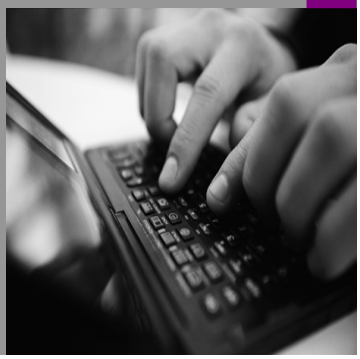


How-to Guide
SAP CPM

How To Manage Data with BPC 5.X Data Manager Tools

Version 1.00 – January 2008

Applicable Releases:
SAP BPC 5.X

THE BEST-RUN BUSINESSES RUN SAP

© Copyright 2007 SAP AG. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP AG. The information contained herein may be changed without prior notice.

Some software products marketed by SAP AG and its distributors contain proprietary software components of other software vendors.

Microsoft, Windows, Outlook, and PowerPoint are registered trademarks of Microsoft Corporation.

IBM, DB2, DB2 Universal Database, OS/2, Parallel Sysplex, MVS/ESA, AIX, S/390, AS/400, OS/390, OS/400, iSeries, pSeries, xSeries, zSeries, z/OS, AFP, Intelligent Miner, WebSphere, Netfinity, Tivoli, and Informix are trademarks or registered trademarks of IBM Corporation in the United States and/or other countries.

Oracle is a registered trademark of Oracle Corporation.

UNIX, X/Open, OSF/1, and Motif are registered trademarks of the Open Group.

Citrix, ICA, Program Neighborhood, MetaFrame, WinFrame, VideoFrame, and MultiWin are trademarks or registered trademarks of Citrix Systems, Inc.

HTML, XML, XHTML and W3C are trademarks or registered trademarks of W3C®, World Wide Web Consortium, Massachusetts Institute of Technology.

Java is a registered trademark of Sun Microsystems, Inc.

JavaScript is a registered trademark of Sun Microsystems, Inc., used under license for technology invented and implemented by Netscape.

MaxDB is a trademark of MySQL AB, Sweden.

SAP, R/3, mySAP, mySAP.com, xApps, xApp, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

These materials are provided "as is" without a warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. SAP shall not be liable for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials.
SAP does not warrant the accuracy or completeness of the information, text, graphics, links or other items contained within these materials. SAP has no control over the information that you may access through the use of hot links contained in these materials and does not endorse your use of third party web pages nor provide any warranty whatsoever relating to third party web pages.
SAP CPM "How-to" Guides are intended to simplify the product implementation. While specific product features and procedures typically are explained in a practical business context, it is not implied that those features and procedures are the only approach in solving a specific business problem using SAP. Should you wish to receive additional information, clarification or support, please refer to SAP Consulting.
Any software coding and/or code lines / strings ("Code") included in this documentation are only examples and are not intended to be used in a productive system environment. The Code is only intended better explain and visualize the syntax and phrasing rules of certain coding. SAP does not warrant the correctness and completeness of the Code given herein, and SAP shall not be liable for errors or damages caused by the usage of the Code, except if such damages were caused by SAP intentionally or grossly negligent.

1 Scenario

All Business Planning and Consolidation applications may require data management processes. SAP Business Planning and Consolidation 5.X is equipped to manage data from a friendly user interface. In this How – To guide, will review how to build a Transformation file, a Conversion file, and Schedule a data management package.

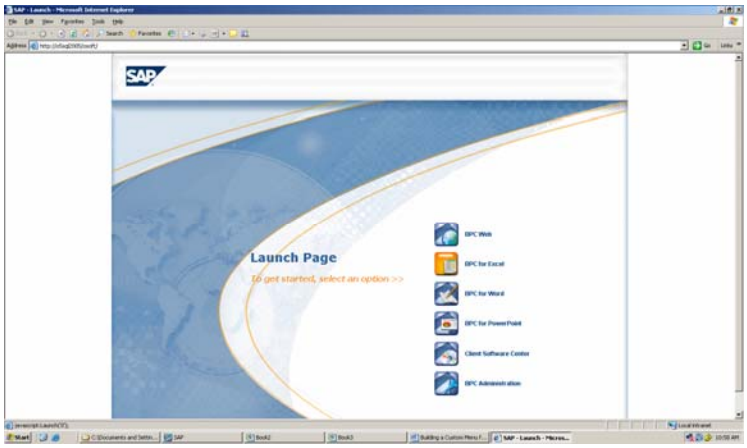
2 Introduction

This How -To guide leverages BPC 5.X and the application set called ApShell. ApShell is currently the default application set that is loaded with the BPC software and is often the beginning point for most customer designs. If this application set is not available at your customer, please discuss gaining access to a copy of this application set for development purposes. Each application in ApShell will have the ability to build, store and mange data management function for the BPC community.

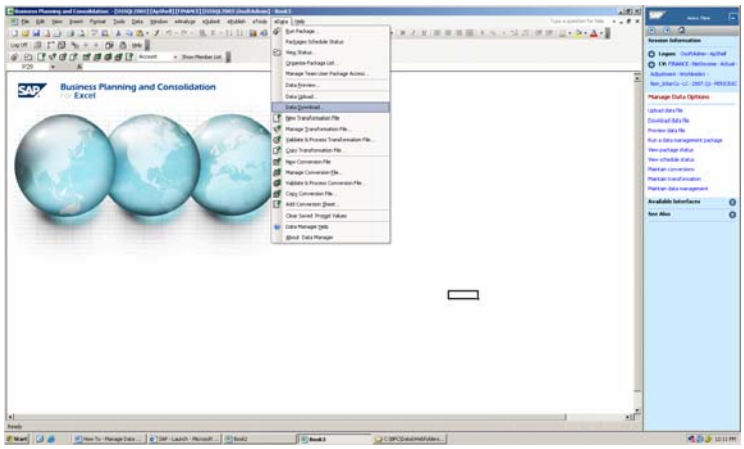
All Data Management processes are located under the eData Menu, or based on the prompts in the Action Pane, beginning with Maintain Transformations.

In order to develop a good guide and example, we first need to modify an existing data file from Apshell. This process is only listed for the purposes of this example, while the steps taken may be used during an implementation to manage data files.

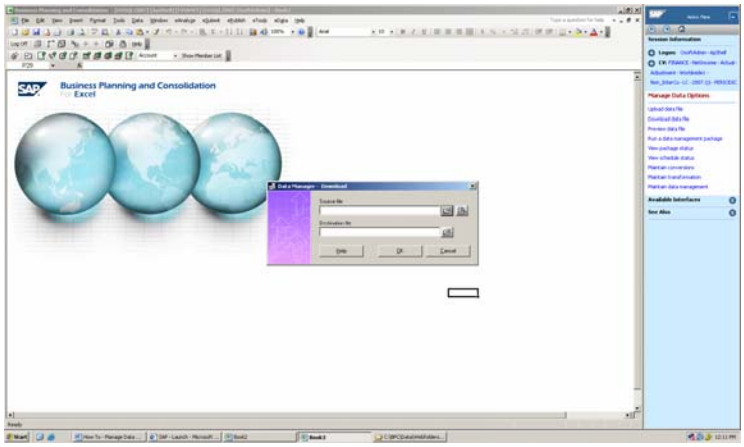
1. Using the FINANCE application in the ApShell Application set, Login and Start in BPC Excel from the BPC launch page.



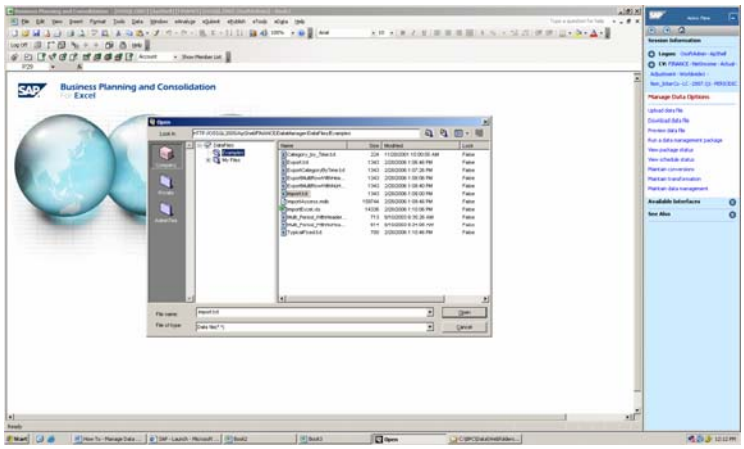
2. Go to eData, Data Download to get an exiting data file for editing



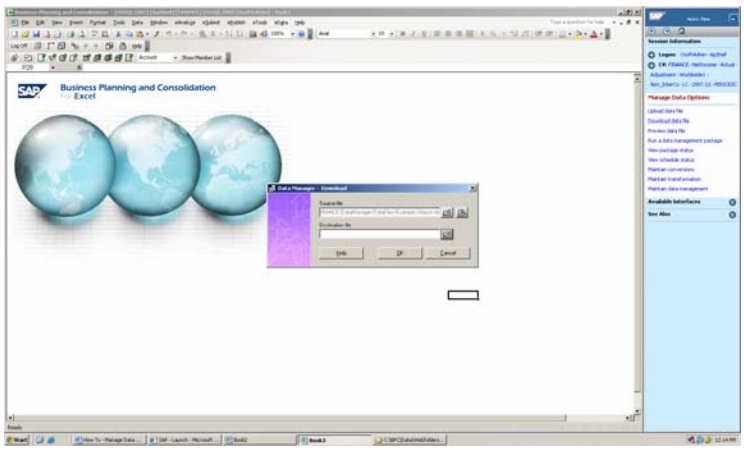
3. In the Source section, click the file folder ICON



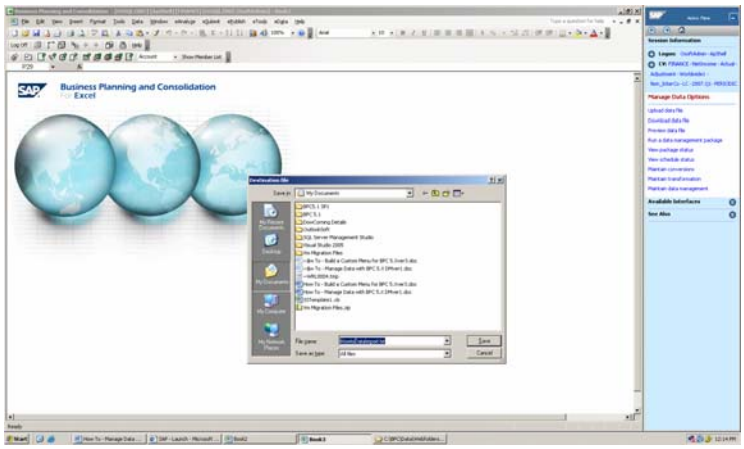
4. Get the Import.txt file from the Examples folder under the Company section.



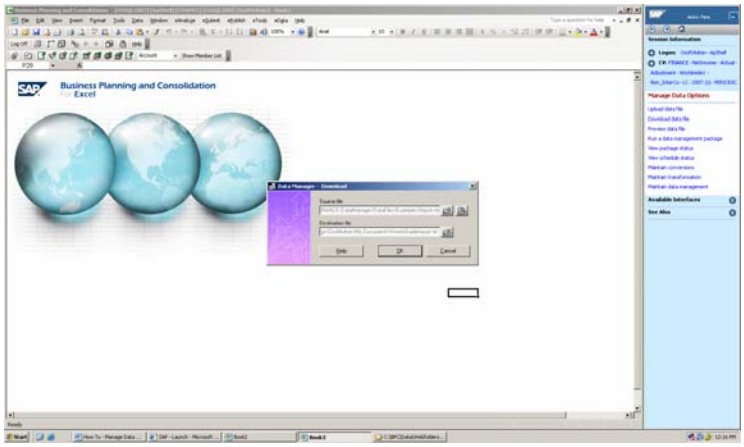
5. Then back on the destination file line, click the folder ICON.



6. Place the file on your local system directory, typically under My Documents, and rename the file to HowtoGuideImport.txt.



7. Click OK button

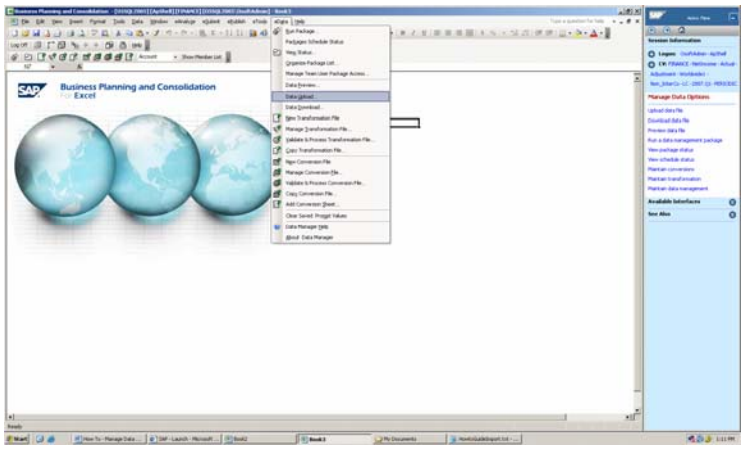


8. Using NotePad or a Text Editing software package, Open the HowtoGuideImport.txt file from the locally saved location. We need to modify this file for this exercise performing the following steps.

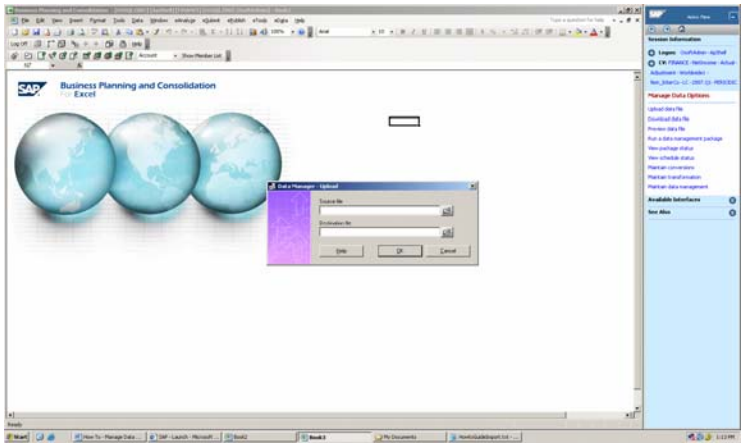
- Modify the Header (row #1), by changing the word Entity to CostCenter
- Modify the Header word Time to Date
- Modify the Header and delete the word DataSrc and the following comma.
- Perform a FIND and Replace to Change all values that are 2006.JAN to 03012007.
- Perform a Find and Replace to remove all values that are “ ,Input, “ with just a “ , “

9. Save the HowtoGuideImport.txt locally.

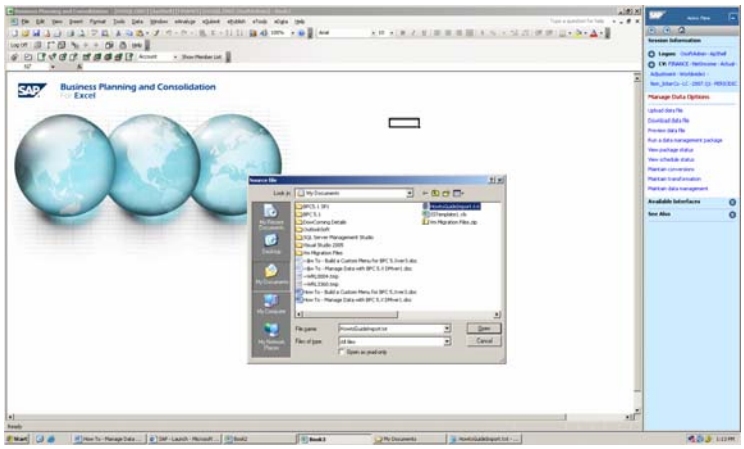
10. Load the file back to the Finance application. Start by selecting the eData, Data Upload to return the file to the BPC file server.



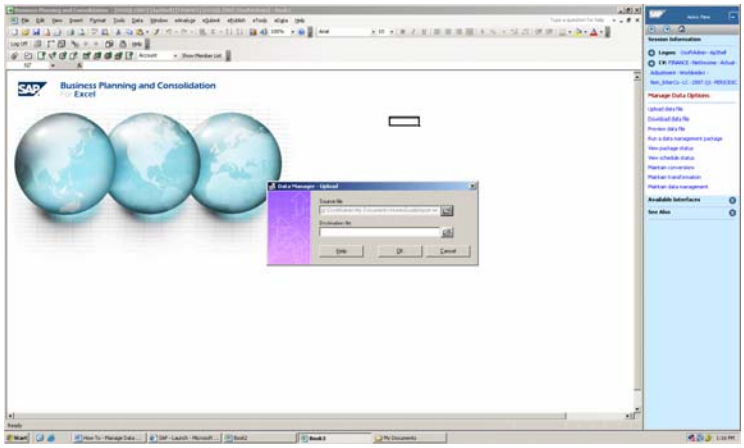
11. In the source file line, click the File Folder ICON



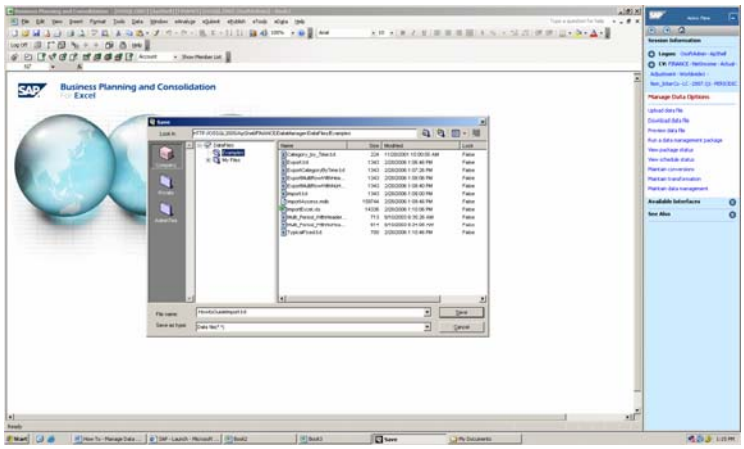
12. Select the file that we modified and stored on your local system



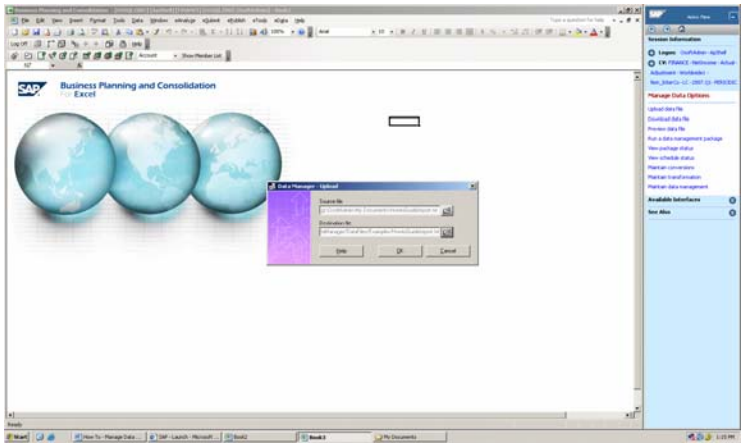
13. In the Destination row, click the File Folder ICON.



14. Store the file in the Company section, under the Examples folder, using the same name.



15. Click okay to move the file and complete this process.



This concludes the process needed to build a file for the How-To guide; however, the steps outlined above may be used to upload or download any files to the various folders in the Data Manger server file folder locations.

The Step By Step Solution

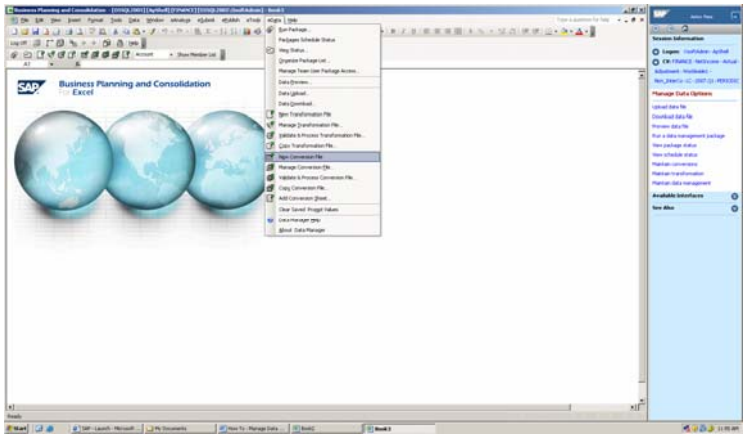
Now that we have a good file for loading into BPC, we need to build both a Transformation file and Conversion file to re-organize the information into a format that we may utilize. The ability to load the data using a standard Data Manager package, such as Import package in eData, Run Package, requires at a minimum a BPC transformation file be defined during the Import process. The steps that we will demonstrate in the guide are as follows:

1. Building the Transformation file
2. Building the Conversion file
3. Testing and Validation of the Transformation file
4. Running the Data Manager package
5. Scheduling the Data Manager package

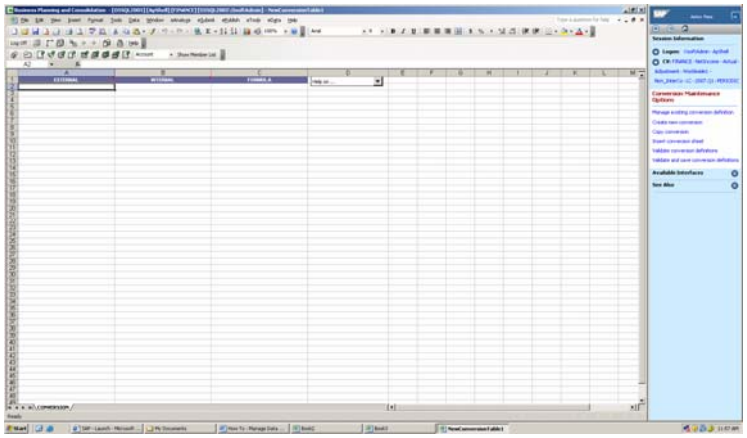
2.1 Build a BPC Data Conversion File

1. Using the FINANCE application in the ApShell Application set, Login and Start in BPC Excel from the BPC launch page.

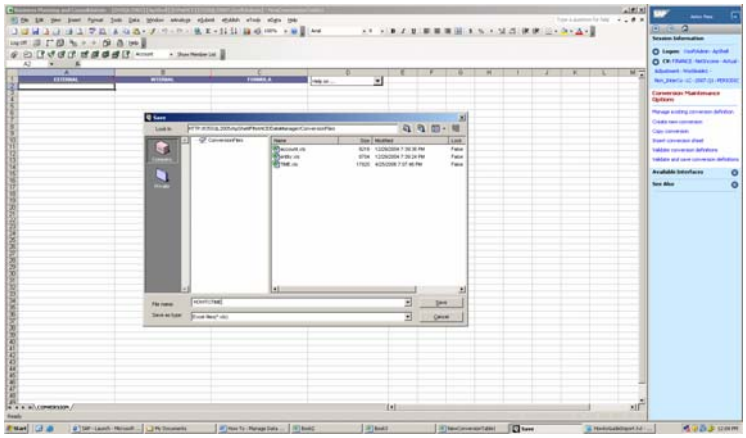
2. Create a NEW transformation file by selecting either eData, New Conversion File or from the Action Pane, Maintain Conversions, Create New Conversion



3. The new file that opens has 1 worksheet tab, with 3 columns; EXTERNAL, INTERNAL, FORMULA and a Help Box.



4. Building the conversion file is simple. First, determine if this conversion file will be used for more than 1 dimension. Each worksheet may be used for 1 dimension or the file may be Dimension specific and use the 1 worksheet. In our HowtoGuideImport.txt file, we changed the TIME members, so we need to convert these values back to the correct members used by BPC, so Save the Worksheet as HOWTOTIME.xls, by clicking eData, ValidateandProcessConversion file, or use the Action Pane.



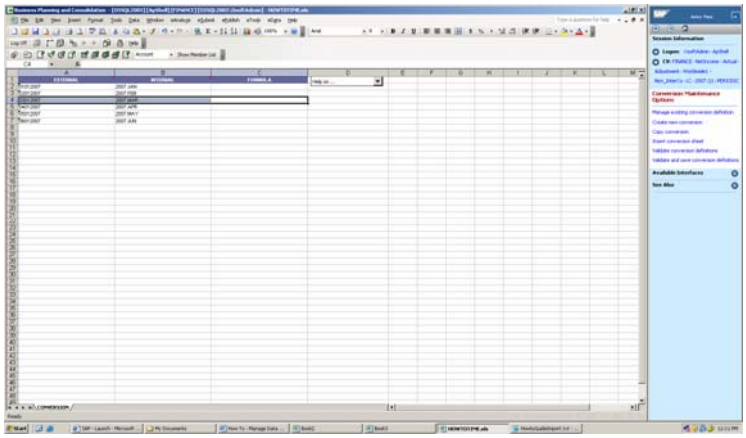
5. Now, to set-up the instructions. Normally, all we need is the EXTERNAL and INTERNAL information filled out. Using FORMULAS is a more complex instruction.

EXTERNAL - The members in the TEXT file that need to be converted

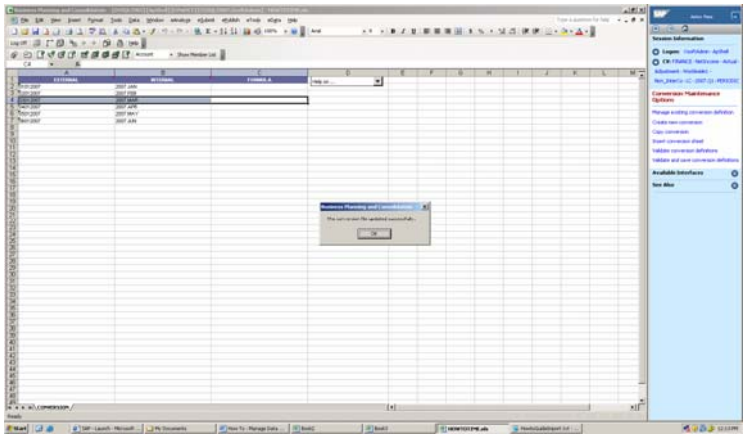
INTERNAL – The member ID that the External name is converted too

FORMULA – A formula used during the process (refer to the HELP Box for detailed instructions)

6. Time members in BPC follow a standard format of YEAR.MON. For example, January 2008 has a member ID of 2008.JAN. Only base level members may be converted, since we can ONLY load base level data information. Fill-in the conversion section similar to the example, so that we convert the Time element, 03012007 to 2007.MAR. The example has 6 months.

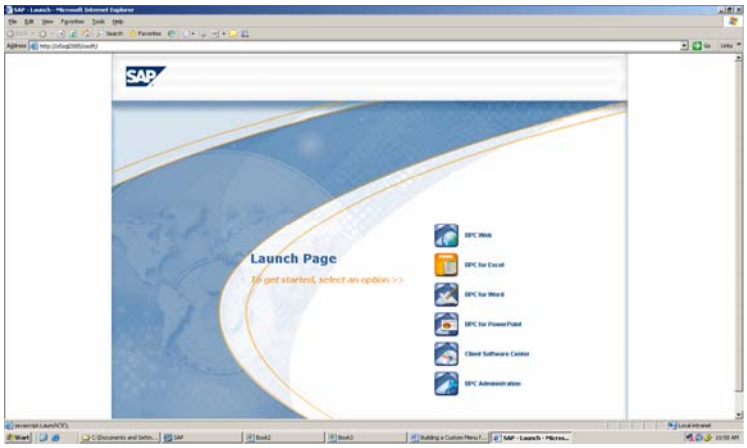


7. Validate and Process the Conversion file, the conversion file is complete.

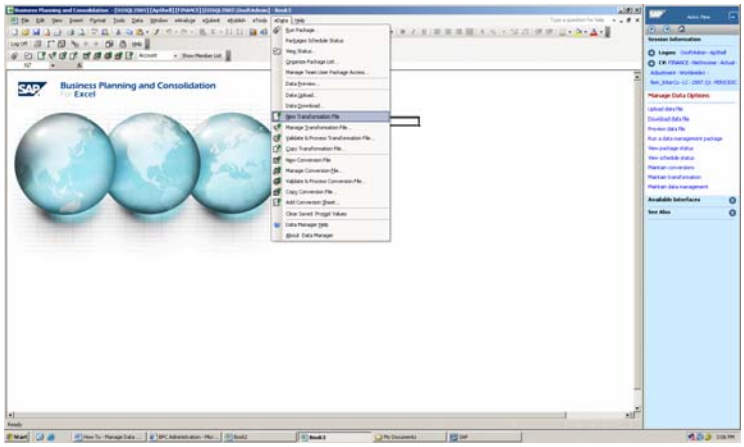


2.2 Open and Create a Data Transformation

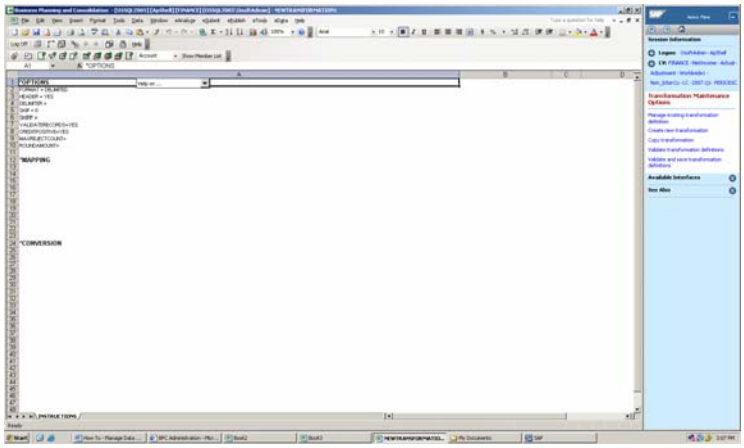
8. Using the FINANCE application in the ApShell Application set, Login and Start in BPC Excel from the BPC launch page.



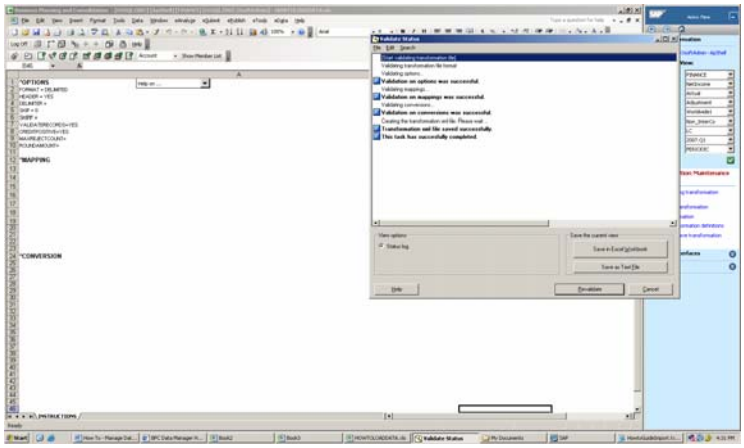
9. Create a NEW transformation file by selecting either eData, New Transformation File or from the Action Pane, Maintain Transformations, Create new Transformation



10. This is where the process will begin. There are 3 sections to any Transformation file, plus a HELP link.



11. Prior to adding information, Save the Transformation file, by selecting eData, Validate and Process Transformation File, or using the Action Pane, Validate and Save transformation definitions. Just click save and name the file HOWTOLOADDATA. Once it is complete, the message should look like the following. Press CANCEL button when complete.



12. The 3 sections are *OPTIONS, *MAPPING, and *CONVERSION

- *OPTIONS defines structured information for the transformation. Typically the existing defined parameters are sufficient for any data management process, but it depends on how the ".TXT" file is defined.
- *MAPPING defines how to map the data file columns of data to the existing dimensions of the application
- *CONVERSION is used if we need to reference a file to convert INBOUND data members during a data management process

13. The *OPTIONS for our process should be changed to the following based on our HowtoGuideImport.txt file. The various options can be reviewed in the HELP button. The most important options are VALIDATERECORDS=YES, which validates all members of the imported strings, CREDITPOSITIVE=YES, which tells the process that the inbound data is in its NATURAL SIGN (INC and LEQ Account types are Negative)

FORMAT = DELIMITED

HEADER = YES

DELIMITER = COMMA

SKIP = 0

SKIPIF =

VALIDATERECORDS=YES

CREDITPOSITIVE=YES

MAXREJECTCOUNT= 10

ROUNDAMOUNT=

14. The *MAPPING section is where we link the HEADER columns from the data file to the dimensionality of the application. The FINANCE application has 8 dimensions. Our data file has 7 names in the header. We need to add a new dimension to the records and match the HEADER names to the dimension names.

The statements read from left to right, from application dimension name to header name in the file.

ACCOUNT=

CATEGORY=

DATASRC=

ENTITY=

INTCO=

RPTCURRENCY=

TIME=

MEASURES IS not used since the assumption is for data to load as either a Balance for AST and LEQ account types, or the Periodic Movement for INC and EXP data types

15. There are a couple of OPTIONS for filling in the *MAPPING Section. OPTION 1: You can list all dimensions and the corresponding header column location from the data file

ACCOUNT= *col(3)

CATEGORY= *col(1)

DATASRC= *newcol(INPUT)

ENTITY= *col(4)

INTCO= *col(5)

RPTCURRENCY= *col(6)

TIME= *col(2)

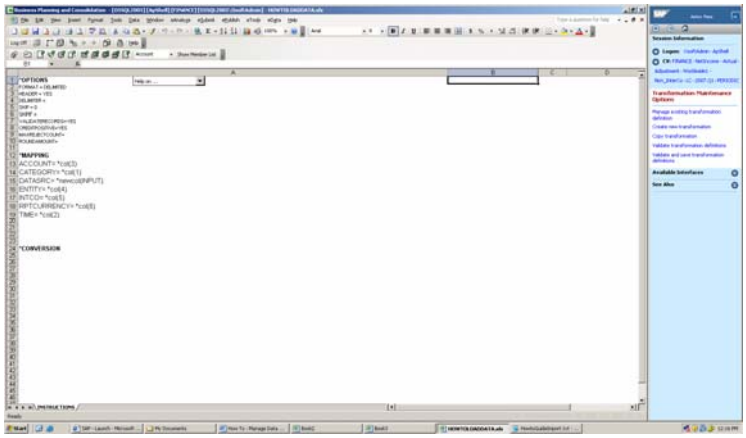
16. OPTION 2: List ONLY the NEW or Header names that NEED to be mapped. Since we have some of the same names in the HEADER as the dimensions in the application, we ONLY add the ones that require mapping.

TIME = DATE

ENTITY = COSTCENTER

DATASRC = *NEWCOL(INPUT)

17. In both OPTIONS, note that if a dimension name is missing in the header, that we use “*NEWCOL” statement to add the dimension data to the file, but may ONLY assign 1 base level member from the dimension to the data.



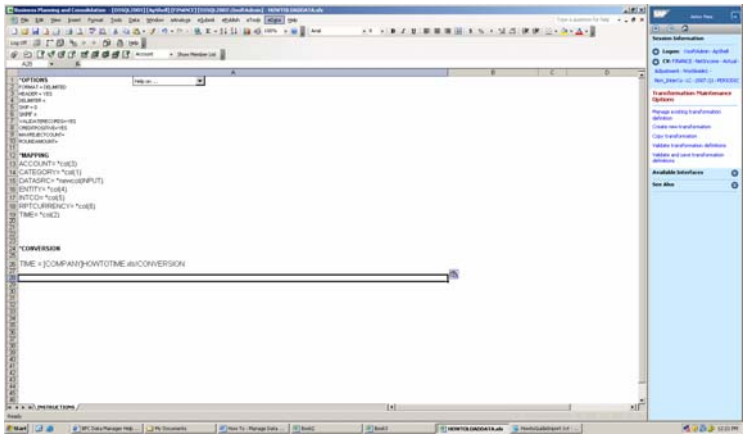
18. Once either method is written into the cells under the *mapping Section, now we need to add the Conversion information in the *CONVERSION section.

19. Conversion files are added using strings similar to ones to the right.

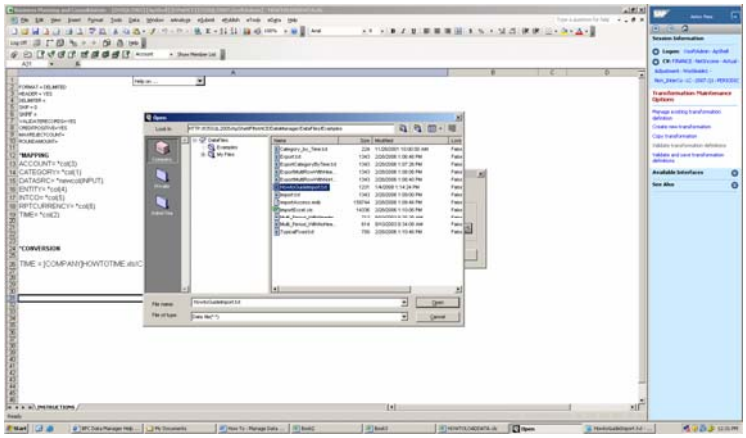
Dimension Name = [COMPANY]WorkbookName[!SheetName]

Use of [COMPANY], will cause the process to look in the company folder and not in a team folder.

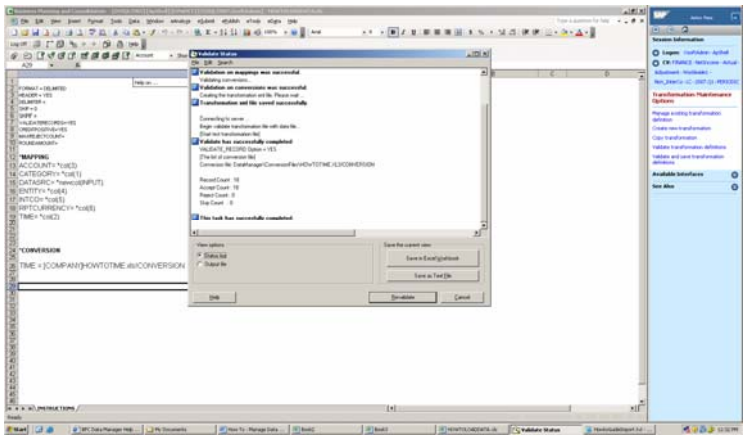
20. Add our Conversion file, TIME = [COMPANY]HOWTOTIME.xls!CONVERSION



21. Validate and Process the Transformation file against the HOWTOGUIDEIMPORT.TXT data file, or using the Action Pane, Validate and Save transformation definitions.



22. If there are errors, re-check the Transformation and re-save. Otherwise the file should Transform successfully.

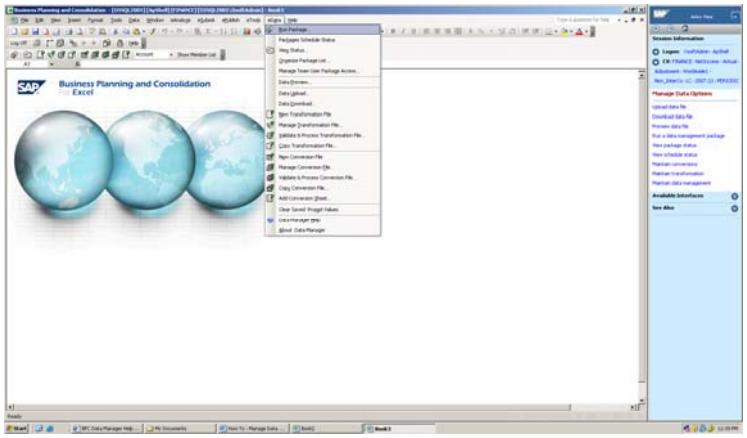


23. Close the Transformation file.

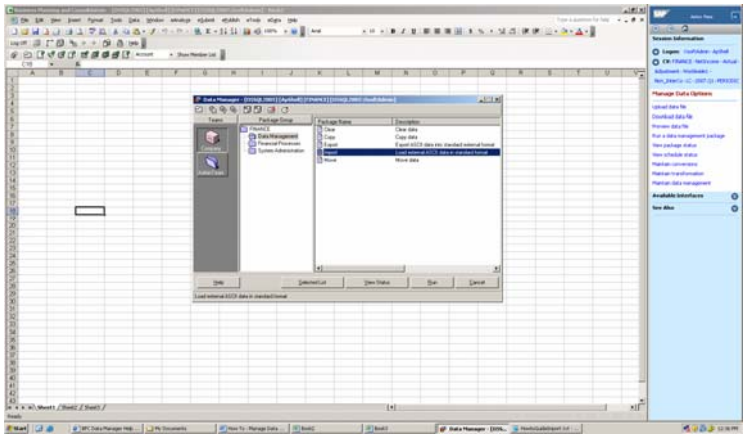
2.3 Load Data Using Transformation file

1. Using the FINANCE application in the ApShell Application set, Login and Start in BPC Excel from the BPC launch page.

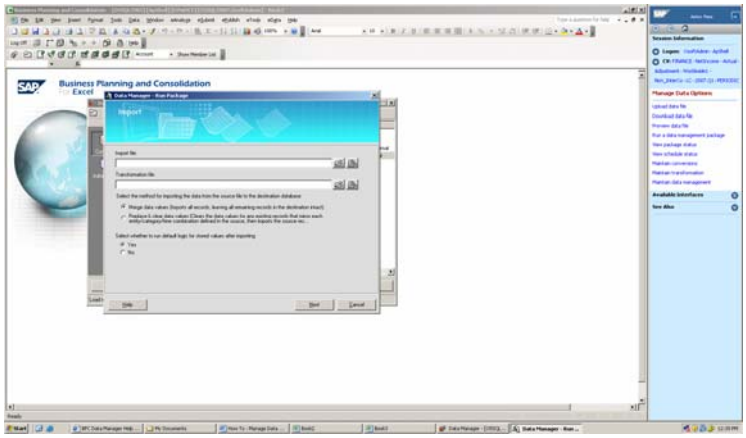
2. Now that we have the 3 components to load data; a data file, a Transformation file and a Conversion file, we may either run a Data Manager package to Import the data or Schedule it for the future. Start by selecting eData, Run Package or Run a data management package from the Action Pane.



3. Select the IMPORT package under the Data Management Folder.

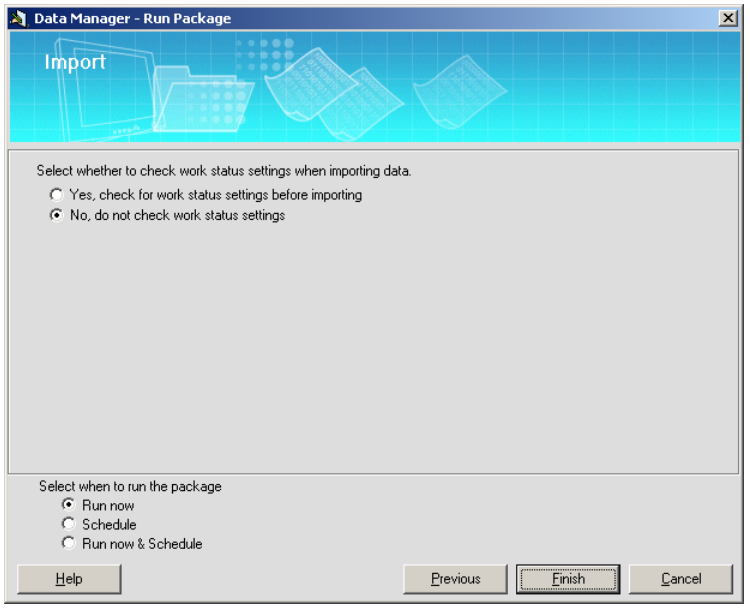


4. In the Import file box, type the file name or click the folder to browse for the HOWTOGUIDEIMPORT.txt file. In theTRANSFORMATION box, click the folder and browse for the HOWTOLOADDATA.xls. Each file is in the Example file folder.

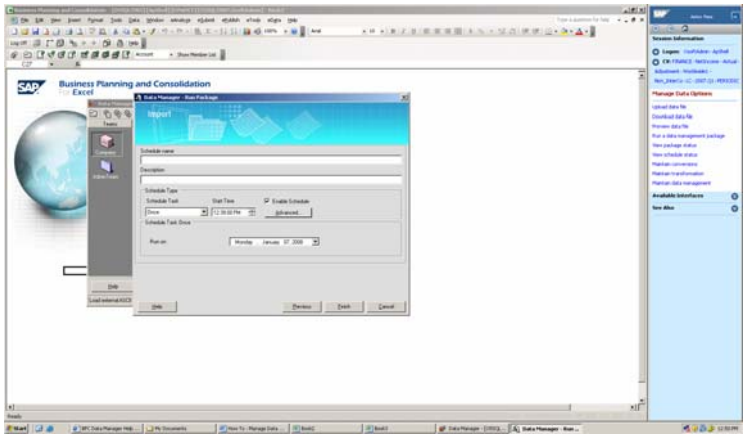


5. Select either Merge or Clear buttons. Select to run or not run default formulas. Click NEXT.

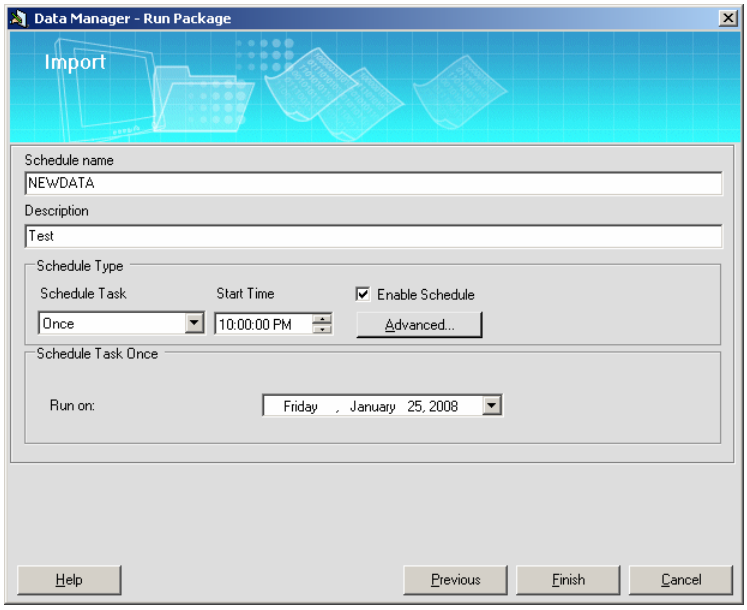
6. Select the No; do not check Work Status settings, since they are not organized in our example. Next, determine if you will run the package now, or Schedule it for a later day and time. If you select Run Now, the default selection, then click the FINISH button.



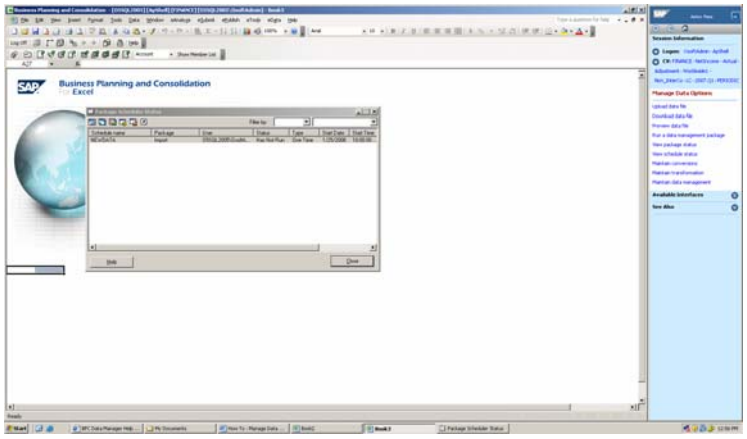
7. We will assume we want to Schedule the package for the night, so click the Schedule button, which will bring up a new form.



8. Fill in the name box, a description, and change the TIME. Select the frequency of the run under the Schedule Task box, select a time and a start date. The Advanced Options will let you choose an END date, if needed. Select the Enable Schedule button. Click Finish when complete.



9. To verify the schedule, go to the eData, Packages Schedule Status to review the schedules in queue.



www.sdn.sap.com/irj/sdn/bpx-cpm