Step by Step Procedure of Creating Workbook using Bex Analyzer

Applies to:
SAP BW Developers. For more information, visit the EDW homepage

Summary
This document provides the step by Step procedure to create Workbooks in SAP Bex Analyzer. It also provides various features available in designing the workbook & steps to broadcast the same.

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**BEx Analyzer**

The Business Explorer Analyzer is an Excel based tool of Business Explorer which can be used for Analysis & reporting by designing the interfaces of our queries with the help of Workbooks. It’s a rich combination of SAP BI & Excel properties. We can create several views of data as per different requirements & user preferences. It has a user-friendly interface which is same as Microsoft Excel with an additional BW menu & toolbar. BEx Analyzer provides several design items (controls) which enhances the reporting functionality.

**About Workbooks**

A Bex Analyzer workbook is nothing but an excel sheet which acts as a place holder for a Query result. A workbook allows us to change the look & feel of a Report by which we can create formatted reports. We can easily insert a Query into the workbook and customize its appearance. We can apply Excel calculations & format properties.

Multiple queries can be inserted together in a single worksheet and can be used for comparative analysis and thereby creating a package of reports with coherent look & feel.

Apart from this Information Broadcasting is the most important feature of workbook which allows precalculation of the workbook (time for which can be defined as per convenience & data availability) and automated broadcasting to the intended recipients.

The key features because of which one may opt for Workbooks:

- The presentation of BI data in Excel format which allows the Users to utilize their Excel knowledge
- Multiple reports can be combined into a single worksheet which provides a better comparison of scenarios
- The look & feel of the report can be customized and calculations can be done locally in the worksheet itself.
- Workbook can be precalculated & can be broadcasted to the users on a regular basis. The automation of this process can be done very conveniently.
- The Password Protection feature of the workbook ensures the security of confidential data.
Creating Workbooks

Steps to Create a Workbook:

Step 1: Open the BEx Analyzer.
1. Go to Start → Business Explorer → Analyzer

![Image of Business Explorer menu]

2. Select File -> New OR click New icon on the toolbar:

![Image of Microsoft Excel toolbar]

Step 2: Insert a Query from BEx Query designer into a Workbook:
1. Select the Cell in the worksheet (Here it is B2) at which you want to start your Query embedding.

   Now, Go to the Add-Ins tab and click over Insert Analysis Grid icon:

![Image of Insert Analysis Grid icon]

2. The Analysis Grid will get inserted at the desired cell selected in above step.

![Image of Analysis Grid inserted in Excel]
3. Now to insert the Query, click over the inserted Analysis Grid (Here, in Cell B2). A pop up screen will appear which will navigate you to the Query which you created in BEx Query Designer:

4. Click on Create Data Provider tab. Another Pop up screen will appear. Here Click on Assign Query/Query View icon which will take you to the BEx screen where we can find & select our already created Query.
5. Select your Query & then click on Open Query which will bring the control back on the previous screen:

Here if we simply want to insert our BEx Query in to the workbook without any formatting check Apply Formatting, Allow Navigation & Display Sort icons options which will keep the convention BEx Query designer formatting intact.

The data will automatically fit itself into the sheet without checking the AutoFit option.

Click Ok.

You will be again reverted to the screen of Step 2. Here click on the Exit Design Mode icon (marked in above snapshot) in the Add-Ins tab.
6. Now you will be able to see the Report output in the worksheet with the BEx formatting.

![Workbook Output](image)

Click the below Icon to switch the workbook in Design or Analysis mode.

![Icon](image)

This will bring the workbook back to Analysis Mode. The rows & columns width can be adjusted just as we do that in Excel.

**Step 3: Inserting a query/view with Custom template**

Instead of using the standard format, we can customize the template and create fixed formatted reports by using excel properties.

We can design the template as per the requirement. We can adjust the look and feel of the Report output through this and we can get an interesting layout for the Report besides the convention Query Designer output.

Various Excel properties like Font color & size, Background color, Borders, formulas to calculate Result rows, inserting Logos, merging sales can be used.

Few points to consider while designing a custom template.

1. You can hide the row in which query has been inserted; so that the header line of query output can be hidden & a formatted header can be set.
2. While inserting the query, uncheck Apply Formatting, Allow Navigation, and Display Sort Icons as we do not want the format properties of BEx.
3. Before creating the format, one should be aware of the result area of the report.
Workbook Settings:

Apart from the Excel settings, there are various other settings which are offered by Analyzer for the workbook. We can set these as per our requirement by clicking on Workbook Settings icon in the Add-Ins tab:

The above screen will appear which has the following options in GENERAL tab:

**Refresh Workbook on Open:** To avoid the manual refresh of the Workbook saved locally, this option needs to be checked. By this the Workbook will automatically connect to the server on opening and will fetch the latest data loaded to the info provider.

**Use Compression when Saving Workbook:** Checking this option helps to reduce the memory consumed for saving the workbook. This Option is very useful when the volume of data is quite high and we have lot of local calculations in the workbook.

**Password-Protect Workbook:** It is a very important feature of analyzer workbooks which ensures security of data. Checking this option password protects all the sheets and changes cannot be done using analyzer functions without providing the password.

To set the Password, check this option which in turn will enable the below two fields asking to enter & re-enter the password:
Password protection helps in restricting the changes that can be done to the data values of the design of a workbook but one can always analyze the Query Result without entering the password which ensures data integrity.

**Workbook Description:** Description can be given for the workbook.

DATA PROVIDERS tab will display all the info providers which are being used as a source in all the sheets of this workbook. New data provider creation/deletion is also possible through this tab.

**Concept of creating Variants:**

If the Query contains User Input Variables, then variants can be created which can contain the values for multiple variables that can be used by more than one Query of a workbook.

Analyzer uses this variant as the saved values for variables every time the Query is refreshed. However, this might not be the case subjected to the settings done in above tabs.

For e.g., if Refresh Workbook on Open indicator is checked, Variable Dialog will be always displayed whenever the Workbook will be opened or refreshed.

**Parent Object for Variable Variants:** This option defines whether a variant created is to be saved to the Workbook as a whole or only to a specified Query.
Useful Constants

Using the text element icon, various information can be shown in the report.

Insert the Text Element, right click – go to properties – Constant tab.

You can display the current user, Query technical name and description, Infoprovider Information

Various Options available:

You can display the current value of the variable through Filter tab.
Example of a Customized template:

Sales Analysis by Market Year
Market Year = 2011

<table>
<thead>
<tr>
<th>Country Code</th>
<th>Sales Org</th>
<th>Business Unit</th>
<th>Market Year</th>
<th>Quantity</th>
<th>Amount in $</th>
<th>Price per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>A105</td>
<td>A101</td>
<td>2011</td>
<td>254</td>
<td>17355.00</td>
<td>68.43</td>
</tr>
<tr>
<td></td>
<td>A106</td>
<td>A101</td>
<td>2011</td>
<td>255</td>
<td>19325.00</td>
<td>76.57</td>
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<tr>
<td></td>
<td>A107</td>
<td>A101</td>
<td>2011</td>
<td>256</td>
<td>17900.00</td>
<td>69.68</td>
</tr>
<tr>
<td></td>
<td>A108</td>
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<td>2011</td>
<td>258</td>
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<td>49.51</td>
</tr>
<tr>
<td></td>
<td>A110</td>
<td>A102</td>
<td>2011</td>
<td>259</td>
<td>13950.00</td>
<td>50.39</td>
</tr>
<tr>
<td></td>
<td>A111</td>
<td>A102</td>
<td>2011</td>
<td>260</td>
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<td>55.98</td>
</tr>
<tr>
<td></td>
<td>A112</td>
<td>A102</td>
<td>2011</td>
<td>261</td>
<td>19555.00</td>
<td>74.52</td>
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<tr>
<td></td>
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<td>253</td>
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<td>57.31</td>
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<td>A101</td>
<td>2011</td>
<td>257</td>
<td>10800.00</td>
<td>38.91</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>3591</td>
<td>196875</td>
<td></td>
</tr>
</tbody>
</table>
Broadcasting the Workbook:

Using the Bex Broadcaster, a Workbook can be distributed to particular set of users through E-Mail or to the Portal.

Go to BEx Analyzer, choose Tools → Broadcaster

It will take you to the broadcaster page.

Click on Create New Setting.
Provide the Description for the setting, set distribution type – Broadcast by Email, Broadcast To Portal etc. Provide the email address of the recipients.

Go to Text Tab. Provide the subject line & Text Content for the email.

Save the workbook.

You can execute the workbook directly or schedule the same.

Create new Scheduling, you can set it periodic – By 1 day, 1 Week or 1 Month and can set the start date.
The variable value can be set before the workbook can be broadcasted.

Click on Create variable under Workbook Precalculation.

Set the value

You can create different Broadcasting settings & can set different list of recipients & set different value to the variable. In this way same workbook with different data set can be broadcasted to the different set of users.

Note: If the default value is set to the variable using Customer Exit, then the value does not change dynamically during workbook broadcasting; it will be broadcasted with old values.
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