Technical Documentation - Sales & distribution - OTIF report

Access Management

Roles & Access

List of application role + menu role and explanation if we have several applications role with specials rules.

Role Code	Role Description	Explanation
ZR_RCS_CA_M49	SD - Sales and Distribution	Role menu
ZBI_RCS_SD_A01	Application role - Sales & Distribution	Linked to authorization role ZBI_SD
ZP2_RCS_SD_A01	Application role - Sales & Distribution	Linked to authorization role ZP2_SD

Authorization Objects

List of authorization objects mandatory for the application.

Authorization object	Explanation
CPFCTR1_2	Global Business Unit role ZR_*_CA_P05
C_COMPCDE	Company Code role ZR_*_CA_P01
C_SAL_OFF	Sales Office role ZR_*_CA_P14
C_COMPCDE__C_AUTHMA	Authorization scope role ZR_*_CA_P10

See also file maintained by Authorization team :

- BW Catalog of Roles: Authorization catalog
- BW Authorization: BW Authorizations

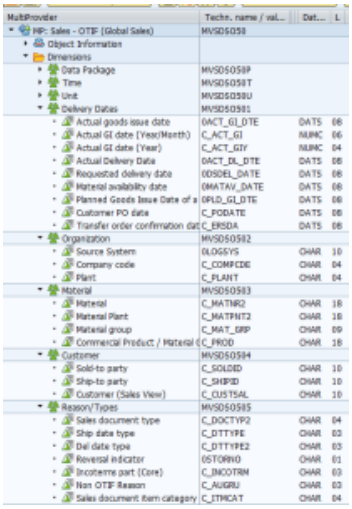
DataFlow

Overview

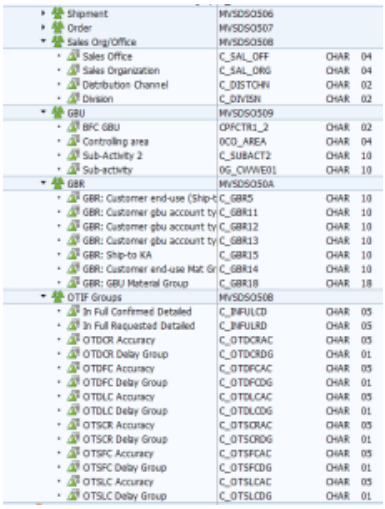
Multi Provider MVSDSO50 - OTIF Global - DATA FLOW

This multi provider is used to manage the OTIF indicators for all sales processes (Solvay & Rhodia)

MP Details - characteristics

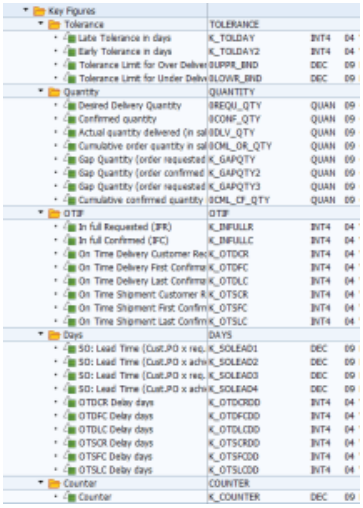


MultiProvider	Techn. name / val...	Dat...	L
MP: Sales - OTIF (Global Sales)	MVSDSO50		
Object Information			
Dimensions			
Data Package	MVSDSO50P		
Time	MVSDSO50T		
Unit	MVSDSO50U		
Delivery Dates	MVSDSO501		
Actual goods issue date	0ACT_GI_DTE	DATS	08
Actual GI date (Year/Month)	C_ACT_GI	NUMC	06
Actual GI date (Year)	C_ACT_GIY	NUMC	04
Actual Delivery Date	0ACT_DL_DTE	DATS	08
Requested delivery date	0DSDEL_DATE	DATS	08
Material availability date	0MATAV_DATE	DATS	08
Planned Goods Issue Date of a	0PLD_GI_DTE	DATS	08
Customer PO date	C_PODATE	DATS	08
Transfer order confirmation dat	C_ERSDA	DATS	08
Organization	MVSDSO502		
Source System	0LOGSYS	CHAR	10
Company code	C_COMPCDE	CHAR	04
Plant	C_PLANT	CHAR	04
Material	MVSDSO503		
Material	C_MATNR2	CHAR	18
Material Plant	C_MATPNT2	CHAR	18
Material group	C_MAT_GRP	CHAR	09
Commercial Product / Material (	C_PROD	CHAR	18
Customer	MVSDSO504		
Sold-to party	C_SOLDTO	CHAR	10
Ship-to party	C_SHPTO	CHAR	10
Customer (Sales View)	C_CUSTSAL	CHAR	10
Reason/Types	MVSDSO505		
Sales document type	C_DOCTYP2	CHAR	04
Ship date type	C_DTTYPE	CHAR	03
Del date type	C_DTTYPE2	CHAR	03
Reversal indicator	0STORNO	CHAR	01
Incoterms part (Core)	C_INCOTRN	CHAR	03
Non OTIF Reason	C_AUGRU	CHAR	03
Sales document item category	C_ITMCAT	CHAR	04

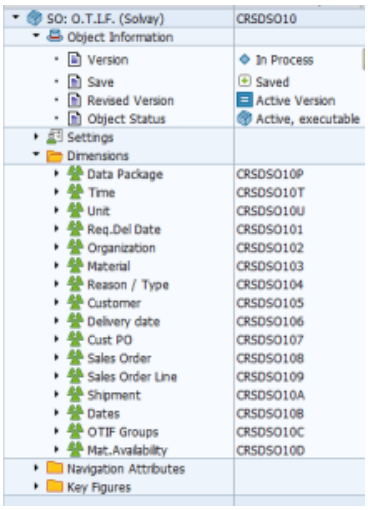


Shipment	MVSDSO506		
Order	MVSDSO507		
Sales Org/Office	MVSDSO508		
Sales Office	C_SAL_OFF	CHAR	04
Sales Organization	C_SAL_ORG	CHAR	04
Distribution Channel	C_DISTCHN	CHAR	02
Division	C_DIVISN	CHAR	02
GBU	MVSDSO509		
BFC GBU	CPFCTR1_2	CHAR	02
Controlling area	0CO_AREA	CHAR	04
Sub-Activity 2	C_SUBACT2	CHAR	10
Sub-activity	0G_CWWE01	CHAR	10
GBR	MVSDSO50A		
GBR: Customer end-use (Ship-t	C_GBR5	CHAR	10
GBR: Customer gbu account ty	C_GBR11	CHAR	10
GBR: Customer gbu account ty	C_GBR12	CHAR	10
GBR: Customer gbu account ty	C_GBR13	CHAR	10
GBR: Ship-to KA	C_GBR15	CHAR	10
GBR: Customer end-use Mat Gr	C_GBR14	CHAR	10
GBR: GBU Material Group	C_GBR18	CHAR	18
OTIF Groups	MVSDSO50B		
In Full Confirmed Detailed	C_INFULCD	CHAR	05
In Full Requested Detailed	C_INFULRD	CHAR	05
OTDCR Accuracy	C_OTDCRAC	CHAR	05
OTDCR Delay Group	C_OTDCRDG	CHAR	01
OTDFC Accuracy	C_OTDFCAC	CHAR	05
OTDFC Delay Group	C_OTDFCDG	CHAR	01
OTDLC Accuracy	C_OTDLCAC	CHAR	05
OTDLC Delay Group	C_OTDLCDG	CHAR	01
OTSCR Accuracy	C_OTSCRAC	CHAR	05
OTSCR Delay Group	C_OTSCRDG	CHAR	01
OTSFC Accuracy	C_OTSFCAC	CHAR	05
OTSFC Delay Group	C_OTSFCDG	CHAR	01
OTSLC Accuracy	C_OTSLCAC	CHAR	05
OTSLC Delay Group	C_OTSLCDG	CHAR	01

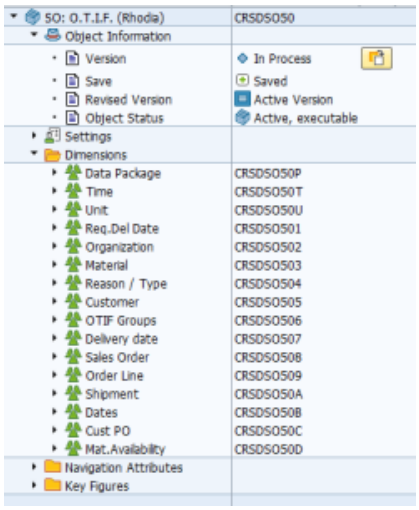
Details - Key Figures



Cube CRSDSO10 - OTIF Sales (Solvay)



Cube CRSDSO50 - OTIF Sales (Rhodia)



Multi Provider MVSDSO51 - OTIF Transfer Global - DATA FLOW

This multi provider is used to manage the OTIF indicators for all sales and transfer processes (Solvay & Rhodia)

Cubes:

CRSDSO54: PO: OTIF Transfer (Rhodia)

As part of the change # 4028391,excluded return items from this cube .Added filter in below DTP's to exclude Return Items.

DTP: DBSDSO91 -> CRSDSO54 (Rhodia)

DTP: DBSDSO91 -> DBSDSO9E (Rhodia)

DTP: DBSDSO98 -> CRSDSO24 (Solvay)

DTP: DBSDSO98 -> DBSDSO9F (Solvay)

CRSDSO24: PO: OTIF Transfer (Solvay)

As part of the change # 4028391,excluded return items from this cube .Added filter in below DTP's to exclude Return Items.

DTP: DBSDSO91 -> CRSDSO54 (Rhodia)

DTP: DBSDSO91 -> DBSDSO9E (Rhodia)

DTP: DBSDSO98 -> CRSDSO24 (Solvay)

DTP: DBSDSO98 -> DBSDSO9F (Solvay)

CRSDSO50: SO: OTIF Sales (Rhodia)
CRSDSO10: SO: OTIF Sales (Solvay)

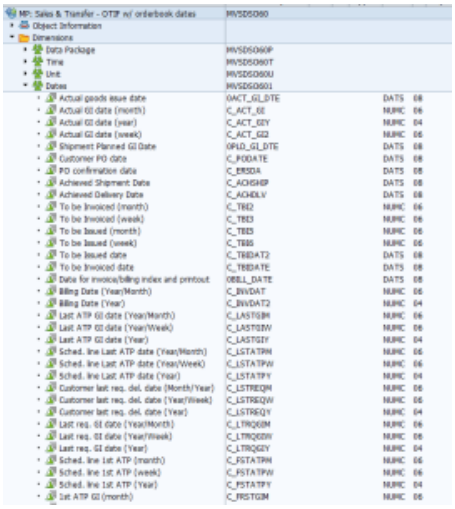
Multi Provider MVSDSO60 - MP Sales & Transfer for OTIF with Order Book dates - DATA FLOW

This multi provider is used to manage the OTIF indicators for all sales and transfer processes (Solvay & Rhodia) matched with order book snapshot data, in order to know the opened orders

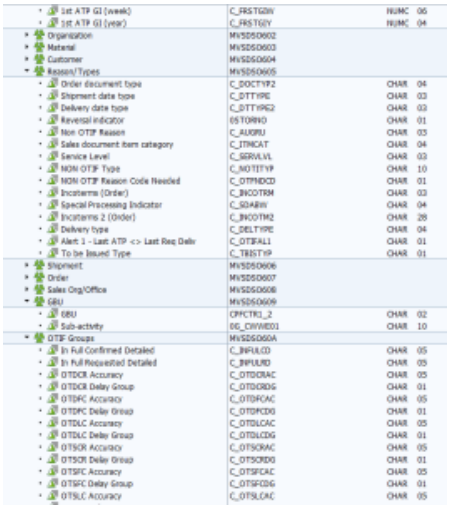
Details - DSO's used in MP

This multi provider is based on two cubes that receive data from DSO's that mix data from OTIF and order book snapshot. The DSO's used here are: DBSDSO9A (OTIF Sales & order book Solvay), DBSDSO9B (OTIF Sales & order book Rhodia), DBSDSO9E (OTIF Transfer & order book Solvay), DBSDSO9F (OTIF Transfer & order book Rhodia)

MP Details - Characteristics

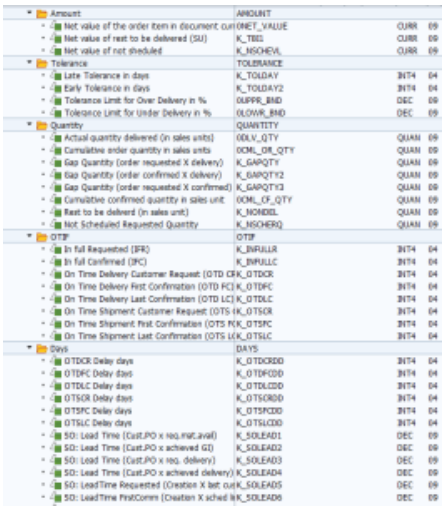


MP: Sales & Transfer - OTIF w/ orderbook dates	MVSDSO60		
Object Information			
Dimensions			
Data Package	MVSDSO60P		
Time	MVSDSO60T		
Unit	MVSDSO60U		
Dates	MVSDSO601		
Actual goods issue date	0ACT_GI_DTE	DATS	08
Actual GI date (month)	C_ACT_GIM	NUMC	06
Actual GI date (year)	C_ACT_GIY	NUMC	04
Actual GI date (week)	C_ACT_GIW	NUMC	06
Shipment Planned GI Date	0PLD_GI_DTE	DATS	08
Customer PO date	C_PODATE	DATS	08
PO confirmation date	C_ERSDA	DATS	08
Achieved Shipment Date	C_ACHSHIP	DATS	08
Achieved Delivery Date	C_ACHDLV	DATS	08
To be Invoiced (month)	C_TBI2	NUMC	06
To be Invoiced (week)	C_TBI3	NUMC	06
To be Issued (month)	C_TBI5	NUMC	06
To be Issued (week)	C_TBI6	NUMC	06
To be Issued date	C_TBIDAT2	DATS	08
To be Invoiced date	C_TBIDATE	DATS	08
Date for invoice/billing index and printout	0BILL_DATE	DATS	08
Billing Date (Year/Month)	C_BIVDAT	NUMC	06
Billing Date (Year)	C_BIVDAT2	NUMC	04
Last ATP GI date (Year/Month)	C_LASTGIM	NUMC	06
Last ATP GI date (Year/Week)	C_LASTGIW	NUMC	06
Last ATP GI date (Year)	C_LASTGIY	NUMC	04
Sched. line Last ATP date (Year/Month)	C_LSTATPM	NUMC	06
Sched. line Last ATP date (Year/Week)	C_LSTATPW	NUMC	06
Sched. line Last ATP date (Year)	C_LSTATPY	NUMC	04
Customer last req. del. date (Month/Year)	C_LSTREQM	NUMC	06
Customer last req. del. date (Year/Week)	C_LSTREQW	NUMC	06
Customer last req. del. date (Year)	C_LSTREQY	NUMC	04
Last req. GI date (Year/Month)	C_LTRQGIM	NUMC	06
Last req. GI date (Year/Week)	C_LTRQGIW	NUMC	06
Last req. GI date (Year)	C_LTRQGIY	NUMC	04
Sched. line 1st ATP (month)	C_FSTATPM	NUMC	06
Sched. line 1st ATP (week)	C_FSTATPW	NUMC	06
Sched. line 1st ATP (Year)	C_FSTATPY	NUMC	04
1st ATP GI (month)	C_FRSTGIM	NUMC	06



1st ATP GI (week)	C_FRSTGIW	NUMC	06
1st ATP GI (year)	C_FRSTGIY	NUMC	04
Organization	MVSDSO602		
Material	MVSDSO603		
Customer	MVSDSO604		
Reason/Types	MVSDSO605		
Order document type	C_DOCTYP2	CHAR	04
Shipment date type	C_DTTYPE	CHAR	02
Delivery date type	C_DTTYPE2	CHAR	02
Reversal indicator	0STORNO	CHAR	01
Non OTIF Reason	C_AUGRU	CHAR	03
Sales document item category	C_ITMCAT	CHAR	04
Service Level	C_SERVLVL	CHAR	03
NON OTIF Type	C_NOTITYP	CHAR	10
NON OTIF Reason Code Needed	C_OTFNDCD	CHAR	01
Incoterms (Order)	C_INCOTRM	CHAR	03
Special Processing Indicator	C_SDABW	CHAR	04
Incoterms 2 (Order)	C_INCOTM2	CHAR	28
Delivery type	C_DELTYPE	CHAR	04
Alert 1 - Last ATP <> Last Req Deliv	C_OTIFAL1	CHAR	01
To be Issued Type	C_TBISTYP	CHAR	01
Shipment	MVSDSO606		
Order	MVSDSO607		
Sales Org/Office	MVSDSO608		
GBU	MVSDSO609		
GBU	OPFCTR1_2	CHAR	02
Sub-activity	0IG_CHVWD01	CHAR	10
OTIF Groups	MVSDSO60A		
In Full Confirmed Detailed	C_INFULCD	CHAR	05
In Full Requested Detailed	C_INFULRD	CHAR	05
OTDCR Accuracy	C_OTDCRAC	CHAR	05
OTDCR Delay Group	C_OTDCRDG	CHAR	01
OTDFC Accuracy	C_OTDFCAC	CHAR	05
OTDFC Delay Group	C_OTDFCDG	CHAR	01
OTDLC Accuracy	C_OTDLCAC	CHAR	05
OTDLC Delay Group	C_OTDLCDG	CHAR	01
OTSCR Accuracy	C_OTSCRAC	CHAR	05
OTSCR Delay Group	C_OTSCRDG	CHAR	01
OTSFC Accuracy	C_OTSFCAC	CHAR	05
OTSFC Delay Group	C_OTSFCDG	CHAR	01
OTSLC Accuracy	C_OTSLCAC	CHAR	05

MP Details - Key figures



Technical Rules on Workbench

Main documentation:

Preparation

Design

Deployment

Business Rules

Get the GBU code

For Rhodia

Using distribution channel and division from material, get the IECRA code in master data C_CDSA

```
** NEW for subactivity (IECRA)
      UNASSIGN <fs_cdsa>.
      READ TABLE itb_cdsa ASSIGNING <fs_cdsa>
      WITH KEY c_cdsa    = <result_fields>-/bic/c_distchn
               division = <result_fields>-/bic/c_divisn.
      IF sy-subrc = 0
      AND <fs_cdsa> IS ASSIGNED.
        <result_fields>-g_cwwe01 = <fs_cdsa>-g_cwwe01.
      ENDIF.
```

Using IECRA code, get the sub-activity in master data g_cwwe01

```
    UNASSIGN <fs_subact>.
    READ TABLE itb_subact ASSIGNING <fs_subact>
    WITH KEY g_cwwe01 = <result_fields>-g_cwwe01.
    IF sy-subrc = 0
    AND <fs_subact> IS ASSIGNED.
      <result_fields>-/bic/cpfctr1_2 = <fs_subact>-cpfctr1_2.
    ENDIF.
```

For Solvay

using business area, get the technical business area in master data c_techba

```
READ TABLE itb_gbu INTO itb_gbu_w
WITH KEY c_techba = <result_fields>-/bic/c_techba.

IF sy-subrc EQ 0.
  IF itb_gbu_w-cpfctr1_2 IS NOT INITIAL.
    <result_fields>-/bic/cpfctr1_2 = itb_gbu_w-cpfctr1_2.
  ENDIF.

  IF itb_gbu_w-c_rest_ba IS NOT INITIAL.

    <result_fields>-g_cwwe01  = itb_gbu_w-c_rest_ba .

    CALL FUNCTION 'CONVERSION_EXIT_ALPHA_INPUT'
      EXPORTING
        input  = itb_gbu_w-c_rest_ba
      IMPORTING
        output = <result_fields>-/bic/c_subact2.
```

The function above is used to fill zeros left

The code below takes the GBU code from master data sub-activity (g_cwwe01)

```
   IF <result_fields>-g_cwwe01 IS NOT INITIAL.
     UNASSIGN <fs_subact>.
     READ TABLE itb_subact ASSIGNING <fs_subact>
     WITH KEY g_cwwe01 = <result_fields>-g_cwwe01.
     IF sy-subrc = 0
     AND <fs_subact> IS ASSIGNED.
       <result_fields>-/bic/cpfctr1_2 = <fs_subact>-cpfctr1_2.
     ENDIF.
   ENDIF.
```

Calculation Rules (DBSDSO98 / DBSDSO91 / DBSDSO60 / DBSDSO20)

Define the ship end date type according to the content of fields actual shipment, planned shipment of GI date

```
IF <result_fields>-/bic/c_dttype  NE 'PGI'.
  " Pick Actual Good Issue

  IF v_shp_eact EQ '00000000'.
    v_shp_eact = <result_fields>-dtshp_eact.
    <result_fields>-/bic/c_dttype2 = 'ASE'.
    " Actual Shipment End
  ENDIF.

  IF v_shp_eact EQ '00000000'.
    v_shp_eact = <result_fields>-dtshp_e_pl.
    <result_fields>-/bic/c_dttype2 = 'PSE'.
    " Planned Shipment End
  ENDIF.

  IF v_shp_eact EQ '00000000'.
    v_shp_eact = v_gi_date.
    <result_fields>-/bic/c_dttype2 = 'AGI'.  " Actual Good Issue
  ENDIF.

ENDIF.
```

Define the good issue date reference

```
    IF <result_fields>-act_gi_dte NE '00000000'.
      v_gi_date = <result_fields>-act_gi_dte.
    ELSE.
      IF <result_fields>-pld_gi_dte NE '00000000'.
        v_gi_date = <result_fields>-pld_gi_dte.
      ELSE.
        v_gi_date = <result_fields>-gi_date.
      ENDIF.
    ENDIF.
```

Redefine the good issue date reference when the order is a pickup

```
  IF <result_fields>-/bic/c_pickflg  = 'X' OR
     <result_fields>-/bic/c_doctyp2 = 'KE'.
```

```
       <result_fields>-/bic/c_dttype  = 'PGI'. "Picking Good Issue
       <result_fields>-/bic/c_dttype2 = 'PGI'.

       IF <result_fields>-/bic/c_ersda  NE '00000000'.
* Last Transfer Order Confirmation Date
         v_gi_date           = <result_fields>-/bic/c_ersda.
         v_shp_eact          = <result_fields>-/bic/c_ersda.
       ELSE.
* Last Requested Good Issue Date
*          v_gi_date           = <result_fields>-/bic/c_lstrqgi.
*          v_shp_eact          = <result_fields>-/bic/c_lstrqgi.
* Last Actual Good Issue Date
         v_gi_date           = <result_fields>-act_gi_dte.
         v_shp_eact          = <result_fields>-act_gi_dte.

       ENDIF.
```

Define the achieved delivery date and achieved shipment datte

```
  <result_fields>-/bic/c_achdlv   =  v_shp_eact.
  <result_fields>-/bic/c_achship  =  v_gi_date.
```

Determine In Full requested considering the lower and upper tolerance

```
  v_tol_uppr = <result_fields>-cml_or_qty *
               ( 100 + <result_fields>-uppr_bnd ) /  100.
  v_tol_lowr = <result_fields>-cml_or_qty *
               ( 100 - <result_fields>-lowr_bnd ) /  100.

  IF <result_fields>-dlv_qty BETWEEN v_tol_lowr AND v_tol_uppr.
    <result_fields>-/bic/k_infullr = 1.
  ELSE.
    <result_fields>-/bic/k_infullr = 0.
  ENDIF.
```

Generate the in full requested detailed with terms light, heavy or yes

```
    IF <result_fields>-dlv_qty < v_tol_lowr.
      <result_fields>-/bic/c_infulrd = 'Light'.
    ENDIF.
    IF <result_fields>-dlv_qty > v_tol_uppr.
      <result_fields>-/bic/c_infulrd = 'Heavy'.
    ENDIF.
    IF <result_fields>-dlv_qty BETWEEN v_tol_lowr AND v_tol_uppr.
      <result_fields>-/bic/c_infulrd = 'Yes'.
    ENDIF.
```

Determine In Full confirmed measure considering the lower and upper tolerance

```
v_tol_uppr = <result_fields>-cml_cf_qty *
             ( 100 + <result_fields>-uppr_bnd ) /  100.
v_tol_lowr = <result_fields>-cml_cf_qty *
             ( 100 - <result_fields>-lowr_bnd ) /  100.

IF <result_fields>-dlv_qty BETWEEN v_tol_lowr AND v_tol_uppr.
  <result_fields>-/bic/k_infullc = 1.
ELSE.
  <result_fields>-/bic/k_infullc = 0.
ENDIF.
```

Generate the in full confirmed detailed with terms light, heavy or yes

```
IF <result_fields>-dlv_qty < v_tol_lowr.
  <result_fields>-/bic/c_infulcd = 'Light'.
ENDIF.
IF <result_fields>-dlv_qty > v_tol_uppr.
  <result_fields>-/bic/c_infulcd = 'Heavy'.
ENDIF.
IF <result_fields>-dlv_qty BETWEEN v_tol_lowr AND v_tol_uppr.
  <result_fields>-/bic/c_infulcd = 'Yes'.
ENDIF.
```

Determine the differences between delivery quantity and requested quantity

```
<result_fields>-/bic/k_gapqty    = <result_fields>-dlv_qty -
                                   <result_fields>-cml_or_qty.

<result_fields>-/bic/k_gapqty2   = <result_fields>-dlv_qty -
                                   <result_fields>-cml_cf_qty.

<result_fields>-/bic/k_gapqty3   = <result_fields>-cml_or_qty -
                                   <result_fields>-cml_cf_qty.
```

Generate on time delivery customer request (OTD CR)

```
    IF v_lstreq           EQ '00000000' OR
       v_shp_eact         EQ '00000000'.
      v_dif_date = '999'.
    ELSE.
      v_dif_date =  v_shp_eact - v_lstreq .
    ENDIF.


    IF v_dif_date BETWEEN <result_fields>-/bic/k_tolday2 AND
                          <result_fields>-/bic/k_tolday.
      <result_fields>-/bic/k_otdcr   = 1. "on time delivey
      <result_fields>-/bic/c_otdcrac = 'OTD'.

    ELSE.

      <result_fields>-/bic/k_otdcr = 0. "not on time delivey

      IF v_dif_date < <result_fields>-/bic/k_tolday2.
        <result_fields>-/bic/c_otdcrac = 'EARLY'.

        IF <result_fields>-/bic/c_pickflg = 'X'.
          <result_fields>-/bic/k_otdcr   = 1. "on time delivey
          <result_fields>-/bic/c_otdcrac = 'OTD'.
        ENDIF.

      ENDIF.

      IF v_dif_date > <result_fields>-/bic/k_tolday.
        <result_fields>-/bic/c_otdcrac = 'LATE'.
      ENDIF.
    ENDIF.
```

Consider special NON OTIF reasons as OTIF

```
READ TABLE itb_augru INTO itb_augru_w
WITH KEY logsys  = <result_fields>-logsys
         c_augru = <result_fields>-/bic/c_augru.

IF sy-subrc NE 0.
  itb_augru_w-c_otifok = ''.
ENDIF.

IF itb_augru_w-c_otifok           = 'X' .

  <result_fields>-/bic/k_otdcr    = 1.
  <result_fields>-/bic/k_otdcrdd  = 0.
  <result_fields>-/bic/c_otdcrac  = 'OTD'.
  <result_fields>-/bic/c_otdcrdg  = 'A'.

  <result_fields>-/bic/k_otdfc    = 1.
  <result_fields>-/bic/k_otdfcdd  = 0.
  <result_fields>-/bic/c_otdfcac  = 'OTD'.
  <result_fields>-/bic/c_otdfcdg  = 'A'.

  <result_fields>-/bic/k_otdlc    = 1.
  <result_fields>-/bic/k_otdlcdd  = 0.
  <result_fields>-/bic/c_otdlcac  = 'OTD'.
  <result_fields>-/bic/c_otdlcdg  = 'A'.

  <result_fields>-/bic/k_otscr    = 1.
  <result_fields>-/bic/k_otscrdd  = 0.
  <result_fields>-/bic/c_otscrac  = 'OTS'.
  <result_fields>-/bic/c_otscrdg  = 'A'.

  <result_fields>-/bic/k_otsfc    = 1.
  <result_fields>-/bic/k_otsfcdd  = 0.
  <result_fields>-/bic/c_otsfcac  = 'OTS'.
  <result_fields>-/bic/c_otsfcdg  = 'A'.

  <result_fields>-/bic/k_otslc    = 1.
  <result_fields>-/bic/k_otslcdd  = 0.
  <result_fields>-/bic/c_otslcac  = 'OTS'.
  <result_fields>-/bic/c_otslcdg  = 'A'.

ENDIF.
```

Generate group of delays for OTDCR

```
IF v_dif_date < 0.
  v_dif_date = v_dif_date * ( -1 ).
ENDIF.

SELECT /bic/c_delgrp
  INTO <result_fields>-/bic/c_otdcrdg
  FROM /bic/pc_delgrp
  WHERE /bic/k_lowdays <= v_dif_date
    AND /bic/k_higdays >= v_dif_date
    AND /bic/c_delgrp <> ''.
ENDSELECT.
```

Generate OTDCR delay days

```
<result_fields>-/bic/k_otdcrdd = v_dif_date.
```

The same rules are applied for OTDFC, OTDLC, OTSCR, OTSFC, OTSLC just changing the date to be considered, see below:

For OTDFC uses the dates v_dif_date = v_fstatp - v_shp_eact (difference between max first ATP and shipment end date)

For OTDFC uses the dates v_dif_date = v_lstatp - v_shp_eact (difference between max last ATP and shipment end date)

Define the dates used in OTS CR (ON TIME SHIPMENT Customer request)

```
IF <result_fields>-/bic/c_dttype NE 'PGI'.
  <result_fields>-/bic/c_dttype  = 'AGI'.
ENDIF.


DATA:  v_lstrqgi TYPE /bic/oic_lstrqgi,
       v_firstgi TYPE /bic/oic_firstgi,
       v_lastgi  TYPE /bic/oic_lastgi,
       v_endcomp TYPE /bic/oik_endcomp.

v_lstrqgi = <result_fields>-/bic/c_lstrqgi.
v_firstgi = <result_fields>-/bic/c_firstgi.
v_lastgi  = <result_fields>-/bic/c_lastgi.
```

For OTSCR uses the dates v_dif_date = v_lstrqgi - v_gi_date (difference between max actual GI date and last req delivery)

For OTSFC uses the dates v_dif_date = v_firstgi - v_gi_date(difference between max actual GI date and first ATP GI)

For OTSLC uses the dates v_dif_date = v_lastgi - v_gi_date (difference between max actual GI date and last ATP GI)

Generate OTIF necessary comment or reason

```
CLEAR v_otfndcd.

IF <result_fields>-/bic/k_otdcr  = 0 OR
  <result_fields>-/bic/k_otdfc   = 0 OR
  <result_fields>-/bic/k_otdlc   = 0 OR
  <result_fields>-/bic/k_otscr   = 0 OR
  <result_fields>-/bic/k_otsfc   = 0 OR
  <result_fields>-/bic/k_otslc   = 0 OR
  <result_fields>-/bic/k_infullc = 0 OR
  <result_fields>-/bic/k_infullr = 0.

  v_otfndcd   = 'X'.
ENDIF.

IF v_otfndcd                    = 'X' AND
   <result_fields>-/bic/c_augru = ''.

  <result_fields>-/bic/c_otfndcd   = 'X'. "'REASON CODE NEEDED'.
ENDIF.
```

Generate NON OTIF Type

```
CASE <result_fields>-/bic/c_augru.
  WHEN '740' OR '741' OR '742' OR '743' OR '744' OR '745'.
    <result_fields>-/bic/c_notityp  = 'RED'.   "REDRESS'.
  WHEN '750' .
    <result_fields>-/bic/c_notityp  = 'REDF'.  "REDRESS FCA'.
ENDCASE.

IF <result_fields>-/bic/c_notityp IS INITIAL.
  IF v_otfndcd  = 'X'.
    <result_fields>-/bic/c_notityp = 'NOFP'.   "NON OTIF-Process'.
  ELSE.
    <result_fields>-/bic/c_notityp = 'OTIFOK'. "OTIF-Process OK'.
  ENDIF.
ENDIF.
```

Determine LEADTIME calculations (DBSDSO9B / DBSDSO9A / DBSDSO91 / DBSDSO60 / DBSDSO20).

Leadtime 1: difference between the customer PO Date (order line level - VBKD-BSTDK), and the requested material availability date

```
IF <result_fields>-/bic/c_podate EQ '00000000' OR
   <result_fields>-matav_date    EQ '00000000'.
  <result_fields>-/bic/k_solead1 = '999'.
ELSE.
  <result_fields>-/bic/k_solead1 =
   <result_fields>-matav_date - <result_fields>-/bic/c_podate.
ENDIF.
```

Leadtime 2: difference between the customer PO Date (VBKD-BSTDK), and the achieved GI date (Max Actual GI Date)

```
IF <result_fields>-/bic/c_podate EQ '00000000' OR
   <result_fields>-act_gi_dte    EQ '00000000'.
  <result_fields>-/bic/k_solead2 = '999'.
ELSE.
  <result_fields>-/bic/k_solead2 =
    <result_fields>-act_gi_dte - <result_fields>-/bic/c_podate.
ENDIF.
```

Leadtime 3: difference between the customer PO Date, and the requested delivery date (Max Last Req Delivery]

```
IF <result_fields>-/bic/c_podate EQ '00000000' OR
   <result_fields>-dsdel_date    EQ '00000000'.
  <result_fields>-/bic/k_solead3 = '999'.
ELSE.
  <result_fields>-/bic/k_solead3 =
    <result_fields>-dsdel_date -
    <result_fields>-/bic/c_podate.
ENDIF.
```

Leadtime 4: difference between the customer PO Date and the achieved delivery date (Achieved Delivery Date)

```
IF <result_fields>-/bic/c_podate EQ '00000000' OR
   <result_fields>-act_dl_dte    EQ '00000000'.
  <result_fields>-/bic/k_solead4 = '999'.
ELSE.
  <result_fields>-/bic/k_solead4 =
    <result_fields>-act_dl_dte - <result_fields>-/bic/c_podate.
ENDIF.
```

Leadtime 5 : LeadTime Requested = Order line creation date - order line last customer req Goods Issue date

```
  IF <fs_order>-createdon EQ '00000000' OR
     <result_fields>-/bic/c_lstrqgi    EQ '00000000'.
    <result_fields>-/bic/k_solead5 = '999'.
  ELSE.
    <result_fields>-/bic/k_solead5 =
      <result_fields>-/bic/c_lstrqgi - <fs_order>-createdon .
  ENDIF.
```

Leadtime 6 : LeadTime FirstCommitted = Order line creation date - schedule line 1st ATP (confirmed) GI date

```
IF <fs_order>-createdon EQ '00000000' OR
   <result_fields>-/bic/c_fstatp    EQ '00000000'.
  <result_fields>-/bic/k_solead6 = '999'.
ELSE.
  <result_fields>-/bic/k_solead6 =
    <result_fields>-/bic/c_fstatp - <fs_order>-createdon.
ENDIF.
```

Leadtime 7 : LeadTime Actual = Order line creation date - actual GI date

```
IF <fs_order>-createdon EQ '00000000' OR
   v_gi_date    EQ '00000000'.
  <result_fields>-/bic/k_solead7 = '999'.
ELSE.
  <result_fields>-/bic/k_solead7 =
    v_gi_date - <fs_order>-createdon.
ENDIF.
```

Leatime 8 : Last Req GI date - Customer PO

```
IF <result_fields>-/bic/c_podate  EQ '00000000' OR
   <result_fields>-/bic/c_lstrqgi EQ '00000000'.
  <result_fields>-/bic/k_solead8 = '999'.
ELSE.
  <result_fields>-/bic/k_solead8  =
    <result_fields>-/bic/c_lstrqgi -
    <result_fields>-/bic/c_podate.
ENDIF.
```

Leatime 9 : First Req GI date - Customer PO

```
IF <result_fields>-/bic/c_podate  EQ '00000000' OR
<fs_order>-c_fstrqgi              EQ '00000000'.
  <result_fields>-/bic/k_solead9 = '999'.
ELSE.
  <result_fields>-/bic/k_solead9 =
    <fs_order>-c_fstrqgi - <result_fields>-/bic/c_podate.
ENDIF.
ENDIF.
```

Reporting

Type	Tech Name	Description	Formula
CKF	BW_CKF_MVSDSO50_0001	Confirmed Qty (PUQ)	CML_CF_QTY
CKF	BW_CKF_MVSDSO50_0002	Order Qty (PUQ)	CML_OR_QTY
CKF	BW_CKF_MVSDSO50_0003	Delivery Qty (PUQ)	DLV_QTY
CKF	BW_CKF_MVSDSO50_0010	In Full	IF K_INFULLR = 1 AND K_INFULLC = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0011	Not In Full	IF K_INFULLR = 0 OR K_INFULLC = 0, then 0
CKF	BW_CKF_MVSDSO50_0012	Not in Full but OTDCR	IF K_INFULLR = 0 AND K_OTDCR = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0013	In Full & OTDCR	IF K_INFULLR = 1 AND K_OTDCR = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0014	In Full & OTDFC	IF K_INFULLR = 1 AND K_OTDFC = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0015	In Full & OTDLC	IF K_INFULLR = 1 AND K_OTDLC = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0016	Not In Full but OTDLC	IF K_INFULLR = 0 AND K_OTDLC = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0017	Not in Full but OTDFC	IF K_INFULLR = 0 AND K_OTDFC = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0018	In Full & OTSCR	IF K_INFULLR = 1 AND K_OTSCR = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0019	In Full & OTSFC	IF K_INFULLR = 1 AND K_OTSFC = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0020	In Full & OTSLC	IF K_INFULLR = 1 AND K_OTSLC = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0021	Not In Full but OTSCR	IF K_INFULLR = 0 AND K_OTSCR = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0022	Not In Full but OTSFC	IF K_INFULLR = 0 AND K_OTSFC = 1, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0023	Not In Full but OTSLC	IF K_INFULLR = 0 AND K_OTSLC = 1, then K_COUNTER

CKF	BW_CKF_MVSDSO50_0024	Not In Full Not OTDCR	IF K_INFULLR = 0 AND K_OTDCR = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0025	Not In Full Not OTDFC	IF K_INFULLR = 0 AND K_OTDFC = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0026	Not In Full Not OTDLC	IF K_INFULLR = 0 AND K_OTDLC = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0027	Not In Full Not OTSCR	IF K_INFULLR = 0 AND K_OTSCR = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0028	Not In Full Not OTSFC	IF K_INFULLR = 0 AND K_OTSFC = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0029	Not In Full Not OTSLC	IF K_INFULLR = 0 AND K_OTSLC = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0030	In Full but Not OTDCR	IF K_INFULLR = 1 AND K_OTDCR = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0031	In Full but Not OTDFC	IF K_INFULLR = 1 AND K_OTDFC = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0032	In Full but Not OTDLC	IF K_INFULLR = 1 AND K_OTDLC = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0033	In Full but Not OTSCR	IF K_INFULLR = 1 AND K_OTSCR = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0034	In Full but Not OTSFC	IF K_INFULLR = 1 AND K_OTSFC = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0035	In Full but Not OTSLC	IF K_INFULLR = 1 AND K_OTSLC = 0, then K_COUNTER
CKF	BW_CKF_MVSDSO50_0040	Lead Time 1 (Cust.PO X req.mat.avail)	K_SOLEAD1
CKF	BW_CKF_MVSDSO50_0041	Lead Time 2 (Cust.PO X achieved GI)	K_SOLEAD2
CKF	BW_CKF_MVSDSO50_0042	Lead Time 3 (Cust.PO X req.delivery)	K_SOLEAD3
CKF	BW_CKF_MVSDSO50_0043	Lead Time 4 (Cust.PO X achieved delivery)	K_SOLEAD4
CKF	BW_CKF_MVSDSO50_0044	Lead Time (Creation X Last Cust Req GI)	K_SOLEAD5
CKF	BW_CKF_MVSDSO50_0045	Lead Time (Creation X Sched line 1st ATP)	K_SOLEAD6
CKF	BW_CKF_MVSDSO50_0046	Lead Time (Creation X Actual GI date)	K_SOLEAD8
CKF	BW_CKF_MVSDSO50_0047	Rush Orders	IF K_SOLEAD5 < 2, THAN 1
CKF	BW_CKF_MVSDSO50_0050	OTD CR - Class 1	IF OTD CR - Class 1 = 1 and K_OTDCR = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0051	OTD CR - Class 2	IF OTD CR - Class 2 = 1 and K_OTDCR = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0052	OTD CR - Class 3	IF OTD CR - Class 3 = 1 and K_OTDCR = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0053	OTD CR - Class 4	IF OTD CR - Class 4 = 1 and K_OTDCR = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0054	OTD FC - Class 1	IF OTD FC - Class 1 = 1 and K_OTDFC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0055	OTD FC - Class 2	IF OTD FC - Class 2 = 1 and K_OTDFC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0056	OTD FC - Class 3	IF OTD FC - Class 3 = 1 and K_OTDFC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0057	OTD FC - Class 4	IF OTD FC - Class 4 = 1 and K_OTDFC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0058	OTS CR - Class 1	IF OTS CR - Class 1 = 1 and K_OTSCR = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0059	OTS CR - Class 2	IF OTS CR - Class 2 = 1 and K_OTSCR = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0060	OTS CR - Class 3	IF OTS CR - Class 3 = 1 and K_OTSCR = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0061	OTS CR - Class 4	IF OTS CR - Class 4 = 1 and K_OTSCR = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0062	OTD LC - Class 1	IF OTD LC - Class 1 = 1 and K_OTDLC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0063	OTD LC - Class 2	IF OTD LC - Class 2 = 1 and K_OTDLC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0064	OTD LC - Class 3	IF OTD LC - Class 3 = 1 and K_OTDLC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0065	OTD LC - Class 4	IF OTD LC - Class 4 = 1 and K_OTDLC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0066	OTS FC - Class	IF OTS FC - Class 1 = 1 and K_OTSFC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0067	OTS FC - Class 2	IF OTS FC - Class 2 = 1 and K_OTSFC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0068	OTS FC - Class 3	IF OTS FC - Class 3 = 1 and K_OTSFC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0069	OTS FC - Class 4	IF OTS FC - Class 4 = 1 and K_OTSFC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0070	OTS LC - Class	IF OTS LC - Class 1 = 1 and K_OTSLC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0071	OTS LC - Class 2	IF OTS LC - Class 2 = 1 and K_OTSLC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0072	OTS LC - Class 3	IF OTS LC - Class 3 = 1 and K_OTSLC = 0 THEN 1
CKF	BW_CKF_MVSDSO50_0073	OTS LC - Class 4	IF OTS LC - Class 4 = 1 and K_OTSLC = 0 THEN 1
RKF	BW_RKF_MVSDSO50_0001	# orderline with actual arrival date	C_DTTYPE2 = ASE, KF=K_COUNTER
RKF	BW_RKF_MVSDSO50_0002	OTD CR - Class 1	C_OTDCRDG = A, KF=OTD CR - Class 1
RKF	BW_RKF_MVSDSO50_0003	OTD CR - Class 2	C_OTDCRDG = B, KF=OTD CR - Class 2

RKF	BW_RKF_MVSDSO50_0004	OTD CR - Class 3	C_OTDCRDG = C, KF=OTD CR - Class 3
RKF	BW_RKF_MVSDSO50_0005	OTD CR - Class 4	C_OTDCRDG = D, KF=OTD CR - Class 4
RKF	BW_RKF_MVSDSO50_0006	OTD FC - Class 1	C_OTDFCDG = A, KF=OTD CR - Class 1
RKF	BW_RKF_MVSDSO50_0007	OTD FC - Class 2	C_OTDFCDG = B, KF=OTD CR - Class 2
RKF	BW_RKF_MVSDSO50_0008	OTD FC - Class 3	C_OTDFCDG = C, KF=OTD CR - Class 3
RKF	BW_RKF_MVSDSO50_0009	OTD FC - Class 4	C_OTDFCDG = D, KF=OTD CR - Class 4
RKF	BW_RKF_MVSDSO50_0010	OTS CR - Class 1	C_OTSCRDG = A, KF=OTS CR - Class 1
RKF	BW_RKF_MVSDSO50_0011	OTS CR - Class 2	C_OTSCRDG = B, KF=OTS CR - Class 2
RKF	BW_RKF_MVSDSO50_0012	OTS CR - Class 3	C_OTSCRDG = C, KF=OTS CR - Class 3
RKF	BW_RKF_MVSDSO50_0013	OTS CR - Class 4	C_OTSCRDG = D, KF=OTS CR - Class 4
RKF	BW_RKF_MVSDSO50_0014	OTD LC - Class 1	C_OTDLCDG = A, KF=OTD LC - Class 1
RKF	BW_RKF_MVSDSO50_0015	OTD LC - Class 2	C_OTDLCDG = B, KF=OTD LC - Class 2
RKF	BW_RKF_MVSDSO50_0016	OTD LC - Class 3	C_OTDLCDG = C, KF=OTD LC - Class 3
RKF	BW_RKF_MVSDSO50_0017	OTD LC - Class 4	C_OTDLCDG = D, KF=OTD LC - Class 4
RKF	BW_RKF_MVSDSO50_0018	OTS FC - Class 1	C_OTSFCDG = A, KF=OTS FC - Class 1
RKF	BW_RKF_MVSDSO50_0019	OTS FC - Class 2	C_OTSFCDG = B, KF=OTS FC - Class 2
RKF	BW_RKF_MVSDSO50_0020	OTS FC - Class 3	C_OTSFCDG = C, KF=OTS FC - Class 3
RKF	BW_RKF_MVSDSO50_0021	OTS FC - Class 4	C_OTSFCDG = D, KF=OTS FC - Class 4
RKF	BW_RKF_MVSDSO50_0022	OTS LC - Class 1	C_OTSLCDG = A, KF=OTS LC - Class 1
RKF	BW_RKF_MVSDSO50_0023	OTS LC - Class 2	C_OTSLCDG = B, KF=OTS LC - Class 2
RKF	BW_RKF_MVSDSO50_0024	OTS LC - Class 3	C_OTSLCDG = C, KF=OTS LC - Class 3
RKF	BW_RKF_MVSDSO50_0025	OTS LC - Class 4	C_OTSLCDG = D, KF=OTS LC - Class 4

PS: same calculated and restricted key figures were created for MVSDSO51 and MVSDSO60 multi providers.

Main queries

Query	Description
BW_QRY_MVSDSO50_0001	BW Sales - OTIF - Details (core query)
BW_QRY_MVSDSO50_0002	BW Sales - OTIF dashboard (core query)
BW_QRY_MVSDSO50_0003	BW Sales - OTIF - Summary (core query)
BW_QRY_MVSDSO51_0001	BW OTIF SO&PO - Details (core query)
BW_QRY_MVSDSO51_0002	BW OTIF SO&PO - dashboard (core query)
BW_QRY_MVSDSO51_0003	BW OTIF SO&PO - Summary (core query)
BW_QRY_MVSDSO60_0001	BW Sales - OTIF & Orderbook - Details (core query)
BW_QRY_MVSDSO60_0002	BW Sales/Transfer - OTIF & Orderbook - Details (core query)
BW_QRY_MVSDSO60_0002_BCAST	Non OTIF Order-Lines of the Month (OTDCR)
BW_QRY_MVSDSO60_0003	BW Sales/Transfer - OTIF & Dynasis Query
DI_BW_QRY_MVSDSO50_0001	BW Sales - OTIF - Details (core query)
DI_BW_QRY_MVSDSO50_9001	BW Sales - OTIF - Details (Dataiku Forecast)
QV_BW_QRY_MVSDSO60_0002	QV -BW Sales/Transfer - OTIF & Orderbook - Details -
QVSCE_BW_QRY_MVSDSO50_0001	BW Sales - OTIF QV (core query)
QVSCE_BW_QRY_MVSDSO51_0001	BW OTIF (Sales & Transfer) QV (core query)

Workbook		Query
OTIF & Order Book: Sales & Purchase Order	BW_WBK_MVSDSO60_0002	BW Sales/Transfer - OTIF & Orderbook - Details (core query) BW_QRY_MVSDSO60_0002
OTIF & Order Book: Sales Order	BW_WBK_MVSDSO60_0001	BW Sales - OTIF & Orderbook - Details (core query) BW_QRY_MVSDSO60_0001
OTIF: Sales & Purchase Order	BW_WBK_MVSDSO51_0001	BW OTIF SO&PO - Details (core query) BW_QRY_MVSDSO51_0001
OTIF: Sales Order	BW_WBK_MVSDSO50_0004	BW Sales - OTIF - Details (core query) BW_QRY_MVSDSO50_0001
OTIF: Sales & Purchase Order (Summary)	BW_WBK_MVSDSO51_0003	BW Transfer & Sales - OTIF - Summary (core query) BW_QRY_MVSDSO51_0003
OTIF: Sales & Purchase Order (Synthesis)	BW_WBK_MVSDSO51_0002	BW Transfer PO OTIF - dashboard (core query) BW_QRY_MVSDSO51_0002
OTIF: Sales Order (Synthesis)	BW_WBK_MVSDSO50_0001	BW Sales - OTIF dashboard (core query) BW_QRY_MVSDSO50_0002
OTIF: Sales Order (Summary)	BW_WBK_MVSDSO50_0003	BW Sales - OTIF - summary (core query) BW_QRY_MVSDSO50_0003

Queries used to load QV applications

InfoProvider	Query	
MVSDSO50	QVBW_QRY_MVSDSO50_0001	BW Sales - OTIF detais (qv query)
MVSDSO51	QVBW_QRY_MVSDSO51_0001	BW Sales - OTIF Transfer (qv query)
MVSDSO51	QVSCE_BW_QRY_MVSDSO51_0001	BW OTIF (Sales & Transfer) QV (core query)
MVSDSO50_	QVSCE_BW_QRY_MVSDSO50_0001	BW Sales - OTIF QV (core query)

SCE defines 6 different OTIF indicators:

- **OTIFD CR :** On Time Delivery in Full (Customer Request) : Concatenates In full Requested and OTD CR
- **OTIFD FC :** On Time Delivery in Full (1st Confirmed) : Concatenates In full Confirmed and OTD FC
- **OTIFD LC** : On Time Delivery in Full (Last Confirmed) : Concatenates In full Confirmed and OTD LC
- **OTIFS CR** : On Time Shipment in Full (Customer Request) : Concatenates In full Requested and OTS CR
- **OTIFS FC** : On Time Shipment in Full (1st Confirmed) : Concatenates In full Confirmed and OTS FC
- **OTIFS LC** : On Time Shipment in Full (Last Confirmed) : Concatenates In full Confirmed and OTS LC

All calculation in this query is managed at Order line level. When several schedule lines matching with one same order lines we consider the sum for quantities and maximum for dates.

1 - Rules for OTIF Calculation

1.1 - On Time Delivery "On Time Delivery: it means that the calculation is based on date of arrival, they compare an achieved arrival date with a target arrival date. Achieved Delivery Date:

Achieved Delivery Date

=If([Transportation mode]="PICK UP" Or [Order Document Type Code]="KE";[V_Max Actual GI Date];If(IsNull([V_Max End of Shipment Calculated]);[V_Max Actual GI Date];[V_Max End of Shipment Calculated]))

For “PICK UP” transportation mode, Rhodia (WP1) : Last transfer order confirmation date for the order line --> FIELD LTAP-QDATU else Last Good Issue date

For “PICK UP” transportation mode, Solvay (PF1) : Last Good Issue date

For any other transportation mode : The last “Actual Shipment end” if it exists else the last “ planned shipment end” if it exists else the last “Actual good Issue”

OTD CR: If Difference between Achieved delivery date and Order line requested delivery Date is lower than – Early tolerance then “EARLY” else if Difference between Achieved delivery date and Order line requested delivery Date is greater than Late tolerance then ""LATE"" else ""OTD""

=If([Transportation mode]="PICK UP";If(DaysBetween(Last Req Delivery];[Achieved Delivery Date])<0;0;DaysBetween(Last Req Delivery];[Achieved Delivery Date]))

OTD FC: If Difference between Achieved delivery date and Orderline 1st confirmed delivery Date is lower than – Early tolerance then “EARLY” else if Difference between Achieved delivery date and Order line 1st conf delivery Date is greater than Late tolerance then ""LATE"" else ""OTD""

=If([Transportation mode]="PICK UP";If(DaysBetween([V_Max 1st ATP];[Achieved Delivery Date])<0;0;DaysBetween([V_Max 1st ATP];[Achieved Delivery Date]))

OTD LC: If Difference between Achieved delivery date and Order line last confirmed delivery Date is lower than – Early tolerance then “EARLY” else if Difference between Achieved delivery date and Order line last conf delivery Date is greater than Late tolerance then ""LATE"" else ""OTD"" "

=If([Transportation mode]="PICK UP";If(DaysBetween([V_Max Last ATP];[Achieved Delivery Date])<0;0;DaysBetween([V_Max Last ATP];[Achieved Delivery Date]))

1.2 - On Time Shipment "On Time Shipment: it means that the calculation is based on date of good issue, they compare an achieved shipment date with a target shipment date (calculated in SAP from requested delivery date, 1confirmed delivery date and last confirmed delivery date). Achieved Shipment Date: For “PICK UP” transportation mode : Last transfer order confirmation date for the order line --> FIELD LTAP-QDATU else Last Good Issue date For other transportation mode : The last “Actual GI” date

Achieved Shipment Date

=If([Transportation mode]="PICK UP" Or [Order Document Type Code]="KE";[V_Max Actual GI Date])

OTS CR: If Difference between Achieved shipment date and Order line requested GI Date is lower than – Early tolerance then “EARLY” else if Difference between Achieved shipment date and Order line requested GI Date is greater than Late tolerance then ""LATE"" else OTS.

=If([Transportation mode]="PICK UP";If(DaysBetween([V_Max Last Req GI]; ";[V_Max Actual GI Date])<0;0;DaysBetween([V_Max Last Req GI]; ";[V_Max Actual GI Date]

OTS FC: If Difference between Achieved shipment date and Order line 1st confirmed GI Date is lower than – Early tolerance then “EARLY” else if Difference between Achieved shipment date and Order line 1st Conf GI Date is greater than Late tolerance then ""LATE"" else ""OTS""

=iF([Transportation mode]="PICK UP";If(DaysBetween([V_Max 1st ATP GI]; ";[V_Max Actual GI Date] <0;0;DaysBetween([V_Max 1st ATP GI];[V_Max Actual GI Date])))

OTS LC: If Difference between Achieved shipment date and Order line last confirmed GI Date is lower than – Early tolerance then “EARLY” else if Difference between Achieved shipment date and Order line Last confirmed GI Date is greater than Late tolerance then ""LATE"" else ""OTS""""

=iF([Transportation mode]="PICK UP";If(DaysBetween([V_Max 1st ATP GI]; ";[V_Max Actual GI Date] <0;0;DaysBetween([V_Max 1st ATP GI];[V_Max Actual GI Date])))

1.3 - Tolerances:

"Number of days based on Transportation Mode (Order Shipping Condition) OCEAN = 7 RAIL = 3 BARGE = 3 INTERMODAL = 2 ROAD = 1 AIR = 0 OTHER = 0 "

DAYS DELAY NET (APPLY THE TOLERANCE)

TOLERANCES by Shipping Conditions

AB";"AC";"AE";"AF => 7 days (ocean)

AJ => 1 day (LTL)

AK AH AI => 0 (FTL)

AU AP => 3 (Barge / Rail)

AV => 2 (multimodal)

“AL” “AW” “AX” => 0 999 days) (Pick Up)

=If([OTD CR - Delay Days]=999;999;If([OTD CR - Delay Days]=0;0;If(Abs([OTD CR - Delay Days])<=[Tolerance Days];0;If([OTD CR - Delay Days]<0;[Tolerance Days]+[OTD CR - Delay Days];[OTD CR - Delay Days]-[Tolerance Days]))))

1.4 - Exceptions:

"Customer Pick Up: uses Last transfer order confirmation date in calculation Customer Pick Up Early = OTIF Order Non OTIF Reason code starting with 7 = OTIF "

1.5 - IN FULL

In Full Calculation "In Full Request Order Quantity fits with Delivery Quantity In Full Confirmed Scheduled Line Confirmed Quantity fits with Delivery Quantity "

IN FULL REQUESTED – IFR

(Order line qty – Sum Delivery quantity) + tolerance that comes from the sales order

IN FULL CONFIRMED – IFC

(Sum Scheduled Confirmed Qty by sales order item – Sum Delivery quantity) + tolerance that comes from the sales order

1.6 - LEAD TIMES

7 lead-times have been defined by SCE (to be challenged for rationalisation)

Leadtime 1 : The Lead-time is the difference, in days, between the customer PO Date (order line level - VBKD-BSTDK), and the requested material availability date (Max in the scheduled line level).

=DaysBetween([V_Max Cust PO];[V_Max Req Material Availability])

Leadtime 2 : The Lead-time is the difference, in days, between the customer PO Date (VBKD-BSTDK), and the achieved GI date

=DaysBetween([V_Max Cust PO];[Max Actual GI Date])

Leadtime 3 : The Lead-time is the difference, in days, between the customer PO Date, and the requested delivery date.

=DaysBetween([V_Max Cust PO];[V_Max Last Req Delivery])

Leadtime 4 : The Lead-time is the difference, in days, between the customer PO Date, and the achieved delivery date

=DaysBetween([V_Max Cust PO];[Achieved Delivery Date])

Leadtime 5 : The Lead-time is the difference, in days, between the creation date and the last customer req Goods Issue date

Leadtime 6 : The Lead-time is the difference, in days, between the creation date and the schedule line 1st ATP (confirmed) GI date

Leadtime 7 : The Lead-time is the difference, in days, between the creation date and the actual GI date

1.7 - DOCUMENTS TYPES

The document types to be considered are:

GCTA	Standard Order
KE	Consig issue
SB	SB Third-p.dir order
SO	SO Rush Order
TA	Standard Order
TAF	Standard Order (FPl)
TAM	Delivery Order
TAV	Standard Order (VMI)
TD	TD Standard Order
TDIV	TDIV Misc Op
TSA	Telesales
ZITI	Sales Order ITI BR

ZORB	Standard Order BR
ZOUT	Other Outputs BR
ZPVA	ZPVA Ord.immed.ship.
ZVEX	Fut. Dely Invoice BR
ZVEY	Fut. Dely Shipmnt BR
NB	Standard PO
UB	Stock transport ord.

Dependencies with other applications

- It was created some master data in order to have the attributes shared with several applications: Sales Order line (C_ITM_SD), PO Line (C_ITM_GS)
- Data is consumed by Qlikview dashboard. The loadings in QV are daily. It runs a fixed scheduled, the loadings must be finished when the next start.
- There is an integration with SPRINT (purchase schedule lines) in order to take the PO schedule lines and identify all the transfers
- There is a link with TIERS in order to get the main shipment for each delivery

Data Loading

Info Providers and objects loaded

Detail of process chain, list + link between or special event done for the loading

Main Process Chain	Final Provider Loading	Frequency	Time start
Global Sales: CRSDSO50 (OTIF Sales) (Rhodia) PC_GL_SALES_CRSDSO50	CRSDSO50	Daily, not weekend	Arround 05:00 am Meta chain PC_GL_SALES_REP02
Global Sales: CRSDSO10 (OTIF Sales) (Solvay) PC_GL_SALES_CRSDSO10	CRSDSO10	Daily, not weekend	Arround 02:45 am Meta chain PC_OBAS_REPORTING
OBAS: Reporting Layer Transfers Orders PC_OBAS_TRANSFERS_ODB	CRSDSO24 CRSDSO12 CRSDSO11 CRSDSO04 CRSDSO17	Daily, not weekend	Arround 06:15 am Meta chain PC_OBAS_TRANSFERS_MAIN
Global Sales: Transfers Reporting layer (Rhodia) PC_GL_SALES_PO_REPORTING	CRSDSO54 CRSDSO52 CRSDSO51 CRSDSO57 CRSDSO47 CRSDSO44	Daily, not weekend	Arround 06:45 am Meta chain PC_GL_SALES_MAIN_PO

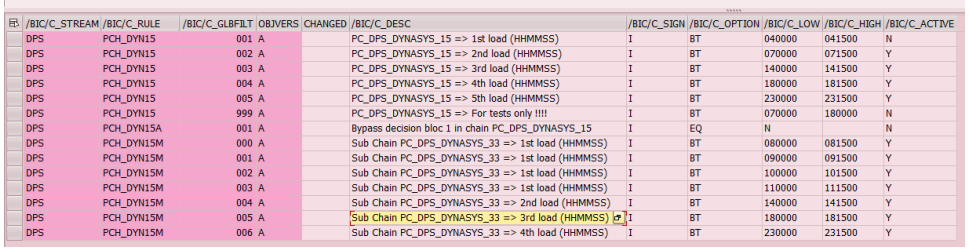
<table>
<tr>
<td>DPS Dynasys: META - D - 6.Reporting DynaSys (Dynamic KPIs)

PC_DPS_DYNASYS_15</td>
<td>DPDYN04

DBDYN20

CRDYN11</td>
<td>Hourly, everyday with decision.</td>
<td>Hourly

Decision linked to values in master data global filter

Table: /BIC/PC_GLBFILT
 
<table>
<tr><th></th><th>/BIC/C_STREAM</th><th>/BIC/C_RULE</th><th>/BIC/C_GLBFILT</th><th>OBJVERS</th><th>CHANGED</th><th>/BIC/C_DESC</th><th>/BIC/C_SIGN</th><th>/BIC/C_OPTION</th><th>/BIC/C_LOW</th><th>/BIC/C_HIGH</th><th>/BIC/C_ACTIVE</th></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15</td><td>001</td><td>A</td><td></td><td>PC_DPS_DYNASYS_15 => 1st load (HHMMSS)</td><td>I</td><td>BT</td><td>040000</td><td>041500</td><td>N</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15</td><td>002</td><td>A</td><td></td><td>PC_DPS_DYNASYS_15 => 2nd load (HHMMSS)</td><td>I</td><td>BT</td><td>070000</td><td>071500</td><td>Y</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15</td><td>003</td><td>A</td><td></td><td>PC_DPS_DYNASYS_15 => 3rd load (HHMMSS)</td><td>I</td><td>BT</td><td>140000</td><td>141500</td><td>Y</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15</td><td>004</td><td>A</td><td></td><td>PC_DPS_DYNASYS_15 => 4th load (HHMMSS)</td><td>I</td><td>BT</td><td>180000</td><td>181500</td><td>Y</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15</td><td>005</td><td>A</td><td></td><td>PC_DPS_DYNASYS_15 => 5th load (HHMMSS)</td><td>I</td><td>BT</td><td>230000</td><td>231500</td><td>Y</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15</td><td>999</td><td>A</td><td></td><td>PC_DPS_DYNASYS_15 => For tests only !!!!</td><td>I</td><td>BT</td><td>070000</td><td>180000</td><td>N</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15A</td><td>001</td><td>A</td><td></td><td>Bypass decision bloc 1 in chain PC_DPS_DYNASYS_15</td><td>I</td><td>EQ</td><td>N</td><td></td><td>N</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15M</td><td>000</td><td>A</td><td></td><td>Sub Chain PC_DPS_DYNASYS_33 => 1st load (HHMMSS)</td><td>I</td><td>BT</td><td>080000</td><td>081500</td><td>Y</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15M</td><td>001</td><td>A</td><td></td><td>Sub Chain PC_DPS_DYNASYS_33 => 1st load (HHMMSS)</td><td>I</td><td>BT</td><td>090000</td><td>091500</td><td>Y</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15M</td><td>002</td><td>A</td><td></td><td>Sub Chain PC_DPS_DYNASYS_33 => 1st load (HHMMSS)</td><td>I</td><td>BT</td><td>100000</td><td>101500</td><td>Y</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15M</td><td>003</td><td>A</td><td></td><td>Sub Chain PC_DPS_DYNASYS_33 => 1st load (HHMMSS)</td><td>I</td><td>BT</td><td>110000</td><td>111500</td><td>Y</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15M</td><td>004</td><td>A</td><td></td><td>Sub Chain PC_DPS_DYNASYS_33 => 2nd load (HHMMSS)</td><td>I</td><td>BT</td><td>140000</td><td>141500</td><td>Y</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15M</td><td>005</td><td>A</td><td></td><td>Sub Chain PC_DPS_DYNASYS_33 => 3rd load (HHMMSS)</td><td>I</td><td>BT</td><td>180000</td><td>181500</td><td>Y</td></tr>
<tr><td></td><td>DPS</td><td>PCH_DYN15M</td><td>006</td><td>A</td><td></td><td>Sub Chain PC_DPS_DYNASYS_33 => 4th load (HHMMSS)</td><td>I</td><td>BT</td><td>230000</td><td>231500</td><td>Y</td></tr>
</table></td>
</tr>
<tr>
<td>DPS Dynasys: META - M - 6.Reporting DynaSys (Snapshots)

PC_DPS_DYNASYS_09</td>
<td>DPDYN01

DBDYN13

CRDYN13</td>
<td>1 time per month the 6th day of month</td>
<td>06:00 am</td>
</tr>
<tr>
<td>Global Sales: CRSDSO30 (SO OTIF w/order book) (Solvay)

PC_GL_SALES_CRSDSO30

SD: SO - D - Main Process Chain - Update

PC_SD_MAIN</td>
<td>CRSDSO30</td>
<td>Daily, not weekend</td>
<td>Arround 06:25 am

Meta chain

PC_OBAS_TRANSFERS_MAIN

Arround 01:55 am

Meta chain

RSP_DAILY</td>
</tr>
<tr>
<td>Global Sales: CRSDSO70 (SO OTIF w/order book) (Rhodia)

PC_GL_SALES_CRSDSO70</td>
<td>CRSDSO70</td>
<td>Daily, not weekend</td>
<td>Arround 05:00 am & 07:00 am

Meta chains

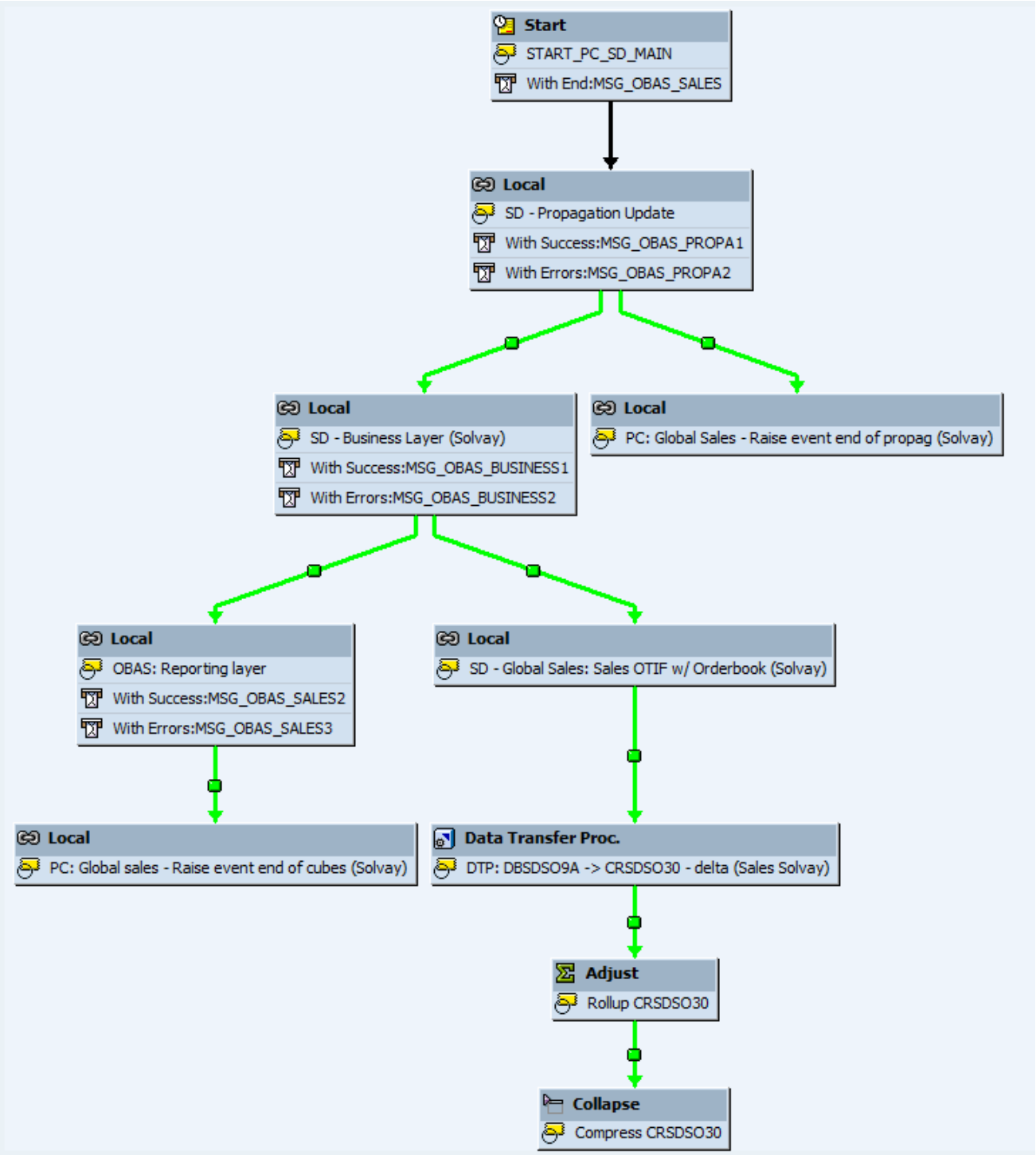
PC_GLOBAL_SALES_MAIN

PC_GL_SALES_MAIN_PO</td>
</tr>
</table>

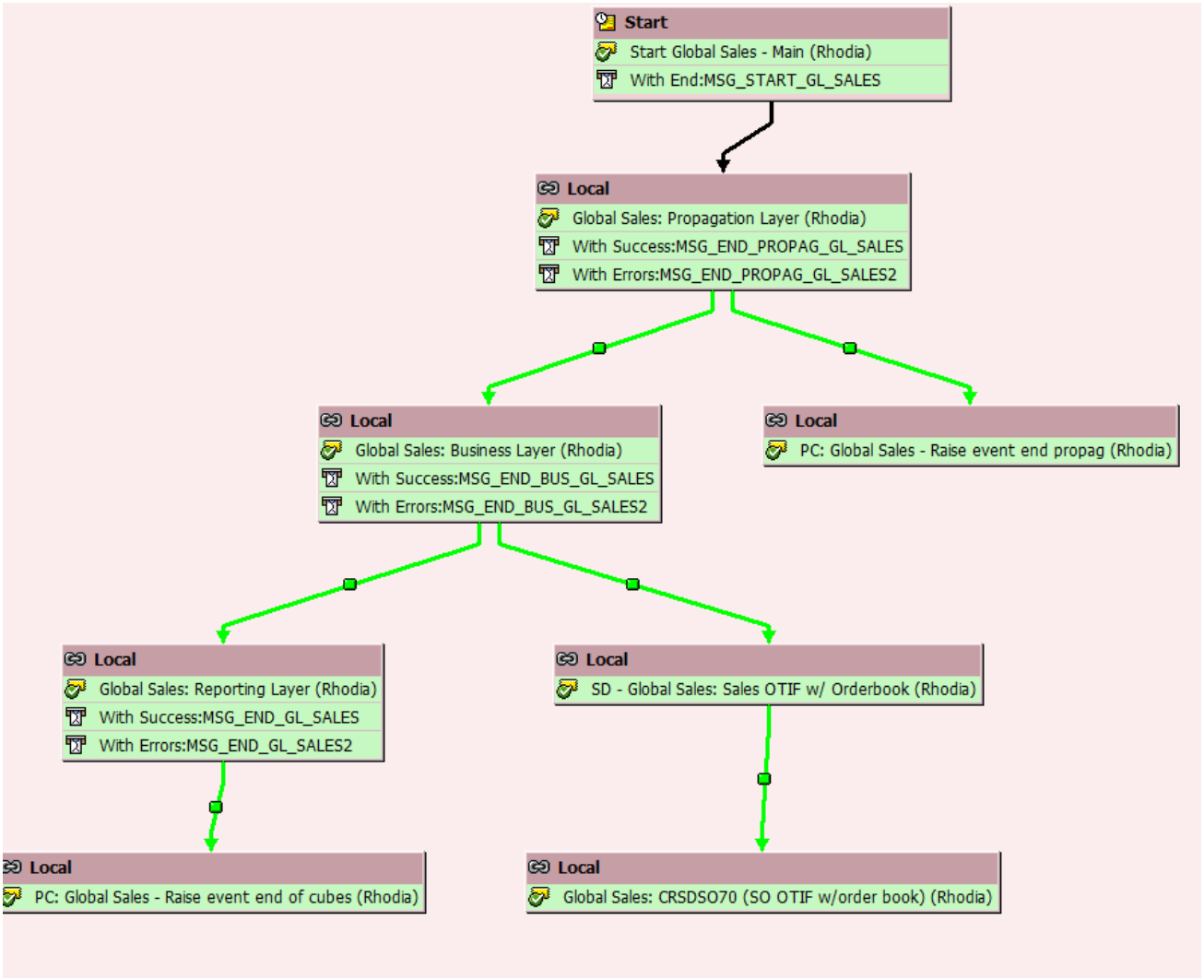
1 - Main Process Chain

This process chain is responsible to trigger and syncronize all Global Sales processes chains for Solvay and Rhodia. It is scheduled to run every workday inside the Daily process chain (RSP_DAILY) after general master data PC, around 3AM (French time) and TIERS.

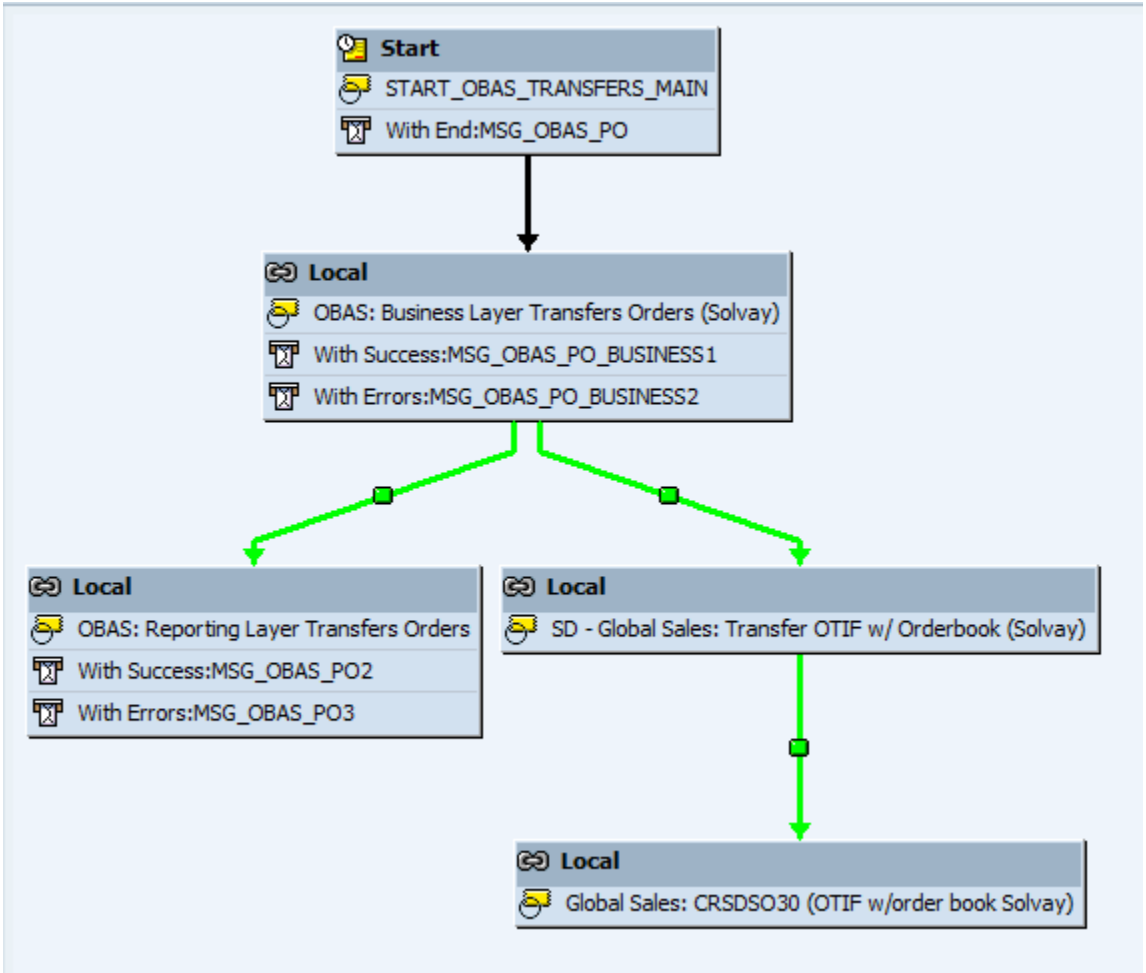
Sales - Part Solvay: PC_SD_MAIN (SD - Main Process Chain - UPTDATE DATA -)



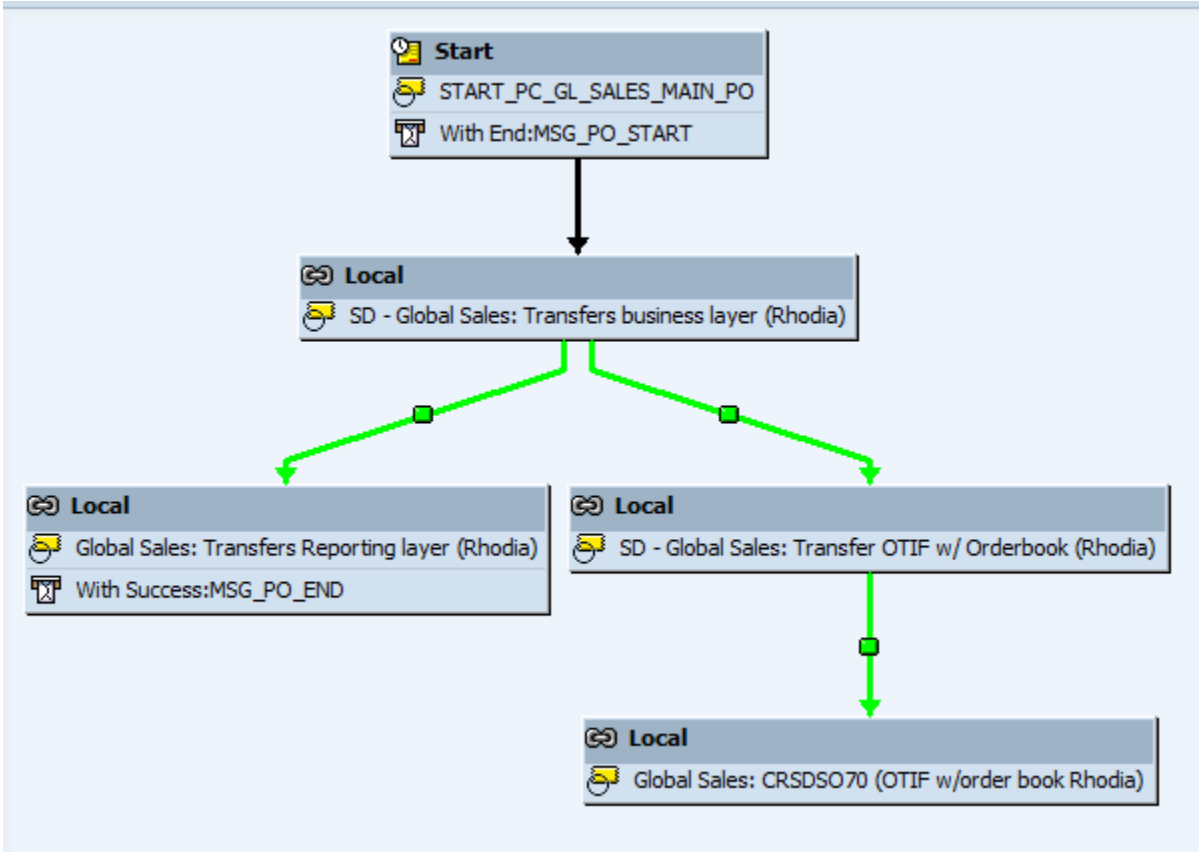
Sales - Part Rhodia : PC_GLOBAL_SALES_MAIN (PC: Global Sales: Main (Rhodia))



Transfer - Part Solvay: PC_OBAS_TRANSFERS_MAIN (OBAS: Transfers Orders Main chain)



Transfer - Part Rhodia: PC_GL_SALES_MAIN_PO (PC: Global Sales: Main transfers (Rhodia))



2 - Propagation Layer

This process chain is responsible to run the loads between source system and first layer in BW.

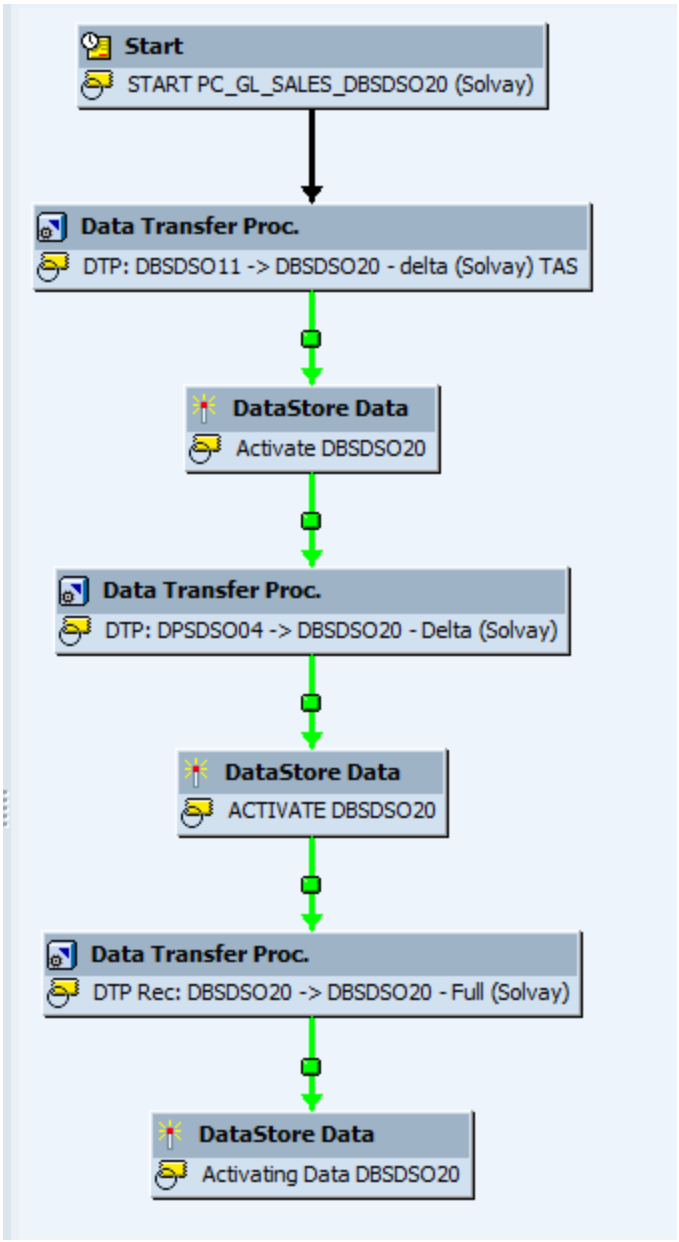
For OTIF process, all the processes in propagation layer are run in general Global Sales Process Chain

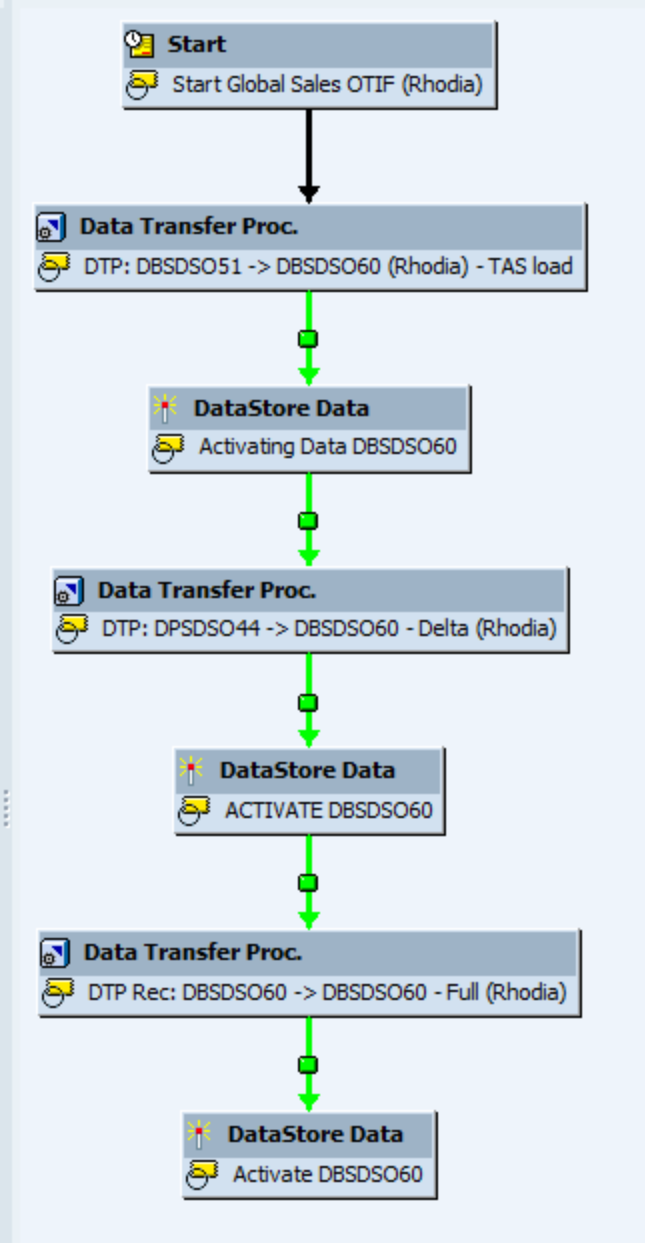
3 - Business Layer

This process chain is responsible to load the second and third layers from propagation layer.

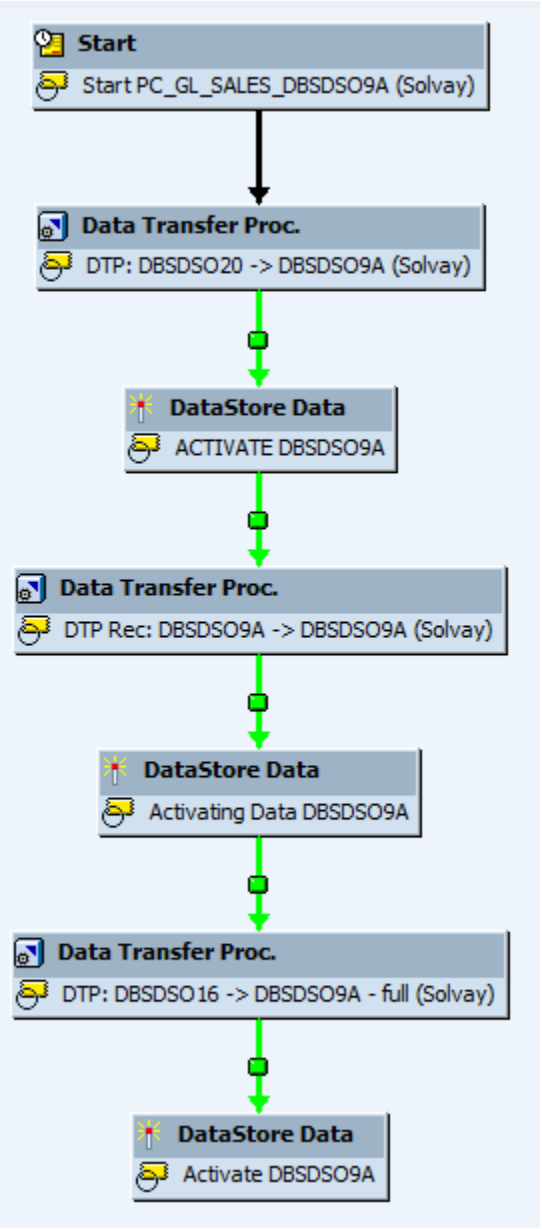
Main Processes for OTIF

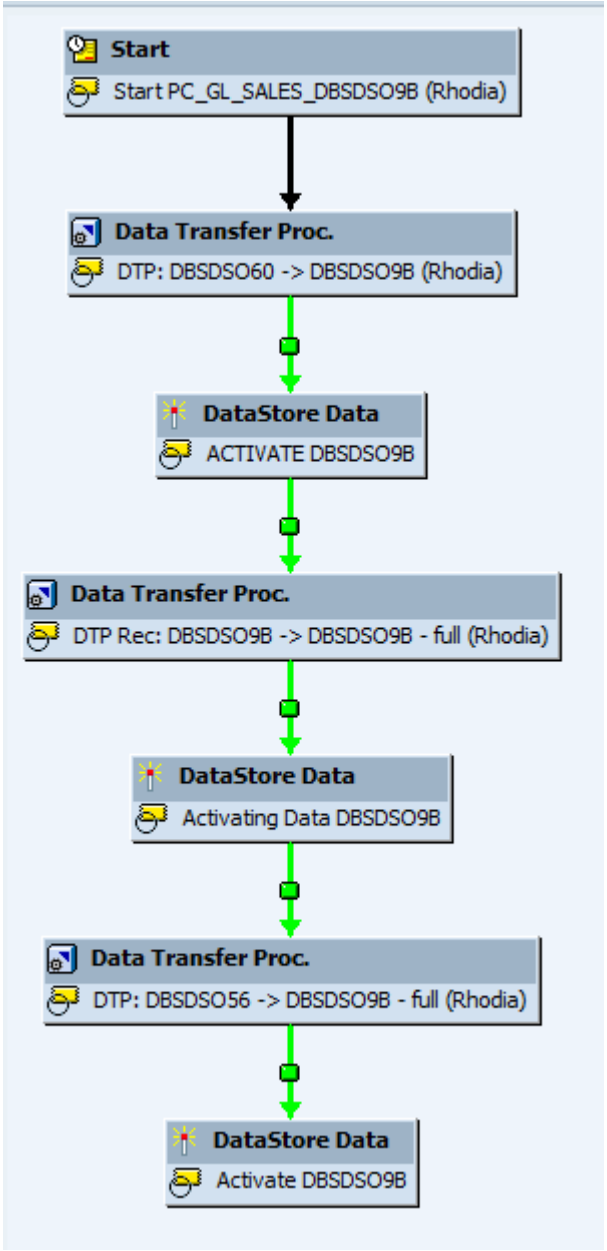
PC_GL_SALES_DBSDSO20 (SD - Global Sales: OTIF (Solvay)) and PC_GL_SALES_DBSDSO60 (SD - Global Sales: OTIF (Rhodia))


Start
START PC_GL_SALES_DBSDSO20 (Solvay)
Data Transfer Proc.
DTP: DBSDSO11 -> DBSDSO20 - delta (Solvay) TAS
DataStore Data
Activate DBSDSO20
Data Transfer Proc.
DTP: DPSDSO04 -> DBSDSO20 - Delta (Solvay)
DataStore Data
ACTIVATE DBSDSO20
Data Transfer Proc.
DTP Rec: DBSDSO20 -> DBSDSO20 - Full (Solvay)
DataStore Data
Activating Data DBSDSO20



PC_GL_SALES_DBSDSO9A (SD - Global Sales: Sales OTIF w/ Orderbook (Solvay)) and PC_GL_SALES_DBSDSO9B (SD - Global Sales: Sales OTIF w/ Orderbook (Rhodia))

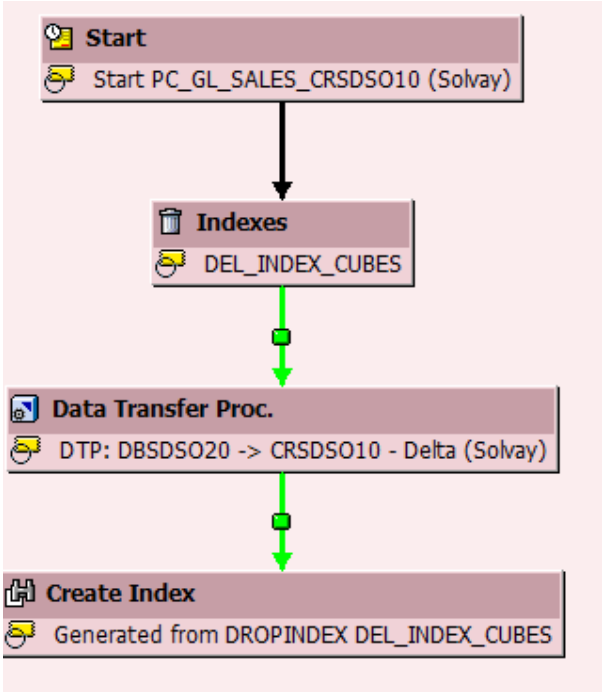


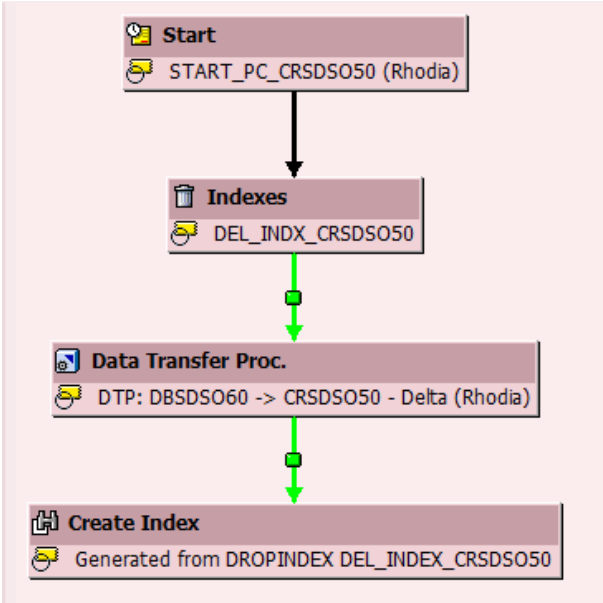


4 - Reporting Level

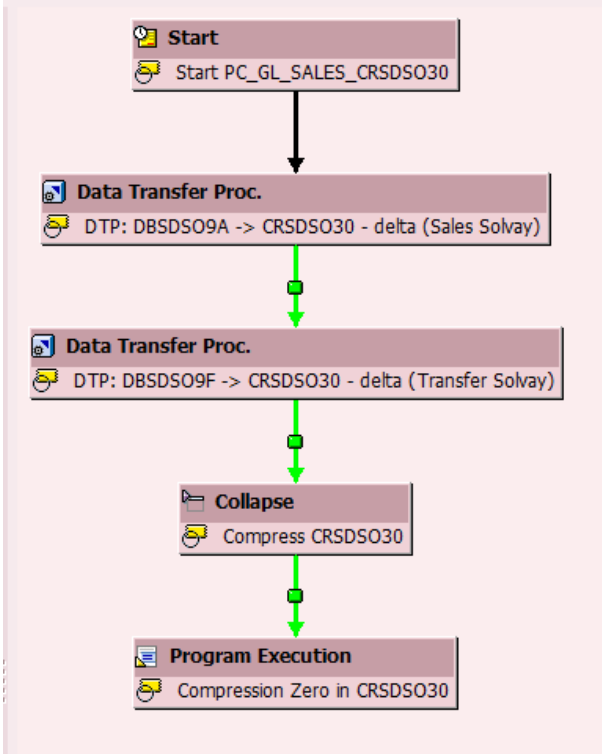
This process chain is responsible to load all the cubes

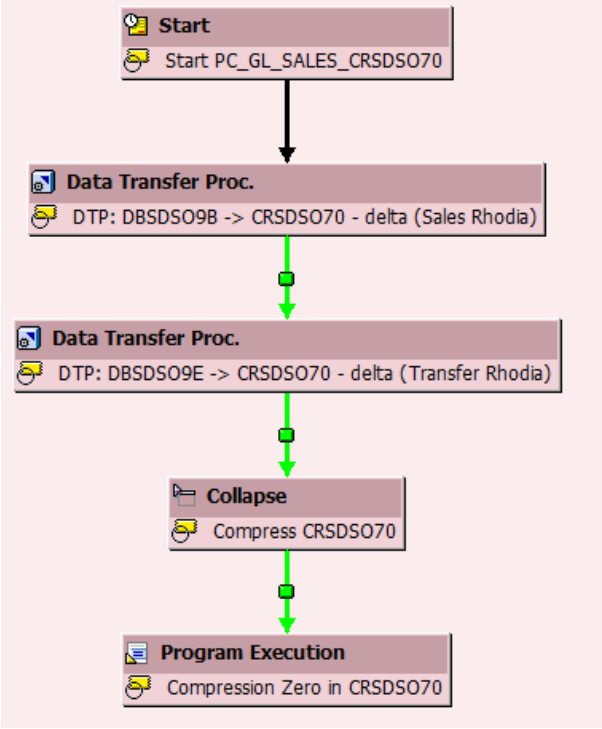
The must important ones are:PC_GL_SALES_CRSDSO10 (SD - Global Sales: Cube CRSDSO10 OTIF Sales (Solvay))
and PC_GL_SALES_CRSDSO50 (SD - Global Sales: Cube CRSDSO50 OTIF Sales (Rhodia))





PC_GL_SALES_CRSDSO30 (Global Sales: CRSDSO30 (OTIF w/order book Solvay)) and PC_GL_SALES_CRSDSO70 (Global Sales: CRSDSO70 (OTIF w/order book Rhodia))





Data Quality Control

Transaction	Description	Corresponding table	Comments

VT03N	Shipments	VTTK, VTTS	in ERP
VI03	Shipment Costs	VFKK, VFKP	in ERP
VL03N	Deliveries	LIKP, LIPS	in ERP
VA03	Sales Orders	VBAK, VBAP	in ERP
ME23N	Purchase Orders	EKKO, EKPO, EKBE	in ERP
MM03	Material maintenance	MARA	in ERP
RSUOM	Unit conversion	T005	in BW
RSCUR	Currency conversion	TCURR	in BW

https://wiki.solvay.com/display/TECHREP/BW+Authorizations?src=contextnavpagetreemode

Operational Documentation

Procedures

- When the process chain fails, the process type must be analyzed and repeated if possible.
- Sometimes a full load by period is required by user in order to syncronize all global sales data.

Scheduling

<Describe the scheduling in place for the application (eg. existing jobs, trigger time/event based, dependencies)>

Monitoring

<Describe the monitoring checks to confirm the application is performing well (eg. check the overall status, check performance metrics like runtime /data volume/memory/disk/CPU, maintain and react to alerts/notifications)>

Error Handling

<Describe how to handle errors (eg. error codes, description and respective resolution, alert users)>

Known Bugs

- Sometimes the unit conversion is not done in query due the unit is not mapped correctly in table UOMCMAT2 by material.

Roadmap

- The Global Sales is deployment phase and sometimes the GBU key user requests additional informations to be added in project.
- The New field ZI Partner will be available for reporting in the queries:Queries- BW_QRY_MVSDSO51_0001 and QVSCE_BW_QRY_MVSDSO51_0001 with the requirement in the FD 4699751.