

How to Run BPS Global Planning Sequences in Process Chains



Applies to:

SAP NW2004s (BI 7.0)

SAP NW2004 (BW 3.5).

Summary

This article explains how to run BPS Global Planning Sequences in Process Chains: a similar standard functionality is provided in SAP BI 7.0, but only concerning BI-IP Planning Sequences.

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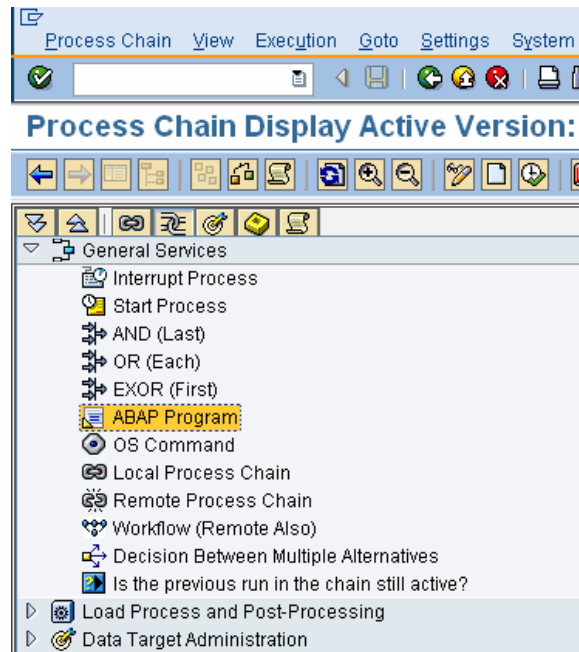
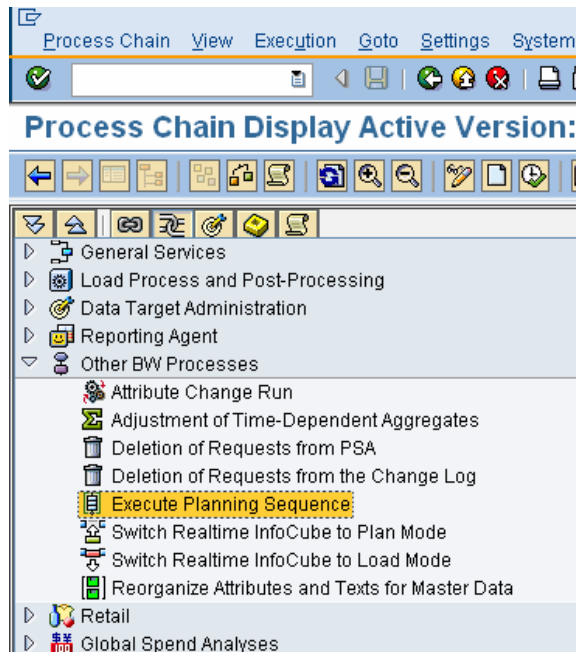
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BPS Global Planning Sequence and Process Chains

In SAP NW 2004s BI-IP Planning sequences can be included in Process Chains, using the new Process Type “Execute Planning Sequence” (PLSEQ). This new kind of process, available with SAP NW2004s (BI 7.0) doesn't allow to run BPS Planning Sequences.



In the following paragraphs we will explain how to run BPS Global Planning Sequences in Process Chain, using ABAP Process Type. The procedure can also be applied in SAP NW2004 (BW-BPS 3.5)

Step by Step Procedure

The solution provided here is based on the Standard SAP program `UPC_BUNDLE_EXECUTE` that can be used to run BPS Global Planning Sequences. This program will be nested into a Custom Program in order to recover Logs in the Spool.

The steps are:

- Implement Custom Program `Z_BPS_BUNDLE_EXECUTE`
-

Create Program variant

-

Define Process Chain

Implement Custom Program Z_BPS_BUNDLE_EXECUTE

With Transaction SE38 “ABAP Editor” create a new Program with the following attributes:

- Technical Name: Z_BPS_BUNDLE_EXECUTE
- Title: BPS: Run Planning Sequence
- Type: Executable program

The screenshot shows the ABAP Editor interface. The main window displays the program attributes for Z_BPS_BUNDLE_EXECUTE. The title is 'BPS: Run Planning Sequence'. The original language is set to 'EN' (English). The creation date is '13.05.2008' and the variant is 'B6P_1'. The status is 'New(Revised)'. The type is 'Executable program'. The attributes section includes fields for Application, Authorization Group, Logical database, and Selection screen. There are also checkboxes for 'Editor lock', 'Unicode checks active', 'Fixed point arithmetic', and 'Start using variant'. The 'Unicode checks active' and 'Fixed point arithmetic' checkboxes are checked.

ABAP: Program Attributes Z_BPS_BUNDLE_EXECUTE Change	
Title	BPS: Run Planning Sequence
Original language	EN English
Created	13.05.2008 B6P_1
Last changed by	
Status	New(Revised)
Attributes	
Type	Executable program
Status	
Application	
Authorization Group	
Logical database	
Selection screen	
<input type="checkbox"/> Editor lock	<input checked="" type="checkbox"/> Fixed point arithmetic
<input checked="" type="checkbox"/> Unicode checks active	<input type="checkbox"/> Start using variant

Source Code is listed in

APPENDIX I: Program Z_BPS_BUNDLE_EXECUTE Source Code.

Also maintain Text Elements → Selection Texts as follows:

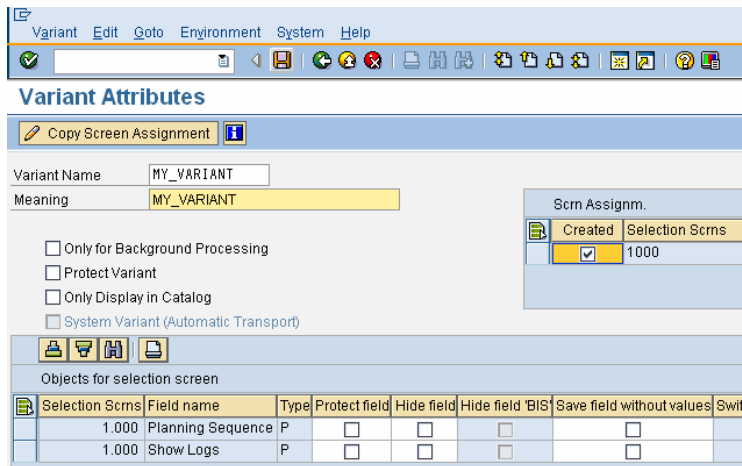
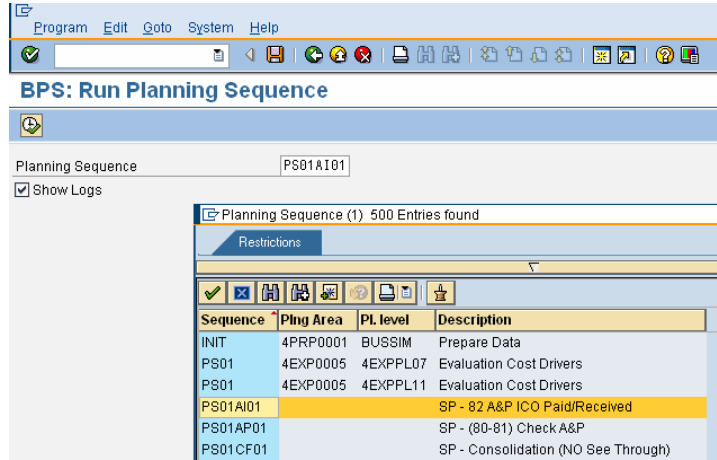
- I_BUNDLE Planning Sequence
- I_LOGS Show Logs

Program Logic

Basically this Program includes the Standard Program UPC_BUNDLE_EXECUTE: the additional functionality provided is the recovery of the log generated by the Planning Sequence that is included in Job Spool. Global Planning Sequence Logs can be displayed from BPS0 → Global Planning Sequence → Logs.

Create Program variant

Run Program Z_BPS_BUNDLE_EXECUTE via SE38 and set the BPS Planning Sequence technical name. Then save as Program Variant (Ctrl + S): this variant will be used in the following step to customize Process Chain. In our example the Variant is named "MY_VARIANT"



Define Process Chain

In order to run BPS Global Planning Sequence in Process Chains we will use the custom program and the related variant defined in the previous steps.

In RSPC – “Process Chain Maintenance” create a new Process Chain, define Start Process and then insert an ABAP Process Type as in the following screens.

The first screenshot shows the 'Insert ABAP Program' dialog box. The 'Program' field contains 'ZRUN_BUNDLE_MY_VARIANT' and the 'Description' field contains 'BPS Run Bundle MY_VARIANT'. There are icons for OK, Cancel, and Help at the bottom.

The second screenshot shows the 'Process Maintenance: ABAP Program' screen. The 'Variant' field contains 'ZRUN_BUNDLE_MY_VARIANT' and the 'BPS Run Bundle MY_VARIANT' is highlighted. Below this, there are fields for 'Last Changed By', 'Changed On' (13.05.2008), and 'At' (09:06:28). The 'Call Mode' section has 'Synchronous' selected. The 'Called From' section has 'Local' selected. The 'Program to Call' section has 'Program' selected, with 'Program Name' set to 'Z_BPS_BUNDLE_EXECUTE' and 'Program Variant' set to 'MY_VARIANT'. A red circle highlights the 'Program Name' and 'Program Variant' fields.

The ABAP Process Type we have defined will run Program Z_BPS_BUNDLE_EXECUTE with the pre-defined Variant MY_VARIANT.

Additional Processes

When defining Planning phases within Process Chains it can be useful, depending on your business scenario, to create 3 steps:

1. Switch Real Time InfoCube to “Plan Mode”
2. Global Planning Sequence Execution
3. Switch Real Time InfoCube to “Load Mode”

Step 1 is necessary in order to enable Planning functionalities over the underlying InfoCubes, especially if the previous Process Chain steps have determined data loading with InfoPackages.

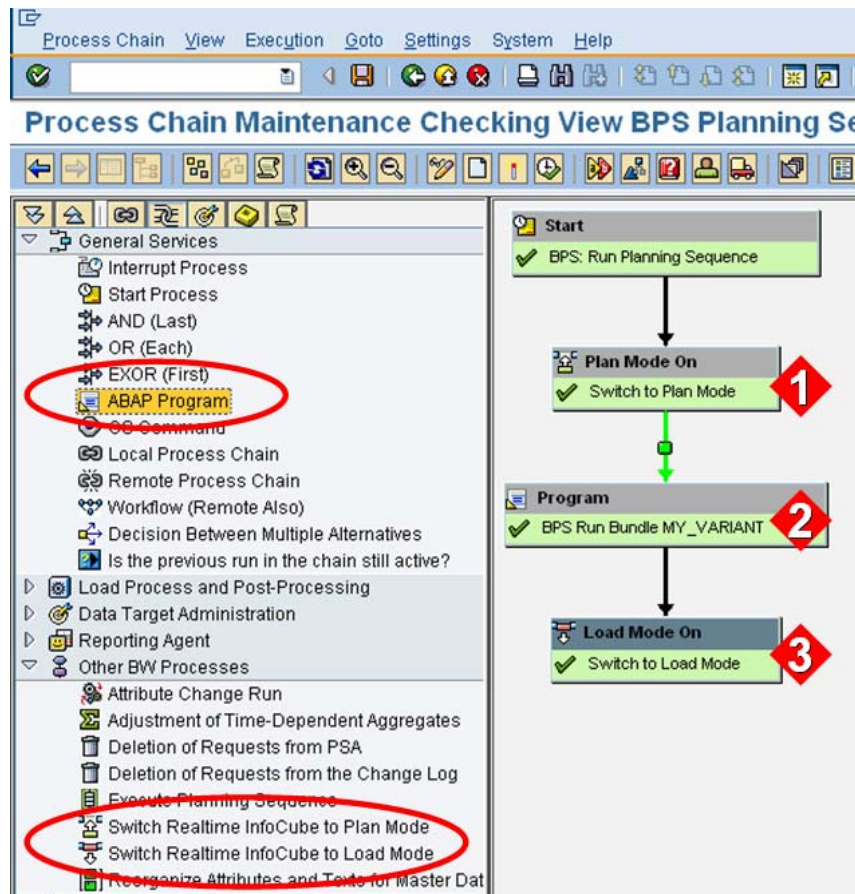
Definition of Step 3 depends on the process you have to manage: anyway you must remember to disable planning functionalities (and then to enable data loading process), before starting data loading process. Considering the reporting features of transactional InfoCubes, unless your Queries aren't enable to read most-recent data, remember to include Step 3 before running reporting sessions.

Changing Real Time InfoCubes Load Behaviour can be performed, in SAP NW2004s (BI 7.0) Process Chains, with the appropriate Process Types:

- Switch Realtime InfoCube to Load Mode (PLSWITCHL -> Load Mode On)
- Switch Realtime InfoCube to Plan Mode (PLSWITCHP -> Plan Mode On)

In previous release also these Processes aren't available: the missing functionality can be easily implemented using function module RSM_SWITCH_ICUBE_TRANS_BATCH.

In the next picture you can see a complete Process Chain that involves the mentioned "Additional Processes" (1 and 3), developed in a SAP NW2004s (BI 7.0) environment. In previous releases Switching Load / Plan Behaviour steps can be implemented as ABAP Process Type.



APPENDIX I: Program Z_BPS_BUNDLE_EXECUTE Source Code

```

*&-----*
*& Report  Z_BPS_BUNDLE_EXECUTE
*&
*&-----*
*&
*&
*&-----*

REPORT  z_bps_bundle_execute.

***** NOTE *****

TABLES: upf_bundlet.
TABLES: upf_bundle.

* Start / End Date / Time
DATA: s_date TYPE sy-datum.
DATA: s_time TYPE sy-zeit.
DATA: e_date TYPE sy-datum.
DATA: e_time TYPE sy-zeit.

PARAMETERS: i_bundle TYPE upf_bundlet-bundle OBLIGATORY.
PARAMETERS: i_logs AS CHECKBOX DEFAULT 'X'.

AT SELECTION-SCREEN ON i_bundle.

  SELECT SINGLE *
    FROM upf_bundlet
   WHERE bundle = i_bundle
      AND langu  = sy-langu.

  IF upf_bundlet-area  = '' AND
     upf_bundlet-plevel = ''.
* OK is a Global ...
  ELSE.
    MESSAGE e000(r1) WITH i_bundle 'is not a Global Planning Sequence!'.
  ENDIF.

START-OF-SELECTION.

* Start Date / Time -> LOG Search
s_date = sy-datum.
s_time = sy-zeit.

* Submit Planning Sequence Execution
SUBMIT upc_bundle_execute
  WITH bundle    = i_bundle
  WITH g_saveer  = 'X'
  AND RETURN.

* End Date / Time -> LOG Search
e_date = sy-datum.
e_time = sy-zeit.

```

```

IF i_logs = 'X'.
  CALL FUNCTION 'APPL_LOG_DISPLAY'
  EXPORTING
    object                = 'SEM-BPS'
    subobject            = 'FUNC'
*   EXTERNAL_NUMBER      = ' '
*   OBJECT_ATTRIBUTE     = 0
*   SUBOBJECT_ATTRIBUTE  = 0
*   EXTERNAL_NUMBER_ATTRIBUTE = 0
    date_from            = s_date
    time_from            = s_time
    date_to              = e_date
    time_to              = e_time
*   TITLE_SELECTION_SCREEN = ' '
*   TITLE_LIST_SCREEN    = ' '
*   COLUMN_SELECTION     = '11112221122 '
    suppress_selection_dialog = 'X'
*   COLUMN_SELECTION_MSG_JUMP = '1'
*   EXTERNAL_NUMBER_DISPLAY_LENGTH = 20
*   I_S_DISPLAY_PROFILE   =
*   I_VARIANT_REPORT      = ' '
* IMPORTING
*   NUMBER_OF_PROTOCOLS  =
* EXCEPTIONS
*   NO_AUTHORITY        = 1
*   OTHERS              = 2
.

ENDIF.

```

Related Content

Further information on these topics can be found using the links below.

[BPS - Planning Sequences](#)

[Scheduling BI-IP Planning Sequences in Process Chains](#)

[Real-Time InfoCubes](#)

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