEBuildMsgs
 Output Parameter #3 -> FILEBuildReport
 Output Parameter #4 -> FILEXmlErrorFeedback
 Output Parameter #1 -> PROPProj
 Output Parameter #2 -> PROPGROUP
 Output Parameter #3 -> PROPTYPE
 Output Parameter #4 -> PROPMemName
 Output Parameter #5 -> PROPSCLMMemberChangeDate
 Output Parameter #6 -> PROPSCLMMemberChangeUser
 Output Parameter #7 -> PROPSCLMMemberBMapDate
 Output Parameter #8 -> PROPElementType
 Output Parameter #9 -> PROPReadyonly
 ISA ISPF Tool REXX TAUSCBDO

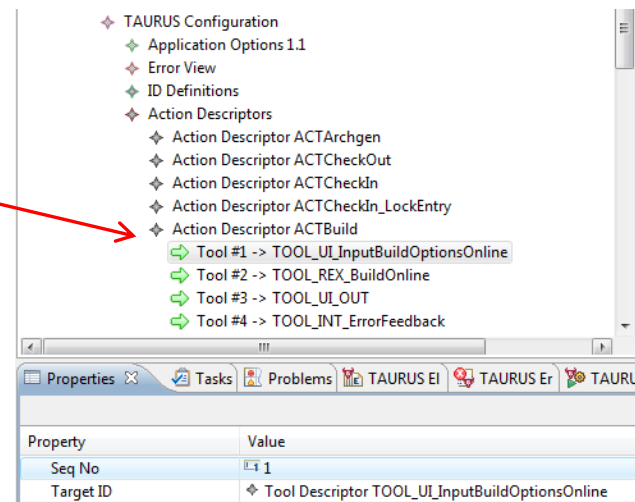
Property	Value
Essential	
ID	TOOL_REX_BuildOnline
Tool Type	MVS
Integrated Tool	
Integrated Tool	NONE
Job Options	
After Job Action	
Run As Job	false
Resource Processing	
Refresh Resource	false
Resource Processing	TOOL_DEFINED

Taurus – How to model the SCLM build action

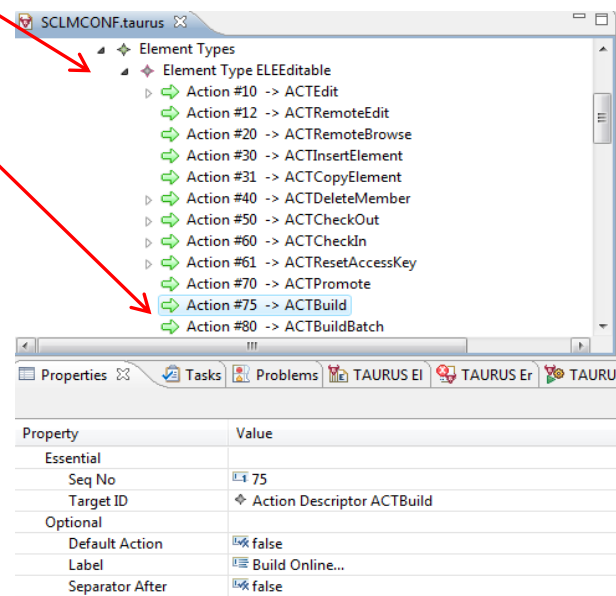
- (4) Define the build action and associate the input dialog, the REXX tool, an output dialog and error feedback support to this action
- (5) Associate the action to the SCLM editable type



Model Definition

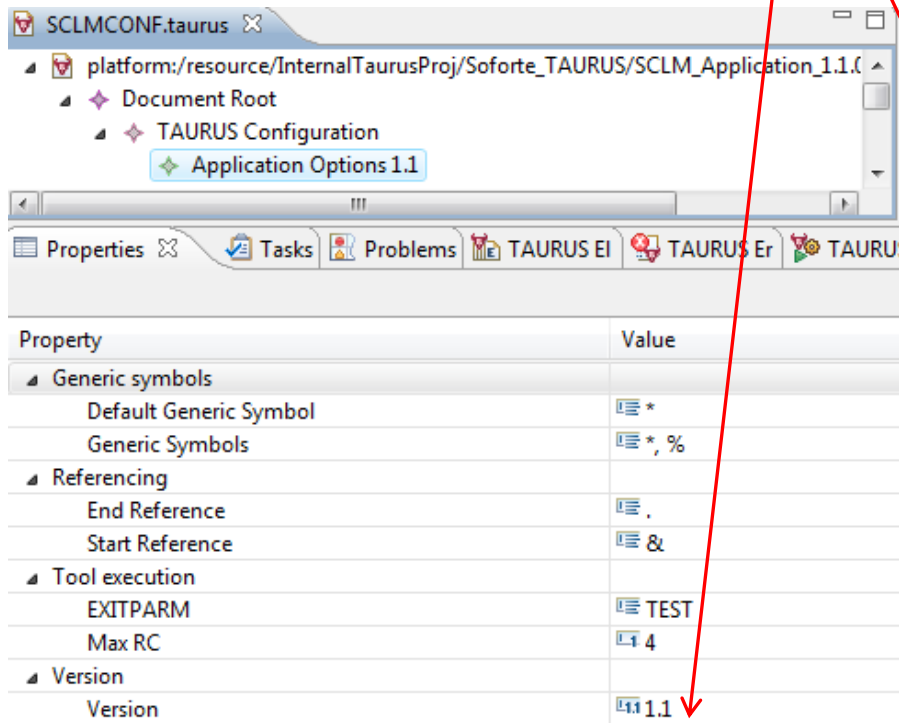


Model Result



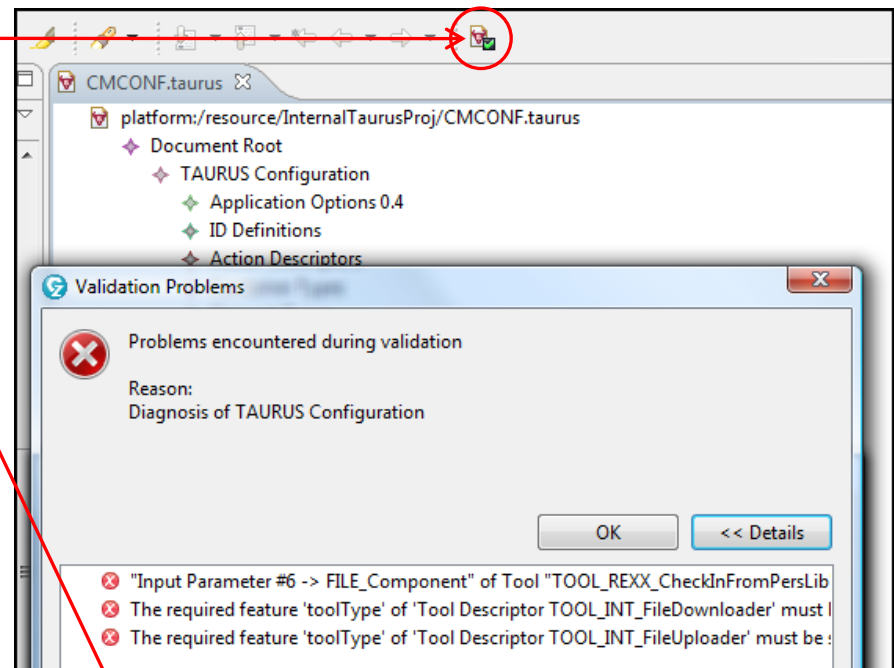
Taurus – How to model the SCLM build action

- (6) validate your model (consistency check)
- (7) Store the model in a PDS or USS and test your customization
- (8) Promote the new model to all client users only by changing the version number (no client installation process necessary)



The screenshot shows the configuration window for SCLMCONF.taurus. The tree view on the left shows the hierarchy: platform:/resource/InternalTaurusProj/Soforte_TAURUS/SCLM_Application_1.1.0 > Document Root > TAURUS Configuration > Application Options 1.1. The Properties tab is active, showing a table of configuration properties.

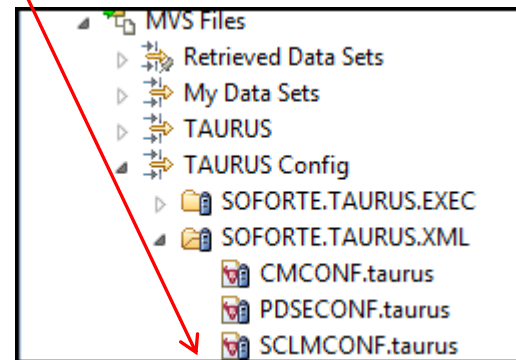
Property	Value
Generic symbols	
Default Generic Symbol	*
Generic Symbols	*, %
Referencing	
End Reference	.
Start Reference	&
Tool execution	
EXITPARM	TEST
Max RC	4
Version	
Version	1.1



The screenshot shows a 'Validation Problems' dialog box with a red 'X' icon. The text inside reads: 'Problems encountered during validation', 'Reason: Diagnosis of TAURUS Configuration'. Below this, there are three error messages, each preceded by a red 'X' icon:

- ✗ "Input Parameter #6 -> FILE_Component" of Tool "TOOL_REXX_CheckInFromPersLib
- ✗ The required feature 'toolType' of 'Tool Descriptor TOOL_INT_FileDownloader' must be
- ✗ The required feature 'toolType' of 'Tool Descriptor TOOL_INT_FileUploader' must be

Buttons for 'OK' and '<< Details' are visible at the bottom right.



The screenshot shows a tree view of MVS Files. The path is: MVS Files > Retrieved Data Sets > My Data Sets > TAURUS > TAURUS Config > SOFORTE.TAURUS.XML > SCLMCONF.taurus. A red arrow points from the 'SCLMCONF.taurus' file icon to the 'Version' property value '1.1' in the previous screenshot.

- **Reduces hurdle for RDz implementation**
 - Plug-in development becomes obsolete
 - Existing skill is sufficient – no plug-in development skill required
 - Supports SCLM, Endeavor, ChangeMan
 - The financial hurdle for RDz implementations is reduced significantly
- **Reduces risk for RDz Implementation**
 - Complete and deep integration becomes affordable
 - Predefined models for different development processes
 - Integration with all kinds of tools like RAA, RTC, ...
 - High functionality and quality of UI increase developer acceptability and productivity
- **It's a product**
 - It's a product, not a service
 - Existing shortage in implementation skills is not a bottleneck anymore