

Using Selective Deletion in Process Chains



Applies to:

SAP BW 3.0b, SAP BW 3.5, Will also work on SAP BI 7

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

Summary

Before loading the data to InfoCube, sometimes we need to delete the particular date range data in InfoCube based on some selections i.e. using selective deletion and then load the data to InfoCube.

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Scope:

This article tells you how to use the Selective Deletion in Process Chains. I.e. Using “DELETE_FACTS” TCode , how to generate the selective deletion program and then using that program how to delete the data in InfoCube.

Why?

Sometimes, before loading the data to InfoCube, we need to delete the data based on some selective deletion, E.g. Date, then we need to load the data to InfoCube. Every time we don't want to do this activity manually, and we need to automate this process.

Steps:

InfoCube Data deletion by using Selective Deletion through Process Chains. In some cases we need to delete the InfoCube data based on selective deletion.

E.g.: We have Planning InfoCube in BW system and the data will get from APO system, in APO they will run planning on weekly basis and they plan from SY-DATUM to next 30 days. So once APO system will completes the SNP Weekly runs, then BW system need to extract the data from APO.

But before loading the data to BW Plan InfoCube, first we need to delete the existing data from SY-DATUM to next 30 days data, after that I need to load the data. Because APO SNP runs will happen every Week, if we load the data directly to Plan InfoCube, it will give wrong information in reports, because every time we are loading from SY-DATUM to next 30 days. (E.g.: Suppose APO SNP first run date is 01.02.2009, so after the APO run we loaded Plan data to BW InfoCube i.e. from date = SY-DATUM (01.02.2009) and to date = 01.03.3009.

Then on 08.02.2009 second SNP run was happen, so if I load data from SY-DATUM (08.02.2009) to 08.03.2009, then the data is duplicated in InfoCube, because we already loaded from 01.02.2009 to 01.03.2009 in the first SNP run, and now we are again loading from 08.02.2009 to 08.03.2009, so finally InfoCube is having the data from 08.02.2009 to 01.03.2009 from first SNP run and 08.02.2009 to 08.03.2009 from second run, this is wrong data. So first we need to delete the data from 08.02.2009 to 01.03.2009 and then load the data from 08.02.2009 to 08.03.2009).

We can achieve this by using “DELETE_FACTS” Transaction code. I want to automate the complete process using Process Chains.

Give **DELETE_FACTS** Tcode in Command field screen and enter and give InfoCube name and select Generate selection program option and then execute.

Program for deleting selecteld entries from the data target

Data target: ZIC_SIT

Use technical name?

Program properties

Direct deletion

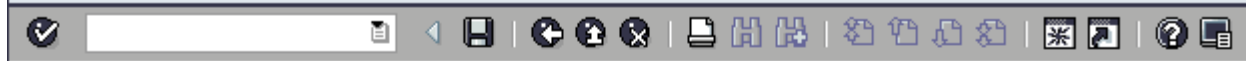
Generate selection program

Generate deletion program


Name of report: _____

It will generate the following G* Program,

Program for deleting selecteld entries from the data target



Program for deleting selecteld entries from the data target



Data target

Use technical name?

Program properties

Direct deletion

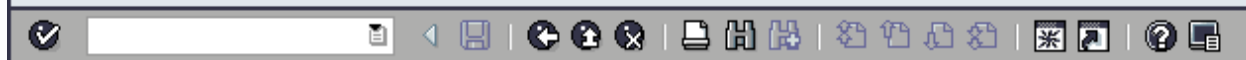
Generate selection program

Generate deletion program


Name of report

Take this program (GP4CZFNBBW1W0RMMVJ0908CTNKK) and then go to SE38 and give program name and click on Variants option.

ABAP Editor: Initial Screen



ABAP Editor: Initial Screen

 Debugging With Variant Variants

Program

Subobjects

Source code

Variants

Attributes

Documentation

Text elements

Give the Variant name ZVAR_DEL and then click on create.

ABAP: Variants - Initial Screen

Program

Variant

Subobjects

Values

Attributes

It will display the selection screen. Our intension is we need to delete the data based on 0Calday (Calendar Day), so press F1 and find the screen fields for that Calendar Day.

Maintain Variant: Report GP4CZFNBBW1W0RMMVJ0908CTNKK, Va

Attributes Execute in Bckgrnd

PO Document

BW: Document Number	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Purchasing document	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Item	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>

Date

Act.goods issue date	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Cal Day	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>

Data Package

Change Run ID (SID)	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Record type (SID)	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Request ID (SID)	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>

Time

Calendar Day	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Calendar Year/Month	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Calendar Year/Week	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>
Calendar Year	<input type="text"/>	to	<input type="text"/>	<input type="button" value="→"/>

Click on Technical name button.

Performance Assistant

Date

In the following screen you can find the Screen Field for Calendar Day. I.e. C016-LOW.

Screen Data	
Report	GP4CZFNBBW1W0RMMVJ0908CTNKK
Program Name	GP4CZFNBBW1W0RMMVJ0908CTNKK
Screen Number	1000

GUI Data	
Program Name	RSSYSTDB
Status	%_VC

Field Data	
Table Name	/BI0/SDATE
Table category	Transparent table
Field Name	DATE0
Data Element	/BI0/OIDATE
DE Supplement	0

Field Description for Batch Input	
Screen Field	C016-LOW

Once you find the screen field number then close the screen. And click on the Attributes Button.

Maintain Variant: Report GP4CZFNBBW1W0

Maintain Variant: Report GP4CZFNBBW1W0

Location

Plant to

Material

Then give Description for the Variant. And select your screen field C016.

Variant Attributes SAP

Variant Name: ZVAR_DEL
Meaning: Deleting Data

Only for background processing
 Protect variant
 Only display in catalog
 System variant (automatic transport)

Scrn Assignm.

Created	Selection Scrms
<input checked="" type="checkbox"/>	1000

Objects for selection screen

Selection Scrms	Field name	Type	Protect field	Hide field	Hide field 'BIS'	Save field without values	Switch GPA off	Required field	Selection variable	Option	Name of Variable (Input C
1.000	C003	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C004	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C005	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C006	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C007	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C008	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C009	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C010	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C011	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C012	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C013	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C014	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C015	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C016	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C017	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Click on Selection Variable and select "D: Dynamic date calculation"

Variant Attributes

Variant Name: ZVAR_DEL
Meaning: Deleting Data

Only for background processing
 Protect variant
 Only display in catalog
 System variant (automatic transport)

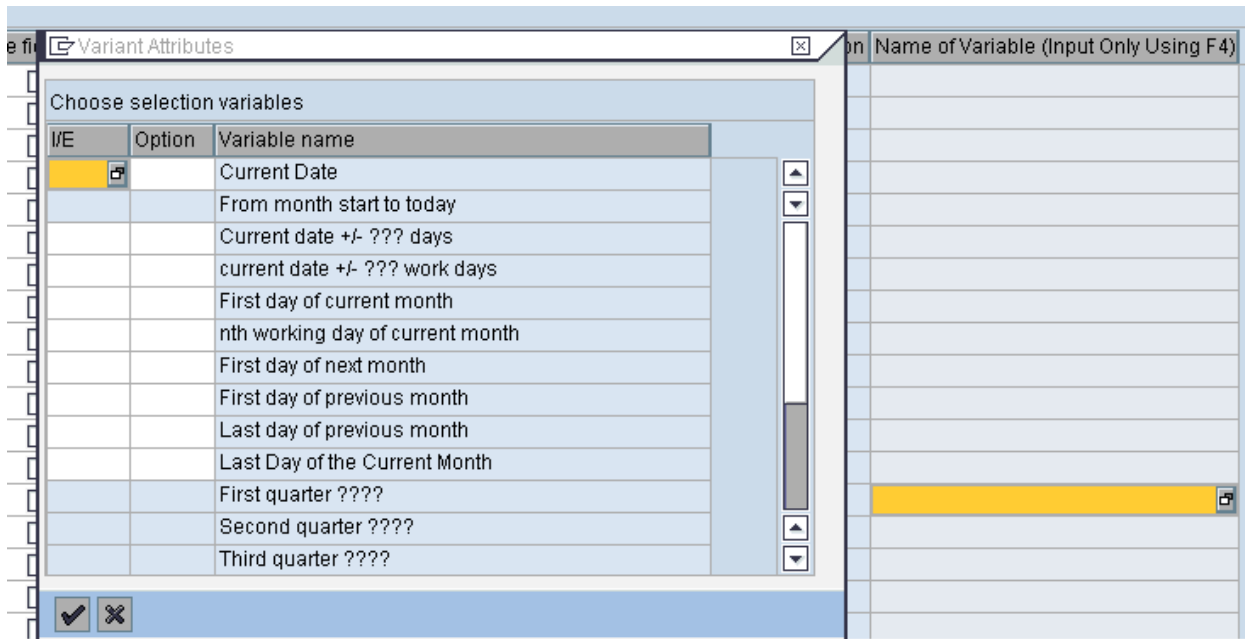
Scrn Assignm.

Created	Selection Scrms
<input checked="" type="checkbox"/>	1000

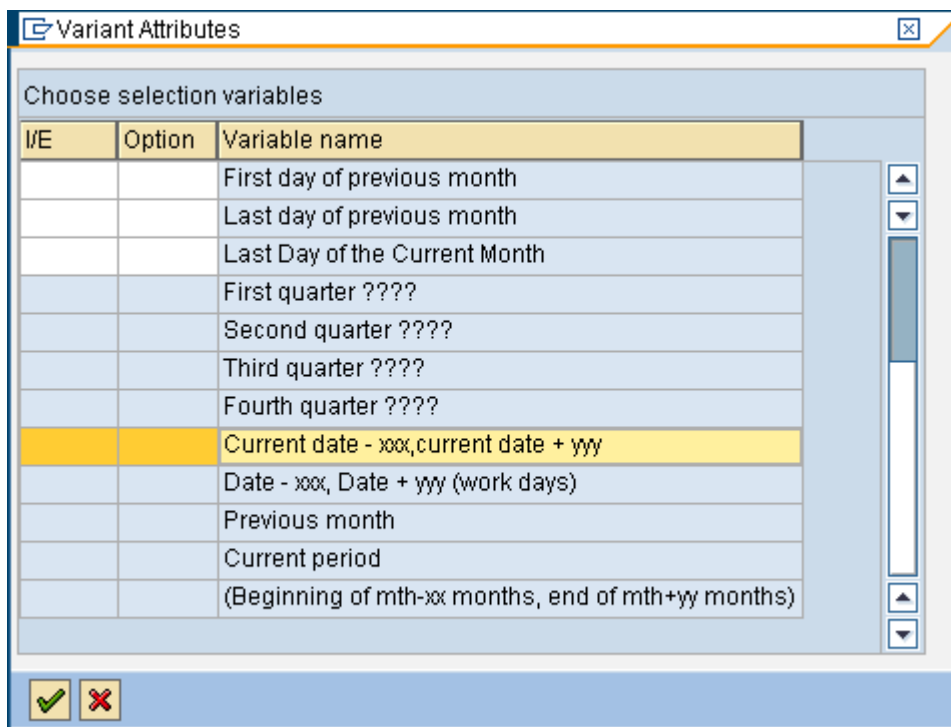
Objects for selection screen

Selection Scr...	Field na...	Ty...	Protect field	Hide field	Hide field 'BIS'	Save field without values	Switch GPA off	Required field	Selection varia...	Option	Name
1.000	C003	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C004	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C005	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C006	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C007	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C008	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C009	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C010	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C011	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C012	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C013	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C014	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C015	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
1.000	C016	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	D		
1.000	C017	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

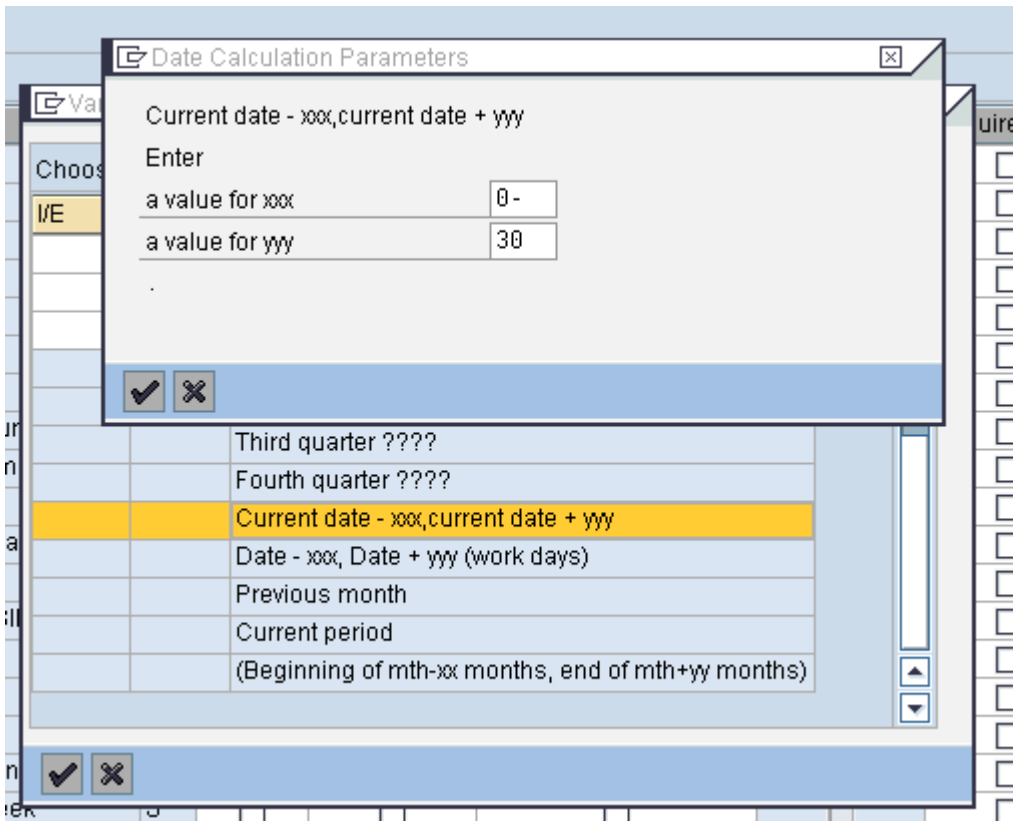
Then select Name of Variable like below and double click on that it will open the following screen.



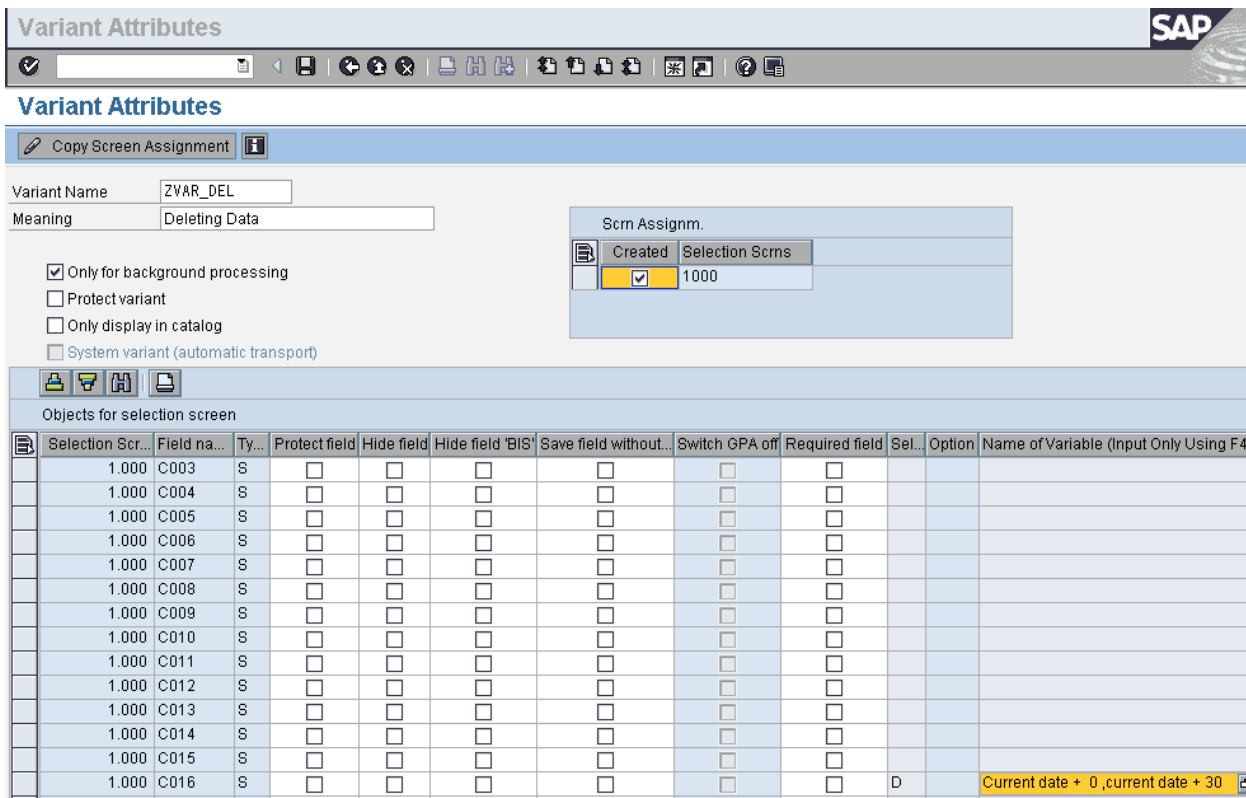
I want to delete the data from Current day to next 30 days. So select Current date -xxx, current date + yyy and double click.



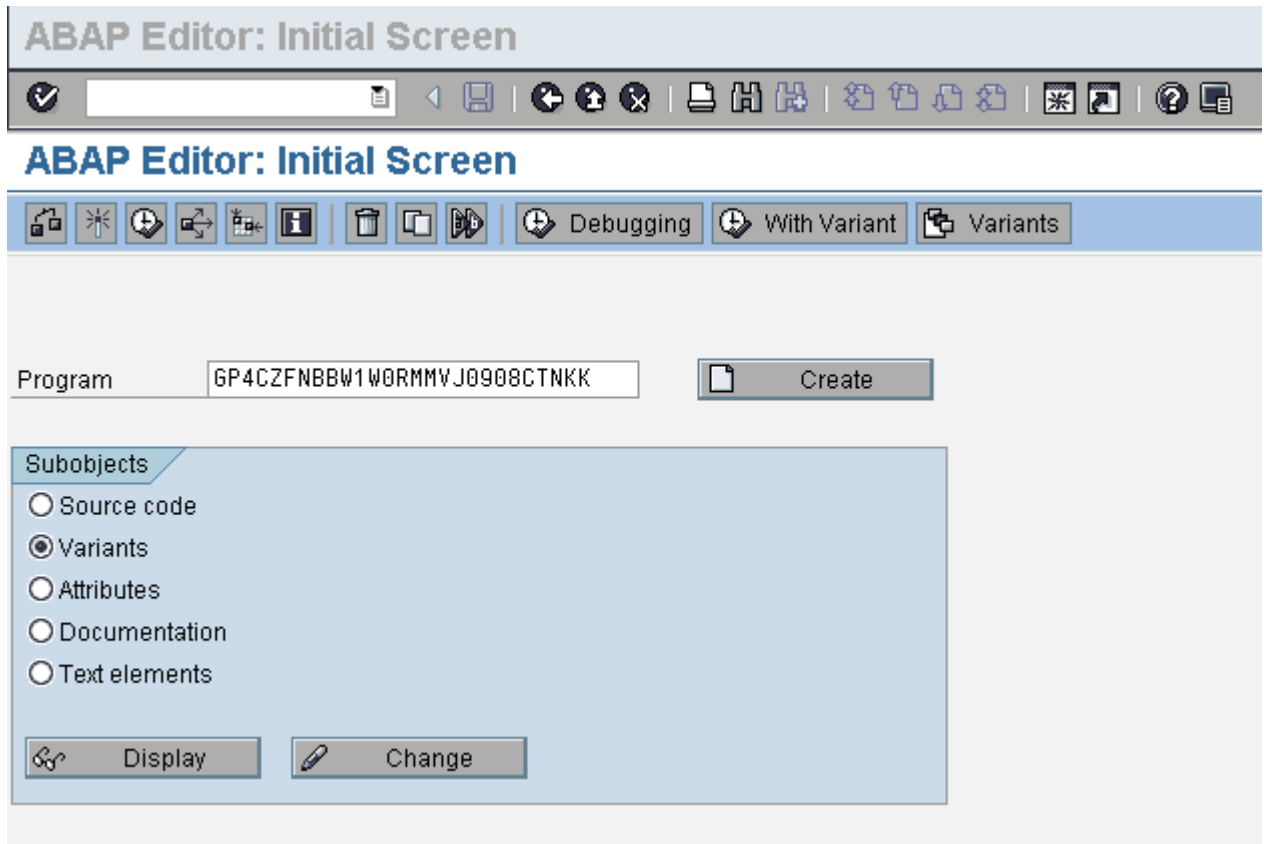
And give the values like below.



Then Save



Come back to SE38 and select Variants option and Click on Display button.



It will open the Variants screen, here select our Variant ZVAR_DEL and click on Display button.

ABAP: Variants - Initial Screen

Program
 Variant

Subobjects

Values
 Attributes

ABAP: Variant Directory of Program GP4CZFNBBW1W0RMMVJ0908CTNKK

Variant catalog for program GP4CZFNBBW1W0RMMVJ0908CTNKK

Variant name	Short description
ZVAR_DEL	Deleting Data
ZVAR_DEL_AB	Deleting Division AB

See the values for that variant. It shows SY-DATUM to next 30 days date.

ABAP: Selections of Variant ZVAR_DEL



ABAP: Selections of Variant ZVAR_DEL

Catalog Values Attributes

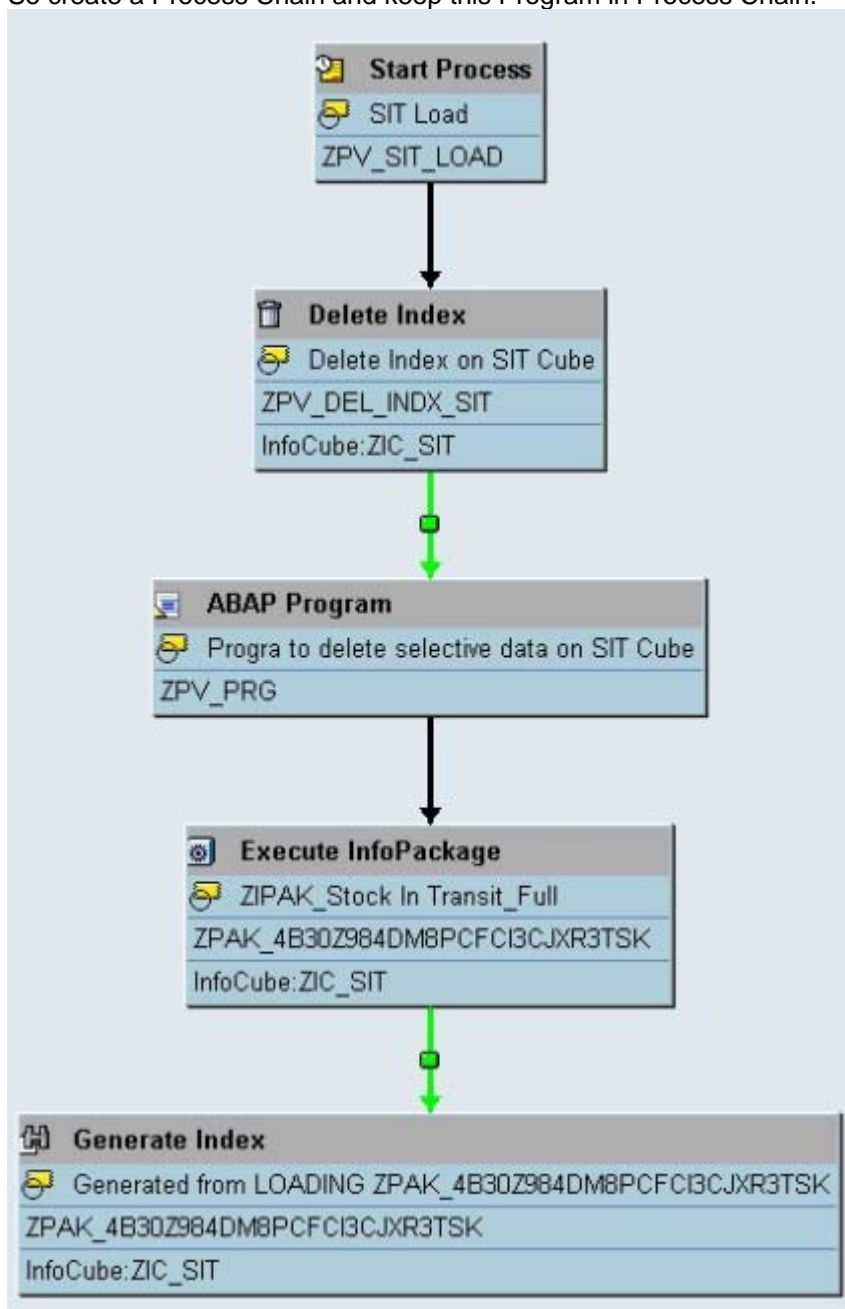


Objects for selection screen

Selection Scrns	Field name	Type	I/E	Option	frm	to
1000	C005	S				
1000	C006	S				
1000	C007	S				
1000	C008	S				
1000	C009	S				
1000	C010	S				
1000	C011	S				
1000	C012	S				
1000	C013	S				
1000	C014	S				
1000	C015	S				
1000	C016	S	I	BT	28.02.2009	30.03.2009
1000	C017	S				
1000	C018	S				
1000	C019	S				
1000	C020	S				

So we created a selective deletion program to delete data from InfoCube, and whenever you execute this program with using Variant ZVAR_DEL, it will delete the data from that day to next 30 days.

So create a Process Chain and keep this Program in Process Chain.



In the above Process Chain in ABAP Program node you need to give our program name and Variant like below.

Process Maintenance: ABAP Program



Process Maintenance: ABAP Program



Variant	Last Changed On
ZPV_PRG	From IBW_SURENDF
Progra to delete selective data on SIT Cut	On 28.02.2009 At 16:50:37

Call Mode	Called From
<input checked="" type="radio"/> Synchronous <input type="radio"/> Asynchronous	<input checked="" type="radio"/> Local <input type="radio"/> Destination

Program to Call	
<input checked="" type="radio"/> Program	
Program Name	GP4CZFNBBW1WORMMVJ0908CTNKK
Program Variant	ZVAR_DEL
<input type="radio"/> Scheduled Program	
Event	
Parameters	

Related Content

[Reports Check in Application Server](#)

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

[For more information, visit the Business Intelligence homepage.](#)

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