

How to Import Master Data and Hierarchies into SAP BusinessObjects BPC 7.5 from SAP NetWeaver BW



Applies to:

SAP BusinessObjects Planning and Consolidation 7.5, version for SAP NetWeaver. For more information, visit the [Enterprise Performance Management homepage](#).

Summary

This How-to Guide demonstrates how to use new process chains introduced in SAP BusinessObjects Planning and Consolidation 7.5, version for SAP NetWeaver to transfer master data and hierarchies from SAP NetWeaver Business Warehouse using the Planning and Consolidation Data Manager. It focuses on how to handle three common design approaches, any of which, you may encounter when integrating Cost Center master data into BPC.

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Document History

Document Version	Description
1.20	Added references to related SAP Notes
1.10	Added information about multiple hierarchy scenarios and split scenario 3 into sub-scenarios 3a and 3b
1.00	First official release of this guide

BPC 7.5 NW related SAP Notes

Since the time this How-to Guide was originally written there have been quite a few software corrections made to the import master data programs, based on customer feedback to SAP Support. Please make sure your system is up to date by installing the latest support package, or the below notes individually, before attempting to follow the examples in this How to Guide.

Support Package 03 notes:

- [1462313](#) - Hierarchy aren't imported by import master data from BW
- [1465651](#) - Description is not imported by mapping EVDESCRIPTION.
- [1466762](#) - Can't display some property in selection window
- [1467734](#) - Text nodes with long name fail to load description
- [1462732](#) - DM: Text node description can't be imported

Support Package 04 notes:

- [1480039](#) - Validate transformation file failed for master data
- [1487016](#) - The reject account is not right.

Support Package 05 notes:

- [1500139](#) - Wrong Spelling in Load Master from BW infoObject.
- [1503302](#) - PC /CPMB/IMPORT_IOBJ_HIER deletes multiple hierarchies

Support Package 06 notes:

- [1529127](#) - Run Import MD Package Dump when ID is not mapped.
- [1530745](#) - Can't see new members after loading master data from iobj
- [1531601](#) - Incident 737084 / 2010 / text nodes aren't loaded
- [1538982](#) - OHIER_NODE interval nodes in hierarchy read twice
- [1540037](#) - TEXT SOURCE record count in DM log incorrect
- [1540038](#) - compound IOBJ MD incorrect when int/output length differs
- [1541288](#) - Duplicated ID when text node is same as compounded MD
- [1542023](#) - load dim member description incorrectly for compounded iobj

Support Package 07 notes:

- [1557075](#) - Validate result cannot be displayed for compounding iobj

Business Scenario

This How-to Guide demonstrates how to use new process chains introduced in SAP BusinessObjects Planning and Consolidation 7.5, version for SAP NetWeaver (hereafter identified as BPC or BPC NW) to transfer master data and hierarchies from SAP Business Warehouse (BW) using the Planning and Consolidation Data Manager. It focuses on how to handle three common design approaches, any of which, you may encounter when integrating Cost Center master data into BPC.

Scenario 1

BPC Cost Center dimension member ID = the BW Cost Center number

The first scenario takes a logical approach to define the BPC Cost Center dimension members to be identical to the BW Cost Center characteristic values. This approach has the obvious benefit of making the BPC master data easy to work with since it matches what users already know in core SAP. This design should only be used by organizations with a single Controlling Area, otherwise unique master data could not be possible in BPC since the InfoObjects which are auto-generated from BPC dimensions do not use compounding like that which is used for the 0COSTCENTER and 0CO_AREA fields in BW. In other words, if an organization with multiple Controlling Areas has the same Cost Center number used in two or more Controlling Areas and all Cost Centers are imported into the same Application Set in BPC the system would not be able to individually store the same Cost Center member ID for each reoccurrence across the Controlling Areas.

Scenario 2

BPC Cost Center dimension member ID = a concatenation of the Controlling Area and the Cost Center number

This second scenario combines together the Cost Center and its Controlling Area to represent the BPC Cost Center. This approach guarantees unique Cost Center member IDs in BPC, even in organizations with multiple Controlling Areas without employing use of compound InfoObjects in the underlying BW system since they are not supported by BPC. If the Controlling Area and Cost Center values are concatenated, users have familiarity with this organizational structure data but they will not be accustomed to seeing Cost Centers defined in such a way compared to working with core SAP. To some extent the Controlling Area prefix can be hidden from users, especially in reports or input schedules, but is not possible in other BPC tasks which accompany general system usage. This design approach is recommended to be used by any organization and is especially suggested for those with multiple Controlling Areas for two reasons.

1. Relatively easier setup required over scenarios 1 and 3 to import master data and hierarchies into BPC from BW.
2. Flexibility to accommodate more than one Controlling Area while avoiding duplicate Cost Center numbering schemas.

Scenario 3

BPC Cost Center dimension member id = a prefix (e.g. "CC_") plus the Cost Center number

The third scenario which defines BPC dimension members with a prefix is a commonly used method by BPC experts to assure unique master data across all dimensions in the Application Set. For example, they might define Cost Centers with a prefix of "CC_", Accounts with a prefix of "A_", and so on. This technique can be especially needed for SAP data which is often found to be redundantly defined. Consider for example the IDES system which uses Controlling Area 1000, Company Code 1000, Sales Organization 1000, Plant 1000, and etc. BPC works optimally with unique master data even across dimensions, though unique master data is not a system requirement. But by having unique master data users are not forced to always explicitly identify both the dimension and the member ID which they seek to filter or select for a given system task or report definition. Rather if master data is unique, BPC users need only to provide the member ID. By adding specific prefixes to dimension members BPC master data can be both unique to improve system usability and familiar to improve user comfort. However, like scenario one, this third design approach should only be used by organizations with a single Controlling Area.

Note: In the sample data which follows Company Code and Profit Center are defined as attributes of Cost Center. While Cost Centers and Profit Centers typically have different business definition and purpose, in the BW environment both objects are technically modeled in near identical formats. Therefore, the setup which is required to transfer master data from BW to BPC from either object is nearly indistinguishable. You can freely exchange any references to Cost Center in any of the examples described here with Profit Center to meet your specific project requirements for loading master data. But naturally it would not be logical in terms of the SAP enterprise structure assignments to make Cost Center a property of Profit Center. Discussion of whether the SAP Company Code, the Cost Center or the Profit Center should be defined as the entity dimension in BPC is not within the scope of this document.

Background Information

In the currently available 7.0 release of BPC NW only one process chain for importing master data (/CPMB/IMPORT_MASTER) is provided upon installation of the BPC component in the BW system. The import master data process chain sources its data only from a flat file. It cannot load BPC dimension members directly from the BW master data. If you want to transfer master data which resides in the BW system into BPC, you can setup an Open Hub Destination to export the master data to a file, and then use Data Manager to import the file using the process chain mentioned previously. Alternately, if you need to fully automate the loading of BW master data into a BPC dimension, this requires creation of a custom process chain and the setup of a BW transformation in the Open Hub Destination and use of an ABAP program to translate BW hierarchy intervals and text nodes into BPC dimension members. The customization steps to automate master data loads from BW to BPC are described in a How-to Guide titled How to...Automate BPC 7.0, version for the NetWeaver Platform Master Data Loads from BW to BPC [here](#) on the EPM Articles page of the SAP Developer Network.

However with the release of BPC 7.5 NW, the use of Open Hub Destination and the customization steps outlined in the HTG are no longer necessary to transfer master data from BW into BPC. Upon installation of BPC 7.5 NW, two process chains are delivered which are used for BW master data imports.

- 1) /CPMB/IMPORT_IOBJ_MASTER is used for loading BPC members from BW master data and texts and creation of BPC members from BW hierarchy text nodes
- 2) /CPMB/IMPORT_IOBJ_HIER is used for assigning the PARENTH% hierarchies in BPC member sheets

Prerequisites

To replicate the steps outlined in this How-to Guide, master data for InfoObject 0COSTCENTER must exist in the SAP Business Warehouse including characteristic values, texts, and at least one related hierarchy.

If your system does not have the Data Manager packages shown below then the packages will need to be created. The steps to create a Data Manager package are not covered in this guide since it is assumed you are familiar with creating a BPC Data Manager package. The important point to mention is you should have a separate package for each of the two process chains mentioned above.

BPC Master Data Transformation Files

The Data Manager transformation file to load the Cost Center master data is explained next. In the *Options section the *important* parameters to set are shown below (every other option can be left as their default values). Notice how the ID mappings differ from scenario to scenario, while the attribute mappings are the same across all three scenarios.

*OPTIONS

```
FORMAT = DELIMITED
HEADER = YES
DELIMITER = TAB
```

The *Mapping section of the transformation file is where the three scenarios mentioned above are handled differently depending on your BPC Cost Center design.

Scenario 1

If your BPC Cost Center member id is named identically to the Cost Center in BW, then you would specify the following.

*MAPPING

```
ID=ID
CURRENCY=0OBJ_CURR
PROFIT_CTR=0PROFIT_CTR
COMPANYCODE=0COMP_CODE
```

Scenario 2

If your BPC Cost Center member id equals the concatenation of the Controlling Area and the Cost Center, then you would specify the following.

*MAPPING

```
ID=0CO_AREA+ID
CURRENCY=0OBJ_CURR
PROFIT_CTR=0PROFIT_CTR
COMPANYCODE=0COMP_CODE
```

Scenario 3

If your BPC Cost Center member id design follows scenario three, then you seek to remove the Controlling Area and to add a prefix (CC_) to the master data. This scenario can be implemented in two variations.

Scenario 3a

In Scenario 3a users want the CC_ prefix added to both the Cost Centers and to the hierarchy text nodes. An *IF condition is used to check for the Controlling Area in the first four positions of the hierarchy text node IDs and an offset is used to avoid it.

*MAPPING

```
ID=*IF(ID(1:4)=*STR(SAP1) then *STR(CC_)+ID(5:12);*STR(CC_)+ID)
CURRENCY=0OBJ_CURR
PROFIT_CTR=0PROFIT_CTR
COMPANYCODE=0COMP_CODE
```

Scenario 3b

However your users may not want the prefix added to the hierarchy text nodes shown above. This can be avoided using the mapping below which contains an *IF condition to test if the first four positions of the record contains the Controlling Area (SAP1) which is indicative of a hierarchy text node record and therefore it skips to position 5 of the node ID, otherwise the record is a Cost Center which should have the CC_ prefix appended.

*MAPPING

```
ID=*IF(ID(1:4)=*STR(SAP1) then ID(5:12);*STR(CC_)+ID)
CURRENCY=0OBJ_CURR
PROFIT_CTR=0PROFIT_CTR
COMPANYCODE=0COMP_CODE
```

BPC Master Data Conversion Files

The three examples shown here do not require any conversion files to be maintained to transfer the Cost Center master data into BPC. But it is recommended (as a best practice) to use a conversion file and to include the JavaScript shown below. The purpose of the JavaScript is to remove any spaces that may exist in the source data which would not be supported by BPC dimension member ids.

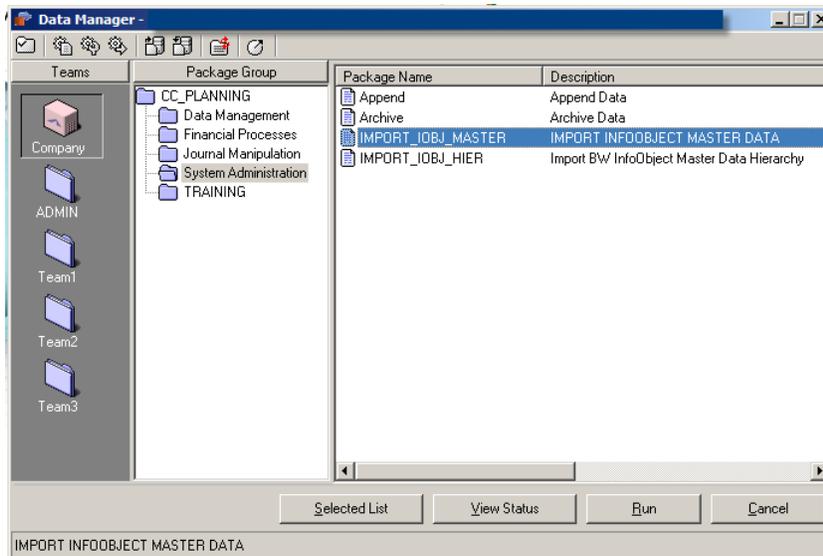
EXTERNAL	INTERNAL	FORMULA
*	<code>js:%external%.toString().replace(/\s+/g,"")</code>	

For readability → `js:%external%.toString().replace(/\s+/g,"")`

Note: Since BPC conversion files support the inclusion of JavaScript functions and also accept simple character replacements using wildcards, it is possible to use a conversion file to handle the string manipulation scenarios that are demonstrated above. Your own unique project requirements and skills will dictate the best approach to utilize.

BPC Data Manager – Run Package

You must run the master data load package before running the hierarchy import package, otherwise you will get a missing member error. Starting with the IMPORT_IOBJ_MASTER package, the execution steps are shown in the subsequent images.

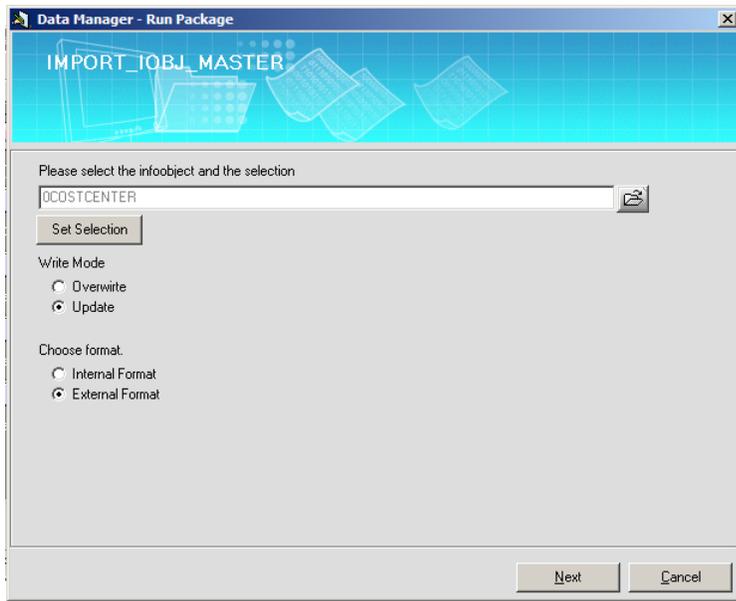


On screen two of the Data Manager – Run Package prompt, you select InfoObject 0COSTCENTER.

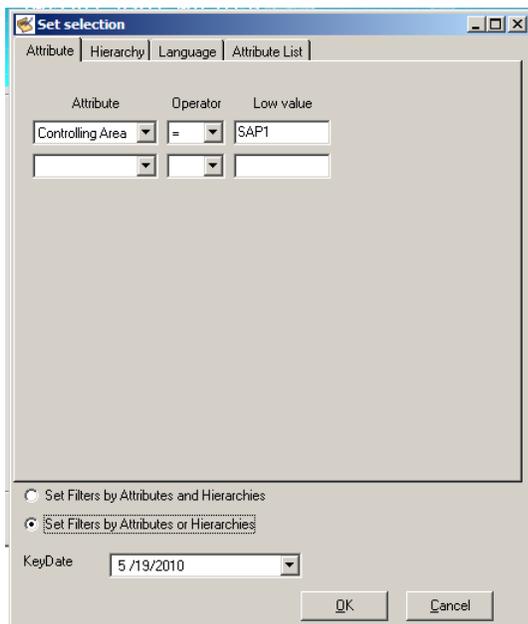
Tip → The list of BW InfoObjects is extensive and it will be typically faster to search directly for the InfoObject rather than scroll through the list provided.

The Write mode selected here is Update. This option will not delete any existing (including manually created) BPC dimension members. Rather it will create new master data for all member ids which do not already exist in BPC and it will update existing members' property fields which are mapped from BW to BPC in the transformation file. Unmapped fields are not overwritten.

The External Format option below will ignore any leading zeros that are contained in the master data for both the Cost Center ID and any property (e.g. Profit Center) in this example. If you need to keep leading zeros in your BPC master data, then select Internal Format.



In the Set Selection screen, the radio button option “Set Filters by Attributes or Hierarchies” was selected, but the other option could be used depending on your business requirements. On the Attribute tab of the Set Selection, a filter is shown to restrict the import to only Cost Centers contained in Controlling Area = SAP1.



On the Hierarchy tab, the Cost Center hierarchy called STDHIER is selected. This is the technical id of the hierarchy in the BW system.

It is *very important* to select a hierarchy version which may exist, or if hierarchy versioning is not used, then to select Empty. Do not leave this input field blank or your master data package will not import successfully.

The Member ID selected will correspond to the hierarchy node you want to select from in the BW hierarchy. The example shows the top node of the hierarchy from the sample data. The Level indicates how far below the selected node you want the selection to expand. In the example, level 07 was the lowest level in the hierarchy, thus the entire hierarchy will be imported into BPC. It is possible to leave the Level field blank to instruct the system to select the entire hierarchy below the node specified in the filter.

The screenshot shows the 'Set selection' dialog box with the 'Hierarchy' tab selected. The 'Import text node' section has 'Yes' selected. The 'Hierarchy' dropdown is set to 'STDHIER', 'Version' is 'Empty', 'Member ID' is 'SAP1E\M1000', and 'Level' is '07'. There are two empty dropdown menus below. The 'Set Filters by Attributes and Hierarchies' radio button is selected. The 'KeyDate' is set to '5 /19/2010'. 'OK' and 'Cancel' buttons are at the bottom.

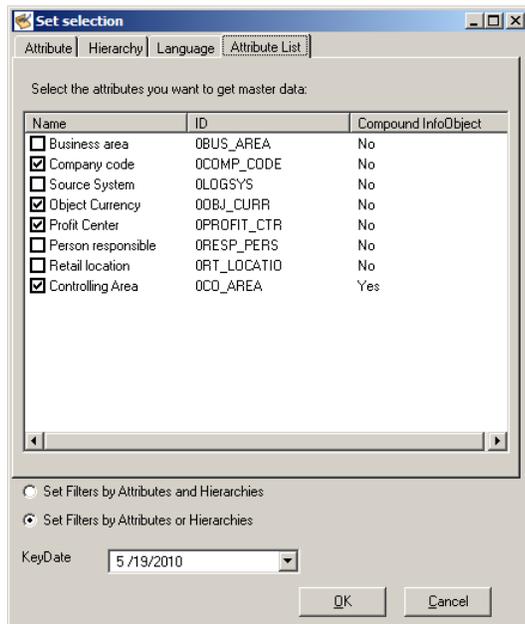
Specify the master data key date in the case of a time-dependent BW hierarchy.

On the Language tab of the Set Selection dialogue you can specify which text languages should be loaded to the BPC EvDescription field and whether the source should be from the BW Short, Medium or Long text fields.

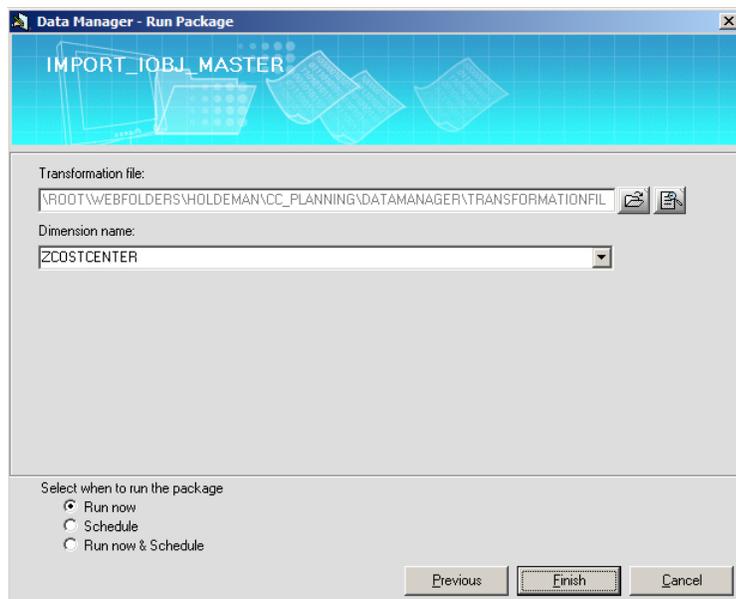
The screenshot shows the 'Set selection' dialog box with the 'Language' tab selected. A table lists languages with checkboxes: English (checked) with ID 'E'. Below the table, 'Medium text' is selected. The 'Set Filters by Attributes and Hierarchies' radio button is selected. The 'KeyDate' is set to '5 /19/2010'. 'OK' and 'Cancel' buttons are at the bottom.

Name	ID
<input checked="" type="checkbox"/> English	E

On the Attribute List tab you make selections for the attributes you want to transfer from BW into BPC as dimension member properties. The selections you make here should correspond to the definition of the transformation file *Mapping section.



On the third screen of the Data Manager – Run Package you select your transformation file and target BPC dimension.



After clicking the Finish button the Data Manager load will run. If the log indicates success, you will have loaded BPC master data from BW. To verify the results you can view the member sheet from the BPC Administration module.

Cost Center Member Sheet

Scenario 1: When using the transformation file for scenario 1, the BPC Cost Center member id will equal the BW Cost Center number. However, the imported hierarchy nodes will be preceded by the Controlling Area just as they exist in the Cost Center hierarchy. The BPC dimension member sheet appears below.

Scenario 1

ID	EVDESCRIPTION	PARENTH1	CURRENCY	COMPANYCO	DE	PROFIT_CT
25150230	OFFICE 230		USD	1001		230
25188411	LOCATION 88411		USD	1001		8411
25198411	LOCATION 98411		USD	1001		8411
25273948	OFFICE 3948		USD	1001		3948
25578411	LOCATION 78411		USD	1001		8411
90250000	CORPORATE HQ		USD	1001		H009
SAP1EXM10000						
SAP1EXM20000						
SAP1EXM51029						
SAP1EXM61166						
SAP1EXM72788						
SAP1EXM72799						

Scenario 2: If the second transformation file is used to import the Cost Center master data, BPC will concatenate the Controlling Area to both the Cost Center and the hierarchy nodes. This design may be the simplest outcome to manage in BPC and may be used by organizations with single or multiple controlling areas. The following image shows the BPC dimension member sheet.

Scenario 2

ID	EVDESCRIPTION	PARENTH1	CURRENCY	COMPANYCO	DE	PROFIT_CT
SAP125150230	OFFICE 230		USD	1001		230
SAP125188411	LOCATION 88411		USD	1001		8411
SAP125198411	LOCATION 98411		USD	1001		8411
SAP125273948	OFFICE 3948		USD	1001		3948
SAP125578411	LOCATION 78411		USD	1001		8411
SAP190250000	CORPORATE HQ		USD	1001		H009
SAP1EXM10000						
SAP1EXM20000						
SAP1EXM51029						
SAP1EXM61166						
SAP1EXM72788						
SAP1EXM72799						

Scenario 3: When the third transformation file is used to transfer the Cost Center master data into BPC it appends the Cost Center with the CC_ prefix. The BPC dimension member sheets below depict the third example.

Scenario
3a

	A	B	C	D	E	F
1	ID	EVDESCRIPTION	PARENTH1	CURRENCY	COMPANYCO	DE
2	CC_25150230	OFFICE 230		USD	1001	230
3	CC_25188411	LOCATION 88411		USD	1001	8411
4	CC_25198411	LOCATION 98411		USD	1001	8411
5	CC_25273948	OFFICE 3948		USD	1001	3948
6	CC_25578411	LOCATION 78411		USD	1001	8411
7	CC_90250000	CORPORATE HQ		USD	1001	H009
8	CC_EXM10000					
9	CC_EXM20000					
10	CC_EXM51029					
11	CC_EXM61166					
12	CC_EXM72788					
13	CC_EXM72799					

In variation 3a above the prefix is added to both the Cost Centers and the hierarchy nodes.

Scenario
3b

	A	B	C	D	E	F	G
1	ID	EVDESCRIPTION	PARENTH1	CURRENCY	COMPANYCO	DE	PROFIT_CTR
2	CC_25150230	OFFICE 230		USD	1001	230	
3	CC_25188411	LOCATION 88411		USD	1001	8411	
4	CC_25198411	LOCATION 98411		USD	1001	8411	
5	CC_25273948	OFFICE 3948		USD	1001	3948	
6	CC_25578411	LOCATION 78411		USD	1001	8411	
7	CC_90250000	CORPORATE HQ		USD	1001	H009	
8	EXM10000						
9	EXM20000						
10	EXM51029						
11	EXM61166						
12	EXM72788						
13	EXM72799						

But in variation 3B above when text hierarchy nodes are imported as BPC dimension members the prefix is excluded.

Information on Text Node Descriptions

The text node descriptions from the BW hierarchy did not import in the examples above. This issue is fixed with the implementation of SAP Note [1462732](#) "DM: Text node description can't be imported" and SAP Note [1467734](#) "Text nodes with long name failed to load description". These two SAP Notes are included in BPC 7.5 NW Support Package 03.

BPC Master Data Hierarchy Transformation Files

The Data Manager transformation files used to import the Cost Center master data hierarchy is explained next. The purpose of this import is to read the BW hierarchy and then make the appropriate assignments to fill the PARENTH% column(s) in the member sheet. It is necessary that any transformation that is made for the master data has to correspond to handling of the hierarchy node assignments, otherwise the system will return an error message that the member does not exist when it tries to assign the hierarchy node to the master data.

Note: In contrast to the import of the master data where a conversion file is potentially not required, the master data hierarchy import does mandate a conversion file. So in the transformation file you must specify a conversion file for the HIER_NAME field such as the following. The purpose of this conversion is to map the technical ID of BW hierarchy to the relevant PARENTH% hierarchy in BPC. It should be noted that it is possible to map two or more BW hierarchies to two or more BPC hierarchies from within the same conversion file.

*CONVERSION

HIER_NAME=HIER_NAME.xls

Alternatively, you might also use a second sheet to define a conversion for the NODENAME. An example where this may be used is to have a JavaScript function remove any spaces that may exist in the text node names since spaces are not supported in valid BPC dimension member IDs. A JavaScript example is provided in section 4.4.

*CONVERSION

HIER_NAME=HIER_NAME.xls

NODENAME=HIER_NAME.xls!NODENAME

In the *Options section of the transformation file the solution diverges based on the three scenarios for the Cost Center design. The important parameters to choose are shown below (every other option can be left as their default values).

Scenario 1

*OPTIONS

FORMAT = DELIMITED

HEADER = YES

DELIMITER = TAB

Scenario 2

*OPTIONS

FORMAT = DELIMITED

HEADER = YES

DELIMITER = TAB

Scenario 3a

***OPTIONS**

FORMAT = DELIMITED
HEADER = YES
DELIMITER = TAB

Scenario 3b

***OPTIONS**

FORMAT = DELIMITED
HEADER = YES
DELIMITER = TAB
SUPPRESSCHARACTER=SAP1

With variation b in the third scenario the Controlling Area is ignored using the SUPPRESSCHARACTER function.

In the *Mapping section of the transformation file the three scenarios mentioned above are setup as follows.

Scenario 1

Scenario 1 results in BPC dimension member IDs identical to the BW Cost Center numbers and Cost Center hierarchy text nodes with a Controlling Area prefix. Therefore to achieve the proper matching of the hierarchy nodes to the BPC master data in order to establish the PARENTH% assignments, the transformation file must be defined as shown below. An *IF statement is used check if the first six positions of the node name includes the Controlling Area (SAP1) and the constant "EX" which is the naming convention used for the hierarchy nodes in the sample data. If the condition passes, then the full node name is used to assign the PARENTH% members. Otherwise the node is a cost center and is represented in the node name in data positions 5-12. You will need to adjust this logic to your specific naming conventions.

***MAPPING**

```
NODENAME=*IF(NODENAME(1:6)=*STR(SAP1EX) then NODENAME; NODENAME(5:12))  
HIER_NAME=HIER_NAME  
PARENT=PARENT  
ORDER=ORDER
```

Scenario 2

If your BPC Cost Center equals the concatenation of the Controlling Area and the Cost Center then this is identical to how BW stores the hierarchy nodes. Therefore you would specify the standard BPC mapping needed for loading the hierarchy master data assignments.

***MAPPING**

```
NODENAME=NODENAME  
HIER_NAME=HIER_NAME  
PARENT=PARENT  
ORDER=ORDER
```

Scenario 3a

Scenario 3a demonstrates how to remove the Controlling Area using an offset and to add a prefix (CC_) to both the Cost Center and the parent hierarchy text nodes.

*MAPPING

```
NODENAME=*STR(CC_)+NODENAME(5:12)
HIER_NAME=HIER_NAME
PARENT=*STR(CC_)+PARENT(5:12)
ORDER=ORDER
```

Scenario 3b

With scenario 3b the goal is to remove the Controlling Area and to add a prefix (e.g. CC_) to the Cost Centers but not to the parent hierarchy text nodes. The mapping which is shown below works in conjunction with the SUPPRESSCHARACTER option mentioned previously which makes it possible to ignore the Controlling Area (SAP1) prefix added to the node names in BW. In the sample hierarchy, the naming convention for the text nodes is to begin with "EX". Therefore an *IF statement is used to handle this conditional test to distinguish between text nodes and Cost Centers.

*MAPPING

```
NODENAME=*IF(NODENAME(1:2)=*STR(EX) then NODENAME; *STR(CC_)+NODENAME(1:8))
HIER_NAME=HIER_NAME
PARENT=PARENT
ORDER=ORDER
```

Warning → Use of SUPPRESSCHARACTER provides an easy shortcut to achieve the desired outcome for scenario 3b for the data in this example. However its usage has to be evaluated for each circumstance. Two possible situations where you need to avoid using this function are explained next.

- 1) If the technical key of the hierarchy you seek to import contains the Controlling Area key, then you cannot use SUPPRESSCHARACTER in the transformation file definition. For example if the BW hierarchy has a technical id SAP1HIER and the Controlling Area is SAP1, the SUPPRESSCHARACTER function will result error message will be shown from the Data Manager log that says: "Hierarchy name must follow pattern PARENTHXX; is invalid". This error means that the transformation file also cleared the string (SAP1) from the conversion file which maps the BW hierarchy ID to the appropriate BPC PARENTH% column, and the system does not know how to map the hierarchies into BPC appropriately.
- 2) If your Controlling Area is defined with a pattern which may be embedded in the Cost Center numbering schema, then you should not use the SUPPRESSCHARACTER method described above. For example if you have defined your Co Area as 1000 and have also defined Cost Centers that contain 1000 (e.g. CC1000, 91000, etc.) this option will not give you the correct results during the import.

BPC Master Data Hierarchy Conversion Files

The purpose of the conversion file is to link the BW hierarchy technical ID to the appropriate BPC PARENTH% hierarchy. Below is an example of the setup which is done on a worksheet tab called CONVERSION. This tells the system that the example Cost Center hierarchy is named STDHIER and it should be assigned to PARENTH1 in BPC.

EXTERNAL	INTERNAL	FORMULA
STDHIER	PARENTH1	

Within the above conversion file it is possible to map multiple hierarchies in order to load more than one BW hierarchy into the same BPC dimension from a single execution of the Data Manager package. For example a second BW hierarchy named ALTHIER could be mapped to hierarchy PARENTH2 in BPC.

It is also a recommended as a best practice to create a tab in the conversion file called NODENAME and include the JavaScript shown below. The purpose of the JavaScript is to remove any spaces that may exist in the source data which would not be supported as BPC dimension member IDs.

EXTERNAL	INTERNAL	FORMULA
*	<code>js:%external%.toString().replace(/s+/g,"")</code>	

For readability → `js:%external%.toString().replace(/s+/g,"")`

BPC Data Manager – Run Package

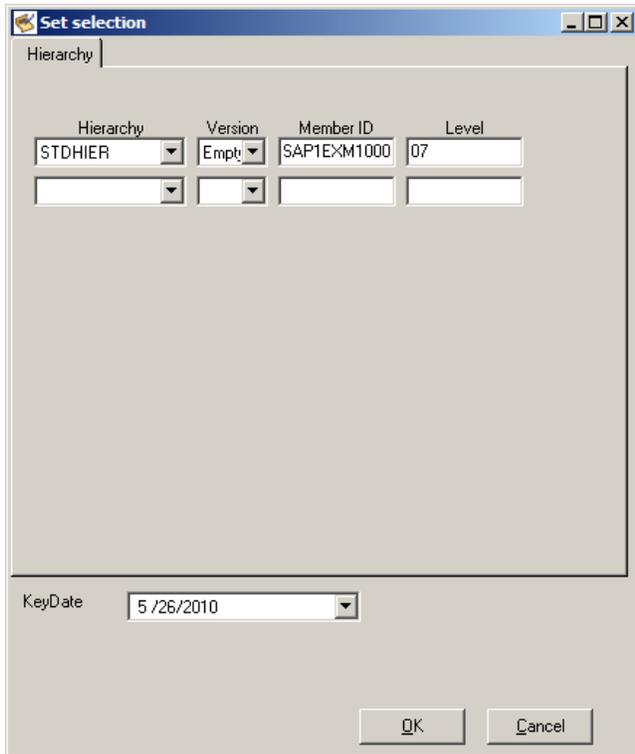
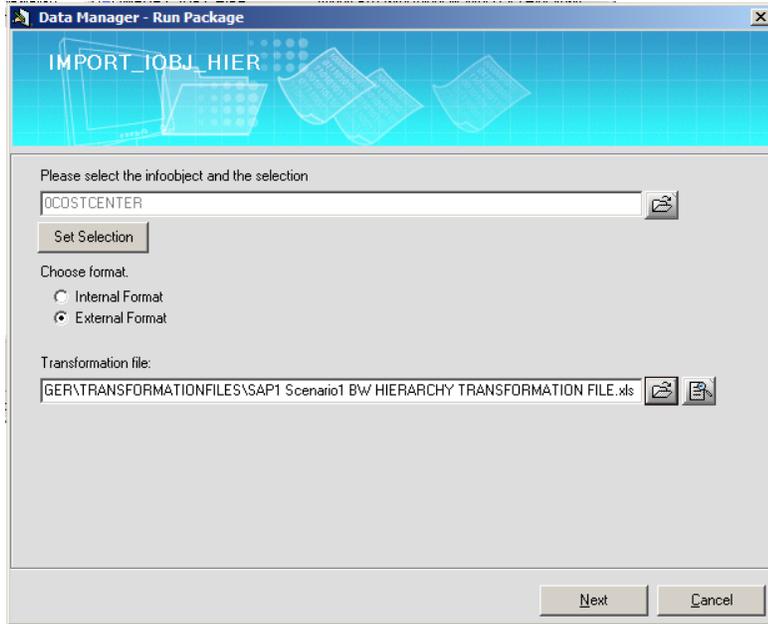
You must run the master data hierarchy load package after running the master data import package.

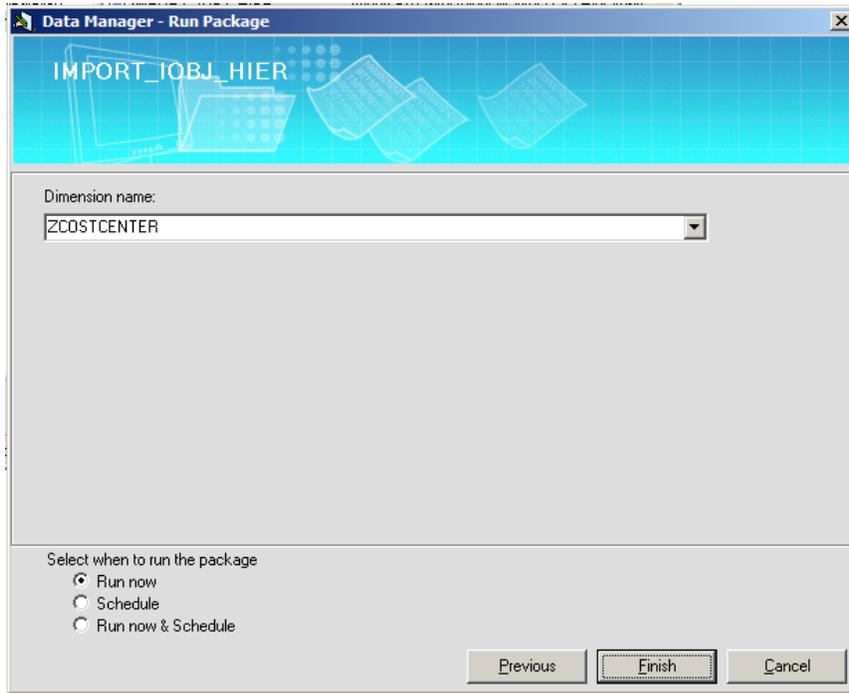
In contrast to the BW master data package which can be run in update or overwrite mode, the BW hierarchy import package always works in overwrite mode. Be advised it also clears any other existing hierarchies which are not specified in the Data Manager package Set Selection filter and Conversion File mapping. So if you need to import more than one BW hierarchy from the same source InfoObject into BPC, it is necessary to transfer these in the same Data Manager package execution step rather than in separate execution runs to avoid clearing the other hierarchies.

Further advice to the point above, if you intend to have additional hierarchies in BPC which are either manually created or loaded from a flat file for the same dimension in which want to import a BW hierarchy be aware that the BW hierarchy import will clear these other hierarchies too (as of BPC 7.5 NW SP03). Thus you have to be cautious of the sequence in which hierarchies are loaded and/or maintained. To work around this issue two options are possible.

- Create a new property for each alternative hierarchy and keep a backup copy of the PARENTH% hierarchy on this new property. After the BW hierarchy loads, then simply go into BPC dimension member maintenance and copy-paste the alternative hierarchy from the backup property field into the appropriate PARENTH% column.
- Create custom code within the Business Add-in (BAI) called from an ENDRoutine referenced by the transformation file. For example the BAI could be used to read into memory the alternative hierarchies which exist prior to running the BW hierarchy import, then to transfer them back from memory into the BPC dimension data after the BW load programs finish but before the save and process dimension tasks complete. Contact a member of the SAP Labs Americas Applications Regional Implementation Group (RIG) team for additional information on this custom option.

The screens for the IMPORT_IOBJ_HIER package are shown in the next images.





After clicking the Finish button the Data Manager load will run. If the log indicates success, you will have loaded BPC master data hierarchy assignments from BW. To verify the results you can view the member sheet from the BPC Administration module.

Cost Center Member Sheet

As a result of the hierarchy load the PARENTH1 column is now populated.

Scenario 1: When using the transformation file for scenario 1, the BPC Cost Center member id will equal the BW Cost Center number. However, the imported hierarchy nodes will be preceded by the Controlling Area just as they exist in the Cost Center hierarchy. The BPC dimension member sheet appears below.

Scenario 1

	A	B	C	D	E	F	G
1	ID	EVDESCRIPTION	PARENTH1	CURRENCY	COMPANYCODE	PROFIT_CTR	
2	25150230	OFFICE 230	SAPIEXM72788	USD	1001	230	
3	25188411	LOCATION 88411	SAPIEXM51029	USD	1001	8411	
4	25198411	LOCATION 98411	SAPIEXM51029	USD	1001	8411	
5	25273948	OFFICE 3948	SAPIEXM61166	USD	1001	3948	
6	25578411	LOCATION 78411	SAPIEXM51029	USD	1001	8411	
7	90250000	CORPORATE HQ	SAPIEXM10000	USD	1001	H009	
8	SAPIEXM10000						
9	SAPIEXM20000		SAPIEXM10000				
10	SAPIEXM51029		SAPIEXM20000				
11	SAPIEXM61166		SAPIEXM51029				
12	SAPIEXM72788		SAPIEXM61166				
13	SAPIEXM72799		SAPIEXM61166				

Scenario 2: If the second transformation file is used to import the Cost Center master data hierarchy, BPC will concatenate the Controlling Area to both the Cost Center and the hierarchy nodes. This design may be the simplest outcome to manage in BPC and may be used by organizations with single or multiple controlling areas. The following image shows the BPC dimension member sheet.

Scenario 2

1	ID	EVDESCRIPTION	PARENTH1	CURRENCY	COMPANYCO	PROFIT_CTR
2	SAP125150230	OFFICE 230	SAP1EXM72788	USD	1001	230
3	SAP125188411	LOCATION 88411	SAP1EXM51029	USD	1001	8411
4	SAP125198411	LOCATION 98411	SAP1EXM51029	USD	1001	8411
5	SAP125273948	OFFICE 3948	SAP1EXM61166	USD	1001	3948
6	SAP125578411	LOCATION 78411	SAP1EXM51029	USD	1001	8411
7	SAP190250000	CORPORATE HQ	SAP1EXM10000	USD	1001	H009
8	SAP1EXM10000					
9	SAP1EXM20000		SAP1EXM10000			
10	SAP1EXM51029		SAP1EXM20000			
11	SAP1EXM61166		SAP1EXM51029			
12	SAP1EXM72788		SAP1EXM61166			
13	SAP1EXM72799		SAP1EXM61166			

Scenario 3a: The BPC dimension member sheet below depicts scenario 3a which has valid PARENTH1 assignments and master data that has been transformed with a prefix of CC_ for both the Cost Centers and the parent text nodes.

Scenario 3a

1	ID	EVDESCRIPTION	PARENTH1	CURRENCY	COMPANYCO	PROFIT_CTR
2	CC_25150230	OFFICE 230	CC_EXM72788	USD	1001	230
3	CC_25188411	LOCATION 88411	CC_EXM51029	USD	1001	8411
4	CC_25198411	LOCATION 98411	CC_EXM51029	USD	1001	8411
5	CC_25273948	OFFICE 3948	CC_EXM61166	USD	1001	3948
6	CC_25578411	LOCATION 78411	CC_EXM51029	USD	1001	8411
7	CC_90250000	CORPORATE HQ	CC_EXM10000	USD	1001	H009
8	CC_EXM10000					
9	CC_EXM20000		CC_EXM10000			
10	CC_EXM51029		CC_EXM20000			
11	CC_EXM61166		CC_EXM51029			
12	CC_EXM72788		CC_EXM61166			
13	CC_EXM72799		CC_EXM61166			

Scenario 3b: When the transformation file example 3b is used it transfers the Cost Center master data hierarchy into BPC and appends the Cost Center with the CC_ prefix. But when hierarchy nodes are imported as BPC dimension members the prefix is excluded. The BPC dimension member sheet below depicts scenario 3b.

Scenario 3b

The screenshot shows a Microsoft Excel spreadsheet titled 'SAP BusinessObjects - ZCOSTCENTER.xls'. The ribbon includes 'Home', 'Insert', 'Page Layout', 'Formulas', 'Data', 'Review', 'View', 'Developer', 'Add-Ins', and 'Planning & Consolidation'. The spreadsheet contains a table with the following data:

	A	B	C	D	E	F	G
1	ID	EVDESCRIPTION	PARENTH1	CURRENCY	COMPANYCODE	PROFIT_CTR	
2	CC_25150230	OFFICE 230	EXM72788	USD	1001	230	
3	CC_25188411	LOCATION 88411	EXM51029	USD	1001	8411	
4	CC_25198411	LOCATION 98411	EXM51029	USD	1001	8411	
5	CC_25273948	OFFICE 3948	EXM61166	USD	1001	3948	
6	CC_25578411	LOCATION 78411	EXM51029	USD	1001	8411	
7	CC_90250000	CORPORATE HQ	EXM10000	USD	1001	H009	
8	EXM10000						
9	EXM20000		EXM10000				
10	EXM51029		EXM20000				
11	EXM61166		EXM51029				
12	EXM72788		EXM61166				
13	EXM72799		EXM61166				

Conclusion

This How-to Guide has demonstrated to you how to use new process chains introduced in BPC 7.5 NW to transfer master data and hierarchies from BW into BPC from the Data Manager. It covered how to handle three common design approaches, any of which, you may encounter when integrating Cost Center master data into BPC.

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