

14

CHAPTER

Working with SAP BI Standard Business Content

In this chapter we will review the options for using Standard Business Content (SBC) while developing queries and reporting strategies. Standard Business Content consists of much more than the standard delivered queries, web templates and workbooks and can help you with the overall timelines and processes in your implementation because you can turn on the SBC you need—for queries as well as InfoProviders, datasources, and many other objects within the BI system to increase the ROI on the implementation. You can also turn on the SBC for help with the performance analysis and tuning of your system. There's much more in the area of technical help within the 7.0 BI system versus the 3.x version. You also have available the Administration Cockpit, which is, among other things, a central focal point for all the reports and queries for tracking query and system performance.

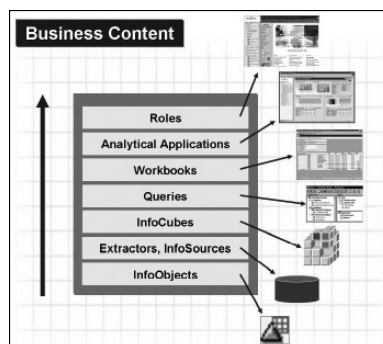
Introduction to BI Standard Business Content for Queries

We have worked through quite a bit of information concerning the design, functionality, and creation of queries, workbooks, and web objects. At this point, however, it's important to take a moment and review what it is we are trying to accomplish. As you go through your implementation, your initial discussion will involve trying to understand how you are going to configure your BI system to deliver to your customers—whether they are executive users, business users, or even other systems—the information, both structured and unstructured, that they need in the format they need. This is where Standard Business Content (SBC) comes into play. The idea of Standard Business Content has been discussed in different ways for the last several chapters, and it is important we discuss it here in a more formal manner. Figure 14-1 shows an overview of the different SBC objects. These are not all the SBC objects available. Rather, this is a view of the critical objects you might use for your project.

If you have gone through numerous implementations, you'll know that you have to answer some initial questions about what to configure and how—and getting the answers to these questions sooner is better than later. This is one area where SBC queries, workbooks, and WAD queries can help. If we are going to get business users involved with the project, we need to get their attention and suggestions—and to do that we need to be able to show them something ASAP. That something could be SBC queries. The easiest and

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FIGURE 14-1
Overview of the
Standard Business
Content objects



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fastest approach to getting information and samples out to your business users is to activate SBC and demo this information for them. This will get them to understand what the possible outcomes could be for the information and how this toolset will work for them.

Another reason for the use of SBC is to increase the speed of an implementation. We are all comfortable with the fact that SBC will not exactly fit our project, but it may fit about 50% to 75% or more of our needs. That's not a bad start, and getting any help to decrease the project timeline and increase the speed in which we can implement this toolset is all good. Therefore, activating SBC to see what it can offer, determine whether it can reduce the amount of customization we need to do, perform gap analysis, and produce a prototype to show the business users is always good and would be a great start.

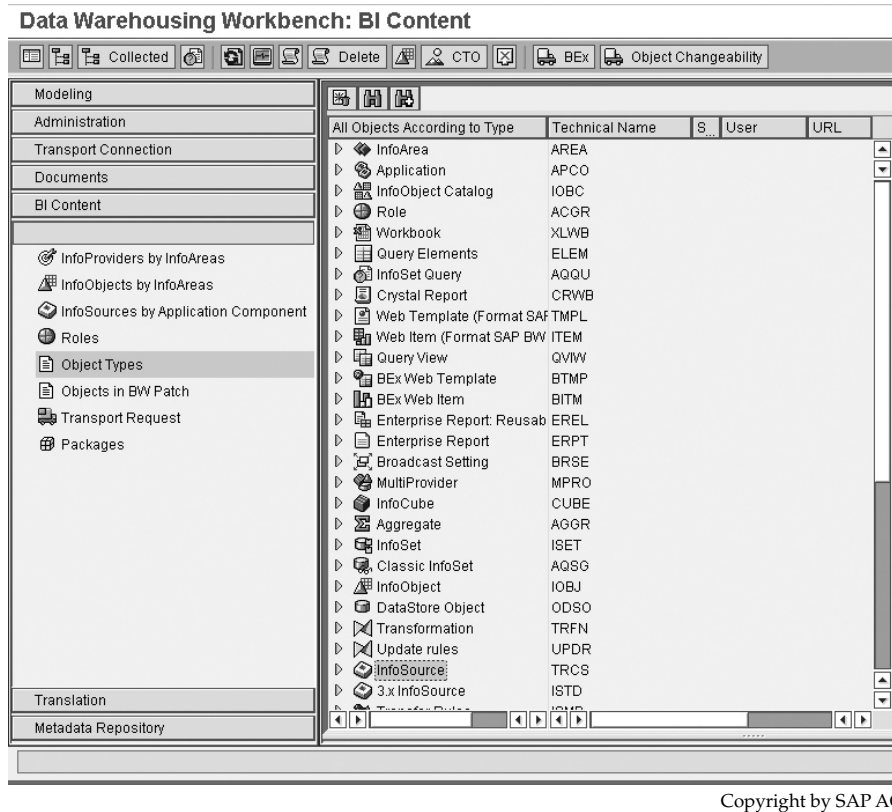
There are other reasons to get SBC up and running, but these can be specific to a particular project. Needless to say, you should review your requirements and investigate what SBC can do for you before spending time on customized anything in BI. We will cover the activation as well as the deactivation of SBC, but only in terms of queries, even though the other objects' activation processes are very similar. In Figure 14-2 you can see a partial list of SBC objects by object type, and at the bottom of the list (not shown) is an additional item called More Types, which offers additional objects not on the primary list. Once you start reviewing the SBC—either by looking to activate a portion of it to review the standard objects in that specific area, activating the SAP Demo SBC for use in demonstrating functionality, or just using the Metadata Repository to view what SBC you have available—you will see that there are literally thousands of SBC objects for you to use.

I think of SBC not only as what the SAP BI system can offer you in terms of the activation of objects, but also what the system can offer you in terms of standard parameters for your queries. Therefore, I have added to this section the parameters you can set in the IMG for the BEx Analyzer and WAD queries. These components have sometimes been overlooked, and they may offer you some help with your business requirements. We will complete this chapter with a discussion of the Metadata Repository.

Standard Functionality for Query Design

Before we move into the true Standard Business Content in the BI system, we'll cover some of the other parameters that could affect your implementation and display of information via queries. These parameters can be found in the Implementation Guide (IMG) for BI. They are settings that control the display of some of the basic information in your queries. Remember that these parameters are systemwide parameters, and if you change them, you change them for everyone.

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FIGURE 14-2 Overview of the Standard Business Content by object type

NOTE We have used the transaction code *SPRO* in past chapters to get to the *IMG*.

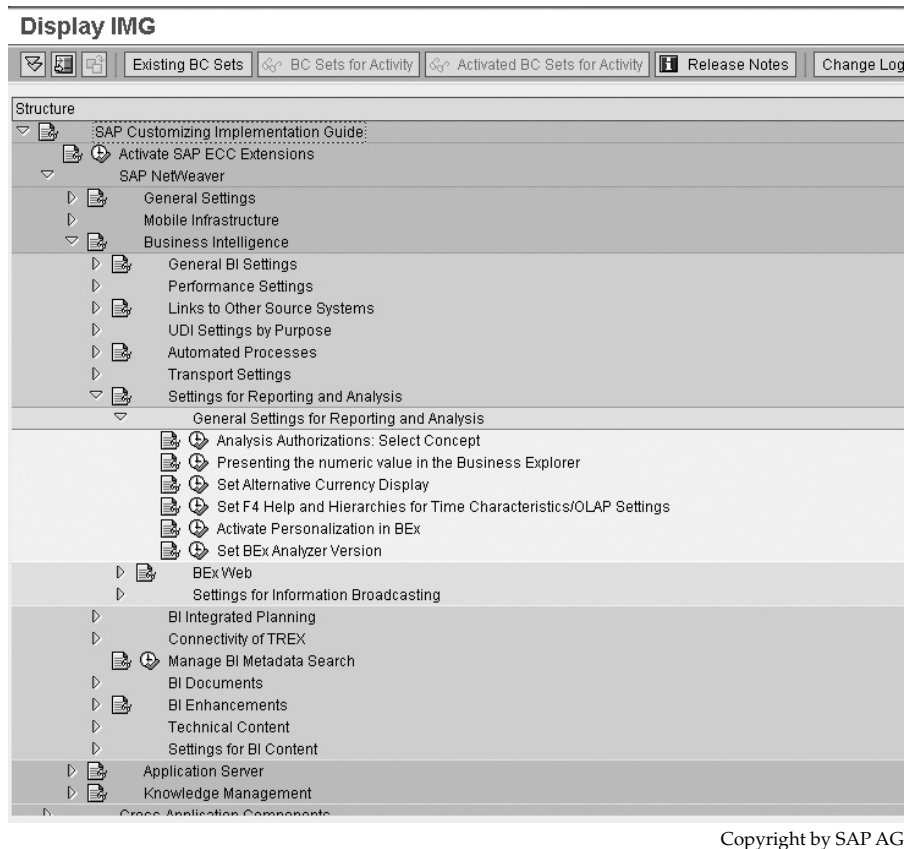
Settings for Reporting and Analysis

Figure 14-3 shows you the menu path in the *IMG* to the actual parameters we will discuss. These parameters are found under the heading *General Settings for Reporting and Analysis* and are listed next:

- Analysis Authorizations: Select Concept
- Presenting the Numeric Value in the Business Explorer
- Set Alternative Currency Display
- Set F4 Help and Hierarchies for Time Characteristics/OLAP Settings
- Activate Personalization in BEx
- Set BEx Analyzer Version

Analysis Authorization is the new authorization process in BI 7.0 version. In this activity, you can choose whether you want to set up the new analysis authorization concept or the

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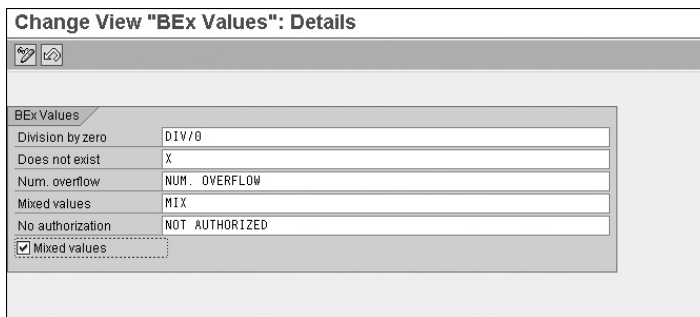
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FIGURE 14-3 General settings for reporting and analysis

old concept of reporting authorizations. The new concept is active as the default setting. You reach the new infrastructure from transaction RSECADMIN, or you can use SAP Easy Access Menu BI | Business Explorer | Authorizations. Both allow you to restrict how data for authorization-relevant characteristics is displayed in a query. However, the new concept is more user friendly and is better suited to the requirements of the BI system. For this reason, SAP recommends that you use the new concept. Only use the old concept in exceptional cases, and when doing so, make sure you have switched back to the old concept.

Presenting the Numerical Value in the Business Explorer allows you to set text for certain instances in the display of the data in the query. This text is important and for the final display may be critical to the acceptance of the data by the business users. The following illustration shows the different options you have when setting default text for certain situations. In most cases, these items are self-explanatory, but some need a bit of explanation.

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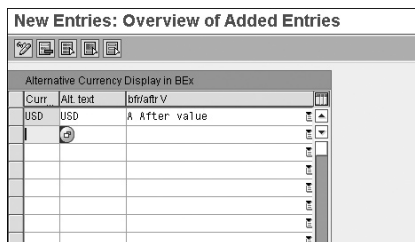
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Under certain circumstances, numeric values and texts for currencies, or units, in the Business Explorer cannot be determined uniquely. In such cases, predefined texts are displayed instead of the numeric values and currencies, or units. If a division-by-zero arises when a numeric value is calculated, the text DIV/0 is the option. If a numeric value cannot be determined, the text X is output (Does Not Exist). If a numeric value is not calculated due to numeric overlapping, the text NUM OVERFLOW is output. If a numeric value is made up of several currencies, or units, the text MIX is output instead of the currency or unit (Mixed Currencies). If a user does not have authorization to display a particular numeric value for a cell in the executed query, the text NOT AUTHORIZED is output in the cell instead (No Authorization). If a calculated numeric value is made up of different currencies, or units, the numeric value may or may not be output. If you choose Mixed Values, the numeric value is output. If Mixed Values is not active, the text is the output that you entered under Mixed Currencies.

Set Alternative Currency Display is generally used to determine whether the dollar sign (\$) or U.S. dollars (USD) is used for display in queries. If you are looking to use USD versus the dollar sign (\$), you can set that here. The standard setting is that all currencies are displayed in accordance with the ISO norm, by default, and appear after the numeric value, with the following exceptions:

- DEM is displayed as DM.
- USD is displayed as \$ (in front of the numeric value).
- GBP is displayed as £ (in front of the numeric value).

The first of the following illustrations shows the entries you would use to alter the standard setting for USD. The second illustration shows the outcome in the query. As you can see, the \$ for U.S. dollars has been changed to USD and appears after the amount.



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Customer Query Last Data Update: 06.12.2004 14:44:20

New Analysis Open Save As... **Display as** Table Information Send Print Version Export to Excel Comments Filter Settings

| Columns | Sold-to party | Incoming Orders | Order Entry Quantity |
|----------------------|--|------------------|----------------------|
| Key Figures | 1000 Becker Berlin | -6.644,42 USD | -2 PC |
| Rows | 1001 Lampen-Markt GmbH | 2.192.794,32 USD | 4.549 CAR |
| Sold-to party | 1002 Omega Soft-Hardware Markt | 156,04 USD | 0 CAR |
| Free characteristics | 1032 Institut fuer Umweltforschung | 285.647,89 USD | 72 PC |
| Division | 1033 Karsson High Tech Markt | 1.427.176,19 USD | 1.222,360 MIX |
| | 1034 ERL Freiburg | 0,00 USD | 0 AU |
| | 1172 CBD Computer Based Design | 1.061.883,67 USD | 4.220 PC |
| | 1174 Motomarkt Stuttgart GmbH | 2.099.126,31 USD | 3.985 PC |
| | 1175 Elektromarkt Bamby | 2.612.688,28 USD | 5.159,000 MIX |
| | 1300 Christal Clear | 2.005.526,82 USD | 4.213 CAR |
| | 1320 Becker Koeln | 1.473.259,13 USD | 390 PC |
| | 1321 Becker Stuttgart | 2.666.906,81 USD | 683 PC |
| | 1360 Amadeus | 1.160.326,94 USD | 5.955 PC |
| | 1460 C.A.S. Computer Application Systems | 1.090.495,56 USD | 2.911 PC |
| | 1900 J & P | 1.766.667,06 USD | 6.016 PC |
| | 1901 Motor Sports | 3.618.877,63 USD | 3.515 PC |
| | 2000 Carbor GmbH | 434.648,27 USD | 114 PC |

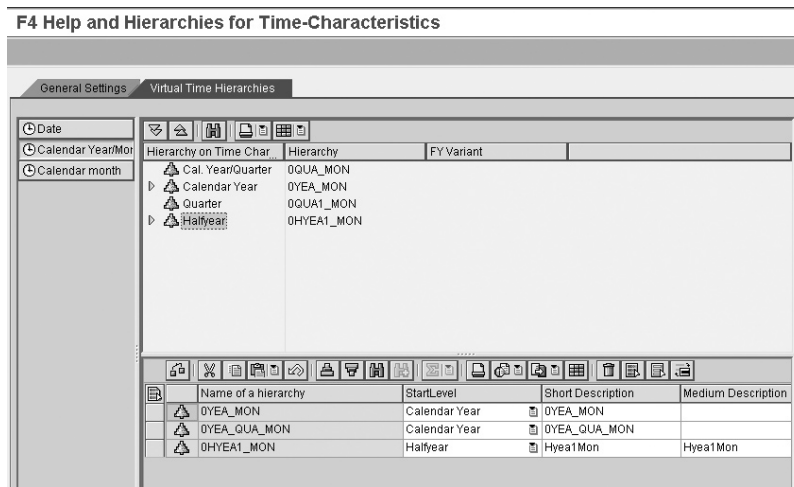
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One of the more important topics in this area is the next set of parameters: Set F4 Help and Hierarchies for Time Characteristics/OLAP Settings. In this activity, you can make some general OLAP settings for time characteristics. You can also determine hierarchies for the time characteristics you want to use in reporting. The leaves of the hierarchy are then in the time interval you have set. In the parameters of the initial tab, you have some basic settings for the time intervals. Here, you can determine the time interval that appears in F4 help for the characteristic values. This period should be as big as required, but also as small as possible so as to keep F4 help as clear as possible. If the interval is later changed, all aggregates that contain a hierarchy of time characteristics are deactivated. Another entry here is for the factory calendar, where you can select a factory calendar for the calculation of working days. Finally, using Masterdata Texts Time Characteristics, you can choose whether the fiscal year or the calendar year is to appear in the text for fiscal year periods.

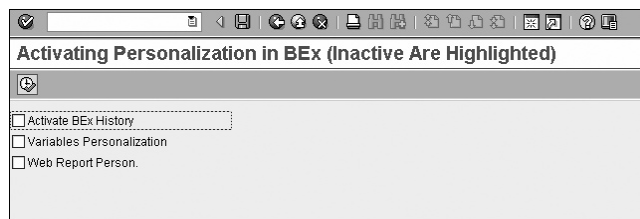
On the second tab in this table you have the virtual time hierarchies. Here, you can select hierarchies for a time characteristic you want to work with in reporting. On the left side, the system displays the existing active time characteristics for which hierarchies exist in the characteristic maintenance. You can use these pushbuttons to see lists of hierarchies related to the time characteristic in question. The list is displayed in the upper-right section of the screen. You can select a hierarchy from this list by double-clicking it. The following illustration displays the view and outcome of the activation of a virtual time hierarchy for Half-Year Hierarchy. Selected hierarchies have green tree icons and are displayed as selected in the list below. Here, you can select the start level and a description of the hierarchies. If you do not enter a description, the system generates one for you. Remember that these hierarchies don't show up in the Administration Workbench or under the time characteristic, only in the Query Designer under the specific time characteristic.

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Activate Personalization in BEx is something we have covered before. In this case, we will highlight the other two entries available. The following illustration shows the additional two items. We covered the Active BEx History option before; the Variables Personalization and Web Report Person options are the ones of interest here. You use this activity to activate personalization in the BEx Analyzer. You can personalize variables so that certain ones selected by you are proposed. Thus, you can identify a default value for a variable and execute a personalization against this value. If you do this, that value will be saved in the appropriate DataStore object for use the next time the query is executed. You can change the personalized settings and adjust the values held for use. The other option is for Web Applications, so that report drilldowns are saved. Remember, once personalization is activated, it cannot be deactivated.



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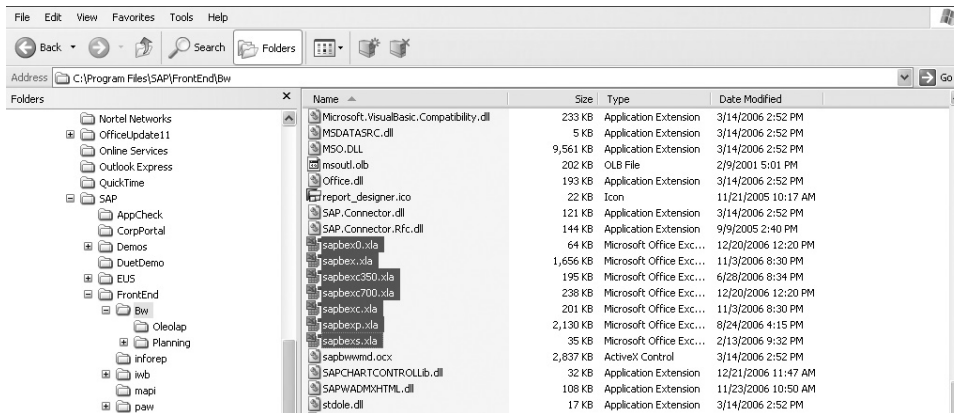
Set BEx Analyzer Version is used for setting the version of the BEx Analyzer (either SAP 3.x or SAP NetWeaver 2004S) that is called in transaction RRMX. Although this can be set, you are better off letting the system identify which version of the BEx Analyzer is available for use.

Configuration Tools for BEx Analyzer

To round out the parameters, that I found to be standard delivered functionality but not SBC objects that we activate from the BW Data Warehouse Workbench, we have several different Excel spreadsheet components we can use to help confirm the configuration of the BEx Analyzer and, more specifically, the Excel spreadsheet used with the BEx Analyzer to

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help us manage styles within the BEx Analyzer. These can be found either on a shared drive your company has set up and is using for this purpose or directly on your local drive. The following illustration shows these components highlighted in Explorer. If you do a search and use the wildcard *sapbex*, you should be able to locate these items.



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Those listed as SAPBEX0.XLA and SAPBEXX.XLA are for the confirmation of the assignment of the current front end for the BEx Analyzer. You may also see SAPBEXC350 or 700.XLA. These are for the same purpose—to confirm the implementation of the Excel front end for the BEx Analyzer. The important ones are SAPBEXS.XLA and SAPBEXC.XLA. Also, SAPBEXC.XLA is a tool that helps in confirming that PC, Server Check, and Version are consistent on your computer. Once you have located this workbook, you can click the Start button to confirm the setup for Excel works consistently with your BEx Analyzer. Executing this each time with the client can save quite a bit of time if you can identify the issues before you work through a query setup and everything short dumps just as you are saving the query. The following illustration shows an example of what this component looks like and what items it tests.

| | A | B | C | D | E | F |
|----|----------------------------------|------------------------|--|-------------|------------------|---|
| 1 | Check Installation on PC | | | | | See Note 197460 f |
| 2 | | | | | | Version is okay |
| 3 | Start | File | C:\DOCUME~1\va020097\LOCALS~1\Temp\sapBEX_PC_0306_175544.xls | | | Version is higher th |
| 4 | | Date/Time | 06.03.2006 17:55:44 | | | Version is lower th |
| 5 | | Excel Version | 11.0 6365 (049) | | | Version of non-BI f |
| 6 | | Windows Version | Windows XP Service Pack 2 (2600) | | | |
| 7 | | OSS Note | 921921 | | | In case of a problem, please create ar |
| 8 | | SAP GUI 6.40 | 13 or higher | | | and send this file to bw.bex.support |
| 9 | | | | | | |
| 10 | Filename | Version on PC | 7.00 Patch 1100 | Path | Date/Time | Size |
| 11 | | | | | | |
| 12 | BI in SAP NetWeaver 2004s | | | | | |
| 13 | AxInterop.SHDocVw.dll | | | | | |
| 14 | BExAddIn.dll | | | | | |
| 15 | BExAnalyzer.exe | | | | | |
| 16 | BExAnalyzer.xla | | | | | |
| 17 | BExApi.dll | | | | | |
| 18 | BExCACControls.dll | | | | | |
| 19 | BExCommon.dll | | | | | |
| 20 | BExCommunication.dll | | | | | |
| 21 | BExControls.dll | | | | | |
| 22 | BExControls2.dll | | | | | |
| 23 | BExDialogOpenSave.dll | | | | | |
| 24 | BExDiffViewer.dll | | | | | |
| 25 | BExFormulaParser.dll | | | | | |
| 26 | BExGeneratedAll.dll | | | | | |
| 27 | BExInstaller.exe | | | | | |
| 28 | BExMailTrace.dll | | | | | |
| 29 | BExOpenSaveServices.dll | | | | | |

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The final Excel workbook that is offered, SAPBEXS.XLA, is a very important part of your workbook and query strategy. This workbook delivers the Cascading Style Sheet (CSS). The CSS is the worksheet that controls the initial colors and formatting you see in the query. If you were wondering what supported these items in the query, this is it. The CSS stores all fonts, styles, colors, and so on, that you would use in the query and workbook configuration. As you can see in Figure 14-4, this has all the fields your query shows and the formatting used. This functionality was demonstrated in a previous chapter, so it is just mentioned here as part of the standard parameters delivered with the system.

Metadata Repository

With the HTML-based Metadata Repository, you can access information about the metadata objects of SAP NetWeaver Business Intelligence from a central point. This metadata especially includes important object properties and their relationships with other objects. Metadata means “data about data,” and this is appropriate for the Metadata Repository. It provides descriptive technical information about the objects used to build your application—in this case, your BI system. For example, metadata about an InfoCube would include the names of the InfoObjects and Dimension tables used in the InfoCube, the date it was designed, the last person who changed the design, and the structures and other objects linked to this InfoCube. It would *not* include the records stored in the InfoCube—that would be transactional data, not metadata. If you were to look at any of the “Create” screens for the objects in BI, you would be looking at the information stored in the Metadata Repository. There are metadata tables for storing information about InfoCubes, InfoObjects, DataStore objects, and all other objects in the BI system. The Metadata Repository is the grouping of all the information collected and stored in these tables. In the new version 7.0 of BI, you have an SBC InfoCube called 0BWTC_C08 that

The screenshot shows an Excel spreadsheet with the following data table:

| Region | Customer | Incoming Orders | Inc.Orders (planned) | Inc.Orders curr. quar |
|-----------|-------------------------|-----------------|----------------------|-----------------------|
| South | Carson Consulting | 10,219.65 | n.a. | 18 |
| | Grover & York | 328,301.84 | 311,000.00 | 45 |
| | Plainsdale | 21,777.65 | 22,300.00 | 3 |
| SouthEast | Result | 360,299.14 | 403,300.00 | 67 |
| | Gianni Vannini | 278,081.30 | 270,000.00 | 46 |
| | The Wainright Institute | 11,337.43 | 15,000.00 | 3 |
| | SonoWave | 120,443.42 | 200,000.00 | 33 |
| | Tecto | 114,934.22 | 117,300.00 | 22 |
| NorthEast | Result | 524,796.37 | 602,300.00 | 105 |
| | Grover & York | 320,166.21 | 502,000.00 | 69 |
| | Hamish Dartmouth | 41,654.54 | 46,400.00 | 13 |
| | SonoWave | 123,180.76 | 180,000.00 | 52 |
| | AG & T | 24,120.89 | 24,500.00 | 3 |
| West | Result | 509,122.40 | 752,900.00 | 139 |
| | Gianni Vannini | 46,590.07 | 55,000.00 | 72 |

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FIGURE 14-4 Sample style for the Business Explorer Analyzer

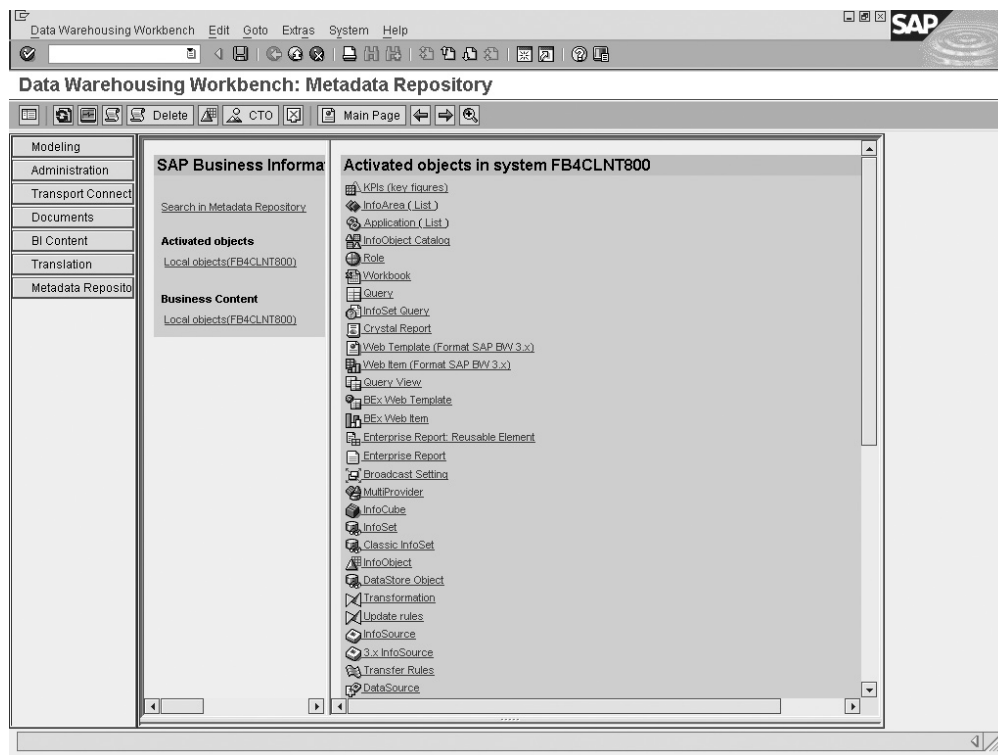
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has all the objects included in the SBC available for your review. Thus, you can create a query against this InfoCube and display all the SBC objects in a specific area (for example, all queries attached to an InfoCube).

Options within the Metadata Repository

You access the Metadata Repository from the Data Warehouse Workbench by using the Metadata Repository button on the left side of the screen. Figure 14-5 shows the initial screen for the Metadata Repository.

From the SAP Easy Access screen, choose Modeling | Data Warehousing Workbench. The Metadata Repository is displayed. A navigation area is available on the left side of the Metadata Repository, and a display area appears on the right side. In the navigation area, you can choose the objects for which information needs to be displayed—either activated objects from the local objects of the BI system or objects from all systems. Business Content (SAP-delivered objects) in the display area includes the available object types for the selection. By clicking the link for an object type, you get a list of all objects that belong to this type. By clicking the link for an object, you get detailed, object-specific information. To navigate from page to page in the Metadata Repository, choose Display Previous Page or Display Next Page. Choose Main Page to call up the entry page. Another approach to

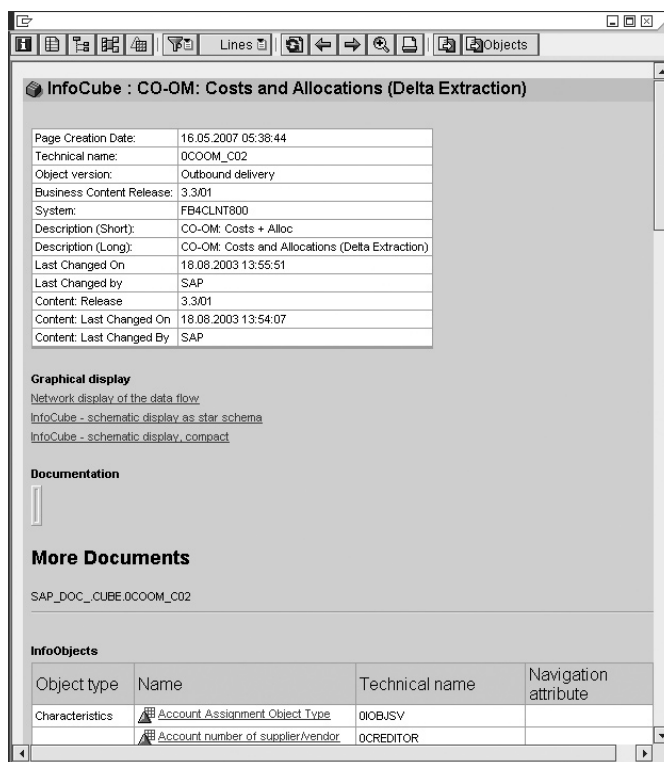


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FIGURE 14-5 Initial screen for the Metadata Repository

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accessing the Metadata Repository is shown in the following illustration. It offers a view of accessing the file system via the BW Administration Workbench configuration screen.



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You can start your search by selecting the Search in the Metadata Repository link, as shown in Figure 14-5, or by selecting one of the object icons in the right pane. If you choose to use the right pane, you will see a list of objects. You then use the Find function to look for the specific object that is of interest to you. For example, if you choose the link to the InfoCubes, you can see the list of InfoCubes available in the system, as shown in the following illustration. This list is not only SBC, but also all the InfoCubes available because we didn't identify that specific information before the search. If only the activated objects or business content objects are of interest, then you should start with the left pane and click the appropriate link and filter your search by business content only or activate objects only for a specific system. This will set the right pane to only those objects and help with the search functions.

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NOTE Remember to use the arrows to move back and forth among these screens. Also, use the Main Page button to move to the initial page of the Metadata Repository. You can also use CTRL-F to find objects you are looking for via a search term.

| | |
|---|-----------|
| Inter-Company Elimination | ICE |
| Interactive Scripting | 0CRM_OIC1 |
| Interactive Scripting Evaluation (IC WebClient) | 0CRM_JSE2 |
| Internal Data | 0CM_C03 |
| Internal Data: Stock (Month, Quarter, Year) | 0CM_C05 |
| Inventory Management InfoCube Gr00 | TR_C00 |
| Inventory Showcase | T_INV00 |
| Liability | 0CDM_C2 |
| Liquidity Planning: Actual Data | OTRPL_C01 |
| LIS Cube00 | LISCUBW00 |
| Lock 99 | LOCK99 |
| LOCK00 | LOCK00 |
| Logistics | ORT_C54 |
| MAP: Actual Data Bottom-Up | ORT_C17 |
| MAP: Actual Data Top-Down | ORT_C16 |
| MAP: Assortment Planning | ORT_C15 |
| MAP: Merchandise Planning | ORT_C12 |
| MAP: Objective Planning | ORT_C10 |
| MAP: Price Band Planning | ORT_C13 |
| MAP: Store Group Planning | ORT_C14 |
| MAP: Store Planning | ORT_C11 |
| MAT | MAT |
| Material Movements | ORT_C35 |
| Material Movements and Stock | 0CP_IC_C1 |
| Material Stocks/Movements (as of 3.0B) | 0IC_C03 |
| Merchandise Flow (Distribution Center) | ORT_C04 |
| Merchandise Planning, Plan | ORMP_C05 |
| Merchandise Planning, POS Sales, Month | ORMP_C01 |
| Merchandise Planning, POS Sales, Week | ORMP_C02 |
| Merchandise Planning, Stock, Month | ORMP_C03 |
| Merchandise Planning, Stock, Week | ORMP_C04 |
| Merchandise Procurement | ORT_C05 |
| Migration | T350IC02 |

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You can get a ton of information from the Metadata Repository, and initially you should try to take advantage of this as much as possible. It will definitely help with your search in the SBC area. Rather than trying to review the information via the Business Content screen in the system, you can navigate via web-based screens and view the details.

NOTE Another approach to reviewing SBC is to go to the Help.SAP.com website and use this option to investigate all the SBC available (via the BI content link), but remember, this is not specifically your system, so you need to compare what is available.

As you review the information in the repository, you can view the details of the specific objects. For example, if we drill down to the InfoCube view, we can choose the InfoCube 0COOM_C02 (SBC, because it begins with a zero). We can see that it offers us information about the initial setup, the last time it was changed, and the content release. Notice in the first of the following illustrations that you have three links in the screen below the heading Graphical Display:

- Network display of the data flow
- InfoCube – schematic display as star schema
- InfoCube – schematic display, compact

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Then, below these in the area titled More Documents you have a link to other documents that are assigned to this InfoCube. With the initial three options, you can generate a graphical view of the design of the InfoCube, which will give you a visual of the characteristics and key figures in your InfoCube and how they are set up in the dimensions. This will allow you to analyze the possible performance questions based on the dimension design and also offer you some help with other InfoCubes that you might be creating and the possible dimension design. The second illustration uses the option “InfoCube—schematic display, compact” to show the view of the dimensions and fact table that store the characteristics and key figures. You can identify a number of interesting items on these screens. Every time I review the Metadata Repository, I see something I didn’t see before. For example, if you look closely at this illustration, you can see that some of the InfoObjects have a small double arrow figure in front of them. This identifies the InfoObject as a navigational attribute. In addition to this, you can see that some of the InfoObjects are indented a bit—for example, under Network Activity the InfoObject Network is indented. This shows that Network is a compound of Network Activity.

SAP Business Information Warehouse | **InfoCube : CO-OM: Costs and Allocations (Delta Extraction)**

Search in Metadata Repository

Activated objects
Local objects(FB4CLNT800)

Business Content
Local objects(FB4CLNT800)

| | |
|---------------------------|---|
| Page Creation Date: | 23.05.2007 12:30:23 |
| Technical name: | 0COOM_C02 |
| Object version: | Outbound delivery |
| Business Content Release: | 3.3/01 |
| System: | FB4CLNT800 |
| Description (Short): | CO-OM: Costs + Alloc |
| Description (Long): | CO-OM: Costs and Allocations (Delta Extraction) |
| Last Changed On: | 18.08.2003 13:55:51 |
| Last Changed by: | SAP |
| Content: Release: | 3.3/01 |
| Content: Last Changed On: | 18.08.2003 13:54:07 |
| Content: Last Changed By: | SAP |

Graphical display
[Network display of the data flow](#)
[InfoCube - schematic display as star schema](#)
[InfoCube - schematic display, compact](#)

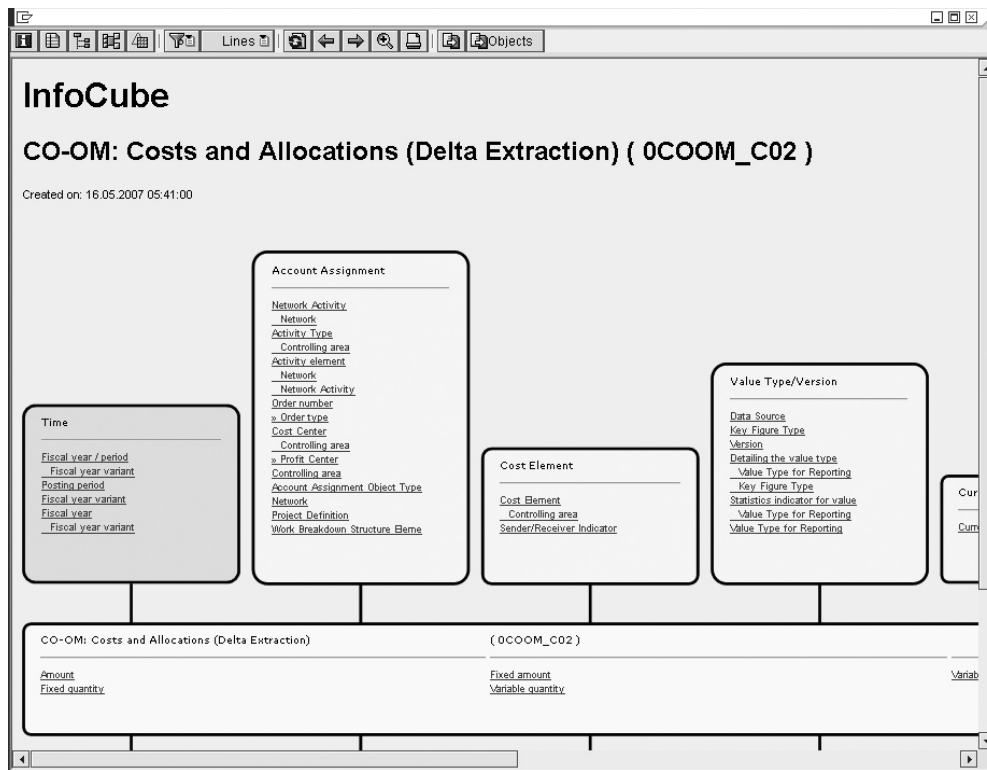
Documentation

More Documents
SAP_DOC_CUBE.0COOM_C02

InfoObjects

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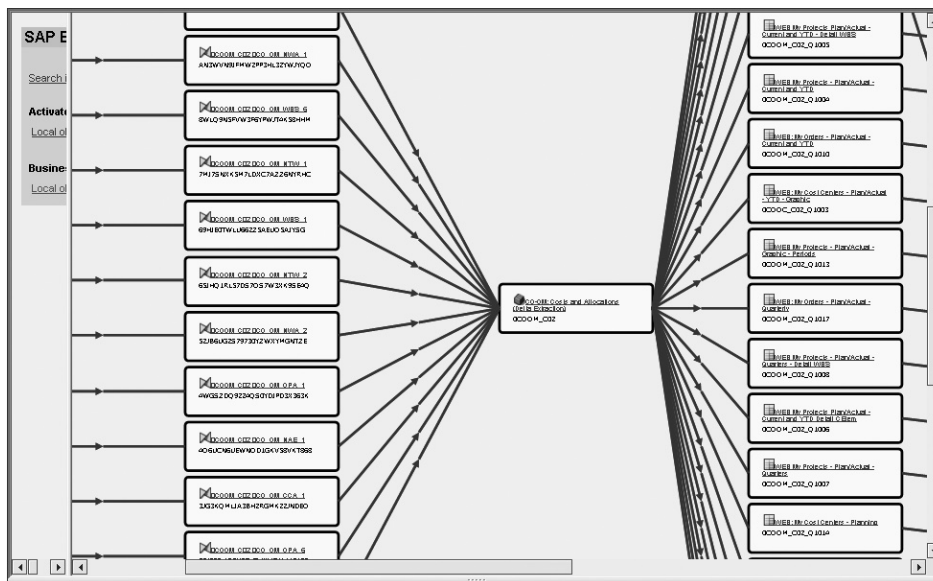
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The other interesting view of the information available in the Metadata Repository is Data Flow. With this option, you can view the data flow of the entire process going from the different datasources right through to the available queries and workbooks. The following illustration shows a partial view of the graphic display of the data flow. In each case, these objects can be used to link you to their details just by clicking an object for which you are executing a drilldown. This functionality is available for all the options in the Metadata Repository. Once you have identified a particular object or view that you are interested in analyzing, you can then export the page to HTML and print the entire view of information. This will give you a great start to review the information via a chart. From the menu bar, go to Extras_HTML Export_Save HTML Pages as Local Files (or other option). This will allow you to save the entire view and then print it if required. The options in this list are defined in Table 14-1. Just remember that selecting Extras_HTML Export always means that the *entire* HTML document is exported. This may take some time, so you will probably want to export via the context menu of the actual object.

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In addition to the options discussed so far, you can also create your own documentation and upload it. You can then connect it to the objects for review and analysis.

Standard Business Content

As you can see in Figure 14-2, a tremendous amount of Standard Business Content is available. SBC covers a number of different aspects of the business process, and more. Some of the SBC we will not really focus on includes all the functionality delivered for the management and analysis of system performance. An entire set of objects is used specifically for the analysis and management of the BI system—how it is performing, how the query is performing

| Function | Description |
|--|--|
| Generate HTML Pages | Generates HTML pages for the metadata objects in the A version (active objects). |
| Generate HTML Pages (Business Content) | Generates HTML pages for the metadata objects in the D version (Business Content objects). |
| Save HTML Pages as Local Files | Exports the entire HTML documentation for the metadata objects in the A version. |
| Save HTML Pages (Business Content) | Saves the entire HTML documentation for the metadata objects in the D version. |
| Delete Saved HTML Pages | Deletes the HTML pages for metadata objects in the A version generated on the database. |
| Delete Saved Pages (Content) | Deletes the HTML pages for metadata objects in the D version generated on the database. |

TABLE 14-1 Options to Export the Definitions and Detail of the Metadata Repository

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and executing, and how long the uploads take into BI from R3 source systems, flat files and third-party uploads. All of this can be found in the BI content area under the folder Technical Content. The SBC is mostly thought of as a set of predefined information models that help identify some of the standard information and objects used in specific industries, different lines of business, or countries. It can also offer you some insight into what some best business practices are within the BI system. For example, looking at the total number of InfoProviders grouped together under a MultiProvider in SBC might give you the idea that the suggested practical limit is around ten InfoProviders. Therefore, if your architecture is set up to have more than ten under an MultiProvider, you might want to review your strategy. There are many of these types of examples throughout the BI Content area. The final process in this activity would be the approach to activating the SBC.

Activation of SBC Queries

To start the process of activating the SBC, you initially have to convert them from the SAP delivery version (D version) into the active version (A version). I recommend that you install BI Content objects in the following cases:


- After a BI Content release upgrade, because there is normally a large number of new and modified BI Content objects. If you want to use the new and modified BI Content, you have to reinstall the BI Content objects.

NOTE Please refer to the Release Notes published with the upgrade.

- After installing a BI Content support package, because this will deliver a large number of new objects. Refer to the SAP Notes that are delivered with each Content Support Package. These SAP Notes contain information on why certain BI Content objects are being redelivered.

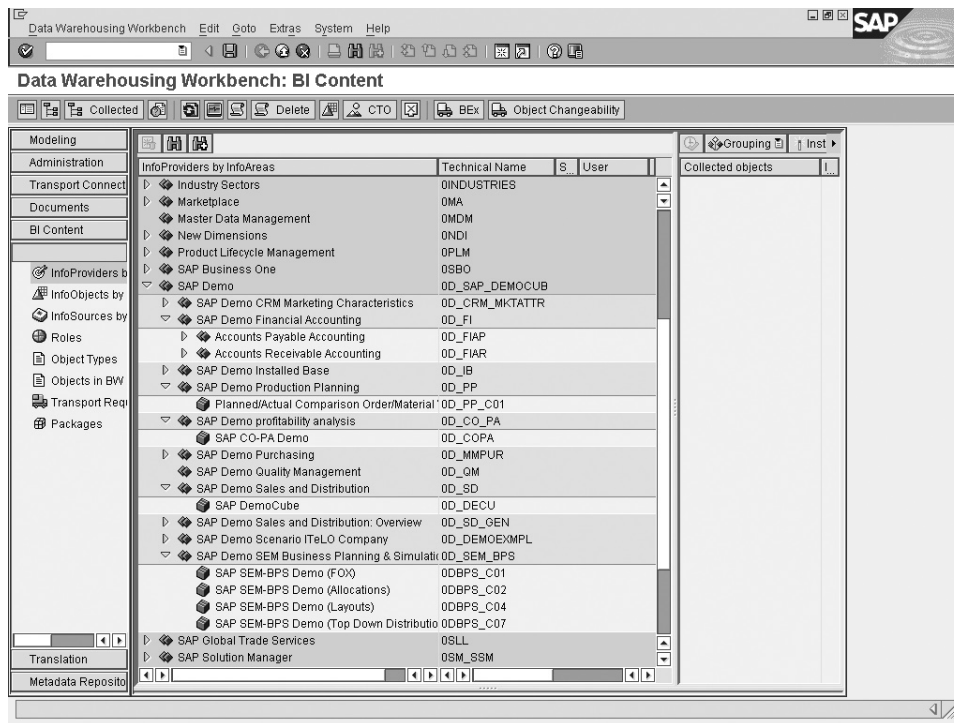
Navigating to the Data Warehousing Workbench to Install BI Content

From the main Business Intelligence menu, choose Modeling_Data Warehousing Workbench: BI Content. If you are already in the Data Warehousing Workbench, select the BI Content functional area by clicking the corresponding pushbutton in the left navigation window or by choosing the menu path Goto_Install BI Content.

The Data Warehousing Workbench for installing BI Content has three navigation windows. In the left window you determine the view of the objects in the middle area of the screen. In the middle window, you select the objects you want to activate. In the right window, you make the settings for installing the BI Content. The right window also contains an overview of the objects you have selected, and it is here that you start the installation of BI Content. One of the steps that is often overlooked is assigning a relevant source system (or systems). If you want to assign a source system, select the Source System Assignment function. 

The Choose Source System by Default? dialog box appears. Select one or more source systems by setting the corresponding indicators in the Default Assignment column. Figure 14-6 shows the dialog box. If you do not select a source system, *all* the source systems are assigned automatically and therefore you may be activating objects indirectly that you don't need.

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FIGURE 14-6 The Dialog Box for Choosing the Source System Default Assignment

NOTE Some objects may be source system dependent, whereas others are not. Still others may have multiple source system dependence. There may be other concerns with the activation of these objects. Be sure to review the information with these points in mind before activating these types of objects.

Grouping Before you drag and drop the objects you are going to activate, we need to review the settings along the toolbar for the activation process. The following illustration shows the toolbar for this process. The first option is for grouping the objects to be included and for determining the mode of collection of these objects.



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Make the settings you require from the following selection lists on the right side of the screen. For Grouping, choose the objects you want the system to include. The groupings combine the objects from a particular area. Table 14-2 details the available options.

The next option for which we need to select a method is Collection Mode. This indicator is for the method you are using to gather all the objects needed to support the item you are activating. Table 14-3 details the options and functionality.

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| Grouping Option | Function and Description |
|--|---|
| Only Necessary Objects (default setting) | Only the objects that are needed to transfer the selected objects from Business Content are gathered. This is the minimal variant of the Business Content transfer. |
| Data Flow Before | All objects that give data to the object being activated are gathered. For example, to activate the query, you would activate the InfoProvider, Transformation Rule, and so on. |
| Data Flow Afterwards | All object that receive data from the object being activated are gathered. For example, to activate the query, you would activate the Workbooks, Roles, and so on. |
| In Data Flow Before and Afterwards | All objects that give data to or receive data from the object being activated are gathered. This is the maximal variant of Business Content transfer. |

TABLE 14-2 Options for Grouping Objects for Activation

The next option is Install. This, of course, is executed once you have dragged and dropped the objects you want to install into the Collected Objects screen. Table 14-4 lists the options under the Install button.

The final option on this toolbar is for the display of the objects. You can view either a hierarchy or a list.

Installation Once you've reviewed and confirmed these settings, you are ready to install and activate Standard Business Content. The first illustration on the next page shows the initial step of choosing the object (in this case, an InfoCube) to be installed. Once you have "transferred" this object to the Collected Objects area, you execute the installation process. The system will start to activate all tables, objects, structures, programs, and dependent components (depending on the settings you have identified) that will allow this InfoCube to be used in the implementation of BI. The Transfer or Collected Object area of the screen has a series of columns that offer information on the installation and activation process occurring.

| Collection Option | Description and Functionality |
|-------------------------|---|
| Collect Automatically | The objects are collected automatically after the object has been selected. This is the default setting. Therefore, all the objects required for the setting in the Grouping option would be collected. |
| Start Manual Collection | The objects to be activated are only collected if you choose the GATHER DEPENDENT OBJECTS (Execute (clock) Icon) function. |

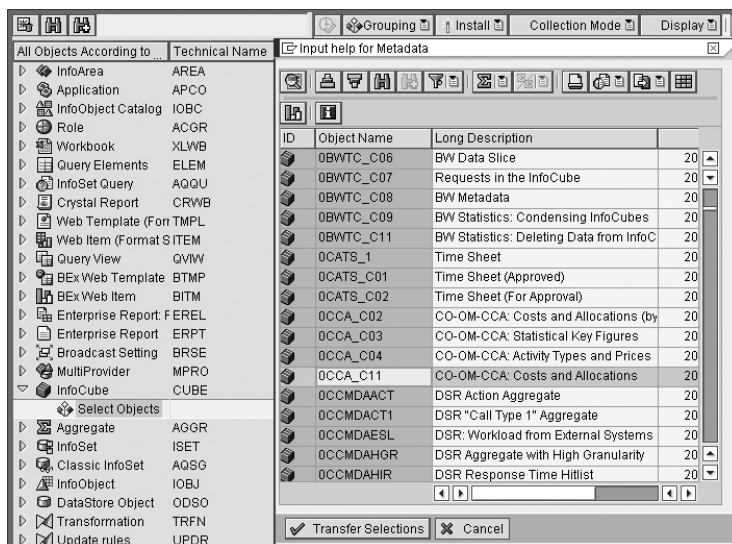
TABLE 14-3 Options for the Collection Mode

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| Type of Install | Description and Functionality |
|----------------------------|--|
| Simulate Installation | The system tests for errors on the critical objects that would be installed. This can be helpful during the initial activations to review the possible issues that may occur. The result of the activation is shown by a green and red icon under the Simulation Results header. |
| Install | The selected objects are activated directly. |
| Install in Background | The selected objects are activated in the background as a batch job. This is reasonable if you are activating large numbers of objects. |
| Installation and Transport | Depending on your transport strategy, this option would activate the objects and then write them to a transport request. |

TABLE 14-4 Installation Options

The second illustration shows the column headings in this screen area. Table 14-5 lists the headings their functionality.



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| | | | | | | | | | | |
|-------------------|---------|------------|-------------------|----------------------|-----------|---------------|-------|------------|---------------------------|--------------------|
| Collected objects | Install | Match (... | Simulation result | Active version avail | Technical | Elevated o... | BC... | Content... | Last Content modification | Person responsi... |
|-------------------|---------|------------|-------------------|----------------------|-----------|---------------|-------|------------|---------------------------|--------------------|

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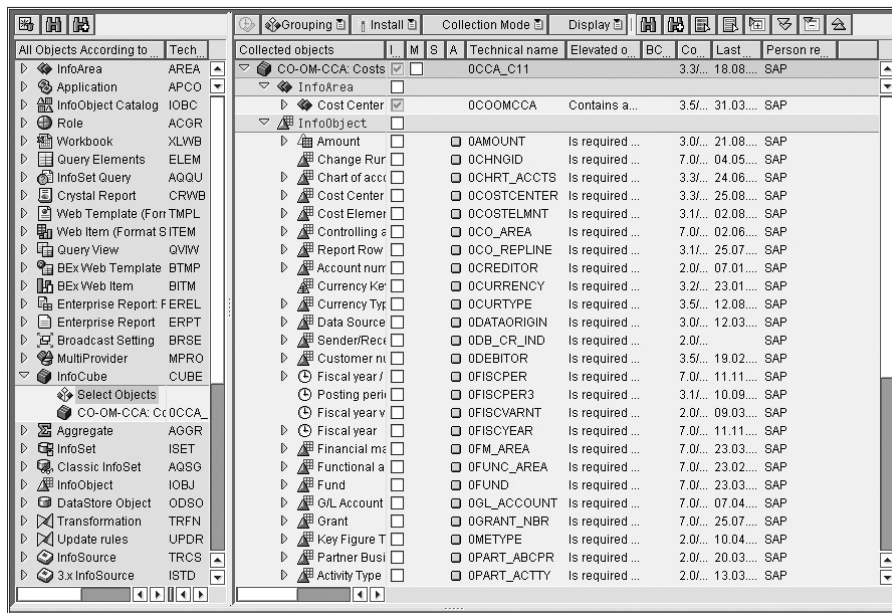
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| Collected Objects Toolbar | Description and Functionality |
|-----------------------------------|---|
| Collected Objects | In this column is a list of all the objects that have been collected based on the option you've selected. In the context menu of this column is a list of additional options—install all, do not install any below a specific level, merge or copy all, display details, display description (Metadata Repository), display version comparisons, and export HTML documentation. |
| Install | In the Install column the following business content objects are indicated by default: <ul style="list-style-type: none"> • Objects transferred for the first time • Objects that have been redelivered by SBC in a more recent version |
| Match (X) or Copy | If the SAP delivery version and the active version can be matched, a check box is displayed in this column. With the most important object types, the active version and the SAP delivery version can be matched. From a technical point of view, the SAP delivery version (D version) is matched against the M version. As in most cases, the M version is identical to the active version (A version) in a customer system. This is referred to as a match between the D and A versions for reasons of simplification. The use of the “match” option is important if there has been some customizing of the SBC, thus, making sure the customization that has occurred will not be overwritten. |
| Simulation Result | If you decided to “simulate” the activation and installation, you would see a “color” light below this column. |
| Active Version Available | This identifies whether the active version of this object is already available via a green light icon. |
| Technical Name | The technical name of the object. |
| Elevated Objects Association Type | Describes the criticality of the object to the root object that is being activated. Thus, informational comments such as “is essentially required” and “receives data from” identify the objects that are required to be activated for the root object to be supported. |
| BC Components | Indicates whether a particular object has a Business Content component. |
| Content Release | Identifies in what content release this object was initially delivered. |
| Last Content Modification | Identifies in what content release this object was last changed. |
| Person Responsible | Because this is SBC, the person responsible is normally SAP. |

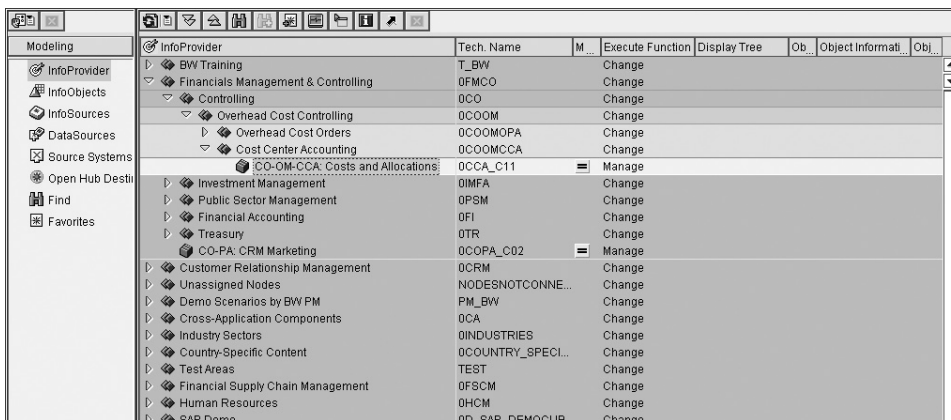
TABLE 14-5 Options in the Collected Objects Columns

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The following illustrations show the sequence of events during activation. In the first illustration you can see that we have executed the activation and installation of the SBC InfoCube OCCA_C11 and that most of the list of InfoObjects have a green light beside them, confirming that their active version is available. You can also see some of the additional information available in the versioning information. The second illustration verifies that the InfoCube is, in fact, available for use in the Data Warehousing Workbench: Modeling folder for the InfoProviders.



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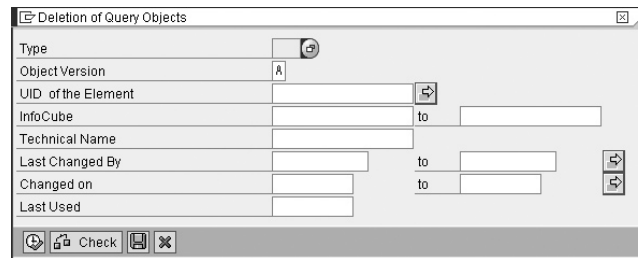


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Deletion of SBC Queries

In order to better manage the number of queries and query components being developed and created, you may want to delete some of them over time. If you have activated or installed more SBC than you need, you can use the Deletion option to deactivate some of the SBC queries or the elements that make up the queries. This is one of the areas of SBC that activating more than what you may need or want is not that much of an issue later on in the maintenance process and the deletion is very straightforward. The wording may seem a bit confusing because in reality you are not deleting the SBC of the queries but rather deactivating them. Therefore, they will not be available for use. If you are dealing with queries you have developed that are not SAP naming convention protected, you will actually delete these if you use this functionality. You find this function from the menu Business Explorer | Query | Delete Objects (transaction code RSZDELETE). The following illustration shows the screen you will see if you execute this component.



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In this screen you have a number of methods for deleting/deactivating the SBC queries. Some of these methods are reasonably self-explanatory:

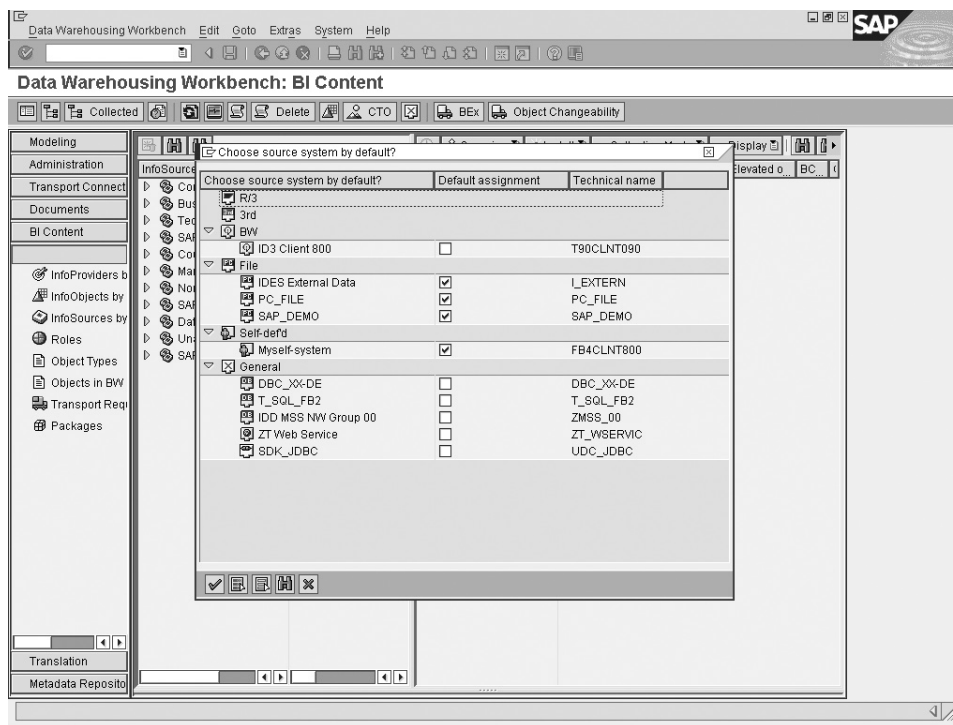
- **Type** Includes queries, filters, structures, restricted key figures, calculated key figures, and variables. It offers the ability to delete just specific objects or elements of the query or the query itself.
- **Object Version**
- **UID of the Element** This is the technical number of the element that is generated by the system to identify that object. If you search for a query in the tables of the DataStore object for the Open dialog box, you will see the UID for the queries that the system generated to catalog these items.
- **InfoCube** You can delete all queries by identifying the InfoCube they are assigned.
- **Technical Name**
- **Last Changed By**
- **Changed On**
- **Last Used** This is a popular option because you can identify the queries that have not been used in the last 90 days (or any date limitation you feel would give you a good reason to delete or deactivate these queries).

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When you execute this process, the system offers another dialog box to ensure you want to delete the specific queries. Finally, once you answer this question, another dialog box appears asking if you are interested in deleting dependent objects such as workbooks, views, and so on from your favorites and roles.

SAP DemoContent

SAP DemoContent comprises additional SBC that is delivered with SAP BI. These are complete data flow processes that are available to be activated and used to demonstrate the functionality of BI. The business processes and areas in the DemoContent are from different lines of business and specifically included in the SBC so that you can have something to display to your business users quickly. This can be done while you are organizing your corporate governance processes, blueprint processes, or overall project activities, and your business users can start to get a feel for the toolsets in BI and their functionality. The SAP DemoContent all begin with OD_ and are activated the same way as other business content. However, in this case, many of them supply sample transactional data and master data so that you avoid having to waste time setting up flat files or another means of getting the required data into the InfoProviders for immediate use. The sample flat files of data are delivered with the BI system, and during the installation of the server they are uploaded into the application server. Figure 14-7 shows the SAP DemoContent in terms of InfoCubes.



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FIGURE 14-7 SAP DemoContent viewed from the Data Warehousing Workbench: BI Content

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Along with this, of course, are all the structures and objects required to have a viable demonstration of BI within a short period of time.

Summary

SAP delivers thousands of different objects, structures, programs, queries, and other components so that you can quickly and effectively implement BI and use its functionality for reporting and analysis. As SAP continues to deliver additional functionality, the SAP SBC will continue to grow so that customers can take advantage of these standard templates in the business process of implementing BI. Again, too much emphasis cannot be given to the need to review and use the SBC available. This has been a sore point for me in certain implementations—that not enough SBC had been used or the investigation into the possible use of SBC has been cut short, thus causing the need to re-create something already available.

Be sure to include time in your project plan to investigate SBC both before the configuration starts and during the initial process of implementation. This can be very helpful with training as well as developing awareness of how BI works and what additional information, and thus strategic reports, can be developed by BI.