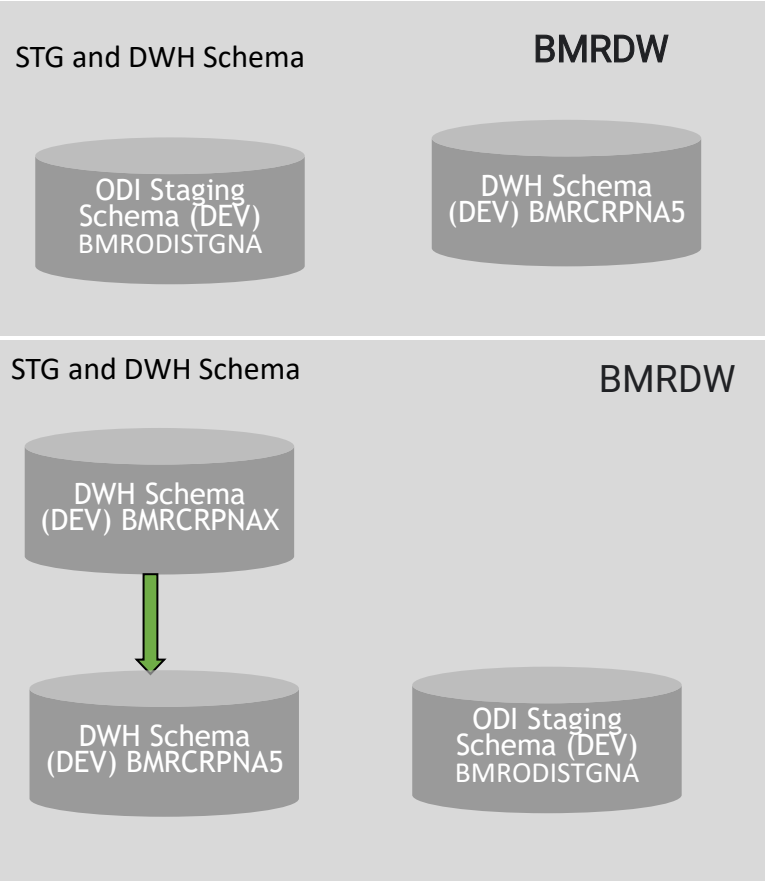
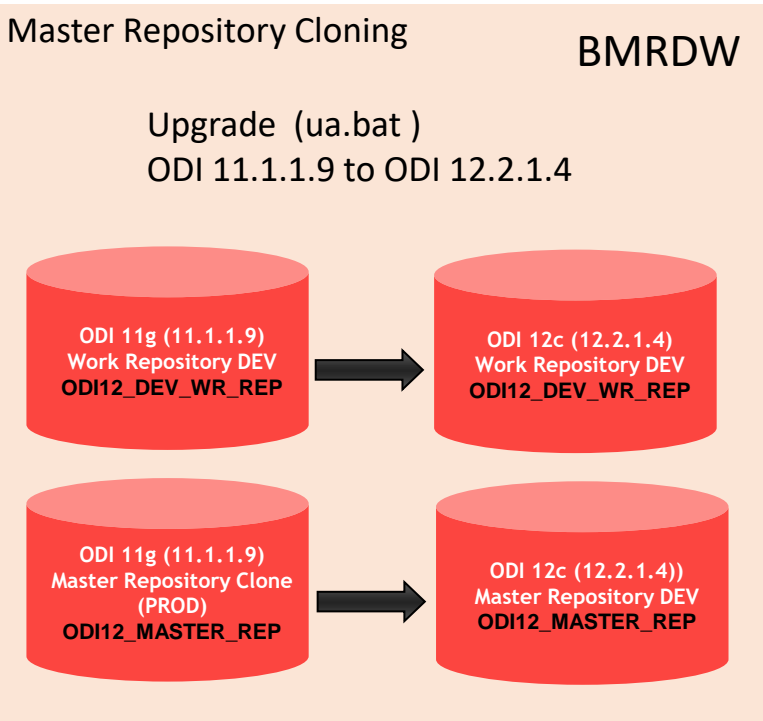
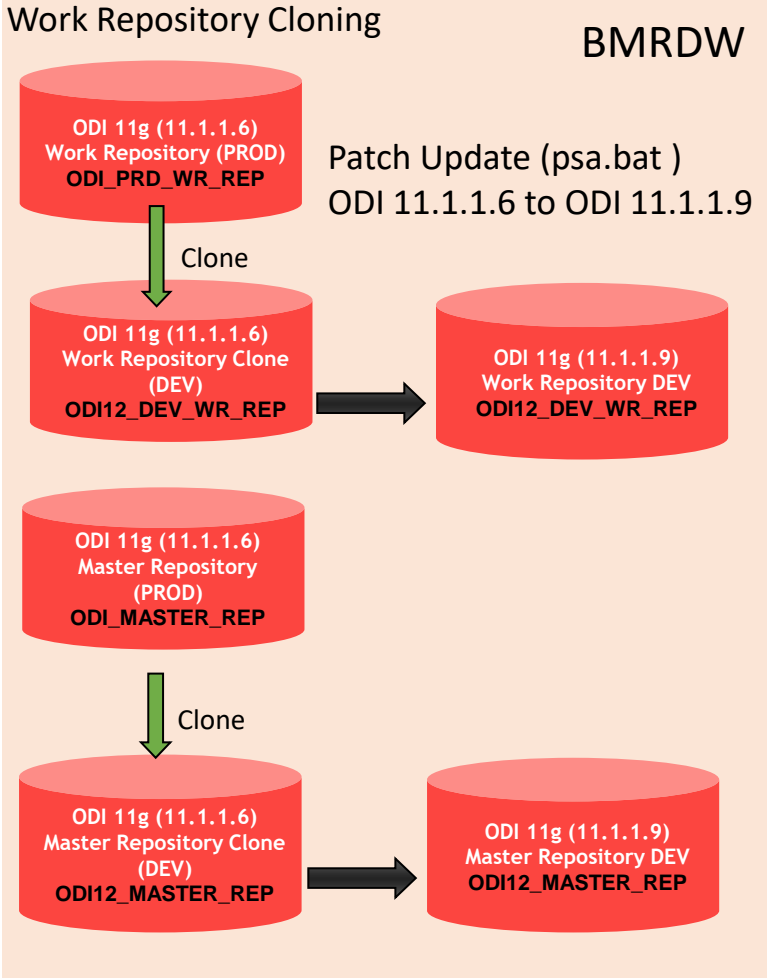


ODI 12c Upgrade KT Session

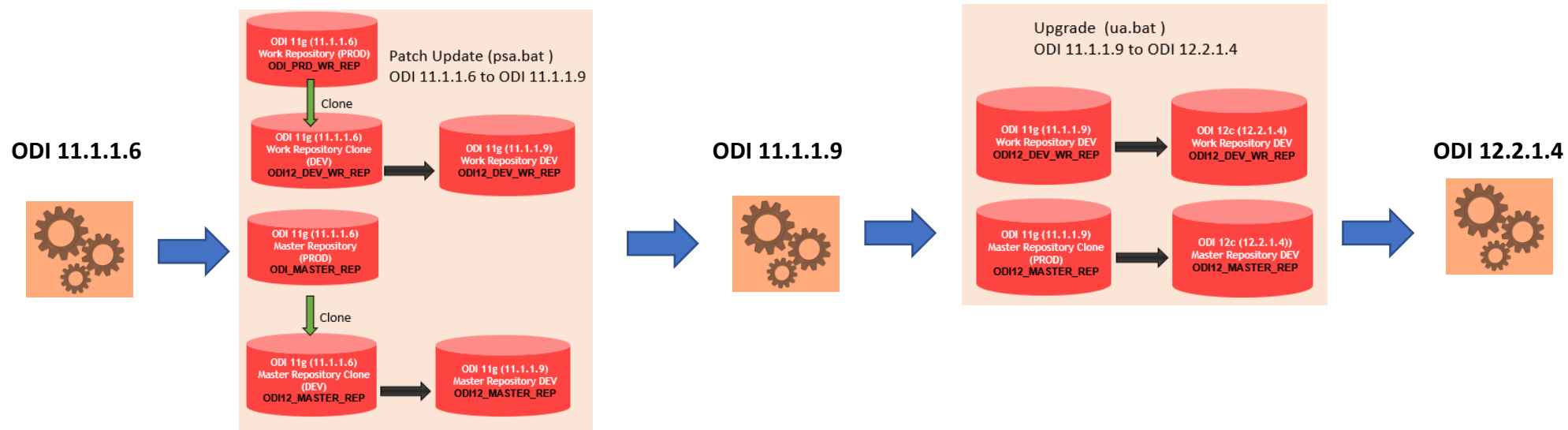
Agenda

- ODI 11g to ODI 12c Upgrade Steps
- ODI 12c new features overview
- ODI 12c features – Example
- ODI 11g to ODI 12c Migration Issues – Example
- Demo
- Q & A

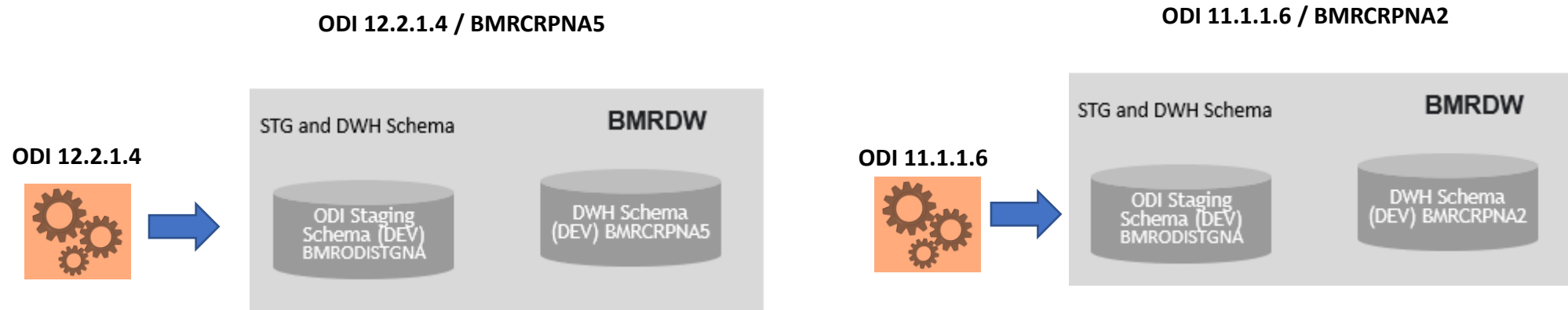
High level Upgrade Steps



ODI Repository Upgrade Steps



Warehouse Schema



New Features of ODI 12c - Overview

- **Mappings** in place of Interface in Oracle Data Integrator 11g
- **Reusable Mappings** in place of Yellow interface
- **Flow based user interface**, connect sources to targets through a flow of components such as: Join, Filter, Aggregate, Set, Split, etc.
- Multiple Target Support
- **Knowledge Module Architecture**
 - Component-Style KM : provides an extensible component framework that improves the overall mapping design, where for example users are able to declare the transformation order
 - Template-Style KM (11g)
- Wallet Password in ODI 12c
- **Agents Configuration in ODI 12C Standalone Agent vs ODI 11g Agents.**
 - Manual intervention is required to configure odiparams.bat file in ODI 11g.
 - UI driven configuration through configuration wizard in ODI 12c.

Yellow Interface to Reusable Mapping

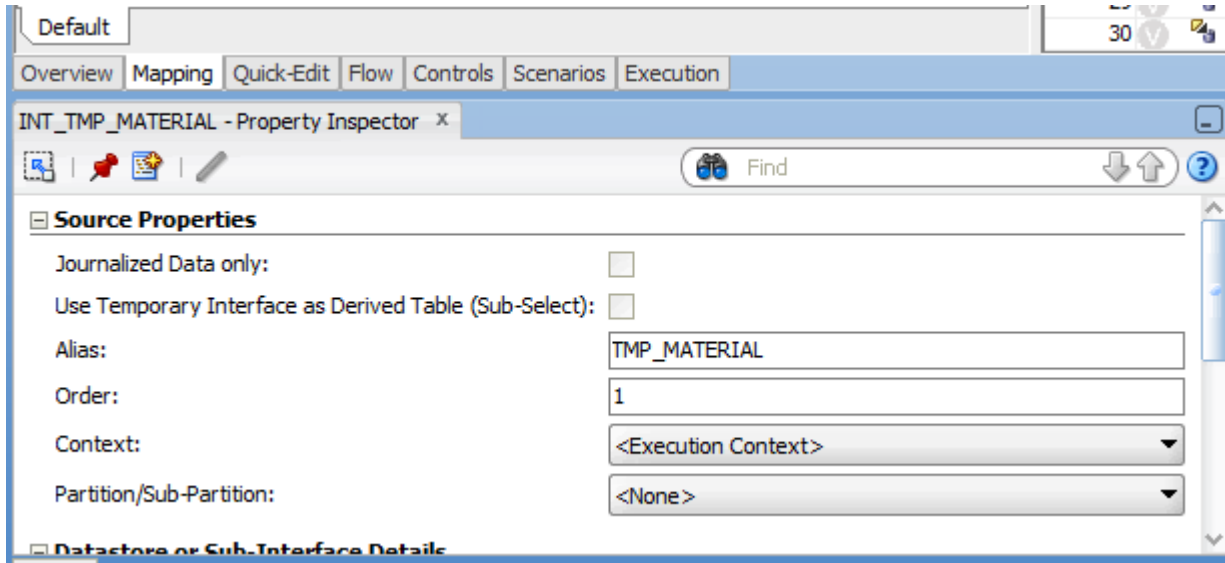
- During upgrade from Oracle Data Integrator ODI 11g to ODI 12c, Temporary Interfaces are converted into Reusable Mappings.
- This results in creation of _RMT and _RMS Reusable Mappings.
- A temporary table gets created during execution.

ODI 11g Temporary Interface Upgrade to ODI 12c Reusable Mappings

In ODI 11g, a sub-interface component has a **Use Temporary Interface as Derived Table (Sub-Select)** property.

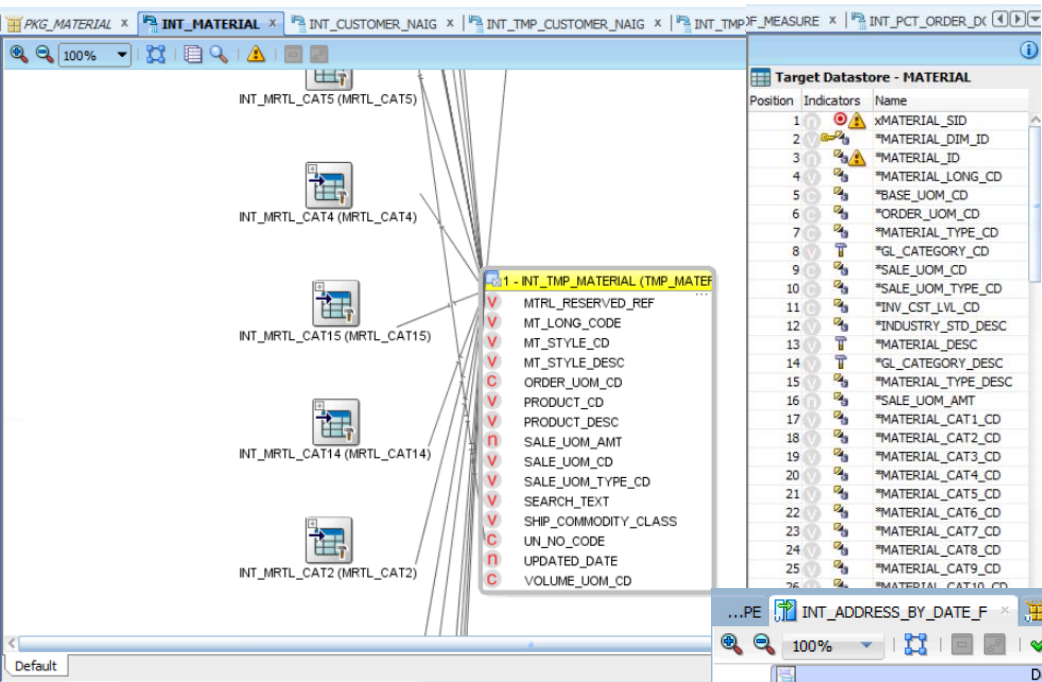
The value of this property determines which of _RMS or _RMT Reusable Mapping will be used after upgrading to ODI 12c:

- In case where the property "Use Temporary Interface as Derived Table (Sub-Select)" *is unchecked* prior to the upgrade or import from 11g, the _RMT Reusable Mapping is used.
- If in the 11g the above property *is checked* and the Temporary Interface / Repository is upgraded or imported to 12c, the Reusable Mapping used is _RMS.



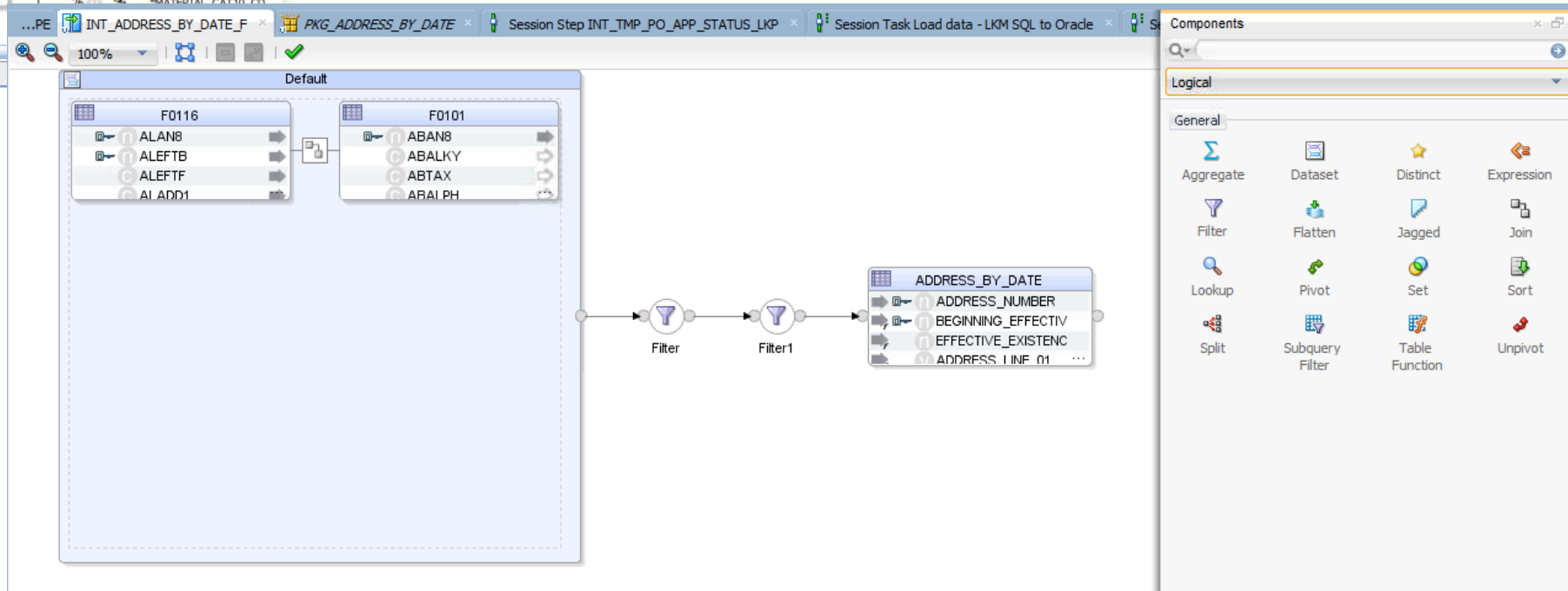
Use Temporary Interface as Derived Table (Sub-Select) - This option is available only if the source datastore is a temporary target datastore of another interface.

When this box is selected, the interface generates a sub-select corresponding to the loading of the temporary datastore. If this box is not selected, make sure to run the interface loading the temporary datastore before running the current interface.



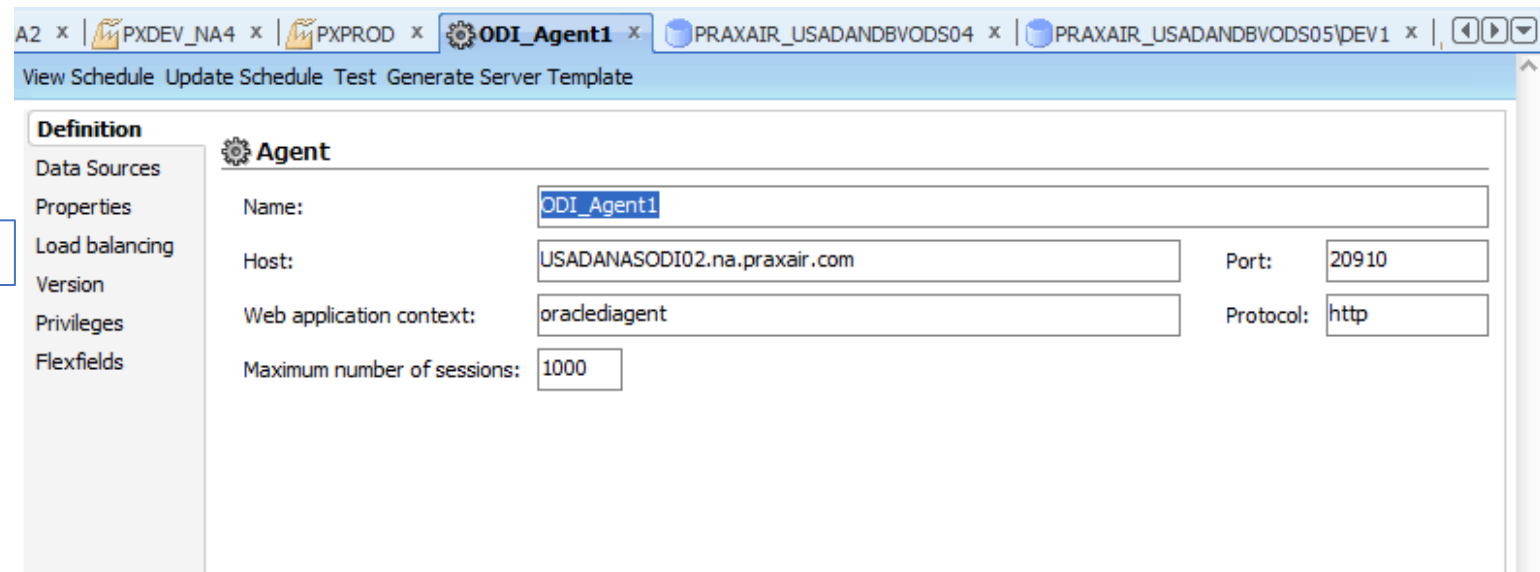
ODI 11g User Interface

ODI 12c Declarative Flow-Based User Interface



Agents Configuration

Manual configuration of odiparams.bat file in ODI 11g

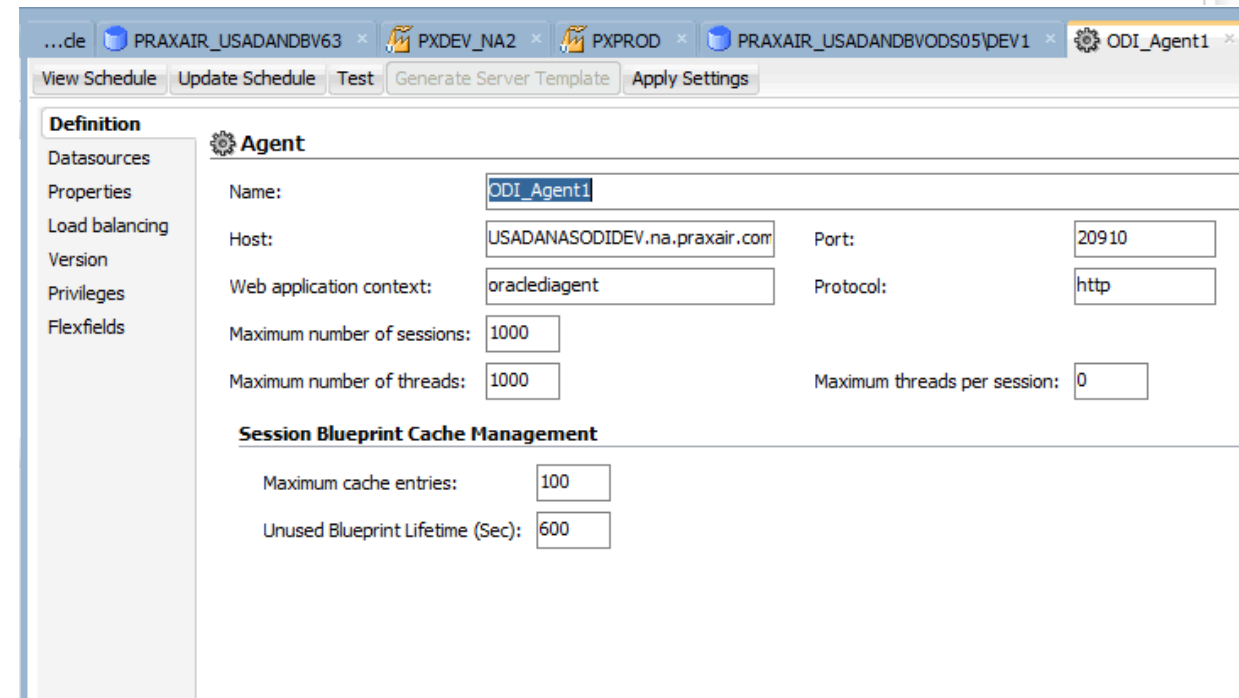


The screenshot shows the ODI 11g Agent Configuration window. The top bar contains tabs for A2, PXDEV_NA4, PXPROD, ODI_Agent1, PRAXAIR_USADANDBVODS04, and PRAXAIR_USADANDBVODS05\DEV1. Below the tabs are buttons for View Schedule, Update Schedule, Test, and Generate Server Template. The left sidebar lists Definition, Data Sources, Properties, Load balancing, Version, Privileges, and Flexfields. The main area is titled 'Agent' and contains the following fields:

Name:	ODI_Agent1		
Host:	USADANASODI02.na.praxair.com	Port:	20910
Web application context:	oraclediagent	Protocol:	http
Maximum number of sessions:	1000		

UI driven configuration through configuration wizard in ODI 12c

C:\oracle\product\12.2.1.4\odi\common\bin\Configuration.cmd



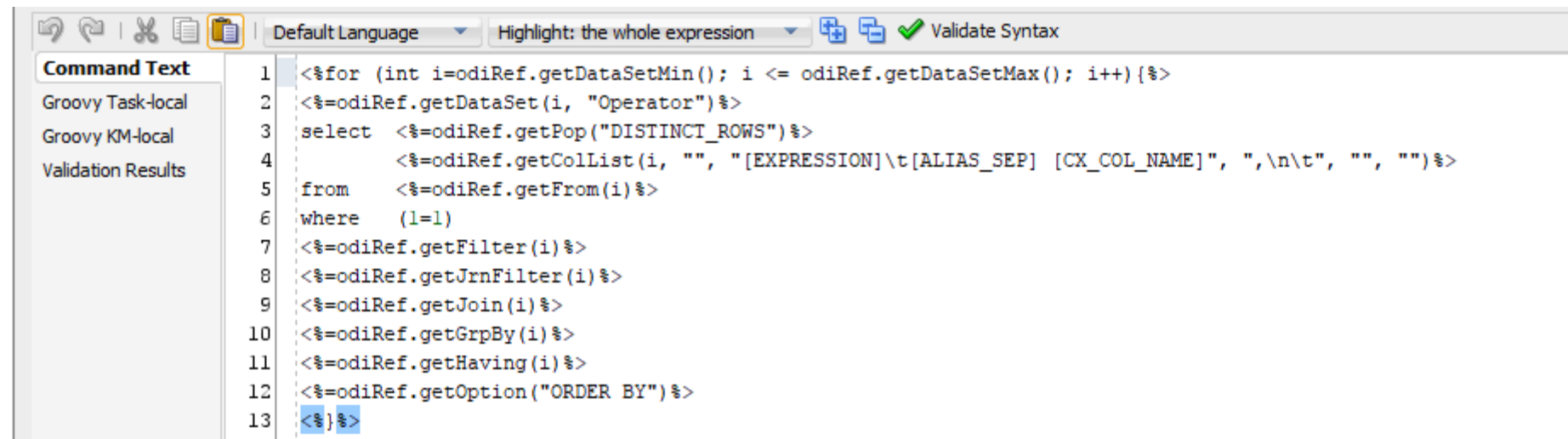
The screenshot shows the ODI 12c Agent Configuration window. The top bar contains tabs for ...de, PRAXAIR_USADANDBV63, PXDEV_NA2, PXPROD, PRAXAIR_USADANDBVODS05\DEV1, and ODI_Agent1. Below the tabs are buttons for View Schedule, Update Schedule, Test, Generate Server Template, and Apply Settings. The left sidebar lists Definition, Datasources, Properties, Load balancing, Version, Privileges, and Flexfields. The main area is titled 'Agent' and contains the following fields:

Name:	ODI_Agent1		
Host:	USADANASODIDEV.na.praxair.com	Port:	20910
Web application context:	oraclediagent	Protocol:	http
Maximum number of sessions:	1000		
Maximum number of threads:	1000	Maximum threads per session:	0

Below the main fields is a section titled 'Session Blueprint Cache Management' with the following fields:

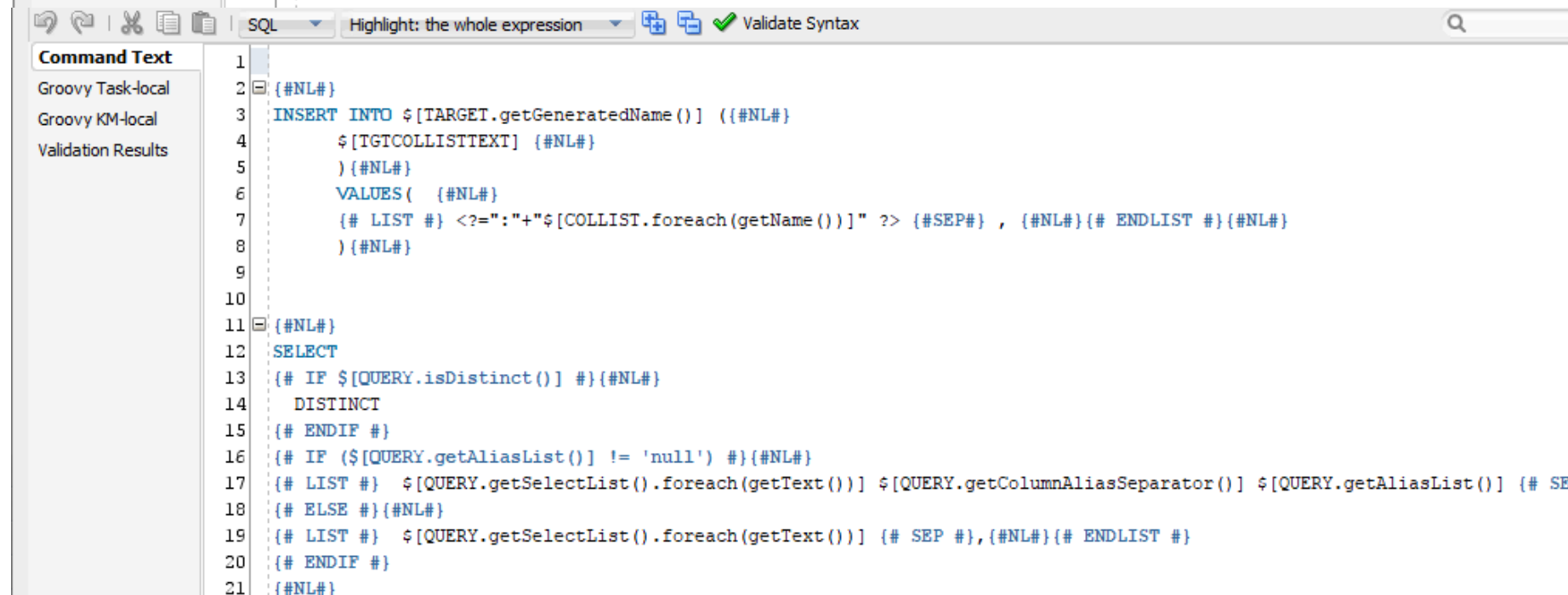
Maximum cache entries:	100
Unused Blueprint Lifetime (Sec):	600

Template-Style KM (11g)



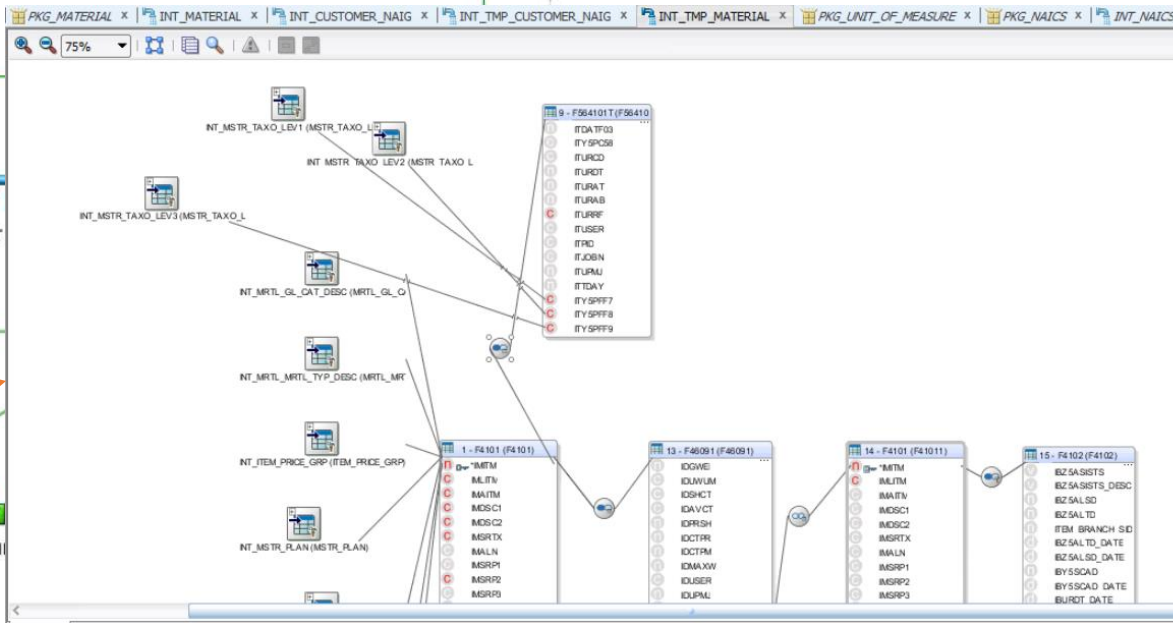
```
1 <%for (int i=odiRef.getDataSetMin(); i <= odiRef.getDataSetMax(); i++) {%>
2 <%=odiRef.getDataSet(i, "Operator")%>
3 select <%=odiRef.getPop("DISTINCT_ROWS")%>
4 <%=odiRef.getColList(i, "", "[EXPRESSION]\t[ALIAS_SEP] [CX_COL_NAME]", ", \n\t", "", "")%>
5 from <%=odiRef.getFrom(i)%>
6 where (l=1)
7 <%=odiRef.getFilter(i)%>
8 <%=odiRef.getJrnFilter(i)%>
9 <%=odiRef.getJoin(i)%>
10 <%=odiRef.getGrpBy(i)%>
11 <%=odiRef.getHaving(i)%>
12 <%=odiRef.getOption("ORDER BY")%>
13 <%}%>
```

Component-Style KM



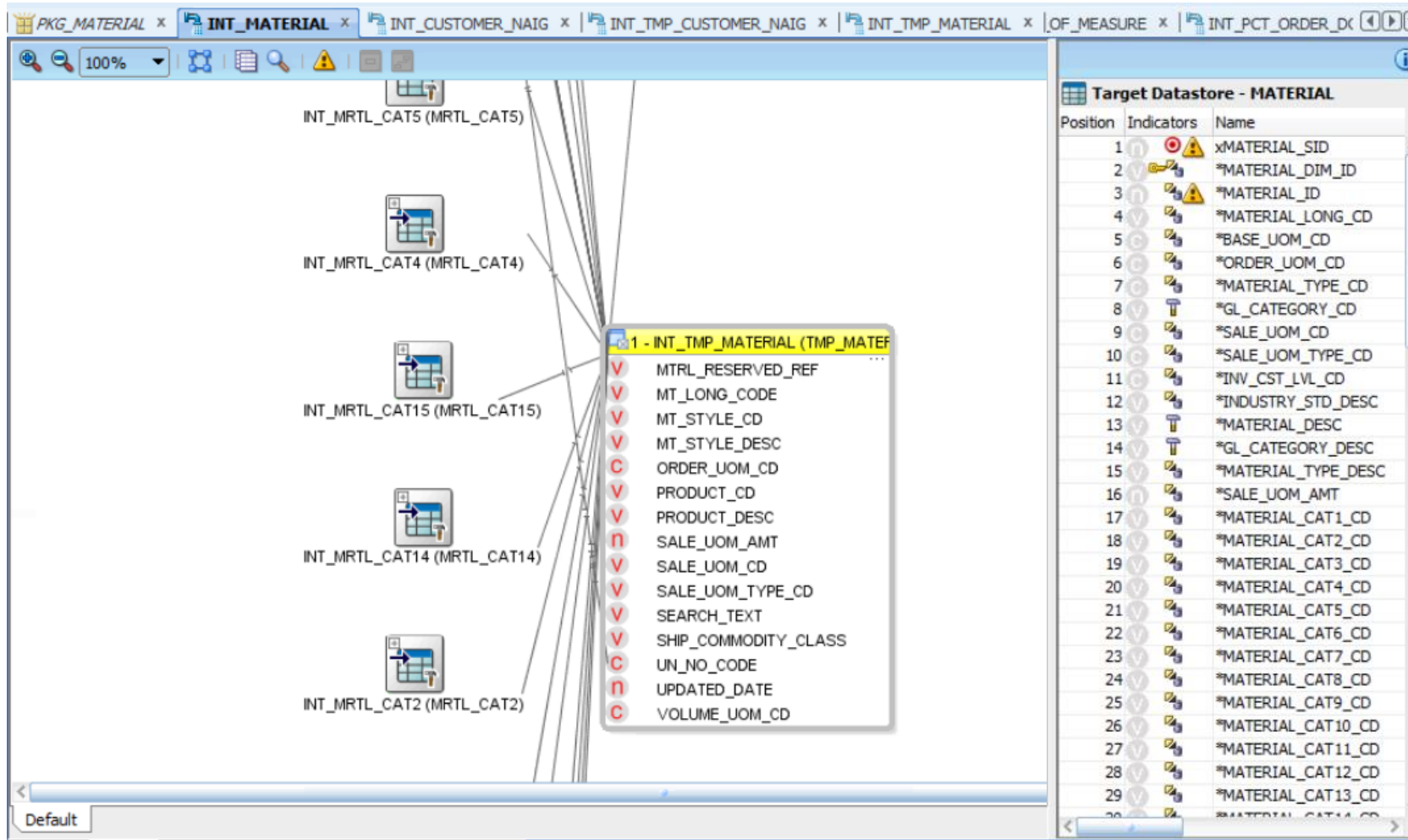
```
1
2 {#NL#}
3 INSERT INTO ${TARGET.getGeneratedName()} ({#NL#}
4     ${TGTCOLLISTTEXT} {#NL#}
5     ) {#NL#}
6     VALUES( {#NL#}
7         {# LIST #} <?=":"+"${COLLIST.foreach(getName())}" ?> {#SEP#} , {#NL#}{# ENDLIST #}{#NL#}
8     ) {#NL#}
9
10
11 {#NL#}
12 SELECT
13 {# IF ${QUERY.isDistinct()} #} {#NL#}
14     DISTINCT
15 {# ENDIF #}
16 {# IF (${QUERY.getAliasList()} != 'null') #} {#NL#}
17 {# LIST #} ${QUERY.getSelectList().foreach(getText())} ${QUERY.getColumnAliasSeparator()} ${QUERY.getAliasList()} {# SE
18 {# ELSE #} {#NL#}
19 {# LIST #} ${QUERY.getSelectList().foreach(getText())} {# SEP #}, {#NL#}{# ENDLIST #}
20 {# ENDIF #}
21 {#NL#}
```

11g Package : PKG_MATERIAL



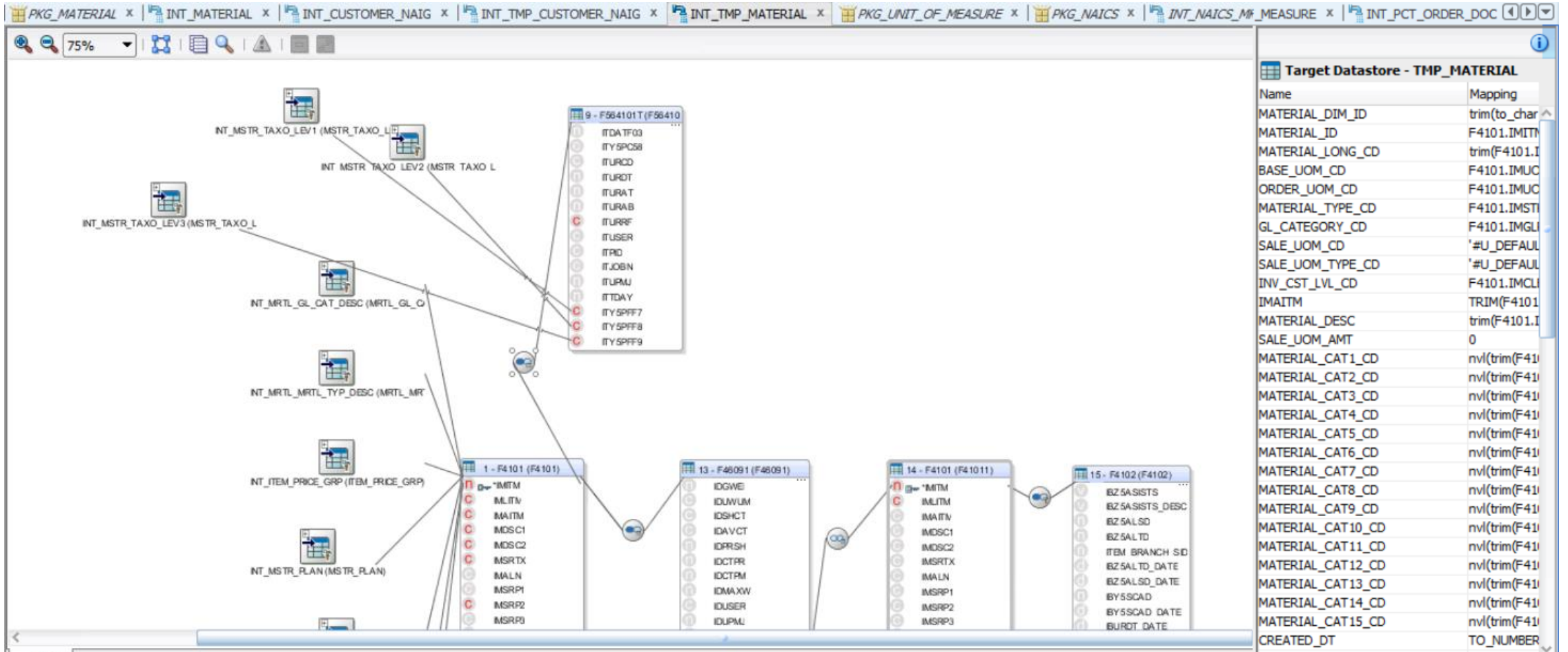
11g Interface : INT_MATERIAL

Main Interface

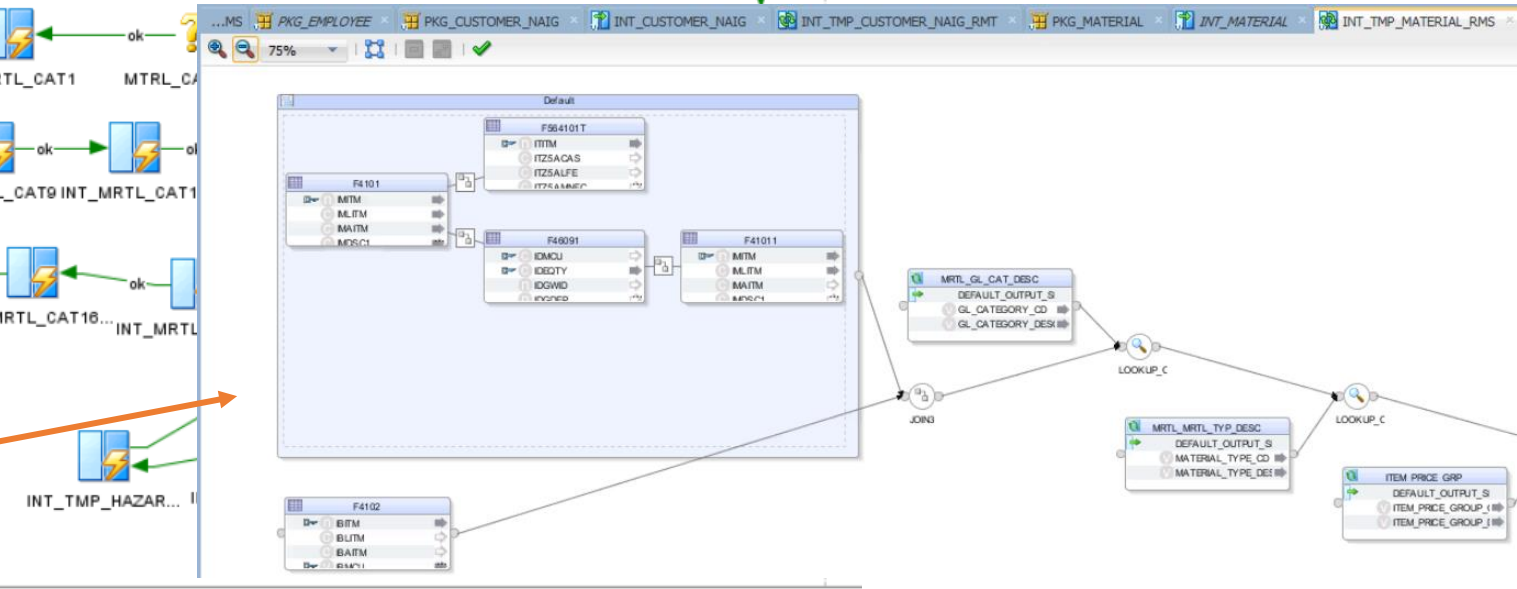
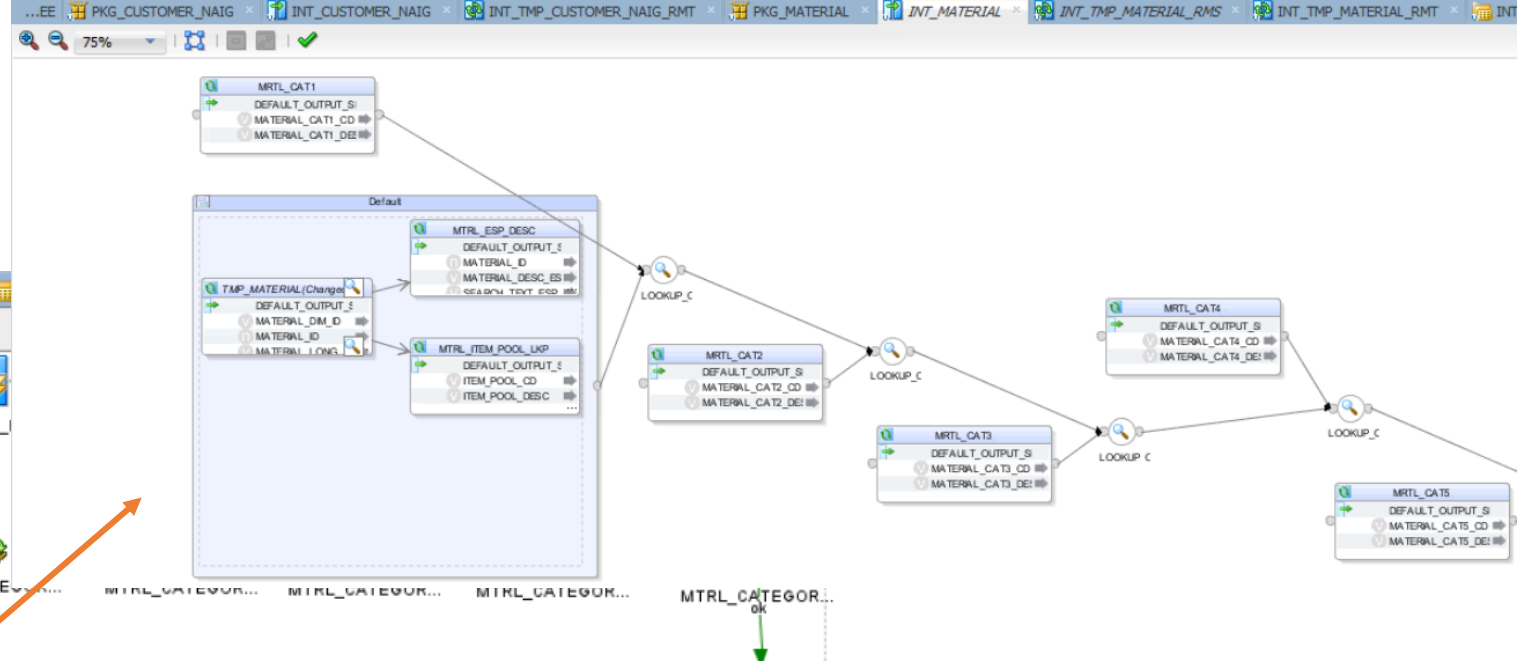
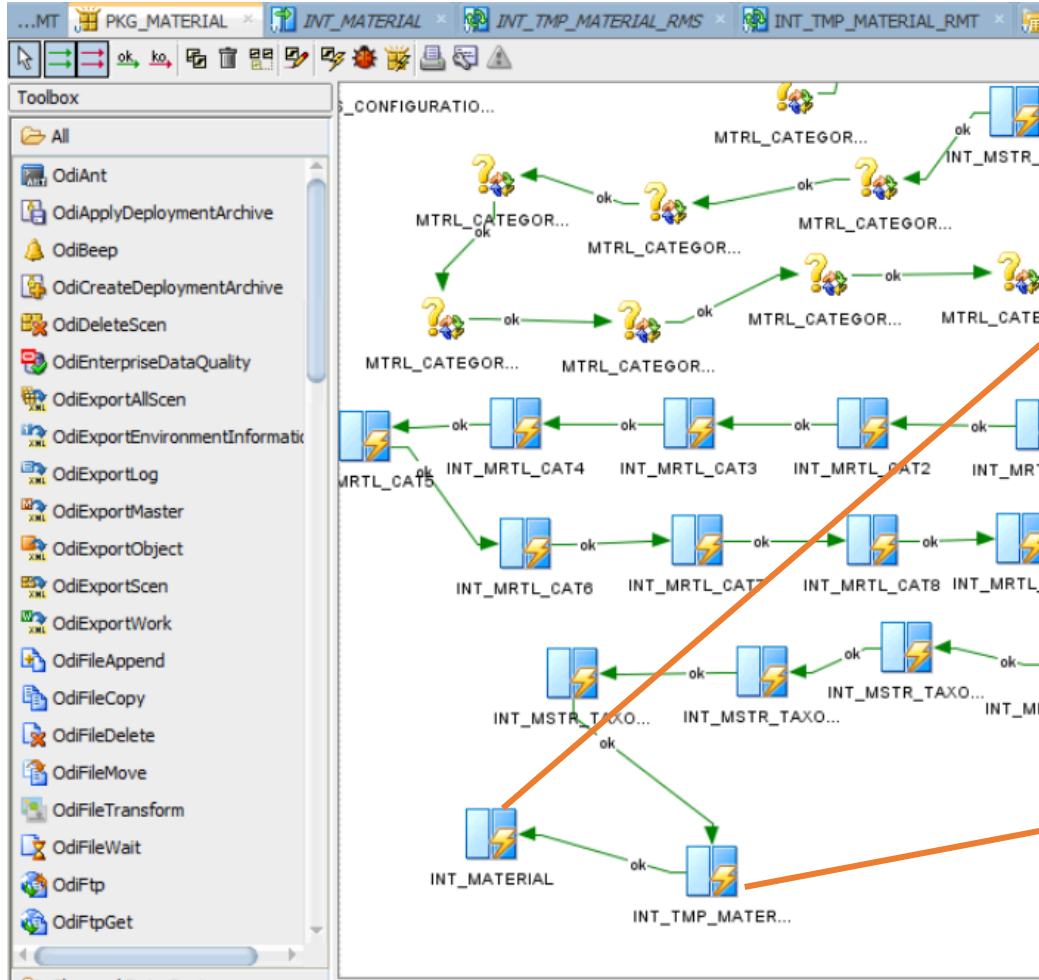


11g Temp Interface : INT_TMP_MATERIAL

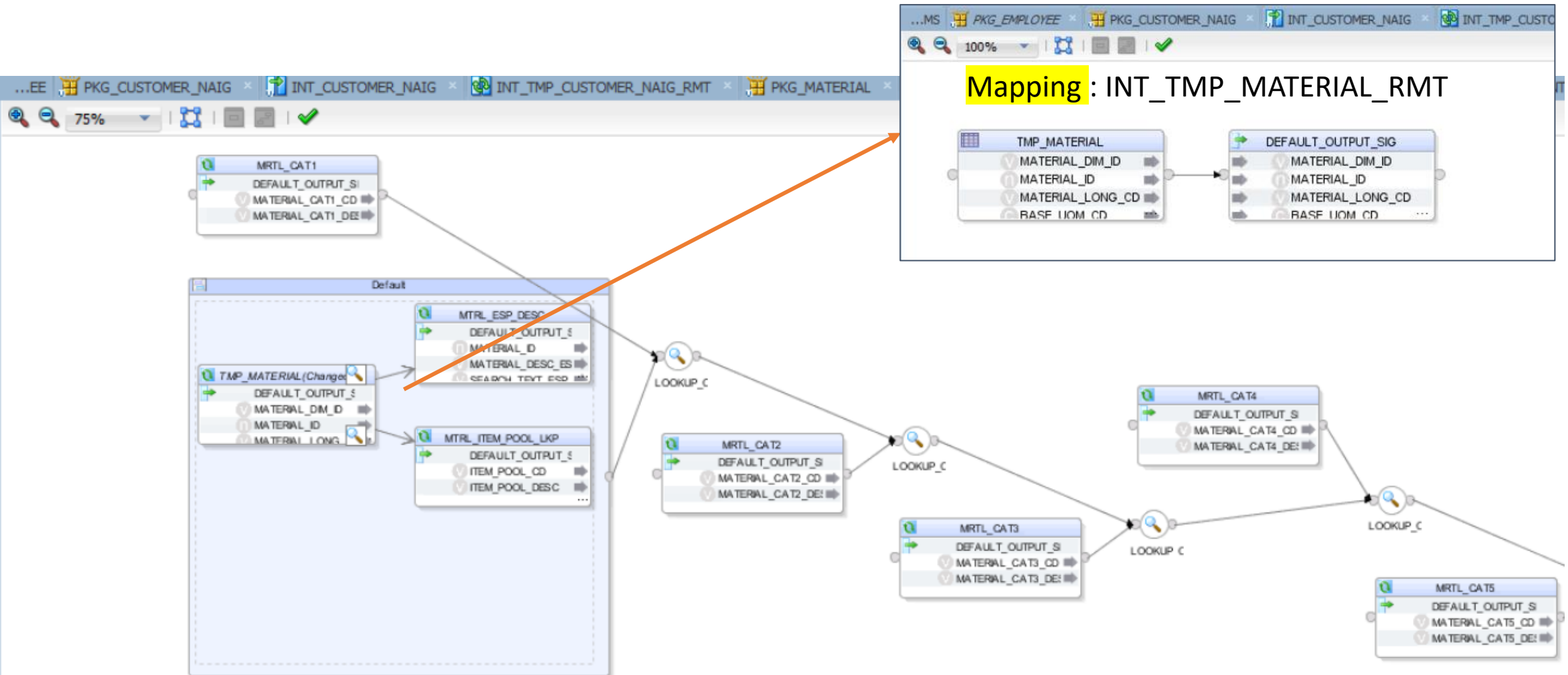
Temp Interface



12c Package : PKG_MATERIAL

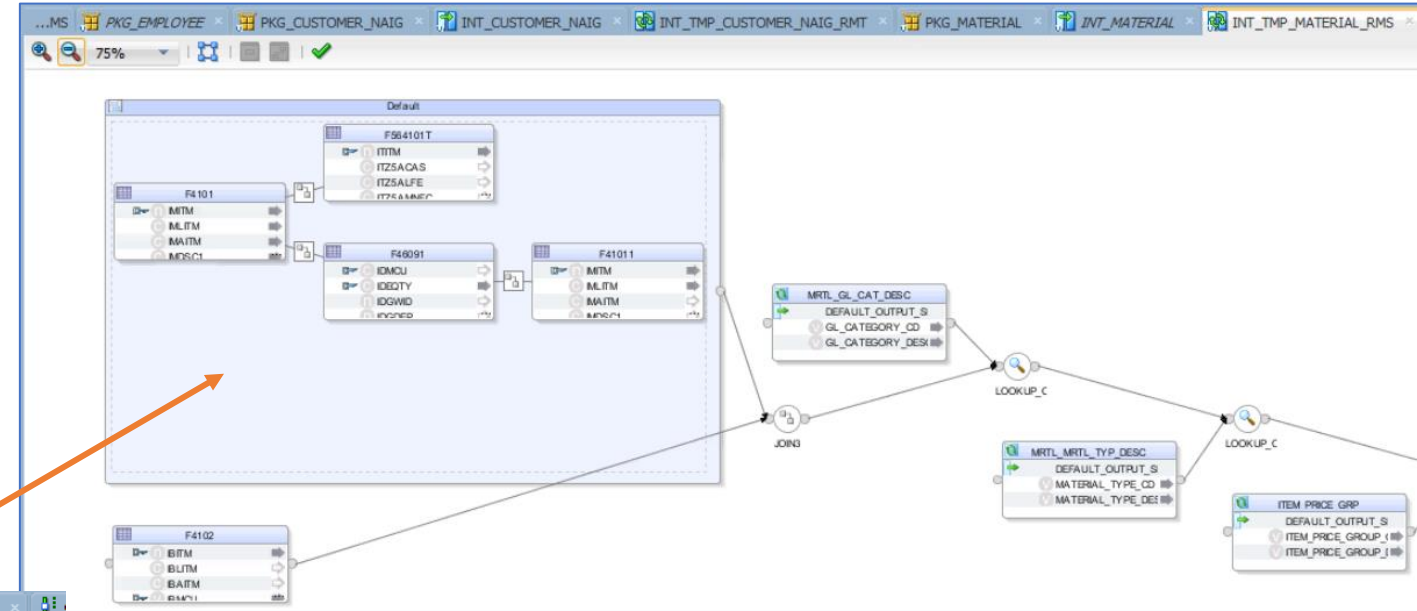
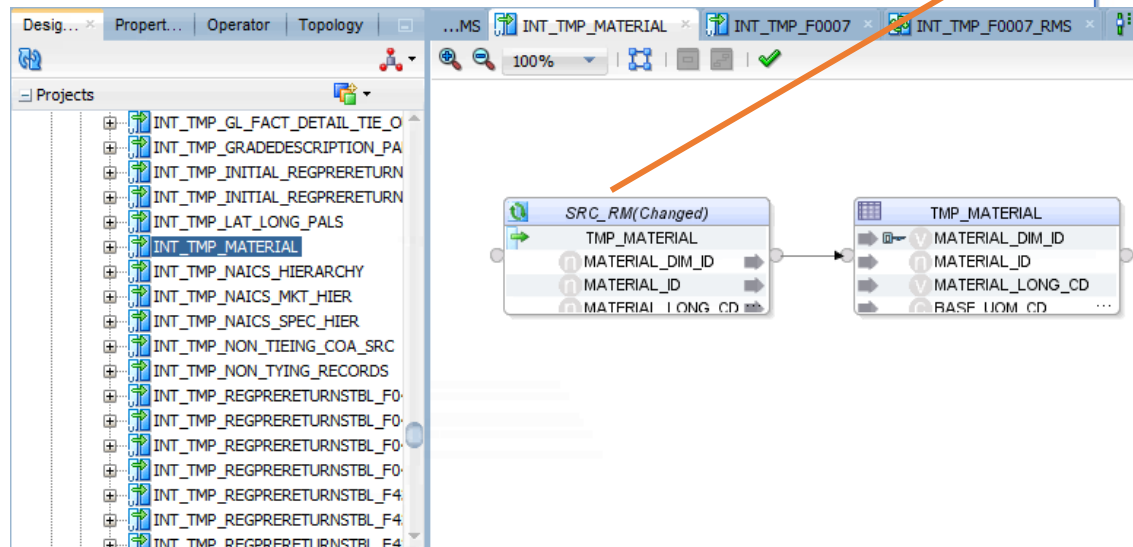


Main Mapping : INT_MATERIAL



INT_TMP_MATERIAL_RMS (reusable mapping source)

INT_TMP_MATERIAL



Model : INT_TMP_MATERIAL

New Model folder Praxair_BI is created.
New Model got created for Reusable Mapping.

The screenshot displays the SAP BW Designer interface. On the left, the 'Models' tree shows the hierarchy: PRAXAIR_JDE > PRAXAIR_ODS_63 > Praxair_BI > ELT_DIMENSIONS > INT_TMP_MATERIAL. The 'INT_TMP_MATERIAL' model is highlighted with a red box. Below it, the 'TMP_MATERIAL' folder is also highlighted with a red box. The main pane shows the 'Attributes' definition for the 'INT_CO_COMPANY_LVL1_LKP_RMS' table. The table has 31 attributes, including material dimensions, categories, and dates. The 'Attributes' pane is also highlighted with a red box.

Order	Name	Type	Length	Scale	Not Null	SCD Behavior
1	MATERIAL_DIM_ID	NVARCHAR2	10			<Undefined>
2	MATERIAL_ID	NUMBER	10		0	<Undefined>
3	MATERIAL_LONG_CD	NVARCHAR2	25			<Undefined>
4	BASE_UOM_CD	NCHAR	2			<Undefined>
5	ORDER_UOM_CD	NCHAR	2			<Undefined>
6	MATERIAL_TYPE_CD	NCHAR	1			<Undefined>
7	GL_CATEGORY_CD	NCHAR	4			<Undefined>
8	SALE_UOM_CD	NVARCHAR2	1			<Undefined>
9	SALE_UOM_TYPE_CD	NVARCHAR2	1			<Undefined>
10	INV_CST_LVL_CD	NCHAR	1			<Undefined>
11	IMATM	NCHAR	25			<Undefined>
12	MATERIAL_DESC	NVARCHAR2	65			<Undefined>
13	SALE_UOM_AMT	NUMBER	10		0	<Undefined>
14	MATERIAL_CAT1_CD	NVARCHAR2	6			<Undefined>
15	MATERIAL_CAT2_CD	NVARCHAR2	6			<Undefined>
16	MATERIAL_CAT3_CD	NVARCHAR2	6			<Undefined>
17	MATERIAL_CAT4_CD	NVARCHAR2	6			<Undefined>
18	MATERIAL_CAT5_CD	NVARCHAR2	6			<Undefined>
19	MATERIAL_CAT6_CD	NVARCHAR2	6			<Undefined>
20	MATERIAL_CAT7_CD	NVARCHAR2	6			<Undefined>
21	MATERIAL_CAT8_CD	NVARCHAR2	6			<Undefined>
22	MATERIAL_CAT9_CD	NVARCHAR2	6			<Undefined>
23	MATERIAL_CAT10_CD	NVARCHAR2	6			<Undefined>
24	MATERIAL_CAT11_CD	NVARCHAR2	6			<Undefined>
25	MATERIAL_CAT12_CD	NVARCHAR2	6			<Undefined>
26	MATERIAL_CAT13_CD	NVARCHAR2	6			<Undefined>
27	MATERIAL_CAT14_CD	NVARCHAR2	6			<Undefined>
28	MATERIAL_CAT15_CD	NVARCHAR2	6			<Undefined>
29	CREATED_DT	NUMBER	8		0	<Undefined>
30	CHANGED_DT	NUMBER	8		0	<Undefined>
31	ITEM PRICE GROUP	NVARCHAR2	8			<Undefined>

ODI Operator 11g vs 12c

ODI 11g

- 69 - INT_TMP_MATERIAL - Jan 13, 2022 12:53:46 AM
 - 566 - Loading - SrcSet0 - Drop work table
 - 567 - Loading - SrcSet0 - Create work table
 - 568 - Loading - SrcSet0 - Load data
 - 569 - Loading - SrcSet0 - Analyze work table
 - 571 - Integration - INT_TMP_MATERIAL - Create target table
 - 572 - Integration - INT_TMP_MATERIAL - Drop flow table
 - 573 - Integration - INT_TMP_MATERIAL - Create flow table I\$
 - 574 - Integration - INT_TMP_MATERIAL - Truncate target table
 - 575 - Integration - INT_TMP_MATERIAL - Insert flow into I\$ table
 - 576 - Integration - INT_TMP_MATERIAL - Create Index on flow table
 - 577 - Integration - INT_TMP_MATERIAL - Analyze integration table
 - 578 - Integration - INT_TMP_MATERIAL - Flag rows for update
 - 579 - Integration - INT_TMP_MATERIAL - Flag useless rows
 - 580 - Integration - INT_TMP_MATERIAL - Insert new rows
 - 581 - Integration - INT_TMP_MATERIAL - Commit transaction
 - 582 - Integration - INT_TMP_MATERIAL - Drop flow table
 - 1000570 - Loading - SrcSet0 - Drop work table

- 70 - INT_MATERIAL - Jan 13, 2022 12:56:11 AM
 - 583 - Integration - INT_MATERIAL - Drop flow table
 - 584 - Integration - INT_MATERIAL - Create flow table I\$
 - 585 - Integration - INT_MATERIAL - Insert flow into I\$ table
 - 586 - Integration - INT_MATERIAL - Create Index on flow table
 - 587 - Integration - INT_MATERIAL - Analyze integration table
 - 588 - Control - MATERIAL - drop check table
 - 589 - Control - MATERIAL - drop check view
 - 590 - Control - MATERIAL - drop check EV
 - 591 - Control - MATERIAL - create check table
 - 592 - Control - MATERIAL - delete previous check sum
 - 593 - Control - MATERIAL - drop error table
 - 594 - Control - MATERIAL - create error table
 - 595 - Control - MATERIAL - delete previous errors
 - 596 - Control - MATERIAL - Create index on PK
 - 644 - Control - MATERIAL - insert Not Null errors
 - 645 - Control - MATERIAL - delete errors from controlled table
 - 646 - Control - MATERIAL - insert check sum into check table
 - 647 - Integration - INT_MATERIAL - Flag rows for update
 - 648 - Integration - INT_MATERIAL - Flag useless rows
 - 649 - Integration - INT_MATERIAL - Update existing rows
 - 650 - Integration - INT_MATERIAL - Insert new rows
 - 651 - Integration - INT_MATERIAL - Commit transaction
 - 652 - Integration - INT_MATERIAL - Analyze target table

- 69 - INT_TMP_MATERIAL - Jan 12, 2022 9:45:26 AM
 - 10 - SERIAL - MAP_MATN
 - 20 - SERIAL - EU - PXDEV_SOURCE_UNIT
 - 30 - Drop work table - LKM SQL to Oracle
 - 40 - Create work table - LKM SQL to Oracle
 - 50 - Load data - LKM SQL to Oracle
 - 60 - Analyze work table - LKM SQL to Oracle
 - 70 - SERIAL - EU - PXDEV_STAGE_UNIT
 - 80 - Create target table - IKM Oracle Incremental Update
 - 90 - Drop flow table - IKM Oracle Incremental Update
 - 100 - Create flow table I\$ - IKM Oracle Incremental Update
 - 110 - Truncate target table - IKM Oracle Incremental Update
 - 120 - Insert flow into I\$ table - IKM Oracle Incremental Update
 - 130 - Create Index on flow table - IKM Oracle Incremental Update
 - 140 - Analyze integration table - IKM Oracle Incremental Update
 - 150 - Flag rows for update - IKM Oracle Incremental Update
 - 160 - Flag useless rows - IKM Oracle Incremental Update
 - 170 - Disable constraints - IKM Oracle Incremental Update
 - 180 - Disable indexes - IKM Oracle Incremental Update
 - 190 - Insert new rows - IKM Oracle Incremental Update
 - 200 - Enable indexes - IKM Oracle Incremental Update
 - 210 - Enable constraints - IKM Oracle Incremental Update
 - 220 - Commit transaction - IKM Oracle Incremental Update
 - 230 - SERIAL - MAP_CLEANUP
 - 240 - SERIAL - EU - PXDEV_SOURCE_UNIT
 - 250 - Drop work table - LKM SQL to Oracle
 - 260 - SERIAL - EU - PXDEV_STAGE_UNIT
- 70 - INT_MATERIAL - Jan 12, 2022 9:47:59 AM
 - 10 - SERIAL - MAP_MATN
 - 20 - SERIAL - EU - PXDEV_TARGET_UNIT
 - 30 - Drop flow table - IKM Oracle Incremental Update
 - 40 - Create flow table I\$ - IKM Oracle Incremental Update
 - 50 - Analyze target table - IKM Oracle Incremental Update
 - 60 - Insert flow into I\$ table - IKM Oracle Incremental Update
 - 70 - Create Index on flow table - IKM Oracle Incremental Update
 - 80 - Analyze integration table - IKM Oracle Incremental Update
 - 90 - drop check table - CKM Oracle
 - 100 - drop check view - CKM Oracle
 - 110 - drop check EV - CKM Oracle
 - 120 - create check table - CKM Oracle
 - 130 - delete previous check sum - CKM Oracle
 - 140 - drop error table - CKM Oracle
 - 150 - create error table - CKM Oracle
 - 160 - delete previous errors - CKM Oracle
 - 170 - Create index on PK - CKM Oracle
 - 180 - insert PK errors - CKM Oracle
 - 190 - insert Not Null errors - CKM Oracle
 - 650 - insert Not Null errors - CKM Oracle
 - 660 - delete errors from controlled table - CKM Oracle
 - 670 - insert check sum into check table - CKM Oracle
 - 680 - Flag rows for update - IKM Oracle Incremental Update
 - 690 - Flag useless rows - IKM Oracle Incremental Update
 - 700 - Disable constraints - IKM Oracle Incremental Update
 - 710 - Disable indexes - IKM Oracle Incremental Update
 - 720 - Update existing rows - IKM Oracle Incremental Update
 - 730 - Insert new rows - IKM Oracle Incremental Update
 - 740 - Enable indexes - IKM Oracle Incremental Update
 - 750 - Enable constraints - IKM Oracle Incremental Update
 - 760 - Commit transaction - IKM Oracle Incremental Update
 - 770 - Analyze target table - IKM Oracle Incremental Update

Steps are Categorized based on stages

ODI 12c

ODI 11g to ODI 12c Migration Issues

- Context Issue
 - Refresh Variable Issue
 - File Missing issue
 - column length issue
 - Batch script not in tidal scheduler
 - Column missing on target issue
 - Data issue – Too much of data or too less data (Extract from Date and to Date settings)
- jde_date issue
 - Reusable mapping issue - (set, distinct, aggregate components)
 - Variable calling issue

INT_ACTIVITY_TYPE_DIM

Target Datastore - ACTIVITY_TYPE_DIM

Position	Indicators	Name	Mapping
1		CUSTOMER_NO	F03B31.ZGAN8
2		BILL_TO_ACTIVITY_TYPE_CODE	nl(trim(F03B31.ZGAIT), ' ')
3		BILL_TO_ACTIVITY_TYPE_DESC	to_char(trim(trim(F03B30.ZIDLO1)))
4		DURATION	RTRIM(TO_CHAR(F03B31.ZGUPMJ)) LTRIM(TO_CHAR(F03B31.ZGDTI))
5		ACTIVITY_TICKLER_DATE	TO_DATE(JDE_DATE(F03B31.ZGDTI NUMBER), 'YYYYMMDD')
6		ACTIVITY_REMARK	nl(trim(F03B31.ZGRMK), ' ')
7		ACTIVITY_TICKLER_DT	JDE_DATE(F03B31.ZGDTI NUMBER)
8		COMPANY_ID	F03B31.ZGCO
9		ACTIVITY_ID	F03B31.ZGAVID
10		LAST_UPDATE_DATE	TO_DATE(JDE_DATE(F03B31.ZGUPMJ NUMBER), 'YYYYMMDD')
11		LAST_UPDATE_DT	TO_DATE(JDE_DATE(F03B31.ZGUPMJ NUMBER), 'YYYYMMDD')
12		LAST_UPDATE_TIME	F03B31.ZGUPMT
13		ACTIVITY_PRIORITY	F03B31.ZGAIPR
14		AMOUNT1	F03B31.ZGAA1/100
15		AMOUNT2	F03B31.ZGAA2/100
16		PROGRAM_ID	F03B31.ZGPID
17		KEY_ID	F03B31.ZGUKID
18		USER_ID	TRIM(F03B31.ZGUSER)
19		COMMENT1	F5503B31.TGECMNT
20		COMMENT2	F5503B31.TG2COMMENTS
21		TRANSACTION_ORIG	F5503B31.TGTORG
22		USER_AMOUNT	F5503B31.TGURAT
23		USER_CODE	F5503B31.TGURCD
24		CUSTOMER_SID	CUSTOMER.CUSTOMER_SID

Mapping Properties

Active Mapping: ☒

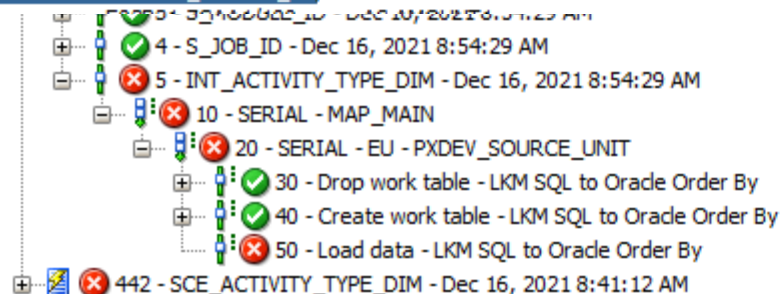
Implementation Technical Description Business Rule

JDE_DATE(F03B31.ZGUPMJ NUMBER)

JDE_DATE Issue

12c Code Before

```
15 F5503B31.TGURAT AS TGURAT,
16 nvl(trim(F03B31.ZGAIT),' ') AS BILL_TO_ACTIVITY_TYPE_CODE,
17 RTRIM(TO_CHAR(F03B31.ZGUPMJ))||LTRIM(TO_CHAR(F03B31.ZGUPMT)) AS DURATION,
18 TO_DATE(CASE WHEN F03B31.ZGDTI NUMBER IS NOT NULL AND F03B31.ZGDTI NUMBER <> 0 THEN
19 TO_NUMBER(TO_CHAR(TO_DATE(F03B31.ZGDTI NUMBER +1900000,'YYYYDDD'), 'YYYYMMDD'))
20 WHEN F03B31.ZGDTI NUMBER = 0 THEN NULL
21 ELSE NULL
22 END,'YYYYMMDD') AS ACTIVITY_TICKLER_DATE,
23 nvl(TRIM(F03B31.ZGRMK),' ') AS ACTIVITY_REMARK,
24 CASE WHEN F03B31.ZGDTI NUMBER IS NOT NULL AND F03B31.ZGDTI NUMBER <> 0 THEN
25 TO_NUMBER(TO_CHAR(TO_DATE(F03B31.ZGDTI NUMBER +1900000,'YYYYDDD'), 'YYYYMMDD'))
26 WHEN F03B31.ZGDTI NUMBER = 0 THEN NULL
27 ELSE NULL
28 END AS ACTIVITY_TICKLER_DT,
29 TO_DATE(CASE WHEN F03B31.ZGUPMJ NUMBER IS NOT NULL AND F03B31.ZGUPMJ NUMBER <> 0 THEN
30 TO_NUMBER(TO_CHAR(TO_DATE(F03B31.ZGUPMJ NUMBER +1900000,'YYYYDDD'), 'YYYYMMDD'))
31 WHEN F03B31.ZGUPMJ NUMBER = 0 THEN NULL
32 ELSE NULL
33 END,'YYYYMMDD') AS LAST_UPDATE_DATE,
34 CASE WHEN F03B31.ZGUPMJ NUMBER IS NOT NULL AND F03B31.ZGUPMJ NUMBER <> 0 THEN
35 TO_NUMBER(TO_CHAR(TO_DATE(F03B31.ZGUPMJ NUMBER +1900000,'YYYYDDD'), 'YYYYMMDD'))
36 WHEN F03B31.ZGUPMJ NUMBER = 0 THEN NULL
37 ELSE NULL
38 END AS LAST_UPDATE_DT,
```



12c Code After

```
15 F5503B31.TGURAT AS TGURAT,
16 nvl(trim(F03B31.ZGAIT),' ') AS BILL_TO_ACTIVITY_TYPE_CODE,
17 RTRIM(TO_CHAR(F03B31.ZGUPMJ))||LTRIM(TO_CHAR(F03B31.ZGUPMT)) AS DURATION,
18 TO_DATE(CASE WHEN F03B31.ZGDTI IS NOT NULL AND F03B31.ZGDTI <> 0 THEN
19 TO_NUMBER(TO_CHAR(TO_DATE(F03B31.ZGDTI +1900000,'YYYYDDD'), 'YYYYMMDD'))
20 WHEN F03B31.ZGDTI = 0 THEN NULL
21 ELSE NULL
22 END,'YYYYMMDD') AS ACTIVITY_TICKLER_DATE,
23 nvl(TRIM(F03B31.ZGRMK),' ') AS ACTIVITY_REMARK,
24 CASE WHEN F03B31.ZGDTI IS NOT NULL AND F03B31.ZGDTI <> 0 THEN
25 TO_NUMBER(TO_CHAR(TO_DATE(F03B31.ZGDTI +1900000,'YYYYDDD'), 'YYYYMMDD'))
26 WHEN F03B31.ZGDTI = 0 THEN NULL
27 ELSE NULL
28 END AS ACTIVITY_TICKLER_DT,
29 TO_DATE(CASE WHEN F03B31.ZGUPMJ IS NOT NULL AND F03B31.ZGUPMJ <> 0 THEN
30 TO_NUMBER(TO_CHAR(TO_DATE(F03B31.ZGUPMJ +1900000,'YYYYDDD'), 'YYYYMMDD'))
31 WHEN F03B31.ZGUPMJ = 0 THEN NULL
32 ELSE NULL
33 END,'YYYYMMDD') AS LAST_UPDATE_DATE,
34 CASE WHEN F03B31.ZGUPMJ IS NOT NULL AND F03B31.ZGUPMJ <> 0 THEN
35 TO_NUMBER(TO_CHAR(TO_DATE(F03B31.ZGUPMJ +1900000,'YYYYDDD'), 'YYYYMMDD'))
36 WHEN F03B31.ZGUPMJ = 0 THEN NULL
37 ELSE NULL
38 END AS LAST_UPDATE_DT,
```

Execution Statistics

Start: Dec 16, 2021 8:54:29 AM

Duration (seconds): 0

Variable and Sequence Values

Error Message:

ODI-1227: Task Load data-LKM SQL to Oracle Order By- fails on the source connection PXPRD_JDENA.
Caused By: java.sql.SQLException: ORA-00920: invalid relational operator

at oracle.jdbc.driver.T4CTTIoer11.processError(T4CTTIoer11.java:510)

Refresh Variable Issue

Designer Properties Operator Topology

Session Task Variable - S_CONFIGURATION_ID Session Step INT_COMMODITY Session Task SERIAL - MAP_MAIN Session Task SERIAL - EU - PXDEV_SRC_CTL_UNIT U_CDC_INCLUDE_ZERO_DATES

Projects

- U_ASSET_BALANCE_TIE_OUT_diffilename
- U_ASSET_BALANCE_TIE_OUT_filename
- U_A_BL_OUT_JDE
- U_CAN_CURRENT_MONTH
- U_CAN_EXPIRY_FILTER
- U_CDC_INCLUDE_ZERO_DATES
- Scenarios
- Used by
- U_CNTRCT_DOC_TYPE

User

All Executions

- 4706 - SCE_COMMODITY - Jan 6, 2022 6:02:37 AM
- 4023 - SCE_COMMODITY - Jan 4, 2022 9:12:28 AM
- 3395 - INT_DM_COMMODITY_LKP_INT_DM_COMMODITY_LKP_DS_SESS - Dec 16, 2021 12:59:23 PM
- 613 - SCE_COMMODITY - Dec 16, 2021 2:15:03 PM
- 533 - SCE_COMMODITY - Dec 16, 2021 12:59:23 PM

Variables

- 0 - S_JOB_NAME - Dec 16, 2021 12:59:23 PM
- 1 - S_APPLICATION_ID - Dec 16, 2021 12:59:23 PM
- 2 - S_CONFIGURATION_ID - Dec 16, 2021 12:59:24 PM
- 3 - S_MODULE_ID - Dec 16, 2021 12:59:24 PM
- 4 - S_JOB_ID - Dec 16, 2021 12:59:24 PM
- 5 - S_CDATE - Dec 16, 2021 12:59:24 PM
- 6 - S_INCLUDE_ZERO_DATES - Dec 16, 2021 12:59:24 PM
- 7 - S_PKG_START_DATE - Dec 16, 2021 12:59:24 PM
- 8 - S_PKG_START_TIME - Dec 16, 2021 12:59:24 PM
- 9 - S_CDC_JULIAN_FROM_DATE - Dec 16, 2021 12:59:24 PM
- 10 - S_CDC_JULIAN_FROM_TIME - Dec 16, 2021 12:59:24 PM
- 11 - S_CDC_JULIAN_TO_DATE - Dec 16, 2021 12:59:24 PM
- 12 - S_CDC_JULIAN_TO_TIME - Dec 16, 2021 12:59:24 PM
- 13 - U_DEFAULT_LONG_CHAR - Dec 16, 2021 12:59:24 PM
- 14 - INT_COMMODITY - Dec 16, 2021 12:59:24 PM
- 10 - SERIAL - MAP_MAIN
- 20 - SERIAL - EU - PXDEV_SRC_CTL_UNIT
- 30 - Drop work table - LKM SQL to Oracle Order By
- 40 - Create work table - LKM SQL to Oracle Order By
- 50 - Load data - LKM SQL to Oracle Order By

Definition Refreshing

Context Filter: All

History

Markers	Date	Value	Context
Memo	Jan 13, 2022 4:22:23 AM	Y	PXDEV_NA5
Version	Oct 20, 2021 1:13:10 AM	Y	PXPROD_MIG
Privileges	Oct 20, 2021 1:10:28 AM	Y	PXPROD
	Jun 28, 2021 12:27:34 AM	Y	PXPROD_JDE
	Jan 23, 2018 2:33:44 PM	Y	PXDEV_NA4
	Aug 17, 2017 2:14:15 PM	Y	PXDEV_NA2

```
1
2 select
3     F0005.DRKY AS DRKY,
4     F0005.DRDL01      AS DRDL01,
5     F0005.DRDL02      AS DRDL02
6 from   CTL.F0005 F0005
7 where  (1=1)
8 and (F0005.DRSY = '57' and F0005.DRRT = 'CM')
9 AND
10 (
11 (F0005.DRUPMJ = 0 AND '#PRAXAIR BI.U_CDC INCLUDE ZERO DATES' = 'Y')
12 OR
13 (F0005.DRUPMJ <> 0
14 AND ((F0005.DRUPMJ > #GLOBAL.S_CDC_JULIAN_FROM_DATE)
15 OR ((F0005.DRUPMJ = #GLOBAL.S_CDC_JULIAN_FROM_DATE)
```

Error Message:

oracle.odi.core.exception.OdiRuntimeException: java.lang.Exception: ODI-17506: Variable has no value: PRAXAIR_BI.U_CDC_INCLUDE_ZERO_DATES

at oracle.odi.query.VariableDwgBridgeImpl.getValue(VariableDwgBridgeImpl.java:35)
at oracle.odi.query.VariableValueGetter.initVarValue(VariableValueGetter.java:26)
at oracle.odi.query.VariableValueGetter.getStringValue(VariableValueGetter.java:40)
at oracle.odi.query.SubstitutionHelper.getSubstitutedText(SubstitutionHelper.java:95)
at oracle.odi.runtime.agent.execution.cmd.TextCommand.initialize(TextCommand.java:81)
at oracle.odi.runtime.agent.execution.sql.SQLCommand.initialize(SQLCommand.java:87)
at oracle.odi.runtime.agent.execution.Executor.handleDataMovementTask(Executor.java:308)
at oracle.odi.runtime.agent.execution.DataMovementTaskExecutionHandler.handleTask(DataMovementTaskExecutionHandler.java:51)
at oracle.odi.runtime.agent.execution.SessionTask.processTask(SessionTask.java:216)
at oracle.odi.runtime.agent.execution.SessionTask.doExecuteTask(SessionTask.java:128)
at oracle.odi.runtime.agent.execution.AbstractSessionTask.execute(AbstractSessionTask.java:886)
at oracle.odi.runtime.agent.execution.SessionExecutor\$SerialTrain.runTasks(SessionExecutor.java:2225)

End: Dec 16, 2021 12:59:25 PM

Return Code: 7000

reusable mapping issue

The screenshot displays the Oracle Data Integrator (ODI) Designer interface. The left pane shows a tree view of the project structure, including Sessions, Status, Keywords, User, and All Executions. The right pane shows the 'Definition' tab for a 'Session Task'.

Session List:

- INT_F0007_INT_F0007_DS_SESS - 3
- INT_TMP_F0007_CDN_INT_TMP_F0007_CDN_DS_SESS - 1
- INT_TMP_F0007_CDN_SUBSELECT_INT_TMP_F0007_CDN_SUBSELECT_DS_SESS - 1
- INT_TMP_F0007_INT_TMP_F0007_DS_SESS - 6
- SCE_F0007 - 5

Session Task Definition:

- Task Name:** Insert flow into I\$ table
- Connection:** IKM Oracle Incremental Update Order By
- Status:** Error
- Type:** Integration
- Order:** 50
- Log Level:** 5
- Invocation Log Level:** 5
- URL:**

Record Statistics:

- No. of Inserts: 0
- No. of Updates: 0
- No. of Deletes: 0
- No. of Errors: 0
- No. of Rows: 0

Execution Statistics:

- Start:** Dec 27, 2021 2:28:27 AM
- End:** Dec 27, 2021 2:28:27 AM
- Duration (seconds):** 0
- Return Code:** 904

Variable and Sequence Values:

Error Message:

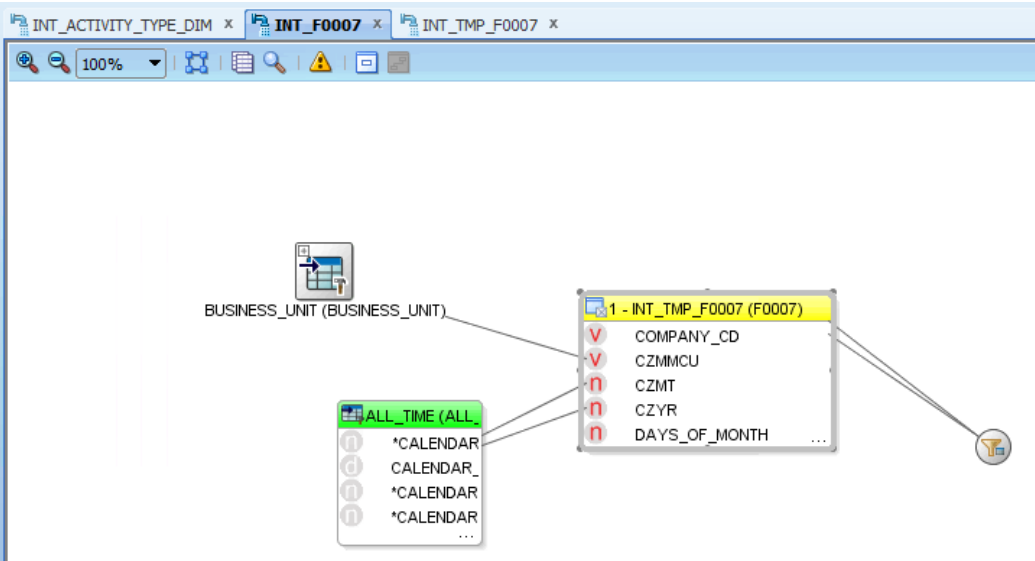
ODI-1228: Task Insert flow into I\$ table-IKM Oracle Incremental Update Order By- fails on the target connection PXDEV_PXDVBMRDG.
Caused By: java.sql.SQLException: ORA-00904: "F00071"."CZMMCU": invalid identifier

Error Message:

ODI-1228: Task Insert flow into I\$ table-IKM Oracle Incremental Update Order By- fails on the target connection PXDEV_PXDVBMRDG.
Caused By: java.sql.SQLException: ORA-00904: "F00071"."CZMMCU": invalid identifier

reusable mapping issue

ODI 11g Interface for INT_TMP_F0007



The screenshot shows the ODI 11g interface for INT_TMP_F0007. The main window displays the '1 - F0007 (F0007)' dataset, which is a union of multiple datasets. The 'Datasets Configuration' dialog is open, showing the configuration for the '1 - F0007 (F0007)' dataset. The dialog includes a table with the following columns: Order, Dataset Name, and Operator. The table lists 10 datasets, all of which are linked using the 'UNION' operator.

Order	Dataset Name	Operator
0	1	<N/A>
10	2	UNION
20	3	UNION
30	4	UNION
40	5	UNION
50	6	UNION
60	7	UNION
70	8	UNION
80	9	UNION
90	10	UNION
100	11	UNION
110	12	UNION
120	13	UNION
130	14	UNION
140	15	UNION
150	16	UNION
160	17	UNION
170	18	UNION
180	19	UNION
190	20	UNION
200	21	UNION
210	22	UNION
220	23	UNION
230	24	UNION
240	25	UNION
250	26	UNION
260	27	UNION
270	28	UNION
280	29	UNION

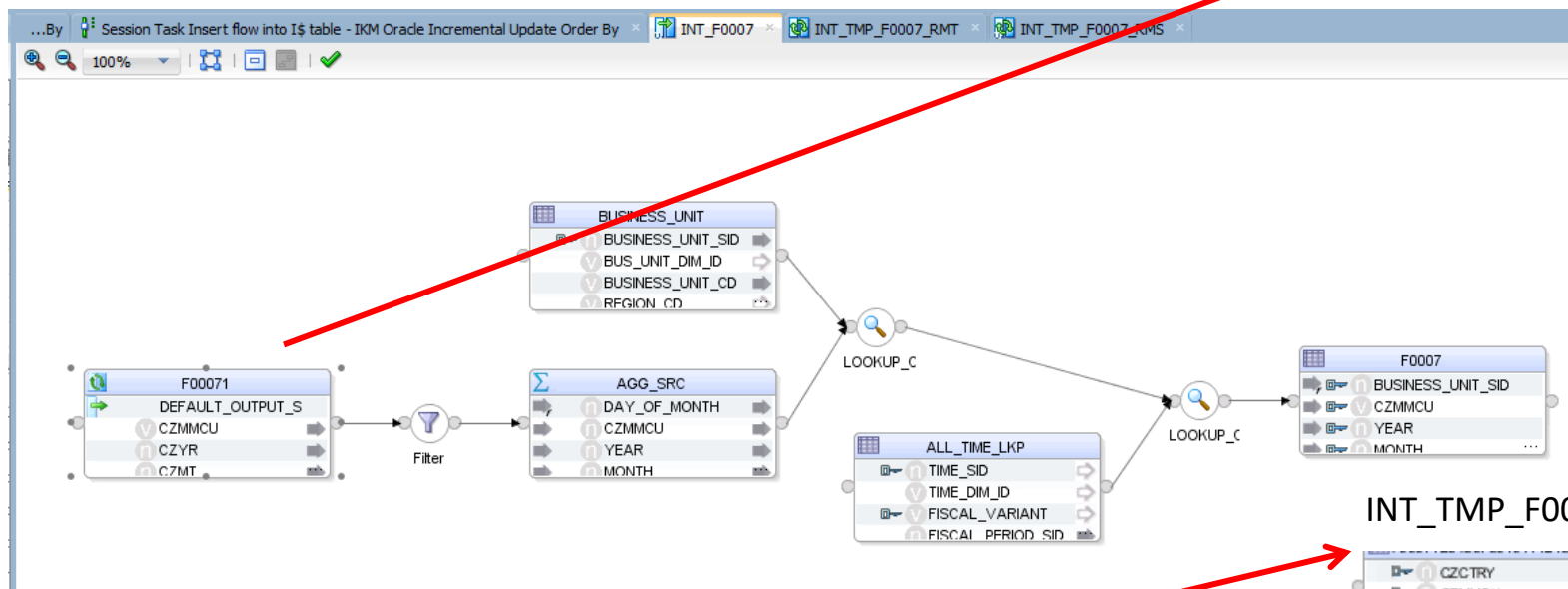
F0007 Interface with Multiple data sets and target data with union operator

reusable mapping issue

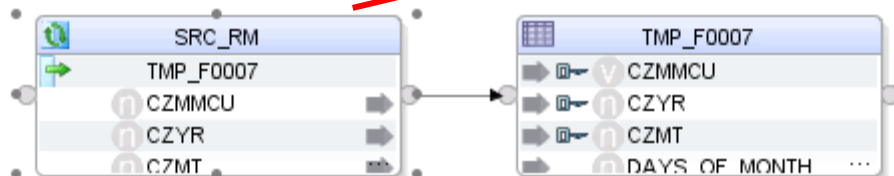
ODI 12c Mapping

INT_TMP_F0007_RMT

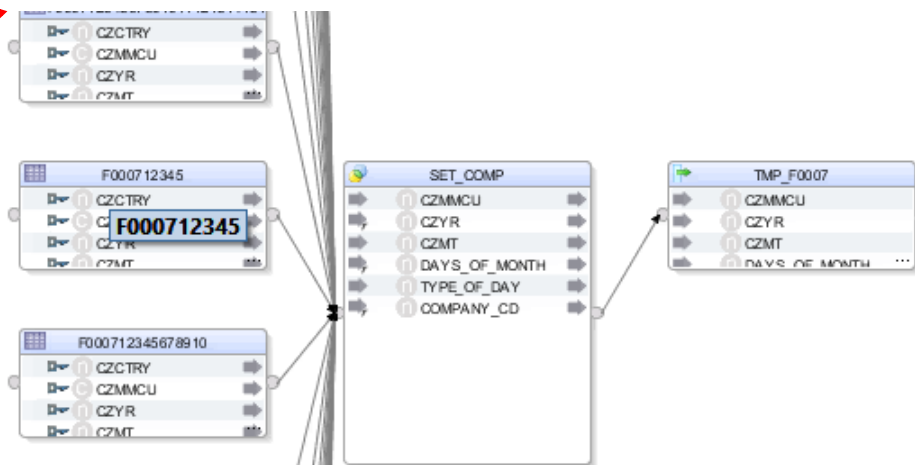
INT_F0007



INT_TMP_F0007



INT_TMP_F0007_RMS

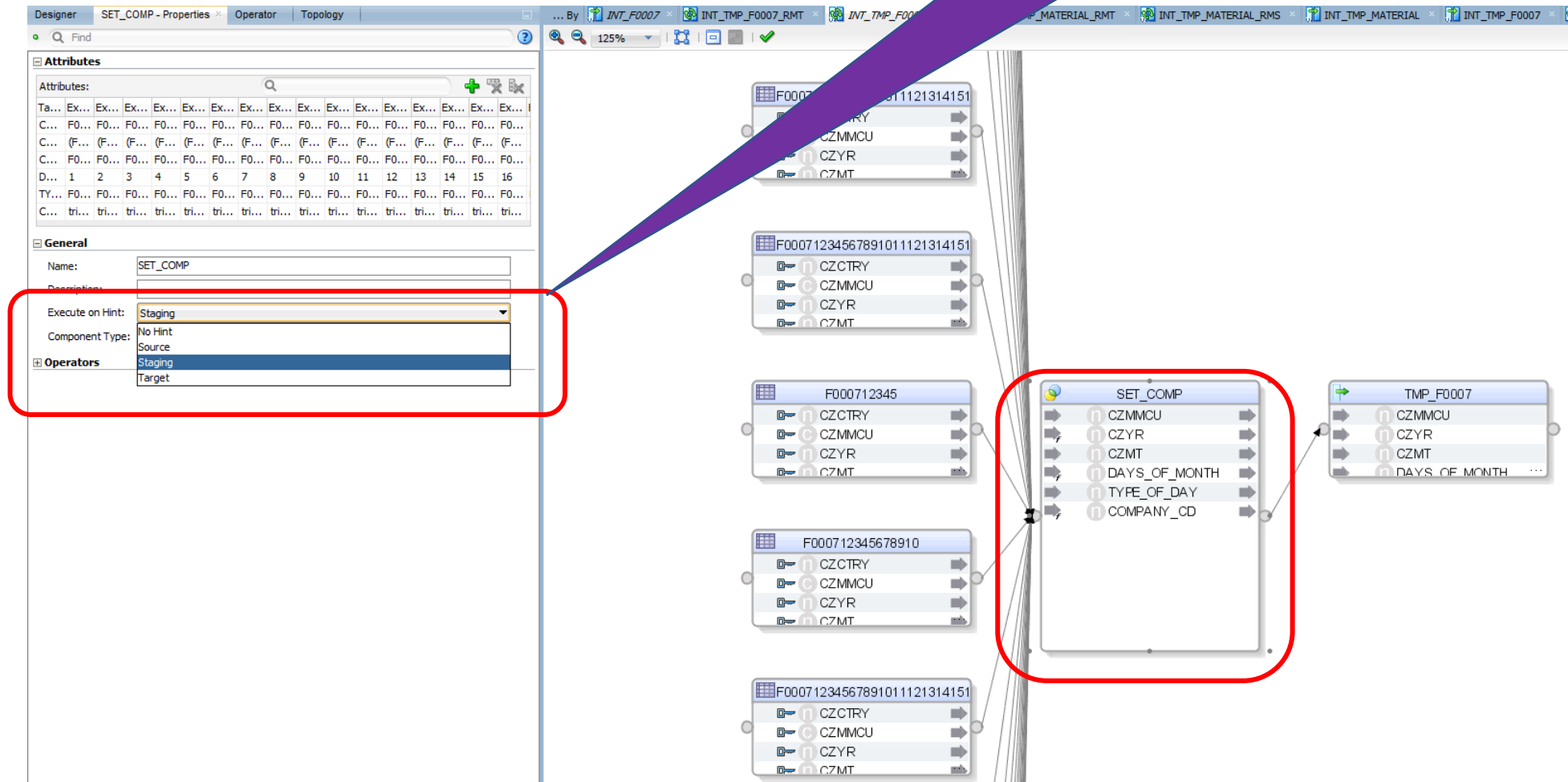


```
) TMP_F0007_F00071_1 LEFT OUTER JOIN BMRCRPA5.BUSINESS_UNIT BUSINESS_UNIT
ON TRIM(F00071.CZMMCU)=TRIM(BUSINESS_UNIT.BUSINESS_UNIT_CD)
) LEFT OUTER JOIN BMRCRPA5.ALL_TIME ALL_TIME_LKP
ON F00071.CZYR=ALL_TIME_LKP.CALENDAR_YEAR
AND F00071.CZMT=ALL_TIME_LKP.CALENDAR_MONTH
AND ALL_TIME_LKP.FISCAL_PERIOD_SID<>-1
```

```
52 ) TMP_F0007_F00071_1 LEFT OUTER JOIN BMRCRPA5.BUSINESS_UNIT BUSINESS_UNIT
53 ON TRIM(TMP_F0007_F00071_1.CZMMCU)=TRIM(BUSINESS_UNIT.BUSINESS_UNIT_CD)
54 ) LEFT OUTER JOIN BMRCRPA5.ALL_TIME ALL_TIME_LKP
55 ON TMP_F0007_F00071_1.YEAR=ALL_TIME_LKP.CALENDAR_YEAR
56 AND TMP_F0007_F00071_1.MONTH=ALL_TIME_LKP.CALENDAR_MONTH
57 AND ALL_TIME_LKP.FISCAL_PERIOD_SID<>-1
```


reusable mapping issue – Resolution

Change Execute on Hint from Source to Staging



reusable mapping issue

Comparison of ODI 11g and ODI 12c Code

```

/* DETECTION_STRATEGY = NOT_EXISTS */
insert /*+ append */ into BMRODISTGNA.Is_F0007
(
  BUSINESS_UNIT_SID,
  CZMMCU,
  YEAR,
  MONTH,
  DAY_OF_MONTH,
  TYPE_OF_DAY,
  FISCAL_PERIOD_SID,
  COMPANY_CD,
  IND_UPDATE
)
select
  BUSINESS_UNIT_SID,
  CZMMCU,
  YEAR,
  MONTH,
  DAY_OF_MONTH,
  TYPE_OF_DAY,
  FISCAL_PERIOD_SID,
  COMPANY_CD,
  IND_UPDATE
from (
  select
    NVL(BUSINESS_UNIT.BUSINESS_UNIT_SID,0) BUSINESS_UNIT_SID,
    F0007.CZMMCU CZMMCU,
    F0007.CZMR YEAR,
    F0007.CZMT MONTH,
    COUNT(F0007.DAYS_OF_MONTH) DAY_OF_MONTH,
    F0007.TYPE_OF_DAY TYPE_OF_DAY,
    ALL_TIME_LKP.FISCAL_PERIOD_SID FISCAL_PERIOD_SID,
    NVL(F0007.COMPANY_CD,'') COMPANY_CD,
    'T' IND_UPDATE
  from (BMRODISTGNA.TMP_F0007 F0007 LEFT OUTER JOIN BMRCRPNAS.BUSINESS_UNIT BUSINESS_UNIT ON TRIM(F0007.CZMMCU)=TRIM(BUSINESS_UNIT.BUSINESS_UNIT_CD)) LEFT OUT
)
AND F0007.CZMT=ALL_TIME_LKP.CALENDAR_MONTH
AND ALL_TIME_LKP.FISCAL_PERIOD_SID<>-1
where (1=1)
And (F0007.TYPE_OF_DAY='W'
AND
(length(trim(F0007.COMPANY_CD)) = 5 or trim(F0007.COMPANY_CD) is null))
Group By NVL(BUSINESS_UNIT.BUSINESS_UNIT_SID,0),
F0007.CZMMCU,
F0007.CZMR,
F0007.CZMT,
F0007.TYPE_OF_DAY,
ALL_TIME_LKP.FISCAL_PERIOD_SID,
NVL(F0007.COMPANY_CD,'')
) S
where NOT EXISTS
( select 1 from BMRCRPNAS.F0007 T
where T.BUSINESS_UNIT_SID = S.BUSINESS_UNIT_SID
and T.CZMMCU = S.CZMMCU
and T.YEAR = S.YEAR
and T.MONTH = S.MONTH
and T.COMPANY_CD = S.COMPANY_CD
and ((T.DAYS_OF_MONTH = S.DAYS_OF_MONTH) or (T.DAYS_OF_MONTH IS NULL and S.DAYS_OF_MONTH IS NULL)) and
((T.TYPE_OF_DAY = S.TYPE_OF_DAY) or (T.TYPE_OF_DAY IS NULL and S.TYPE_OF_DAY IS NULL)) and
((T.FISCAL_PERIOD_SID = S.FISCAL_PERIOD_SID) or (T.FISCAL_PERIOD_SID IS NULL and S.FISCAL_PERIOD_SID IS NULL))
)

```

```

1 /* DETECTION_STRATEGY = NOT_EXISTS */
2 insert /*+ append */ into BMRODISTGNA.Is_F0007
3
4 (
5   BUSINESS_UNIT_SID,
6   CZMMCU,
7   YEAR,
8   MONTH,
9   DAY_OF_MONTH,
10  TYPE_OF_DAY,
11  FISCAL_PERIOD_SID,
12  COMPANY_CD,
13  IND_UPDATE
14 )
15 select
16   BUSINESS_UNIT_SID,
17   CZMMCU,
18   YEAR,
19   MONTH,
20   DAY_OF_MONTH,
21   TYPE_OF_DAY,
22   FISCAL_PERIOD_SID,
23   COMPANY_CD,
24   IND_UPDATE
25 from (
26   select
27     NVL(BUSINESS_UNIT.BUSINESS_UNIT_SID,0) BUSINESS_UNIT_SID,
28     TMP_F0007_F00071_1.CZMMCU CZMMCU,
29     TMP_F0007_F00071_1.YEAR YEAR,
30     TMP_F0007_F00071_1.MONTH MONTH,
31     TMP_F0007_F00071_1.DAYS_OF_MONTH DAY_OF_MONTH,
32     TMP_F0007_F00071_1.TYPE_OF_DAY TYPE_OF_DAY,
33     ALL_TIME_LKP.FISCAL_PERIOD_SID FISCAL_PERIOD_SID,
34     TMP_F0007_F00071_1.COMPANY_CD COMPANY_CD,
35     'T' IND_UPDATE
36   from ((
37     SELECT
38       COUNT(TMP_F0007_F00071.DAYS_OF_MONTH) AS DAY_OF_MONTH ,
39       TMP_F0007_F00071.CZMMCU AS CZMMCU ,
40       TMP_F0007_F00071.CZMR AS YEAR ,
41       TMP_F0007_F00071.CZMT AS MONTH ,
42       TMP_F0007_F00071.TYPE_OF_DAY AS TYPE_OF_DAY ,
43       NVL(TMP_F0007_F00071.COMPANY_CD,'') AS COMPANY_CD
44     FROM
45       BMRODISTGNA.TMP_F0007 TMP_F0007_F00071
46     WHERE
47       (TMP_F0007_F00071.TYPE_OF_DAY='W'
48       AND
49       (length(trim(TMP_F0007_F00071.COMPANY_CD)) = 5 or trim(TMP_F0007_F00071.COMPANY_CD) is null)
50     )
51     GROUP BY
52       TMP_F0007_F00071.CZMMCU, TMP_F0007_F00071.CZMR, TMP_F0007_F00071.CZMT, TMP_F0007_F00071.TYPE_OF_DAY, NVL(TMP_F0007_F00071.COMPANY_CD,'')
53     ) TMP_F0007_F00071_1 LEFT OUTER JOIN BMRCRPNAS.BUSINESS_UNIT BUSINESS_UNIT
54     ON TRIM(F00071.CZMMCU)=TRIM(BUSINESS_UNIT.BUSINESS_UNIT_CD)
55     ) LEFT OUTER JOIN BMRCRPNAS.ALL_TIME_LKP
56     ON F00071.CZMR=ALL_TIME_LKP.CALENDAR_YEAR
57   AND F00071.CZMT=ALL_TIME_LKP.CALENDAR_MONTH
58   AND ALL_TIME_LKP.FISCAL_PERIOD_SID<>-1
59   where (1=1)
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74 ) S
75 where NOT EXISTS
76 ( select 1 from BMRCRPNAS.F0007 T
77 where T.BUSINESS_UNIT_SID = S.BUSINESS_UNIT_SID
78 and T.CZMMCU = S.CZMMCU
79 and T.YEAR = S.YEAR
80 and T.MONTH = S.MONTH
81 and T.COMPANY_CD = S.COMPANY_CD
82 and ((T.DAYS_OF_MONTH = S.DAYS_OF_MONTH) or (T.DAYS_OF_MONTH IS NULL and S.DAYS_OF_MONTH IS NULL)) and
83 ((T.TYPE_OF_DAY = S.TYPE_OF_DAY) or (T.TYPE_OF_DAY IS NULL and S.TYPE_OF_DAY IS NULL)) and
84 ((T.FISCAL_PERIOD_SID = S.FISCAL_PERIOD_SID) or (T.FISCAL_PERIOD_SID IS NULL and S.FISCAL_PERIOD_SID IS NULL))
85 )

```

reusable mapping issue

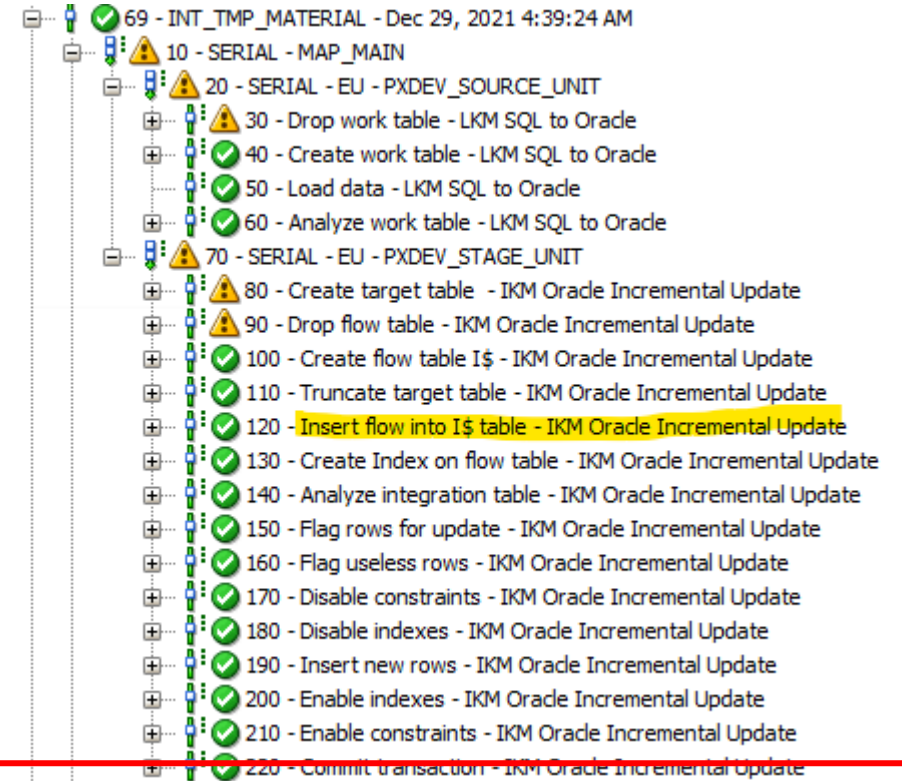
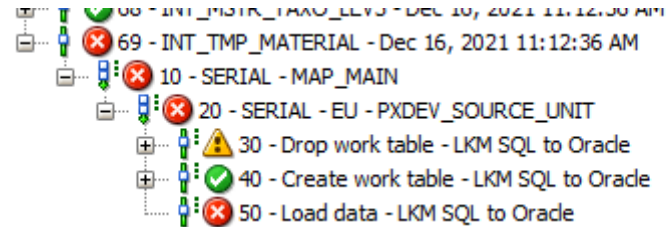
Comparison of ODI 12c Failed and ODI 12c Fixed Code

```
1 /* * DETECTION_STRATEGY = NOT_EXISTS */
2 insert /*+ append */ into BMRODISTGNA.Its_F0007
3 (
4     BUSINESS_UNIT_SID,
5     CZMMCU,
6     YEAR,
7     MONTH,
8     DAY_OF_MONTH,
9     TYPE_OF_DAY,
10    FISCAL_PERIOD_SID,
11    COMPANY_CD,
12    IND_UPDATE
13 )
14 select
15 BUSINESS_UNIT_SID,
16 CZMMCU,
17 YEAR,
18 MONTH,
19 DAY_OF_MONTH,
20 TYPE_OF_DAY,
21 FISCAL_PERIOD_SID,
22 COMPANY_CD,
23 IND_UPDATE
24 from (
25 select
26 NVL(BUSINESS_UNIT.BUSINESS_UNIT_SID,0) BUSINESS_UNIT_SID,
27 TMP_F0007_F00071_1.CZMMCU CZMMCU,
28 TMP_F0007_F00071_1.YEAR YEAR,
29 TMP_F0007_F00071_1.MONTH MONTH,
30 TMP_F0007_F00071_1.DAY_OF_MONTH DAY_OF_MONTH,
31 TMP_F0007_F00071_1.TYPE_OF_DAY TYPE_OF_DAY,
32 ALL_TIME_LKP.FISCAL_PERIOD_SID FISCAL_PERIOD_SID,
33 TMP_F0007_F00071_1.COMPANY_CD COMPANY_CD,
34 'I' IND_UPDATE
35 from ((
36 SELECT
37 COUNT(TMP_F0007_F00071.DAYS_OF_MONTH) AS DAY_OF_MONTH ,
38 TMP_F0007_F00071.CZMMCU AS CZMMCU ,
39 TMP_F0007_F00071.CZMR AS YEAR ,
40 TMP_F0007_F00071.CZMT AS MONTH ,
41 TMP_F0007_F00071.TYPE_OF_DAY AS TYPE_OF_DAY ,
42 NVL(TMP_F0007_F00071.COMPANY_CD, '') AS COMPANY_CD
43 FROM
44 BMRODISTGNA.TMP_F0007 TMP_F0007_F00071
45 WHERE
46 (TMP_F0007_F00071.TYPE_OF_DAY='W'
47 AND
48 (length(trim(TMP_F0007_F00071.COMPANY_CD)) = 5 or trim(TMP_F0007_F00071.COMPANY_CD) is null)
49 )
50 )
51 GROUP BY
52 TMP_F0007_F00071.CZMMCU, TMP_F0007_F00071.CZMR, TMP_F0007_F00071.CZMT, TMP_F0007_F00071.TYPE_OF_DAY, NVL(TMP_F0007_F00071.COMPANY_CD, '')
53 ) TMP_F0007_F00071_1 LEFT OUTER JOIN BMRCRPNAS.BUSINESS_UNIT BUSINESS_UNIT
54 ON TRIM(TMP_F0007_F00071.CZMMCU)=TRIM(BUSINESS_UNIT.BUSINESS_UNIT_CD)
55 ) LEFT OUTER JOIN BMRCRPNAS.ALL_TIME ALL_TIME_LKP
56 ON F00071.CZMR=ALL_TIME_LKP.CALENDAR_YEAR
57 AND F00071.CZMT=ALL_TIME_LKP.CALENDAR_MONTH
58 AND ALL_TIME_LKP.FISCAL_PERIOD_SID<>-1
59 where (1=1)
60 )
61 where NOT EXISTS
62 ( select 1 from BMRCRPNAS.F0007 T
63 where T.BUSINESS_UNIT_SID = S.BUSINESS_UNIT_SID
64 and T.CZMMCU = S.CZMMCU
65 and T.YEAR = S.YEAR
66 and T.MONTH = S.MONTH
67 and T.COMPANY_CD = S.COMPANY_CD
68 and ((T.DAY_OF_MONTH = S.DAY_OF_MONTH) or (T.DAY_OF_MONTH IS NULL and S.DAY_OF_MONTH IS NULL)) and
69 ((T.TYPE_OF_DAY = S.TYPE_OF_DAY) or (T.TYPE_OF_DAY IS NULL and S.TYPE_OF_DAY IS NULL)) and
70 ((T.FISCAL_PERIOD_SID = S.FISCAL_PERIOD_SID) or (T.FISCAL_PERIOD_SID IS NULL and S.FISCAL_PERIOD_SID IS NULL))
71 )
72 )
```

```
1 /* * DETECTION_STRATEGY = NOT_EXISTS */
2 insert /*+ append */ into BMRODISTGNA.Its_F0007
3 (
4     BUSINESS_UNIT_SID,
5     CZMMCU,
6     YEAR,
7     MONTH,
8     DAY_OF_MONTH,
9     TYPE_OF_DAY,
10    FISCAL_PERIOD_SID,
11    COMPANY_CD,
12    IND_UPDATE
13 )
14 select
15 BUSINESS_UNIT_SID,
16 CZMMCU,
17 YEAR,
18 MONTH,
19 DAY_OF_MONTH,
20 TYPE_OF_DAY,
21 FISCAL_PERIOD_SID,
22 COMPANY_CD,
23 IND_UPDATE
24 from (
25 select
26 NVL(BUSINESS_UNIT.BUSINESS_UNIT_SID,0) BUSINESS_UNIT_SID,
27 TMP_F0007_F00071_1.CZMMCU CZMMCU,
28 TMP_F0007_F00071_1.YEAR YEAR,
29 TMP_F0007_F00071_1.MONTH MONTH,
30 TMP_F0007_F00071_1.DAY_OF_MONTH DAY_OF_MONTH,
31 TMP_F0007_F00071_1.TYPE_OF_DAY TYPE_OF_DAY,
32 ALL_TIME_LKP.FISCAL_PERIOD_SID FISCAL_PERIOD_SID,
33 TMP_F0007_F00071_1.COMPANY_CD COMPANY_CD,
34 'I' IND_UPDATE
35 from ((
36 SELECT
37 COUNT(TMP_F0007_F00071.DAYS_OF_MONTH) AS DAY_OF_MONTH ,
38 TMP_F0007_F00071.CZMMCU AS CZMMCU ,
39 TMP_F0007_F00071.CZMR AS YEAR ,
40 TMP_F0007_F00071.CZMT AS MONTH ,
41 TMP_F0007_F00071.TYPE_OF_DAY AS TYPE_OF_DAY ,
42 NVL(TMP_F0007_F00071.COMPANY_CD, '') AS COMPANY_CD
43 FROM
44 BMRODISTGNA.TMP_F0007 TMP_F0007_F00071
45 WHERE
46 (TMP_F0007_F00071.TYPE_OF_DAY='W'
47 AND
48 (length(trim(TMP_F0007_F00071.COMPANY_CD)) = 5 or trim(TMP_F0007_F00071.COMPANY_CD) is null)
49 )
50 )
51 GROUP BY
52 TMP_F0007_F00071.CZMMCU, TMP_F0007_F00071.CZMR, TMP_F0007_F00071.CZMT, TMP_F0007_F00071.TYPE_OF_DAY, NVL(TMP_F0007_F00071.COMPANY_CD, '')
53 ) TMP_F0007_F00071_1 LEFT OUTER JOIN BMRCRPNAS.BUSINESS_UNIT BUSINESS_UNIT
54 ON TRIM(TMP_F0007_F00071.CZMMCU)=TRIM(BUSINESS_UNIT.BUSINESS_UNIT_CD)
55 ) LEFT OUTER JOIN BMRCRPNAS.ALL_TIME ALL_TIME_LKP
56 ON TMP_F0007_F00071_1.YEAR=ALL_TIME_LKP.CALENDAR_YEAR
57 AND TMP_F0007_F00071_1.MONTH=ALL_TIME_LKP.CALENDAR_MONTH
58 AND ALL_TIME_LKP.FISCAL_PERIOD_SID<>-1
59 where (1=1)
60 )
61 where NOT EXISTS
62 ( select 1 from BMRCRPNAS.F0007 T
63 where T.BUSINESS_UNIT_SID = S.BUSINESS_UNIT_SID
64 and T.CZMMCU = S.CZMMCU
65 and T.YEAR = S.YEAR
66 and T.MONTH = S.MONTH
67 and T.COMPANY_CD = S.COMPANY_CD
68 and ((T.DAY_OF_MONTH = S.DAY_OF_MONTH) or (T.DAY_OF_MONTH IS NULL and S.DAY_OF_MONTH IS NULL)) and
69 ((T.TYPE_OF_DAY = S.TYPE_OF_DAY) or (T.TYPE_OF_DAY IS NULL and S.TYPE_OF_DAY IS NULL)) and
70 ((T.FISCAL_PERIOD_SID = S.FISCAL_PERIOD_SID) or (T.FISCAL_PERIOD_SID IS NULL and S.FISCAL_PERIOD_SID IS NULL))
71 )
72 )
```

Variable Calling issue

PKG_MATERIAL : ODI12c Failed vs Fixed Code



```
nvl(trim(#F4101.MTRL_CATEGORY1_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT1_CD,  
nvl(trim(#F4101.MTRL_CATEGORY2_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT2_CD,  
nvl(trim(#F4101.MTRL_CATEGORY3_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT3_CD,  
nvl(trim(#F4101.MTRL_CATEGORY4_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT4_CD,  
nvl(trim(#F4101.MTRL_CATEGORY5_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT5_CD,  
nvl(trim(#F4101.MTRL_CATEGORY6_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT6_CD,  
nvl(trim(#F4101.MTRL_CATEGORY7_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT7_CD,  
nvl(trim(#F4101.MTRL_CATEGORY8_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT8_CD,  
nvl(trim(#F4101.MTRL_CATEGORY9_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT9_CD,  
nvl(trim(#F4101.MTRL_CATEGORY10_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT10_CD,  
nvl(trim(#F4101.MTRL_CATEGORY11_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT11_CD,  
nvl(trim(#F4101.MTRL_CATEGORY12_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT12_CD,  
nvl(trim(#F4101.MTRL_CATEGORY13_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT13_CD,  
nvl(trim(#F4101.MTRL_CATEGORY14_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT14_CD,  
nvl(trim(#F4101.MTRL_CATEGORY15_CD), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT15_CD,
```

```
119 nvl(trim(DEFAULT_A.IMPRP1), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT1_CD,  
120 nvl(trim(DEFAULT_A.IMPRP2), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT2_CD,  
121 nvl(trim(DEFAULT_A.IMPRP3), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT3_CD,  
122 nvl(trim(DEFAULT_A.IMPRP4), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT4_CD,  
123 nvl(trim(DEFAULT_A.IMPRP5), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT5_CD,  
124 nvl(trim(DEFAULT_A.IMPRP6), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT6_CD,  
125 nvl(trim(DEFAULT_A.IMPRP7), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT7_CD,  
126 nvl(trim(DEFAULT_A.IMSRP1), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT8_CD,  
127 nvl(trim(DEFAULT_A.IMSRP2), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT9_CD,  
128 nvl(trim(DEFAULT_A.IMSRP3), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT10_CD,  
129 nvl(trim(DEFAULT_A.IMSRP4), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT11_CD,  
130 nvl(trim(DEFAULT_A.IMSRP5), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT12_CD,  
131 nvl(trim(DEFAULT_A.IMSRP6), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT13_CD,  
132 nvl(trim(DEFAULT_A.IMSRP7), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT14_CD,  
133 nvl(trim(DEFAULT_A.IMSRP8), '#PRAXAIR_BI.U_DEFAULT_SHORT_CHAR') AS MATERIAL_CAT15_CD,
```

Thank you
Q & A