# How to Setup and Execute Data Manager Package on Behalf of another User



## Applies to:

SAP Business Planning and Consolidation 7.5 version for NetWeaver, SP04 and higher

### Summary

Currently BPC NW only supports running a package on behalf of the users who start them.

In this business scenario for integration purposes the business wants to execute script logics to pull or push data from one application into another. Normally end-users who execute this kind of script logic must have access to both the source and the target applications. However, on daily basis the users work only with one of the applications and do not need to have read or write access to another application.

For this purpose it might be worthwhile to run integration script logic on behalf of special user who has sufficient rights to the applications in order to read from the source application and write to the target.

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#### **Author Bio**



Kirill Gromyko has been working with Business Planning and Consoldiation 7.0, 7.5 and 10 versions for NetWeaver for almost 2 years. Kirill is part of SAP BPC NW Support Team as SAP Support Engineer.

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## **Background Information**

This how-to guide will demonstrate a procedure how to configure a process chain, data manager package and scrip logic files to achieve the goal of executing the data manager package on behalf of another user (integration user).

The concept of the approach is the following:

- 1. End-user starts the configured data manager package
- 2. The package triggers a custom process chain.
- 3. The process chain executes a script logic file
- The script logic file runs a BAdI which temporary changes the end-user id to the devoted integration user id.
- Then it runs the main script which reads and writes data.
- Then it changes the integration user id back to the end-user id via the BAdl.

Please read carefully the following note before implementing this how-to guide.

• Due to the script logic will be executed on behalf of an integration user, relative operations such as read and write back will be executed by this user.

#### **Prerequisites**

Required/recommended expertise or prior knowledge

- SAP BusinessObjects Planning and Consolidation 7.0, version for SAP NetWeaver, SP09 and higher
- SAP BusinessObjects Planning and Consolidation 7.5, version for SAP NetWeaver, SP04 and higher
- ABAP programming skills
- Access to SAP NetWeaver transaction codes: SE18, SE19, SE80, RSPC
- Developer key for NetWeaver user.

Additional Documentation

- RKT Online Knowledge Product <u>http://service.sap.com/rkt</u> On the left hand side, navigate to SAP Ramp-Up Knowledge Transfer -> SAP BusinessObjects EPM Solutions -> SAP BO PC 7.5, version for SAP NetWeaver
- HTG explains how to make a process chain
   <u>http://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/20f4252d-98ca-2b10-e689-f85085ae2d12?QuickLink=index&overridelayout=true</u>
- Script Logic for SAP BusinessObjects Planning and Consolidation for NetWeaver
   <u>http://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/e025fa8d-1c22-2e10-cd9f c488c7eeadd4?QuickLink=index&overridelayout=true
  </u>

Other EPM How-To Guides

• <u>http://wiki.sdn.sap.com/wiki/display/BPX/Enterprise+Performance+Management+%28EPM%29+How</u> -to+Guides

SAP Help Library – Business Add Ins

<u>http://help.sap.com/saphelp\_nw70/helpdata/en/8f/f2e540f8648431e10000000a1550b0/frameset.htm</u>

### **Step-by-Step Procedure**

The following steps describe how to implement the desired functionality.

#### **Create Process Chain**

Please refer to the following HTG and create a simple process chain to run a custom script logic.

http://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/20f4252d-98ca-2b10-e689f85085ae2d12?QuickLink=index&overridelayout=true

The process chain should look similar to the following



Please notice that in this example I used RUN\_LOGIC\_RUN name for Run Logic step, hence the definition of a data manager package in appendix is for the name RUN\_LOGIC\_RUN. If you've used different name you will need to adjust the code in appendix.

#### **Create a BAdl Implementation**

A BAdI implementation is the term used in the Enhancement Framework for an enhancement implementation element. A BAdI implementation consists of a BAdI implementation class that implements the BAdI interface. The BAdI implementation also contains a filter condition which is specified in the BAdI definition. This filter condition can be used to execute the BAdI implementation at runtime.

1. Log on to NetWeaver and enter SE18 transaction

| En | hancement Spot | Edit | Goto |
|----|----------------|------|------|
| 0  | SE18           |      | Ē    |

2. Select UJ\_CUSTOM\_LOGIC and click Display

| BAdl Builder: Initial Screen for Definitions |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Enhancement Spot     UJ_CUSTOM_LOGIC         |  |  |  |  |  |  |
| O BAdi Name                                  |  |  |  |  |  |  |
| 🗞 Display 🥒 Change 🗋 Create                  |  |  |  |  |  |  |

3. Expand BADI\_UJ\_CUSTOM\_LOGIC and right- click on Implementation, select Create BAdI Implementation

| Enhancement Spot   |                |
|--------------------|----------------|
|                    |                |
| Attributes Enhance | m. Implementat |
|                    | ) 📋 🛛 Ir       |
| BAdI Definitions   | Descripti      |
| 🗢 🐖 BADI_UJ_CUSTOM | BPC: BAdl [    |
| 🗐 Interface        | E              |
| Filter             | 2              |
| Organia Didl       |                |
|                    | npiementation  |
|                    |                |

4. Click New and provide name and description ZBPC\_RUN\_INT\_LOGIC\_SET\_USER ZBPC\_RUN\_INT\_LOGIC\_SET\_USER

| Create Enhancement Implementation    | ×                           | 7- |
|--------------------------------------|-----------------------------|----|
| Enhancement Implementation           | ZBPC_RUN_INT_LOGIC_SET_USER |    |
| Short Text                           | ZBPC_RUN_INT_LOGIC_SET_USER |    |
| Composite Enhancement Implementation | 0                           |    |
|                                      |                             |    |
|                                      |                             |    |

5. Click OK. Click Local Object

| 🔄 Create Object Directory Entry      | ×                      |
|--------------------------------------|------------------------|
| Object R3TR ENHO ZBPC_               | RUN_INT_LOGIC_SET_USER |
| Attributes                           |                        |
| Package                              |                        |
| Person Responsible                   | TEST                   |
| Original System<br>Original language | BWD<br>EN English      |
|                                      |                        |
| 📙 Local Object 🙎 Lock O              | verview 🔁 🗶            |

6. Select the created object and click ok.

| ZBPC_RUN_INT_LOGIC_SET_USER | \$TMP | ZBPC_RUN_INT_LOGIC_SET_USER |   |
|-----------------------------|-------|-----------------------------|---|
|                             |       |                             | • |
| ✓ 🗋 🗙                       |       |                             |   |
|                             |       |                             |   |

7. Provide the following BAdI implementation name, description and class name.

| ZBPC_RUN_INT_LO0<br>ZBPC_RUN_INT_LO0<br>ZCL_BPC_RUN_INT_ | GIC_SET_USER<br>GIC_SET_USER<br>_LOGIC_SET_USER |             |  |  |  |
|--|---|-------------|--|--|--|
| Create BAdl Implementation                               |   | $\boxtimes$ |  |  |  |
| BAdI Implementation                                      | ZBPC_RUN_INT_LOGIC_SET_USER                     |             |  |  |  |
| Description  | ZBPC_RUN_INT_LOGIC_SET_USER                     |             |  |  |  |
| Implementing Class ZCL_BPC_RUN_INT_LOGIC_SET_USER        |   |             |  |  |  |
| <ul><li>✓ ×</li></ul>                                    |   |             |  |  |  |

8. Click Local Object if asked

| 📴 Create Object Directory Entry      |                           | $\times$ |
|--------------------------------------|---------------------------|----------|
| Object R3TR CLAS ZCL_B               | PC_RUN_INT_LOGIC_SET_USER |          |
| Attributes                           |                           |          |
| Package                              | <u>\$TMP</u>              |          |
| Person Responsible                   | TEST                      |          |
| Original System<br>Original language | BWD<br>EN English         |          |
|                                      |                           |          |
| 📙 Local Object 🗟 Lock O              | verview 📔 🗶               |          |

9. Expand ZBPC\_RUN\_INT\_LOGIC\_SET\_USER and double click on Filter Val. Click on Modify, Combination, double click on ???? under Value 1, provide Value 1 as SET\_USER.

| Enhancement I         | mplementati             | on <mark>ZB</mark> P | C_RUN_INT            | _LOGIC_SI        | ET_USER Chan           |
|-----------------------|-------------------------|----------------------|----------------------|------------------|------------------------|
| 🔶   💯 🕄 🖻             | 64 ¥  ↔   4             | 1 <u>2</u>           |                      | <b>1</b>         |                        |
| Enhancement Implement | ation                   | ZBPC_RUN_            | _INT_LOGIC_SET_US    | SER              | Inactive               |
|                       |                         |                      |                      |                  |                        |
| Properties Histo      | ory Technical Det       | ails En              | h. Implementation El | ements           |                        |
| 8200                  |                         |                      | Filter Values        |                  |                        |
| BAdl Implementation   | ns Description          |                      | <mark>⊗ ∕</mark> Com | nbination  🛱 Cor | mbination 🖉 Filt. Val. |
| ZBPC_RUN_IN           | T_LOG ZBPC_RUN_I        | NT_LOG               | Filter Combination   | s Filte Value    | 1 Comp                 |
| Filter Val.           | ig Clas                 |                      | Combinatio           | in 1<br>💽 ????   | ???? C                 |
|                       | Change Eilter ) (al     |                      |                      |                  |                        |
|                       |                         |                      | _                    | ~                |                        |
|                       | Filter Type             | _ Character          | -Туре                | S 1              | ilter Attributes       |
|                       | Filter Value            |                      |                      |                  |                        |
|                       | Value 1                 | SET_USE              | R                    | ð                |                        |
|                       | Comparator 1            | = 🗈                  |                      |                  |                        |
|                       | Filter                  | CUSTOM_L             | OGIC_NAME            |                  |                        |
|                       | Comparator 2            |                      |                      |                  |                        |
|                       | Value 2                 |                      |                      |                  |                        |
|                       |                         |                      |                      |                  |                        |
|                       | <ul> <li>✓ ×</li> </ul> |                      |                      |                  |                        |
| -                     |                         |                      |                      |                  |                        |

10. Click OK, save and activate.



11. When activating select the objects and click ok

| ¢                     | Inac | tive Obje | ects for TEST                         |  |  |  |  |
|-----------------------|------|-----------|---------------------------------------|--|--|--|--|
| Transportable Objects |      |           |                                       |  |  |  |  |
|                       |      | ranopon   |                                       |  |  |  |  |
|                       | Ok   | ject nan  | ne                                    |  |  |  |  |
|                       | D    | Object    | Obj. name                             |  |  |  |  |
|                       |      | ENHO      | ZBPC_RUN_INT_LOGIC_SET_USER           |  |  |  |  |
|                       |      | METH      | ZCL_BPC_CL IF_UJ_CUSTOM_LOGIC~EXECUTE |  |  |  |  |
|                       |      | CINC      | ZCL_BPC_RUN_INT_LOGIC_SET_USERCCDEF   |  |  |  |  |
|                       |      | CINC      | ZCL_BPC_RUN_INT_LOGIC_SET_USERCCIMP   |  |  |  |  |
|                       |      | CINC      | ZCL_BPC_RUN_INT_LOGIC_SET_USERCCMAC   |  |  |  |  |
|                       |      | CPRI      | ZCL_BPC_RUN_INT_LOGIC_SET_USER        |  |  |  |  |
|                       |      | CPRO      | ZCL_BPC_RUN_INT_LOGIC_SET_USER        |  |  |  |  |
|                       |      | CPUB      | ZCL_BPC_RUN_INT_LOGIC_SET_USER        |  |  |  |  |
|                       |      |           |                                       |  |  |  |  |
|                       | 1    |           |                                       |  |  |  |  |
|                       | 1    |           |                                       |  |  |  |  |
|                       | -    |           |                                       |  |  |  |  |
|                       | -    |           |                                       |  |  |  |  |
|                       |      |           |                                       |  |  |  |  |
|                       | -    |           |                                       |  |  |  |  |
|                       | -    |           |                                       |  |  |  |  |
|                       | -    |           |                                       |  |  |  |  |
|                       |      |           |                                       |  |  |  |  |
|                       |      |           |                                       |  |  |  |  |
|                       |      |           |                                       |  |  |  |  |
|                       |      |           |                                       |  |  |  |  |
| <b>1</b>              | 26   |           | 🛃 🔀 Overview                          |  |  |  |  |

12. Double click on Implementing Class, and then on IF\_UJ\_CUSTOM\_LOGIC~EXECUTE method. Click Yes.

| Properties History Technical Details E  | nh. Implementation Elements  |   |
|---|--|---|
| Image: Second system     Image: Second system       Image: Second system     Im | Implementing Class<br>Interface<br>Implementing Class<br>Method<br>IF_UJ_CUSTOM_LOGIC~EX | IF UJ CUSTOM LOGJ<br>ZCL BPC RUN INT L<br>ECUTE |
| Create Method Implementat<br>Interface method was n<br>Do you want to create in<br>Yes No   | ion Implemented Implementation?  |   |

| Class  | Builder: Class ZCL_BPC_RUN_INT_LOGIC_§    |
|--------|---|
| <      | 📂 🕄 🖻 🔞   🗗 🔭 🕮 🚭   🗜 🗮 🔲 🖬 🖷 📽 🛛 Patteri |
| Method | IF_UJ_CUSTOM_LOGIC~EXECUTE                |
| 1      | □ method IF_UJ_CUSTOM_LOGIC~EXECUTE.      |
| 2      | <sup>L</sup> endmethod.                   |
|        |   |

13. Click Edit, copy and paste the code from the Appendix 1 and activate the object.



#### Create Script Logic files and set up the integration user.

As a prerequisite, please create a user which is going to be added to BPC and play a role of integration user. It is Windows Authentication used in this example. EPM-BW-DEV\BPC\_INTEGRATION\_USER was created.

1. Log on to BPC Admin Client to the appset you are going to work with.

| SAP Business Objects                             |                      |
|--|----------------------|
| Will Hard and and and and and and and and and an | Release 7.50.08      |
|  | Select AppSet:       |
|  | APSHELL              |
|  | Description: Apshell |
|  |                      |
|  |                      |
|  |                      |
|  | English - EN         |
|  | Connection Summary   |
| (c) Copyright SAP AG 2009                        | Cancel               |

2. Add integration user and assign appropriate right to the user

| <u>2</u> , User Detail | Þ                 | <u>3.</u> Assignments <u>4</u> . Finish         |
|------------------------|-------------------|---|
| e users vou want to    | grant access to P | Janning and Consolidation                       |
|                        |                   | Selected for Planning and Consolidation access: |
|                        | <u> </u>          |   |

In this example the user has read and write access to all applications.

- 3. Select the application the end-users are going to start packages from, select Script Logic and click Create New Logic. Provide PUSH\_DATA.LFG name and click OK.
- 4. Copy and paste the script logic from Appendix 1, click Save and Validate.



The script in the example pushes all actual data to ZPLANNING application. The selection is narrowed down by the package's selection.

To create script logic which pulls data from ZPLANNING, please follow the same steps but copy the script logic from Appendix 2 (file name should be PULL\_DATA.LGF).

#### **Create Data Manager Package**

Now let's create the package the end-users will start from BPC Excel Client.

1. Log on to BPC Excel Client

| Session Information |   |  |
|---------------------|---|--|
| Ð                   | Logon: Administrator - APSHELL          |  |
| 0                   | EV: PLANNING - ACTUAL - CE0004000       |  |
| - A(                | 005 - India - MANUAL - EUR - 2009.FEB - |  |
| PEF                 | RIODIC                                  |  |

2. Click on Planning and Consolidation on the ribbon. Select More and then Organize Package List...



3. Right click on the pane and select Add Package

|  | <u>A</u> dd Package<br><u>M</u> odify Package<br><u>R</u> emove Package                      |              |
|--|--|--------------|
|  | <u>C</u> opy Package<br><u>M</u> ove Package   | <u>S</u> ave |
|  | A <u>d</u> d Package Group<br>M <u>o</u> dify Package Group<br>R <u>e</u> move Package Group |              |

- 4. Browse to the process chain you've created previously. In this example it is /CMPB/BPC\_RUN\_LOGIC.
- 5. Provide name and description (PUSH\_ACTUAL\_TO\_ZPLANNING in this example) and click Add and Save

| 🎽 Data Ma     | mager - [EPM-BW-DEV:1080] [APSF  | IELL] [PLANNING] [I | EPM-BW-DEV\b                          | pc_sysadr       | nin] - Org   | anize pack.    | <u>-   x</u>                            |
|---------------|--|---------------------|---------------------------------------|-----------------|--------------|----------------|---|
| 日日日           | 122120212  | 0                   |                                       |                 |              |                |   |
| Teams         | Package Group  | Package Name        |                                       | Description     |              |                |   |
|               | PLANNING   | Clear               |                                       | Clear Transa    | action Data  |                |   |
|               | Add Package  |                     |                                       |                 |              | 2              | ×                                       |
| Compa<br>ADMI | Package type<br>Process Chain<br>Process Chain<br>/CPMB/BPC_RUN_LOGIC<br>Package name<br>PUSH_DATA_TO_ZPLANNING<br>Group | <u>2</u>            | Task Type<br>I⊽ User Pa<br>I⊽ Admin P | ckage<br>ackage |              |                | oject<br>/ BW<br>W infoOb<br>ioprovider |
|               | Data Management  | <u>-</u>            |                                       |                 |              |                |   |
|               | PUSH DATA TO ZPLANNING   |                     |                                       |                 |              |                |   |
|               | ,  |                     |                                       | Add             |              | <u>C</u> ancel | ]                                       |
|               |  | •                   |                                       |                 |              |                |   |
| Clear Transac | stion Data   |                     |                                       |                 | <u>S</u> ave | <u>C</u> a     | ncel                                    |

6. Select Organize Package list option again.



7. Right click on the package and select Modify Package

| 🖂 ZOFUNL   | ZDFUNL  |          |                |
|------------|---|----------|----------------|
| PUSH_ACTUA | Add Package<br>Modify Package<br>Remove Package                                     | L_TO_ZPL | ANNING         |
|            | <u>C</u> opy Package<br><u>M</u> ove Package  | ve       | <u>C</u> ancel |
|            | A <u>d</u> d Package Group<br>Modify Package Group<br>R <u>e</u> move Package Group |          |                |

Select View Package, click Advanced.

| ta M | 1anager - LEPM-BW-DE¥:108        | 0][APSHELL][PLANNING][EPM-BW-DE                             | V\bpc_sysadmin] - Organize pack 📕 🗐 🗙 |        |  |
|------|----------------------------------|---|---------------------------------------|--------|--|
| 7 国  | ] 🖻 🖻 🗂 🖒 🗳 🛉                    | 💾 🖸 🖆 📔 Data Manager Package View & Dynamic Script Editor 📃 |                                       |        |  |
| eam  | ns Package Gro                   | Data Manager Packag   | ge view & Dynamic Script Editor       |        |  |
| npa  | Package type                     | Package information.  | Adv                                   | /anced |  |
| MI   | Process Chain 💌<br>Process Chain | Package   | Properties                            |        |  |
| н    | /CPMB/BPC_RUN_LOGIC              | E-L PUSH_DATA_TU_ZPLANNING                                  |                                       |        |  |
| н    | Package name                     | Dynamic Package Script(MO                                   |                                       |        |  |
| н    | Group                            | Bynamic Constants   |                                       |        |  |
|      | Data Management                  |   |                                       |        |  |
|      | Des 🤣 Data Manager Dyn           | namic Script  |                                       |        |  |
| н    | PU                               |   |                                       |        |  |
| н    |                                  |   |                                       |        |  |
| ŀ    | Functions      Figure 100        |   |                                       |        |  |
|      | TASK                             |   |                                       |        |  |
|      |                                  |   |                                       |        |  |
| DAT  | TA_TO                            |   |                                       |        |  |
|      |                                  |   |                                       |        |  |
|      |                                  |   |                                       |        |  |
|      |                                  |   |                                       |        |  |

8. Copy and paste the definition of the package. Click OK, Save, Save, Save and OK.

| 🤣 Data Manager Dynamic Script                          |  | _ 🗆 × |
|--|--|-------|
| Functions     Functions     PromPT     ProMPT     TASK | PROMPT(SELECTINPUT,,"%ACCOUNT_DIM%,%ENTITY_DIM%,%TIME_DIM%")<br>INF0(%EQU%,=)<br>INF0(%TAB%,;)<br>TASK(RUN_LOGIC_RUN,TAB,%TAB%)<br>TASK(RUN_LOGIC_RUN,EQU,%EQU%)<br>TASK(RUN_LOGIC_RUN,SAPPSET,%)<br>TASK(RUN_LOGIC_RUN,SAPPSET,%)<br>TASK(RUN_LOGIC_RUN,SAPPSET%)<br>TASK(RUN_LOGIC_RUN,SELECTION,%SELECTION%)<br>TASK(RUN_LOGIC_RUN,SELECTION,%SELECTION%)<br>TASK(RUN_LOGIC_RUN,REPLACEPARAM,USER_D%EQU%%USER%) |       |
|  |  |       |

The data manager package we've created copies data to ZPLANNING application. To create a data manager package which pulls data from ZPLANNING application please use the same steps but provide definition of the package from Appendix 2.

#### Run the package

In this example the end-user has read and write access to PLANNING application and read-only access to ZPLANNING application. Please notice that read-only access to ZPLANNING application is given for the purpose to demonstrate the actual result of executing of the packages. In real situation the user will have no access to ZPLANNING and the result of execution will be the same.

The user will start the package which will run PUSH\_DATA.LGF script logic

1. Log on with the user who has access to the Planning application (in this example it is EPM-BW-DEV\BPC\_PLANNING user)

| SAP BusinessObjects | ×   |
|---------------------|---|
| Transfer State      | Your Planning and Consolidation credentials   |
| 15                  | Select the credentials used to log on to Planning and Consolidation.  |
| Y                   | <ul> <li>Use my Microsoft Windows user ID and password</li> <li>Use a different user ID and password</li> </ul> |
|                     | Logon information<br>User ID:<br>BPC_PLANNING<br>Password:<br>************************************              |
|                     | << Back Next >> Cancel  |

2. For visualization in this example a simple report is created for the same scope but 2 applications (PLANNING and ZPLANNING). 3 values are posted to PLANNING application.

| ng Application | Арр  | ZPLANNING  | COPY OF PLANNING APPLIC  |
|----------------|--|--|--|
| L              | CATEGORY   | ACTUAL   | ACTUAL   |
| osts           | P_ACCT   | CE0001000  | Total Costs  |
| vity           | P_ACTIVITY   | A005   | No activity  |
|                | P_CC   | India  | India  |
| Planning       | P_DATASRC  | MANUAL   | Manual Planning  |
|                | RPTCURRENCY  | EUR  | EURO   |
| N              | TIME   | 2005.JAN   | 2005.JAN   |
| •              | MEASURES   | PERIODIC   | Periodic   |
|                |  |  |  |
|                |  | 2009.JAN   | 2009.FEB   |
|                |  | 2009.JAN   | 2009.FEB   |
| CE0004010      | Bonus Expense  |  |  |
| CE0004020      | Wages and Salaries   |  |  |
| CE0004030      | Social Contributions   |  |  |
| CE0004210      | Internet Expenses  |  |  |
| CE0004220      | TV & Radio   |  |  |
| CE0004230      | Magazines  |  |  |
| CE0004510      | Cooling (Water) Costs  |  |  |
|                | ng Application<br>L<br>osts<br>sity<br>Planning<br>M<br>CE0004010<br>CE0004020<br>CE000420<br>CE000420<br>CE0004210<br>CE0004210 | ng Application L CATEGORY Odds P_ACCT P_ACTIVITY P_CC Planning P_CC P_DATASRC RPTCURRENCY N TIME b CE0004000 Bonus Expense CE0004020 Vages and Salaries CE000420 CE000420 CE000420 CE000420 TV & Radio CE000420 CE000420 TV & Radio CE00420 TV & Ra | ag Application         App         ZPLANNING           L         CATEGORY         ACTUAL           CatEGORY         ACTUAL         Coolidity           vity         P_ACCT         CE000000           vity         P_ACTIVITY         A005           P_DATASRC         MANUAL         RPTCURRENCY         EUR           N/         TIME         2005.JAN         2005.JAN           c         E0004020         MEASURES         PERIODIC           CE0004020         Social Contributions         2009.JAN           CE0004020         Vages and Salaries         CE000420           CE0004200         Internet Expenses         CE000420           CE0004201         Internet Expenses         CE000420           CE0004202         TV & Radio         CE000420           CE0004203         Gagazines         CE000420           CE0004204         Gagazines         CE004510           Ce004510         Cooling (Vater) Costs         Ce004500 |

3. Start the package PUSH\_DATA\_TO\_ZPLANNING and provide the selection

| 💐 Data Manager - Run Package   |                                 |
|--------------------------------|---------------------------------|
| PUSH_DATA_TO_ZPLANN1           | ÑG                              |
| Select the desired data range  |                                 |
| P_ACCT<br>P_CC<br>TIME         | CE0004010,CE0004020,CE00040 💌 🔊 |
| Select when to run the package | Save Load                       |

4. The result is SUCCESS

| 1        | 🔂 Package Status  |   |  |  |  |  |  |  |  |
|----------|---|---|--|--|--|--|--|--|--|
|          | ₫ ७ 0 ₽ 0   | Filter by:  |  |  |  |  |  |  |  |
| 1        | Package   | User Progress Start Time End Ti                               |  |  |  |  |  |  |  |
|          | V PUSH_DATA_TO_ZPLANNING                                      | EPM-BW-DEV\BPC Completed 12/2/2011 7:47:20 12/2/2             |  |  |  |  |  |  |  |
|          | 🔍 Detail Log  | - D ×   |  |  |  |  |  |  |  |
|          | File Edit Search  |   |  |  |  |  |  |  |  |
|          |   |   |  |  |  |  |  |  |  |
| ł        | POSH_DATA_TO_ZPLANNIN   | QUERY TIME : 250.00 ms. 3 RECORDS QUERTED UUT.                |  |  |  |  |  |  |  |
| ŝ        |   | QUERY REFERENCE DHIH  |  |  |  |  |  |  |  |
| 3        | CHLCULHIUN IIME IN IUIAL :63.99 MS.                           |   |  |  |  |  |  |  |  |
| S        |   |   |  |  |  |  |  |  |  |
| ]        |   | ENDWHEN ACCUMULATION: 3 RECORDS ARE GENERATED.                |  |  |  |  |  |  |  |
|          |   | DATA TO WRITE BACK:   |  |  |  |  |  |  |  |
|          |   | CATEGORYMP ACCTMP ACTIVITYMP CCMP DATASRCMRPTCURRENCYMTIMENSI |  |  |  |  |  |  |  |
| 3        |   | ACTUALECE0004010EA005EIndiaEMANUALEURE2009.JANE50.00          |  |  |  |  |  |  |  |
|          |   | ACTUALECE0004020EA005EIndiaEMANUALEEURE2009.JANE35.00         |  |  |  |  |  |  |  |
|          | ACTUALECE 00040308A0058IndiaEMANUALEURE2009.JANE20.00         |   |  |  |  |  |  |  |  |
| J        | 3 RECORDS HAVE BEEN WRITTEN BACK.                             |   |  |  |  |  |  |  |  |
|          | WRITING TIME :297.00 ms.                                      |   |  |  |  |  |  |  |  |
| 녜        | [WARNING!] NO MEMBER SPECIFIED FOR DIMENSION:P_ACTIVITY WILL  |   |  |  |  |  |  |  |  |
| ŗ        | [WARNINGT] NO MEMBER SPECIFIED FOR DIMENSION:P_DATASRC WILL Q |   |  |  |  |  |  |  |  |
| 3        | EXECUTION BADI:SET_USER                                       |   |  |  |  |  |  |  |  |
|          |   | UUERY: UFF  |  |  |  |  |  |  |  |
|          |   | WKIIE: UFF  |  |  |  |  |  |  |  |
|          |   | THE USER IS CHANGED LUGUSER_IDG                               |  |  |  |  |  |  |  |
|          | $\Gamma$  |   |  |  |  |  |  |  |  |
|          |   | 106 END TIME:2011-12-02 07:47:21                              |  |  |  |  |  |  |  |
| _        |   |   |  |  |  |  |  |  |  |
| h        |   |   |  |  |  |  |  |  |  |
| <u>(</u> |   |   |  |  |  |  |  |  |  |
| _        |   |   |  |  |  |  |  |  |  |
| _        |   | Cancel  |  |  |  |  |  |  |  |
| _        |   |   |  |  |  |  |  |  |  |
|          |   |   |  |  |  |  |  |  |  |

#### 5. Refresh the report to see the values in ZPLANNING



A demonstration of pulling data from ZPLANNING.

1. For the purpose of demonstration some values were posted to ZPLANNING application.

|            |                       | App       | PLANNING    | Planning Application |            | Арр                   | ZPLANNING   | COPY OF PLA     | NNING APPLICATION |
|------------|-----------------------|-----------|-------------|----------------------|------------|-----------------------|-------------|-----------------|-------------------|
|            |                       | CATEGORY  | ACTUAL      | ACTUAL               |            | CATEGORY              | ACTUAL      | ACTUAL          |                   |
|            | P_ACCT CE0001000      |           | Total Costs |                      | P_ACCT     | CE0001000             | Total Costs |                 |                   |
|            |                       | P_ACTIVIT | A005        | No activity          |            | P_ACTIVITY            | A005        | No activity     |                   |
|            |                       | P_CC      | India       | India                |            | P_CC                  | India       | India           |                   |
|            |                       | P_DATASE  | MANUAL      | Manual Planning      |            | P_DATASRC             | MANUAL      | Manual Planning |                   |
|            |                       | RPTCURRE  | EUR         | EURO                 |            | RPTCURRENCY           | EUR         | EURO            |                   |
|            |                       | TIME      | 2005.TOTAL  | 2005.TOTAL           |            | TIME                  | 2005.TOTAL  | 2005.TOTAL      |                   |
|            |                       | MEASURE   | PERIODIC    | Periodic             |            | MEASURES              | PERIODIC    | Periodic        |                   |
|            |                       |           |             |                      |            |                       |             | 6               |                   |
|            |                       | 2009.JAN  | 2009.FEB    |                      |            |                       | 2009.JAN    | 2009.FEB        |                   |
|            |                       | 2009.JAN  | 2009.FEB    |                      |            |                       | 2009.JAN    | 2009.FEB        |                   |
| CE0004010  | Bonus Expense         | 50.00     |             |                      | CE0004010  | Bonus Expense         | 50.00       | 10.00           |                   |
| CE0004020  | Wages and Salaries    | 35.00     |             |                      | CE0004020  | Wages and Salaries    | 35.00       | 15.00           |                   |
| CE0004030  | Social Contributions  | 20.00     |             |                      | CE0004030  | Social Contributions  | 20.00       | 20.00           |                   |
| CE0004210  | Internet Expenses     |           |             |                      | CE0004210  | Internet Expenses     |             | 25.00           |                   |
| CE0004220  | TV & Radio            |           |             |                      | CE0004220  | TV & Radio            |             | 30.00           |                   |
| CE0004230  | Magazines             |           |             |                      | CE0004230  | Magazines             |             | 35.00           |                   |
| CE0004510  | Cooling (Water) Costs |           |             |                      | CE0004510  | Cooling (Water) Costs |             | 40.00           |                   |
| CE0004520  | Heating (Steam) Costs |           |             |                      | CE0004520  | Heating (Steam) Costs |             | 45.00           |                   |
| CE0004530  | Machine Repair        |           |             |                      | CE0004530  | Machine Repair        |             | 50.00           |                   |
| CE0004540  | Electricity           |           |             |                      | CE0004540  | Electricity           |             | 55.00           |                   |
| CE0004610  | Operating Supplies    |           |             |                      | CE0004610  | Operating Supplies    |             | 60.00           |                   |
| CE0004620  | Maintenance Supplies  |           |             |                      | CE0004620  | Maintenance Supplies  |             | 65.00           |                   |
| CE0004810  | Depreciations         |           |             |                      | CE0004810  | Depreciations         |             | 70.00           |                   |
| CE0004820  | Building Costs        |           |             |                      | CE0004820  | Building Costs        |             | 75.00           |                   |
| CE0004830  | Consulting Costs      |           |             |                      | CE0004830  | Consulting Costs      |             | 80.00           |                   |
| CE0651000  | Machine Hours         |           |             |                      | CE0651000  | Machine Hours         |             | 85.00           |                   |
| CE0652000  | Labour Hours          |           |             |                      | CE0652000  | Labour Hours          |             | 90.00           |                   |
| CE0653000  | Maintenance Hours     |           |             |                      | CE0653000  | Maintenance Hours     |             | 95.00           |                   |
| newmemver  | aaa                   |           |             |                      | newmemver  | aaa                   |             | 100.00          |                   |
| CE0661000  | Personnel Price       |           |             |                      | CE0661000  | Personnel Price       |             | 0.17            |                   |
| CE0662000  | Maintenance Price     |           |             |                      | CE0662000  | Maintenance Price     |             | 50.68           |                   |
| VALIDATION | Validation Account    |           |             |                      | VALIDATION | Validation Account    |             | 115.00          |                   |
| ererye     | erye                  |           |             |                      | ererye     | erye                  |             | 120.00          |                   |

2. Run the package PULL\_ACTUAL\_FROM\_ZPLANNING. Please notice that section on P\_ACCT is not full, therefore only part of the accounts' data will be copied.

Result is the following:

| Team Start cut        |   |
|-----------------------|---|
| Package Status        |   |
| 00001                 | Filter by:  |
| Package               | r Progress Start Time   |
|                       | 4.BW/DEV/BPC PLANNING Completed 12/2/2011 9:15:47                   |
|                       | HEW DEVICE Completed 12/2/2011 9-00-49                              |
| Detail Log            |   |
| Ele Edit Cearde       |   |
| ANI Elle Eule Search  |   |
| PULL_ACTUAL_FROM_ZPLA | [WARNING!] NO MEMBER SPECIFIED FOR DIMENSION:CATEGORY WILL QU       |
|                       | [WARNING!] NO MEMBER SPECIFIED FOR DIMENSION:P ACTIVITY WILL        |
| Formula log           | [WARNING!] NO MEMBER SPECIFIED FOR DIMENSION:P_DATASRC WILL Q       |
|                       | EXECUTION BADI:SET_USER   |
|                       | QUERY: OFF  |
|                       | WRITE: OFF  |
|                       | The user is changed toEPM-BW-DEV\BPC_INTEGRATION_USER               |
|                       | BADI EXECUTION TIME IN TOTAL :0.00 ms.                              |
|                       | [INFO] GET_DIM_LIST(): I_APPL_ID="PLANNING", #dimensions=8          |
|                       | CATEGORY, MEASURES, P_ACCT, P_ACTIVITY, P_CC, P_DATASRC, RPTCURRENC |
|                       | #dim_memberset=3  |
|                       | P_ACCT:CE0004010,CE0004020,CE0004030,CE0004210,CE0004220,6          |
|                       | P_CC:India,1 in total.  |
|                       | TIME:2009.FEB,1 in total.   |
|                       | REC :LOOKUP(CAT)  |
|                       | CALCULATION BEGIN:  |
| ILL_A                 | QUERY PROCESSING DATA   |
|                       | QUERY TIME : 250.00 ms. 0 RECORDS QUERIED OUT.                      |
|                       | QUERY REFERENCE DATA  |
|                       | QUERY LOOKUP DATA FROM APPLICATION: ZPLANNING                       |
|                       | QUERY TIME : 203.00 ms. 6 RECORDS QUERIED OUT.                      |
|                       | QUERY TIME : 313.00 ms. 0 RECORDS QUERIED OUT.                      |
|                       | CALCULATION TIME IN TOTAL :375.00 ms.                               |
|                       | 6 RECORDS ARE GENERATED. ED   |
|                       | CALCULATION END.  |
|                       | ENDWHEN ACCUMULATION: 6 RECORDS ARE GENERATED.                      |
|                       |   |
|                       | FO  |
|                       | 1 FO  |
|                       | <u>C</u> ancel  |
|                       |   |
|                       | ev  |



|           |                       | Арр       | PLANNING  | Planning Application |            | Арр                   | ZPLANNING COPY O |             | ANNING APPLICATION |
|-----------|-----------------------|-----------|-----------|----------------------|------------|-----------------------|------------------|-------------|--------------------|
|           |                       | CATEGORY  | ACTUAL    | ACTUAL               |            | CATEGORY              | ACTUAL           | ACTUAL      |                    |
|           |                       | P_ACCT    | CE0001000 | Total Costs          |            | P_ACCT                | CE0001000        | Total Costs | 5                  |
|           |                       | P_ACTIVIT | A005      | No activity          |            | P_ACTIVITY            | A005             | No activity |                    |
|           |                       | P_CC      | India     | India                |            | P_CC                  | India            | India       |                    |
|           |                       | P_DATASE  | MANUAL    | Manual Planning      |            | P_DATASRC             | MANUAL           | Manual Pla  | anning             |
|           |                       | RPTCURRE  | EUR       | EURO                 |            | RPTCURRENCY           | EUR              | EURO        |                    |
|           |                       | TIME      | 2005.JAN  | 2005.JAN             |            | TIME                  | 2005.JAN         | 2005.JAN    |                    |
|           |                       | MEASURE   | PERIODIC  | Periodic             |            | MEASURES              | PERIODIC         | Periodic    |                    |
|           |                       |           |           | <b>-</b>             |            |                       |                  |             |                    |
|           |                       | 2009.JAI  | 2009.FEB  |                      |            |                       | 2009.JAN         | 2009.FEB    |                    |
|           |                       | 2009.JAI  | 2009.FEB  |                      |            |                       | 2009.JAN         | 2009.FEB    |                    |
| E0004010  | Bonus Expense         | 50.00     | 10.00     |                      | CE0004010  | Bonus Expense         | 50.00            | 10.00       |                    |
| E0004020  | Wages and Salaries    | 35.00     | 15.00     |                      | CE0004020  | Wages and Salaries    | 35.00            | 15.00       |                    |
| E0004030  | Social Contributions  | 20.00     | 20.00     |                      | CE0004030  | Social Contributions  | 20.00            | 20.00       |                    |
| E0004210  | Internet Expenses     |           | 25.00     |                      | CE0004210  | Internet Expenses     |                  | 25.00       |                    |
| E0004220  | TV & Radio            |           | 30.00     |                      | CE0004220  | TV & Radio            |                  | 30.00       |                    |
| E0004230  | Magazines             |           | 35.00     |                      | CE0004230  | Magazines             |                  | 35.00       |                    |
| E0004510  | Cooling (Water) Costs |           |           | <u> </u>             | CE0004510  | Cooling (Water) Costs |                  | 40.00       | 1                  |
| E0004520  | Heating (Steam) Costs |           |           |                      | CE0004520  | Heating (Steam) Costs |                  | 45.00       |                    |
| E0004530  | Machine Repair        |           |           |                      | CE0004530  | Machine Repair        |                  | 50.00       |                    |
| E0004540  | Electricity           |           |           |                      | CE0004540  | Electricity           |                  | 55.00       |                    |
| E0004610  | Operating Supplies    |           |           |                      | CE0004610  | Operating Supplies    |                  | 60.00       |                    |
| E0004620  | Maintenance Supplies  |           |           |                      | CE0004620  | Maintenance Supplies  |                  | 65.00       |                    |
| E0004810  | Depreciations         |           |           |                      | CE0004810  | Depreciations         |                  | 70.00       |                    |
| E0004820  | Building Costs        |           |           |                      | CE0004820  | Building Costs        |                  | 75.00       |                    |
| E0004830  | Consulting Costs      |           |           |                      | CE0004830  | Consulting Costs      |                  | 80.00       |                    |
| E0651000  | Machine Hours         |           |           |                      | CE0651000  | Machine Hours         |                  | 85.00       |                    |
| E0652000  | Labour Hours          |           |           |                      | CE0652000  | Labour Hours          |                  | 90.00       |                    |
| E0653000  | Maintenance Hours     |           |           |                      | CE0653000  | Maintenance Hours     |                  | 95.00       |                    |
| newmemver | aaa                   |           |           |                      | newmemver  | aaa                   |                  | 100.00      |                    |
| E0661000  | Personnel Price       |           |           |                      | CE0661000  | Personnel Price       |                  | 0.17        |                    |
| E0662000  | Maintenance Price     |           |           |                      | CE0662000  | Maintenance Price     |                  | 50.68       |                    |
| ALIDATION | Validation Account    |           |           |                      | VALIDATION | Validation Account    |                  | 115.00      |                    |
| ererye    | егуе                  |           |           |                      | ererye     | erye                  |                  | 120.00      |                    |

## Appendix 1 – PUSH DATA TO ZPLANNING

#### **BAdl's code**

```
method IF_UJ_CUSTOM_LOGIC~EXECUTE.
 DATA: LS USER
                       TYPE UJO S USER,
                       TYPE REF TO IF UJ CONTEXT,
      LO CONTEXT
                      TYPE UJ USER ID,
      l user id
      ls param
                       TYPE ujk s script logic hashentry,
      l log
                       TYPE string.
*_____
*-----READ_PARAMETERS------
_ _ _
CLEAR ls param.
READ TABLE it param WITH KEY hashkey = 'USER ID' INTO 1s param.
IF sy-subrc NE 0.
 l_log = 'You have not specified the parameter ''USER_ID'' which is required.'.
 cl ujk logger=>log( i object = l log ).
 RAISE EXCEPTION TYPE cx uj custom logic.
 EXIT.
ENDIF.
l user id = ls param-hashvalue.
_ _ _
*_____
LO CONTEXT = CL UJ CONTEXT=>GET CUR CONTEXT().
LS USER = LO CONTEXT->DS USER.
LS_USER-USER_ID = l_user_id.
 CALL METHOD CL UJ CONTEXT=>SET CUR CONTEXT
 EXPORTING I APPSET ID = I APPSET ID
         IS_USER = LS_USER
I_APPL_ID = I_APPL_ID
          I MODULE NAME = LO CONTEXT-MODULE NAME.
 •
IF sy-subrc = 0.
 CONCATENATE 'The user is changed to ' LS USER-USER ID INTO 1 log.
 cl ujk logger=>log( i object = l log ).
ENDIF.
endmethod.
Script logic files.
```

PUSH\_DATA.LGF

\*DESTINATION\_APP=ZPLANNING

```
*START_BADI SET_USER
 QUERY = OFF
 WRITE = OFF
 USER_ID = EPM-BW-DEV\BPC_INTEGRATION_USER
*END_BADI
*XDIM_MEMBERSET CATEGORY=ACTUAL
*WHEN CATEGORY
   *IS ACTUAL
          *REC(EXPRESSION=%VALUE%)
* ENDWHEN
*DESTINATION_APP=PLANNING
*START BADI SET USER
 QUERY = OFF
 WRITE = OFF
 USER_ID = $USER_ID$
*END_BADI
```

Data Manager Package definition

PUSH\_ACTUAL\_TO\_ZPLANNING

PROMPT(SELECTINPUT,,,,,,"%ACCOUNT\_DIM%,%ENTITY\_DIM%,%TIME\_DIM%") INFO(%EQU%,=) INFO(%TAB%,;) TASK(RUN\_LOGIC\_RUN,TAB,%TAB%) TASK(RUN\_LOGIC\_RUN,EQU,%EQU%) TASK(RUN\_LOGIC\_RUN,SUSER,%USER%) TASK(RUN\_LOGIC\_RUN,SAPPSET,%APPSET%) TASK(RUN\_LOGIC\_RUN,SAPP,%APP%) TASK(RUN\_LOGIC\_RUN,SELECTION,%SELECTION%) TASK(RUN\_LOGIC\_RUN,LOGICFILENAME,PUSH\_DATA.LGF) TASK(RUN\_LOGIC\_RUN,REPLACEPARAM,USER\_ID%EQU%%USER%)

## Appendix 2 – PULL DATA FROM ZPLANNING

#### BAdl's code

The BAdI's code is the same as in Appendix 1.

#### Script logic files.

PULL\_DATA.LGF

```
*START_BADI SET_USER
 QUERY = OFF
 WRITE = OFF
 USER_ID = EPM-BW-DEV\BPC_INTEGRATION_USER
*END_BADI
*LOOKUP ZPLANNING
*DIM CAT: CATEGORY= ACTUAL
*ENDLOOKUP
*WHEN_REF_DATA=MASTER_DATA
*WHEN CATEGORY
   *IS ACTUAL
          *REC(EXPRESSION=LOOKUP(CAT))
* ENDWHEN
*START_BADI SET_USER
 QUERY = OFF
 WRITE = OFF
 USER_ID = $USER_ID$
*END BADI
```

#### **Data Manager Package definition**

PULL\_ACTUAL\_FROM\_ZPLANNING

PROMPT(SELECTINPUT,,,,,"%ACCOUNT\_DIM%,%ENTITY\_DIM%,%TIME\_DIM%") INFO(%EQU%,=) INFO(%TAB%,;) TASK(RUN\_LOGIC\_RUN,TAB,%TAB%) TASK(RUN\_LOGIC\_RUN,EQU,%EQU%) TASK(RUN\_LOGIC\_RUN,SUSER,%USER%) TASK(RUN\_LOGIC\_RUN,SAPPSET,%APPSET%) TASK(RUN\_LOGIC\_RUN,SAPP,%APP%) TASK(RUN\_LOGIC\_RUN,SELECTION,%SELECTION%) TASK(RUN\_LOGIC\_RUN,LOGICFILENAME,PULL\_DATA.LGF) TASK(RUN\_LOGIC\_RUN,REPLACEPARAM,USER\_ID%EQU%%USER%)

## **Related Content**

- HTG explains how to make a process chain
   <u>http://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/20f4252d-98ca-2b10-e689f85085ae2d12?QuickLink=index&overridelayout=true
  </u>
- Script Logic for SAP BusinessObjects Planning and Consolidation for NetWeaver
   <u>http://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/e025fa8d-1c22-2e10-cd9f c488c7eeadd4?QuickLink=index&overridelayout=true
  </u>
- Other EPM How-To Guides
   <u>http://wiki.sdn.sap.com/wiki/display/BPX/Enterprise+Performance+Management+%28EPM%29+How</u>
   <u>-to+Guides</u>
- SAP Help Library Business Add Ins <u>http://help.sap.com/saphelp\_nw70/helpdata/en/8f/f2e540f8648431e10000000a1550b0/frameset.htm</u>

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