How to Write a Routine for 0FISCPER in InfoPackage Selection

SAP

Applies to:

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

Summary

This article gives clear picture about how to use a Routine for 0FISCPER in InfoPackage Selection based on System Date.

Author: Surendra Kumar Reddy Koduru

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

Created on: 26 June 2011

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 and he is the author for various Articles and Blogs (SAP-BW/BI) in SAP Community Network.

Table of Contents

Introduction:

This article addresses the requirement of a Routine in InfoPackage selection on 0FISCPER. Using this routine, I need to load only that particular Fiscal Year Period into InfoCube and other data just ignore in ECC it self.

Live Scenario:

Some times when we are loading data from Source System into BW/BI System, we need some selections in InfoPackage in BW/BI side, this is useful specially when we are doing Full Loads, and actually we need only Current Fiscal Year Period i.e. 003.2011 (this is based on 06.2011 because I written this article on 26-06-2011 so as per this date the Fiscal Year period is 003.2011)

We are loading data to **0PC_C01** InfoCube and using DataSource **0CO_PC_01,** this DataSource supports Full Load only so we need to restrict the unwanted data, and other wise the data will be duplicated in InfoCube (do delete overlapping request we can also need to set some settings in InfoPackage level). To load Current Fiscal Year Period based on System Date we need to write the ABAP Routine in InfoPackage selection.

Here in this example I took ECC as my Source System and explained all steps how to do it.

0CO_PC_01 DataSource:

This DataSource is already given by SAP in ECC System, so just install, Activate, Replicate in BW and Use it for DataLoads.

See all Tabs of DataSource:

DataSource	0CO_PC_01	CostObjCon:Pln/ActDt
Source System	T90CLNT090 IDC Client 800	
Version	Active	Compare with...
Active Version	Executable = Edited Version	Emulated

General Info.	Extraction	Fields

Delta Process	Full Upload (Delta from InfoPackage Selection Only)
Direct Access	NO DTP Allowed for Direct Access
Real Time	Real-Time Data Acquisition Is Not Supported

Adapter	Access to SAP Data through Service API	Properties

Data Format	Fixed Length

Convers. Lang.	User Master Record
Number format	User Master Record

DataSource	0CO_PC_01	CostObjCon:Pln/ActDt
Source System	T90CLNT090 IDC Client 800	
Version	Active	Compare with...
Active Version	Executable = Edited Version	Emulated

General Info.	Extraction	Fields

Field Attributes

| Pos.	Field	Descript.	D...	T..	Data type	Lngth	Deci...	Exter...	L..	K..	Con...	Format	SS ...	cur/unit	S..	Sel. Opts	Field Type
1	FISCVARNT	Fiscal year v...	✎	✓	CHAR	2	0	0	☐	☐		Inter...				0	
2	FISCPER	Fiscal year/...	✎	✓	NUMC	7	0	0	☐	☐		Inter...	PERI7		X	0	
3	CO_AREA	CO Area	✎	✓	CHAR	4	0	0	☐	☐		Inter...			X	0	
4	PLANT	Plant	✎	✓	CHAR	4	0	0	☐	☐		Inter...			X	0	
5	MATERIAL	Material	✎	✓	CHAR	18	0	0	☐	☐		Inter...	MATN1			0	
6	PRODVRSN	Prod. Version	✎	✓	CHAR	4	0	0	☐	☐		Inter...				0	
7	PRODPROCNR	Prod. Proc. ...	✎	✓	NUMC	12	0	0	☐	☐		Inter...				0	
8	PRODORDER	Order	✎	✓	CHAR	12	0	0	☐	☐		Inter...	ALPHA		X	0	
9	FLG_DELFLG	Orders w/o ...	✎	✓	CHAR	1	0	0	☐	☐		Inter...			X	0	
10	ORDERITEM	Item Number	✎	✓	NUMC	4	0	0	☐	☐		Inter...				0	
11	VTYPE	Value Type	✎	✓	NUMC	3	0	0	☐	☐		Inter...			X	1	
12	VERSION	Version	✎	✓	CHAR	3	0	0	☐	☐		Inter...	ALPHA			0	
13	VALUTYP	Valuation Vi...	✎	✓	NUMC	1	0	0	☐	☐		Inter...				0	
14	COSTELMNT	Cost Eleme...	✎	✓	CHAR	10	0	0	☐	☐		Inter...	ALPHA			0	

Data Flows:

See the below Data Flow diagrams.
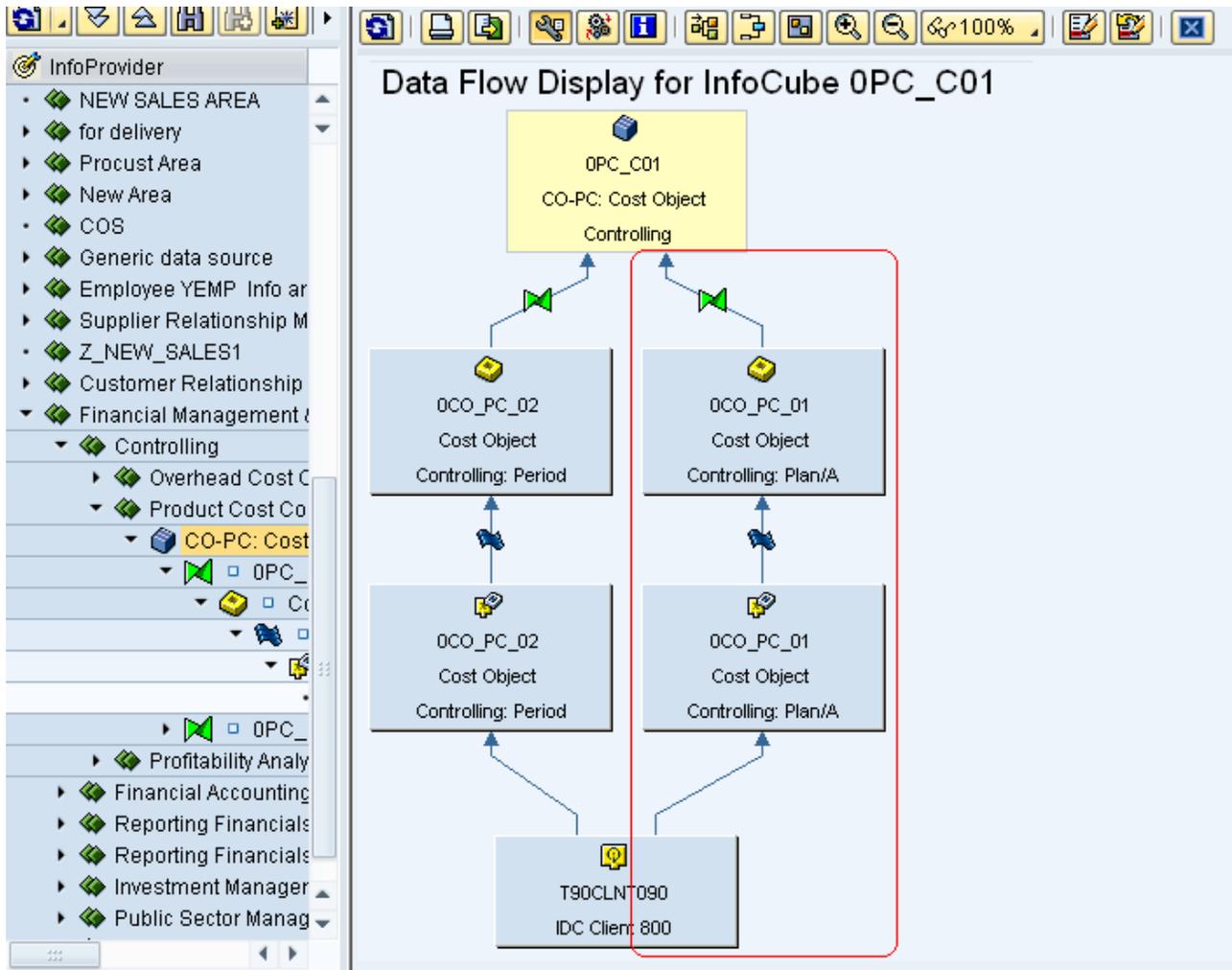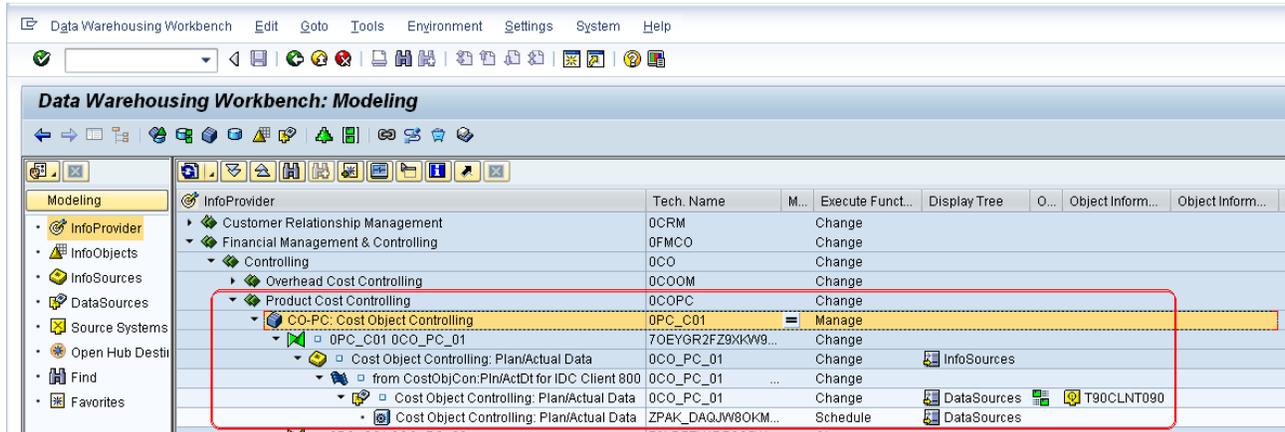
We are using only 0CO_PC_01 DataSource, so that is the reason I highlighted.

InfoPackage:

Create the InfoPackage and then see the Data Selection Tab; we are going to change in this tab only, there no change in all other Tabs.
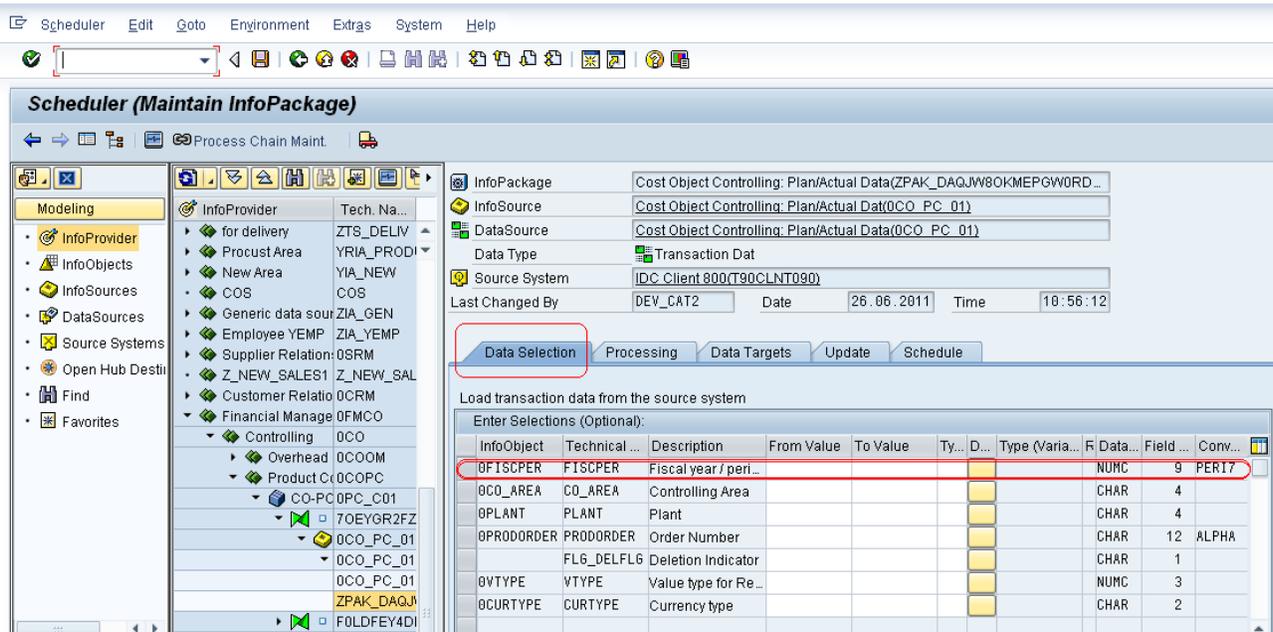
In above screen you can find the Data Selection Tab there 0FICPER InfoObject is there, here we will write a routine to load only Current Fiscal Year Period Data, because this DataSource supports Full, so we need to restrict the data based on InfoPackage selections only.

So every day this InfoPackage trigger by Process Chain and then this ABAP Code will check the System date and then calculate the Current Fiscal Year period and then load for Current Fiscal Year Period.
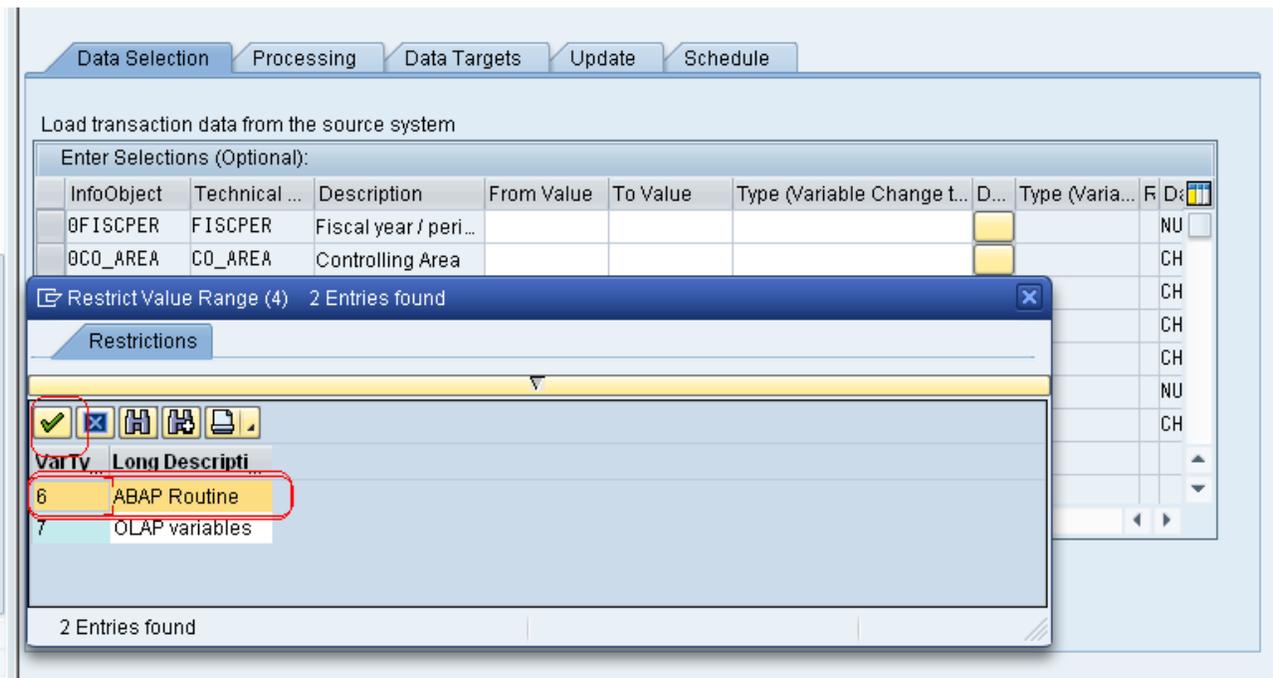
See above screen, press F4 in **Type** against 0FISCPER InfoObject , it open the Restricted Values window, so select **6** and then give name of the routine see the below screen Fiscal Year Period.
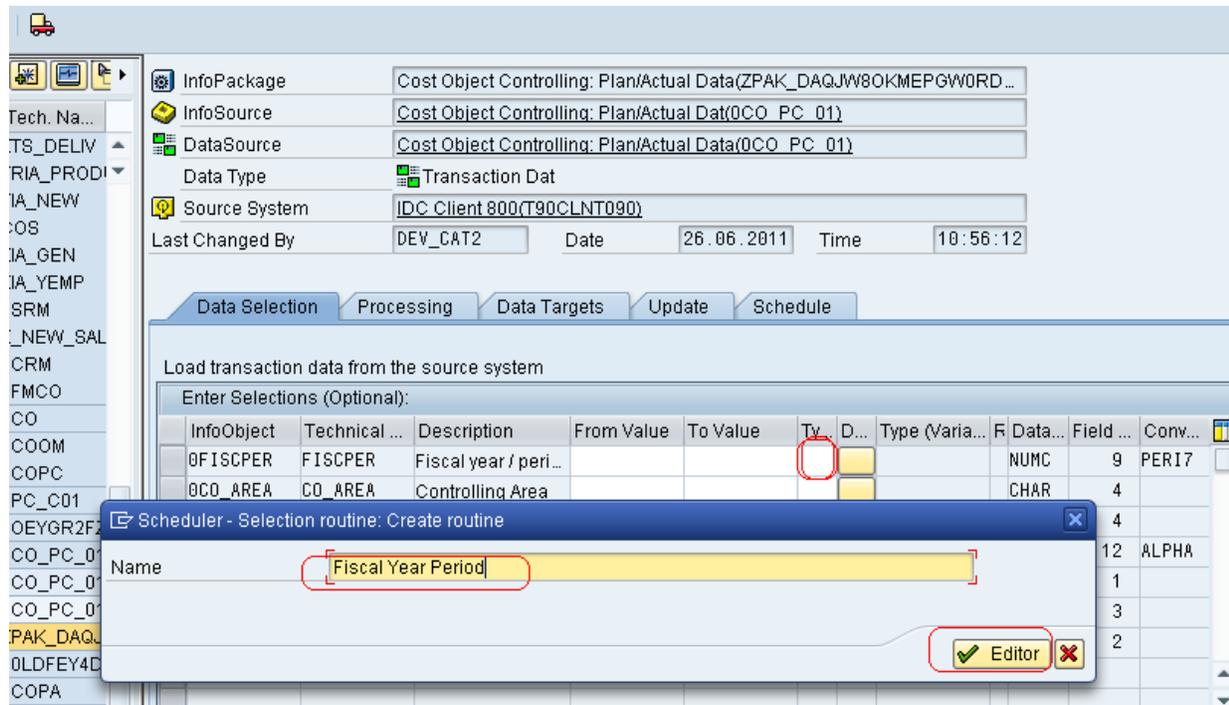
Once you click on **Editor** Button, it will go to Code window like below.

In above screen you can see ABAP Code Editor; here we are going to write the ABAP code to load only Current Fiscal Year Period Data based on SY-DATUM (System Date).

Eg: Today Date is 26-06-2011, as per this date the Fiscal Year Period is 003.2011.

So the data is loaded only for 003.2011 period using Full InfoPackage.

Code before Change:

```
program conversion_routine.
* Type pools used by conversion program
type-pools: rsarc, rsarr, rssm.
tables: rssdlrange.
* Global code used by conversion rules
*$*$ begin of global - insert your declaration only below this line  *-*
* TABLES: ...
* DATA:    ...
*$*$ end of global - insert your declaration only before this line   *-*
* ---------------------------------------------------------------
*     InfoObject      = 0FISCPER
*     Fieldname       = FISCPER
*     data type       = NUMC
*     length          = 000009
*     convexit        = PERI7
* ---------------------------------------------------------------
form compute_FISCPER
  tables   l_t_range       structure rssdlrange
  using    p_infopackage  type rslogdpid
           p_fieldname    type rsfnm
  changing p_subrc        like sy-subrc.
*       Insert source code to current selection field
*$*$ begin of routine - insert your code only below this line       *-*
data: l_idx like sy-tabix.
read table l_t_range with key
     fieldname = 'FISCPER'.
l_idx = sy-tabix.
*....
modify l_t_range index l_idx.

p_subrc = 0.

*$*$ end of routine - insert your code only before this line        *-*
endform.                      "
```

Code after Change:

Now we will write few lines of ABAP code to fulfill our requirement. See the below code. Once you write the code, check the syntax error, if it is Ok then Save the routine.

The code which is written in above window is given in below page, so you can compare the code before and after.

```
program conversion_routine.
* Type pools used by conversion program
type-pools: rsarc, rsarr, rssm.
tables: rssdlrange.
* Global code used by conversion rules
*$*$ begin of global - insert your declaration only below this line  *-*
* TABLES: ...
* DATA:    ...
*$*$ end of global - insert your declaration only before this line   *-*
```

```
* --------------------------------------------------------------------
*     InfoObject       = 0FISCPER
*     Fieldname        = FISCPER
*     data type        = NUMC
*     length           = 000009
*     convexit         = PERI7
* --------------------------------------------------------------------
form compute_FISCPER
  tables    l_t_range       structure rssdlrange
  using     p_infopackage   type rslogdpid
            p_fieldname     type rsfnm
  changing p_subrc          like sy-subrc.
*       Insert source code to current selection field
*$*$ begin of routine - insert your code only below this line       *-*
  data: l_idx like sy-tabix.
  Data:   zzdate LIKE sy-datum,  " Declaration
          zzbuper LIKE t009b-poper,
          zzbdatj LIKE t009b-bdatj,
          zzperiod(7) TYPE c.
  read table l_t_range with key
       fieldname = 'FISCPER'.
  l_idx = sy-tabix.
******Surendra Kumar Reddy Koduru***Begin***
  l_idx = sy-tabix.
  zzdate = sy-datum - 1.
  CALL FUNCTION 'DATE_TO_PERIOD_CONVERT'
    EXPORTING
      i_date                = zzdate
*     I_MONMIT              = 00
      i_periv               = 'V3'
    IMPORTING
     e_buper                = zzbuper
     e_gjahr                = zzbdatj.
*    EXCEPTIONS
*     INPUT_FALSE           = 1
*     T009_NOTFOUND         = 2
*     T009B_NOTFOUND        = 3
*     OTHERS                = 4
  IF sy-subrc <> 0.
*    MESSAGE ID SY-MSGID TYPE SY-MSGTY NUMBER SY-MSGNO
*    WITH SY-MSGV1 SY-MSGV2 SY-MSGV3 SY-MSGV4.
  ENDIF.
  CONCATENATE zzbdatj zzbuper INTO zzperiod.
  l_t_range-low = zzperiod.
  l_t_range-option = 'EQ'.
  l_t_range-sign = 'I'.
******Surendra Kumar Reddy Koduru***End*****
  modify l_t_range index l_idx.  p_subrc = 0.
*$*$ end of routine - insert your code only before this line        *-*
endform.                                     "
```

All Tabs of InfoPackage:

InfoPackage	Cost Object Controlling: Plan/Actual Data(ZPAK_DAQJW8OKMEPGW0RD…
InfoSource	Cost Object Controlling: Plan/Actual Dat(0CO_PC_01)
DataSource	Cost Object Controlling: Plan/Actual Data(0CO_PC_01)
Data Type	Transaction Dat
Source System	IDC Client 800(T90CLNT090)

Last Changed By	DEV_CAT2	Date	26.06.2011	Time	10:56:12

Data Selection / Processing / Data Targets / Update / Schedule

Load transaction data from the source system

Enter Selections (Optional):

InfoObject	Technical ...	Description	From Value	To Value	Type (Variable Change t...	D...	Type (Varia...	F	Da
0FISCPER	FISCPER	Fiscal year / peri…			6	🔍	ABAP Routi…		NU
0CO_AREA	CO_AREA	Controlling Area							CH
0PLANT	PLANT	Plant							CH
0PRODORDER	PRODORDER	Order Number							CH
	FLG_DELFLG	Deletion Indicator							CH
0VTYPE	VTYPE	Value type for Re…							NU
0CURTYPE	CURTYPE	Currency type							CH

InfoPackage	Cost Object Controlling: Plan/Actual Data(ZPAK_DAQJW8OKMEPGW0RD7Q
InfoSource	Cost Object Controlling: Plan/Actual Dat(0CO_PC_01)
DataSource	Cost Object Controlling: Plan/Actual Data(0CO_PC_01)
Data Type	Transaction Dat
Source System	IDC Client 800(T90CLNT090)

Last Changed By	DEV_CAT2	Date	26.06.2011	Time	10:56:12

Data Selection / **Processing** / Data Targets / Update / Schedule

☐ Consistency check for characteristic values in transfer rules

Update Data...

- ⦿ PSA and then into Data Targets (Package by Package)
- ○ PSA and Data Targets in Parallel (Package by Package)
- ○ Only PSA   ☐ Update Subsequently in Data Targets
- ○ Data Targets Only

	InfoPackage	Cost Object Controlling: Plan/Actual Data(ZPAK_DAQJW8OKMEPGW0RD7Q
	InfoSource	Cost Object Controlling: Plan/Actual Dat(0CO_PC_01)
	DataSource	Cost Object Controlling: Plan/Actual Data(0CO_PC_01)
	Data Type	Transaction Dat
	Source System	IDC Client 800(T90CLNT090)
	Last Changed By	DEV_CAT2	Date 26.06.2011 Time 10:56:12

Data Selection | Processing | Data Targets | Update | Schedule

⦿ Update in All Data Targets for Which Active Rules Exist
◯ Select Data Targets

Select Data Targets To Be Updated

U...	D...	Data Target Name	M...	M...	C...	D...	A...	D...	Technical name	
☐	📦	CO-PC: Cost Object Controlling	⧓	📝	🗋			☐	0PC_C01	

	InfoPackage	Cost Object Controlling: Plan/Actual Data(ZPAK_DAQJW8OKMEPGW0RD7Q
	InfoSource	Cost Object Controlling: Plan/Actual Dat(0CO_PC_01)
	DataSource	Cost Object Controlling: Plan/Actual Data(0CO_PC_01)
	Data Type	Transaction Dat
	Source System	IDC Client 800(T90CLNT090)
	Last Changed By	DEV_CAT2	Date 26.06.2011 Time 10:56:12

Data Selection | Processing | Data Targets | Update | Schedule

Update Mode
⦿ Full Update

Data Update Type in the Data Targets
⦿ Always update data, even if no master data exists for the data
◯ Do not update data if no master data exists for a characteristic

Error handling

Request will be processed at once in the source system

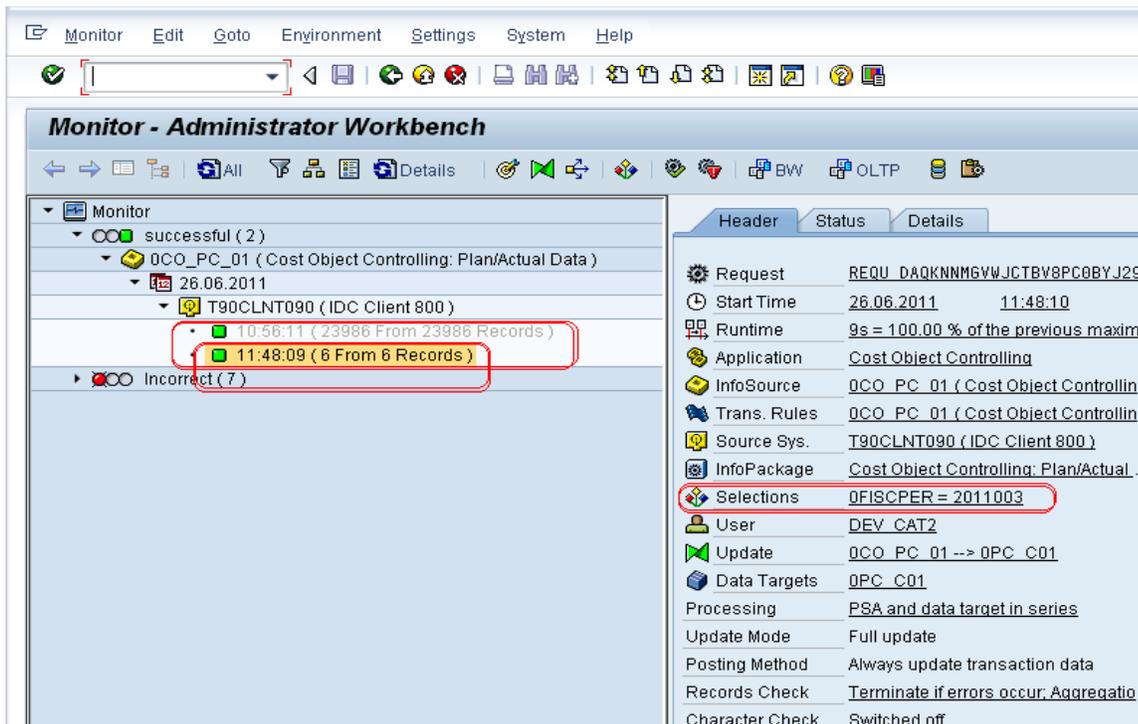In below page you can see the Schedule Tab.

Data loading using above InfoPackage:
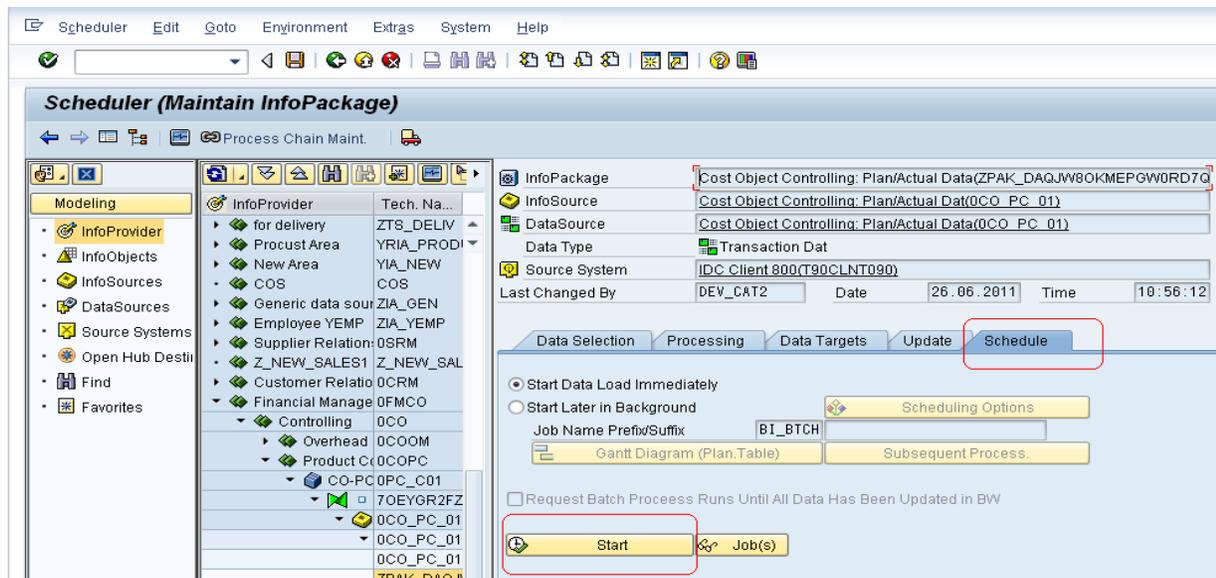
Once you click on Start Button, you can see the message "**Data was requested**" , then go to Monitor and see the status of the Data Load.

Monitor Screen:

See the below Monitor screen, you can find our selection also under Selection in right side and number of records transferred.


If you see the above Monitor screen, you can find the selection on **0FISCPER = 2011003**, (Right side screen) this is because o our routine in InfoPackage selection.
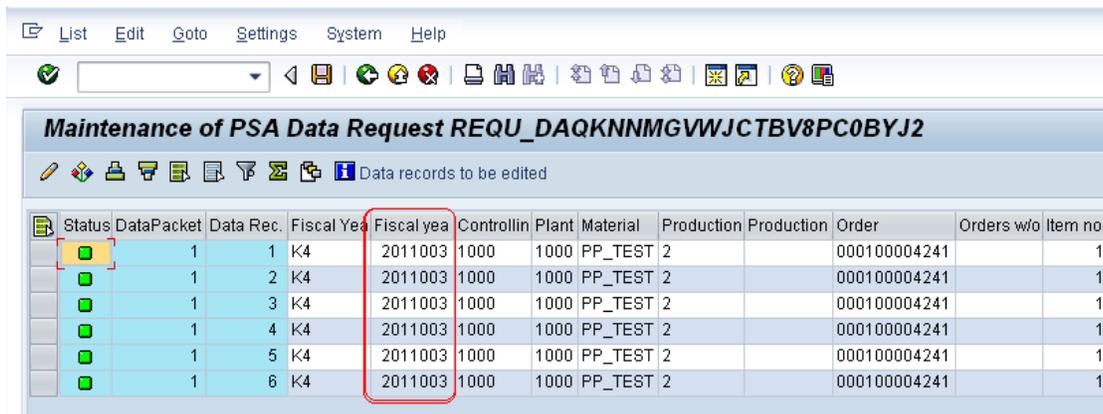
And if you see the left side screen, you can find the number of records Transferred and added, there you can see **23986** records and this is old one, i.e. before this routine, now it comes to **6** records after routine implementation.

PSA Data:

Click on PSA Icon like below.
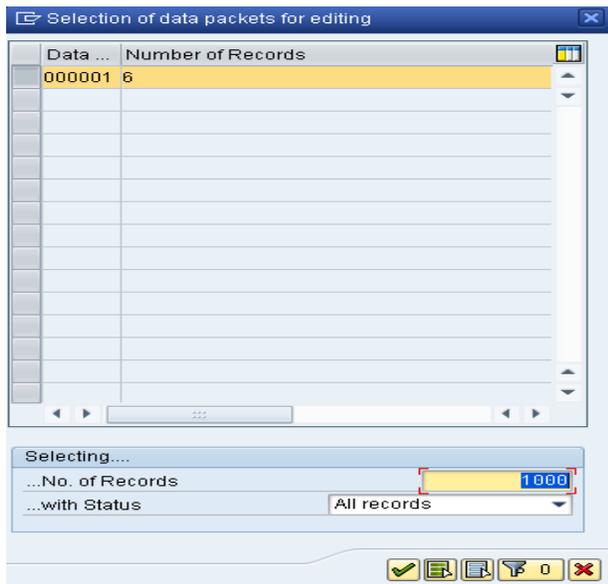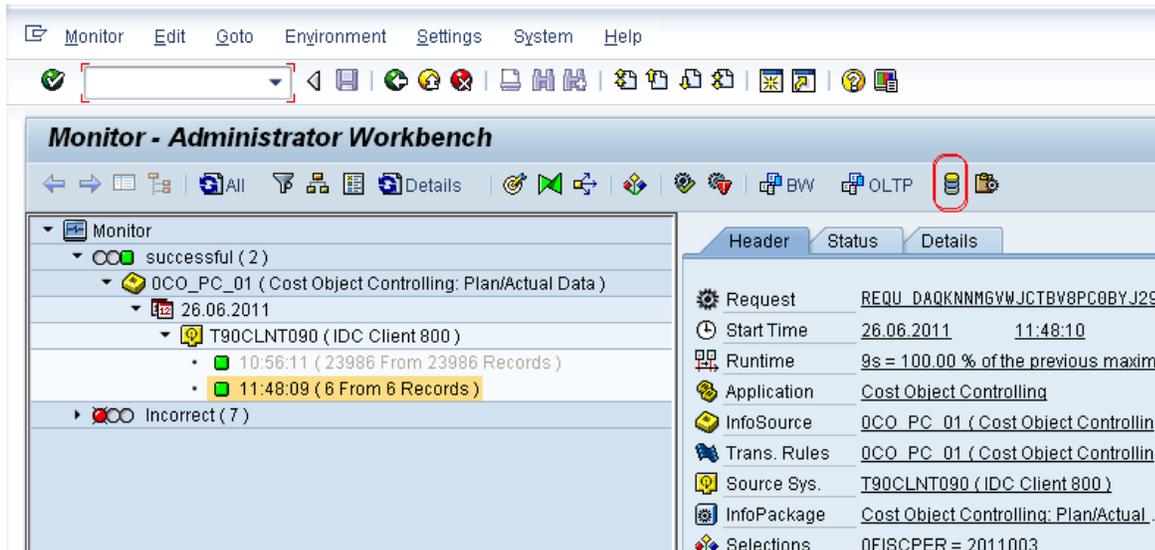
See in above screen, you can find only 6 records are loaded into PSA, all these records are 003.2011 Period.

InfoCube Data:

In below screen you can see the Data in InfoCube, there are only 6 records.

So in this way we can use the InfoPackage routines to restrict the unwanted data.

Related Content

[For all Articles and Blogs by Surendra Kumar Reddy, Please visit this URL](#)

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

[Using Customer Exit Variables in BW Reports Part - 2](#)

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

[Using Customer Exit Variables in BW Reports Part - 4](#)

[Using Customer Exit Variables in BW Reports Part - 5](#)

[Using Customer Exit Variables in BW Reports Part - 6](#)

[Using Customer Exit Variables in BW Reports: Part - 8](#)

[Using Customer Exit Variables in BW Reports: Part - 9](#)

[Using Customer Exit Variables in BW Reports: Part - 10](#)

[Using Customer Exit Variables in BW Reports: Part - 11](#)

[Using Customer Exit Variables in BW Reports: Part - 12](#)

[Using Customer Exit Variables in BW Reports: Part - 13](#)

[Using Customer Exit Variables in BW Reports: Part - 14](#)

[Using Customer Exit Variables in BW Reports: Part - 15](#)

[Using Customer Exit Variables in BW Reports: Part - 16](#)

[Using Customer Exit Variables in BW Reports: Part - 17](#)

[Using Customer Exit Variables in BW Reports: Part - 18](#)

[Inventory Management (0IC_C03) Part - 1](#)

[Inventory Management (0IC_C03) Part - 2](#)

[Inventory Management (0IC_C03) Part - 3](#)

[To Check the Files/Reports in Application Server and trigger mail alerts](#)

[Calculating the Ageing of the Materials](#)

[Using Selective Deletion in Process Chains](#)

[Triggering the Process Chains at Particular Date using Events](#)

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

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

[Analysis Process Designer (APD): Part - 3](#)

[Open Hub Destination: Part 1](#)

[Open Hub Destination: Part 2](#)

[InfoSpoke Part 1](#)

[InfoSpoke Part 2](#)

[Using Rule Group in SAP-BI Part - 1](#)

For more information, visit the [EDW homepage](#)

Disclaimer and Liability Notice

This document may discuss sample coding or other information that does not include SAP official interfaces and therefore is not supported by SAP. Changes made based on this information are not supported and can be overwritten during an upgrade.

SAP will not be held liable for any damages caused by using or misusing the information, code or methods suggested in this document, and anyone using these methods does so at his/her own risk.

SAP offers no guarantees and assumes no responsibility or liability of any type with respect to the content of this technical article or code sample, including any liability resulting from incompatibility between the content within this document and the materials and services offered by SAP. You agree that you will not hold, or seek to hold, SAP responsible or liable with respect to the content of this document.