

# How to Correct Routines in Transformations



## Applies to:

SAP NetWeaver Business Warehouse (Formerly BI), Will also work on SAP BI 3.5. For more information, visit the [Business Intelligence homepage](#).

## Summary

This article gives clear picture about how to correct the Routines in Transformations in between InfoSource and InfoCube/DSO in BI 7.0

**Author:** Surendra Kumar Reddy Koduru

**Company:** ITC Infotech India Ltd. (Bangalore/INDIA)

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## Author Bio



Surendra Kumar Reddy Koduru is a SAP BI Lead Consultant currently working with ITC Infotech India Ltd (Bangalore/INDIA). He has got rich experience and worked on various BW/BI implementation/Support projects.

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## Introduction

Some time after migrating the Flow from BW 3.5 to BI 7.0, we may get some problems like, some Transfer Routines will not copy, but it won't give any error and it will impact on Result. So here I'm explaining the scenario what I faced and how I rectified.

### Live Scenario

I'm **2LIS\_13\_VDITM** DataSource and loading data to InfoCube/DSO, but some routines are not copied for **ODOC\_CLASS** and **ODEB\_CRED** InfoObjects in Transformations in between InfoSource and DSO. See the below screen.

Source Object	Target Object
ODISTR_CHAN	ODISTR_CHAN
OSALESORG	OSALESORG
ODIVISION	ODIVISION
Document Category	ODOC_CLASS
Credit/Debit (C/D)	ODEB_CRED
OCP_CATEG	OCP_CATEG
OPROD_CATEG	OPROD_CATEG
Subtotal 1 From Pricing Procedure in Statistics Currency	OSUBTOT_1S
Subtotal 2 from Pricing Procedure in Statistics Currency	OSUBTOT_2S
Subtotal 3 From Pricing Procedure in Statistics Currency	OSUBTOT_3S
Subtotal 4 from Pricing Procedure in Statistics Currency	OSUBTOT_4S
Subtotal 5 from Pricing Procedure in Statistics Currency	OSUBTOT_5S
Subtotal 6 from Pricing Procedure in Statistics Currency	OSUBTOT_6S

And also see (below) the individual screen for those InfoObjects.

**Rule Details**

Description: Document Category

Target InfoObject: 0DOC\_CLASS Document category /Quotation/Order/Delivery/Invoice

Rule Type: Routine

Conversion Exit: ALPHA Perform

Source Fields of Rule:

Field	Long Description	Type	Lng...	Conv...	IOAssgnmnt	Long Description

Target Fields of Rule:

InfoObject	lc...	Long Description	Type	Lng...	Conv...
0DOC_CLASS		Document category	CHAR	1	ALPHA

Transfer Values

For above InfoObject we need to give some constant (based on DataSource) as per SAP.

[http://help.sap.com/erp2005\\_ehp\\_04/helpdata/EN/71/1769372b2b7d20e10000009b38f842/content.htm](http://help.sap.com/erp2005_ehp_04/helpdata/EN/71/1769372b2b7d20e10000009b38f842/content.htm)

<b>0DOC_CLASS</b>	<ul style="list-style-type: none"> <li>• Document classification: Order/Delivery/Invoice</li> <li>• Classifies documents as order, delivery and invoicing (billing) documents:             <ul style="list-style-type: none"> <li>○ O = Order</li> <li>○ D = Delivery</li> <li>○ I = Invoice</li> </ul> </li> </ul>
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Rule Details

Description: Credit/Debit (C/D)

Target InfoObject: 0DEB\_CRED Credit/debit posting (C/D)

Rule Type: Routine

Source Fields of Rule:

Field	Long Description	Type	Lng...	Conv...	IOAssgnmnt	Long Description

Target Fields of Rule:

InfoObject	Ic...	Long Description	Type	Lng...	Conv...
0DEB_CRED		Credit/debit posting	CHAR	1	

Transfer Values

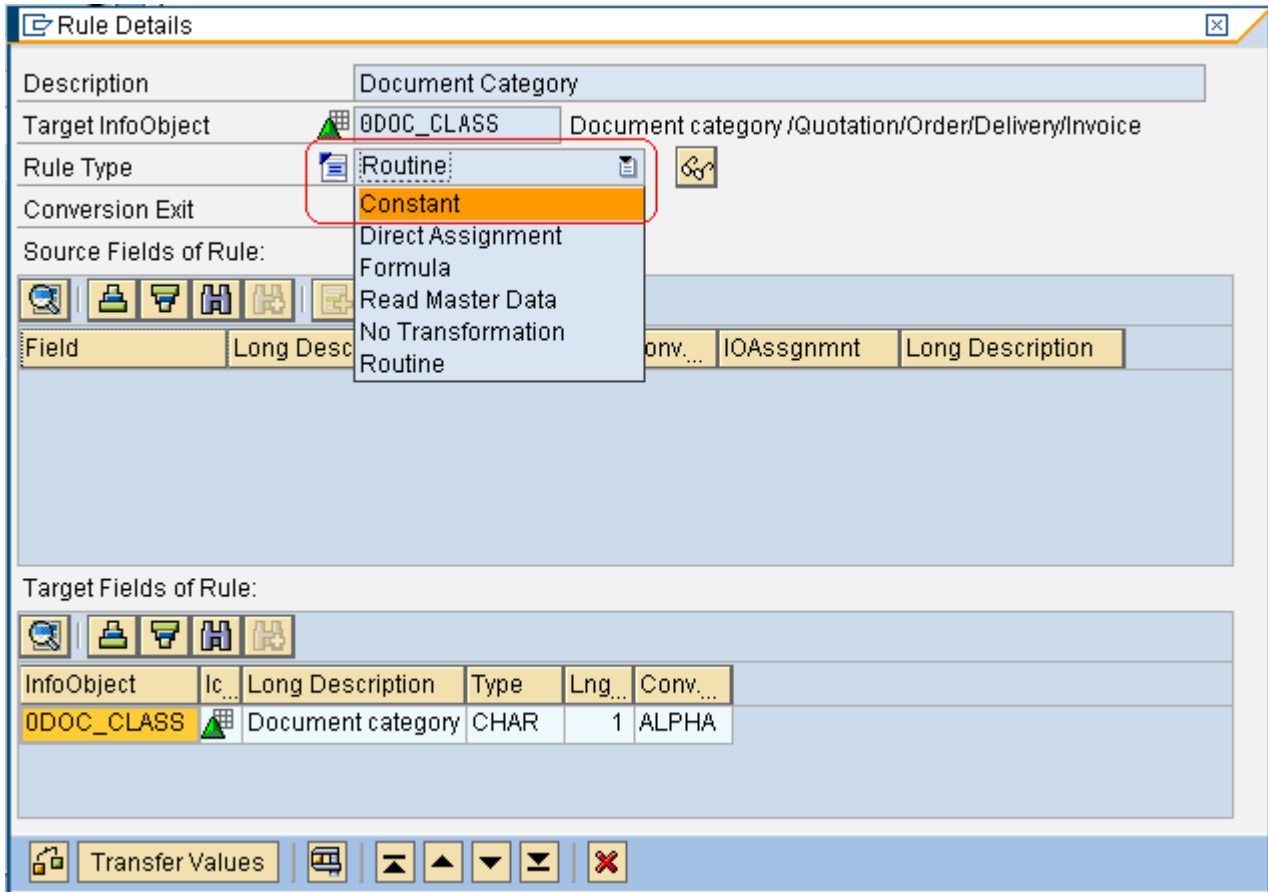
For the above InfoObject there is one Routine as per SAP Deliver content.

[http://help.sap.com/erp2005\\_ehp\\_04/helpdata/EN/71/1769372b2b7d20e1000009b38f842/content.htm](http://help.sap.com/erp2005_ehp_04/helpdata/EN/71/1769372b2b7d20e1000009b38f842/content.htm)

<b>0DEB_CRED</b>	<p>Credit/Debit Postings (C/D)</p> <p>Differentiates between target and actual documents.</p> <p>The following sales document categories (0DOC_CATEG = VB Typ) generate target postings in the InfoCube:</p> <ul style="list-style-type: none"> <li>• Sales order processing: <ul style="list-style-type: none"> <li>○ Credit memo request (VB Typ = K)</li> <li>○ Returns (VB Typ = H)</li> </ul> </li> <li>• Delivery processing: <ul style="list-style-type: none"> <li>○ Return delivery (VB Typ = T)</li> </ul> </li> <li>• Invoice processing: <ul style="list-style-type: none"> <li>○ Credit memo (VB Typ = O)</li> <li>○ Cancelled invoice (VB Typ = N)</li> <li>○ Internal consumption (credit) (VB Typ = 6)</li> </ul> </li> </ul> <p>All other categories of sales documents generate actual postings in the InfoCube.</p>
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### How to Correct

Double click on 0DOC\_CLASS in Transformations and then change it from Routine to Constant and then give the Constant "1"



See the below screen.

**Rule Details**

Description: I

Target InfoObject: 0DOC\_CLASS Document category /Quotation/Order/Delivery/Invoice

Rule Type: Constant Constant Value: I

Conversion Exit: ALPHA Perform

Source Fields of Rule:

Field	Long Description	Type	Lng...	Conv...	IOAssgnmnt	Long Description

Target Fields of Rule:

InfoObject	Ic...	Long Description	Type	Lng...	Conv...
0DOC_CLASS		Document category	CHAR	1	ALPHA

Transfer Values


Then click on **Transfer Values** button in the above screen and Save.

Double click on 0DEB\_CRED in transformations, it must be in Change mode only.







Rule Details

Description: Credit/Debit (C/D)

Target InfoObject: 0DEB\_CRED Credit/debit posting (C/D)





Rule Type: Routine 


Source Fields of Rule:








     

Field	Long Description	Type	Lng...	Conv...	IOAssgnmnt	Long Description

Target Fields of Rule:

InfoObject	lc...	Long Description	Type	Lng...	Conv...
0DEB_CRED		Credit/debit posting	CHAR	1	

 Transfer Values      


Click on “+” Icon and then add “DOC\_CATEG”, because out routine depends on this Field only. For reference please see the above SAP Help.



Rule Details

Description: Credit/Debit (C/D)


Target InfoObject: 0DEB\_CRED Credit/debit posting (C/D)





Rule Type: Routine 

Source Fields of Rule:

Field	Long Description	Type	Lng...	Conv...	IOAssignmnt	Long Description
DOC_CATEG	Sales Document C...	CHAR	2			

Target Fields of Rule:

InfoObject	lc...	Long Description	Type	Lng...	Conv...
0DEB_CRED		Credit/debit posting	CHAR	1	

Transfer Values    

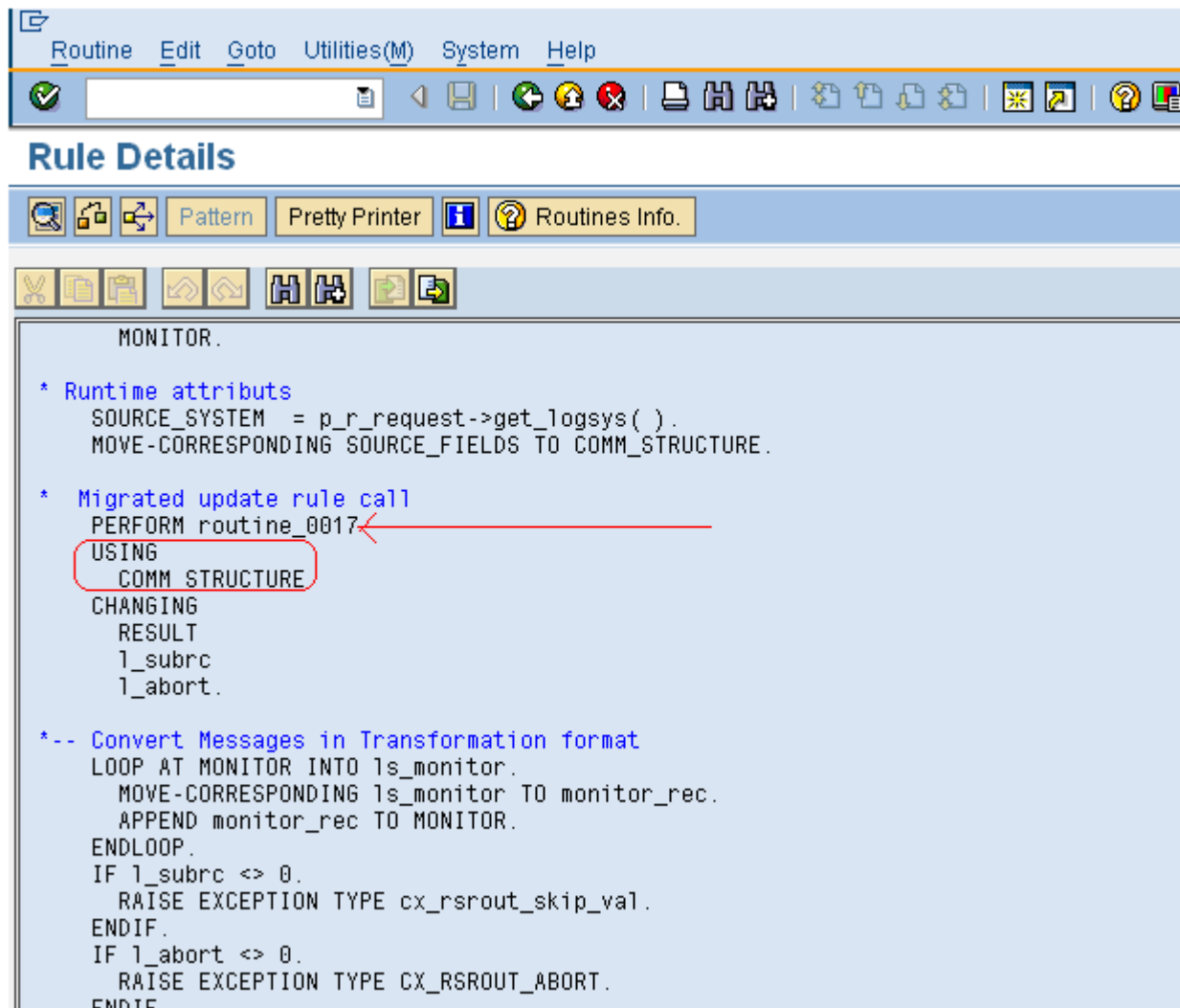
Click on Chang Icon and then write the Code.

It will take to you code window and our routine name is PERFORM routine\_0017, it will change in your system.

Add, it won't contains by default.

**USING**

**COMM\_STRUCTURE**



Then Double click on **routine\_0017** and add the below two lines

```

USING
  COMM_STRUCTURE TYPE _ty_s_sc_1__rule_001

```

```

* -->RAISING text
* -->CX_SY_ARITHMETIC_ERROR text
* -->CX_SY_CONVERSION_ERROR text
* .....*
FORM routine_0017
  USING
    "Surendra Reddy 03-03-2010 @ 10.30 PM
    COMM_STRUCTURE TYPE ty_s_sc_1_rule_001
    "Surendra Reddy 03-03-2010 @ 10.30 PM
  CHANGING
    RESULT TYPE ty_s_tg_1_full-deb_cred
    RETURNCODE LIKE sy-subrc
    ABORT LIKE sy-subrc
  RAISING
    cx_sy_arithmetic_error
    cx_sy_conversion_error.

* init variables

* fill the internal table "MONITOR", to make monitor entries

* result value of the routine
* RESULT = .
* if abort is not equal zero, the update process will be canceled

IF COMM_STRUCTURE-doc_categ CA deb_cred.
  RESULT = 'C'.
ELSE.
  RESULT = 'D'.
ENDIF.

RETURNCODE = 0.

```

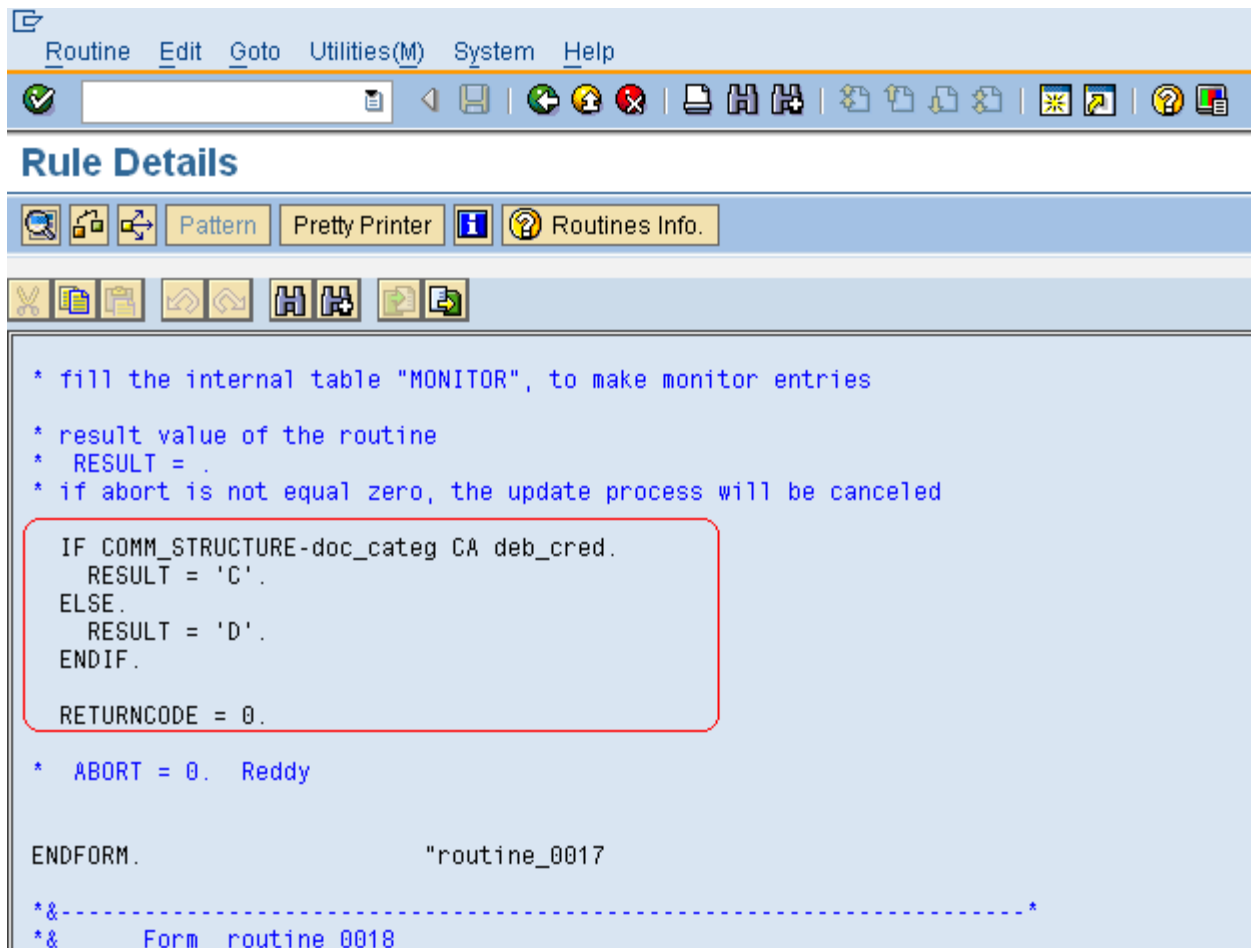
Then write the below code

```

IF COMM_STRUCTURE-doc_categ CA deb_cred.
  RESULT = 'C'.
ELSE.
  RESULT = 'D'.
ENDIF.

RETURNCODE = 0.

```



```

* fill the internal table "MONITOR", to make monitor entries
* result value of the routine
* RESULT = .
* if abort is not equal zero, the update process will be canceled
IF COMM_STRUCTURE-doc_categ CA deb_cred.
  RESULT = 'C'.
ELSE.
  RESULT = 'D'.
ENDIF.
RETURNCODE = 0.

* ABORT = 0. Reddy

ENDFORM.          "routine_0017
*&-----*
*& Form routine_0018

```

In above code we must declare the `_ty_s_sc_1__rule_001` and `deb_cred`.

See the below screen, in that code window find the below code and the after that we will declare `_ty_s_sc_1__rule_001`.

```
END OF _ty_s_tg_1_full.
```

Routine Edit Goto Utilities(M) System Help

PROGRAM trans\_routine.

```

*-----*
*      CLASS routine DEFINITION
*-----*
*
*-----*
CLASS 1c1_transform DEFINITION.
  PUBLIC SECTION.

*  Attributs
  DATA:
    p_check_master_data_exist
      TYPE RSODSOCHECKONLY READ-ONLY,
*-  Instance for getting request runtime attributs;

```

Routine Edit Goto Utilities(M) System Help

```

deliv_item      TYPE /bi0/oideliv_item,
*  InfoObject: 0DELIV_NUMB Delivery.
deliv_numb      TYPE /bi0/oideliv_numb,
*  InfoObject: 0COUNTRY Country Key.
country         TYPE /bi0/oicountry,
END OF _ty_s_tg_1_full.

*****S Surendra Reddy***Begin of Declaration***
TYPES:
  BEGIN OF _ty_s_sc_1__rule_001,
    doc_categ    TYPE /bi0/oidoc_categ,
*  Field: RECORD.
    record       TYPE rsarecord,
    netval_inv   TYPE /bi0/oinetval_inv,

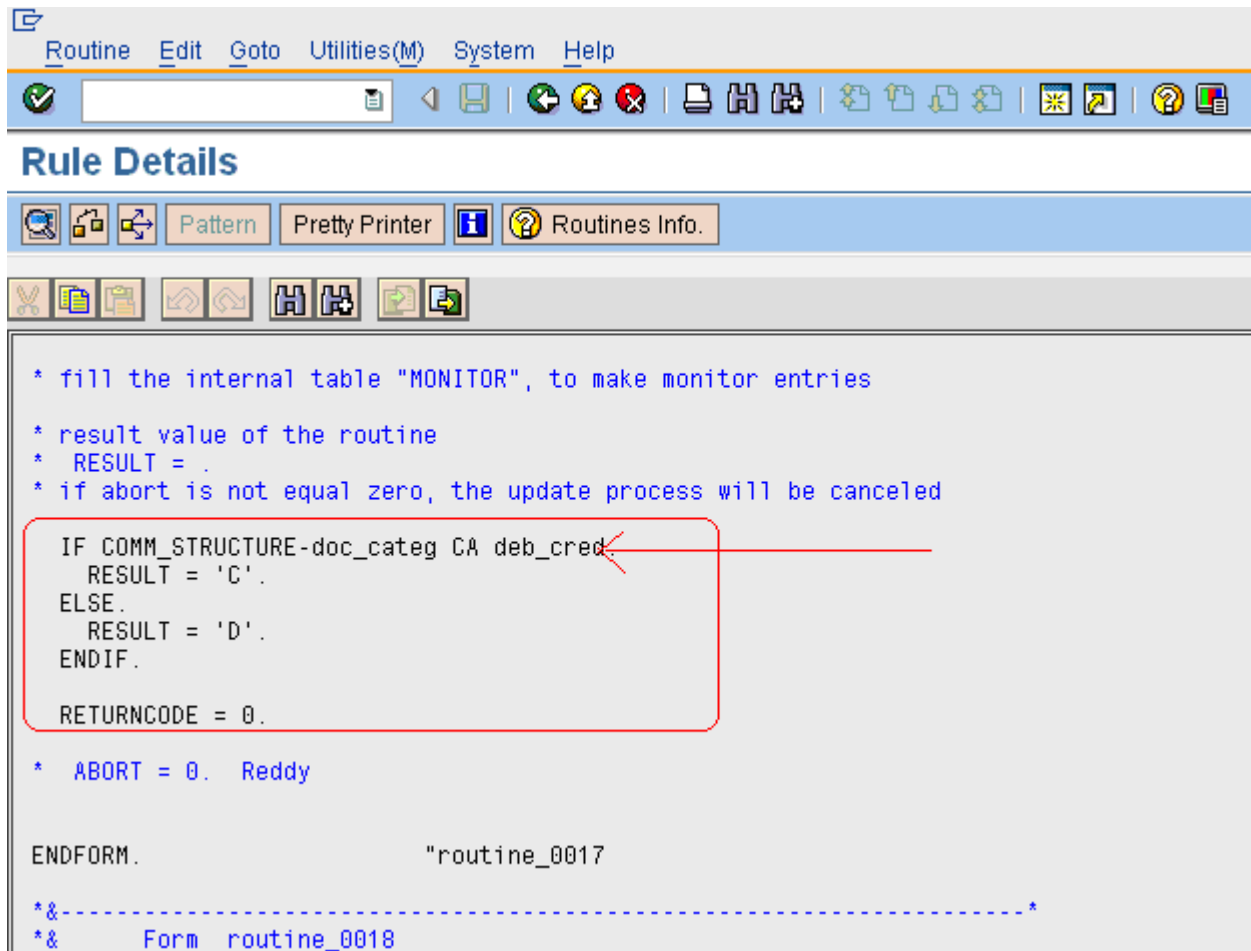
  END OF _ty_s_sc_1__rule_001.

*****S Surendra Reddy***End of Declaration***

TYPES:
  BEGIN OF _ty_s_sc_1__rule_90,
*  InfoObject: 0SYDATE ACC Customer date for FI creation

```

Then double click on **deb\_cred**, see the below screen...



```
* fill the internal table "MONITOR", to make monitor entries
* result value of the routine
* RESULT = .
* if abort is not equal zero, the update process will be canceled
IF COMM_STRUCTURE-doc_categ CA deb_cred
  RESULT = 'C'.
ELSE.
  RESULT = 'D'.
ENDIF.
RETURNCODE = 0.

* ABORT = 0. Reddy

ENDFORM.                "routine_0017

*&-----*
*& Form routine_0018
```

```

denom          TYPE f,
numer          TYPE f.

DATA: I_hlp_chav1      TYPE rschav1,
      deb_cred(2)     TYPE c VALUE 'HK', "SAP Note 1156259
      *As SAP suggested SAP Note 1156259, we changed to NO6 on 03-03-2010 by
      *Surendra Reddy
      deb_cred(3)     TYPE c VALUE 'NO6',
      quot(1)        TYPE c VALUE 'B'.

CONSTANTS: c_msgty_e   VALUE 'E',
           cust_hier_type(2) TYPE c VALUE ' '.

* Structure for BPB_GRP and its attributes
TYPES: BEGIN OF struc_bp_grp,
       bp_grp          TYPE rsd_chav1,
       customer        TYPE rsd_chav1,
       crm_salesorg    TYPE rsd_chav1,
       distr_chan      TYPE rsd_chav1

```

For reference purpose only here I'm giving the SAP Note, the changing/not changing of declaration is depends on your business.

#### Before change

```

DATA: I_hlp_chav1      TYPE rschav1,
      deb_cred(2)     TYPE c VALUE 'HK',
      deb_cred(3)     TYPE c VALUE 'NO6',
      quot(1)        TYPE c VALUE 'B'.

```

#### After change

```

DATA: I_hlp_chav1      TYPE rschav1,
      deb_cred(2)     TYPE c VALUE 'NO6',
      deb_cred(3)     TYPE c VALUE 'NO6',
      quot(1)        TYPE c VALUE 'B'.

```

See SAP Help.

[http://help.sap.com/erp2005\\_ehp\\_04/helpdata/EN/71/1769372b2b7d20e1000009b38f842/content.htm](http://help.sap.com/erp2005_ehp_04/helpdata/EN/71/1769372b2b7d20e1000009b38f842/content.htm)

0DEB_CRED	<p>Credit/Debit Postings (C/D) Differentiates between target and actual documents. The following sales document categories (0DOC_CATEG = VB Typ) generate target postings in the InfoCube:</p> <ul style="list-style-type: none"> <li>• Sales order processing: <ul style="list-style-type: none"> <li>○ Credit memo request (VB Typ = K)</li> <li>○ Returns (VB Typ = H)</li> </ul> </li> <li>• Delivery processing: <ul style="list-style-type: none"> <li>○ Return delivery (VB Typ = T)</li> </ul> </li> <li>• Invoice processing: <ul style="list-style-type: none"> <li>○ Credit memo (VB Typ = O)</li> <li>○ Cancelled invoice (VB Typ = N)</li> <li>○ Internal consumption (credit) (VB Typ = 6)</li> </ul> </li> </ul> <p>All other categories of sales documents generate actual postings in the InfoCube.</p>
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Save , Activate the Transformations and then Execute the DTP and see the data in InfoCube/DSO.

#### SAP Note 1156259

For reference purpose only here I'm giving the SAP Note, the changing/not changing of declaration is depends on your business.

```

DATA: IN                TYPE F,
      OUT               TYPE F,
      DENOM             TYPE F,
      NUMER             TYPE F.

DATA: L_HLP_CHAVL      TYPE RSCHAVL,
      *****start of deletion*****

```

27.02.2010

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#### SAP Note 1156259 - Update rules incorrect for InfoCube OSD C03

```

DEB_CRED(2)           TYPE C VALUE 'HK',
*****end of deletion*****
*****start of insertion*****
DEB_CRED(3)           TYPE C VALUE 'NO6',
*****end of insertion*****

```



## Related Content

[Analysis Process Designer \(APD\): Part - 1](#)

[Analysis Process Designer \(APD\): Part - 2](#)

[Analysis Process Designer](#)

[Using Customer Exit Variables in BW Reports Part - 3](#)

[How to use Customer Exit Variables in BW Reports: Part - 2](#)

[Using Customer Exit Variables in BW or BI Reports Part - 1](#)

[Using Text Variables with Customer Exits in Report Headings](#)

[Using Text Variables with Customer Exits in Report Headings](#)

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