

# Oracle® ABM Analyzer

User Guide

Release 11*i*

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Oracle ABM Analyzer User Guide, Release 11i

Part No. A90840-02

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Primary Author: Frank Colligan

Contributing Authors: Michael Casey, Scott Date, Srinivasan Jandyala, Steven Roepke, Lauren Schwartz, Dan Sinnreich

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# Contents

<b>Send Us Your Comments .....</b>	<b>vii</b>
<b>Preface.....</b>	<b>ix</b>
<b>1 Introduction</b>	
<b>What is Oracle ABM?.....</b>	<b>1-1</b>
<b>What is Oracle Discoverer?.....</b>	<b>1-2</b>
<b>Basic Features of ABM Analyzer .....</b>	<b>1-2</b>
<b>The ABM Analyzer Integration Process.....</b>	<b>1-3</b>
<b>ABM Analyzer Integration .....</b>	<b>1-4</b>
<b>2 Using Workbooks</b>	
<b>Opening Workbooks and Duplicating Sheets .....</b>	<b>2-2</b>
<b>Creating New Worksheets.....</b>	<b>2-7</b>
<b>Using Tools.....</b>	<b>2-8</b>
Conditions .....	2-8
Sorts .....	2-12
Totals .....	2-14
Percentages.....	2-16
Calculations .....	2-18
Parameters .....	2-19
<b>Sharing Workbooks.....</b>	<b>2-21</b>
<b>Exporting Data to Excel.....</b>	<b>2-23</b>
<b>Data Variance.....</b>	<b>2-25</b>

<b>For Further Information.....</b>	<b>2-26</b>
-------------------------------------	-------------

### **3 Standard Workbooks**

<b>Worksheets in Standard Workbooks.....</b>	<b>3-2</b>
<b>Case Study.....</b>	<b>3-3</b>
<b>Departments Workbook .....</b>	<b>3-15</b>
Worksheets .....	3-15
Department Account.....	3-16
Department Statistic .....	3-17
Department Workbook Hierarchy .....	3-20
Examples of Using Hierarchy in Report.....	3-21
<b>Activity Workbook.....</b>	<b>3-22</b>
Activity Cost Account .....	3-23
Activity Statistic .....	3-24
Activity Rate .....	3-25
Activity Rate Set.....	3-26
Driver Volume.....	3-27
Activity Driver Source .....	3-28
RE or Department Driver Source .....	3-29
Activity Workbook Hierarchy .....	3-29
<b>Materials Workbook.....</b>	<b>3-31</b>
Material Account Report .....	3-31
Material Statistic Report .....	3-32
Material Cost Report .....	3-32
Material Workbook Hierarchy.....	3-33
<b>Cost Objects Workbook .....</b>	<b>3-33</b>
Cost Object Detail .....	3-34
Cost Object Account .....	3-37
Cost Object Statistic .....	3-39
Cost Object Revenue and Cost.....	3-40
Cost Objects Workbook Hierarchy.....	3-41
Data Set Hierarchy.....	3-42
<b>Model Export Using Discoverer Worksheets.....</b>	<b>3-44</b>
Using Specific Export Files .....	3-45
Using Any Extract Worksheet .....	3-46

The Bill Item Extract .....	3-46
Opening Export Workbooks .....	3-46
Verifying and Saving Bill Item Worksheet Data .....	3-46

## **4 Adding Optional Attributes**

<b>Creating Attributes and Attribute Values</b> .....	4-2
<b>Creating Attribute Folders in the End User Layer</b> .....	4-6
Creating Business Views for Attributes .....	4-6
Add the Attribute Folder to the End User Layer .....	4-7
Set the Folder Item Properties in Administration Edition .....	4-11
Joining Attribute Folders to Business Area Detail Folders .....	4-17
<b>Using ABM Attributes in Reports</b> .....	4-23

## **5 Security**

<b>The ABM Security Model</b> .....	5-1
<b>ABM Analyzer Security</b> .....	5-2
Example .....	5-3
Securable Objects .....	5-3
<b>Business Area Privileges</b> .....	5-4

## **Index**



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# Send Us Your Comments

**Oracle ABM Analyzer User Guide, Release 11*i***

**Part No. A90840-02**

Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

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# Preface

This user guide is the primary reference for Release 11*i* of Oracle ABM Analyzer. It contains detailed discussions of product features and functions, plus procedures, case studies, and examples.

The preface explains how the user guide is organized and introduces other sources of information.

## Product Overview

Oracle ABM Analyzer is a **relational online analytical processing (OLAP)** reporting and analysis application. It was created specifically for **activity-based management (ABM)** and works in conjunction with Oracle Discoverer tools. ABM Analyzer enables users throughout an organization to easily generate multidimensional, custom reports without writing code.

ABM Analyzer is part of Oracle Applications is an integrated suite of more than 45 software modules for financial management, supply chain management, manufacturing, project systems, human resources, and sales and service management.

## Intended Audience

This guide is intended for system administrators, database managers, consultants, and other users of ABM Analyzer.

## How the User Guide is Structured

This book is divided into the following chapters. There is also an index.

### **Chapter 1**

Chapter 1 provides a brief introduction to ABM Analyzer, ABM, and Discoverer.

### **Chapter 2**

Chapter 2 discusses how to use, create, copy, and customize ABM Analyzer workbooks.

### **Chapter 3**

Chapter 3 describes the four standard workbooks available in ABM Analyzer.

### **Chapter 4**

Chapter 4 explains how to add ABM attribute folders to a worksheet.

### **Chapter 5**

Chapter 5 explains how to secure ABM data and limit access to secured ABM objects.

## Assumptions

It is assumed that you have the requisite knowledge and skills for your business area. If you are an administrator, you are familiar with the Discoverer Administration Edition. If you are a user, you are familiar with activity-based management, Oracle ABM, and the Discoverer User Edition.

## Related Documents

The following are reference materials for products related to ABM Analyzer:

### **Oracle Activity-Based Management User Guide**

This guide covers activity-based management, setting up activities and cost objects, flex-budgeting, and standard reports.

### **Oracle Discoverer User Guide**

This guide explains how to use Discoverer to access, view, and analyze data in your database, and how to produce reports.

### **Oracle Discoverer User Tutorial**

This tutorial helps the user to quickly learn Discoverer.

### **Oracle Discoverer Administration Guide**

This guide enables database administrators to prepare database data in a manner that facilitates use.

### **Oracle Activity-Based Management Installation Guide**

This guide explains how to install ABM, ABM Analyzer, and SEM Exchange.

### **Oracle Discoverer Installation and Upgrade Guide**

This guide contains instructions for installing Discoverer, the demonstration database, and the tutorial examples. It also describes how to migrate existing Discoverer/2000 End-User Layer to the latest version of Discoverer.

## **Modifying Oracle Applications Data**

It is strongly recommended that you use only Oracle Applications to modify table data within Oracle Applications. There are at least three reasons for this. First, Oracle Applications tables are interrelated, and revising one table causes related tables to be updated automatically. Second, the system reviews your changes to ensure their validity. Third, the system keeps track of who made the changes and when they were made.

If you enter information into database tables using database tools, you risk storing invalid information. Also, you cannot track who has changed your information because SQL\*Plus and other database tools do not keep a record of changes.

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**Caution:** Oracle strongly recommends that you never use SQL\*Plus or any other tool to modify Oracle Applications data unless otherwise instructed.

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## Conventions

The following conventions are used in this book:

Convention	Meaning
. . . . . .	Vertical ellipsis points in an example mean that information not directly related to the example has been omitted.
. . .	Horizontal ellipsis points in statements or commands mean that parts of the statement or command not directly related to the example have been omitted
<b>boldface text</b>	Boldface type in text indicates a term defined in the text, the glossary, or in both locations.
<i>italic text</i>	Italic type indicates a term defined in the text, the glossary, or in both locations. It can also represent a variable and be used to provide emphasis.
Menu name > Command	Text in this format conveys a sequence of choices. For example, choose the menu and then the command under that menu.
courier text	Text in this format indicates a command line to be typed.
< >	Angle brackets enclose user-supplied names.
[ ]	Brackets enclose optional clauses from which you can choose one or none.

## Oracle Products and Support

Oracle Corporation is the second largest software company in the world. It is also the leading supplier of software for information management, with products and services being used in more than 140 countries.

Oracle provides an integrated line of software for database management, applications development, decision support, and office automation. These products are available for mainframes, minicomputers, personal computers, network computers, and personal digital assistants. They enable organizations to integrate various computers, operating systems, networks, and database management systems into a single, unified resource.

In addition to software, Oracle provides consulting, education, and support services.

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# Introduction

ABM Analyzer is a reporting and analysis application. It enables you to navigate the Oracle ABM database using Oracle Discoverer, and to compare details across dimensions such as time periods, accounts, customers, and products. ABM Analyzer also enables you to customize reports by using such Discoverer functions as drilling, pivoting, and sorting data. ABM Analyzer automates the manual procedures required to run a report in ABM.

This chapter contains the following sections:

- [What is Oracle ABM?](#)
- [What is Oracle Discoverer?](#)
- [Basic Features of ABM Analyzer](#)
- [The ABM Analyzer Integration Process](#)
- [ABM Analyzer Integration](#)

## What is Oracle ABM?

Oracle ABM is an enterprise-wide, **activity-based costing (ABC)** and management application that supports any ABC methodology in any industry. ABM provides flexible modeling, which enables profit and loss analysis to occur at any level of the organization. Activity-based analysis of profitability provides a new foundation for making decisions about customers, products, and services. It also facilitates volume-based forecasting of expenses, capacity, and resources.

The Oracle ABM solution includes both ABM Analyzer and SEM Exchange. (SEM stands for Strategic Enterprise Management.) SEM Exchange enables you to completely integrate with Oracle General Ledger those auditable monetary amounts that are the source of operating expenses viewed in ABM.

## What is Oracle Discoverer?

Oracle Discoverer is a multidimensional **relational online analytical processing (OLAP)** and reporting tool. The Discoverer Administration Edition enables a system administrator to customize the End User Layer so that users can instantly access specific, predefined reports. The Discoverer User Edition enables users to navigate and construct reports, select data items based on the existing relational structure, and to perform advanced data edits.

## Basic Features of ABM Analyzer

The following are basic features of ABM Analyzer:

- Built-in multidimensional reports on ABM objects (such as departments, activities, materials, and cost objects) for cost and profitability analysis.
- Sophisticated security model allows access control over models and period data sets.
- Wizards automate query definitions of SQL for accessing ABM tables.
- Supports a mix of dynamic and precomputed queries to optimize performance. This feature is invisible to the user.

With ABM Analyzer, you can do the following:

- Perform cost variance analysis by comparing actual, budgeted, or forecast amounts.
- Define attribute sets for presenting data in new dimensions.
- Rapidly create new ABM reports from a list of predefined dimensions on ABM data.
- Add and remove dimensions from reports by selecting folders and items in ABM Analyzer.
- Drill up or down through predefined ABM hierarchies.
- Store workbooks in the database for enterprise-wide distribution.
- Extract model data and structure from ABM and import into another model or separate ABM instance.

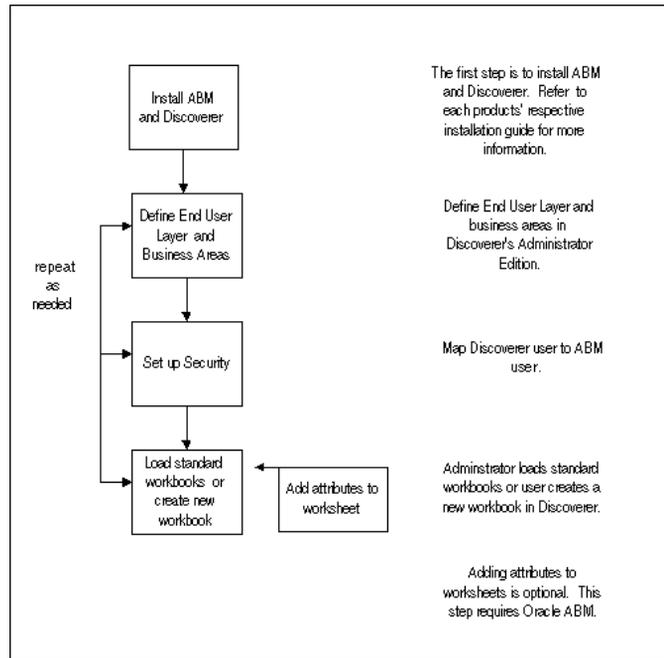
## The ABM Analyzer Integration Process

The process of integrating ABM and Discoverer with ABM Analyzer involves four tasks and an optional fifth step. They are as follows:

1. **Install Discoverer and ABM.** ABM Analyzer needs both ABM and Discoverer to be installed. Refer to the *Oracle ABM Installation Guide*, the *Oracle Discoverer Administration Guide*, and the *Oracle Discoverer User Guide* for details.
2. **Define EUL and Business Areas.** The system administrator, using Discoverer Administration Edition, creates the End User Layer and installs the ABM Analyzer business areas and workbooks. Refer to the *Oracle ABM Installation Guide* for more information.
3. **Set Up Security.** The system administrator defines users and roles through Oracle Applications. The administrator also grants business area security privileges to users and responsibilities. Refer to the *Oracle ABM Installation Guide* for additional information.
4. **Load or Create Workbooks.** The system administrator loads or creates workbooks using Oracle Discoverer User Edition.
5. **Add Attributes to Worksheets (Optional).** The administrator, using Discoverer Administration Edition, customizes the ABM Analyzer workbooks. Each attribute adds a new dimension to a worksheet.

Figure 1-1 illustrates the ABM Analyzer integration process.

**Figure 1-1 Process Flow for ABM Analyzer Integration**

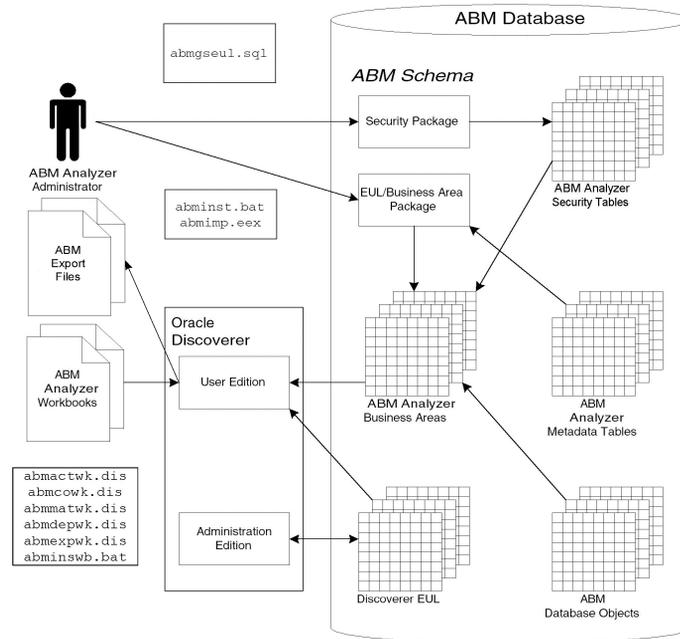


## ABM Analyzer Integration

The ABM Analyzer administrator installs and configures the business areas, assigns business area access to users, and installs the ABM Analyzer workbooks. Users are predefined in the Oracle Applications environment. The administrator can create new business areas or add attributes to existing business areas at any time. Users access ABM Analyzer workbooks through Oracle Discoverer User Edition.

Figure 1-2 shows the architecture of the ABM Analyzer package as integrated with Discoverer and ABM.

Figure 1-2 ABM Analyzer System





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## Using Workbooks

ABM Analyzer workbooks have predefined attributes and you can add calculations, totals, and percentages to help identify trends and relationships. You can also apply special filters (conditions and parameters) to a worksheet, share workbooks with other users, and export data to Microsoft Excel.

This chapter discusses how to use, create, copy, and customize workbooks. It is broken into sections as follows:

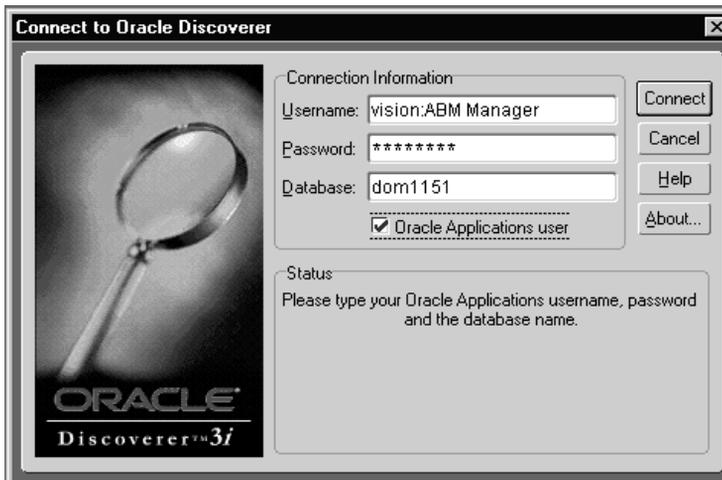
- [Opening Workbooks and Duplicating Sheets](#)
- [Creating New Worksheets](#)
- [Using Tools](#)
- [Sharing Workbooks](#)
- [Exporting Data to Excel](#)
- [Data Variance](#)
- [For Further Information](#)

## Opening Workbooks and Duplicating Sheets

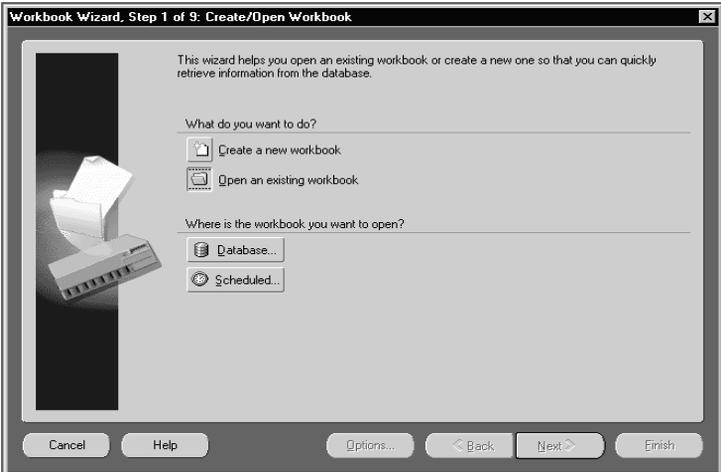
This section describes how to open an existing workbook or duplicate worksheets in a different format.

### How To Open an Existing Workbook

1. Log in to Discoverer User Edition with your user name and password.

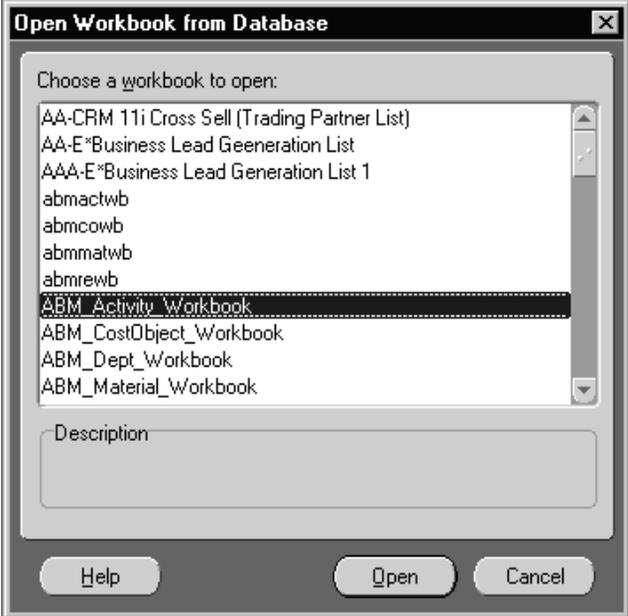


2. From within Discoverer User Edition, select **Open an Existing Workbook**.
3. Select **Database** as the location of the workbook.
4. Select **Next** to continue.

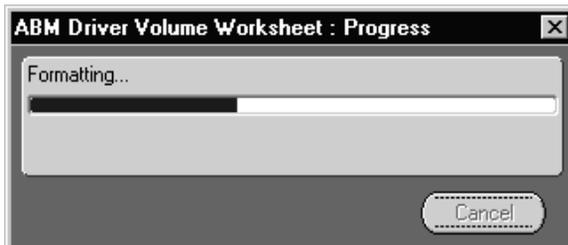


A list of workbooks stored in your ABM database appears.

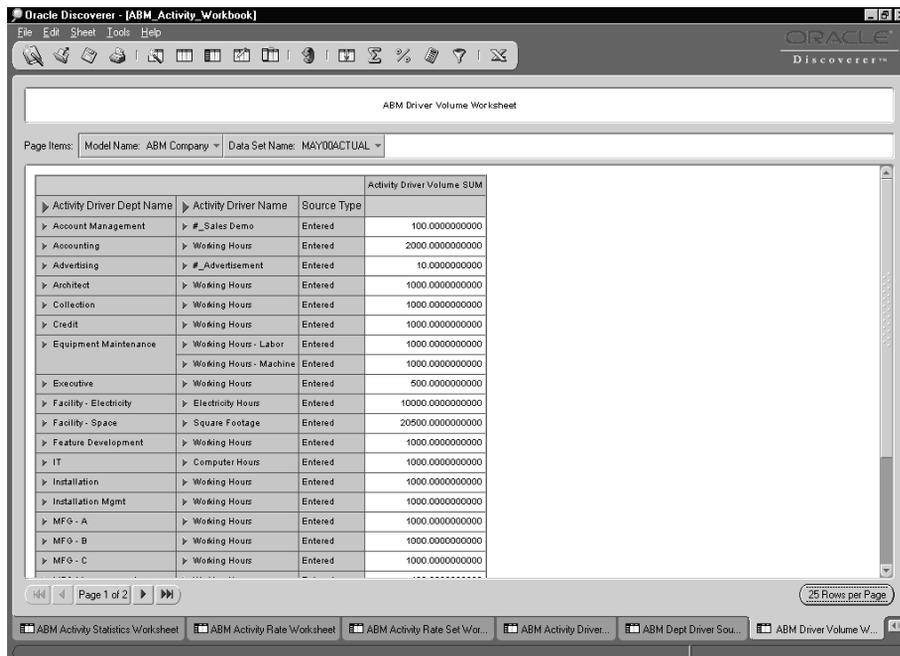
- 5. Select a workbook from the list and choose **Open**.



A progress screen displays while the last opened sheet in your workbook is formatted for viewing.

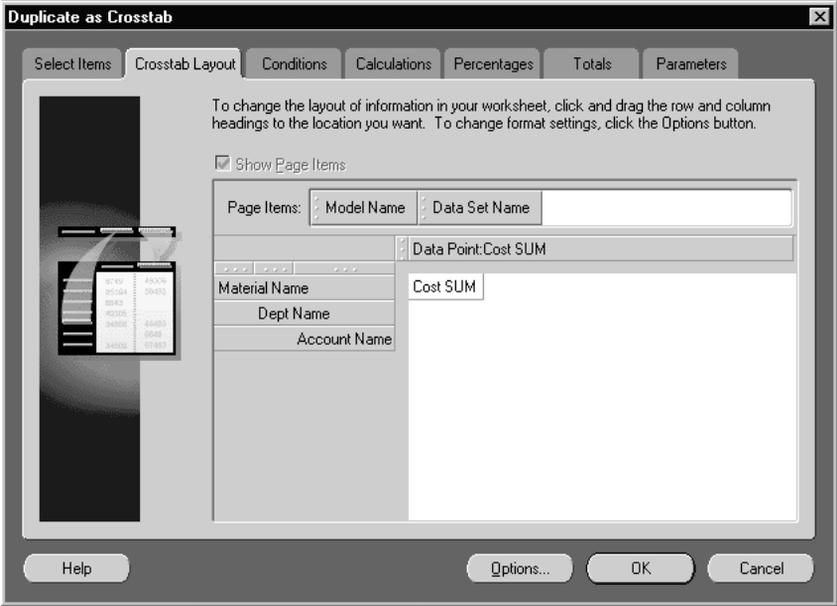


When formatting is complete, your workbook opens to the sheet that was active when the workbook was previously open.

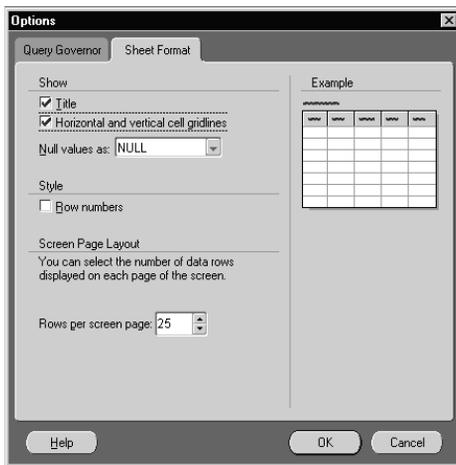


### How To Make a Copy of an Existing Worksheet

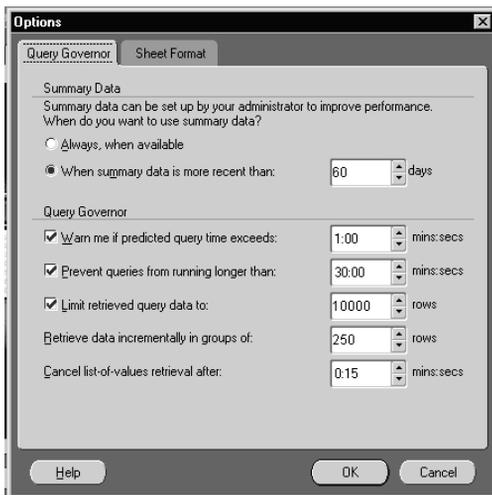
- 1. Open the worksheet in Discoverer User Edition.
- 2. To duplicate your sheet as a crosstab, select **Sheet**, then **Duplicate as Crosstab**. To copy your sheet as a table, select **Sheet**, then **Duplicate as Table**.
- 3. Customize the placement of row and column headers by using the Layout tab.



- 4. Select **Options**.
- 5. In the **Sheet Format** tab, choose whether to show a title, cell grid lines, or row numbers, and how to display null values. You can also select a maximum number of rows to display per page.



6. Select the **Query Governor** tab.
7. Choose when to use summary data. You can also set warnings if a query is predicted to exceed a time limit, or limit query time or the volume of data that a query returns.
8. When you are finished, choose **OK**.



ABM Analyzer generates a duplicate worksheet.

## Creating New Worksheets

You can create a new worksheet within a standard workbook to include dimensions for different analyses. In doing so, you can select from a list of folders available for the standard business areas, or from the folders created by the system administrator when new business areas are defined.

### How To Create a New Worksheet

1. From the **File** menu, select **New** to create a worksheet.
2. Select a format for the worksheet:
  - The **Table and Page-Detail Table** lists data in rows and columns.
  - The **Crosstab and Page-Detail Crosstab** lists data in rows and columns that you can pivot, displaying data in more than two dimensions. For example, one row could contain a period dimension underneath which one or more dimensions are grouped (such as product line or department).
3. Choose **Next**.
4. To include an item in your new worksheet, highlight the item in the **Available** list and choose **Add** (the button pointing to the Selected list).

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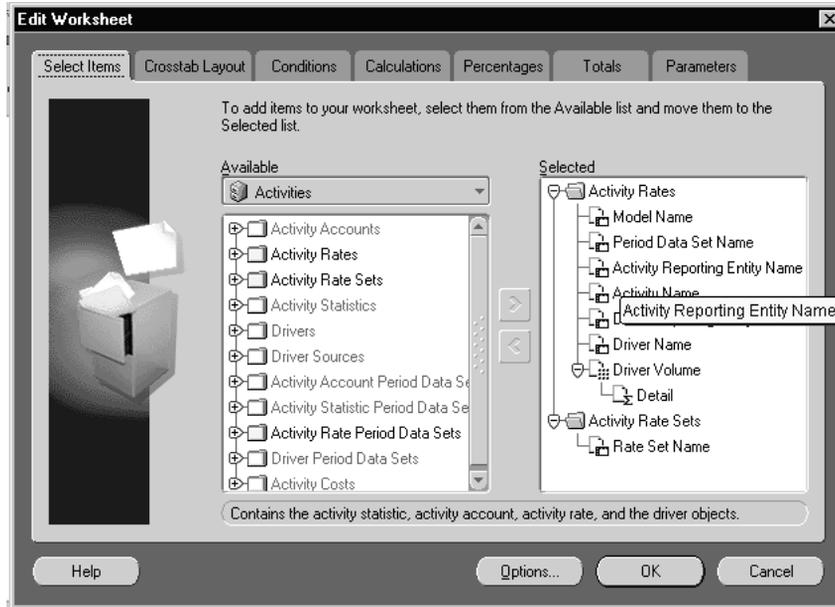
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**Note:** Items not associated with one of the four ABM Analyzer business areas, or business areas to which the system administrator has granted access, are not included in the Available column. However, the system administrator can use the *join* feature in Discoverer to join folders between different business areas. For more information on using the join feature, see *Oracle Discoverer Administrator's Guide*.

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When you create a new workbook or new worksheet for an existing workbook, a wizard displays all of the folders available for a business area. In the following example, the Activities business area contains three standard folders: Activity Rates, Activity Rate Sets, and Activity Rate Data Sets.



5. Choose **OK** to finish creating your worksheet.

## Using Tools

Discoverer User Edition contains tools for customizing workbooks. For example, you can apply filters so that a worksheet displays only data meeting certain criteria, such as revenue greater than a given amount. You can add totals and percentages, creating new summary rows or columns of data. This makes data easier to present and helps in identifying trends and relationships. In addition, you can add custom calculations that relate items in the worksheet, such as a field that displays data for all accounts where the account department is the same as the material department.

## Conditions

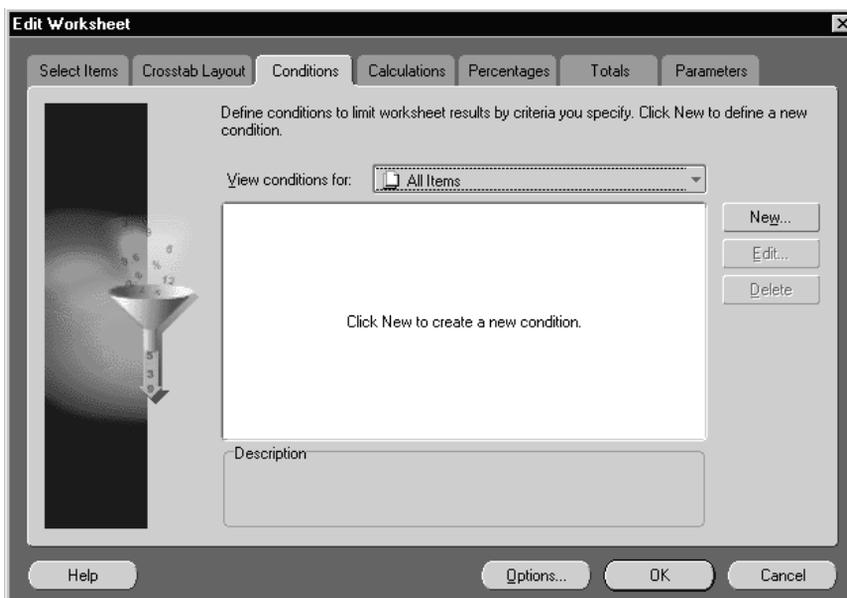
A *condition* is a logical relationship between an item or calculation and another item, another calculation, or a parameter. A *logical relationship* means that one entity is greater than, equal to, or less than the other. A *parameter* is a placeholder for a condition requiring values to be entered upon activation. (See "[Parameters](#)".)

ABM Analyzer uses conditions to limit or filter the data it returns for a given worksheet. This enables you to view, without modifying the base data, only records in which data for a certain field exceeds or falls below a given threshold or meets a more complex logical condition.

You can create conditions in the Discoverer Administration Edition and add them to business areas for later incorporation into your workbooks. The following section describes how to add conditions to ABM Analyzer workbooks from within Discoverer User Edition. For more information on these options, consult the *Oracle Discoverer Administrator's Guide*.

### How To Create a Condition

1. Log in to Discoverer User Edition. Open the ABM Analyzer workbook containing the sheet to which you want to apply a condition.
2. Select the tab for the worksheet.
3. From the **Tools** pull-down menu, select **Conditions**.
4. If items in your worksheet have predefined conditions, then you can select an item from the pull-down menu.



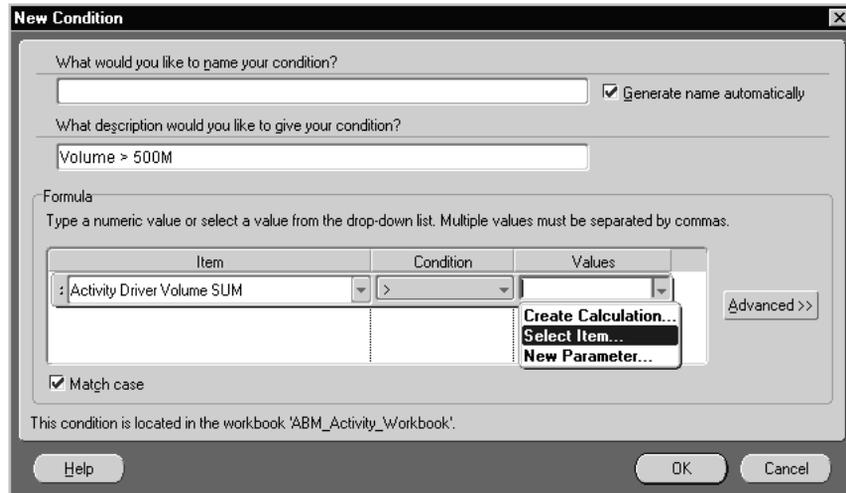
5. To create a new condition, select **New**.

6. Enter a description for your condition using two operands and an operator.  
Example: Volume > 500M.

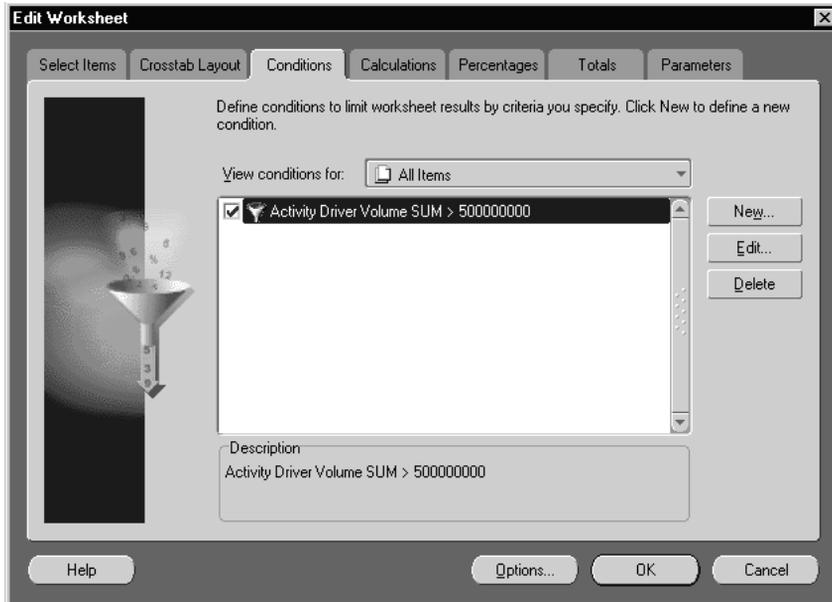
Table 2-1 describes the conditional operators.

**Table 2–1 Conditional Operators**

<b>Operator</b>	<b>Description</b>
=	Equal to
<>	Not equal to
>	Greater than
<	Less than
<=	Less than or equal to
>=	Greater than or equal to
LIKE	Similar to (using wildcard matching)
IS	Equals
IS NULL	Contains no data (not even zero)
IS NOT NULL	Contains some data (even zero)
IN	Is contained in
BETWEEN	Value lies inside two values
NOT IN	Is not contained in
NOT BETWEEN	Value lies outside two values
NOT LIKE	Not similar to
!= or ^=	Not equal to



7. To group conditions of three or more operands, select **Advanced**.  
You can use four types of grouping operators: OR, AND, NOT OR, and NOT AND. Conditions are applied in that order.
8. Select **OK** to exit the window when you are finished.
9. Select **OK** to finish defining your condition.
10. To apply your condition now, let it remain selected. The workbook will be updated immediately. To apply the condition later, deselect it.
11. Select **OK** to create the condition.



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**Note:** If you save a worksheet after applying a condition, the condition becomes permanently applied.

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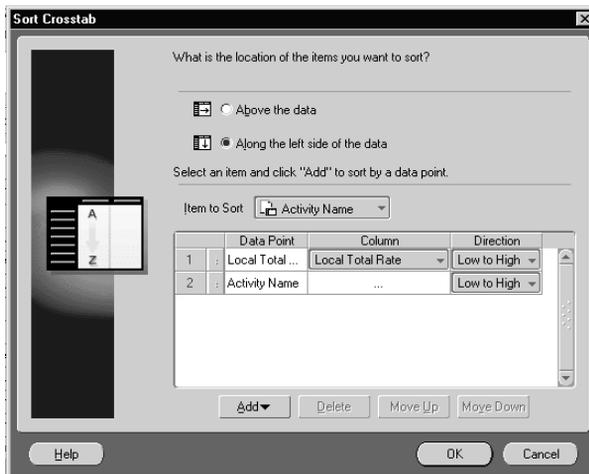
12. To apply the condition on demand, select **Tools**, then **Conditions**. From the pull-down menu, select an item for which you defined the condition.

## Sorts

Adding sorts to a worksheet facilitates readability or the flow of information. For example, you could change the way data is sorted in the Activity Rate Workbook by changing the default Department Name setting to Activity Name. You can also define multilevel sorts, which orders sorting by dimension.

## How To Define a Sort

1. From your active worksheet, select **Tools**, then **Sort**.



2. In the Sort Crosstab interface, do the following:
  - a. Choose the location of the items to be sorted. In crosstab worksheets, this depends on how you have organized the fields.
  - b. From the pull-down menu, select an item on which to sort.
  - c. To select a data point on which to sort, select **Add** and select a data point from the list.
  - d. Choose a sort direction: Low to High, or High to Low.
  - e. Continue adding data points in the order in which you want data sorted.
  - f. To define data points to sort for this item, select a different item from the list. Continue applying sorts to different items as needed.
  - g. To reorganize a multilevel sort, select a level and then select Move Up or Move Down.
3. Choose **OK** to apply your sort criteria to the open worksheet. You may need to close and reopen the worksheet to view the results of your sort.

## Totals

With the Totals feature, you can add summary columns or rows containing functions such as summations, averages, and maximums and minimums to a worksheet. You can define multiple totals based on different worksheet items.

Totals can expose trends that were not apparent from the raw data.

### How To Add a Total

1. With the worksheet open, select the **Tools** menu, then **Totals**.
2. To see totals that have been defined for your worksheet, select items from the pull-down menu.
3. Select **Edit** to show the characteristics of a total.
4. To create a new total, select **New**.

**New Total**

Which data point would you like to create a total on?  
 Driver Volume SUM

What kind of total do you want?  
 f(x) Sum

Where would you like your total to be shown?  
 Grand total at bottom  
 Grand total on right  
 Subtotal at each change in:  
 All Items

Don't display total for a single row

Which page items do you want to include?  
 Calculate totals only for current page items.  
 Calculate totals for all page items.

**Example**

	Walkhj	Lpdgr	Pdgrh
pd	70	85	100
dgh	40	60	25
hdg	30	25	75
			<b>100</b>
pd	30	25	50
dgh	30	10	40
hdg	0	35	10
			<b>50</b>

The example above shows a Sum total calculated from sample data.

What label do you want to be shown?  
 Sum

Generate label automatically

Help OK Cancel

5. Choose between totaling on a specific data point or on all data points in the worksheet.
  6. Select the type of total you want to create from the drop-down list.
- Table 2-2 describes the totaling options.

**Table 2–2 Totaling Options**

Option	Description
Sum	Adds all the values
Average	Adds all the values and divides by the number of values
Count	Counts the total number of values
Count distinct	Counts the total number of unique values
Minimum	Finds the lowest value
Maximum	Finds the highest value
Standard deviation	Calculates the square root of the variance of the values
Variance	Calculates the sum of the squares of the differences between each value and the arithmetic mean divided by the number of values
Percentage of Grand Total	Calculates the grand total of the row or column and then finds the percentage of the current column or row of the Grand Total

7. Select a placement option: grand total at bottom, grand total on right, or subtotal at each change in an item.  
  
If you subtotal at each change in an item, you can select a different item from the one on which your total is based. For example, you can add a summary column for values at each data set represented in the worksheet.
8. If you do not want to display totals for single rows of data, then select the *Don't display total for a single row* box.
9. If you selected *grand total at bottom* or *grand total on right*, then you can calculate totals for all items in the worksheet or only the items currently displayed. For example, if you have drilled through a level of detail, then you can exclude or include that level.
10. Select a label for your total.  
  
You can generate a label automatically or build one from the names of items and values in your worksheet. For example, if you were totaling on Driver Volume, then the *Sum&Item* would display *Driver Volume Sum*.
11. Select **OK** to create your total.

---



---

**Note:** Save your worksheet only if you want this total to be added permanently to the worksheet. You can avoid changing the original by creating a duplicate (see [Opening Workbooks and Duplicating Sheets](#)) and adding the percentage to the duplicate sheet.

---



---

## Percentages

Percentages can be grouped by category and added to worksheets. For example, you can group the percent growth in each data point between two periods. As with totals, this is a useful way of adding another analytical layer to a worksheet that is not provided by the base data.

### How To Add a Percentage

1. With your worksheet open, go to the **Tools** menu and select **Percentages**.
2. Select **New** to create a new percentage.

**New Percentage**

What do you want to name this percentage?

Which data point do you want to base your percentage on?

Calculate as a percentage of:  
 Grand total of all values  
 Grand total for each column  
 Grand total for each row  
 Subtotal at each change in:

Which page items do you want to include?  
 Calculate percentages only for current page items.  
 Calculate percentages for all page items.

**Example**

	mm1	mm2	mm3	% mm2	% mm3
mm1	20	10	100%	100%	
mm2	16	5	80%	50%	
mm3	4	5	20%	50%	
mm4	20	10	100%	100%	
Totals			28%	14%	
mm5	30	10	100%	100%	

The example above shows a percentage calculated from sample data with both totals shown.

Which totals do you want to be shown?  
 Show subtotal and subtotal percentage  
 Label:   
 Show the percentage of the grand total for each subtotal  
 Label:

Help OK Cancel

3. Select, from the drop-down list, the item on which you want to base the percentage.

The system automatically displays in the name field a name for the percentage. You can edit the name if you want.

**New Percentage**

What do you want to name this percentage?

Which data point do you want to base your percentage on?

Calculate as a percentage of:  
 Grand total of all values  
 Grand total for each column  
 Grand total for each row  
 Subtotal at each change in:

Which page items do you want to include?  
 Calculate percentages only for current page items.  
 Calculate percentages for all page items.

Example

	mm1		% mm1	
	mm2	mm3	% mm2	% mm3
mm1	20	10	100%	100%
mm2	16	5	80%	50%
mm3	4	5	20%	50%
	20	10	100%	100%
			28%	14%
mm4	30	10	100%	100%

The example above shows a percentage calculated from sample data with both totals shown.

Which totals do you want to be shown?  
 Show subtotal and subtotal percentage  
Label:   
 Show the percentage of the grand total for each subtotal  
Label:

Help OK Cancel

4. Edit the following parameters:

- Select one of these options: grand total for all values, grand total of each column, grand total of each row, or subtotal at each change in a specific dimension.
- Select either to calculate the percentage for the current page items only or for all page items.  
For example, if you have drilled to detail on a category, then you can exclude data that is hidden from your percentage.
- Choose to either display a subtotal percentage or a percent of grand total.
- If you want, then insert item names, data point names, or values to customize your label.

5. Select **OK** to create your percentage.

If you apply the percentage immediately, it is added directly to your worksheet.

---

**Note:** If you save your worksheet, then the percentage is added permanently to it. You can avoid changing the original worksheet by creating a duplicate (see [Opening Workbooks and Duplicating Sheets](#)) and then adding the percentage to the duplicate.

---

## Calculations

Calculations are similar to totals in that they are functions or operations performed on worksheet items, or between items and values, parameters, or other calculations. However, totals include only a subset of functions while calculations can include such complex functions as the following:

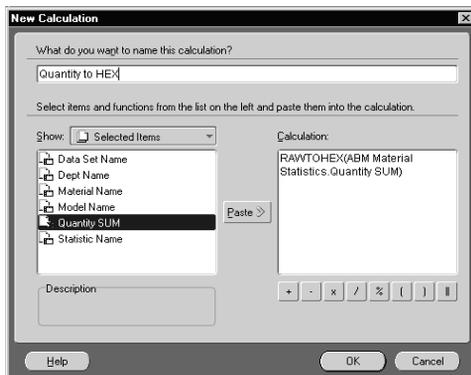
- Conversion functions
- SQL commands to the database
- Date functions
- Grouping functions (including average, count, max, and min)
- Numeric functions
- String functions
- Other functions

Calculations can be performed on any item available to a worksheet, including any item in the attribute folder from which that worksheet is created.

### How To Add a Calculation

1. From the **Tools** menu, select **Calculations**.
2. Select **New** to create a new calculation.
3. Enter a name for your calculation.
4. Build the calculation using selected items, items from the folder on which your worksheet is based, functions, other calculations, or parameters.

In the following example, the function returns the hexadecimal value of each quantity sum in the worksheet.



5. Select **OK** when you have finished creating your calculation.
6. To create multiple calculations, repeat steps 2 through 5.

---

**Note:** If you combine detail and aggregate data points, such as a value and a value sum, then the system displays a message that your action could create misleading results.

---

7. If you do not want to enable the calculation yet, then deselect the checkbox.
8. If you are adding the calculation immediately, select **OK**.

If you left the calculation selected, it is added to your worksheet as a new column or row.

## Parameters

A parameter is a condition or calculation with fields that you designated. When the condition is activated, you are prompted to input values for the fields required by the parameter. After you enter the values, worksheet data is filtered by the parameters.

If a number of people will be accessing the ABM Analyzer workbooks, then parameters can be used to dynamically correlate the information needs of each person with the appropriate worksheet data.

## How To Define a Parameter

1. From the worksheet for which you want to define the parameter, select **Tools**, then **Parameters**.
2. Select **New** to create a new parameter.
3. Enter a name and the item on which you are basing the parameter. Examples include data set and model name. You will be prompted to enter a value for this parameter when the condition defined in this interface is activated.

In the following example, the parameter name of RateBeginDate is based on the Activity Rate Sets Begin Date item.

**New Parameter**

What do you want to name this parameter?

Which item do you want to base your parameter on?  
 Activity Rate Sets.Begin Date

What prompt do you want to show other users?

What description do you want to show other users?

What default value do you want to give this parameter?

Let other users select multiple values

**Parameterized Conditions**  
 Parameters are often used within conditions as placeholders for values.  
 A parameter can only be activated in a worksheet by activating the condition that uses it.  
 To change the current value of an active parameter, select Edit Parameter Values from the Sheet menu.

Create condition

Use operator:

Help OK Cancel

4. Enter the prompt that you want to see when the condition is activated.  
 Example: *Please enter a model name.*

In the example, the following message appears: *Please enter a rate set begin date (dd-mm-yy).*

5. Enter a description of the parameter to be displayed.
6. Select a default value and whether you want to enable others to enter multiple values.
7. Define the condition on which the parameter is based.
8. Select **OK** to apply the parameter.
9. To create additional parameters, repeat steps 2 through 8.

In the following example, the related conditions of begin date and end date are going to be applied:

## Sharing Workbooks

You can define sharing privileges for workbooks, which enables others to access and analyze the data. This feature is useful when you want to share and disseminate information among departments and workgroups in your organization. There are two ways to share a workbook:

- Define a group of users or responsibilities that can access the same workbook.
- Define a group of workbooks that a user or responsibility can access.

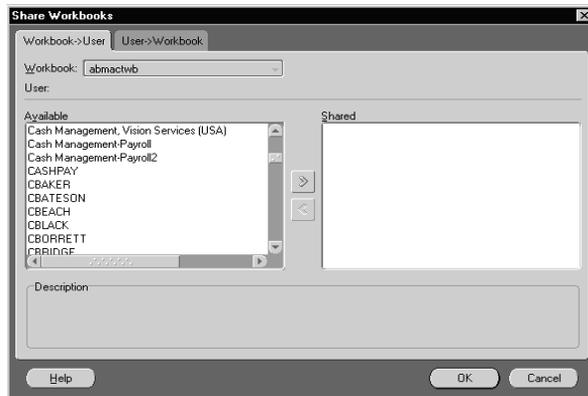
---

**Note:** You must have *grant workbook* privileges in order to share workbooks. The system administrator assigns privileges in Discoverer Administration Edition by selecting **Tools**, then **Privileges**. For more information, see the *Oracle Discoverer Administrator's Guide*.

---

## How To Define Sharing Privileges for a Workbook

1. Log in to ABM Analyzer with your user name and password. Connect to the database in which your workbooks are stored.
2. From the **File** menu, select **Manage Workbooks**, then **Sharing**.
3. Select the workbook you want to share from the pull-down menu.



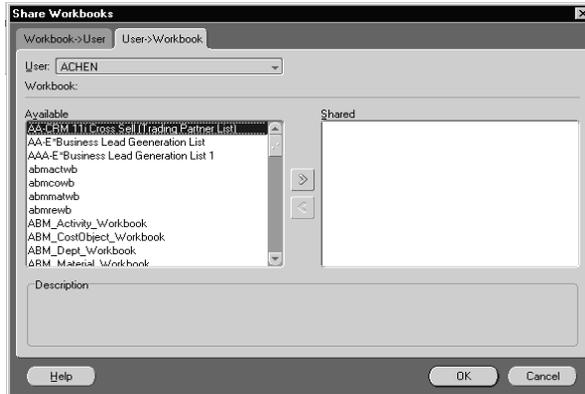
4. Select users and responsibilities from the Available list. Then click the button that points to the Selected column to move the users or responsibilities.

---

**Note:** To select multiple users or responsibilities, press the Control key on your keyboard during selection.

---

5. If you want to define a list of workbooks that a single user or responsibility can access, select the **Users ->Workbooks** tab.



6. Select a user or responsibility from the pull-down list and then select workbooks from the Available list.
7. Select **OK**.

## Exporting Data to Excel

ABM Analyzer data can be exported to Microsoft Excel one sheet at a time, but not an entire workbook at once.

### How To Export to Microsoft Excel

1. Open the worksheet to be exported.
2. From the **File** menu select **Export**, or select the Microsoft Excel icon in the Discoverer toolbar.



3. If this is the first export during the current Discoverer session, then Windows prompts you to either save the file or to open it immediately. The prompt displays the default location and file in which ABM Analyzer exports are stored. Note this location and file name.



Data in the open ABM Analyzer worksheet appear in rows and columns in Excel.

4. To avoid overwriting your data, Oracle recommends that you rename the Microsoft Excel file with a descriptive name.

## Data Variance

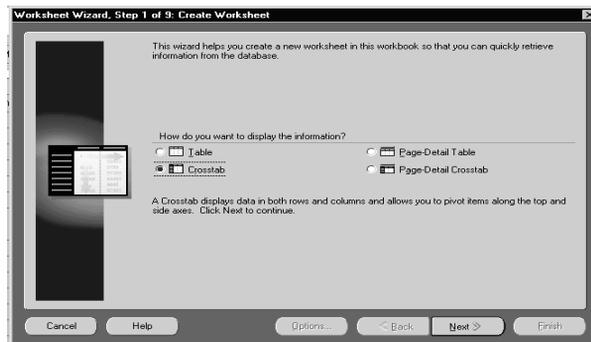
You can perform variance analysis on a given workbook to compare actual with forecast data. Variance analysis can be performed on the following types of data, to a maximum of four data sets:

- Department account data
- Activity account data
- Activity rate data

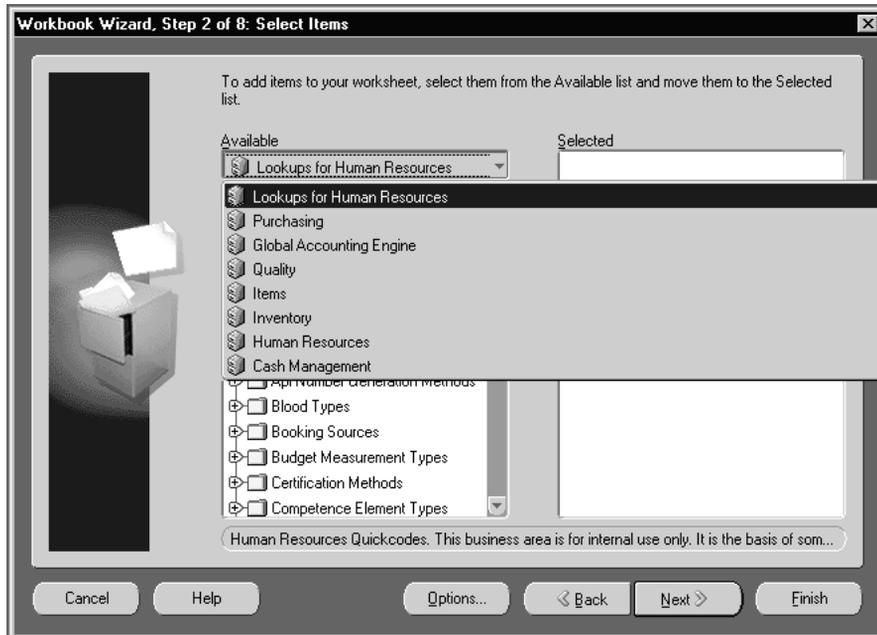
Add a variance worksheet to enable data variance in the Departments and Activities workbooks.

### How to Add Data Variance to a Workbook

1. With the workbook open, launch the **New Sheet** wizard.
2. Select the type of worksheet to create, then select **Next**.



3. From the list of available business areas, select the one corresponding to your workbook. If necessary, expand the business area to see the folders beneath.



4. Select **OK**. The Data Variance sheet is then added to your workbook.

## For Further Information

For details about working with workbooks and worksheets, refer to the *Oracle Discoverer User Guide*. It addresses the following topics:

- Pivoting and sorting data
- Drilling into and out of data
- Using graphs
- Joining folders
- Using calculations, such as subtracting local cost from rolled up cost in the Activity Rate Report

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## Standard Workbooks

This chapter discusses the worksheets and reports in each workbook, as well as the drilling hierarchies for the dimensions used in reports. The chapter is divided into the following sections:

- [Worksheets in Standard Workbooks](#)
- [Case Study](#)
- [Departments Workbook](#)
- [Activity Workbook](#)
- [Materials Workbook](#)
- [Cost Objects Workbook](#)
- [Model Export Using Discoverer Worksheets](#)

## Worksheets in Standard Workbooks

ABM Analyzer contains five standard workbooks. You can add worksheets to them to display results of calculations or totals, or to display the same data in a different way.

Table 3-1 lists the worksheets in each of the standard workbooks.

**Table 3-1** *Worksheets in Standard Workbooks*

Workbook	Worksheets
Departments <sup>1</sup>	Department account and department statistic
Activities	Activity cost account, activity statistic, activity rate, activity rate set, activity driver source, department driver source and driver volume
Materials	Material account, material statistic, and material cost
Cost Objects	Cost object account, cost object statistic, cost object revenue and cost, cost object detail
Model Exports	Department Account Data, Department Statistic Data, Department Activity Account Data, Department Activity Statistic Data, Activity Rate Structure, Cost Object Account Data - Non Cost Accounts, Cost Object Account Data - Revenue Accounts, Cost Object Statistic Data, Bill Header Data, Bill Item Data, Material Accounts Data - Cost Accounts, Material Account Data - Non Cost Accounts, Material Statistic Data, Material Unit Cost Data

<sup>1</sup> In the ABM Analyzer application, departments are sometimes referred to as Reporting Entities (REs).

After you run calculations in ABM, it stores the results in **data sets (DS)** that are viewable with ABM Analyzer. If you do not run ABM calculations, you can view only your input data with ABM Analyzer. Some calculations can be defined and run from within ABM Analyzer. These calculations are used on the data items that are visible within a given worksheet.

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**Note:** Oracle recommends that you copy a worksheet before adding optional attributes. This preserves the original worksheet and helps you track changes you make to the worksheet.

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The standard workbooks do not include ABM attributes. Such attributes are defined by the user. See [Chapter 4, "Adding Optional Attributes"](#).

## Case Study

This case study is designed to illustrate the benefits of using ABM Analyzer:

- ABM Analyzer makes it easier to see the contribution made to a customer segment by each activity involved in the cost of delivering final product.
- ABM Analyzer can help you to determine departmental costs, monitor productivity as output per unit cost, and to see trends over time.

### Introduction

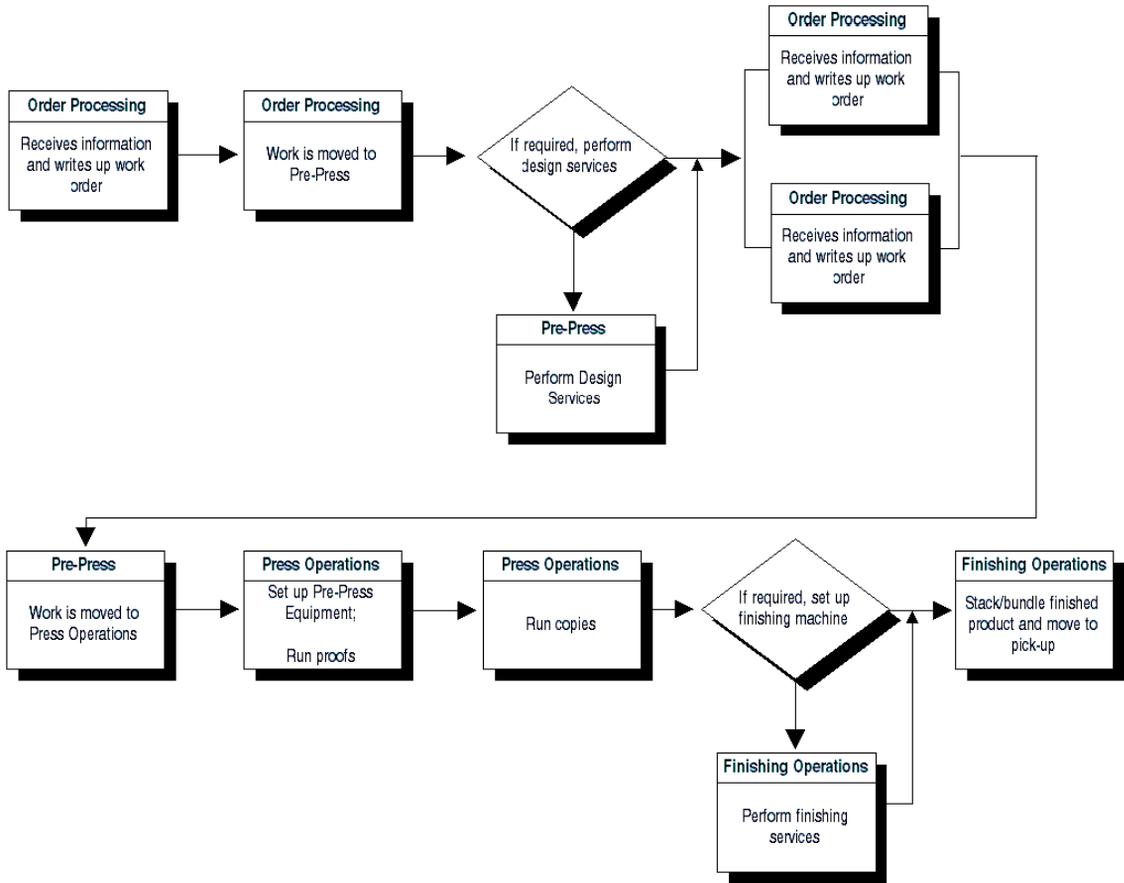
The case study is based on a fictitious printshop chain called K&L Printing. We will focus on one of the stores, owned by a man named Tom, for the sake of simplicity.

K&L offers eight products: pamphlets, brochures, glossy report covers, theses, rough drafts, resumes, black and white copies, and color copies. Each product uses a unique combination of materials, and each material has its own unit price. The following table lists the materials used by Tom's shop:

**Table 3–2 Materials Used**

Sheets of Paper	Ink per Page	Toner per Page
70# coated (8.5x11")	1-color	B/W
20# uncoated (8.5x11")	2-color	Color
80#coated	8.5x11"	3-color
80# uncoated	8.5x11"	4-color
70# coated	11x17"	
80# coated	11x17"	

The printshop contains four departments: Order Processing, Pre-Press, Press Operations, and Finishing. The function of each department is illustrated in following diagram and table:



**Table 3–3 Departments and Activities**

<b>Order Processing</b>	<b>Pre-Press</b>	<b>Press Operations</b>	<b>Finishing Operations</b>
Greet customers	Receive work from previous department	Receive work from previous department	Set up finishing machine
Receive rough materials	Perform design work	Set up offset printer	Load staples
Determine services required	Create printing plate	Handle materials	Receive work from previous department
Write up order	Create master copy	Run offset proofs	Load work into machine
Move work to next department	Move work to next department	Run offset print run	Run finishing machine
Receive work from previous department		Inspect product	Inspect product
Hand work to customer		Load master photocopy	Stack or bundle product
Settle end-of-day receipts		Run photocopy proofs	
		Run photocopy print run	
		Move work to next department	

In preparing this case study, we did the following things in ABM:

1. Assigned cost from GL accounts to activities through the mapping process.
2. Calculated activity rates for all activities.
3. Set up a bill of resources for each product to include consumption quantity of activities, material, and cost objects from a different bill of resources.
4. Calculated unit cost of a product and extended unit cost.
5. Entered revenue for each product for a data set.
6. Created a fictitious department called Print Production to hold all account data from the general ledger.

## Cost Object Revenue and Cost Report

Tom realizes that one of his products, glossy report covers, is losing money for the data set January 1998–Actual. To find out how much, he accesses the ABM Analyzer standard reports to view the product’s cost components. He discovers in the Cost Object Revenue and Cost Report that his company incurred a loss of \$144,881 on glossy covers for data set January 1998–Actual.

Glossy Covers	
<b>Revenue</b>	<b>\$1,031,348.00</b>
Extended Unit Cost	<b>\$1,176,229.28</b>
Extended Rolled Up Activity Cost	\$64,417.28
Extended Rolled Up Material Cost	\$1,111,812.00
<b>Margin</b>	<b>-\$144,881.28</b>
<b>Statistic Quantity</b>	<b>2,000,000.00</b>

The Cost Object Revenue and Cost Report also shows that the extended unit cost (which is the unit cost multiplied by the number of units sold) is \$1,176,229.28 and that 2,000,000 units were sold.

## Cost Object Detail Report

Tom then accesses the Cost Object Detail Report to get a breakdown of the resources used to make a unit of glossy covers. The report shows that *perform design work* has the highest activity cost of all the activities related to glossy covers.

Oracle Discoverer - [demo2.dbs]

File Edit View Sheet Format Tools Graph Window Help

Cost Object Detail Worksheet

Page Items: Parent Model Name: K&L Shop - Tom Parent Bor Type: Cost Management Parent Cost Object Name: < >

Child Model Name	Child Name	Child Type	BOR Line Total Cost	Extended Consumption Quantity
K&L Shop - Tom	80# COATED (11X17")	Material	0.372600	.0200
K&L Shop - Tom	4-COLOR INK	Material	0.175315	.0700
K&L Shop - Tom	1-COLOR INK	Material	0.006261	.0100
K&L Shop - Tom	perform design work	Activity	0.003632	.0007
K&L Shop - Tom	materials handling	Activity	0.003293	1.0000
K&L Shop - Tom	setup offset printer	Activity	0.003133	.0007
K&L Shop - Tom	load work into machine	Activity	0.002358	1.0000
K&L Shop - Tom	create Printing plate	Activity	0.002180	.0007
K&L Shop - Tom	move work to next dept	Activity	0.002175	1.0000
K&L Shop - Tom	run offset print run	Activity	0.001976	1.0000
K&L Shop - Tom	inspect product	Activity	0.001976	1.0000

NUM

## Activity Rate Set Report

To investigate why the activity rate *perform design work* is so high, Tom goes to the Activity Rate Set Report to obtain the activity cost amount and the driver information. In this report, the Cost Object represents a product, so Tom can see the cost components within this product. He can also see the costs of several activities, sorted by decreasing amount. However, he does not know why the activities are so expensive, because he can see only the component costs. He wants to see activity costs per department so that he can compare costs and productivity within the Pre-Press department.

Activity Reporting Entity	Activity Name	Driver Name	Activity Rate Set Total Rate	Activity Rate Set Total Cost	Driver Volume
Finishing			2.019956	49,266.000000	33372148
K&L			1,500.000000	1,500.000000	2
Order Processing			2.420169	45,026.714286	11911948
Pre-Press					
	create Printing plate	# work orders - offset	2.909577	21,426.128571	7364
	create master copy (phc	# work orders - copy	0.776309	7,142.042857	9200
	move work to next dept	# work orders - total	0.431179	7,142.042857	16564
	<b>perform design work</b>	# work orders - design	5.445290	28,568.171429	5246
	receive work prev dept	# work orders - total	0.431179	7,142.042857	16564
Press Operations			7.610157	128,286.857143	23686692

The Activity Rate Set Report shows that the total activity cost for *perform design work* is \$28,568.17, making it the most expensive activity in the Pre-Press department. The report also shows that the driver volume is 5246. An activity rate is high either because the total activity cost assigned to the activity is very high, or the driver volume is very low.

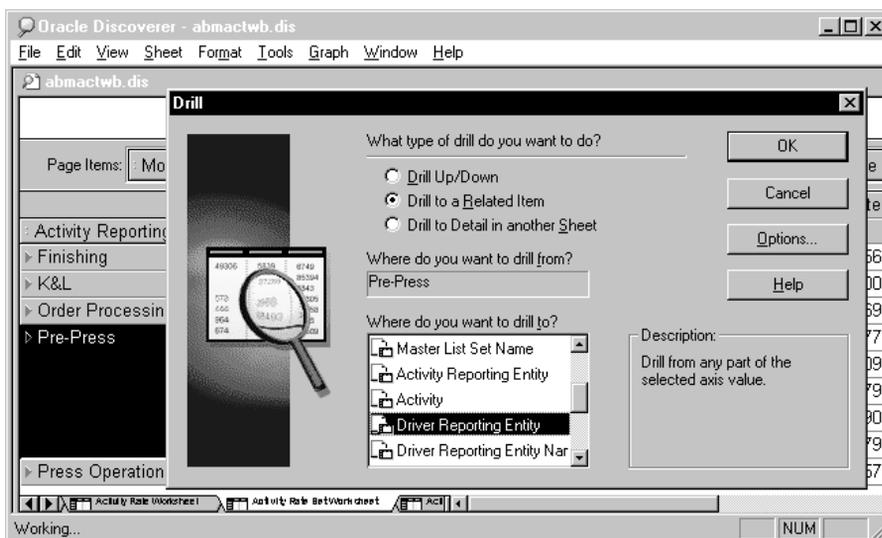
At this point in the analysis, Tom's knowledge of the industry and the company is critical. Although he can analyze historical trends, he ultimately must determine if the driver volume and the dollar cost per driver volume are reasonable. To obtain additional information, Tom drills down this report for detailed data on an activity such as driver department or driver name. This helps him to further analyze the driver volume data.

Some drivers are controlled by the same department as the activity expenditures. Other drivers can be measured and controlled by distinct departments. This separation of control between costs and drivers could provide clues about organizational changes that Tom can implement.

## Drilling Down to Driver Department

To drill down to Driver Department, Tom does the following:

1. In the Activity Reporting Entity column, he right-clicks the arrowhead for Pre-Press.
2. Selects Driver Department as the hierarchy level he wants to drill to.
3. Selects Driver Name to drill to that.



## Possible Additional Analysis

Tom can conduct additional analysis using ABM Analyzer, including the following:

- Locating more uses for a given driver volume output.
  - Ideally, more than one revenue stream or product is supported by a given driver volume. For example, a mailing could promote more products and services. A set of activities can describe a promotional mailing process.
- Using more productive technology to increase driver volume output measures, with lower cost.

For example, Tom might use logistics software to decrease needed deliveries and reduce warehousing expenses by increasing utilization of floor space as an input.

- Reassigning critical machinery or people resources where the largest cost impact could occur.

Tom could change the organizational structure to reallocate people across activities, which would change activity rates and driver volumes. This can decrease profitability in the short term to satisfy a longer term objective. It is often prudent to quantify the impacts.

### Driver Department and Driver Name

The following window shows the results of drilling to Driver Department and Driver Name from the Activity Department.

Activity Reporting Entity	Driver Reporting Entity Name	Reporting Entity Activity Name	Driver Name	Activity Rate Set Total Rat
Finishing				2.019956155
K&L				1,500.000000000
Order Processing				2,420169375
Pre- Press	Print Production	create Printing plate	> # work orders - offset	2.909577481
		create master copy (photo)	> # work orders - copy	0.776309000
		move work to next dept	> # work orders - total	0.431178631
		perform design work	> # work orders - design	5.445290376
		receive work prev dept	> # work orders - total	0.431178631
Press Operations				7.610157115

In the drilled-down report, Tom sees the name of the driver volume of *perform design work* for January 1998–Actual. The Driver Name for driver volume 5246 is *# of work orders– design* and the driver department is Print Production.

## Driver Volume Report

Tom then accesses the Driver Volume Report to view the details for the driver department Print Production, and driver name # *work orders design*.

The screenshot shows the Oracle Discoverer interface with the 'Driver Volume Report' window. The window title is 'abmactwb.dis'. The menu bar includes File, Edit, View, Sheet, Format, Tools, Graph, Window, and Help. The page items section shows 'Model Name: K&L Shop - Tom' and 'Period Data Set Name: January 1998 Actual Data'. The main table displays driver volume data for 'Print Production'.

Driver Reporting Entity Name	Driver Name	Source Type	Driver Volume SUM
Print Production	# pieces - copied	RE Stat	55000
	# pieces - finished	RE Stat	5223000
	# pieces - offset	RE Stat	5843000
	# pieces - total	RE Stat	5898000
	# work order-stapled	RE Stat	3184
	# work orders - copy	RE Stat	9200
	# work orders - design	RE Stat	5246
	# work orders - finished	RE Stat	5964
	# work orders - offset	RE Stat	7364

The Driver Volume Report shows the source type information for the driver volume for each department driver. Different source types can have different levels of accuracy and timeliness.

In the example, the driver # *work orders - design* has a source type of Department Stat. This means that the driver volume 5246 is derived from data entered or calculated in the Department Statistical Data window within ABM.

## Department Driver Source Report

Tom can then query the Department Driver Source Report to get the breakdown of the total for design work orders in terms of source reporting entities. In other words, he can find out how many work orders are from given reporting entities.

			Source Value SUM	
			January 1998 Actual Data	January 1998 Budget Data
Driver Name	Source Reporting	Source Name		
# work orders - design	> B&W Copy Job	> Work Orders- Design	0	50
	> Brochures	> Work Orders- Design	986	1000
	> Color Copy Job	> Work Orders- Design	1110	1200
	> Engines	> Work Orders- Design	181	250
	> Glossy Covers	> Work Orders- Design	1357	1650
	> Roughs	> Work Orders- Design	630	650
	> Theses	> Work Orders- Design	718	730
	> Transmissions	> Work Orders- Design	264	270
		Sum		5246

By comparing driver source value across multiple data sets in the Department Driver Source Report, you can determine whether a resource is under or over capacity. If it is under capacity, you can investigate possible means of maximizing use.

The case study illustrates how to move the data set to the column axis in order to generate multiple data set columns, such as forecast or simulated data sets. This enables you to obtain current capacity levels by comparing them to a baseline period. The baseline period can be an arbitrary past period with known capacity measurements.

Tom may want to correlate this output measure (number of work orders) with other measures, such as staffing levels and number of walk-in customers. By looking across products, Tom can see how driver volume changes in one product are correlated with other products. The higher the positive correlation, the greater the need for independent resource capacity. Low or negatively correlated driver volume suggests that Tom can use shared services to provide resources for handling those drivers.

## Activity Cost Account Report

Tom goes to the report Activity Cost Account Report to see the activity cost broken down in terms of Department accounts. In the Activity Rate Set Report earlier in this section, the activity cost for *perform design work* \$28,568.17 came from salary - non supervisory for Pre-Press and accounts (with prefix R-) that were Redistributed to department Pre-Press via mapping.

Oracle Discoverer - abmactwb.dis

File Edit View Sheet Format Tools Graph Window Help

abmactwb.dis

Activity Cost Account Report

Page Items: Model Name: K&L Shop - Tom | Period Data Set Name: January 1998 Actual Data

Activity Reporting	Activity Name	Account Name	Local Cost SUM
Pre-Press	create Printing plate		\$21,426.13
	create master copy (photo)		\$7,142.04
	move work to next dept		\$7,142.04
	perform design work		
		R-Accounting	\$500.00
		R-Benefits	\$5,440.00
		R-Deprn (building)	\$141.60
		R-Deprn (pre-press equip)	\$2,800.00
		R-HR/benefit admin	\$800.00
		R-Insurance	\$1,050.57
		R-Salaries (supervisor)	\$4,000.00
		R-Utilities	\$236.00
		Salaries- non-supervisory	\$13,600.00

Activity Cost Account Report | Activity Rate Set Report | Act | NUM

## Activity Cost Report

In the Activity Cost Report, Tom adds a percentage column to further analyze the data, for example, to find out the percentage of R-Salaries (supervisory) of activity *perform design work* for department Pre-Press as of the total R-Salaries (supervisory) of all activities for Pre-Press. The report shows that the R-salaries for Pre-Press *perform design work* account for 40 percent of the total activity cost \$10,000.

## Adding a Percentage Column

To add a percentage column, do the following:

1. Select the **Local Cost Sum** column.
2. From the **Tool** menu, select **Percentage**.
3. Select the **New** box.
4. In the **Percentage** dialog box, select *each change in*
5. Choose **Account Name** in the drop box.

Account Reporting Entity	Account Name	Activity Name	Local Cost SUM	% of Total Account Cost	
Pre-Press	R-Accounting		\$1,250.00	100%	
	R-Benefits		\$13,600.00	100%	
	R-Depm (building)		\$354.00	100%	
	R-Depm (pre-press equip)		\$7,000.00	100%	
	R-HR/benefit admin		\$2,000.00	100%	
	R-Insurance		\$2,626.43	100%	
	R-Salaries (supervisor)		create Printing plate	\$3,000.00	30%
			create master copy (photo)	\$1,000.00	10%
			move work to next dept	\$1,000.00	10%
			perform design work	\$4,000.00	40%
			receive work prev dept	\$1,000.00	10%
	Sum		\$10,000.00		

With the analysis from the reports, Tom can now determine whether the costing behavior of activity *perform design work* is appropriate by comparing with other activities or with the forecast data. He can also obtain the capacity level of an activity and determine whether to increase the driver volume for an activity such as increasing the number of work orders served by the activity *perform design work*.

For more information, see [Chapter 2, "Using Workbooks"](#), ["Percentages"](#).

## Departments Workbook<sup>1</sup>

The Departments workbook contains two worksheets. These worksheets organize account and statistic data by reporting entities such as cost centers, profit centers, or shared service centers throughout the organization. You can analyze department account and statistic results by budget or by actual or forecast scenarios, and thus examine trends. You can drill one level at a time through a hierarchical structure of these departments.

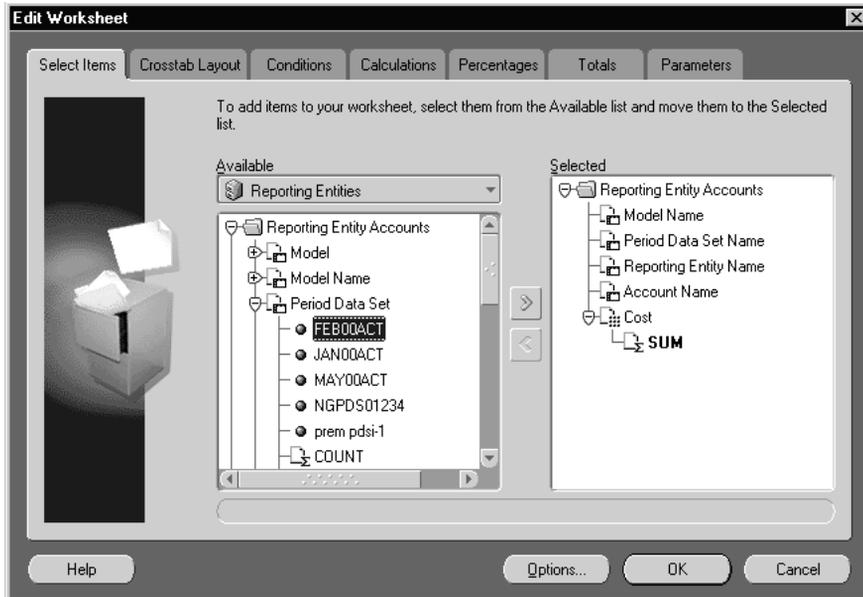
### Worksheets

To add items to dimensions for each worksheet, do the following:

1. From the **Sheet** menu, select **Edit Sheet**.  
The business area for that workbook should already be selected.
2. To add items:
  - a. Expand the highlighted folders.
  - b. Select items.
  - c. Click the right-arrow button to move items into the Selected panel.
3. Click **OK** when you are finished.

---

<sup>1</sup> The term Reporting Entity or RE is sometimes used interchangeably with Department.



## Department Account

The Department Account report displays accounts and their cost data for departments. You can add the department, account, and department account attribute dimensions to this report to further summarize and group department cost information. (See [Chapter 4, "Adding Optional Attributes"](#).)

The following items are used for the report dimensions:

- Page dimensions, including model name and data set name.
- Column dimensions, including cost amount.
- Row dimensions, including account name.

Reporting Entity Account Worksheet

Page Items: Model Name: ABM Company Period Data Set Name: MAY00ACTUAL

Reporting Entity Name	Account Name	Cost SUM
Account Management		\$75,000.00
	Air Fare	\$4,000.00
	Depreciation Expense	\$500.00
	Material Cost - A	\$0.00
	Material Cost - B	\$0.00
	Material Cost - C	\$0.00
	Material Cost - Shared	\$0.00
	Office Supply	\$1,000.00
	Salary	\$61,500.00
	T&E	\$8,000.00
Accounting		\$137,500.00
	Advertisement	\$0.00

Page 1 of 12 25 Rows per Page

RE Account Worksheet RE Statistic Worksheet

To see department account information across data sets, do either of the following:

- Select **Sheet**, then **Crosstab Layout** to drag the page item Data Set Name to the row axis.
- Edit worksheet to include the data set item from the Department Account Data Set folder.

## Department Statistic

The Department Statistic report compares statistical data by department. The statistics can be sorted within each department. This report does not display total or subtotal because statistics are not assumed to be additive. If the user inserts subtotals, then the report could show misleading figures.

You can add attribute dimensions for department, statistic, and department statistic to this workbook to group the statistic information. The following items are used for the report dimensions:

- Page dimensions include model name and data set name

- Column dimensions include statistic value
- Row dimensions include statistic name

See [Chapter 4, "Adding Optional Attributes"](#) for more information.

The screenshot shows the Oracle Discoverer interface for a Reporting Entity Statistic Worksheet. The window title is "Oracle Discoverer - [abmrewb]". The menu bar includes File, Edit, Sheet, Tools, and Help. The toolbar contains various icons for navigation and editing. The main area displays a table with the following data:

Reporting Entity Name	Statistic Name	Quantity
Account Management	Headcount	10.0000000000
	Office Space	1000.0000000000
Accounting	Headcount	21.0000000000
	Office Space	2100.0000000000
Advertising	Headcount	3.0000000000
	Office Space	300.0000000000
Architect	Headcount	10.0000000000
	Installation Unit	17000.0000000000
	Office Space	1000.0000000000
Collection	Headcount	4.0000000000
	Office Space	400.0000000000
	Product Unit	17000.0000000000

Page Items: Model Name: ABM Company | Period Data Set Name: MAY00ACTUAL

Page 1 of 3 | 25 Rows per Page

RE Account Worksheet | RE Statistic Worksheet

The Department Statistic report enables you to verify, before mapping, that target departments have the same driver statistics. For example, you could see which statistic drivers were assigned to target departments before you use the *Full Time Headcount* driver to map the benefit cost of a department to other departments. This makes it easier to avoid including a department without the *Full Time Headcount* driver.

## Viewing and Sorting Statistics

You can see all departments that have a given statistic by rearranging the columns. You can also sort the statistics alphabetically by name, or numerically.

To sort statistics, select the **Tools** menu, then **Sorts**. See [Chapter 2, "Using Workbooks"](#), "Sorts".

To compare statistical data by a statistic driver, move the item *Statistic Name* to the row axis by selecting **Sheet**, then **Crosstab Layout**. The new report shows statistical data of each driver for each department.

Reporting Entity Name	Statistic Name	Headcount	Installation Unit	Office Space	Product Unit
		Quantity	Quantity	Quantity	Quantity
Account Management		10.0000000000	NULL	1000.0000000000	NULL
Accounting		21.0000000000	NULL	2100.0000000000	NULL
Advertising		3.0000000000	NULL	300.0000000000	NULL
Architect		10.0000000000	17000.0000000000	1000.0000000000	NULL
Collection		4.0000000000	NULL	400.0000000000	17000.0000000000
Credit		4.0000000000	NULL	400.0000000000	NULL
Equipment Maintenance		3.0000000000	NULL	300.0000000000	NULL
Executive		5.0000000000	NULL	500.0000000000	NULL
Facility - Electricity		1.0000000000	NULL	100.0000000000	NULL
Facility - Space		2.0000000000	NULL	200.0000000000	NULL

You can edit the report to show statistical data for multiple data sets by one of two ways:

- Move the Data Set item from page axis to row axis.
- Edit the worksheet to include the data set item from the folder Department Statistic Data Set.

## Department Workbook Hierarchy

Department workbooks are organized into hierarchies, the top level being the highest. Here are two examples of how your hierarchies might be organized:

### **Example 3–1 Department Account Hierarchy**

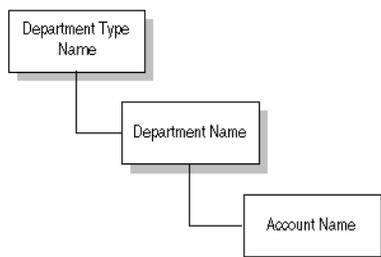
- Highest level: Department Name
  - Next level: Account Name

### **Example 3–2 Department Statistic Hierarchy**

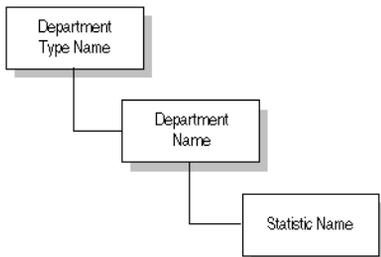
- Highest level: Department Name
  - Next level: Statistic Name

The following diagram shows the hierarchies you can drill up or down in, in the worksheets.

#### • Department Account Hierarchy



#### • Department Statistic Hierarchy



## Examples of Using Hierarchy in Report

The side axis of the Department Account Report has two items, named Department Name and Account Name, with arrowheads by their names. When you want to drill down an item, place the pointer on the arrowhead. The pointer becomes a magnifying glass. Then click to obtain a drop-down menu and select another level of data.

If you drill on Department, you get a drop-down menu showing Department as the current level, and Department Type Name as the next level.

If you drill on Account Name, then a drop-down menu appears. It shows that Account Name is the current level, and that Department Type Name and Department Name are the other two levels.

Oracle Discoverer - [ABM\_Dept\_Workbook]

File Edit Sheet Tools Help

ORACLE Discoverer™

ABM Department Account Worksheet

Page Items: Model Name: ABM Company Data Set Name: MAY00ACTUAL

Dept Name	Department Type Name	Department Name	Account Name	Cost SUM
Account Management				\$75,000.00
	Administrative			\$4,000.00
	Depreciation Expense			\$500.00
	Material Cost - A			\$0.00
	Material Cost - B			\$0.00
	Material Cost - C			\$0.00
	Material Cost - Shared			\$0.00
	Office Supply			\$1,000.00
	Salary			\$61,500.00
	T&E			\$8,000.00
Accounting				\$137,500.00
	Advertising			\$0.00

Page 1 of 12 25 Rows per Page

ABM Department Account Worksheet ABM Department Statistic Worksheet

## Activity Workbook

The Activity workbook contains seven worksheets. These enable you to analyze activity data such as activity driver, activity cost, and activity statistics.

You can compare activity costs across cost centers and time periods. You can also compare the activity driver volumes that determine activity rates in different activity rate sets. The Activity Rate Report and Activity Rate Set Report show activity rates in the form of dollars per activity divided by activity driver volume. Each activity can have its own cost (local) or a rolled-up cost (sum or local cost) of all subactivities by data set.

## Activity Cost Account

The Activity Cost Account report provides the department account level detail underlying the activity costs on the activity rate set report. It also provides a breakdown of the total activity cost of all the department activities. For each department activity, the report shows the components of the activity cost, and the department accounts from which the amounts were mapped.

You can add attribute dimensions for activity, department activity, account, and department account to further summarize and group the activity account costs. See [Chapter 4, "Adding Optional Attributes"](#) for more information.

The following items are used for the report dimensions:

- Page dimensions include model name and data set name.
- Column dimensions include local cost amount.
- Row dimensions include activity name and account name.

Activity Cost Account Worksheet

Page Items: Model Name123: ABM Company | Period Data Set Name: MAY00ACTUAL

Activity Reporting Entity Name	Activity Name	Account Name	Local Cost SUM
Account Management			\$75,000.00
	Sales - Acct Mgmt		\$75,000.00
		Air Fare	\$4,000.00
		Depreciation Expense	\$500.00
		Material Cost - A	\$0.00
		Material Cost - B	\$0.00
		Material Cost - C	\$0.00
		Material Cost - Shared	\$0.00
		Office Supply	\$1,000.00
		Salary	\$61,500.00
		T&E	\$9,000.00
Accounting			\$137,500.00

Page 1 of 3 | 25 Rows per Page

## Activity Statistic

The Activity Statistic report displays activity statistic quantities. It helps you to analyze trends in the activity statistics that are used to map costs. You can add attribute dimensions for activity, department activity, statistic, and department statistic to summarize and group the statistic values. See [Chapter 4, "Adding Optional Attributes"](#) for more information.

The following items are used for the report dimensions:

- Page dimensions include model name and data set name.
- Column dimensions include local quantity.
- Row dimensions include activity name and statistic name.

Activity Statistic Worksheet

Page Items: Model Name: ABM Company | Period Data Set Name: MAY00ACTUAL

Activity Reporting Entity Name	Activity Name	Statistic Reporting Entity Name	Statistic Name	Local Quantity
Account Management	Sales - Acct Mgmt	Account Management	Headcount	10
			Office Space	1000
Accounting	G&A - Accounting	Accounting	Headcount	21
			Office Space	2100
Advertising	Marketing - Advertising	Advertising	Headcount	3
			Office Space	300
Architect	Prof. Svc - Architect	Architect	Headcount	10
			Office Space	1000
Collection	Fin Services - Collection	Collection	Headcount	4
			Office Space	400
Credit	Fin Services - Credit	Credit	Headcount	4
			Office Space	400

Page 1 of 3 | 25 Rows per Page

Activity Cost Account... | Activity Statis... | Activity Rate W... | Activity Rate S... | Activity Driver... | RE Driver Sourc...

## Activity Rate

The Activity Rate report displays local and rolled-up rates for activities and their related drivers. For a parent activity, the report may show both the rolled-up activity rate and local activity rate if the parent has its own activity cost (local) as well as activity cost rolled up from the child activities.

You might have several drivers related to an activity for product costing, budgeting, and performance measurement. The Activity Rate report enables you to quickly compare activity rates (which are activity costs divided by driver volumes) across different periods or different data set types.

To change to a different data set, select the down arrow of data set on the page axis.

To see data for all data sets available, move the data set from the page axis to the row axis by selecting **Sheet**, then **Crosstab Layout**.

You can add attribute dimensions for driver, department driver, activity, and department activity to further summarize and group the activity rate information.

The following items are used for the report dimensions:

- Page dimensions include model name and data set name.
- Column dimensions include local activity rate and rolled-up activity rate.
- Row dimensions include activity name and driver name.

Activity Statistic Worksheet

Page Items: Model Name: ABM Company | Period Data Set Name: MAY00ACTUAL

Activity Reporting Entity Name	Activity Name	Statistic Reporting Entity Name	Statistic Name	Local Quantity
Account Management	Sales - Acct Mgmt	Account Management	Headcount	10
			Office Space	1000
Accounting	G&A - Accounting	Accounting	Headcount	21
			Office Space	2100
Advertising	Marketing - Advertising	Advertising	Headcount	3
			Office Space	300
Architect	Prof. Svc - Architect	Architect	Headcount	10
			Office Space	1000
Collection	Fin Services - Collection	Collection	Headcount	4
			Office Space	400
Credit	Fin Services - Credit	Credit	Headcount	4
			Office Space	400

Page 1 of 3 | 25 Rows per Page

Activity Cost Account ... Activity Statis... Activity Rate W... Activity Rate S... Activity Driver... RE Driver Sourc...

With the Activity Rate report, you can analyze trends in activity rates, their associated activity costs, and driver volumes. An example would be to compare driver volumes across different periods.

## Activity Rate Set

The Activity Rate Set report displays the current activities, drivers, and rates in a rate set with activity costs and driver volumes. An activity rate set is used to group activity rates into categories for defining different cost object costing scenarios. Use this report to analyze costing rates for estimating, planning, or simulation by selecting different rate sets or moving the Rate Set Name from page axis to row axis.

You can add attribute dimensions for driver, department driver, activity, and department activity to further summarize and group the activity rate information.

The following items are used for the report dimensions:

- Page dimensions include model name, data set name, and rate set name.
- Column dimensions include activity rate (local or rolled up), activity cost (local or rolled up), and driver volume.

- Row dimensions include activity name and driver name.
- Report parameters include the rate effective date.

When you run this report, the system prompts you to enter a rate set begin date and end date.

**Edit Parameter Values**

Please select values for the following parameters. To change these values later, select Edit Parameter Values from the Sheet menu.

Please enter a rate set begin date (dd-mon-yyyy) '01-JAN-1998'

Please enter a rate set end date (dd-mon-yyyy) '31-JAN-9999'

Description  
This parameter must be specified when selecting items from the activity rate sets folder.

Help OK Cancel

## Driver Volume

The Driver Volume report displays the driver volume and source type data for all drivers in a model. The volume of a department driver is derived from one of the source types in ABM. The source types are: *Entered*, *Department Acct*, *Department Stat*, *Act Acct*, and *Act Stat*.

The source type determines how ABM calculates the driver volume. If the source type is either Department Acct or Department Stat, then use the Department Driver Source worksheet to view the source information for the driver. Examples of source information include source department name, source account, and source statistics. If the source type is Act Stat or Act Acct, then use the Activity Driver Source worksheet. See "[Activity Driver Source](#)".

You can add attribute dimensions for driver and department driver to the workbook to further summarize and group driver volumes. See [Chapter 4, "Adding Optional Attributes"](#).

The following items are used for the report dimensions:

- Page dimensions include model name and data set name.
- Column dimensions include driver volume.
- Row dimensions include driver name and source type.

Oracle Discoverer - [abmactwb]

Driver Volume Worksheet

Page Items: Model Name: ABM Company | Period Data Set Name: MAY00ACTUAL

Driver Reporting Entity Name	Driver Name	Source Type	Driver Volume SUM
> Account Management	> #_Sales Demo	Entered	100.0000000000
> Accounting	> Working Hours	Entered	2000.0000000000
> Advertising	> #_Advertisement	Entered	10.0000000000
> Architect	> Working Hours	Entered	1000.0000000000
> Collection	> Working Hours	Entered	1000.0000000000
> Credit	> Working Hours	Entered	1000.0000000000
> Equipment Maintenance	> Working Hours - Labor	Entered	1000.0000000000
	> Working Hours - Machine	Entered	1000.0000000000
> Executive	> Working Hours	Entered	600.0000000000
> Facility - Electricity	> Electricity Hours	Entered	10000.0000000000
> Facility - Space	> Square Footage	Entered	20500.0000000000
> Feature Development	> Working Hours	Entered	1000.0000000000

Page 1 of 2 | 25 Rows per Page

## Activity Driver Source

The Activity Driver Source report shows the source details for the activity account and activity statistic that are used to derive driver volume. In ABM, a driver volume is either entered manually or referenced to Department Account, Department Statistic, Activity Account, or Activity Statistic data. The driver source type is located in the Driver Volume worksheet.

The following items are used for the report dimensions:

- Page dimensions, which include model name, data set name, and driver department name.
- Column dimensions, including the source value.
- Row dimensions, including the driver name, source activity department name, source activity name, source department name, and source name.

## RE or Department Driver Source

The RE or Department Driver Source report shows source details for the Department account and Department statistics used to derive driver volume. In ABM, a driver volume is either manually entered or referenced to Department Account, Department Statistic, Activity Account, or Activity Statistic. The driver source type is contained in the Driver Volume worksheet.

The following items are used for the report dimensions:

- Page dimensions, including the model name, data set name, and driver department name.
- Column dimension, including the source value.
- Row dimensions, including the driver name, source department name, and source name.

## Activity Workbook Hierarchy

Activity workbooks are organized into hierarchies. The top level of a hierarchy is the highest, and you can drill through them. Here are some examples of how your hierarchies might be organized:

### ***Example 3–3 Department Account Hierarchy***

- Top level: Department Name
  - Next level: Account Name

### ***Example 3–4 Department Activity Hierarchy***

- Top level: Department Name
  - Next level: Activity Name

### ***Example 3–5 Department Statistic Hierarchy***

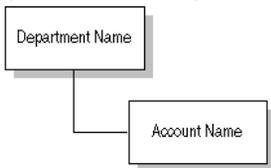
- Highest level: Department Name
  - Next level: Statistic Name

### ***Example 3–6 Department Driver Hierarchy***

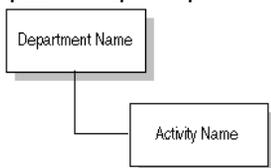
- Highest level: Department Name
  - Next level: Driver Name

The following diagrams show the hierarchies in the Activity worksheets:

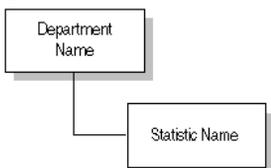
◆ **Department Account Hierarchy**



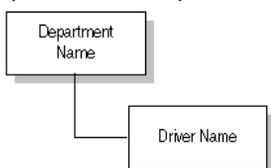
◆ **Department Activity Hierarchy**



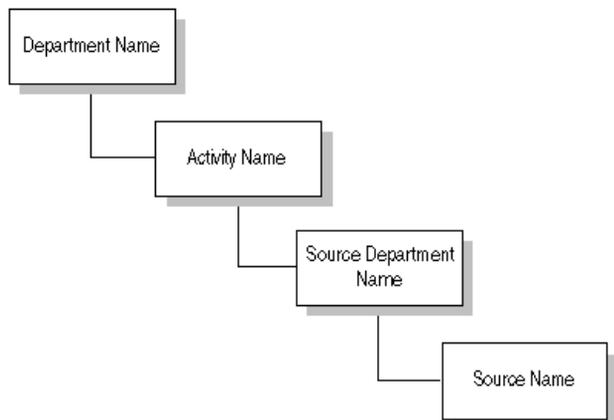
◆ **Department Statistic Hierarchy**



◆ **Department Driver Hierarchy**



◆ **Driver Source Hierarchy**



## Materials Workbook

The Material workbook contains three worksheets, which enable you to compare the material quantities used in products over different periods. You can also choose among materials to modify the bill of resources based on cost-benefit analysis.

## Material Account Report

The Material Account report analyzes the material account details of all materials in a model. It shows all of the financial data used to calculate the material unit costs. This report is useful for comparing total material costs across departments.

The Material Account report uses the following dimensions:

- Page dimensions, including model name and data set name.
- Column dimensions, including costs.
- Row dimensions, including material name and account name.

Oracle Discoverer - [ABM\_Material\_Workbook]

File Edit Sheet Tools Help

ABM Material Account Worksheet

Page Items: Model Name: ABM Company Data Set Name: MAY00ACTUAL

Material Name	Dept Name	Account Name	Cost SUM
Material Cost - A	MFG - A		\$16,000,000.00
		Material Cost - A	\$8,000,000.00
		Material Cost - B	\$8,000,000.00
Material Cost - B	MFG - B		\$12,000,000.00
		Material Cost - B	\$12,000,000.00
Material Cost - C	MFG - C		\$10,000,000.00
		Material Cost - C	\$10,000,000.00
Material Cost - FD	MFG - A		\$17,000,000.00
			\$10,000,000.00

Page 1 of 1 25 Rows per Page

ABM Material Account Worksheet ABM Material Statistic Worksheet ABM Material Cost Worksheet

## Material Statistic Report

The Material Statistic Report shows material statistical data for all materials in a model. Material statistics are used to calculate material unit costs. You can compare the statistical data across multiple data sets by moving the Data Set item from page axis to row axis.

The Material Statistic report contains following dimensions:

- Page dimensions, including model name and data set name.
- Column dimensions, including statistic value.
- Row dimensions, including material name and statistic name.

## Material Cost Report

The Material Cost report displays both material unit cost and extended material costs for all materials. Extended material costs equal unit cost multiplied by statistical data.

Use the Material Cost report to document a purchase price variance. To do so, multiply actual purchase quantities by the planned and actual unit costs stored in different data sets.

---

---

**Note:** Calculate a purchase price variance by using ABM rather than a Discoverer function.

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The Material Cost report contains the following dimensions:

- Page dimensions, which include model name, statistic name, and data set name.
- Column dimensions, which include extended material cost or formula, material unit costs, and material statistic value.
- Row dimensions, which include material name and account name.

## Material Workbook Hierarchy

Material workbooks are organized into drillable hierarchies, where the top level is highest. Here are some examples of how your hierarchies might be organized:

### **Example 3-7 Department Statistic Hierarchy**

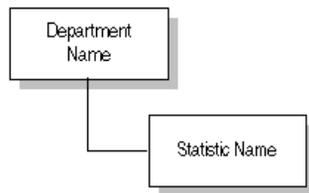
- Highest level: Department Name
  - Next level: Statistic Name

### **Example 3-8 Department Account Hierarchy**

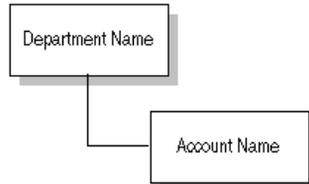
- Highest level: Department Name
  - Next level: Account Name

The following diagram illustrates the worksheet hierarchies:

#### • Department Statistic Hierarchy



#### • Department Account Hierarchy



## Cost Objects Workbook

Cost objects are any items that are used to build a bill of resources for calculating unit costs. Examples of cost objects include products, customers, and services.

The Cost Objects workbook has four worksheets. It enables you to uncover the root causes of changes in unit cost of cost objects, and to examine profitability. The latter is possible because cost objects are used to model item costs by consuming activities, materials, and other cost objects while generating revenues.

## Cost Object Detail

The Cost Object Detail report displays all of the costs associated with each material and activity in the cost object. The report also displays details for all levels of the **bill of resources, or BOR**.

A Cost Object Detail report is produced for each cost object in the hierarchy of a given parent cost object, including the parent cost object. The report details the activities, materials, and cost objects at that level.

---

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**Note:** Before you can run the Cost Object Detail report, you must do two things:

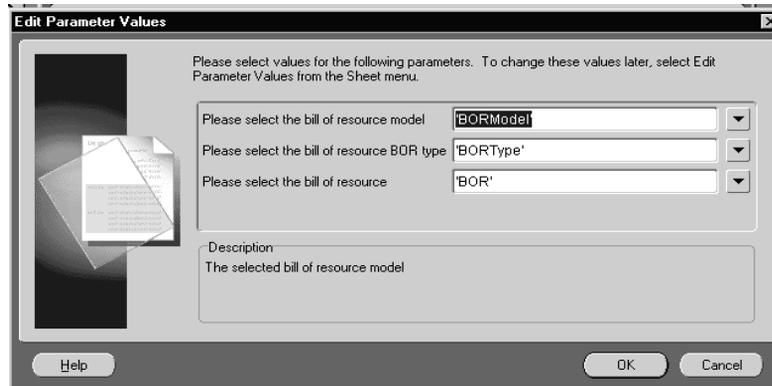
- Run the Cost Object Unit Cost calculation in ABM with the variable Write Line Items set to *Y*.
  - Run the Cost Object Detail Report in ABM for every top cost object that you want to analyze.
- 
- 

The Cost Object Detail report uses data and several parameters from the bill of resources rollup calculation.

The following items are used for the report dimensions:

- Page dimensions, including parent **CO (cost object)** model name, parent BOR (bill of resources) type, parent CO name, data set name, and BOR level.
- Column dimensions, including extended consumption quantity, BOR, BOR line total cost, expanded **RU (rolled up)** material cost, and expanded RU activity cost.
- Row dimensions, including row number, child model name, child BOR type, child name, and child type.

When you open this worksheet, the system prompts you to enter the model ID, BOR type name, and BOR.



A **parent cost object (parent CO)** is a cost object on which you build a bill of resources for calculating a unit cost. In the bill of resources, a parent cost object consumes activities, materials, and cost objects. Each one of these items becomes a child of the parent. Activities and materials must come from the same model as parent cost objects, whereas cost objects can be from the same or different models from parent cost objects.

When a parent cost object includes in its bill of resources a cost object from another bill of resources, ABM calculates the numbers shown in the Cost Object Detail Worksheet as follows:

- BOR line total cost equals expanded rolled-up material cost, plus expanded rolled-up activity cost.
- Extended consumption quantity equals consumption quantity of resources by child cost object, multiplied by consumption quantity of child cost object for one unit of parent cost object.
- Expanded rolled-up material cost equals extended consumption quantity at child level, times unit cost of the child material unit cost.
- Expanded rolled up activity cost equals extended consumption quantity at child level, times unit cost of the child activity rate.

You need to run the Activity Rate Calculation, the Material Unit Cost Calculation, and the Cost Object Unit Cost Calculation in ABM. Each calculation run inserts new results into the DS that can be viewed in ABM Analyzer.

If a parent cost object does not include in its bill of resources a cost object from a different BOR, then in a simple bill of resources you can treat Extended

Consumption Quantity as consumption quantity, Expanded Rolled-up Material Cost as material cost, and Expanded Rolled-up Activity Cost as activity cost.

The following model uses a specific customer, called Customer #1, as the top level cost object. This customer *consumes* two different products (pamphlets and glossy covers) and two different activities. These, in turn, consume materials and activities.

**Example 3–9 Modeling a Bill of Resources Hierarchy**

The parent cost object, Customer #1, has a bill of resources per unit (level 1) as follows:

- 5 units of cost object 'JRSCO3- Pamphlets'
- 6 units of activity 'JOHNRE2- Special handling'
- 8 units of activity 'JOHNRE1- Special handling'
- 7 units of material 'JRSMAT1 - Glossy covers'

The bill of resources of child CO 'Pamphlet' per unit (level 2) is:

- 2 units of material 'JRSMAT3 - Color paper'
- 3 units of activity 'JOHNRE2 - Design pamphlets'
- 4 units of activity 'JOHNRE1 - Design pamphlets'

The following table shows how extended consumption quantity is calculated by multiplying the child cost object Resources by the parent cost object Pamphlet:

**Table 3–4 Sample Calculation of Extended Consumption Quantity**

Bill of Resources of Child Cost Object <i>Pamphlet</i>	Consumption Quantity per Unit of Child Cost Object Pamphlet	Expanded Consumption Quantity per Unit of Parent Cost Object <i>Customer #1</i>
Material–Color Paper	2 units	10 units
Activity–JOHNRE2 Design Pamphlets	3 units	15 units
Activity–JOHNRE1 Design Pamphlets	4 units	20 units

ABM Analyzer calculates both the expanded rolled-up activity cost and the expanded rolled-up material cost by multiplying the extended consumption quantity by the activity rate and material unit cost.

The total of the expanded rolled-up activity cost column at level 2 is \$6.00 + \$19.2857 = \$25.2857, according to the report. This figure becomes the expanded rolled-up activity cost for the line of cost object *Pamphlets* in the Cost Object Detail report for parent CO (level 1). The same applies to the expanded rolled-up material cost.

## Cost Object Account

The Cost Object Account report shows the breakdown details on revenue account and extended cost account of a cost object. Using this report, you can obtain the account breakdown of revenue shown on the Cost Object Revenue and Cost worksheet. The extended costs shown in this report equal cost object unit cost multiplied by cost object statistics, and were created by running the extended cost object unit cost calculation in ABM.

It is based on the cost object statistic you entered as a calculation variable in ABM. It is not calculated by ABM Analyzer. If you want ABM Analyzer to calculate various extended costs of a cost object using different cost object statistics, then use the "[Cost Object Revenue and Cost](#)" worksheet.

You can add attribute dimensions for cost object, account, and department account to this workbook to further summarize and group cost object costs.

The Cost Object Account report contains the following dimensions:

- Page dimensions, including model name and data set ID.
- Column dimensions, including extended cost and revenue.
- Row dimensions, including cost object name and account name.

Cost Object Account Worksheet

Page Items: Model Name: ABM Company | Period Data Set Name: MAY00ACTUAL

Cost Object Name	Reporting Entity Name	Account Name	Extended Cost SUM	Revenue SUM
Architect	Architect	Install Rev - Architect	\$3,400,000.00	NULL
Gadget A	Order Management	Product Revenue	\$10,000,000.00	NULL
Gadget B	Order Management	Product Revenue	\$15,000,000.00	NULL
Gadget C	Order Management	Product Revenue	\$5,000,000.00	NULL
Installation	Installation	Install Rev - Install	\$1,700,000.00	NULL
Interest Income	Collection	Financial Revenue	\$3,550,000.00	NULL
Project Management	Project Management	Install Rev - Prj Mgmt	\$900,000.00	NULL

Page 1 of 1 | 25 Rows per Page

Cost Object Account Wor... | Cost Object Statistic Wor... | Cost Object Revenue an... | Cost Object Detail Works...

## Cost Object Statistic

The Cost Object Statistic report shows the statistics that are related to each cost object. Use this report to calculate the extended unit cost of cost objects by multiplying the cost object statistic shown in this report by cost object unit cost. This report can also analyze production levels over time. For extended cost data, see "[Cost Object Revenue and Cost](#)".

You can add attribute dimensions for cost object, statistic, and department statistic to this report to further summarize and group cost object statistic values.

The Cost Object Statistic report has the following dimensions:

- Page dimensions, including model name and data set ID.
- Column dimensions, including quantity.
- Row dimensions, including cost object name and statistic name.

**Edit Parameter Values**

Please select values for the following parameters. To change these values later, select Edit Parameter Values from the Sheet menu.

Please select the bill of resource model:

Please select the bill of resource BDR type:

Please select the bill of resource:

Description:  
The selected bill of resource model

Help OK Cancel

## Cost Object Revenue and Cost

The Cost Object Revenue and Cost worksheet enables you to do the following:

- Compare the profitability of all cost objects in a model.
- View the sales and cost of sales for all of the cost objects in a data set. Cost of sales is calculated by extending the cost object unit costs by the cost object statistic that you select in the Statistic Name page item.
- It shows the breakdown of the extended cost by activity cost and material cost.
- It enables you to create formulas combining cost object unit costs, revenues, and statistics. You could, for example, conduct profitability analysis across cost objects, across different time dimensions, or by using different statistics to calculate the extended unit cost.

To obtain more detailed information on cost object statistics, open the Cost Object Statistic worksheet. For more information about cost object accounts, open the Cost Object Account worksheet.

The values appearing in a page item drop-down list depend on the values that you select for the page item on its left. For example, suppose that the leftmost page item is called Model Name, and the one to its immediate right is called Data Sets. Consequently, the Data Sets drop-down list contains only data sets that are related to the model you selected in Model Name. To take this example a step further, suppose that you drag the Statistic Name page item to the leftmost position. The report responds by displaying a list of all statistics for all models. These results enable you to calculate extended unit costs with statistics such as units sold, units delivered, and units produced.

You can add cost object attribute dimensions to this workbook to further summarize and group cost object costs and revenues. For instructions, see [Chapter 4, "Adding Optional Attributes"](#).

The following items are used for the report dimensions:

- Page dimensions, including model name, data set ID, cost object statistic department, and cost object statistic.
- Column dimensions, including cost object name.
- Row dimensions, including revenue, extended unit cost, extended rolled-up material cost, extended rolled-up activity cost, margin, and quantity.

## Cost Objects Workbook Hierarchy

Cost Objects workbooks are organized into hierarchies, with the topmost level being highest. Your hierarchies might be organized in a manner similar to these examples:

### **Example 3–10 Bill of Resources Hierarchy**

- Highest level: Parent Cost Object Name
  - Next level: Child Resource Name

### **Example 3–11 Department Statistic Hierarchy**

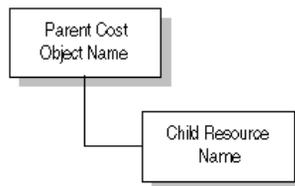
- Highest level: Department Name
  - Next level: Statistic Name

### **Example 3–12 Department Account Hierarchy**

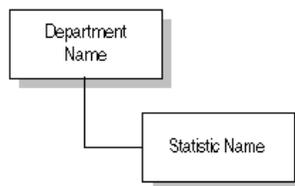
- Highest level: Department Name
  - Next level: Account Name

The following diagram illustrates the worksheet hierarchies that you can drill:

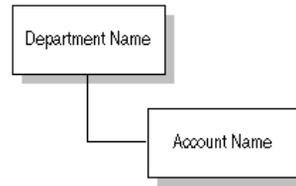
#### ◆ Bill of Resource Hierarchy



#### ◆ Department Statistic Hierarchy



#### ◆ Department Account Hierarchy



## Data Set Hierarchy

You can perform time summarization for those reports having the data set dimension. You can also drill on the time dimension and apply conditions when querying data. For example, if you are using only the monthly data set period in ABM and want to obtain quarterly or yearly data, or both, then you must create a new data set period for quarter or year, or both, in ABM. However, by using ABM Analyzer, you can easily calculate quarterly or yearly data, or both, by adding Begin Date Quarter and Begin Date Year to your worksheet.

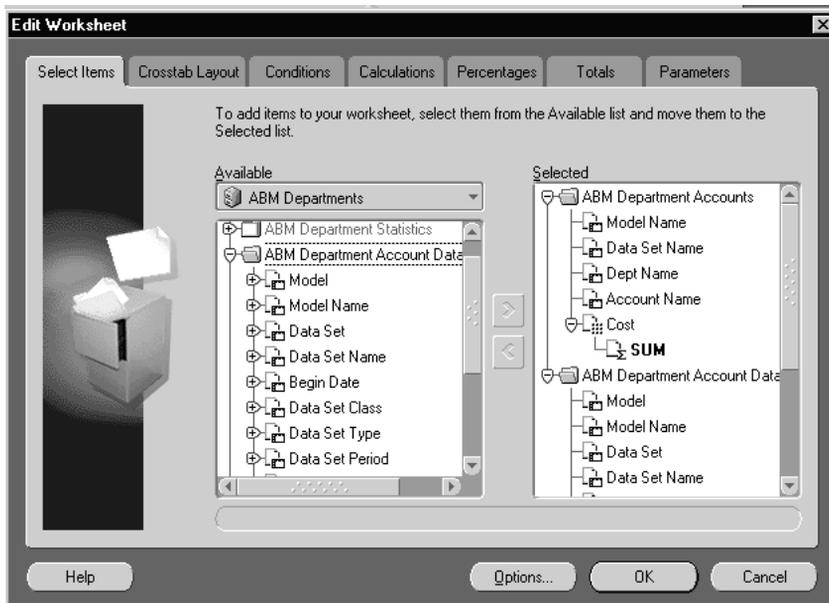
Use the Data Set Class, Data Set Type, and Data Set Period folder items if they are used in ABM. This prevents the system from erroneously adding data across a data set class, data set type, or data set period.

To add these items to a worksheet, select **Sheet**, then **Edit Sheet**, and then choose the data set folder in the Available column.

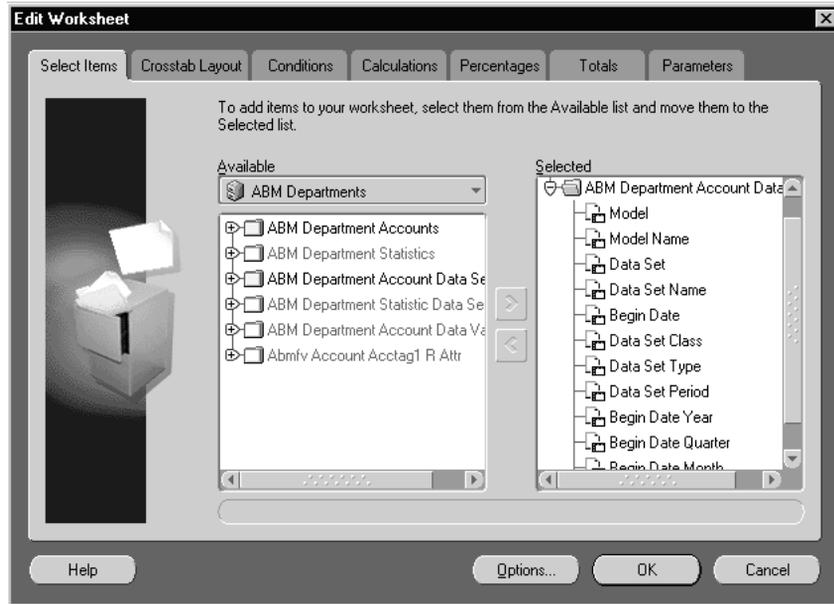
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**Note:** To use the data set hierarchy correctly, you must include all three of the folder items if they are used in ABM.

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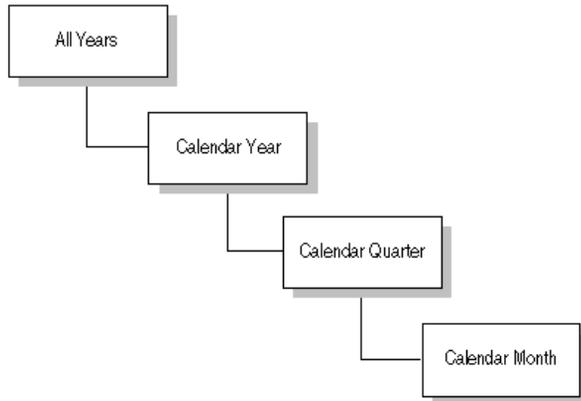
Choose the level of time dimension for your report. To obtain data at all levels for year, quarter, and month, then go to the data set folder in the Available column and select Begin Date Year, Begin Date Quarter, and Begin Date Month.



When the yearly, quarterly, and monthly data are available in your worksheet, you can drill up and down in each dimension by clicking the arrowhead-shaped icon beside it.

The following is an illustration of the data set hierarchy:

◆ **Data Set Data Hierarchy**



## Model Export Using Discoverer Worksheets

ABM Analyzer contains a workbook that enables you to view and save data from an ABM model in the same format as the spreadsheet imports. This enables you to extract model data and structure for import to another model or separate ABM instance.

To extract the data, do either of the following:

- From **Discoverer Plus**, select **File**, then select **Save As**.
- From the **Discoverer i-viewer**, select **Export**. Then save the data to a tab-delimited file that is able to be reimported to ABM.

The system supports the following export files:

- Department Account Data
- Department Statistic Data
- Department Activity Account Data
- Department Activity Statistic Data
- Activity Rate Structure - only activity and driver relationship
- Cost Object Account Data - Non Cost Accounts
- Cost Object Account Data - Revenue Accounts

- Cost Object Statistic Data
- Bill Header Data
- Bill Item Data
- Material Account Data - Cost Accounts
- Material Account Data - Non Cost Accounts
- Material Statistic Data
- Material Unit Cost Data

## Using Specific Export Files

The following notes apply to specific export files.

### **Department Activity Account Data**

This template exports only local cost element accounts.

### **Cost Object Account Data**

- The noncost and revenue worksheets are separated to emphasize the fact that, to successfully import revenue accounts, you must create the model department accounts and set the cost type to *revenue* before importing the cost object account data or type revenue. If the model department account does not exist at the time of import, ABM creates the department account of type *noncost*. In addition, *not null* filters are applied to each sheet to retrieve only rows with non-null data.
- Cost object account data of type *cost* cannot be imported or entered through the interface. This is because the only way to create cost object account cost data is through the extended cost object unit cost calculation.
- The material account export is split between cost and noncost accounts. If the model department account does not exist at the time of import, ABM creates the account with a default of type *cost*. Also note that *not null* filters are applied to each sheet so as to retrieve only rows for non-null values.
- To export bill items, the option for *display null as* in the worksheet must be set to blank at the time of export.

## Using Any Extract Worksheet

The following notes apply to all extract worksheets:

- When an item comprises multiple transactions for one or more origin codes, the amount exported is the net sum of the transactions. For example, an activity account can comprise an *In* transaction for 500 and an *Out* transaction for 500, resulting in a net export of zero.
- Data, but not structure, is exported. For example, if you have 15,000 model department accounts and only 10 have values, then only 10 are exported.
- Activity Hierarchy and Mapping Rules are not included.
- Data must be extracted in tab-delimited format for ABM to read it directly. Exports to Excel must first be converted to Excel 97 before importing.

## The Bill Item Extract

**Unit of Measure (UOM)** cannot be added to a model during the import process. Add all necessary units of measure before beginning the import process.

## Opening Export Workbooks

Do the following to open export workbooks:

1. Launch Discoverer Plus, then open the workbook named *abmexpwk*.
2. Select the worksheet for the data type to be exported.
3. Fill in the parameters, but do not rearrange any columns, change any formats, or add any totals. This is because the current column arrangement matches that of the spreadsheet imports.
4. From the **File** menu, select **Export**, and then select **Tab-delimited format**.
5. Save the file to any location you want.

## Verifying and Saving Bill Item Worksheet Data

To verify or save bill item worksheet information, do the following:

1. Select **Tools**, then **Options**, then **Sheet Format**. Verify that the **Display Null As** options is set to blank.
2. Save any exported date to a column that is formatted as text. This is because the F1J tool does not correctly parse fields defined in Excel as date.

---

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## Adding Optional Attributes

In ABM, you can define attributes to sort and subtotal values on windows and reports. This chapter explains how to add attribute folders to a worksheet.

The ABM attribute entity types are as follows:

- Account
- Statistic
- Activity
- Driver
- Department
- Material
- Cost Object
- Department Account
- Department Statistic
- Department Activity
- Department Driver
- Data Source (Account, Statistic, and Driver collectively)
- Bill Item (Activity, Material, and Cost Object collectively)

Attributes and attribute values that are defined in ABM enable user-defined dimensions to be included in ABM reports. These are usable in the ABM Analyzer reports as separate dimensions for pivoting report layouts.

**Table 4–1 Common Attribute Usage**

<b>Attribute</b>	<b>Attribute Values</b>
Customer Type	Corporate, Strategic, Retail
Cost Type	Fixed, Partial, Variable
Service Type	Temp Work, Outsourced, Employee

The process of adding attributes to workbooks involves three main tasks:

1. [Creating Attributes and Attribute Values](#)
2. [Creating Attribute Folders in the End User Layer](#)
3. [Using ABM Attributes in Reports](#)

## Creating Attributes and Attribute Values

You can create attributes and attribute values in ABM, and then assign the attributes to an ABM Analyzer business area. Access the attributes through the Edit Sheet wizard to add them to worksheets.

### How to Create Attributes and Attribute Values

1. Log in to ABM as the system administrator.
2. Select **Setup**, then **Attribute Options**, then the **Attributes** node.
3. Click in the top half of the window, under Attributes.

Attributes

Attribute Id	Attribute Name	Attribute Entity	Required	Lock Status
ACCTAG1-R	Account Tag Set ...	ACCOUNT	N	U
ACCTAG2-N	Account Tag Set ...	ACCOUNT	N	U
ACTTAG1-R	Activity Tag Set 1 - ...	ACTIVITY	N	U
ACTTAG2-N	Activity Tag Set 1 - ...	ACTIVITY	N	U
COSTTAG1-R	Co Tag Set 1-No	COST OBJECT	N	U
DSTAG1-R	Datasource Tag ...	DATA SOURCE	N	U
DSTAG2-N	Datasource Tag ...	DATA SOURCE	N	U
DRVTAG1-R	Drv Tag Set 1 - No	DRIVER	N	U
MATTAG1-R	Mat Tag Set 1 - No	MATERIAL	N	U
REACCTAG1-N	ReAccount Tag S...	RE-ACCOUNT	N	U
REACTTAG1-R	ReActivity Tag Set...	RE ACTIVITY	N	U

Click in the top section of the Attribute Options Inspector

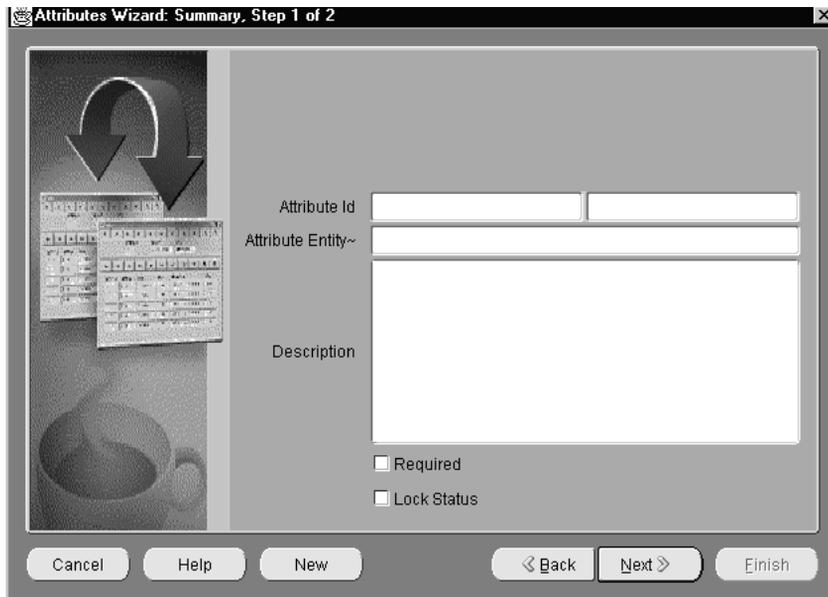
Details

Attribute Values

User Attribute Value	User Attribute Description
ACC-1-1	Account Tag 1-1
ACC-1-2	Account Tag 1-2
NEW	NEW

Details

4. Select **New** to create a new attribute type, and then select **Next**.

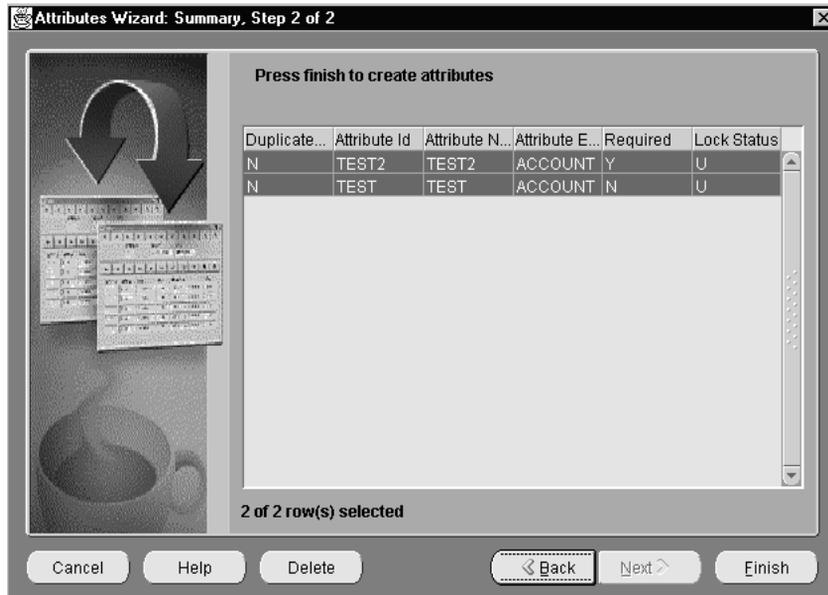


5. Enter the following values:

**Table 4–2**

Field	Value
Attribute ID	Enter an ID for your attribute.
Attribute Entity	Enter one of the ABM entity types: Accounts, Statistics, or Materials.
Description	Enter a description of the attribute.
Required	Select this field if a value is required for your attribute.
Lock Status	Leave this field unselected to make the attribute available for addition to your workbooks.

6. To create additional attributes, repeat steps 4 and 5.
7. When you are finished creating attributes, click **Next**.
8. In the Summary window, review the attributes that you created. Delete an attribute by highlighting it and clicking **Delete**.



9. Click **Finish**.
10. Click the bottom half of the window, under Attribute Values.
11. Click **New**, then **Next**.
12. Select the attribute to which a value will be assigned.
13. Enter a value and description for your attribute.
14. To create additional attribute values, repeat steps 12 and 13.
15. To create a new attribute, select **New**. Then follow the instructions in the wizard.
16. Click **Next** to display the summary window. Review your attribute values.
17. Click **Finish**.

## Creating Attribute Folders in the End User Layer

There are three steps to loading an attribute view into the **End User Layer (EUL)**. They are as follows:

- Create business views for attributes. This must be completed for all new attributes.
- Modify the end user layer.
- Add joins.

It is necessary to load an attribute view because each attribute type is added to a different set of business areas, and is joined to a different set of folders.

You must modify the end-user layer for each attribute that you want to add. For each attribute that you add, you must complete the following tasks:

1. Add the Attribute folder to the ABM Analyzer end-user layer.
2. Set the Folder Item Properties in Discoverer Administration Edition

After you have added all of your attributes to the ABM Analyzer end user layer, you can add joins in Discoverer Administration Edition.

## Creating Business Views for Attributes

To include attributes in ABM Analyzer, you must run a script that creates attribute-specific business views. Follow this procedure:

1. Log in to SQL\*Plus as the database user APPS.
2. To create the views for attributes, enter the following command at the SQL prompt:  

```
@<abmdir>\abmgen.sql
```
3. The script prompts you for two responses:
  - a. At the *Enter Tag Set Id or Return for all* prompt, enter a specific attribute ID or press **Return** to select all attribute IDs.
  - b. At the *Enter taggable Entity Type, return for all* prompt, enter a specific attribute type or press **Return** to select all attribute types. You can determine the valid list of attribute types by browsing the view named `ABM_TAGGABLE_ENTITIES_I15_V`.

Example: The Account attribute has an ID called *TEST*. Running the `abmgen.sql` script creates the business view `ABMFV_ACCOUNT_TEST_ATTR`. When you provide only taggable entity types, the system generates a set of business views based on entity types for all attributes specified in ABM. The `ABMFV_ACCOUNT_TEST_ATTR` business view is then included in the Available list when you load the schema object into a business area.

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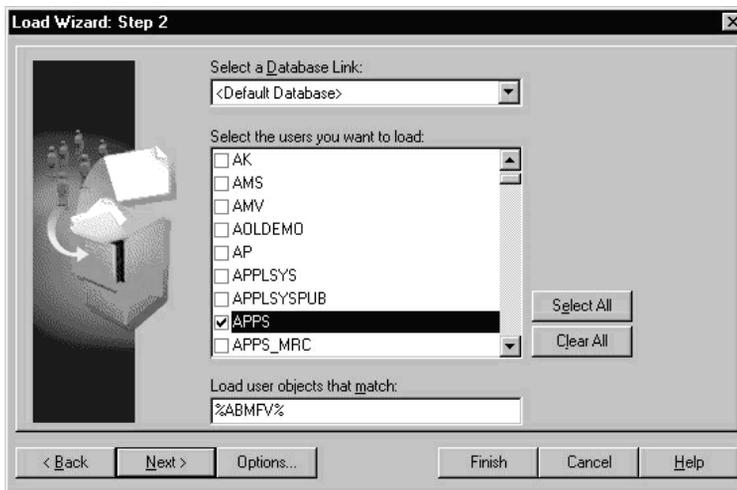
**Note:** Because of database column width limitations, the attribute column names are limited to 30 characters, 21 of which are system-generated. Therefore, when creating attributes in ABM for use in Discoverer, remember that the first nine characters of the Attribute ID must be unique.

---

## Add the Attribute Folder to the End User Layer

To add an attribute folder instance to the end user layer, do the following:

1. Open the Discoverer Administration Edition.
2. Connect to the database as the end user layer owner.
3. Select the *Open an Existing Business Area* option from the dialog box.
4. Click **OK**.
5. Open the Departments, Activities, Cost Objects, and Materials business areas.
6. Right-click a business area that is associated with the attribute type of the attribute folder or folders being added.
7. Select the *New Folder from Database* option from the pop-up menu.
8. Select the Online dictionary option.
9. Click **Next**.
10. Select the user APPS from the *Select the users you want to load* list.



11. In the *Load user objects that match* field, enter %ABMFV%ATTR.
12. Click **Next**.
13. Select an attribute view from the Available list, then click the right-facing arrow to move it into the Selected hierarchy. Repeat this step to select additional views.

---

**Note:** The Available list contains all the ABM folder views available to be added to your ABM Analyzer workbooks. It should include any attributes that you created in ABM. Some attributes work within one business area while others do not.

---

14. Click **Next**.

15. In Step 4 of the Load Wizard, select and deselect the checkboxes as follows:

**Table 4–3 Load Wizard Check Boxes**

Select	Deselect
Capitalize names	Remove all column prefixes
Replace all underscores with spaces	Create joins from
Default aggregate on datapoints	Date hierarchies
SUM (from the Default aggregate on datapoints poplist)	:List of values for items of type

16. Click **Finish**.

17. Click the expansion sign to the right of the business area icon. This expands the business area into which you installed the new attribute folder.

18. Click the folder name and rename it. Follow the naming convention shown in [Table 4–4](#).

**Table 4–4 Attribute Entities**

Attribute Entity	Business Area	Attribute Folder Name
account	Departments	Account <attribute_id> Dept. Account Attributes
	Activities	Account <attribute_id> Activity Account Attributes
	Materials	Account <attribute_id> Material Account Attributes
	Cost Objects	Account <attribute_id> Cost Object Account Attributes
department account	Departments	Dept. Account <attribute_id> Dept. Account Attributes
	Activities	Dept. Account <attribute_id> Activity Account Attributes
	Materials	Dept. Account <attribute_id> Material Account Attributes
	Cost Objects	Dept. Account <attribute_id> Cost Object Account Attributes
statistic	Departments	Statistic <attribute_id> Dept. Statistic Attributes
	Activities	Statistic <attribute_id> Activity Statistic Attributes
	Materials	Statistic <attribute_id> Material Statistic Attributes
	Cost Objects	Statistic <attribute_id> Cost Object Statistic Attributes

**Table 4–4 Attribute Entities**

<b>Attribute Entity</b>	<b>Business Area</b>	<b>Attribute Folder Name</b>
department statistic	Departments	Dept. Statistic <attribute_id> Dept. Statistic Attributes
	Activities	Dept. Statistic <attribute_id> Activity Statistic Attributes
	Materials	Dept. Statistic <attribute_id> Material Statistic Attributes
	Cost Objects	Dept. Statistic <attribute_id> Cost Object Statistic Attributes
driver	Activities	Driver <attribute_id> Activity Rate Attributes
	Activities	Driver <attribute_id> Driver Attributes
Dept. driver	Activities	Dept. Driver <attribute_id> Activity Rate Attributes
	Activities	Dept. Driver <attribute_id> Driver Attributes
activity	Activities	Activity <attribute_id> Activity Account Attributes
	Activities	Activity <attribute_id> Activity Statistic Attributes
	Activities	Activity <attribute_id> Activity Rate Attributes
Dept. activity	Activities	Dept. Activity <attribute_id> Activity Account Attributes
	Activities	Dept. Activity <attribute_id> Activity Statistic Attribute
	Activities	Dept. Activity <attribute_id> Activity Rate Attributes
cost object	Cost Objects	Cost Object <attribute_id> Cost Object Account Attributes
	Cost Objects	Cost Object <attribute_id> Cost Object Statistic Attributes
	Cost Objects	Cost Object <attribute_id> Cost Object Unit Cost Attributes
materials	Materials	Material <attribute_id> Material Account Attributes
	Materials	Material <attribute_id> Material Statistic Attributes
	Materials	Material <attribute_id> Material Unit Cost Attributes
department	Departments	Department <attribute_id> RE Account Attributes
	Departments	Department <attribute_id> RE Statistic Attributes
	Activities	Department <attribute_id> Activity Account Attributes
	Activities	Department <attribute_id> Activity Statistic Attributes
resource	Cost Objects	Resource <attribute_id> Bill of Resources Attributes

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**Note:** The <attribute\_id> string that appears in the Folder Name column above is meant to act as a placeholder for the attribute id of the attribute folder that is being loaded. Replace the placeholder with the attribute id of the attribute folder.

---

---

19. Set the folder item properties in Discover Administration Edition. This is described in the next section, "[Set the Folder Item Properties in Administration Edition](#)".
20. Make copies of the completed attribute folder. Rename them as needed to create the attribute folders listed in [Table 4-4](#).

## Set the Folder Item Properties in Administration Edition

Before copying an attribute folder and moving it to a business area, set the folder item property to *Visible to user*. This property determines whether the item is visible to users viewing the folder in Discoverer User Edition.

[Table 4-5](#) lists the visible property for each item. Items are grouped by attribute type because the set of folder items is the same within an attribute type. This applies to all copies made.

### How to Set the *Visible to User* Property

1. Double-click the new attribute folder to expand it.
2. Select all of the folder items whose *Visible to user* property must be set to *N*, as indicated in [Table 4-5](#).
3. Select **Edit**, then **Properties**.
4. Set the *Visible to User* item attribute to *N*.

---

---

**Note:** Folder items with *Visible to User* set to *N* are unavailable.

---

---

**Table 4–5 Attribute Entity Types and Attribute Properties**

<b>Attribute Entity Type</b>	<b>Attributes</b>	<b>Visible to User</b>
Account	Master List Sets Id	N
	Account Id	N
	Account Type Code	N
	Attribute Id	N
	Attribute Id	N
	Master List Set	N
	Master List Set Name	N
	Account	N
	Account Name	N
	Attribute	Y
	Attribute Name	Y
Dept. Account	Master List Sets Id	N
	Dept. Id	N
	Account Id	N
	Account Type Code	N
	Attribute Id	N
	Master List Set	N
	Master List Set Name	N
	Department	N
	Department Name	N
	Account	N
	Account Name	N
	Attribute	Y
	Attribute Name	Y

**Table 4–5 Attribute Entity Types and Attribute Properties**

<b>Attribute Entity Type</b>	<b>Attributes</b>	<b>Visible to User</b>
Statistic	Master List Sets Id	N
	Statistic Id	N
	Statistic Type Code	N
	Attribute Id	N
	Master List Set	N
	Master List Set Name	N
	Statistic	N
	Statistic Name	N
	Attribute	Y
	Attribute Name	Y
Dept. Statistic	Master List Sets Id	N
	Dept. Id	N
	Statistic Id	N
	Statistic Type Code	N
	Attribute Id	N
	Master List Set	N
	Master List Set Name	N
	Department	N
	Department Name	N
	Statistic	N
	Statistic Name	N
	Attribute	Y
	Attribute Name	Y

**Table 4–5 Attribute Entity Types and Attribute Properties**

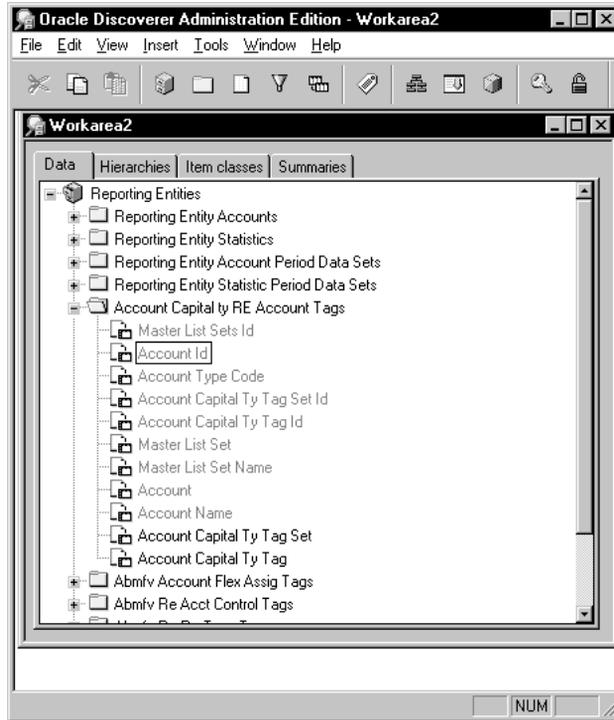
<b>Attribute Entity Type</b>	<b>Attributes</b>	<b>Visible to User</b>
Driver	Master List Sets Id	N
	Driver Id	N
	Driver Type Code	N
	Attribute Id	N
	Master List Set	N
	Master List Set Name	N
	Driver	N
	Driver Name	N
	Attribute	Y
	Attribute Name	Y
Dept. Driver	Master List Sets Id	N
	Department Id	N
	Driver Id	N
	Driver Type Code	N
	Attribute Id	N
	Master List Set	N
	Master List Set Name	N
	Department	N
	Department Name	N
	Driver	N
	Driver Name	N
	Attribute	Y
	Attribute Name	Y

**Table 4–5 Attribute Entity Types and Attribute Properties**

<b>Attribute Entity Type</b>	<b>Attributes</b>	<b>Visible to User</b>	
Activity	Master List Sets Id	N	
	Activity Id	N	
	Attribute Id	N	
	Master List Set	N	
	Master List Set Name	N	
	Activity	N	
	Activity Name	N	
	Attribute	Y	
	Attribute Name	Y	
Department Activity	Master List Sets Id	N	
	Dept. Id	N	
	Dept. Activity Id	N	
	Dept. Activity Type Code	N	
	Attribute Id	N	
	Master List Set	N	
	Master List Set Name	N	
	RE Activity	N	
	RE Activity Name	N	
	Attribute	Y	
	Attribute Name	Y	
	Cost Object	Master List Sets Id	N
		Cost Object Type Code	N
Cost Object Id		N	
Attribute Id		N	
Master List Set		N	
Master List Set Name		N	
Cost Object		N	
Cost Object Name		N	
Attribute		Y	
Attribute Name		Y	

**Table 4–5 Attribute Entity Types and Attribute Properties**

<b>Attribute Entity Type</b>	<b>Attributes</b>	<b>Visible to User</b>
Material	Master List Sets Id	N
	Material Type Code	N
	Material Id	N
	Attribute Id	N
	Master List Set	N
	Master List Set Name	N
	Material	N
	Material Name	N
	Attribute	Y
	Attribute Name	Y
Department	Master List Sets Id	N
	Dept. Type Code	N
	Dept. Id	N
	Attribute Id	N
	Master List Set	N
	Master List Set Name	N
	Dept.	N
	Dept. Name	N
	Attribute	Y
	Attribute Name	Y
Resource	Master List Sets Id	N
	Resource Type Code	N
	Resource Id	N
	Attribute Id	N
	Master List Set	N
	Master List Set Name	N
	Resource	N
	Resource Name	N
	Attribute	Y
	Attribute Name	Y



## Joining Attribute Folders to Business Area Detail Folders

Each of the attribute folders you created when modifying the ABM Analyzer end user layer must be joined to a different business area detail folder. If the attribute folders have been renamed from the system-generated attribute folder name, then the last part of the attribute folder name may refer to the attribute folder detail folder. (This is true if the recommended folder names from table 4-4 have been used.)

To successfully join the attribute folder with the existing workbooks, you must create a join definition that links the master to the detail through the primary keys from each folder. Refer to [Table 4-6](#) for definitions of the primary keys columns in the attribute folder, and the related key columns in the detail folders.

See the next section for instructions on creating the join definition for attributes. Note that you must use the Discoverer administration edition to create the join definitions.

### How to Join Attribute Folders

1. Select one of the attribute folders that was created when modifying the ABM Analyzer end user layer.
2. From the menu, select **Insert**, then **Join**, and then **Multi-Item** from the Join dialog box.
3. By picking the view folder as the basis for the join, it will be listed as the first drop-down in the *master folders* column of the join dialog. Select the drop-down and pick the first row, which is the first key field for the join.
4. Select the detail folder from the drop-down list on the same line, and select the column that corresponds to the master folder selection.

For example, if you selected *master list id* from the master folder, then pick *master list id* for the detail folder.

5. Repeat steps 1 through 4 for each required key field for the join. Additional rows for the join definition may be added with the "Add" button on the join dialog.

See [Table 4–6](#) for the list of keys required for each join.

6. When finished entering join relationships, select **Options** in the join dialog.
7. Select *Outer join on detail* and *Detail foreign key can have null values*. Then select **OK** to close the options dialog.
8. Click **OK** to close the join dialog.
9. Select the new join definition that has been created in the master folder. This will be the attribute folder.
10. Select **Edit**, then **Properties**, from the menu.
11. Set the attribute *Detail Item Values* equal to *Might Not Exist in Master Folder*.
12. Set the attribute *Outer Join On* equal to *Detail Folder*.
13. Click **OK**.

---

---

**Note:** The join can also be created by selecting the base view as the master and then the attribute view as the detail. The results should be the same.

---

---

**Table 4–6 Joining Attribute Folders to Business Area Detail Folders**

<b>Attribute Type</b>	<b>Master Folder</b>	<b>Master Primary Key Item</b>	<b>Detail Folder</b>	<b>Detail Foreign Key Item</b>
Account	▪ Account <attribute_id> Dept. Account Tags	Master List Sets Id Account Id Account Type Code	Dept. Accounts	Master List Sets Id Account Id Type Code
	▪ Account <attribute_id> Activity Account Tags	Master List Sets Id Account Id Account Type Code	Activity Accounts	Master List Sets Id Account Id Acct. Type Code
	▪ Account <attribute_id> Material Account Tags	Master List Sets Id Account Id Account Type Code	Material Accounts	Master List Sets Id Account Id Acct. Type Code
	▪ Account <attribute_id> CO Account Tags	Master List Sets Id Account Id Account Type Code	CO Accounts	Master List Sets Id Account Id Acct. Type Code
Dept. Account	▪ Dept. Account <attribute_id> Dept. Account Tags	Master List Sets Id Department Id Account Id Account Type Code	Dept. Accounts	Master List Sets Id Department Id Account Id Type Code
	▪ Dept. Account <attribute_id> Activity Account Tags	Master List Sets Id Department Id Account Id Account Type Code	Activity Accounts	Master List Sets Id Department Id Account Id Acct. Type Code
	▪ Dept. Account <attribute_id> Material Account Tags	Master List Sets Id Department Id Account Id Account Type Code	Material Accounts	Master List Sets Id Department Id Account Id Acct. Type Code
	▪ Dept. Account <attribute_id> CO Account Tags	Master List Sets Id Department Id Account Id Account Type Code	CO Accounts	Master List Sets Id Department Id Account Id Acct. Type Code

**Table 4–6 Joining Attribute Folders to Business Area Detail Folders**

<b>Attribute Type</b>	<b>Master Folder</b>	<b>Master Primary Key Item</b>	<b>Detail Folder</b>	<b>Detail Foreign Key Item</b>
Statistic	<ul style="list-style-type: none"> <li>■ Statistic &lt;attribute_id&gt; Dept. Statistic Tags</li> </ul>	Master List Sets Id Statistic Id Statistic Type Code	Department Statistics	Master List Sets Id Statistic Id Type Code
	<ul style="list-style-type: none"> <li>■ Statistic &lt;attribute_id&gt; Activity Statistic Tags</li> </ul>	Master List Sets Id Statistic Id Statistic Type Code	Activity Statistics	Master List Sets Id Statistic Id Statistic Type Code
	<ul style="list-style-type: none"> <li>■ Statistic &lt;attribute_id&gt; Material Statistic Tags</li> </ul>	Master List Sets Id Statistic Id Statistic Type Code	Material Statistics	Master List Sets Id Statistic Id Statistic Type Code
	<ul style="list-style-type: none"> <li>■ Statistic &lt;attribute_id&gt; CO Statistic Tags</li> </ul>	Master List Sets Id Statistic Id Statistic Type Code	CO Statistics	Master List Sets Id Statistic Id Statistic Type Code
Dept. Statistic	<ul style="list-style-type: none"> <li>■ Dept. Statistic &lt;attribute_id&gt; Dept. Statistic Tags</li> </ul>	Master List Sets Id Dept. Id Statistic Id Statistic Type Code	Department Statistics	Master List Sets Id Dept. Id Statistic Id Type Code
	<ul style="list-style-type: none"> <li>■ Dept. Statistic &lt;attribute_id&gt; Activity Statistic Tags</li> </ul>	Master List Sets Id Dept. Id Statistic Id Statistic Type Code	Activity Statistics	Master List Sets Id Dept. Id Statistic Id Statistic Type Code
	<ul style="list-style-type: none"> <li>■ Dept. Statistic &lt;attribute_id&gt; Material Statistic Tags</li> </ul>	Master List Sets Id Dept. Id Statistic Id Statistic Type Code	Material Statistics	Master List Sets Id Dept. Id Statistic Id Statistic Type Code
	<ul style="list-style-type: none"> <li>■ Dept. Statistic &lt;attribute_id&gt; CO Statistic Tags</li> </ul>	Master List Sets Id Dept. Id Statistic Id Statistic Type Code	CO Statistics	Master List Sets Id Dept. Id Statistic Id Statistic Type Code
Driver	<ul style="list-style-type: none"> <li>■ Driver &lt;attribute_id&gt; Activity Rate Tags</li> </ul>	Master List Sets Id Driver Id Driver Type Code	Activity Rates	Master List Sets Id Driver Id Driver Type Code
	<ul style="list-style-type: none"> <li>■ Driver &lt;attribute_id&gt; Driver Tags</li> </ul>	Master List Sets Id Driver Id Driver Type Code	Drivers	Master List Sets Id Driver Id Driver Type Code

**Table 4–6 Joining Attribute Folders to Business Area Detail Folders**

<b>Attribute Type</b>	<b>Master Folder</b>	<b>Master Primary Key Item</b>	<b>Detail Folder</b>	<b>Detail Foreign Key Item</b>
Dept. Driver	<ul style="list-style-type: none"> <li>▪ Dept. Driver &lt;attribute_id&gt; Activity Rate Tags</li> </ul>	Master List Sets Id Dept. Id Driver Id Driver Type Code	Activity Rates	Master List Sets Id Driver Dept. Id Driver Id Driver Type Code
	<ul style="list-style-type: none"> <li>▪ Dept. Driver &lt;attribute_id&gt; Driver Tags</li> </ul>	Master List Sets Id Dept. Id Driver Id Driver Type Code	Drivers	Master List Sets Id Driver Dept. Id Driver Id Driver Type Code
Activity	<ul style="list-style-type: none"> <li>▪ Activity &lt;attribute_id&gt; Activity Account Tags</li> </ul>	Master List Sets Id Activity Id	Activity Accounts	Master List Sets Id Activity
	<ul style="list-style-type: none"> <li>▪ Activity &lt;attribute_id&gt; Activity Statistic Tags</li> </ul>	Master List Sets Id Activity Id	Activity Statistics	Master List Sets Id Activity
	<ul style="list-style-type: none"> <li>▪ Activity &lt;attribute_id&gt; Activity Rate Tags</li> </ul>	Master List Sets Id Activity Id	Activity Rates	Master List Sets Id Activity
Dept. Activity	<ul style="list-style-type: none"> <li>▪ Dept. Activity &lt;attribute_id&gt; Activity Account Tags</li> </ul>	Master List Sets Id Dept. Act. Type Code Dept. Activity Id	Activity Accounts	Master List Sets Id Dept. Activity Type Code Dept. Activity Id
	<ul style="list-style-type: none"> <li>▪ Dept. Activity &lt;attribute_id&gt; Activity Statistic Tags</li> </ul>	Master List Sets Id Dept. Act. Type Code Dept. Activity Id	Activity Statistics	Master List Sets Id Dept. Activity Type Code Dept. Activity Id
	<ul style="list-style-type: none"> <li>▪ Dept. Activity &lt;attribute_id&gt; Activity Rate Tags</li> </ul>	Master List Sets Id Dept. Act. Type Code Dept. Activity Id	Activity Rates	Master List Sets Id Dept. Activity Type Code Dept. Activity Id

**Table 4–6 Joining Attribute Folders to Business Area Detail Folders**

<b>Attribute Type</b>	<b>Master Folder</b>	<b>Master Primary Key Item</b>	<b>Detail Folder</b>	<b>Detail Foreign Key Item</b>
Cost Object	■ Cost Object <attribute_id> Account Tags	Master List Sets Id Cost Object Type Code Cost Object Id	CO Accounts	Master List Sets Id CO Type Code Cost Object Id
	■ Cost Object <attribute_id> Statistic Tags	Master List Sets Id Cost Object Type Code Cost Object Id	CO Statistics	Master List Sets Id CO Type Code Cost Object Id
	■ Cost Object <attribute_id> Unit Cost Tags	Master List Sets Id Cost Object Type Code Cost Object Id	CO Unit Costs	Master List Sets Id CO Type Code Cost Object Id
Material	■ Material <attribute_id> Account Tags	Master List Sets Id Material Type Code Material Id	Material Accounts	Master List Sets Id Mat. Type Code Material Id
	■ Material <attribute_id> Statistic Tags	Master List Sets Id Material Type Code Material Id	Material Statistics	Master List Sets Id Mat. Type Code Material Id
	■ Material <attribute_id> Unit Cost Tags	Master List Sets Id Material Type Code Material Id	Material Unit Costs	Master List Sets Id Mat. Type Code Material Id
Dept.	■ Dept. <attribute_id> Dept. Account Tags	Master List Sets Id Dept. Id	Dept. Accounts	Master List Sets Id Dept. Id
	■ Dept. <attribute_id> Dept. Statistic Tags	Master List Sets Id Dept. Id	Dept. Statistics	Master List Sets Id Dept. Id
	■ Dept. <attribute_id> Activity Statistic Tags	Master List Sets Id Dept. Id	Activity Statistics	Master List Sets Id Activity Dept.
	■ Dept. <attribute_id> Activity Statistic Tags	Master List Sets Id Dept. Id	Activity Accounts	Master List Sets Id Activity Dept.
Resource	■ Resource <attribute_id> BOR Tags	Master List Sets Id Resource Type Code Resource Id	BOR	Child MLS Id Child Type Code Child Resource Id

## Using ABM Attributes in Reports

After the system administrator adds attribute folders to the business areas, you must add attributes to a worksheet.

### How to Add Attributes to Your Worksheet

1. Start Discoverer User Edition.
2. Select **File**, then **Connect to Database** to reconnect to the database.
3. Select and open a worksheet.
4. Select **Sheet**, then **Edit Sheet** from the top menu.
5. Select an attribute folder in the Available column.
6. Add the folder to the worksheet by clicking the right-facing arrowhead button.
7. In the worksheet, remove items in the folder that are being replaced by the attribute value.
8. From the **Edit Sheet** menu, select **Crosstab Layout**.
9. Use the Crosstab Layout function to move the attribute to the row axis.
10. Click **OK** to run the query.



This chapter describes the ABM security model and its effect on ABM Analyzer. The chapter contains the following sections:

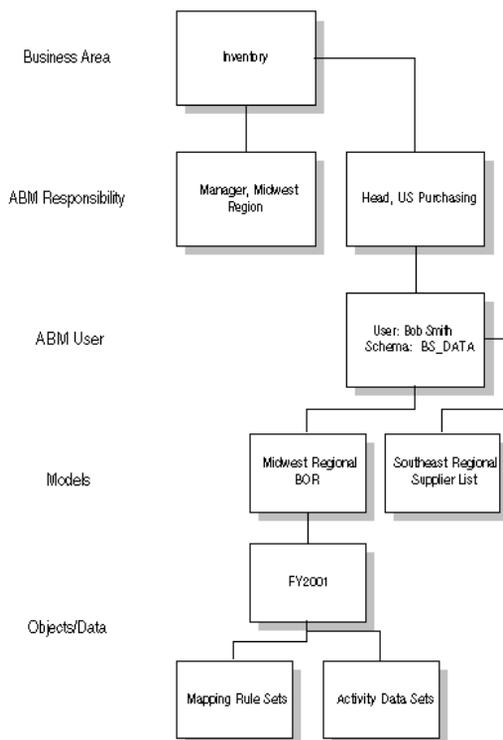
- [The ABM Security Model](#)
- [ABM Analyzer Security](#)
- [Business Area Privileges](#)

## The ABM Security Model

The ABM security model protects data and objects. When you are assigned a responsibility, you inherit the associated master list and model profile. You can have more than one responsibility.

The extent of your access to data depends on the security model profile for your assigned responsibility. If other users have similar model profiles, then they could access the same objects while accessing the same or different data.

The following chart illustrates the ABM security model.



Administrators use Discoverer Administration Edition to map users to business areas and to assign business area privileges such as workbook scheduling and grant workbook.

For more information about the ABM security model, see *Oracle ABM User Guide*.

## ABM Analyzer Security

ABM Analyzer security is tied to the ABM security model. ABM security is tied to the model and object level. Consequently, what you are accessing in ABM Analyzer are the ABM model objects that your responsibility can access. To put it another way, when you are mapped to ABM Analyzer workbooks, your ABM security profile determines the workbook data that you can access.

## Example

Suppose that *Tom*, an ABM Analyzer user, has been mapped to the ABM user *MPLS Plant Manager*, who only has access (with view or update status to a securable object) to the *Minneapolis* model Department accounts (through the *Model Dept. Accounts* securable object of profile type *Model*) and the G/L Actual period account data (through the *Account Data* securable object of profile type *Data Set*).

When *Tom* opens the *Dept. Account* worksheet, he sees only the department account data for the *Minneapolis* model and the G/L Actual data sets. *Tom* is restricted from viewing department account data for any other data sets or model.

## Securable Objects

[Table 5-1](#) relates each folder in the standard worksheets to one or more ABM securable objects. For example, the *Dept. Account* worksheet in the Department workbook includes two folders, Department Accounts and Department Account Data Sets, that can be viewed in the Edit Sheet wizard.

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**Note:** Select **Sheet**, then **Edit Sheet**, to open the Edit Sheet wizard.

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To illustrate how to interpret [Table 5-1](#), suppose you revoked access to the securable object *Model Dept. Accounts* for the profile type *Model* in ABM. The associated ABM Analyzer user cannot access the model department account data of the profile's related models in the *Dept. Account* worksheet.

**Table 5-1** *Securable Objects*

Standard Folders	Profile Types	ABM Securable Objects
Dept. Accounts	Model, DS	Model Dept. Accounts, Account Data
Dept. Statistics	Model, DS	Model Dept. Statistics, Statistic Data
Data Sets	Model	Data Sets
Activity Accounts	Model, DS	Activity Dept. Accounts, Activity Account Data
Activity Statistics	Model, DS	Activity Dept. Statistic, Activity Statistic Data
Drivers	Model DS	Model Dept. Drivers Driver Data
Driver Sources	Model DS	Model Dept. Drivers Driver Data

**Table 5–1 Securable Objects**

<b>Standard Folders</b>	<b>Profile Types</b>	<b>ABM Securable Objects</b>
Activity Rates	Activity Rate Set	Activity Rate Sets
Activity Rate Sets	Activity Rate Set	Activity Rate Sets
Material Statistics	Model DS	Material Dept. Statistics Material RE Statistics Data
Material Accounts	Model DS	Material Dept. Accounts Material Account Data
Material Unit Costs	Model DS	Model Materials Material Unit Costs
Cost Object Accounts	Model DS	Cost Object Dept. Accounts Cost Object Account Data
Cost Object Statistics	Model DS	Cost Object Dept. Statistics Cost Object Statistic Data
Cost Object Unit Costs	Model DS	Model Cost Objects Cost Object Unit Costs
Bill of Resources	Bill of Resources	Bill of Resources

## Business Area Privileges

You can grant or revoke specific business area privileges, such as the ability to format, schedule, and access workbooks, through Discoverer Administration Edition.

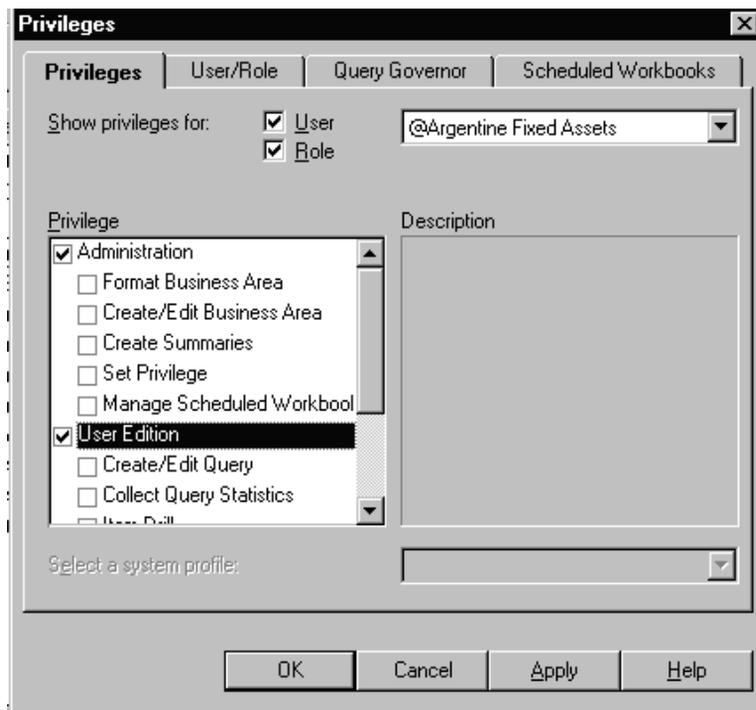
There are two seeded responsibilities in ABM:

- ABM Supervisor, the administrator's responsibility
- ABM Manager, the responsibility that the administrator must assign to each user requiring system access through Self-Service Web Applications.

For more information on this topic, see the *ABM Installation Guide*.

## How to Grant or Revoke Business Area Privileges

1. Define users or responsibilities, and map responsibilities to master list and model profiles in ABM. This determines which models and data sets a responsibility can access or modify.
2. Install and configure the ABM Analyzer end user layer, business areas, and workbooks. For more information, see the *ABM Installation Guide*.
3. Log in to Discoverer Administration Edition as the end user layer owner.
4. Select **Tools**, then **Privileges**. The Privileges dialog appears.



5. Select a user or responsibility from the pull-down menu.
6. Select administrative and user privileges from the Privilege list.
7. Click **OK** to apply your changes.



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# Index

## A

---

ABM Analyzer, features, basic, 1-2  
ABM, general, 1-1  
activity cost account worksheet, 3-23  
activity driver source worksheet, 3-28  
activity rate set worksheet, 3-26  
activity rate worksheet, 3-25  
activity statistic worksheet, 3-24  
activity workbook, 3-22  
activity workbook hierarchy, 3-29  
attribute folder, adding to EUL, 4-7  
attribute folders, creating in EUL, 4-6  
attributes and attribute values, creating, 4-2  
attributes, using in reports, 4-23

## C

---

calculations, adding to worksheets, 2-18  
conditions, adding to worksheets, 2-8  
cost object account worksheet, 3-37  
cost object detail worksheet, 3-34  
cost object revenue and cost worksheet, 3-40  
cost object statistic worksheet, 3-39  
cost objects workbook, 3-33  
cost objects workbook hierarchy, 3-41

## D

---

data set hierarchy, 3-42  
data variance, 2-25  
department account worksheet, 3-16  
department driver source worksheet, 3-29  
department statistic worksheet, 3-17

department workbook hierarchy, 3-20  
departments workbook, 3-15  
Discoverer, general, 1-2  
driver volume worksheet, 3-27

## E

---

Excel, export feature, 2-23  
exporting to Microsoft Excel, 2-23

## F

---

folder item properties, setting, 4-11

## I

---

integration process, 1-3

## J

---

joins, adding, 4-17

## M

---

material account worksheet, 3-31  
material cost worksheet, 3-32  
material statistic worksheet, 3-32  
material workbook hierarchy, 3-33  
materials workbook, 3-31  
Microsoft Excel, exporting to, 2-23

## P

---

parameters, adding to worksheets, 2-19

percentages, adding to worksheets, 2-16

## **R**

---

RE driver source worksheet, 3-29

## **S**

---

sharing workbooks, 2-21

sorts, adding to worksheets, 2-12

system architecture, 1-4

## **T**

---

tools, using, 2-8

totals, adding to worksheets, 2-14

## **W**

---

workbooks, opening, 2-2

workbooks, sharing, 2-21

worksheets, adding dimensions, 3-15

worksheets, calculations, adding, 2-18

worksheets, conditions, adding, 2-8

worksheets, creating, 2-7

worksheets, duplicating, 2-2, 2-5

worksheets, parameters, adding, 2-19

worksheets, percentages, adding, 2-16

worksheets, sorts, adding, 2-12

worksheets, totals, adding, 2-14