SAS® Profitability Management 1.2.1

Help

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SAS® Profitability Management 1.2.1 Help

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What's New

Data Preview

Whenever you are working with a transaction table, dimensions table, or behavior table, you can view the first one thousand rows of data in the table. This feature enables you to verify the underlying data without leaving SAS Profitability Management.

Export Rules and Associations

You can export all rules and all associations. This feature enables you to easily move the rules and associations between models or between servers.

Audit Log

SAS Profitability Management maintains an audit log of the the changes to a model. The audit log enables you to determine the changes made, who made them, and when they were made.

Detailed Report Filtering

When filtering a detailed report, you can filter on specific dimensions and levels. This feature provides you further flexibility with detailed reports.

Enhanced Rule Matching

You can match fields between columns in a behavior table and a transaction table, instead of matching a single rule to a single row in a behavior table. This feature enables you to to create a single rule for a single type of field matching, which makes modeling much easier.

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- Calculate a model
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Rules

Behavior Table

The behavior table lists each source of a transaction cost with its appropriate values. A behavior table contains the following columns:

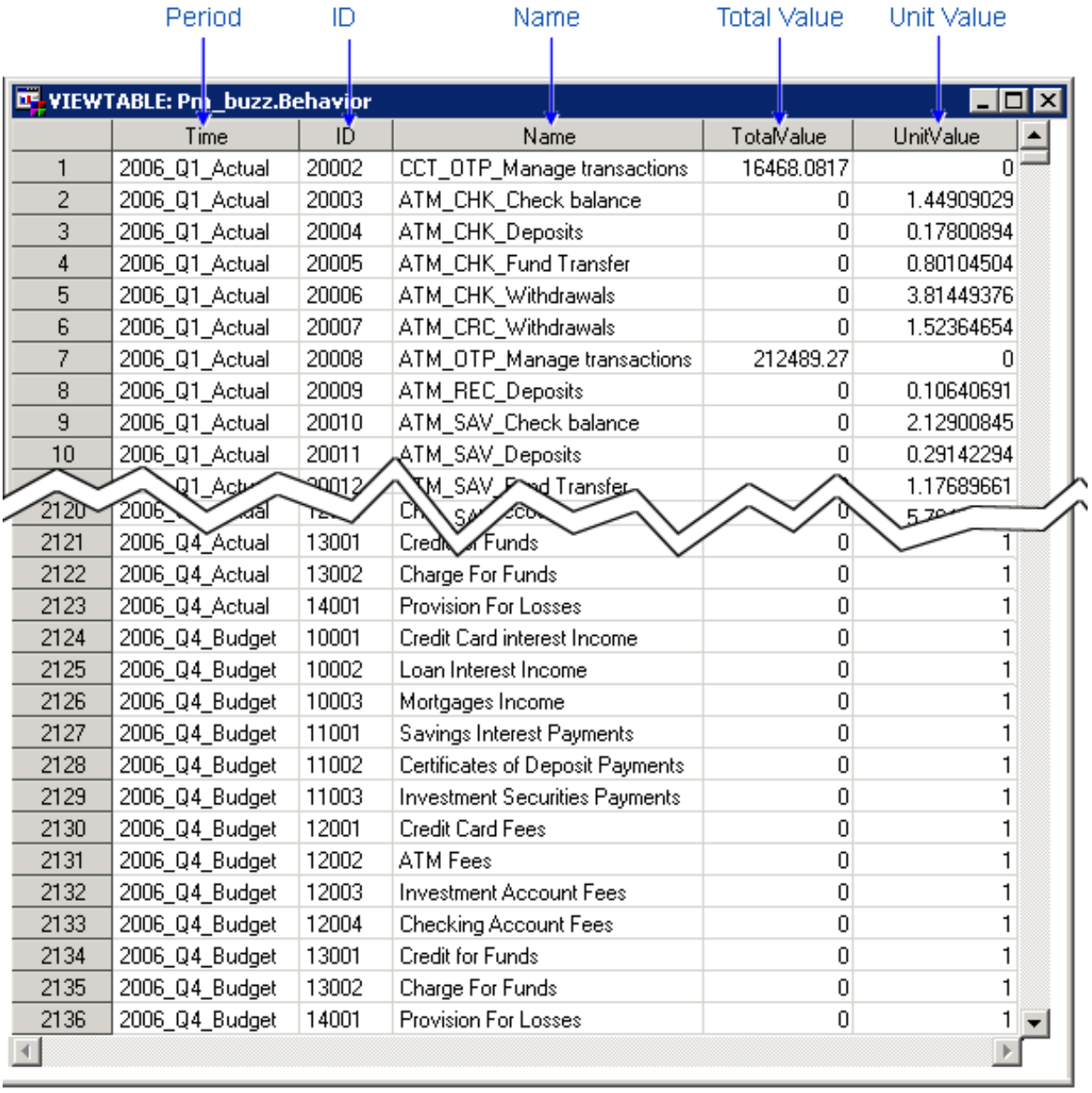
Position	Name	Maximum Length	Description
1	Time	Char 32	The period for the transaction costs
2	ID	Char 32	The identifying reference for the behavior
3	Name	Char 32	The name of the behavior
4	Total Value	Numeric 8	The total source amount that will be spread
5	Unit Value	Numeric 8	The unit cost for each transaction with this source

In a behavior table, consider the following rules:

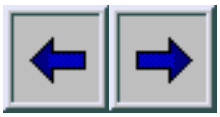
- The columns must appear in the order that is shown.
- Each column must have the length that is shown.
- The name of the column is arbitrary.

Note: Only one of the Unit Value and Total Value columns can contain a non-zero value for any row of the behavior table.

The following picture shows a sample behavior table:



	Time	ID	Name	TotalValue	UnitValue
1	2006_Q1_Actual	20002	CCT_OTP_Manage transactions	16468.0817	0
2	2006_Q1_Actual	20003	ATM_CHK_Check balance	0	1.44909029
3	2006_Q1_Actual	20004	ATM_CHK_Deposits	0	0.17800894
4	2006_Q1_Actual	20005	ATM_CHK_Fund Transfer	0	0.80104504
5	2006_Q1_Actual	20006	ATM_CHK_Withdrawals	0	3.81449376
6	2006_Q1_Actual	20007	ATM_CRC_Withdrawals	0	1.52364654
7	2006_Q1_Actual	20008	ATM_OTP_Manage transactions	212489.27	0
8	2006_Q1_Actual	20009	ATM_REC_Deposits	0	0.10640691
9	2006_Q1_Actual	20010	ATM_SAV_Check balance	0	2.12900845
10	2006_Q1_Actual	20011	ATM_SAV_Deposits	0	0.29142294
	Q1_Actu	20012	TM_SAV_ d Transfer		1.17689661
2120	2006_ ual	12	CH SA cco	0	5.78
2121	2006_Q4_Actual	13001	Credi Funds	0	1
2122	2006_Q4_Actual	13002	Charge For Funds	0	1
2123	2006_Q4_Actual	14001	Provision For Losses	0	1
2124	2006_Q4_Budget	10001	Credit Card interest Income	0	1
2125	2006_Q4_Budget	10002	Loan Interest Income	0	1
2126	2006_Q4_Budget	10003	Mortgages Income	0	1
2127	2006_Q4_Budget	11001	Savings Interest Payments	0	1
2128	2006_Q4_Budget	11002	Certificates of Deposit Payments	0	1
2129	2006_Q4_Budget	11003	Investment Securities Payments	0	1
2130	2006_Q4_Budget	12001	Credit Card Fees	0	1
2131	2006_Q4_Budget	12002	ATM Fees	0	1
2132	2006_Q4_Budget	12003	Investment Account Fees	0	1
2133	2006_Q4_Budget	12004	Checking Account Fees	0	1
2134	2006_Q4_Budget	13001	Credit for Funds	0	1
2135	2006_Q4_Budget	13002	Charge For Funds	0	1
2136	2006_Q4_Budget	14001	Provision For Losses	0	1



6. Calculate a Model Show me

Calculating a model takes the transaction tables in your input directory, applies assignment rules in the model to make calculations, and stores the calculation results in columns that are appended to your transaction tables in the output directory.

1. In any workspace, select a model.
2. Select **Actions** ▸ **Calculate Model**.

   The Calculate wizard opens.
3. On the Period Information page, select the periods to calculate, and then click **Next**.

   Note: Because each transaction table is associated with one period, when you recalculate a model, you do not need to recalculate all of the transaction tables. For example, you can calculate January, and then February as a separate calculation. You do not need to process a single period's transaction table more than once as the months proceed through the year.
4. On the Table Groups page, select the table groups to include in the calculation, and then click **Next**.
5. On the Cube Generation page, select the cubes to generate, and then click **Next**.
6. On the Concurrent Sessions page, select the number of concurrent sessions to run, and then click **Finish**.

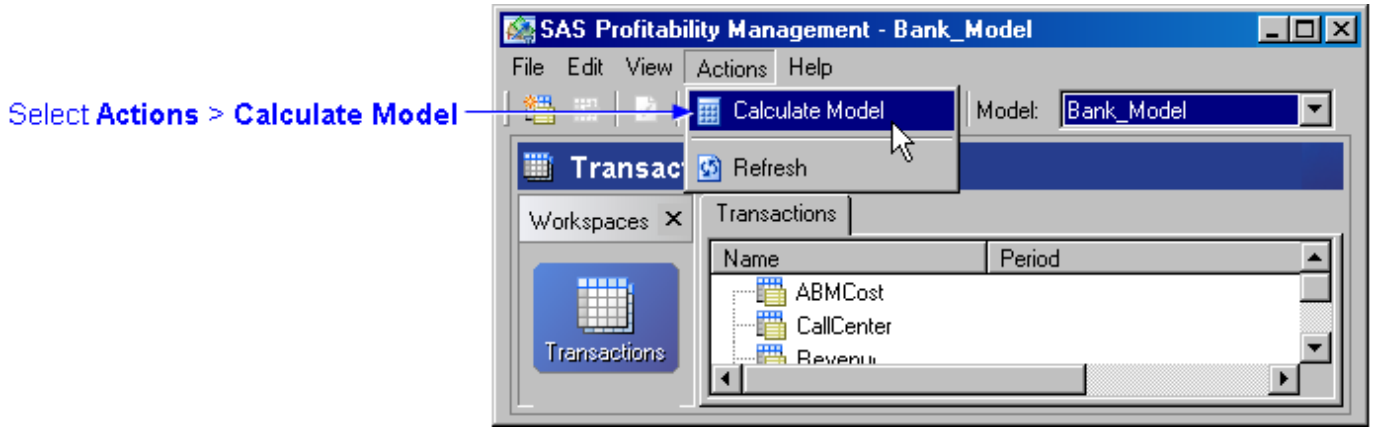
   A progress window appears.

   Note: The progress window appears only if you have previously generated cubes for this model.
7. When the calculation finishes, click **Details** to view the message log.

Calculate a Model

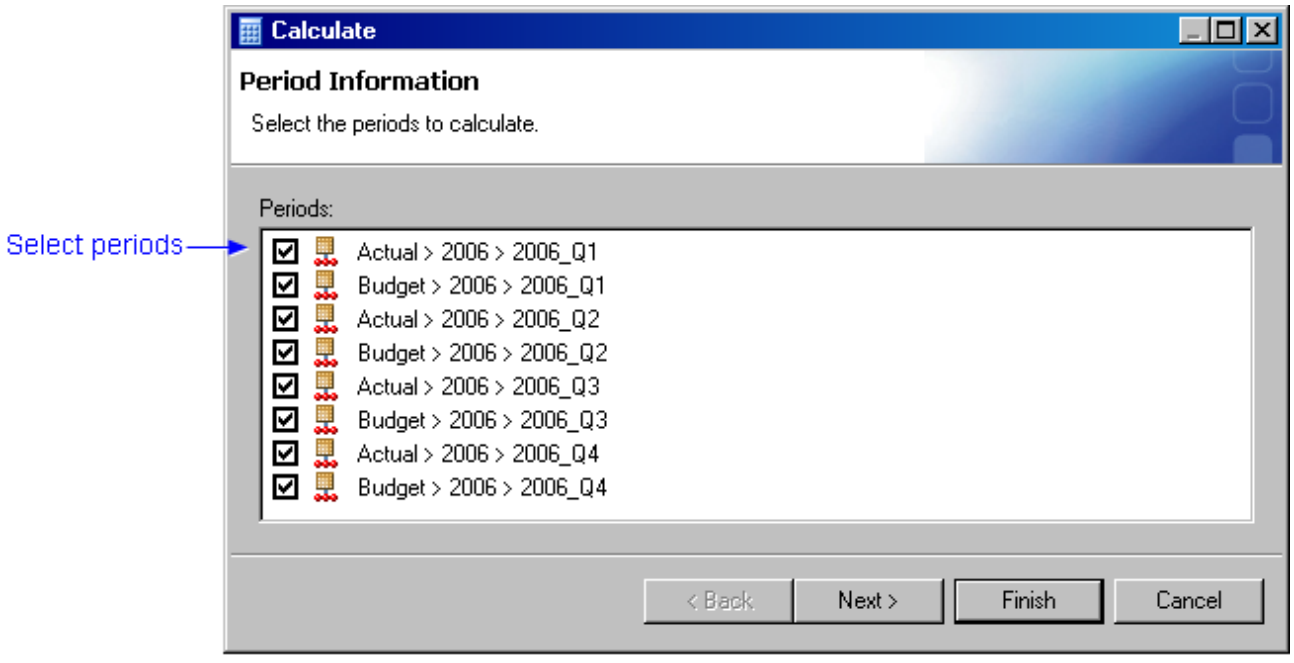
1. In any workspace, select a model.
2. Select **Actions** ▸ **Calculate Model**.

   The Calculate wizard opens.

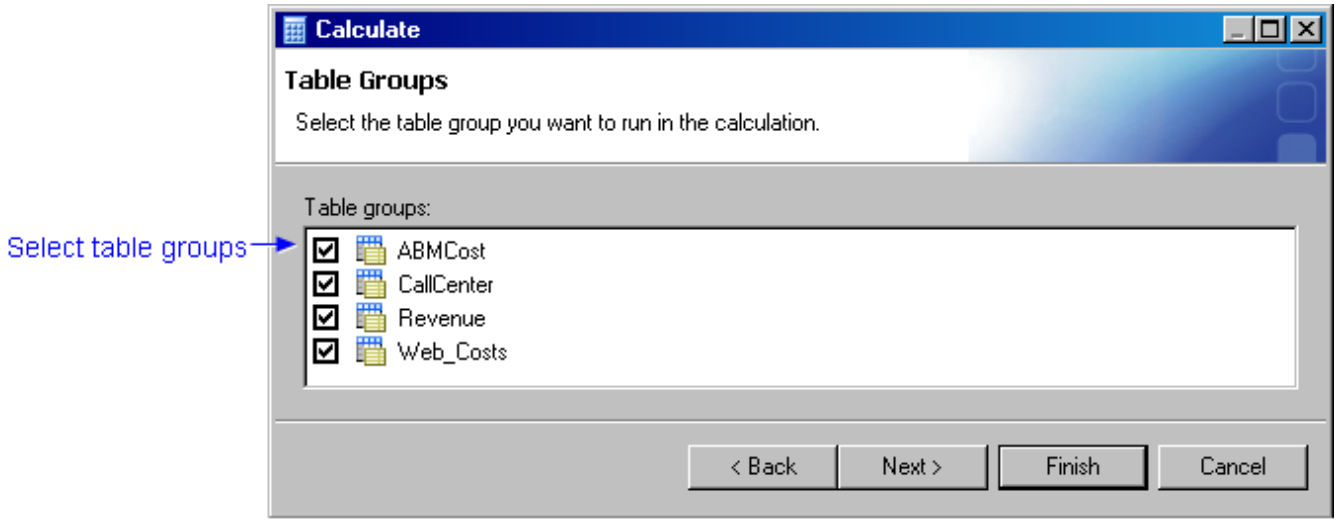


3. On the Period Information page, select the periods to calculate, and then click **Next**.

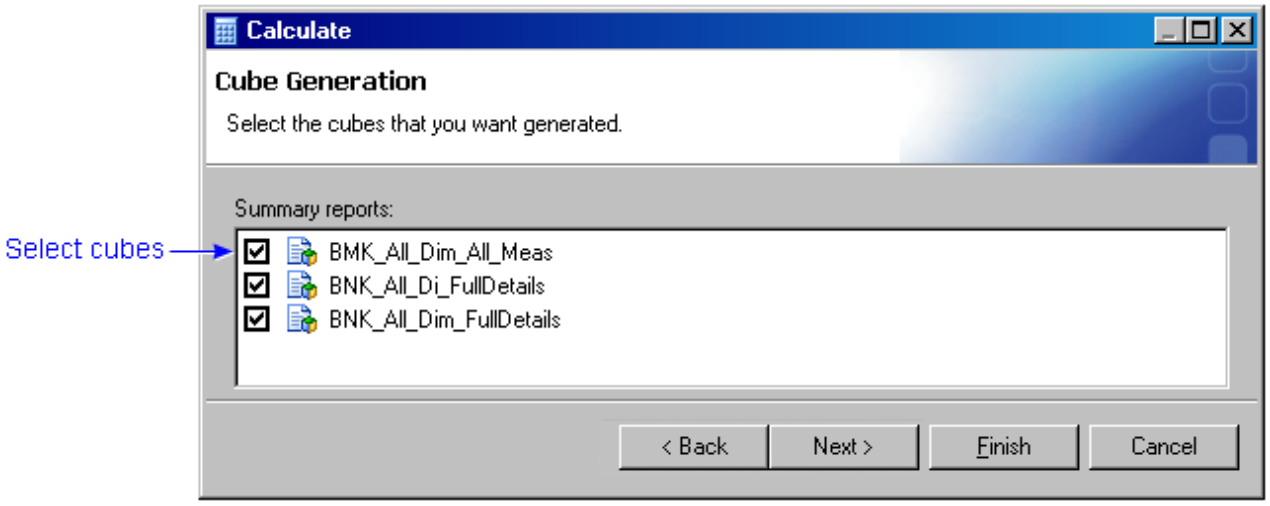
   Note: Because each transaction table is associated with one and only one period, when you recalculate a model you do not need to recalculate all of the transaction tables. For example, you can calculate January and then February as a separate calculation. You never need to process a single period's transaction table more than once as the months proceed through the year.



4. On the Table Groups page, select the table groups to include in the calculation, and then click **Next**.

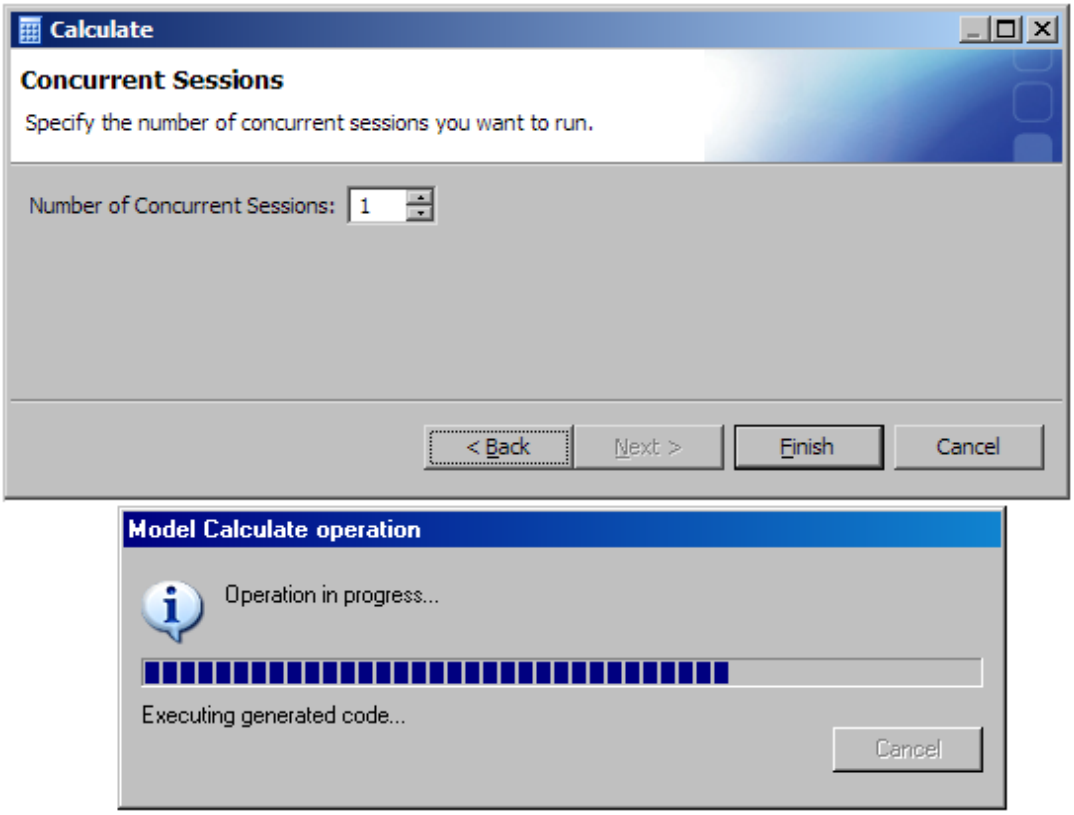


5. On the Cube Generation page, select the cubes to generate, and then click **Next**.



6. On the Concurrent Sessions page, select the number of concurrent sessions to run, and then click **Finish**.

   A progress window appears.



Note: The progress window appears only if you have previously generated cubes for this model.

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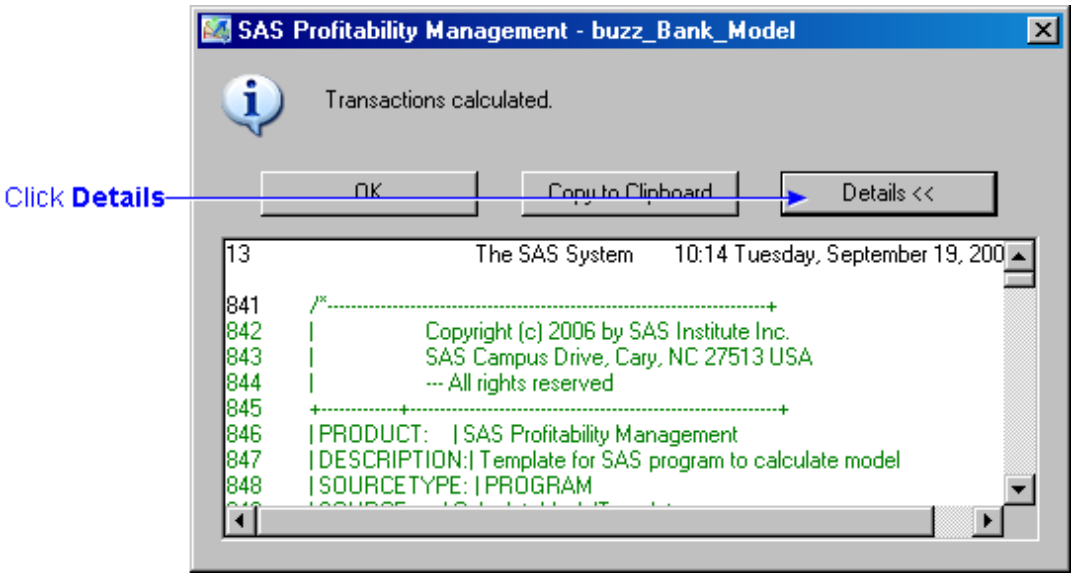
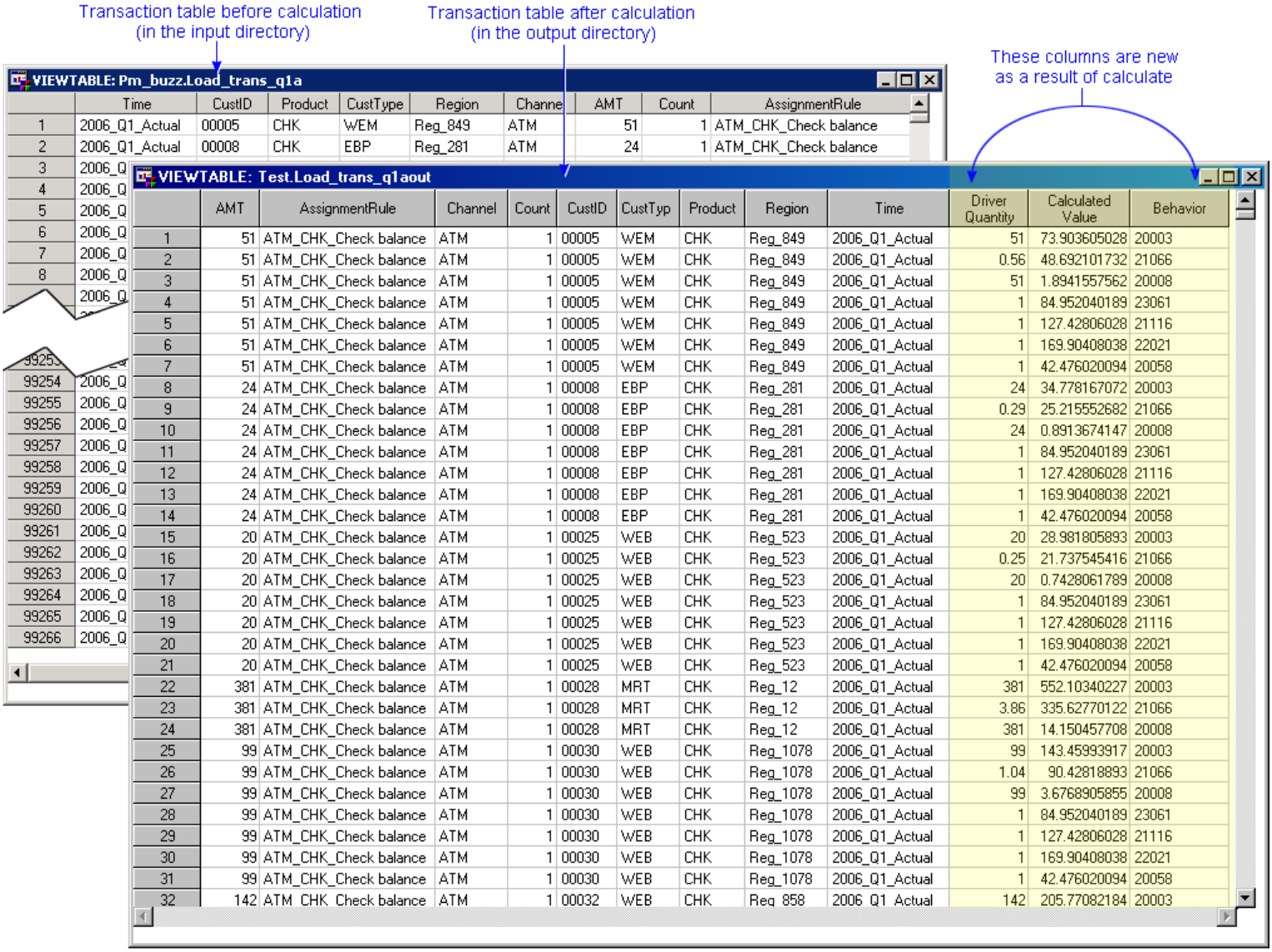
7. When the calculation finishes, click **Details** to view the message log.



Results of a Calculation

The following picture shows a sample transaction table before and after a calculation. The calculation has added three new columns to the transaction table in the output directory:

Driver Quantity	The quantity calculated by the driver formula
Calculated Value	The calculated cost for the transaction
Behavior	The row from the Behavior table that is used in the calculation for a transaction



VIEWTABLE: Pm_buzz.Load_trans_q1a

	Time	CustID	Product	CustType	Region	Channe	AMT	Count	AssignmentRule
1	2006_Q1_Actual	00005	CHK	WEM	Reg_849	ATM	51	1	ATM_CHK_Check balance
2	2006_Q1_Actual	00008	CHK	EBP	Reg_281	ATM	24	1	ATM_CHK_Check balance
3	2006_Q								
4	2006_Q								
5	2006_Q								
6	2006_Q								
7	2006_Q								
8	2006_Q								
	2006_Q								
99254	2006_Q								
99255	2006_Q								
99256	2006_Q								
99257	2006_Q								
99258	2006_Q								
99259	2006_Q								
99260	2006_Q								
99261	2006_Q								
99262	2006_Q								
99263	2006_Q								
99264	2006_Q								
99265	2006_Q								
99266	2006_Q								

VIEWTABLE: Test.Load_trans_q1aout

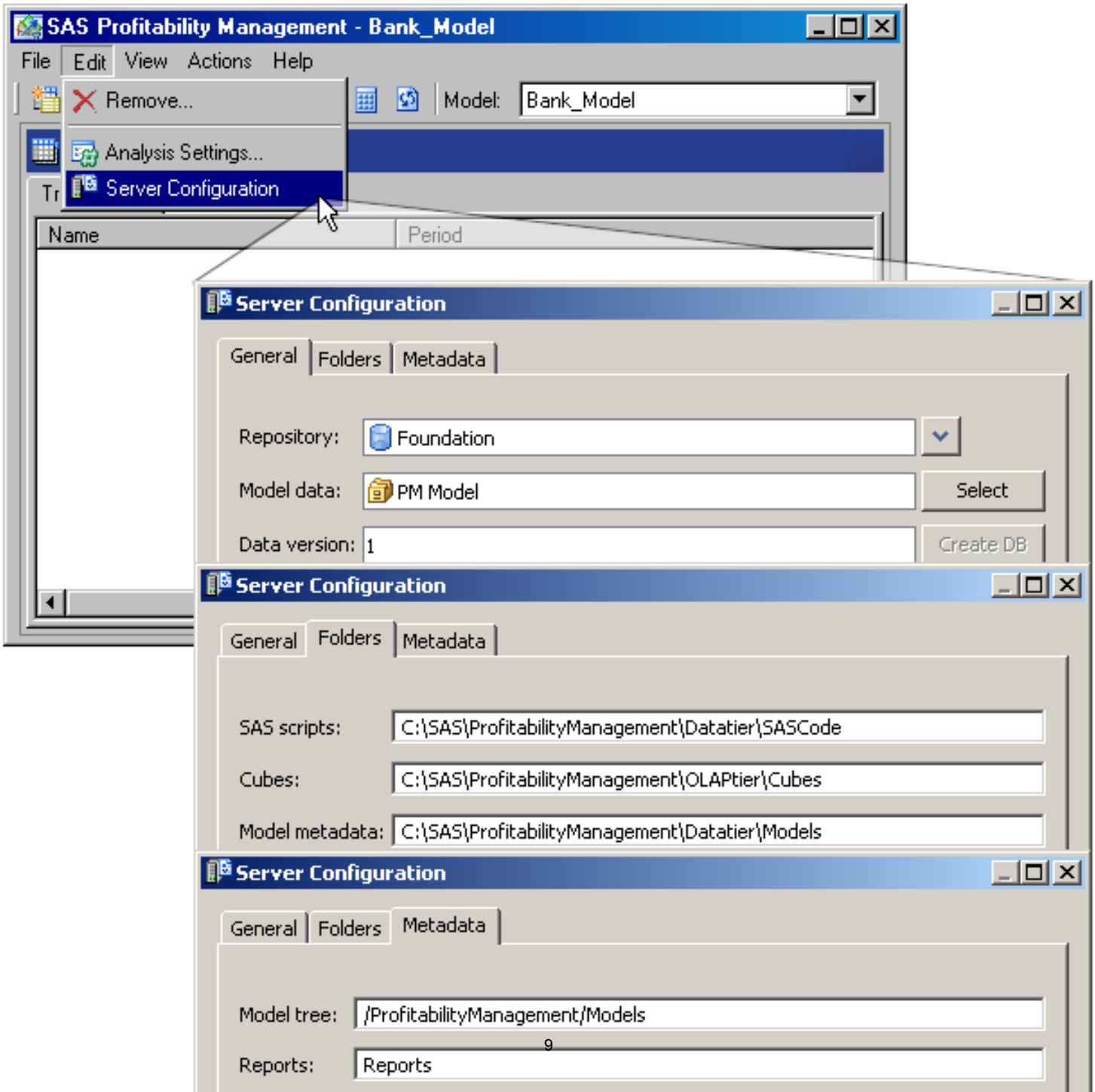
	AMT	AssignmentRule	Channel	Count	CustID	CustTyp	Product	Region	Time	Driver Quantity	Calculated Value	Behavior
1	51	ATM_CHK_Check balance	ATM	1	00005	WEM	CHK	Reg_849	2006_Q1_Actual	51	73.903605028	20003
2	51	ATM_CHK_Check balance	ATM	1	00005	WEM	CHK	Reg_849	2006_Q1_Actual	0.56	48.692101732	21066
3	51	ATM_CHK_Check balance	ATM	1	00005	WEM	CHK	Reg_849	2006_Q1_Actual	51	1.8941557562	20008
4	51	ATM_CHK_Check balance	ATM	1	00005	WEM	CHK	Reg_849	2006_Q1_Actual	1	84.952040189	23061
5	51	ATM_CHK_Check balance	ATM	1	00005	WEM	CHK	Reg_849	2006_Q1_Actual	1	127.42806028	21116
6	51	ATM_CHK_Check balance	ATM	1	00005	WEM	CHK	Reg_849	2006_Q1_Actual	1	169.90408038	22021
7	51	ATM_CHK_Check balance	ATM	1	00005	WEM	CHK	Reg_849	2006_Q1_Actual	1	42.476020094	20058
8	24	ATM_CHK_Check balance	ATM	1	00008	EBP	CHK	Reg_281	2006_Q1_Actual	24	34.778167072	20003
9	24	ATM_CHK_Check balance	ATM	1	00008	EBP	CHK	Reg_281	2006_Q1_Actual	0.29	25.215552682	21066
10	24	ATM_CHK_Check balance	ATM	1	00008	EBP	CHK	Reg_281	2006_Q1_Actual	24	0.8913674147	20008
11	24	ATM_CHK_Check balance	ATM	1	00008	EBP	CHK	Reg_281	2006_Q1_Actual	1	84.952040189	23061
12	24	ATM_CHK_Check balance	ATM	1	00008	EBP	CHK	Reg_281	2006_Q1_Actual	1	127.42806028	21116
13	24	ATM_CHK_Check balance	ATM	1	00008	EBP	CHK	Reg_281	2006_Q1_Actual	1	169.90408038	22021
14	24	ATM_CHK_Check balance	ATM	1	00008	EBP	CHK	Reg_281	2006_Q1_Actual	1	42.476020094	20058
15	20	ATM_CHK_Check balance	ATM	1	00025	WEB	CHK	Reg_523	2006_Q1_Actual	20	28.981805893	20003
16	20	ATM_CHK_Check balance	ATM	1	00025	WEB	CHK	Reg_523	2006_Q1_Actual	0.25	21.737545416	21066
17	20	ATM_CHK_Check balance	ATM	1	00025	WEB	CHK	Reg_523	2006_Q1_Actual	20	0.7428061789	20008
18	20	ATM_CHK_Check balance	ATM	1	00025	WEB	CHK	Reg_523	2006_Q1_Actual	1	84.952040189	23061
19	20	ATM_CHK_Check balance	ATM	1	00025	WEB	CHK	Reg_523	2006_Q1_Actual	1	127.42806028	21116
20	20	ATM_CHK_Check balance	ATM	1	00025	WEB	CHK	Reg_523	2006_Q1_Actual	1	169.90408038	22021
21	20	ATM_CHK_Check balance	ATM	1	00025	WEB	CHK	Reg_523	2006_Q1_Actual	1	42.476020094	20058
22	381	ATM_CHK_Check balance	ATM	1	00028	MRT	CHK	Reg_12	2006_Q1_Actual	381	552.10340227	20003
23	381	ATM_CHK_Check balance	ATM	1	00028	MRT	CHK	Reg_12	2006_Q1_Actual	3.86	335.62770122	21066
24	381	ATM_CHK_Check balance	ATM	1	00028	MRT	CHK	Reg_12	2006_Q1_Actual	381	14.150457708	20008
25	99	ATM_CHK_Check balance	ATM	1	00030	WEB	CHK	Reg_1078	2006_Q1_Actual	99	143.45993917	20003
26	99	ATM_CHK_Check balance	ATM	1	00030	WEB	CHK	Reg_1078	2006_Q1_Actual	1.04	90.42818893	21066
27	99	ATM_CHK_Check balance	ATM	1	00030	WEB	CHK	Reg_1078	2006_Q1_Actual	99	3.6768905855	20008
28	99	ATM_CHK_Check balance	ATM	1	00030	WEB	CHK	Reg_1078	2006_Q1_Actual	1	84.952040189	23061
29	99	ATM_CHK_Check balance	ATM	1	00030	WEB	CHK	Reg_1078	2006_Q1_Actual	1	127.42806028	21116
30	99	ATM_CHK_Check balance	ATM	1	00030	WEB	CHK	Reg_1078	2006_Q1_Actual	1	169.90408038	22021
31	99	ATM_CHK_Check balance	ATM	1	00030	WEB	CHK	Reg_1078	2006_Q1_Actual	1	42.476020094	20058
32	142	ATM_CHK_Check balance	ATM	1	00032	WEB	CHK	Reg_858	2006_Q1_Actual	142	205.77082184	20003

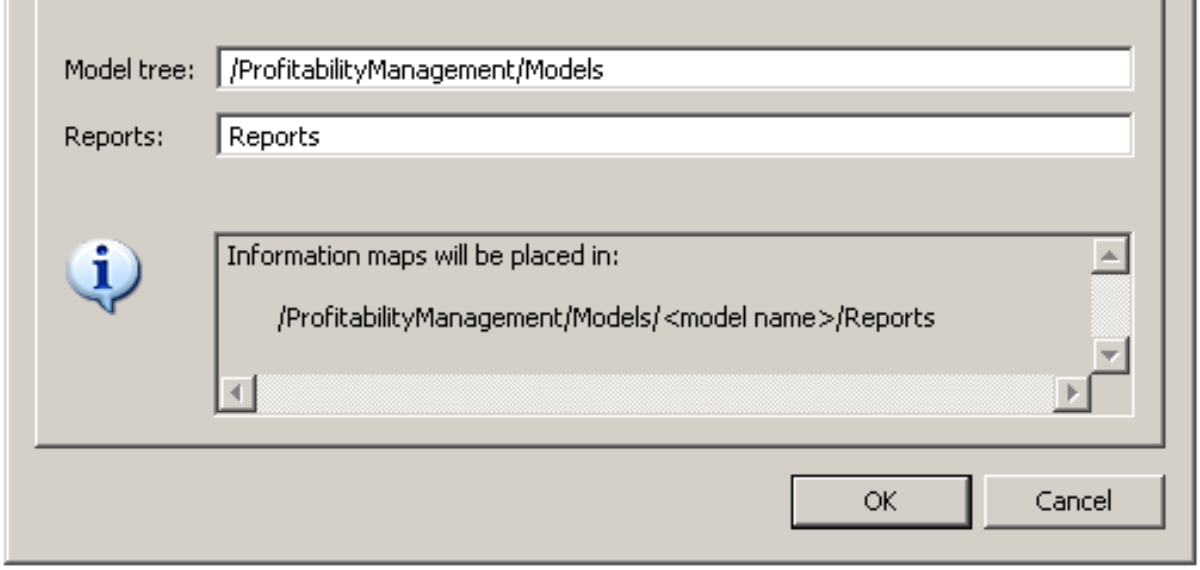
Configure the Server

Note: The server needs to be configured only once, and it was configured during installation. **You should not change the directories after this configuration occurs**.

1. Log on to SAS Profitability Management.
2. Select **Edit** ▸ **Server Configuration**.

   The Server Configuration window opens.
3. Click the **General**, **Folders**, and **Metadata** tabs, and then enter the required information.




Model tree:
/ProfitabilityManagement/Models
Reports:
Reports
Information maps will be placed in:
/ProfitabilityManagement/Models/<model name>/Reports
OK
Cancel

Edit the Properties of a Cube

To edit the properties for a cube, perform the following steps:

1. Activate the **Transactions** workspace, and then select a model.
2. Click **Change analysis settings**, or select **Edit ▸ Analysis Settings**.

   The Analysis Settings windows opens.
3. Click the **Periods** tab to select which periods to include in the generated cube.

   Note: The periods that you select to include in a cube must have been previously selected for calculation when you calculated the model.
4. Click the **Measures** tab to define the display format for numbers.

   Note: You can also change the display format for numbers in the SAS Profitability Management Web Reporting Client.

Generate a Cube

To generate a cube, perform one of the following steps:

- Activate the **Reports** workspace. Select a summary report, and then click **Generate cube**, or select **Actions** ▸ **Generate Cube**.
- Follow the process to calculate a model. During that process, you can generate a cube.

View a Cube (Summary Report)

- Open a summary report
- Drill into a summary report
- Suppress the display of blank content
- Select specific values to display
- Change the number of rows or columns that are displayed
- Change heading colors
- Format displayed numbers
- Insert a graph
- Save a view of a report

Custom Dimensions Table

A custom dimensions tables defines the dimensions of a transaction. A definition table must be loaded for each dimension that will be used in the model and in the transaction tables. A custom dimensions table contains the following columns:

Position	Name	Maximum Length	Description
1	ID	Char 32	The identifying value for the region; must be unique and match the dimension value fields in all transaction tables
2	L1_Area	Char 32	Top-level dimension member value (for example, EMEA)
3	L2_Country	Char 32	Second-level dimension member value (for example, Great Britain)
4	L3_State	Char 32	Third-level dimension member value (for example, Sussex)
5	L4_City	Char 32	Fourth-level dimension member value (for example, East Sussex)

In a custom dimensions table, consider the following rules:

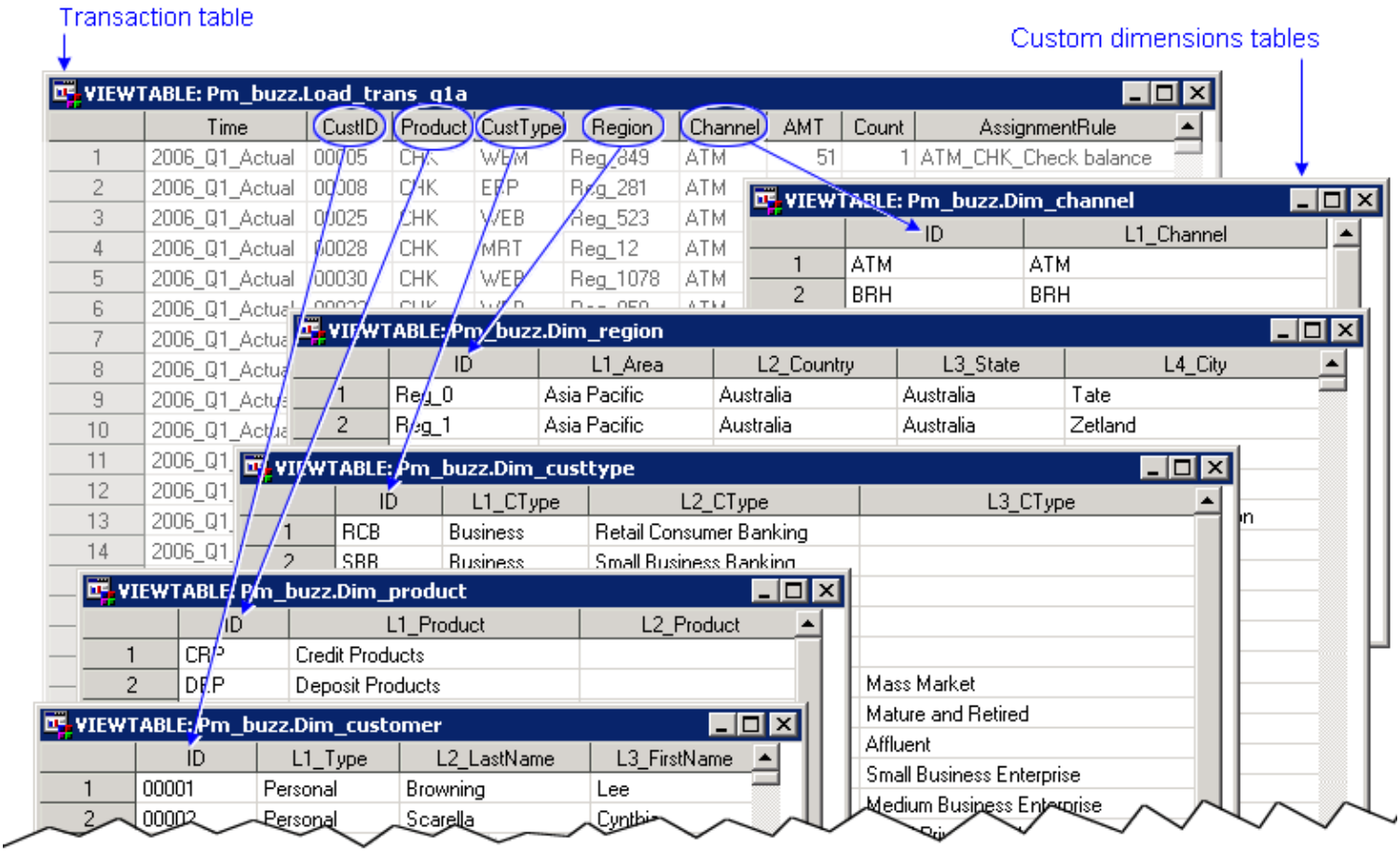
- The first column is the key field.
- Subsequent fields are the dimensions in the order in which they appear in the table.
- Each column must have the length that is shown.
- The name of the column is arbitrary, but it must be a **single word**.
- The number of columns is arbitrary.

Notes:

- When transaction tables in different transaction table groups map to the same custom dimension table, then the column names in the transaction tables must match. Otherwise, the table joins to create the OLAP cube will fail.
- Level names must unique across all dimensions. A difference in case does not count as a difference between names.

The following picture shows the mapping from a sample transaction table to different custom dimensions tables:

- Channel
- Customer
- Customer-Type
- Product
- Region



Channel Dimensions Table

VIEWTABLE: Pm_buzz.Dim_channel

	ID	L1_Channel
1	ATM	ATM
2	BRH	BRH
3	CCT	Call Center
4	DSA	Direct Sales Agent - DSA
5	EML	Email
6	EVE	Events
7	INT	Internet
8	MAL	Mail
9	MOP	Mobile Phone
10	TEL	Telebanking
11	N/A	

Customer Dimensions Table

VIEWTABLE: Pm_buzz.Dim_customer

	ID	L1_Type	L2_LastName	L3_FirstName
1	00001	Personal	Browning	Lee
2	00002	Personal	Scarella	Cynthia
3	00003	Personal	Bosch	Duane
4	00004	Personal	Digarmallo	Mark
5	00005	Personal	Pennise	Alana
6	00006	Personal	Gilbert	Vicki
7	00007	Personal	Ellison	David
[illegible]	00008	Personal	Butler	Edward
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18293	18294	[illegible]	[illegible]wright	Q
18294	18295	Personal	Yach	
18295	18296	Personal	Yarnell	J
18296	18297	Personal	Young	J
18297	18298	Personal	Young	K
18298	18299	Personal	Yu	Q
18299	18300	Personal	Zhang	E
18300	18301	Personal	Coderre	Nancy
18301	N/A			

Customer-Type Dimensions Table

VIEWTABLE: Pm_buzz.Dim_custtype

	ID	L1_CType	L2_CType	L3_CType
1	RCB	Business	Retail Consumer Banking	
2	SBB	Business	Small Business Banking	
3	PRB	Personal	Private Banking	
4	OLB	Personal	Onllne Banking	
5	CPB	Business	Corporate Banking	
6	MAM	Business	Retail Consumer Banking	Mass Market
7	MRT	Business	Retail Consumer Banking	Mature and Retired
8	AFF	Business	Retail Consumer Banking	Affluent
9	SBE	Business	Small Business Banking	Small Business Enterprise
10	MBE	Business	Small Business Banking	Medium Business Enterprise
11	RPB	Personal	Private Banking	Retail Private Banking
12	PBI	Personal	Private Banking	Private Banking and Investing
13	WEM	Personal	Private Banking	Wealth Management
14	FRT	Personal	Private Banking	Franchise Trust
15	WEB	Personal	Onllne Banking	Web Banking
16	EBP	Personal	Onllne Banking	Electronic Bill Payments
17	MFN	Business	Corporate Banking	Media Finance
18	AGR	Business	Corporate Banking	Agriculture
19	IAS	Business	Corporate Banking	Institutional Asset Services
20	HEC	Business	Corporate Banking	Health Care
21	CRE	Business	Corporate Banking	Commercial Real Estate
22	STF	Business	Corporate Banking	Structured Finance
23	INB	Business	Corporate Banking	Investment Banking
24	CAM	Business	Corporate Banking	Capital Markets
25	N/A			

Product Dimensions Table

VIEWTABLE: Pm_buzz.Dim_product

	ID	L1_Product	L2_Product
1	CRP	Credit Products	
2	DEP	Deposit Products	
3	FBP	Fee Based Products	
4	OTP	Other Products	
5	RCP	Revolving Credit Products	
6	TPP	Third Party Products	
7	SCR	Credit Products	Secured/Mortgages
8	UCR	Credit Products	Un secured
9	CHK	Deposit Products	Checking
10	REC	Deposit Products	Recurring
11	SAV	Deposit Products	Savings
12	TRM	Deposit Products	Term
13	CRC	Revolving Credit Products	Credit Cards
14	OVD	Revolving Credit Products	Overdrafts
15	N/A		

Region Dimensions Table

VIEWTABLE: Pm_buzz.Dim_region

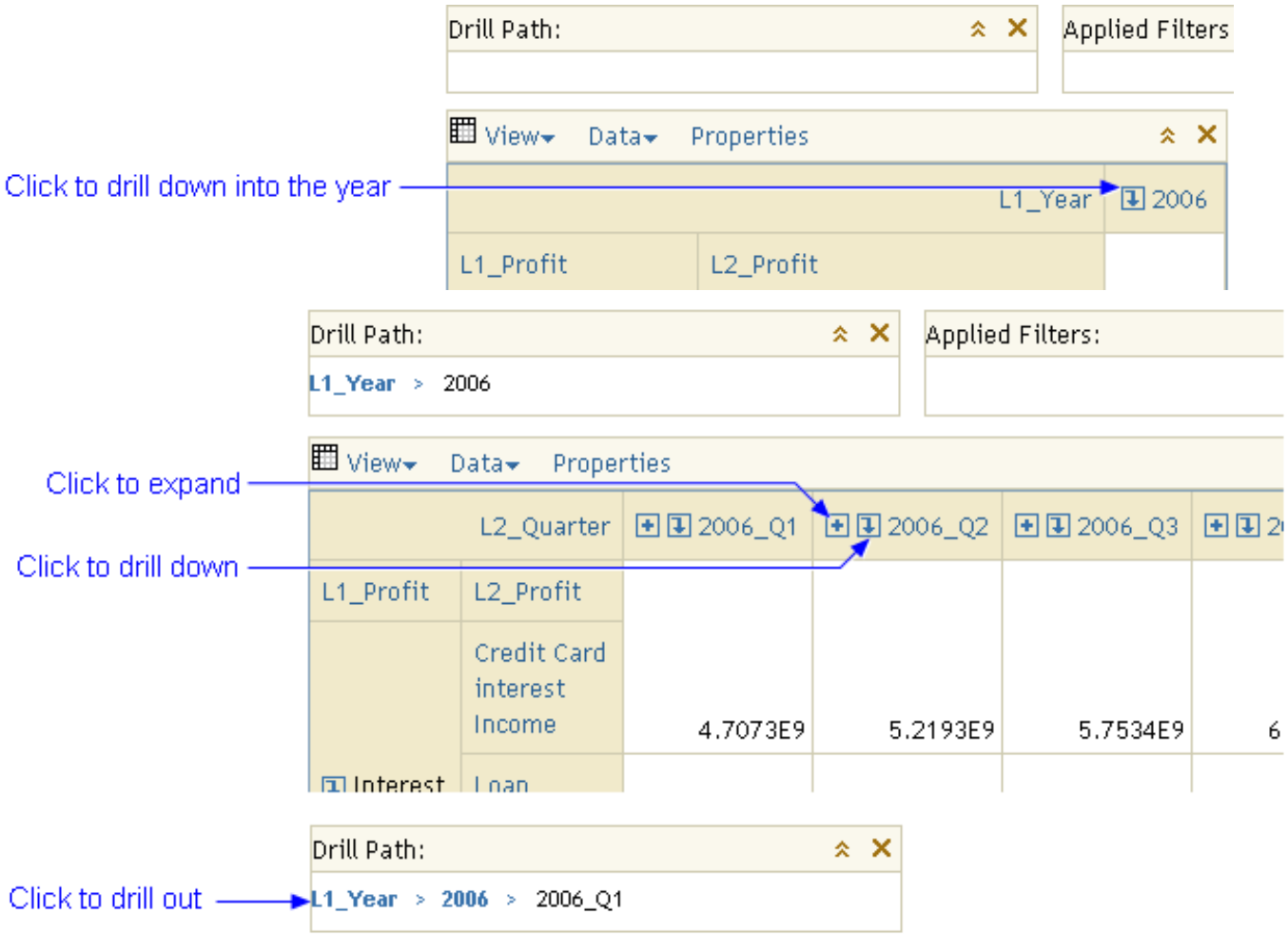
	ID	L1_Area	L2_Country	L3_State	L4_City
1	Reg_0	Asia Pacific	Australia	Australia	Tate
2	Reg_1	Asia Pacific	Australia	Australia	Zetland
3	Reg_10	Asia Pacific	Hong Kong	Hong Kong	Kowloon Tong
4	Reg_100	EMEA	Great Britain	Sussex	East Sussex
5	Reg_1000	USA_SW	USA	California	Mcb Camp Pendleton
6	Reg_1001	USA_SW	USA	California	Mission Viejo
7	Reg_1002	USA_SW	USA	California	Mountain View
8	Reg_1003	USA_SW	USA	California	Newport Beach
9	Reg_1004	USA_SW	USA	California	Oakland
	Reg_1005	USA_SW	USA	California	Oceanside
1129		USA_SW			Yabra
1130	Reg_99	EMEA	Great Britain	Sussex	Bathgate
1131	Reg_990	USA_SW	USA	California	Lafayette
1132	Reg_991	USA_SW	USA	California	Laguna Beach
1133	Reg_992	USA_SW	USA	California	Laguna Hills
1134	Reg_993	USA_SW	USA	California	Laguna Niguel
1135	Reg_994	USA_SW	USA	California	Lake Forest
1136	Reg_995	USA_SW	USA	California	Lexington Park
1137	Reg_996	USA_SW	USA	California	Los Angeles
1138	Reg_997	USA_SW	USA	California	Madera
1139	Reg_998	USA_SW	USA	California	Manhattan Beach
1140	Reg_999	USA_SW	USA	California	March Afb
1141	N/A				

Drill into a Detail Report

- Drill by columns
- Drill by rows

Drill by Columns

Drill down into the columns to see more detail in the period dimension.



Drill by Rows

Drill down into the rows to see more detail about the contributing costs.

Total Non Interest Income						2861.28	2575.15	3166.49
Provision For Losses						465.46	418.91	515.11
Direct Product	Cost to Provide	MAL	OTP			49.84	50.75	43.83
	Cost to Sustain Business					84.95	60.48	83.23
Relationship Management	Cost to Acquire	CCT	OVD	CCT_OVD_Inquiry		245.92	111.11	238.27
			TRM			0.00	0.00	0.00
		INT				0.00	0.00	0.00
	Cost to Retain	CCT				5.26	2.34	5.15
		MAL	OTP	MAL_OTP_Communication		612.87	499.26	673.66
	Cost to Serve					0.00	0.00	0.00
	Cost to Sustain Business					254.86	181.45	249.68
Sales and Marketing Effort	Cost to Retain					0.00	0.00	0.00
	Cost to Sustain Business					339.81	241.93	332.90
Servicing Effort						169.92	120.98	166.47
Total Non Interest Expense						2228.89	1687.23	2308.29
Net Contribution						21355.31	19538.54	23791.62

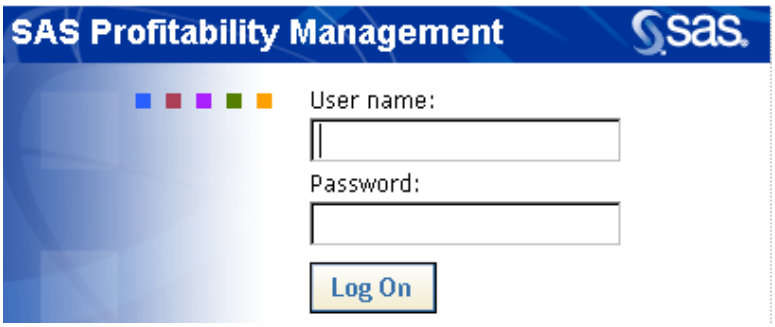
Open a Detail Report

Use the SAS Profitability Management Web Reporting Client to select a detail report for viewing. The report is viewed with the SAS Web OLAP Viewer. To view a detail report, perform the following steps:

1. Log on to the SAS Profitability Management Web Reporting Client.

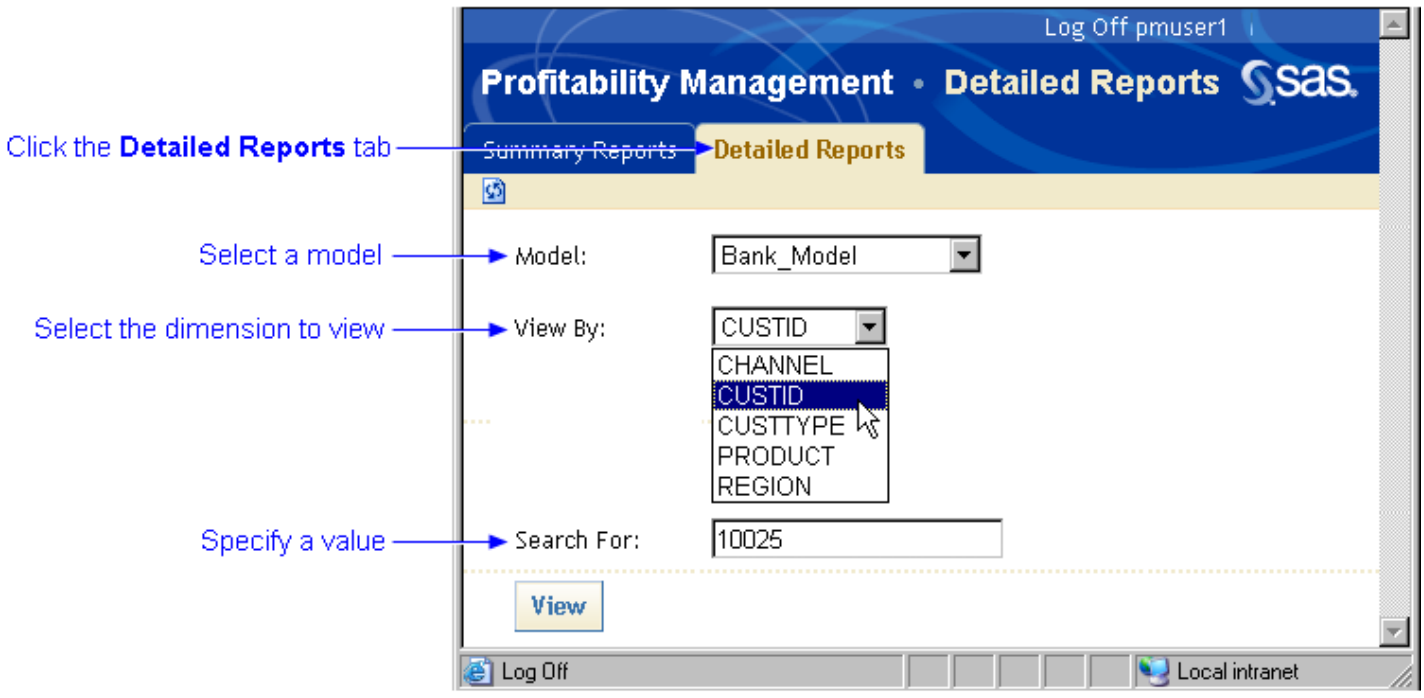
   User IDs and passwords were established during installation. The exact URL to use depends on your server installation. A sample URL is the following:

   http://profitmgmt:8080/SASProfitability/LogonCreate.do

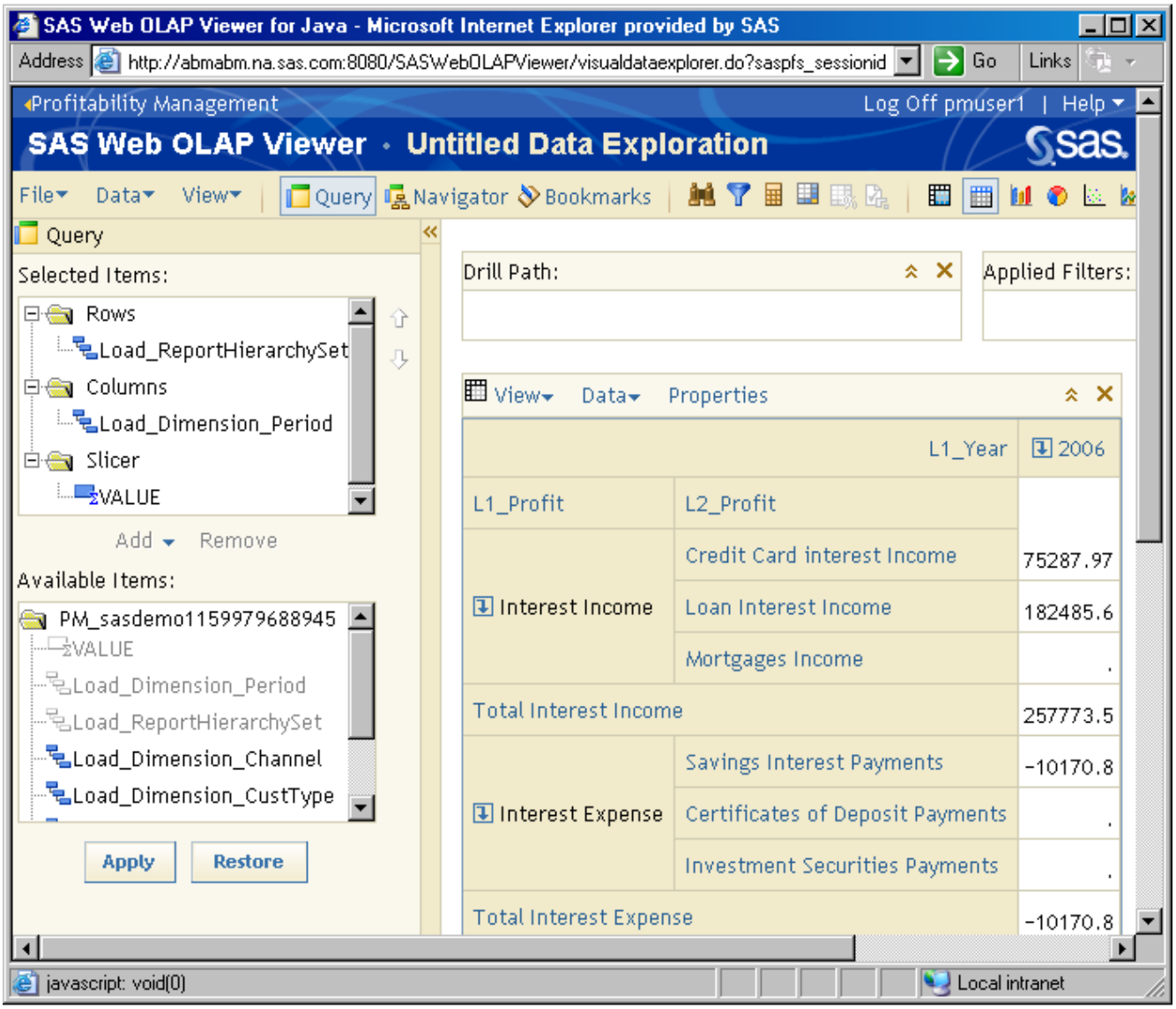


2. Click the **Detail Reports** tab.
3. Select a model.
4. Select the dimension to view.
5. Specify a value of the dimension to search for, and then click **View**.

   Note: The text that is entered into the **Search For** field is **case sensitive**.



6. The detail report is displayed in the SAS Web OLAP Viewer.


SAS Web OLAP Viewer for Java - Microsoft Internet Explorer provided by SAS
Address
http://abmabm.na.sas.com:8080/SASWebOLAPViewer/visualdataexplorer.do?saspfs_sessionid
Go
Links
Profitability Management
Log Off pmuser1 | Help
SAS Web OLAP Viewer · Untitled Data Exploration
sas
File
Data
View
Query
Navigator
Bookmarks
Query
Selected Items:
Rows
Load_ReportHierarchySet
Columns
Load_Dimension_Period
Slicer
VALUE
Add
Remove
Available Items:
PM_sasdemo1159979688945
VALUE
Load_Dimension_Period
Load_ReportHierarchySet
Load_Dimension_Channel
Load_Dimension_CustType
Apply
Restore
Drill Path:
Applied Filters:
View
Data
Properties
L1_Year
2006
L1_Profit
L2_Profit
Interest Income
Credit Card interest Income
75287.97
Loan Interest Income
182485.6
Mortgages Income
.
Total Interest Income
257773.5
Interest Expense
Savings Interest Payments
-10170.8
Certificates of Deposit Payments
.
Investment Securities Payments
.
Total Interest Expense
-10170.8
javascript: void(0)
Local intranet

Driver Formula

An assignment rule uses its driver formula in a calculation is based on whether the behavior table contains a unit value or a total value.

Unit Value

When a row in a behavior table contains a unit value, the driver formula calculates the number of units that are involved in each transaction that is selected by the selection criteria. Then, the cost per transaction (value) is determined by multiplying the number of units by the unit cost (in the behavior table) of the transaction.

Show an example

Total Value

When a row in a behavior table contains a total value, the driver formula calculates the number of units that are involved in each transaction that is selected by the selection criteria. Then, the cost per transaction is determined in the following way:

1. The total number of units for all transactions (selected by the selection criteria) is calculated by adding the number of units (as determined by the driver formula) for each transaction (selected by the selection criteria).

2. The cost per unit is calculated by dividing the total value (in the row in the behavior table) by the total number of units.

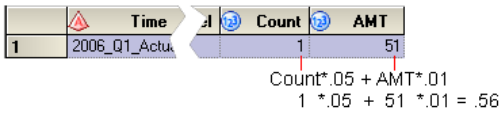
3. The cost for each transaction (value) is calculated by multiplying the cost per unit by the number of units (as determined by the driver formula) for that transaction.

Show an example

Driver Formula: Total Value

In the following picture, you can see:

1. The driver formula is: **Count*.05 + AMT*.01**.
2. The driver quantity for the first transaction is **0.56**.

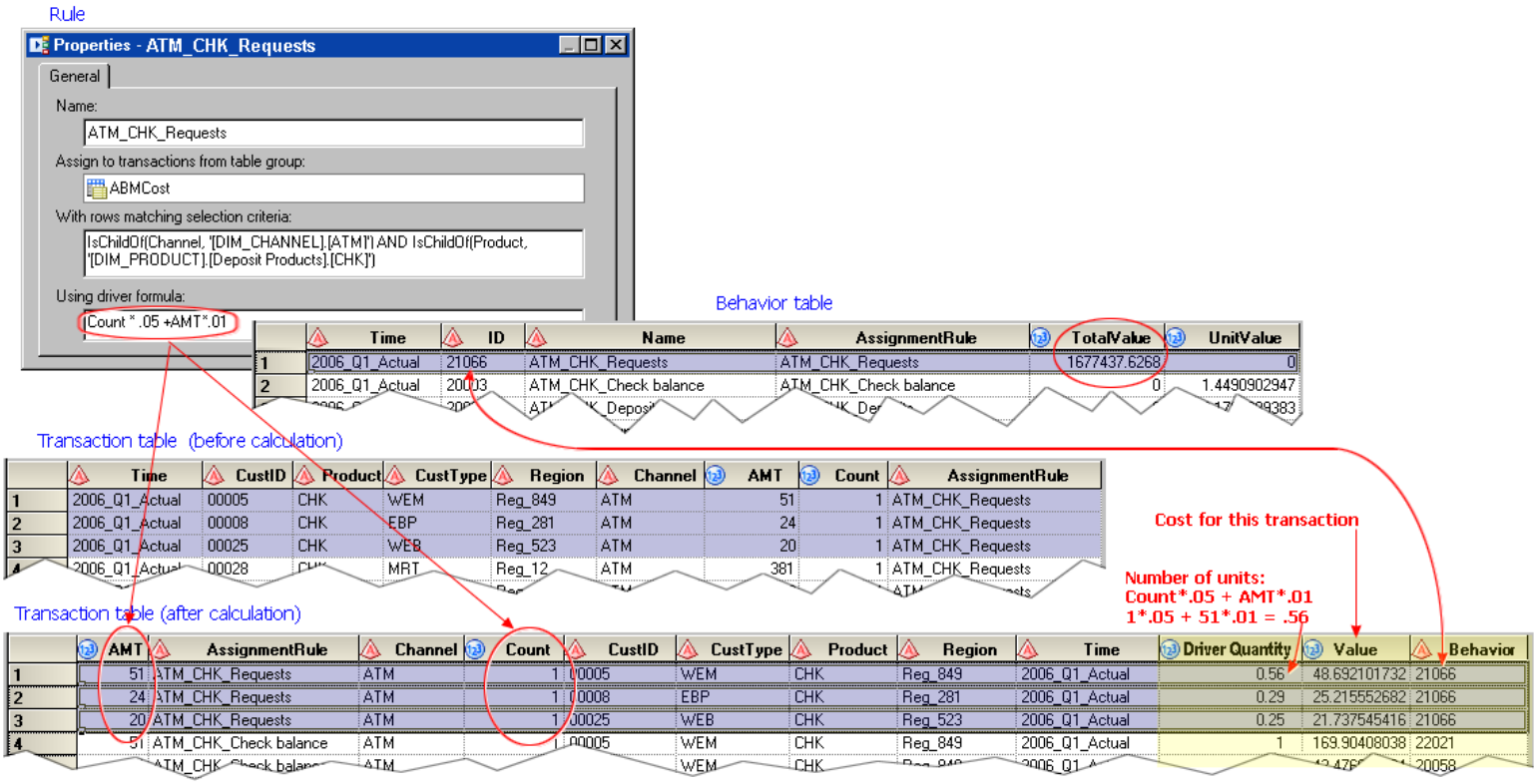


3. The cost per transaction (value) for the first transaction is **48.692101732**.

   Note: If you divide the value by the driver quantity for each of these three transactions, you get the same answer (rounded for the purpose of illustration):

   - 48.6921 / 0.56 = 86.95
   - 25.2155 / 0.29 = 86.95
   - 21.7375 / 0.25 = 86.95

   This quantity, 86.95, is the price per unit. So, the driver quantity (which represents the number of units) multiplied by the price per unit equals value (cost per transaction).

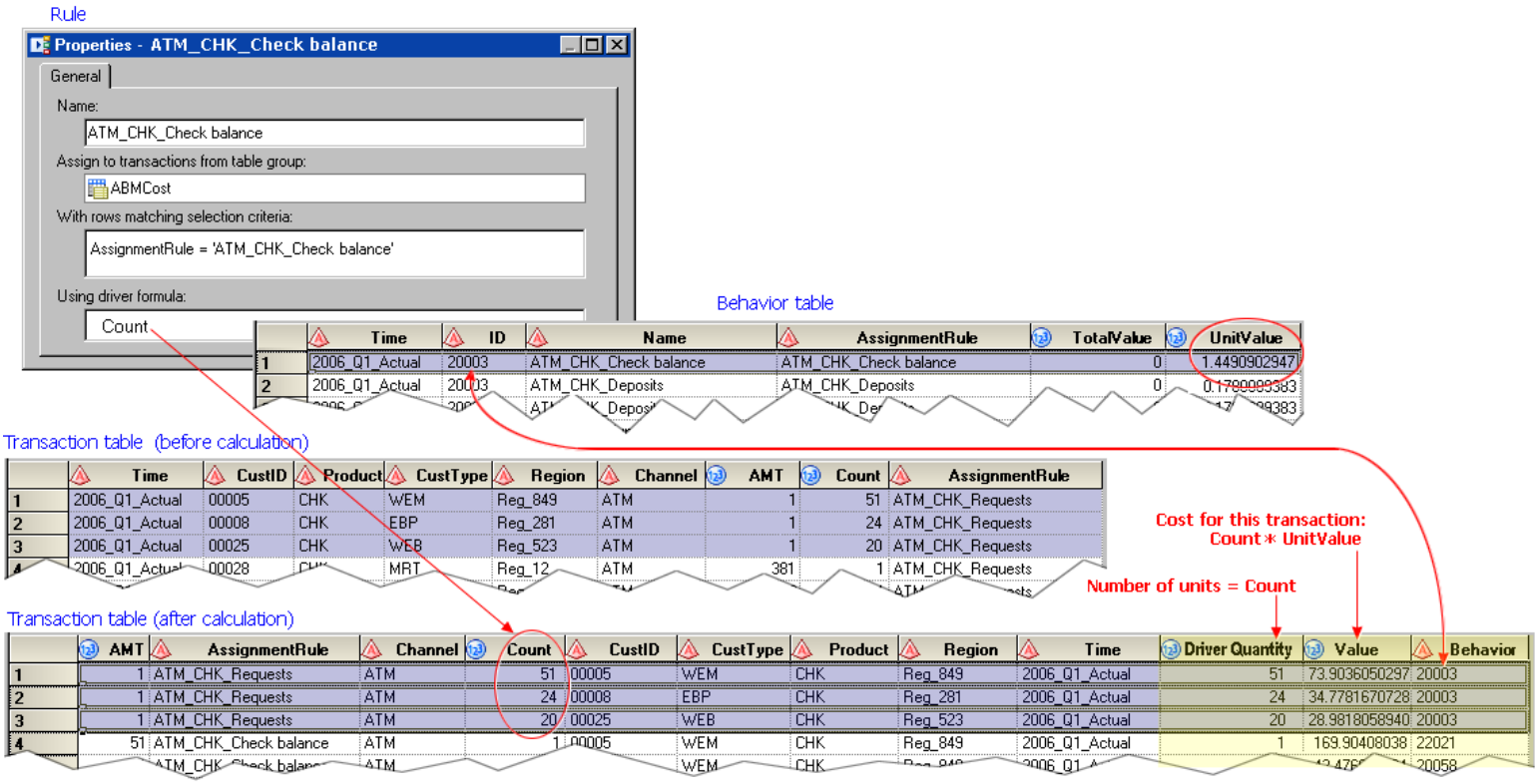


Driver Formula: Unit Value

In the following picture, you can see:

1. The driver formula is**Count**.
2. The driver quantity for the first transaction is **51**.
3. The cost per transaction (value) for the first transaction is **73.9036050297**. This represents the number of units (**51**) multiplied by the unit value from the behavior table (**1.4490902947**).

   So, the driver quantity (which represents the number of units) multiplied by the price per unit equals value (cost per transaction).



Driver Quantity

Driver quantity is the number of units calculated by the driver formula. The calculation is based on whether the behavior table row that is accessed by an assignment rule contains a unit value or a total value.

Unit Value

When a row in a behavior table contains a unit value, the driver formula calculates the number of units that are involved in each transaction that is selected by the selection criteria. The number of units appears in the **Driver quantity** field. Then, the cost per transaction (value) is determined by multiplying the number of units (driver quantity) by the unit cost (in the behavior table) of the transaction.

Show an example

Total Value

When a row in a behavior table contains a total value, the driver formula calculates the number of units that are involved in each transaction that is selected by the selection criteria. Then, the cost per transaction is determined in the following way:

1. The total number of units for all transactions (selected by the selection criteria) is calculated by adding the number of units (as determined by the driver formula) for each transaction (selected by the selection criteria). The number of units for each transaction appears in the **Driver quantity** field.

2. The cost per unit is calculated by dividing the total value (in the row in the behavior table) by the total number of units.

3. The cost for each transaction (value) is calculated by multiplying the cost per unit by the number of units (as determined by the driver formula) for that transaction.

Show an example

Edit a Model

To edit a model, perform the following steps:

1. Select **File ▸ Organize Models**.

   The Organize Models window opens.

2. Select a model.

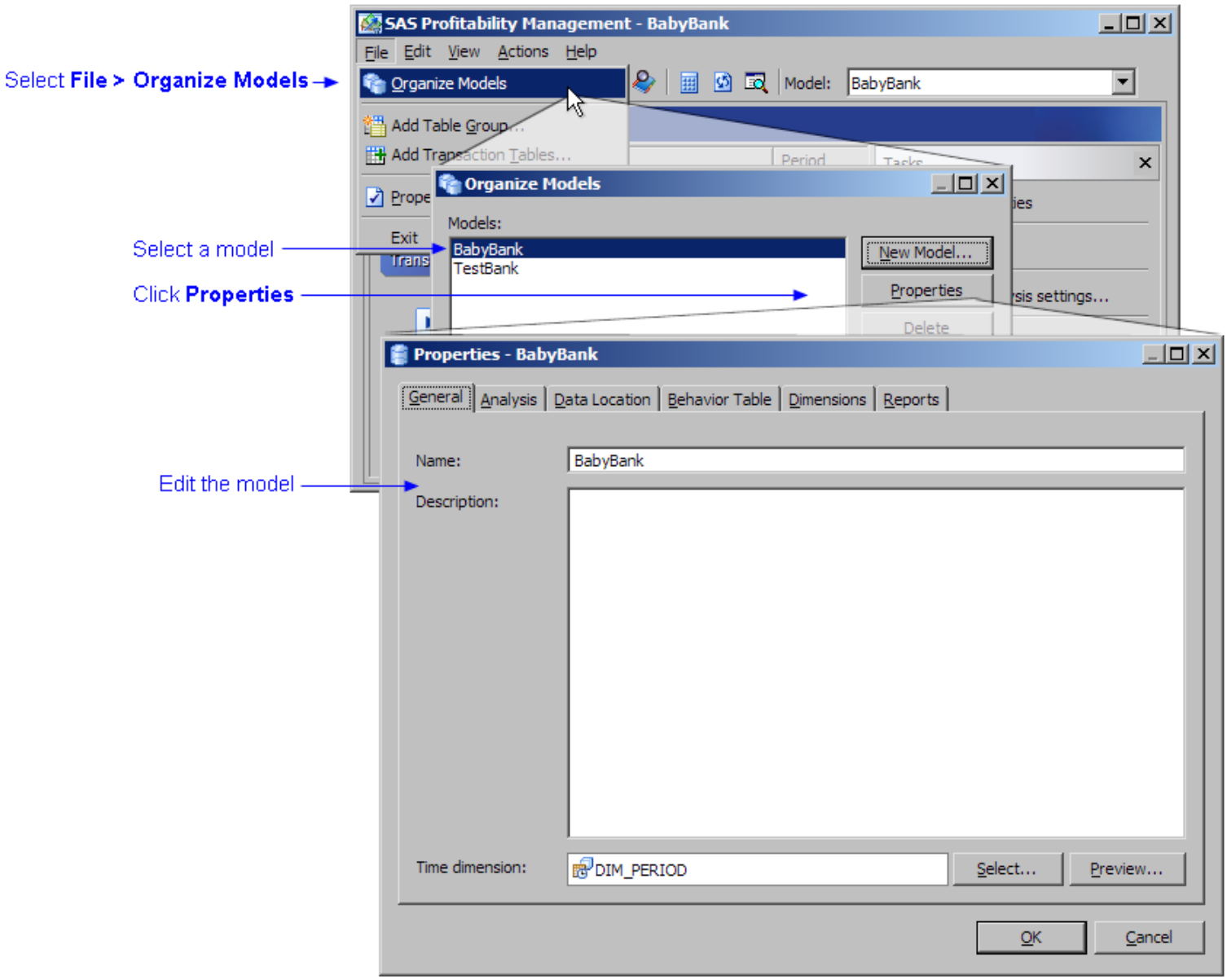
3. Click **Properties**.

4. Edit the model.

5. To preview the data on the **General**, **Behavior Table**, **Dimensions**, and **Reports** tabs, click **Preview**.

   The Preview window opens.

Note: If you change the report hierarchy or report layout, you have to regenerate any cubes (summary reports) that have already been generated.



Export a Rule Association Table

1. Activate the **Behaviors** workspace, and then select the model from which you want to export the rule associations.
2. Select **Actions ▸ Export Associations**.

   The **Export Associations** window opens.
3. Name the export table.
4. Click **Select** to select a library in which to store the export table.

   The Select Table window opens. Select a library, and then click **OK**.
5. Click **OK**.

Related Topics:

- Import a rule association table

Export a Rule Definition Table

1. Activate the **Rules** workspace, and then select the model from which you want to export the rule definitions.
2. Select **Actions ▸ Export Assignment Rules**.

   The **Export Rules** window opens.
3. Name the export table.
4. Click **Select** to select a library in which to store the export table.

   The Select Table window opens. Select a library, and then click **OK**.
5. Click **OK**.

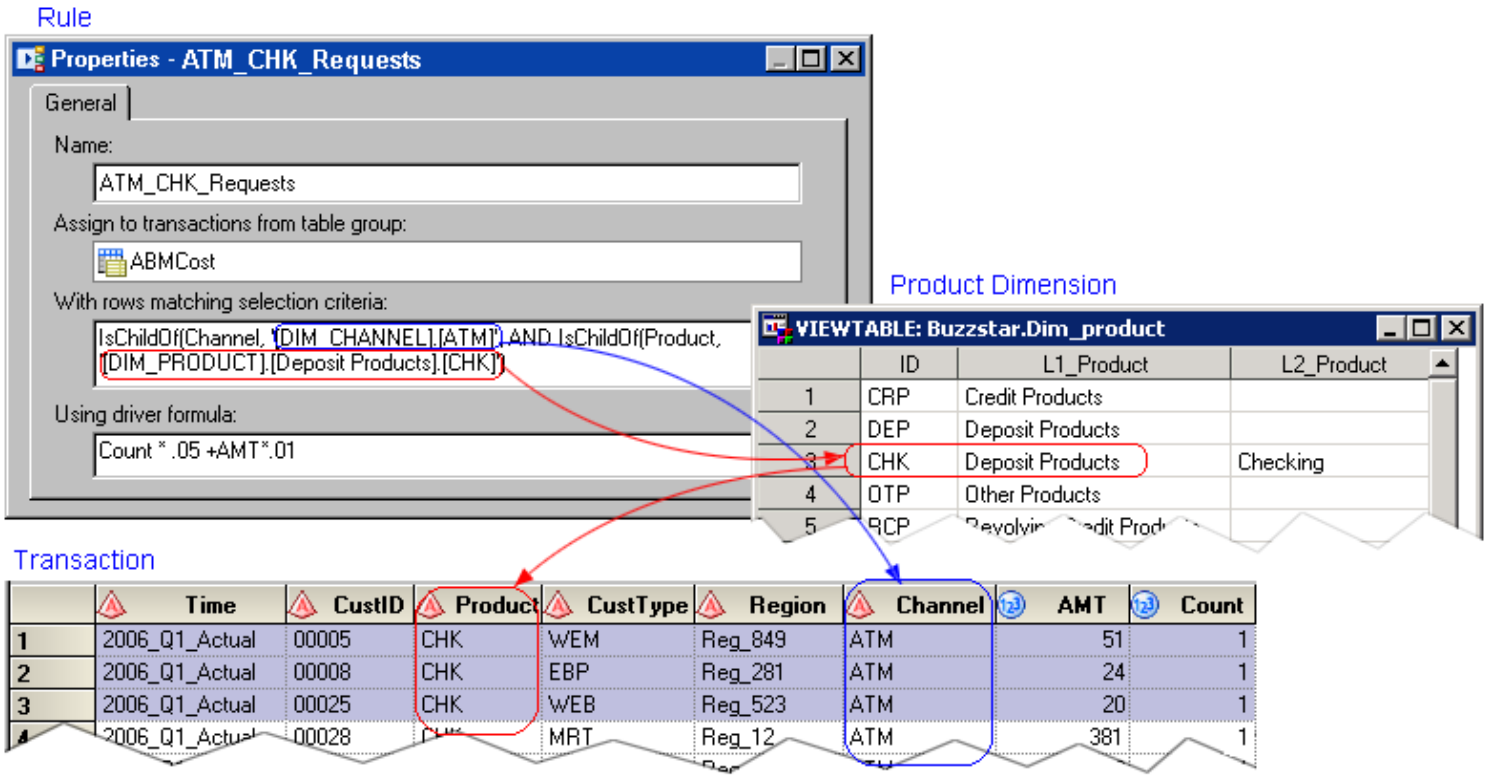
Related Topics:

- Import a rule definition table

Filter by the Value of One or More Dimensions

You can select all rows in a transaction table that have one or more columns whose value matches (or doesn't match) values in dimension tables.

In the following picture, the selection criterion **IsChildOf(Channel, '[DIM_CHANNEL].[ATM]') AND IsChildOf(Product, '[DIM_PRODUCT].[Deposit Products].[CHK]')** selects the first several rows in the transaction table:



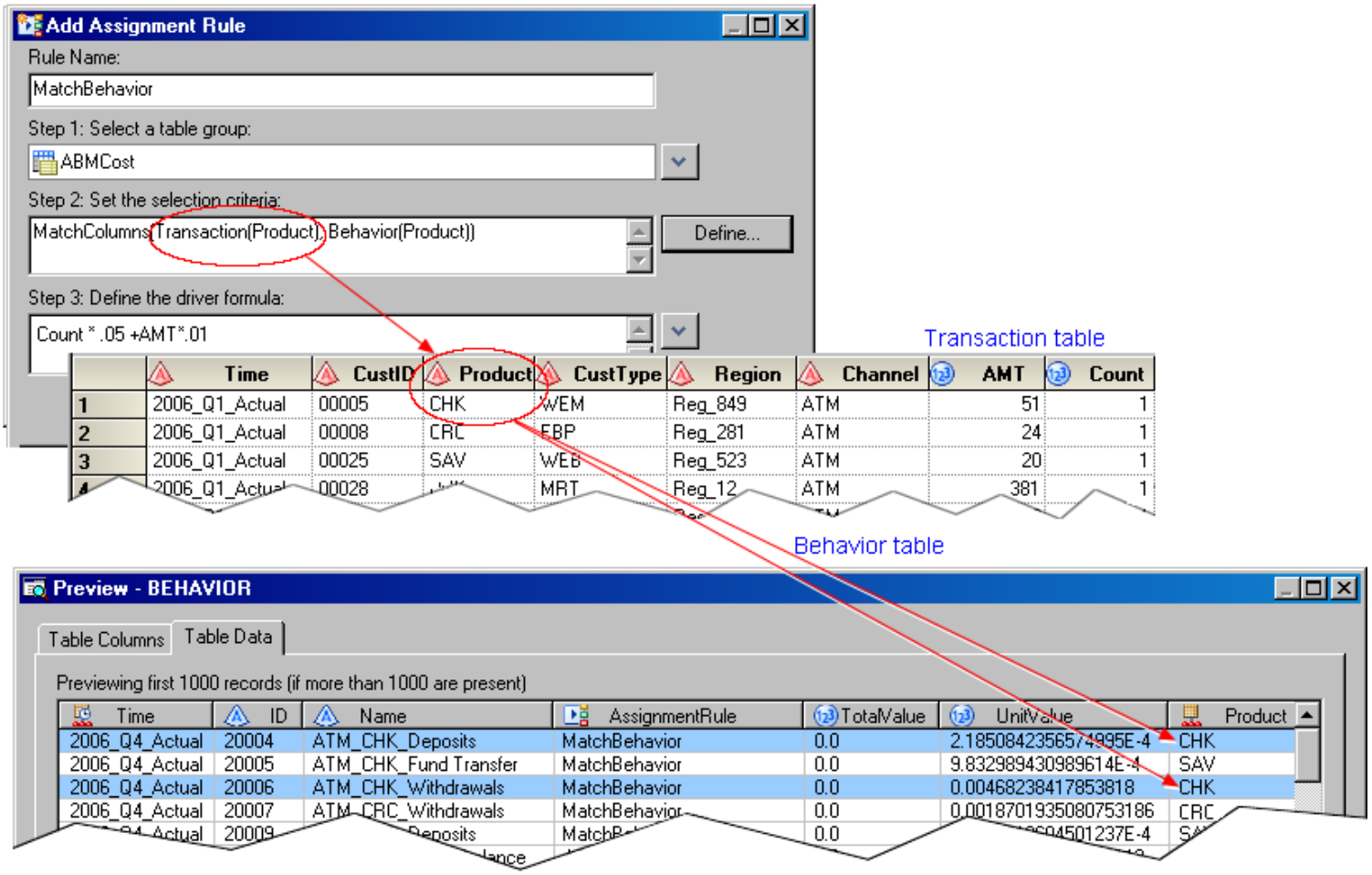
Notice that the **IsChildOf** property allows you to select from any point in a dimension hierarchy tree, and all children of that hierarchy are filtered as a "Yes" value.

Filter by Matching a Behavior Table Field and a Transaction Table Field

The **match behavior** operator enables you to do a field comparison between the behavior table and a transaction table. The selection criteria are met when the value of every matching column in the transaction table row equals the value of the corresponding matching column in the behavior table row.

For example, “Product” in a transaction table can have a corresponding matching column “Product” in the behavior table.

Both text and numeric column types are supported for field matching. You can combine multiple match behaviors with AND.

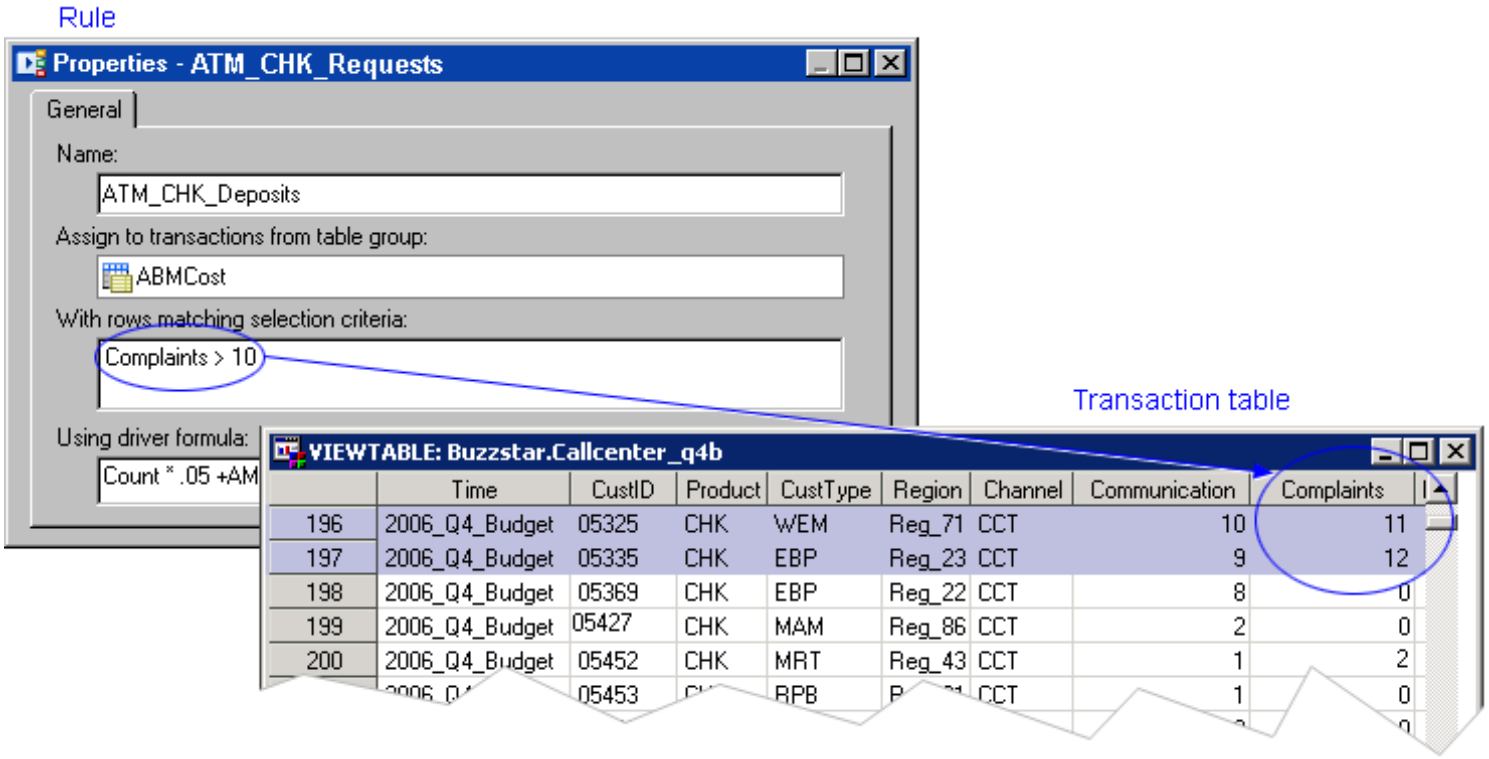


Filter by Numeric Value

Matching Values

You can select all rows in a transaction table that have one or more columns whose numeric value matches (or doesn't match) a specified value.

In the following picture, the selection criterion **Complaints > 10** selects the first two rows in the transaction table:



Matching Behavior

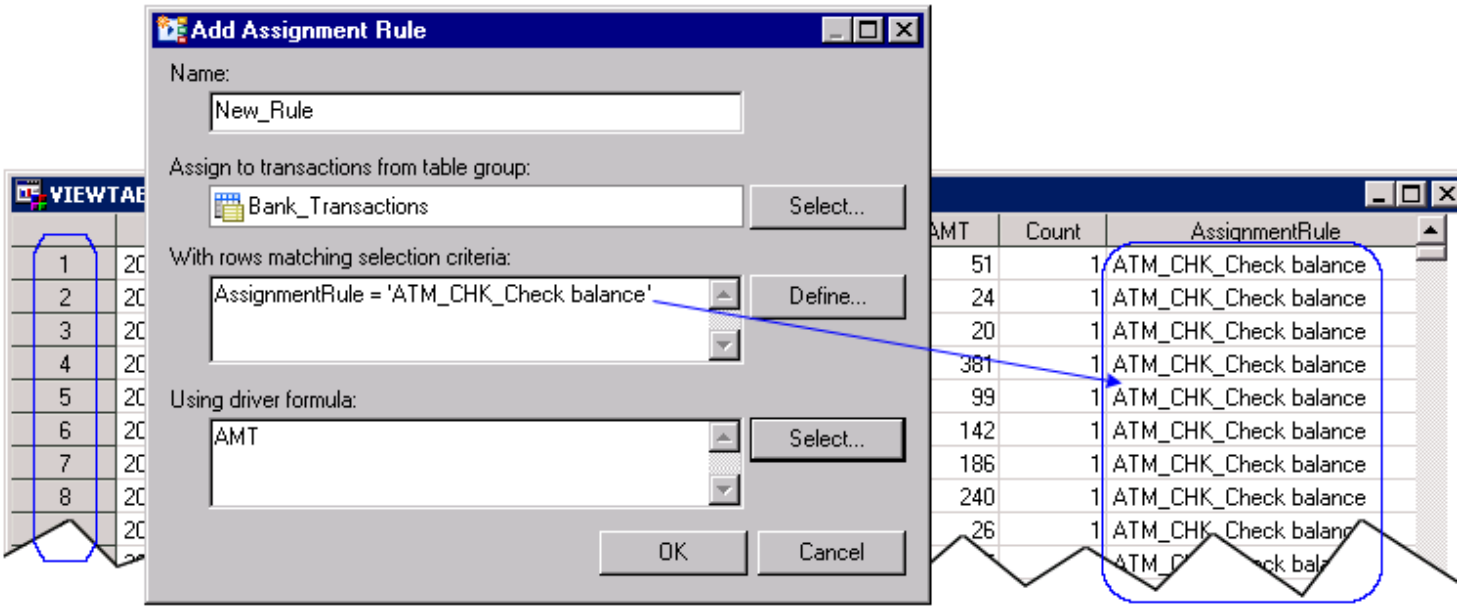
You can create a rule that matches fields between columns in the behavior table and the transaction tables. The **match Behavior** operator enables you to create one rule for one type of field matching for multiple behaviors, which makes modeling much easier.

Filter by Text Value

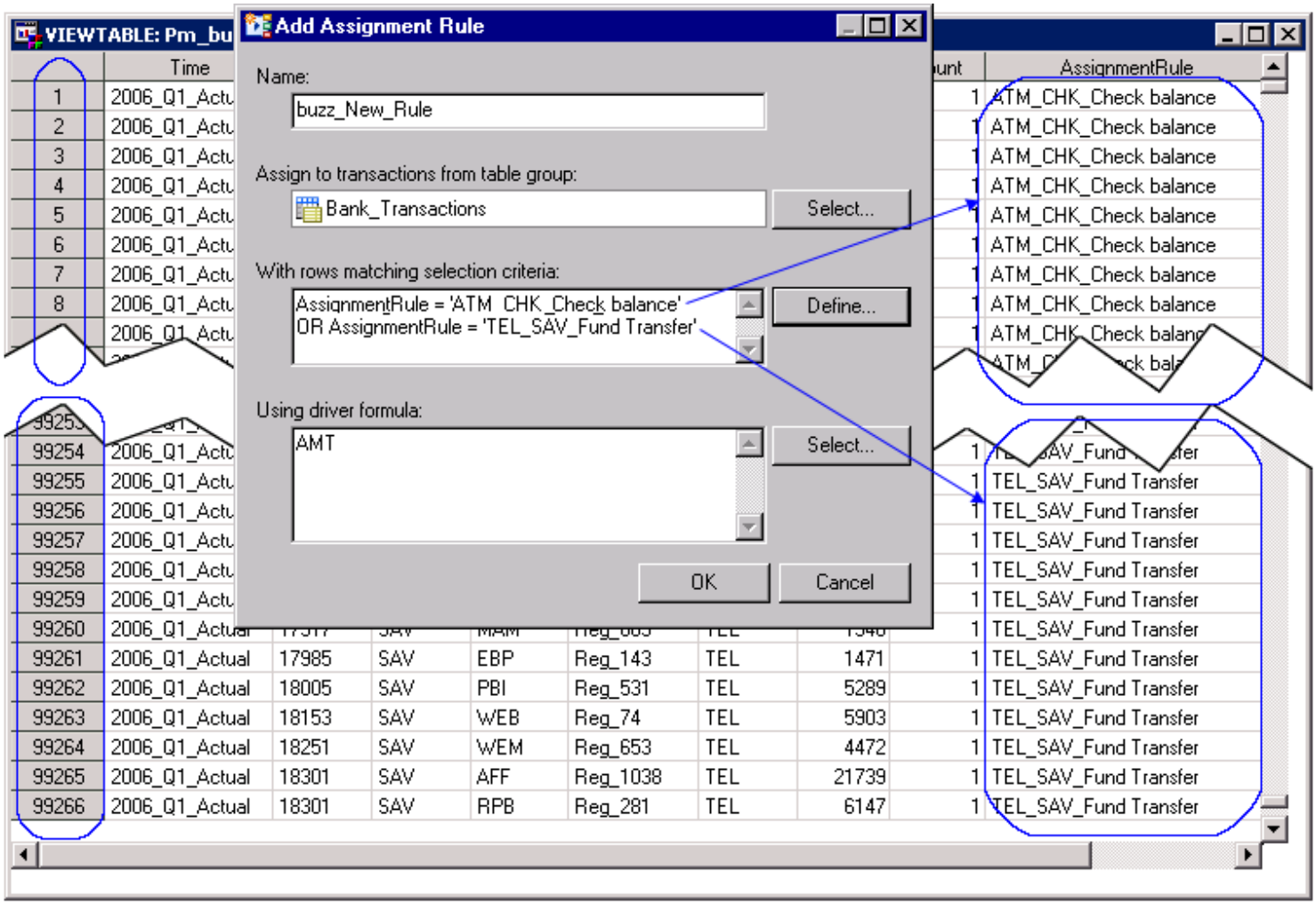
Matching Values

You can select all rows in a transaction table that have one or more columns whose text value matches (or doesn't match) a string.

In the following picture, the selection criterion **AssignmentRule='ATM_CHK_Check balance'** selects the first several rows in the transaction table:



In the following picture, the more complicated selection criterion **AssignmentRule='ATM_CHK_Check balance' OR AssignmentRule='TEL_SAV_Fund Transfer** selects rows at the beginning of the transaction table and rows at the end of the transaction table:



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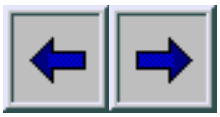

2. Set Up the Environment

- Identify input and output directories to SAS Profitability Management
- Import tables into the input directory
- Add users
- Configure the server

Identify Input and Output Directories to SAS Profitability Management Show me

This process needs to be performed for both the input and output directories.

1. Log on to the SAS Management Console.

   The main window opens.

2. Select the **Foundation** repository.

3. Expand **Data Library Manager**.

4. Right-click **SAS Libraries**.

5. Click **New Library**.

   The New Library Wizard opens.

6. Select the type of library to be created (for example, SAS Base Engine Library), and then click **Next**.

7. Name the library, and then click **Next**.

8. Type a libref name (the name you use to refer to the library).

   The libref name must be less than eight characters.

9. Specify **BASE** as the engine type.

10. Specify the library directory path, and then click **Next**.

11. Select **SASMain** as the server where the library is to be assigned.

12. Click **Next**, and then click **Finish**.

13. Select **View** ▸ **Refresh** to see the library listed.

Identify Input and Output Directories to SAS Profitability Management

This process needs to be performed for both the input and output directories.

1. Log on to the SAS Management Console.

   The main window opens.

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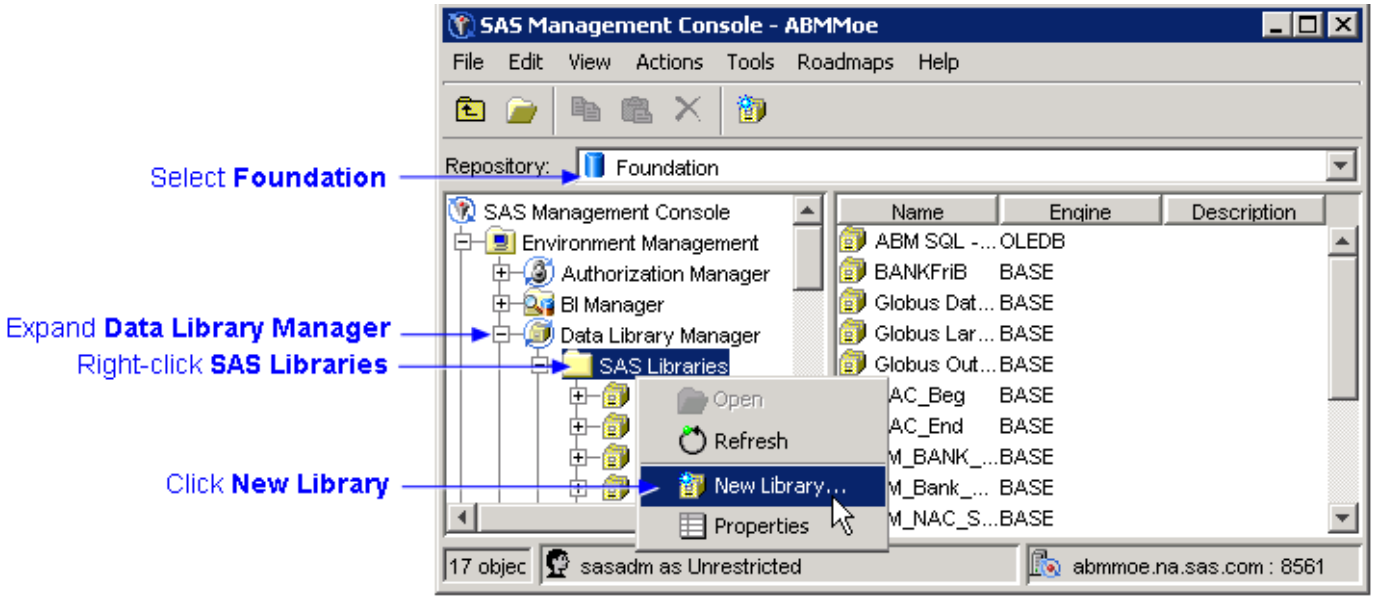
   The New Library Wizard opens.



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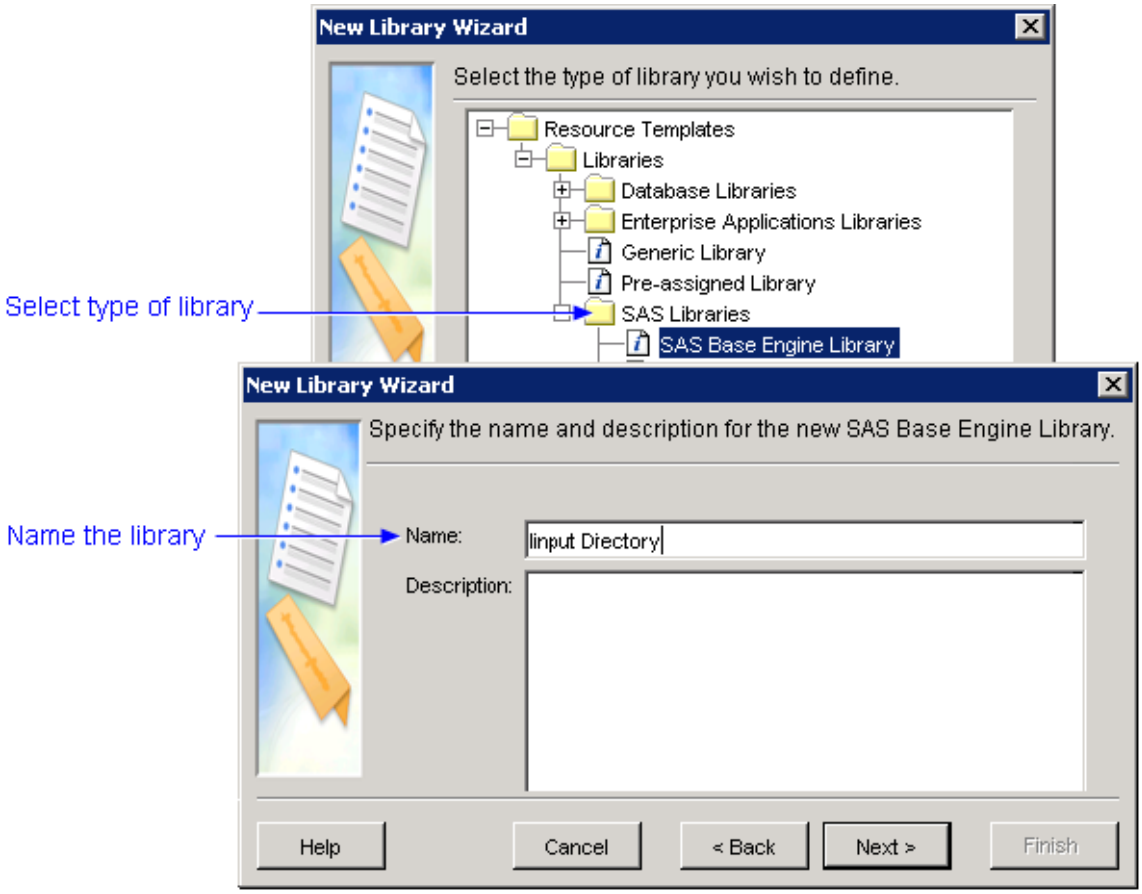

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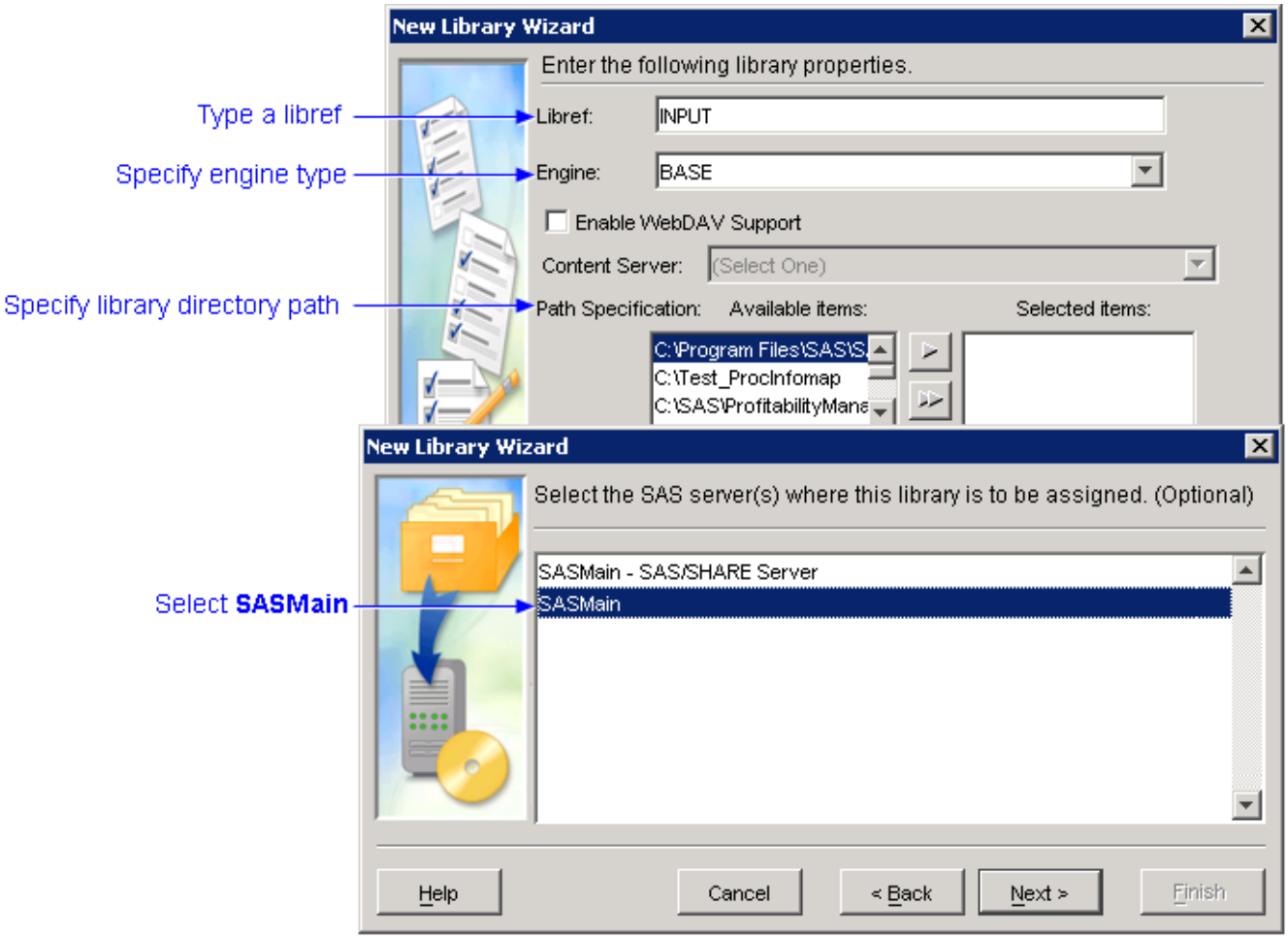
13. Select **View** ▸ **Refresh** to see the library listed.


Type a libref
Specify engine type
Specify library directory path
Select SASMain
New Library Wizard
Enter the following library properties.
Libref:
INPUT
Engine:
BASE
Enable WebDAV Support
Content Server:
(Select One)
Path Specification:
Available items:
Selected items:
C:\Program Files\SAS\S
C:\Test_ProcInfomap
C:\SAS\ProfitabilityMana
New Library Wizard
Select the SAS server(s) where this library is to be assigned. (Optional)
SASMain - SAS/SHARE Server
SASMain
Help
Cancel
< Back
Next >
Finish

Import Tables into the Input Directory Show me

After identifying the input directory to SAS, you must import the input tables into the input directory using SAS Management Console.

Note: Even if the input tables are already in the input directory, you must perform these steps to identify the tables to SAS. And, if you modify the input tables subsequently, you must **reimport** them so that the metadata that is maintained by SAS Management Console is updated.

To import tables, perform the following steps:

1. Log on to the SAS Management Console.

   The main window opens.

2. Select the **Foundation** repository.

3. Expand **Data Library Manager**.

4. Expand **SAS Libraries**.

5. Select the input library.

6. Select **Actions** ▸ **Import Tables**.

   The Connect to SAS window opens.

7. Select **SASMain** as the SAS server, and then log on to SASMain.

8. Verify that the input library is correct, and then click **Next**.

9. Select the tables to be imported, and then click **Next**.

   Note: The name of a SAS table cannot contain a blank space or exceed 32 characters.

10. View the summary of which tables are to be imported, and then click **Finish**.

Import Tables into the Input Directory

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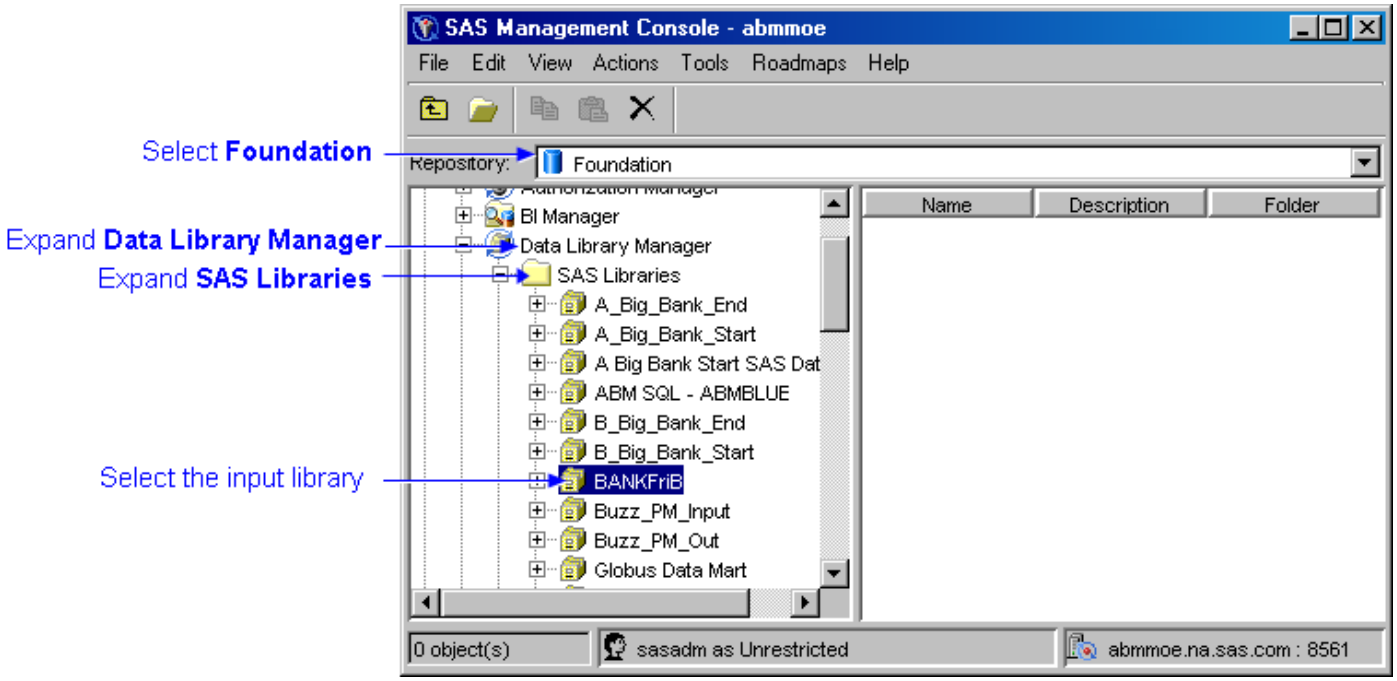
   The main window opens.

2. Select the **Foundation** repository.

3. Expand **Data Library Manager**.

4. Expand **SAS Libraries**.

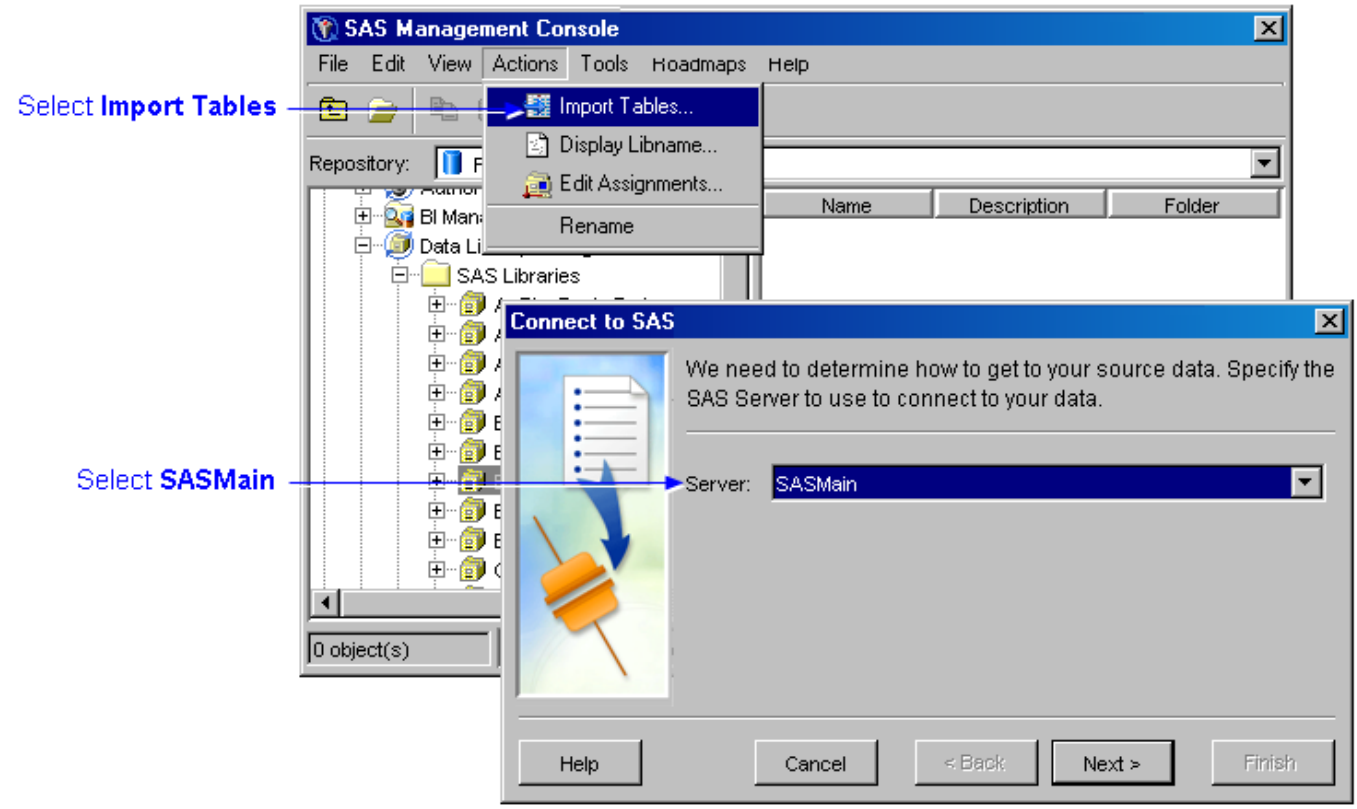
5. Select the input library.



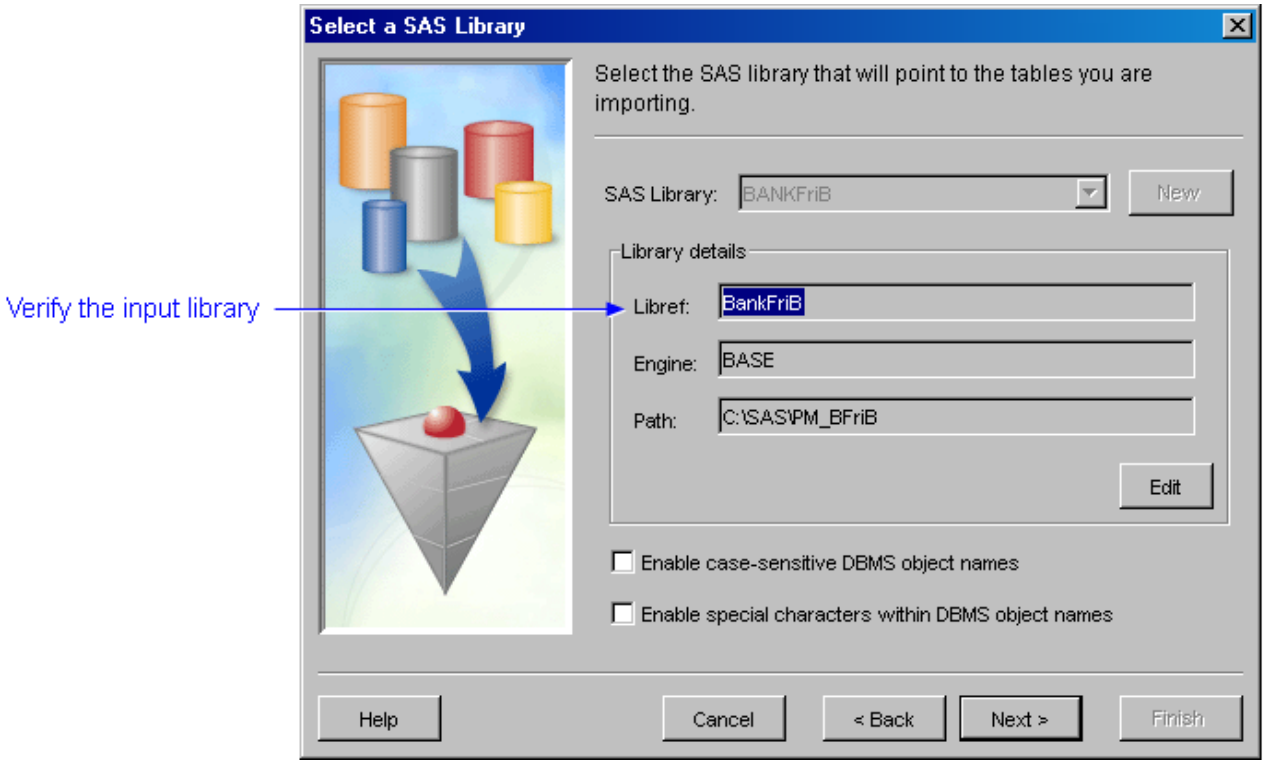
6. Select **Actions** ▸ **Import Tables**.

   The Connect to SAS window opens.

7. Select **SASMain** as the SAS server, and then log on to SASMain.



8. Verify that the input library is correct, and then click **Next**.



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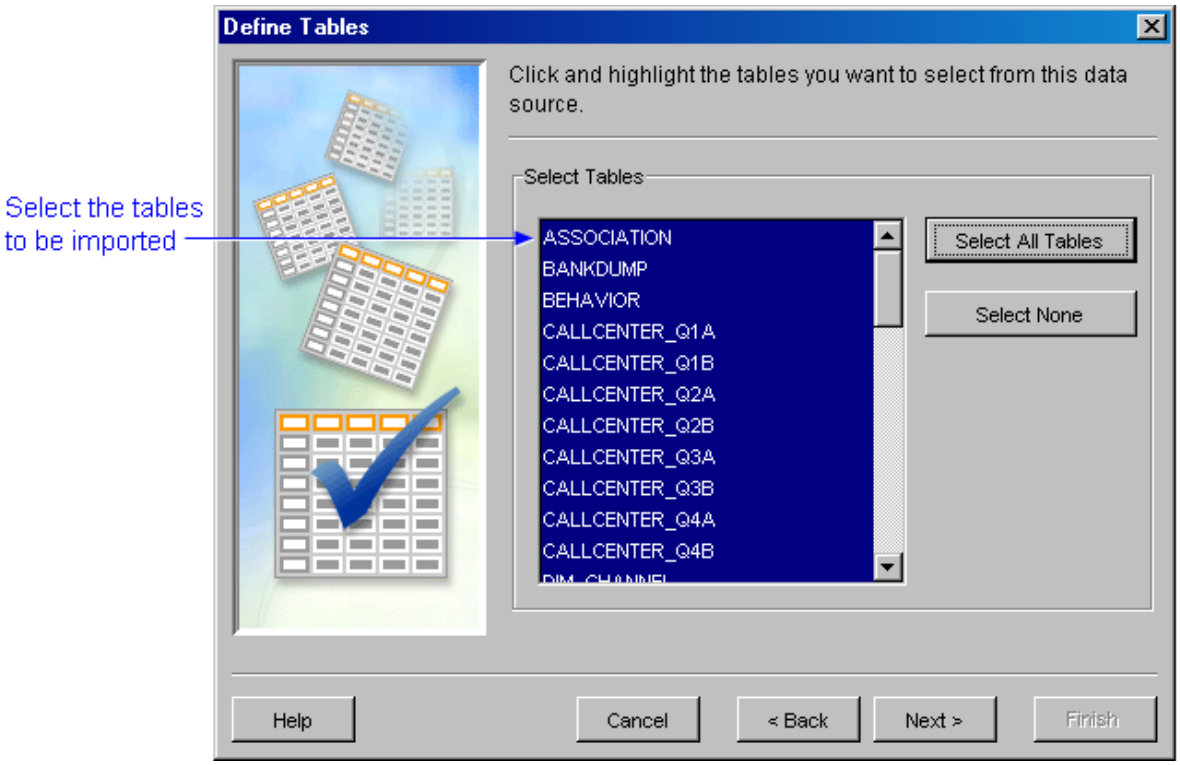
10. View the summary of which tables are to be imported, and then click **Finish**.


Define Tables
Select the tables to be imported
Click and highlight the tables you want to select from this data source.
Select Tables
ASSOCIATION
BANKDUMP
BEHAVIOR
CALLCENTER_Q1A
CALLCENTER_Q1B
CALLCENTER_Q2A
CALLCENTER_Q2B
CALLCENTER_Q3A
CALLCENTER_Q3B
CALLCENTER_Q4A
CALLCENTER_Q4B
Select All Tables
Select None
Help
Cancel
< Back
Next >
Finish

Rule Association Table

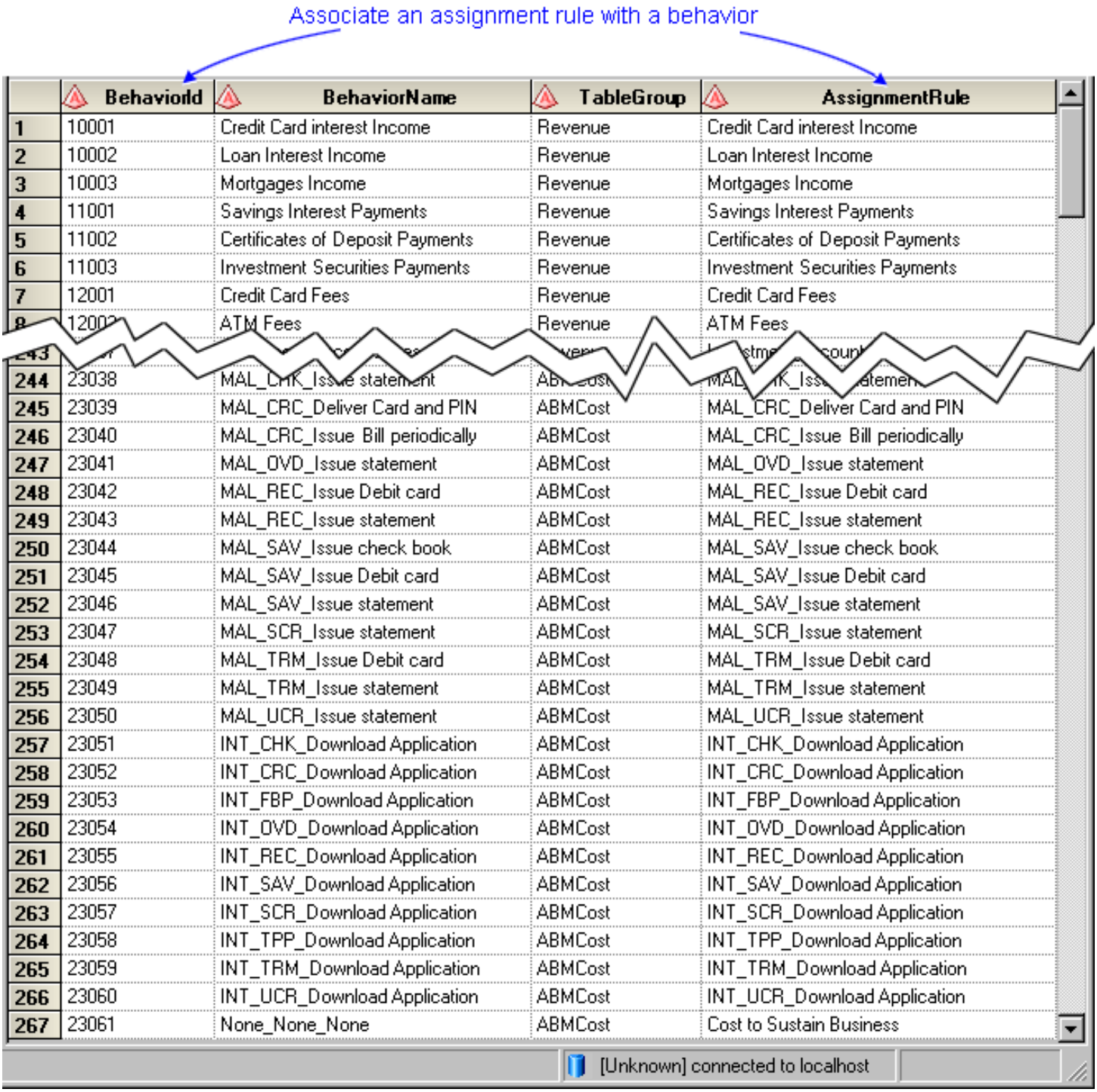
A rule association table associates rules with behaviors. Because an assignment rule selects rows from the transaction tables in a transaction table group, the ultimate effect of a rule association table is associating each behavior with a set of rows. A rule association table contains the following columns:

Name	Maximum Length	Description
BehaviorID	Char 32	The identifying value for the behavior
BehaviorName	Char 255	Optional field; the name of the behavior
Table Group	Char 64	Defined transaction table group for the rule that is applied
AssignmentRule	Char 64	The name for the assignment rule; must be unique within the model

In a rule association table, consider the following rules:

- The columns must appear in the order that is shown.
- The columns must have the length that is shown.
- The order of the columns is arbitrary.
- The column name is arbitrary.
- If any column is blank, it is an error and the row is not imported.
- If the assignment rule name is not found, it is an error and the row is not imported.
- If the table group name is not found, it is an error and the row is not imported.
- If an association already exists for a behavior, the new association in the import table replaces the existing association.

The following picture shows a sample rule association table that can be imported into a model.



	BehaviorId	BehaviorName	TableGroup	AssignmentRule
1	10001	Credit Card interest Income	Revenue	Credit Card interest Income
2	10002	Loan Interest Income	Revenue	Loan Interest Income
3	10003	Mortgages Income	Revenue	Mortgages Income
4	11001	Savings Interest Payments	Revenue	Savings Interest Payments
5	11002	Certificates of Deposit Payments	Revenue	Certificates of Deposit Payments
6	11003	Investment Securities Payments	Revenue	Investment Securities Payments
7	12001	Credit Card Fees	Revenue	Credit Card Fees
8	12002	ATM Fees	Revenue	ATM Fees
244	23038	MAL_CHK_Issue statement	ABMCost	MAL_CHK_Issue statement
245	23039	MAL_CRC_Deliver Card and PIN	ABMCost	MAL_CRC_Deliver Card and PIN
246	23040	MAL_CRC_Issue Bill periodically	ABMCost	MAL_CRC_Issue Bill periodically
247	23041	MAL_OVD_Issue statement	ABMCost	MAL_OVD_Issue statement
248	23042	MAL_REC_Issue Debit card	ABMCost	MAL_REC_Issue Debit card
249	23043	MAL_REC_Issue statement	ABMCost	MAL_REC_Issue statement
250	23044	MAL_SAV_Issue check book	ABMCost	MAL_SAV_Issue check book
251	23045	MAL_SAV_Issue Debit card	ABMCost	MAL_SAV_Issue Debit card
252	23046	MAL_SAV_Issue statement	ABMCost	MAL_SAV_Issue statement
253	23047	MAL_SCR_Issue statement	ABMCost	MAL_SCR_Issue statement
254	23048	MAL_TRM_Issue Debit card	ABMCost	MAL_TRM_Issue Debit card
255	23049	MAL_TRM_Issue statement	ABMCost	MAL_TRM_Issue statement
256	23050	MAL_UCR_Issue statement	ABMCost	MAL_UCR_Issue statement
257	23051	INT_CHK_Download Application	ABMCost	INT_CHK_Download Application
258	23052	INT_CRC_Download Application	ABMCost	INT_CRC_Download Application
259	23053	INT_FBP_Download Application	ABMCost	INT_FBP_Download Application
260	23054	INT_OVD_Download Application	ABMCost	INT_OVD_Download Application
261	23055	INT_REC_Download Application	ABMCost	INT_REC_Download Application
262	23056	INT_SAV_Download Application	ABMCost	INT_SAV_Download Application
263	23057	INT_SCR_Download Application	ABMCost	INT_SCR_Download Application
264	23058	INT_TPP_Download Application	ABMCost	INT_TPP_Download Application
265	23059	INT_TRM_Download Application	ABMCost	INT_TRM_Download Application
266	23060	INT_UCR_Download Application	ABMCost	INT_UCR_Download Application
267	23061	None_None_None	ABMCost	Cost to Sustain Business

[Unknown] connected to localhost

Related Topics:

- Import a rule definition table
- Import a rule association table
- Rule definition table

Rule Definition Table

An assignment rule associates rows in a group of transaction tables with behaviors. An assignment rule:

- is associated with one or more rows in a behavior table (the associations can be done interactively using the SAS Profitability Management GUI, or can be imported from a file that specifies the associations).
- specifies which rows in a transaction table group to include in the calculation.
- specifies what quantity to include in the calculation.

A rule definition table contains the following columns:

Name	Maximum Length	Description
Table Group Name	Char 64	The name of the transaction table group in the model in which the assignment rule will be applied
Name	Char 64	The name for the assignment rule; this must be unique within the model
Selection Criteria	Char 1024	The formula defining the filter logic
Driver Formula	Char 1024	The formula defining the calculated quantity

In a rule definition table, consider the following rules:

- The columns must have the length that is shown.
- The order of the columns is arbitrary.
- The column name is arbitrary.
- If any column is blank, it is an error and the row is not imported.
- If an assignment rule with the name already exists, it is an error and the row is not imported.
- If the table group name is not found, it is an error and the row is not imported.

Related Topics:

- Import a rule definition table
- Import a rule association table
- Rule association table

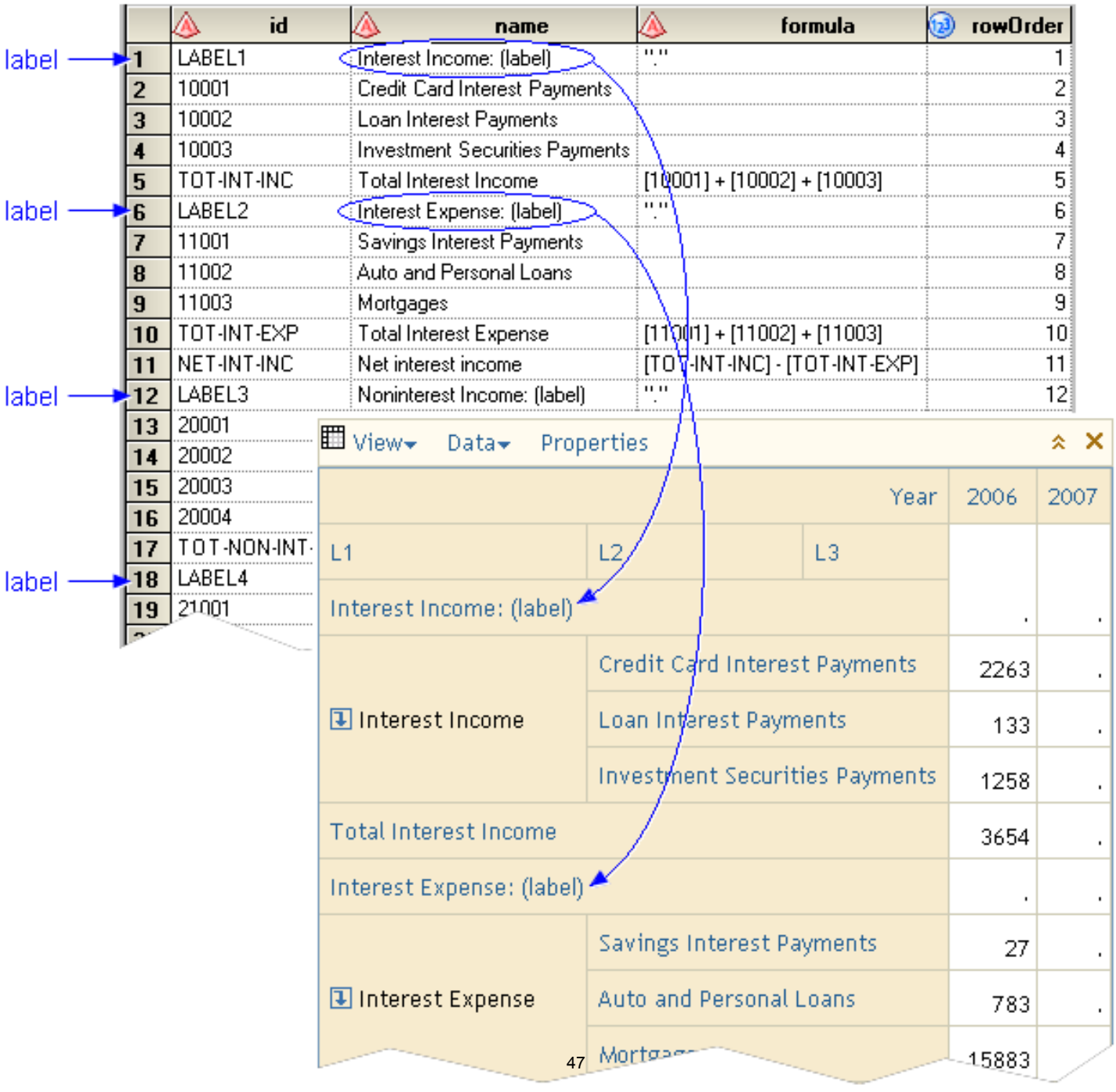
Index of Terms

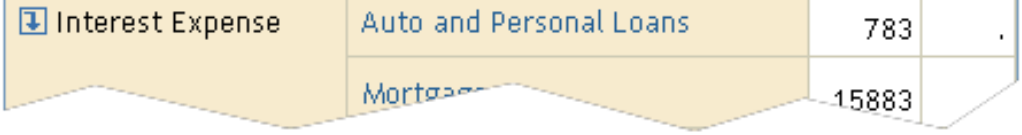
Add Labels to a Report

You can add labels to your reports. For each label, add a row that contains the following data to the report layout table:

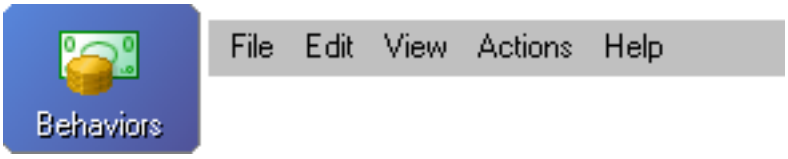
1. The **id** field, which is a string. The string is arbitrary but must be unique and cannot occur elsewhere in the ID field of either the report layout table or the report hierarchy table.
2. The **name** field, which is a string that is the label. The maximum length is 32 characters.
3. The **formula** field, which contains **"."**

The following picture shows a report layout table with labels and the resulting report:




Interest Expense
Auto and Personal Loans
783
15883

Menus for Behaviors



File

- **Organize Models** - Displays all available models on this server
- **Create a New Association** - Associates an assignment rule with a behavior
- **Properties** - Displays the properties for the selected items
- **Exit** - Closes the application

Edit

- **Clear Association** - Removes the association between an assignment rule and a behavior
- **Clear all associations** - Clears all assignment rule associations
- **Server Configuration** - Displays the server storage location and repository information for SAS Profitability Management, for all models on the server

View

- **Transactions** - Opens the **Transactions** workspace
- **Rules** - Opens the **Rules** workspace
- **Behaviors** - Opens the **Behaviors** workspace
- **Reports** - Opens the **Reports** workspace
- **Audit Log** - Displays the audit log
- **Workspace List** - Displays or suppresses the workspace list in the current workspace

- **Task List** - Displays or suppresses the task list in the current workspace

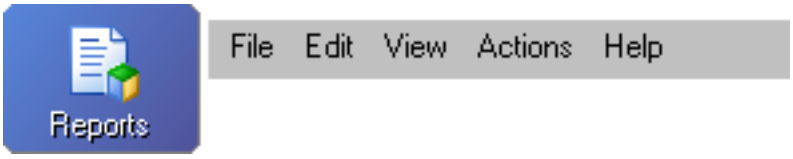
Actions

- **Calculate Model** - Calculates a model by taking the transaction tables in the input directory, applying rules in the model to make calculations, and storing the calculated results in columns that are appended to the transaction tables in the output directory
- **Import Associations** - Imports a file that associates assignment rules with behaviors
- **Export Associations** - Exports a file that associates assignment rules with behaviors
- **Refresh** - Refreshes the screen to display the current status of all table source data; when you change the underlying SAS tables, you should always refresh the model before you continue editing the content in SAS Profitability Management

Help

- **Contents** - Opens the Help file
- **PM on the Web** - Links to the SAS Profitability Management Web site
- **SAS on the Web** - Links to http://www.sas.com/
- **About** - Provides version information for the application

Menus for Reports



Summary Reports Tab

File

- **Organize Models** - Displays all available models on this server
- **New Summary Report Definition** - Creates a new summary report
- **Properties** - Displays the properties for the selected items
- **Exit** - Closes the application

Edit

- **Remove** - Removes the selected item from the SAS Profitability Management model
- **Server Configuration** - Displays the server storage location and repository information for SAS Profitability Management, for all models on the server

View

- **Transactions** - Opens the **Transactions** workspace
- **Rules** - Opens the **Rules** workspace
- **Behaviors** - Opens the **Behaviors** workspace
- **Reports** - Opens the **Reports** workspace
- **Audit Log** - Displays the audit log
- **Workspace List** - Displays or suppresses the workspace list in the current workspace

- **Task List** - Displays or suppresses the task list in the current workspace

Actions

- **Calculate Model** - Calculates a model by taking the transaction tables in the input directory, applying rules in the model to make calculations, and storing the calculated results in columns that are appended to the transaction tables in the output directory
- **Generate Cube** - Generates a cube for a SAS Profitability Management model
- **Refresh** - Refreshes the screen to display the current status of all table source data; when you change the underlying SAS tables, you should always refresh the model before you continue editing the content in SAS Profitability Management

Help

- **Contents** - Opens the Help file
- **PM on the Web** - Links to the SAS Profitability Management Web site
- **SAS on the Web** - Links to http://www.sas.com/
- **About** - Provides version information for the application

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Detail Reports Tab

File

- **Organize Models** - Displays all available models on this server
- **New Detail Report Definition** - Creates a new detail report
- **Properties** - Displays the properties for the selected items
- **Exit** - Closes the application

Edit

- **Remove** - Removes the selected item from the SAS Profitability Management model
- **Server Configuration** - Displays the server storage location and repository information for SAS Profitability Management, for all models on the server

View

- **Transactions** - Opens the **Transactions** workspace
- **Rules** - Opens the **Rules** workspace
- **Behaviors** - Opens the **Behaviors** workspace
- **Reports** - Opens the **Reports** workspace
- **Audit Log** - Displays the audit log
- **Workspace List** - Displays or suppresses the workspace list in the current workspace
- **Task List** - Displays or suppresses the task list in the current workspace

Actions

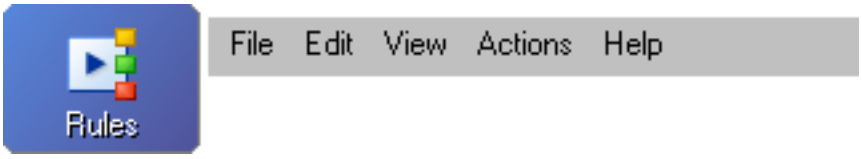
- **Calculate Model** - Calculates a model by taking the transaction tables in the input directory, applying rules in the model to make calculations, and storing the calculated results in columns that are appended to the transaction tables in the output directory
- **Refresh** - Refreshes the screen to display the current status of all table source data; when you change the underlying SAS tables, you should always refresh the model before you continue editing the content in SAS Profitability Management

Help

- **Help Contents** - Opens the Help file
- **PM on the Web** - Links to the SAS Profitability Management Web site
- **SAS on the Web** - Links to http://www.sas.com/

- **About** - Provides version information for the application

Menus for Rules



File

- **Organize Models** - Displays all available models on this server
- **Add Assignment Rule** - Adds an assignment rule to the current model
- **Properties** - Displays the properties for the selected items
- **Exit** - Closes the application

Edit

- **Copy Assignment Rule** - Makes a copy, with a new name, of an assignment rule
- **Remove** - Removes the selected item from the SAS Profitability Management model
- **Delete all assignment rules** - Deletes all assignment rules
- **Server Configuration** - Displays the server storage location and repository information for SAS Profitability Management, for all models on the server

View

- **Transactions** - Opens the **Transactions** workspace
- **Rules** - Opens the **Rules** workspace
- **Behaviors** - Opens the **Behaviors** workspace
- **Reports** - Opens the **Reports** workspace
- **Audit Log** - Displays the audit log

- **Workspace List** - Displays or suppresses the workspace list in the current workspace
- **Task List** - Displays or suppresses the task list in the current workspace

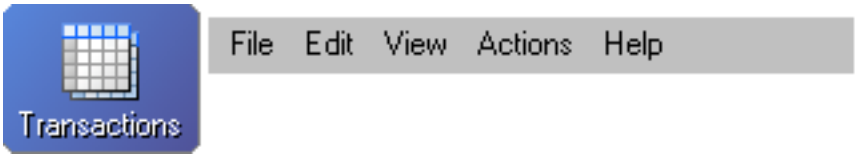
Actions

- **Calculate Model** - Calculates a model by taking the transaction tables in the input directory, applying rules in the model to make calculations, and storing the calculated results in columns that are appended to the transaction tables in the output directory
- **Import Assignment Rules** - Imports a file defining rules that associate rows in a group of transaction tables with a behavior
- **Export Assignment Rules** - Exports a file defining rules that associate rows in a group of transaction tables with a behavior
- **Refresh** - Refreshes the screen to display the current status of all table source data; when you change the underlying SAS tables, you should always refresh the model before you continue editing the content in SAS Profitability Management

Help

- **Contents** - Opens the Help file
- **PM on the Web** - Links to the SAS Profitability Management Web site
- **SAS on the Web** - Links to http://www.sas.com/
- **About** - Provides version information for the application

Menus for Transactions



File

- **Organize Models** - Displays all available models on this server
- **Add Table Group** - Adds a table group to the current model
- **Add Transaction Tables** - Adds a transaction table to the selected table group
- **Properties** - Displays the properties for the selected items
- **Exit** - Closes the application

Edit

- **Remove** - Removes the selected item from the SAS Profitability Management model
- **Analysis Settings** - Defines the settings for time periods and measures format
- **Server Configuration** - Displays the server storage location and repository information for SAS Profitability Management, for all models on the server

View

- **Transactions** - Opens the **Transactions** workspace
- **Rules** - Opens the **Rules** workspace
- **Behaviors** - Opens the **Behaviors** workspace
- **Reports** - Opens the **Reports** workspace
- **Audit Log** - Displays the audit log
- **Workspace List** - Displays or suppresses the workspace list in the current

workspace

- **Task List** - Displays or suppresses the task list in the current workspace

Actions

- **Calculate Model** - Calculates a model by taking the transaction tables in the input directory, applying rules in the model to make calculations, and storing the calculated results in columns that are appended to the transaction tables in the output directory

- **Refresh** - Refreshes the screen to display the current status of all table source data; when you change the underlying SAS tables, you should always refresh the model before you continue editing the content in SAS Profitability Management

- **Preview Data** - Previews the first 1000 rows of data in a table

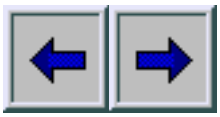
Help

- **Help Contents** - Opens the Help file

- **PM on the Web** - Links to the SAS Profitability Management Web site

- **SAS on the Web** - Links to http://www.sas.com/

- **About** - Provides version information for the application



3. Create a New Profitability Model Show me

A profitability model contains the following tables:

- Behavior
- Period Dimensions
- Transaction (organized into table groups)
- Custom Dimensions
- Report Hierarchy
- Report Layout

To create a new profitability model, perform the following steps:

1. Select **File ▸ Organize Models**.

   The Organize Models window opens.

2. Click **New Model**.

   The Add Model wizard opens.

3. On the Information page, name the model.

4. Click **Select** to select the time dimension for the model.

   The Select Table window opens. Select a time dimension, and then click **OK**.

5. To preview the data in the time dimension table, click **Preview**.

   The Preview window opens and the time dimension table is displayed.

6. Click **OK**, and then click **Next**.

7. On the Analysis View and Output Library page, name the analysis view.

   The analysis view name is used as the name of the database view that is

created to join the transaction output tables into a single virtual fact table that the OLAP cube is built from.

8. Click **Select** to select the analysis view library.

   The Select Library window opens. Select a library, and then click **OK**.

9. Click **Select** to select the output directory for analysis results.

   The Select Library window opens. Select a library, and then click **OK**.

10. Click **Next**.

11. On the Data Location page, verify the storage locations for external data, and then click **Next**.

    Note: The storage locations were established during installation. You do not have to change them now.

12. On the Behavior table page, select a behavior table.

13. To preview the data in the behavior table, click **Preview**.

    The Preview window opens and the behavior table is displayed.

14. Identify each of its required fields, and then click **Next**.

15. On the Dimension Tables page, select the dimension tables.

    Note: It is not necessary to add the time dimension because it has already been identified in a previous step.

16. To preview a dimension table, select one from either list in the Add Dimension Tables window or the list on the Dimension Tables page, and then click **Preview**.

    The Preview window opens and the dimension table is displayed.

17. Click **Next**.

18. On the Report Tables page, select the report hierarchy.

19. Select the report layout.

20. To preview the data in either the report hierarchy table or the report layout table, click **Preview**.

    The Preview window opens and the report hierarchy table is displayed.

21. Click **Finish**.

    The new profitability model is added to the Organize Models window.

22. Click **Close**.

Related Topics:

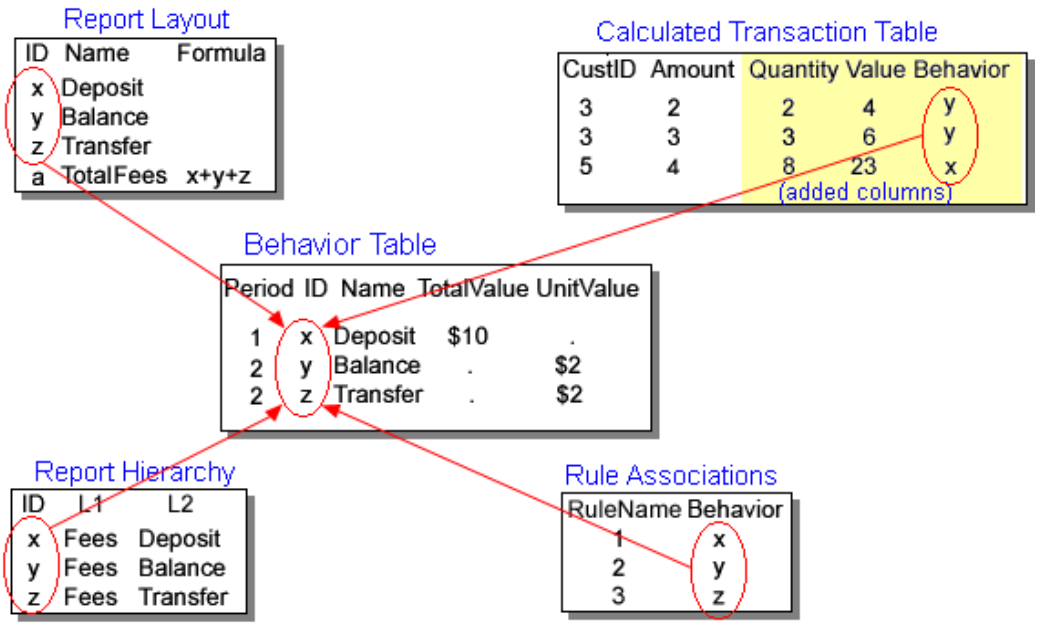
- Edit a model

Profitability Model

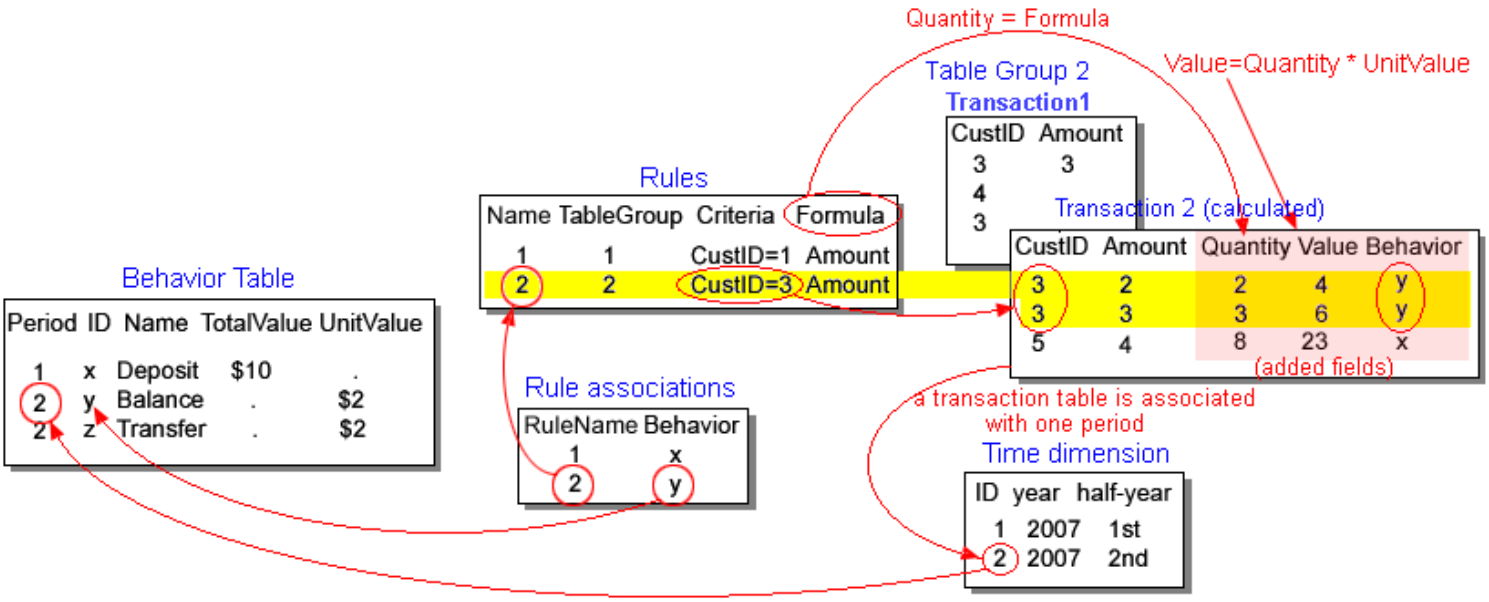
A profitability model contains the following tables:

- Behavior
- Report Hierarchy
- Report Layout
- Period Dimensions
- Custom Dimensions
- Transaction (organized into table groups)

The following picture shows the relationships between the behavior table and the other tables in a profitability model.



The following pictures shows additional relationships among the tables that make up a profitability model:


Quantity = Formula
Value=Quantity * UnitValue
Table Group 2
Transaction1
CustID Amount
3 3
4
3
Rules
Name TableGroup Criteria Formula
1 1 CustID=1 Amount
2 2 CustID=3 Amount
Transaction 2 (calculated)
CustID Amount Quantity Value Behavior
3 2 2 4 y
3 3 3 6 y
5 4 8 23 x
(added fields)
Behavior Table
Period ID Name TotalValue UnitValue
1 x Deposit $10 .
2 y Balance . $2
2 z Transfer . $2
Rule associations
RuleName Behavior
1 x
2 y
a transaction table is associated
with one period
Time dimension
ID year half-year
1 2007 1st
2 2007 2nd

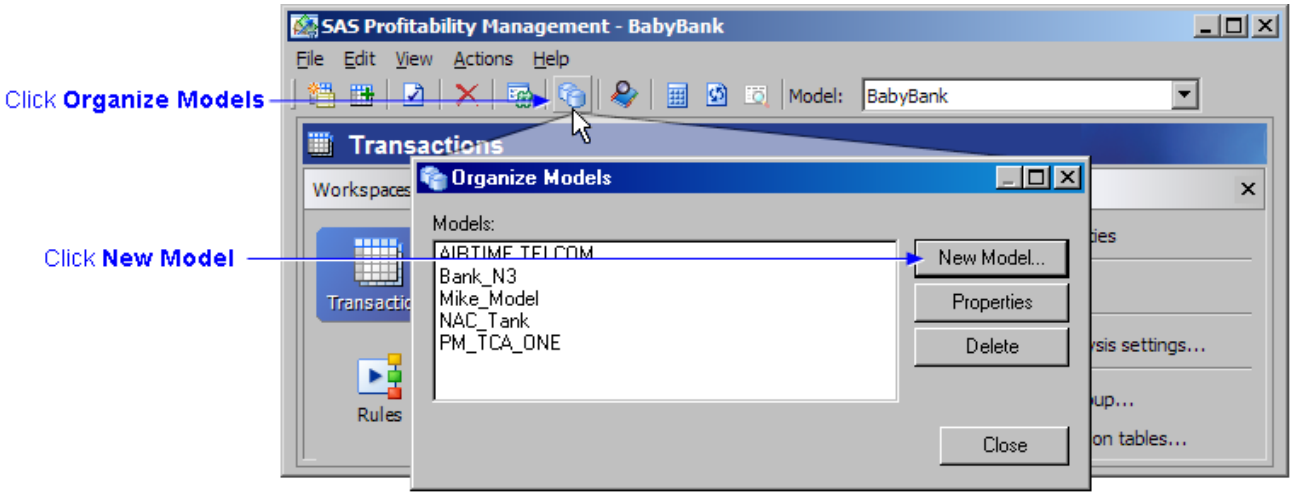
Create a New Profitability Model

1. Select **File** ▸ **Organize Models**.

   The Organize Models window opens.

2. Click **New Model**.

   The Add Model wizard opens.



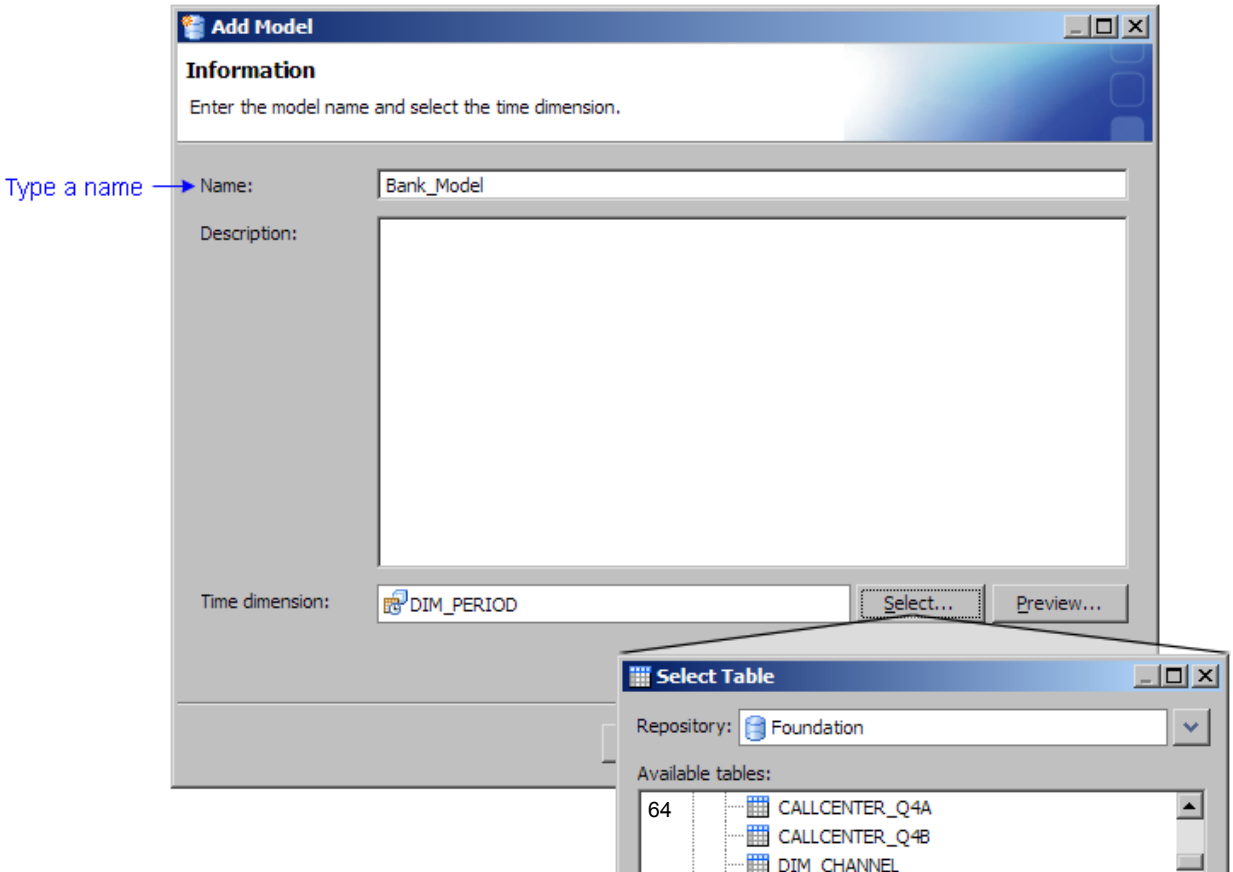
3. On the Information page, name the model.
4. Click **Select** to select the time dimension for the model.

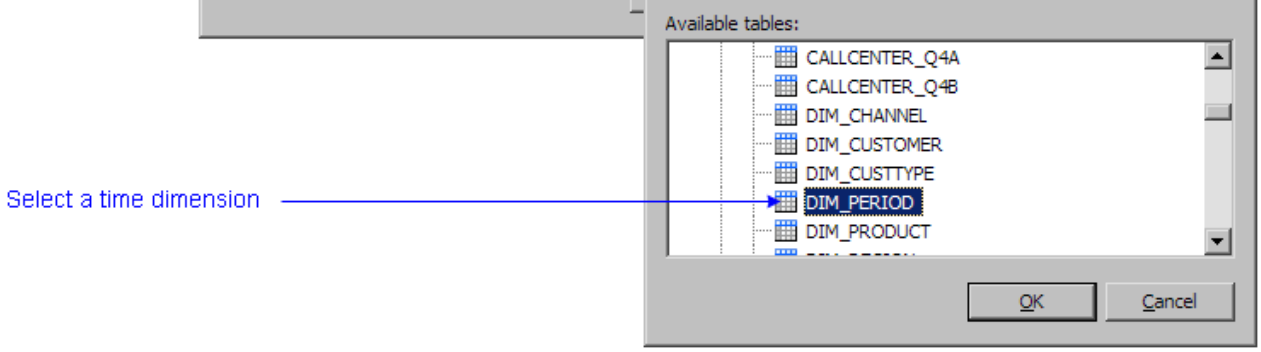
   The Select Table window opens. Select a time dimension, and then click **OK**.

5. To preview the data in the time dimension table, click **Preview**.

   The Preview window opens and the time dimension table is displayed.

6. Click **OK**, and then click **Next**.





7. On the Analysis View and Output Library page, name the analysis view.

   The analysis view name is used as the name of the database view that is created to join the transaction output tables into a single virtual fact table that the OLAP cube is built from.

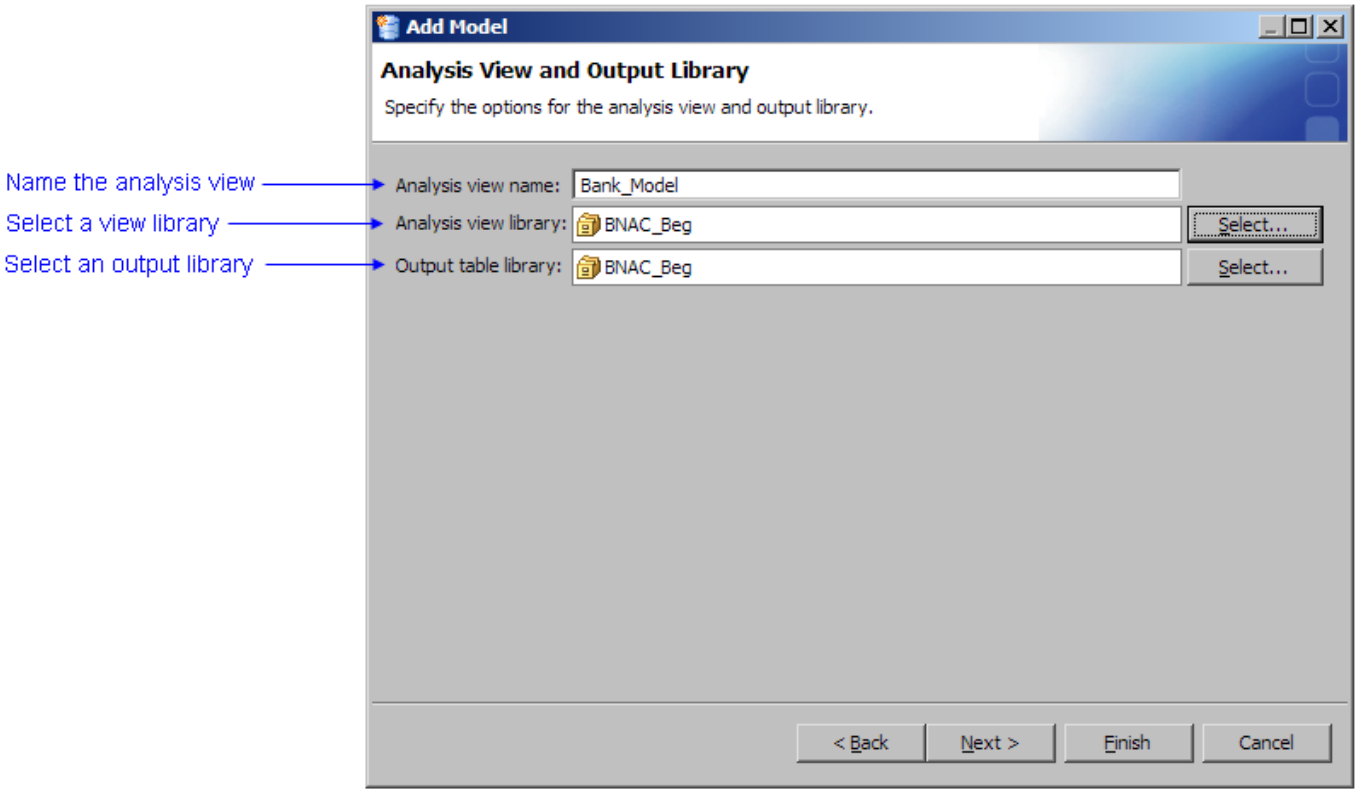
8. Click **Select** to select the analysis view library.

   The Select Library window opens. Select a library, and then click **OK**.

9. Click **Select** to select the output directory for analysis results.

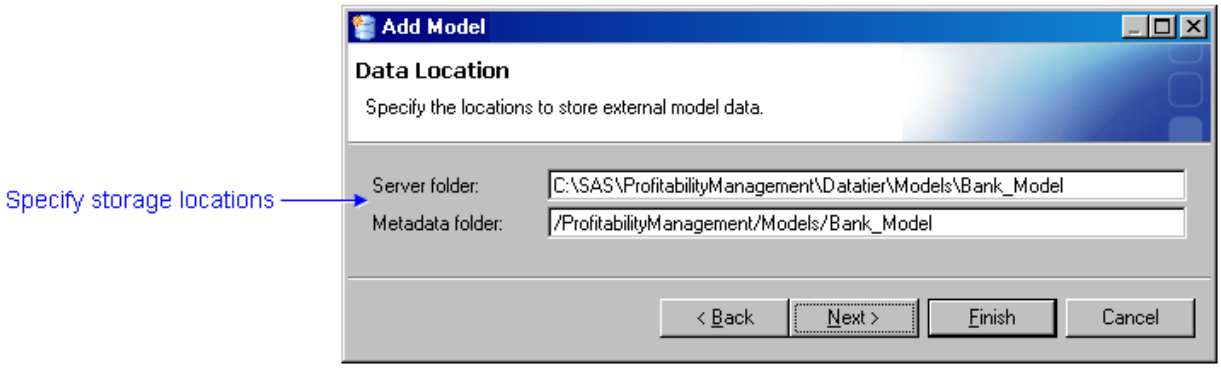
   The Select Library window opens. Select a library, and then click **OK**.

10. Click **Next**.



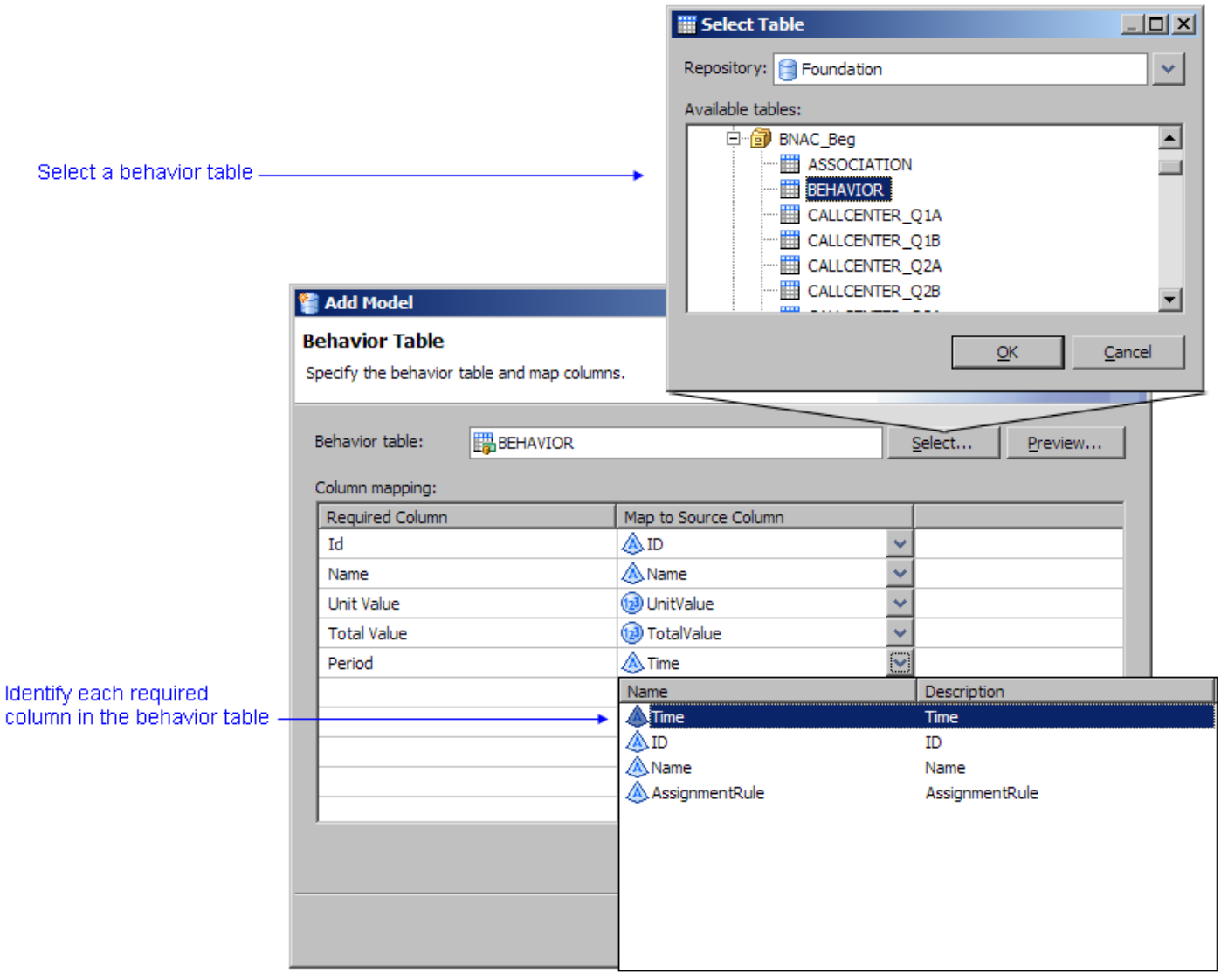
11. On the Data Location page, verify the storage locations for external data, and then click **Next**.

    Note: The storage locations were established during installation. You do not have to change them now.



12. On the Behavior table page, select a behavior table.
13. To preview the data in the behavior table, click **Preview**.

    The Preview window opens and the behavior table is displayed.
14. Identify each of its required fields, and then click **Next**.

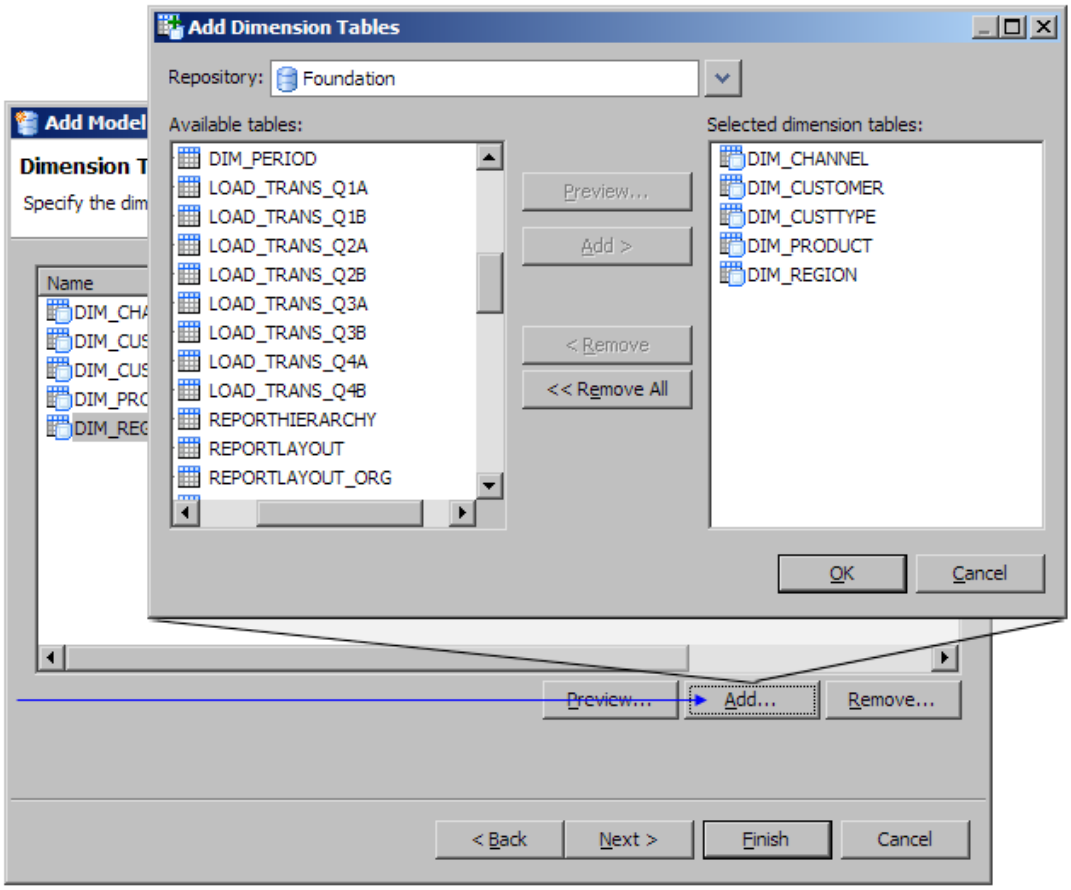


15. On the Dimension Tables page, select the dimension tables.

    Note: It is not necessary to add the time dimension because it has already been identified in a previous step.
16. To preview a dimension table, select one from either list in the Add Dimension Tables window or the list on the Dimension Tables page, and then click **Preview**.

The Preview window opens.

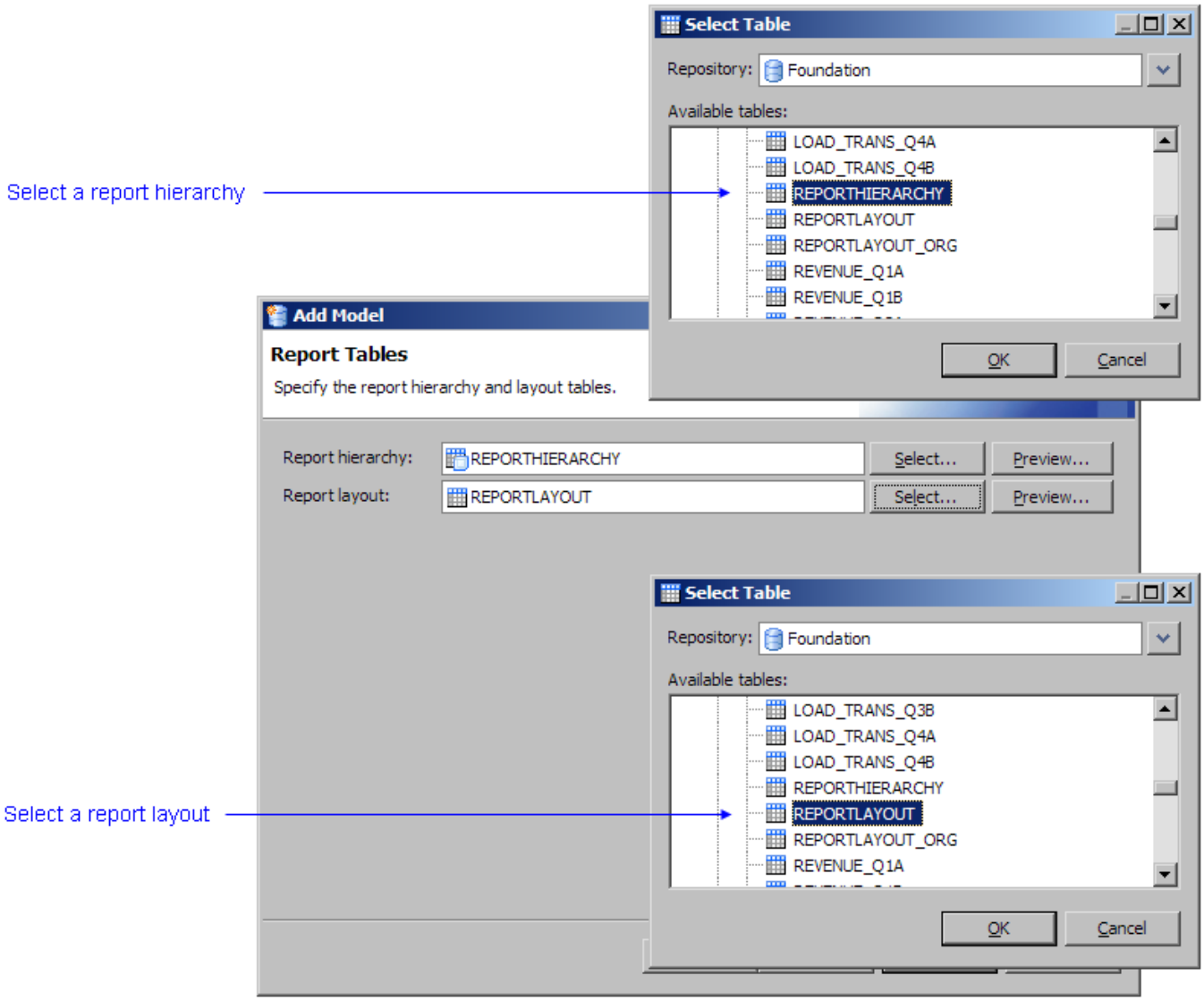
17. Click **Next**.



18. On the Report Tables page, select the report hierarchy.
19. Select the report layout.
20. To preview the data in either the report hierarchy table or the report layout table, click **Preview**.

    The Preview window opens and the report hierarchy table is displayed.

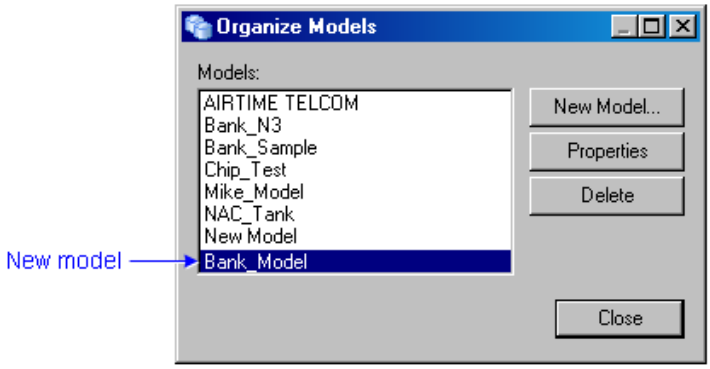
21. Click **Finish**.



The new profitability model is added to the Organize Models window.

---

22. Click **Close**.



Related Topics:

- Edit a model

Period Dimensions Table

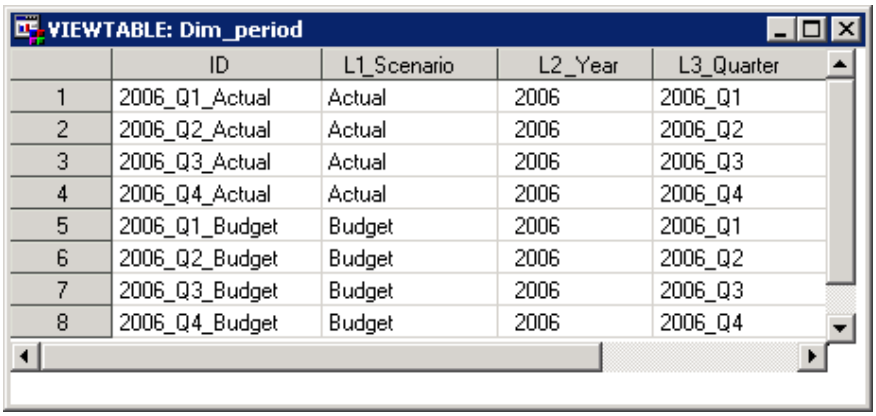
A period dimensions table defines the time periods to be used. The number of levels in the period dimensions table depends on your reporting needs. A period dimensions table contains the following columns:

Position	Name	Maximum Length	Description
1	ID	Char 32	The identifying value for the period
2	L3_Scenario	Char 32	Third-level dimension member value (for example, Actual or Budget)
3	L1_Year	Char 32	Top-level dimension member value (for example, 2006)
4	L2_Quarter	Char 32	Second-level dimension member value (for example, 2006_Q4)

In a period dimensions table, consider the following rules:

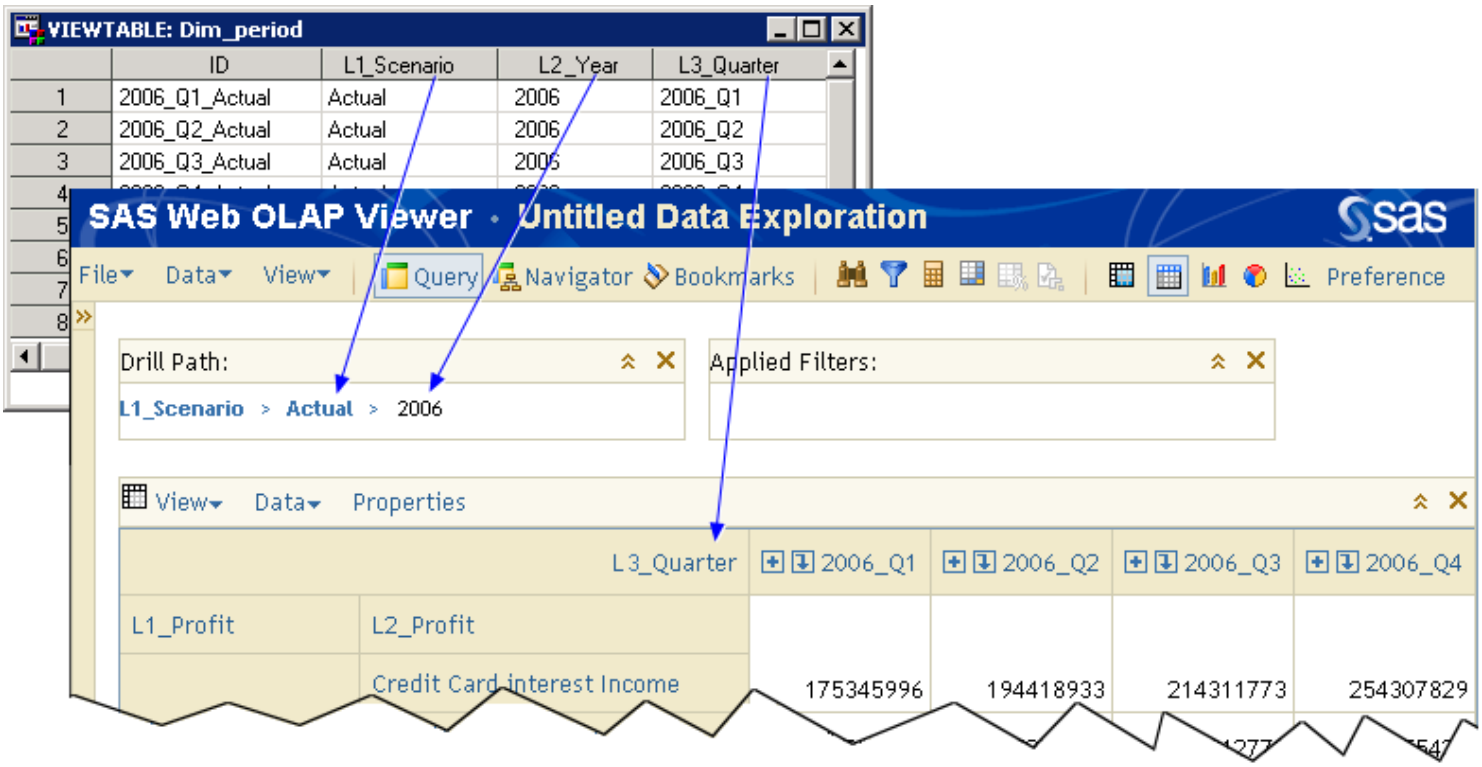
- The columns must appear in the order that is shown.
- Each column must have the length that is shown.
- The name of the column is arbitrary.
- The number of levels is arbitrary.

The following picture shows a sample period dimensions table:



	ID	L1_Scenario	L2_Year	L3_Quarter
1	2006_Q1_Actual	Actual	2006	2006_Q1
2	2006_Q2_Actual	Actual	2006	2006_Q2
3	2006_Q3_Actual	Actual	2006	2006_Q3
4	2006_Q4_Actual	Actual	2006	2006_Q4
5	2006_Q1_Budget	Budget	2006	2006_Q1
6	2006_Q2_Budget	Budget	2006	2006_Q2
7	2006_Q3_Budget	Budget	2006	2006_Q3
8	2006_Q4_Budget	Budget	2006	2006_Q4

The following picture shows the relationship between this sample period dimensions table and the resulting profit-and-loss report:



Related Topics:

- Add a new period to the period dimension table

1. Populate the Input Directory

Your input directory must contain the following tables:

- Behavior
- Report Hierarchy
- Report Layout
- Period Dimensions
- Custom Dimensions
- Transaction

The input directory can contain the following tables:

- Rule Definition
- Rule Association

A profitability model ties these tables together.

Notes:

- In addition to the required columns, all of the tables can contain additional columns without causing any problems.

- The following characters are not valid in reports (cubes):

  . , ; ' ` : ? * & % $! - + = ( ) [ ] { } / \

Preview the Data in a Table

To preview the data in a table, perform the following steps:

1. Activate the **Transactions** workspace.
2. Select a model and a table.
3. Click **Preview Data**, or select **Actions ▸ Preview Data**.

   The Preview window opens.

The TRANASSIGN Procedure

Overview

The TRANASSIGN procedure provides a batch method for calculating a SAS Profitability Management model. The procedure takes the transaction tables in your input directory, applies rules in the model to make calculations, and stores the calculated results in columns that are appended to your transaction tables in the output directory. Errors and warnings are written to the SAS log file.

Syntax:

PROC TRANASSIGN
AR=*assignment-rule-table*
BH=*behavior-table*
TS=*transaction-schema-table*;

TRANSACTION
DATA=*transaction-table*
OUTPUT=*output-table*
PERIOD='*period-name*'
TYPE='*transaction-table-group*';

DIMENSION
NAME=*dimension-name*
TABLE=*dimension-table*;

PROC TRANASSIGN Statement

The PROC TRANASSIGN statement specifies the input data sources for transaction table schema, transaction behaviors, and assignment rules.

PROC TRANASSIGN
AR=*assignment-rule-table*
BH=*behavior-table*
TS=*transaction-schema-table*;

Required Arguments:

AR | **ASSIGNMENTRULE**=*assignment-rule-table*
Specifies the data source for the assignment rule table. The table must conform to the following schema:

Name	Data Type	Maximum Length	Description
Name	Char	64	The name of the assignment rule
Condition	Char	4096	The expression that is used to select transactions as assignment destinations; the expression should be SAS-compliant and only use variables from the transaction table; the only exception is that it can use the customized dimension-member filtering function ChildOf
Formula	Char	4096	The formula expression that is used to calculate the driver quantity for a particular assignment; the expression must be SAS-compliant and only use variables from the transaction table
Type	Char	64	The transaction table group that the assignment rule applies to; the value of this field is matched by the value of the TYPE parameter in a TRANSACTION statement

BH | **BEHAVIOR**=*behavior-table*

Specifies the data source for the behavior table. The behavior table must conform to the following schema:

Name	Data Type	Maximum Length	Description
Name	Char	32	The name of the behavior
Period	Char	64	The period name for the behavior row
AssignmentRule	Char	64	The name of the assignment rule used by the behavior
TotalValue	Double		The total cost/revenue value for the behavior row
UnitValue	Double		The unit cost/revenue value for the behavior row

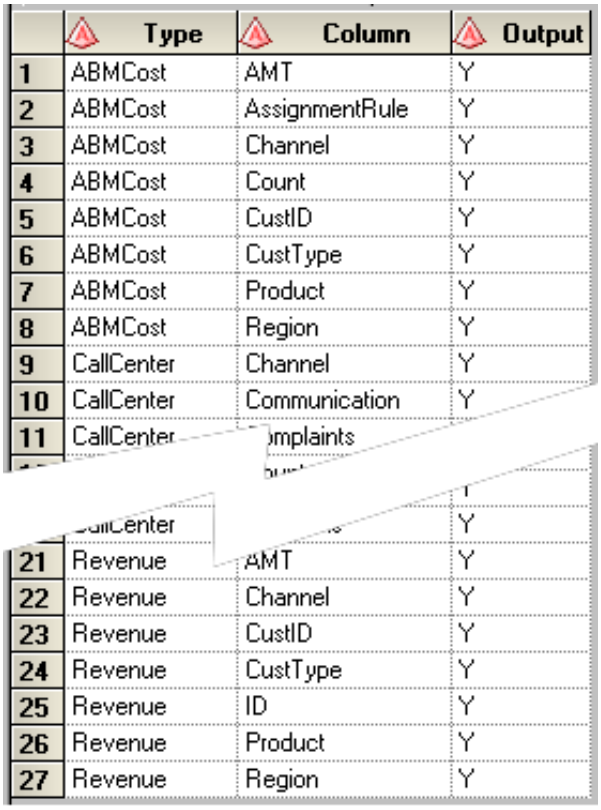
Note: This behavior table is not identical to the behavior table that is used by a SAS Profitability Management model. Whereas the TRANASSIGN behavior table contains an AssignmentRule field, the SAS Profitability Management model behavior table does not contain such a field. Internally, SAS Profitability Management combines its behavior table with a rule association table to append an AssignmentRule field to produce the kind of behavior table that is used by the TRANASSIGN procedure.

TS | **TRANSCHEMA**=*transaction-schema-table*

Specifies the data source for the transaction-schema table. The table must conform to the following schema:

Name	Data Type	Maximum Length	Description
Type	Char	64	The transaction table group to which a transaction table belongs; the value of this field is matched by the value of the TYPE parameter in a TRANSACTION statement
Column	Char	64	The name of the column
Output	Char	1	Is it part of the output (dimension or measure): 'Y' or 'N' ?

Note that the transaction schema table can contain multiple schemas. There is one schema per transaction table group. The Type field in the transaction schema table contains a string that identifies the transaction table group. The following is a sample transaction schema table:



	Type	Column	Output
1	ABMCost	AMT	Y
2	ABMCost	AssignmentRule	Y
3	ABMCost	Channel	Y
4	ABMCost	Count	Y
5	ABMCost	CustID	Y
6	ABMCost	CustType	Y
7	ABMCost	Product	Y
8	ABMCost	Region	Y
9	CallCenter	Channel	Y
10	CallCenter	Communication	Y
11	CallCenter	mplaints	
	CallCenter		Y
21	Revenue	AMT	Y
22	Revenue	Channel	Y
23	Revenue	CustID	Y
24	Revenue	CustType	Y
25	Revenue	ID	Y
26	Revenue	Product	Y
27	Revenue	Region	Y

TRANSACTION Statement

The TRANSACTION statement specifies the input data source for a transaction table. It is also used to specify the transaction type, the period for the transaction table, and the data source for the output table. The statement specifies the action (overwrite or append) when there is a pre-existing output table with the same name. At least one TRANSACTION statement is required for a TRANASSIGN procedure.

TRANSACTION
DATA=*transaction-table*
OUTPUT=*output-table*
PERIOD='*period-name*'
TYPE='*transaction-table-group*'

Required Arguments:

DATA=*transaction-table*
Specifies the data source for the transaction table. Its schema must match the value of the TYPE parameter.

OUTPUT=*output-table*
Specifies the output table for the resulting transaction table. The schema of the output table is based on the transaction table schema that is specified in the TRANSCHEMA parameter in the PROC

TRANASSIGN statement. All columns that are specified as output columns for the transaction table are in the output table. In addition, the following columns are part of the schema for the output table:

Name	Data Type	Maximum Length	Description
Behavior	Char	32	The name of the behavior that corresponds to the assignment
Quantity	Double		The driver quantity of the assignment
Value	Double		The cost/revenue that flows through the assignment

PERIOD='*period-name*'
Specifies the period for the transaction table. The period information determines the corresponding behavior rows for the transaction assignment.

TYPE=*'transaction-table-group*'
Specifies the name of the transaction table group to which this transaction table belongs. The transaction table group determines the schema of the transaction table. Every transaction table in a group must share the same schema. The schema for a transaction table group is in the table specified by the TRANSCHEMA parameter in the PROC TRANASSIGN statement.

DIMENSION Statement

The DIMENSION statement defines the dimensional mappings in the transaction assignment. An assignment rule can use a condition that has an external dimension that does not live in the transaction table. This statement defines the data source for the external dimension table, and the key mapping between the transaction table and the dimension table. The DIMENSION statement is optional for a TRANASSIGN procedure.

DIMENSION
NAME=*dimension-name*
TABLE=*dimension-table*;

Required Arguments:

NAME=*dimension-name*
Specifies the name of the dimension. The dimension name is referenced in an assignment rule's condition.

TABLE=*dimension-table*
Specifies the data source for the dimension table. Each dimension table must follow the following column ordering and length, although the name of each column is arbitrary:

Name	Data Type	Maximum Length	Description
Key	Char	32	The primary key for the dimension table
L1	Char	32	The level 1 member

L2	Char	32	The level 2 members
...			
Ln	Char	32	The level *n mm*

Example

In the following example, the caller invokes the TRANASSIGN procedure to process two transaction tables and write the output to the same data source. The REGION dimension is used for dimension-member filtering:

```
libname model .;
libname modelOut .;

PROC TRANASSIGN
        TranSchema=TranSchema
        Behavior=Behavior
        AssignmentRule=Rule;

Transaction Data=model.Atm04Q3 Period='2004_Q3' Type='General' Output=modelOut.
ATMOut;
Transaction Data=model.Atm04Q4 Period='2004_Q4' Type='General' Output= modelOut.
ATMOut;
Dimension Name='Region' Table=model.DimRegion;

RUN;
```

ChildOf Function

double IsChildOf(dim_member_column_in_transaction_table, parent_dim_member_full_name);

The ChildOf function returns 1 when the corresponding dimension member for the current transaction row is a descendant of the member **parent_dim_member_full_name**. Otherwise, it returns 0.

The first parameter specifies the column name of the dimension member in the transaction table. This parameter should not be in quotation marks.

The second parameter specifies the full name of a parent dimension member. The syntax of **dim_member_full_name** is similar to MDX (multidimensional expressions). Square brackets enclose the name of a single dimension member. The full name must start with the dimension name, and it must contain the name of each level for the parent dimension member. This parameter must be in quotation marks.

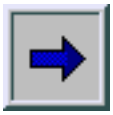
Examples for calling this function include:

- IsChildOf(Region, "[Region].[USA].[North Carolina]")
- IsChildOf(Product, "[Product].[Paper Goods].[Tissue Paper[429x340]]]")
- IsChildOf(Product, '[Product].[Beverages].[Fred"s choice]')

The examples demonstrate the following rules:

- Both single quotation marks and double quotation marks can enclose strings.
- "]" is used as an escape character for embedded closing square bracket.
- A single quotation mark is used as an escape character for an embedded single quotation mark.

SAS Profitability Management



Quick Start

1. Populate the input directory

2. Set up the environment

3. Create a new profitability model

4. Define transaction table groups

5. Define rules

6. Calculate a model

7. Prepare reports

8. View reports

Take the SAS Profitability Management Tutorial to familiarize yourself with this software.

Reference

- Index of terms
- Menus and toolbars
- The TRANASSIGN Procedure

Define a Detail Report Show me

Each detail report is available to produce a report that is based on a single dimension and by filtering a single value in that dimension. Detail reports are run from the SAS Profitability Management Web Client and create a cube on the fly. To configure a detail report, perform the following steps:

1. Activate the **Reports** workspace, and then select a model.
2. Click the **Detail Reports** tab, and then click **New detail report definition**.

   The New Detail Report Definition wizard opens.
3. On the Information page, select a detail report, and then click **Next**.
4. On the Dimensions and levels page, select the dimensions.

   Note: Although all of the columns in all of the tables of the model are displayed, only those columns corresponding to dimensions should be selected to produce the most meaningful report. For the best response time, select dimensions with a limited number of records. Three dimensions are automatically selected: the column that you selected in the previous step, the **DIM_PERIOD** dimension, and the **REPORTHIERARCHY** dimension. These dimensions are automatically selected and disabled because they are required for the report. However, you can select the levels of these dimensions.
5. In the **Allow Drill Down To** column, select the level for each dimension.
6. Click **Next**.
7. On the Measure page, select the measures to be included in the detail report.

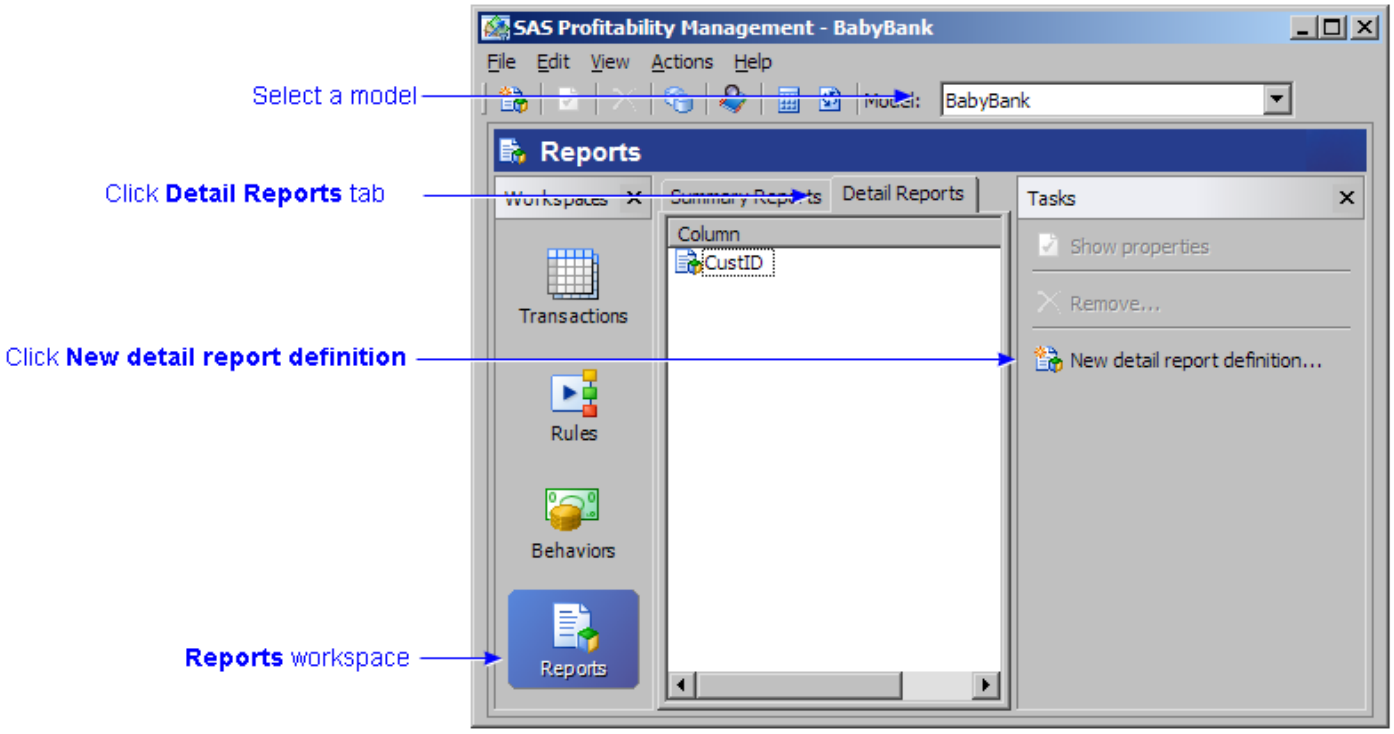
   Note: **Value** is automatically selected and disabled because it is required for the report.
8. Click **Finish**.

   After the selected dimensions are configured, the list of detail reports is displayed on the **Detail Reports** tab of the **Reports** workspace. This is the same list of detail reports that will be available in the SAS PRofitability Management Web Client for viewing.

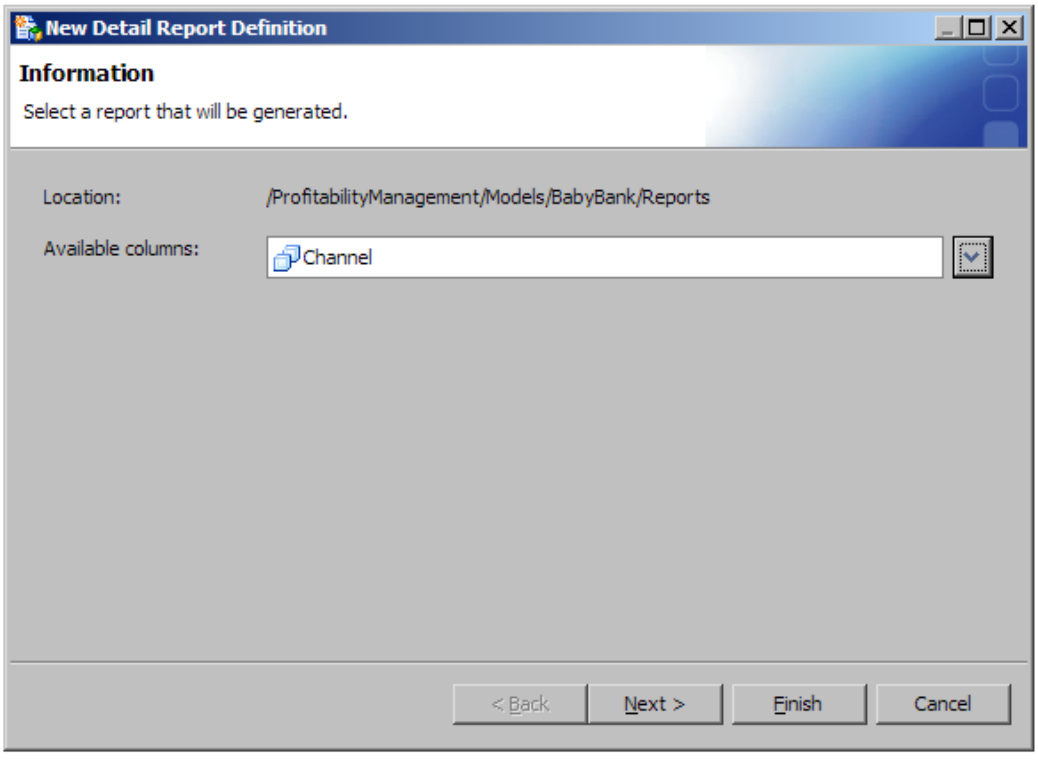
Define a Detail Report

1. Activate the **Reports** workspace, and then select a model.
2. Click the **Detail Reports** tab, and then click **New detail report definition**.

   The New Detail Reports Definition wizard opens.



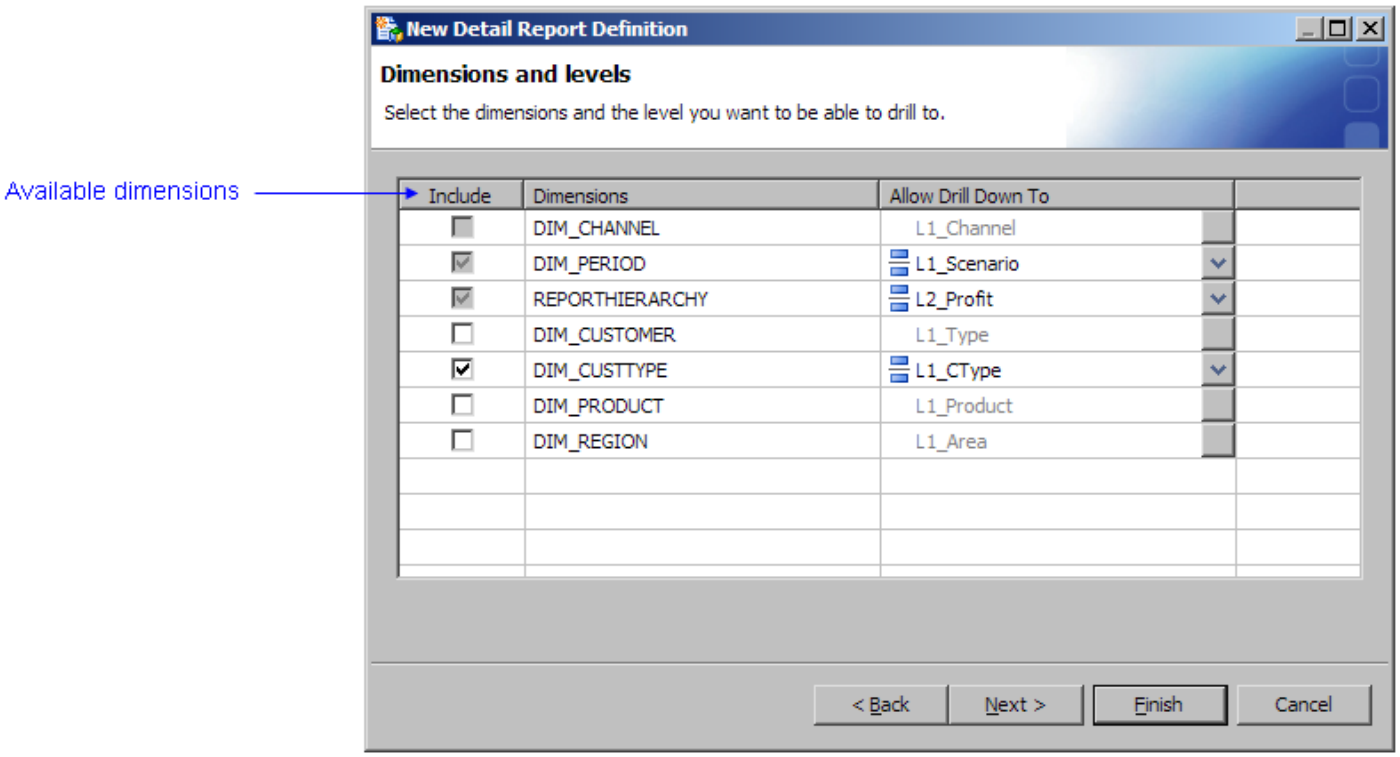
3. On the Information page, select a detail report, and then click **Next**.



4. On the Dimensions and levels page, select the dimensions.

Note: Although all of the columns in all of the tables of the model are displayed, only those columns corresponding to dimensions should be selected to produce the most meaningful report. For the best response time, select dimensions with a limited number of records. Three dimensions are automatically selected: the column that you selected in the previous step, the **DIM_PERIOD** dimension, and the **REPORTHIERARCHY** dimension. These dimensions are automatically selected and disabled because they are required for the report. However, you can select the levels of these dimensions.

5. From the **Allow Drill Down To** column, select the level for each dimension.
6. Click **Next**.

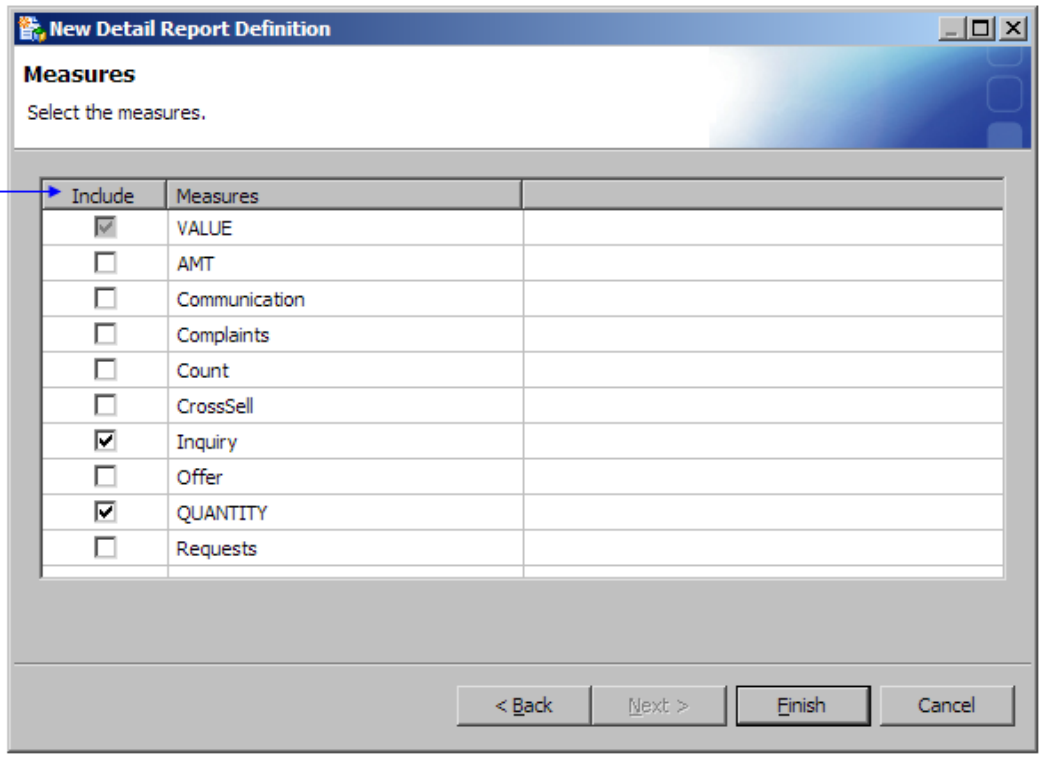


7. On the Measure page, select the measures to be included in the detail report.

   Note: **VALUE** is automatically selected and disabled because it is required for the report.

8. Click **Finish**.

   After the selected dimensions are configured, the list of detail reports is displayed on the **Detail Reports** tab of the **Reports** workspace. This is the same list of detail reports that will be available in the SAS PRofitability Management Web Client for viewing.



Available measures

Report Hierarchy Table

The report hierarchy table defines the dimension hierarchy for drilling down into the profit-and-loss report. The number of levels in the hierarchy is a critical decision in model design and is subject to the ultimate reporting needs for the business managers to make decisions. A report hierarchy contains the following columns.

Position	Name	Maximum Length	Description
1	ID	Char 32	The identifying reference for the behavior
2	L1_Profit	Char 32	Top-level dimension members for the hierarchy
3	L2_Profit	Char 32	Second-level dimension members for the hierarchy
4	L3_Profit	Char 32	Third-level dimension members for the hierarchy
5	L4_Profit	Char 32	Fourth-level dimension members for the hierarchy
6	L5_Profit	Char 32	Fifth-level dimension members for the hierarchy

In a report hierarchy table, consider the following rules:

- The columns must appear in the order that is shown.
- Each column must have the length that is shown.
- The name of the column is arbitrary.
- The number of levels is arbitrary.

The following picture shows a sample report hierarchy table:

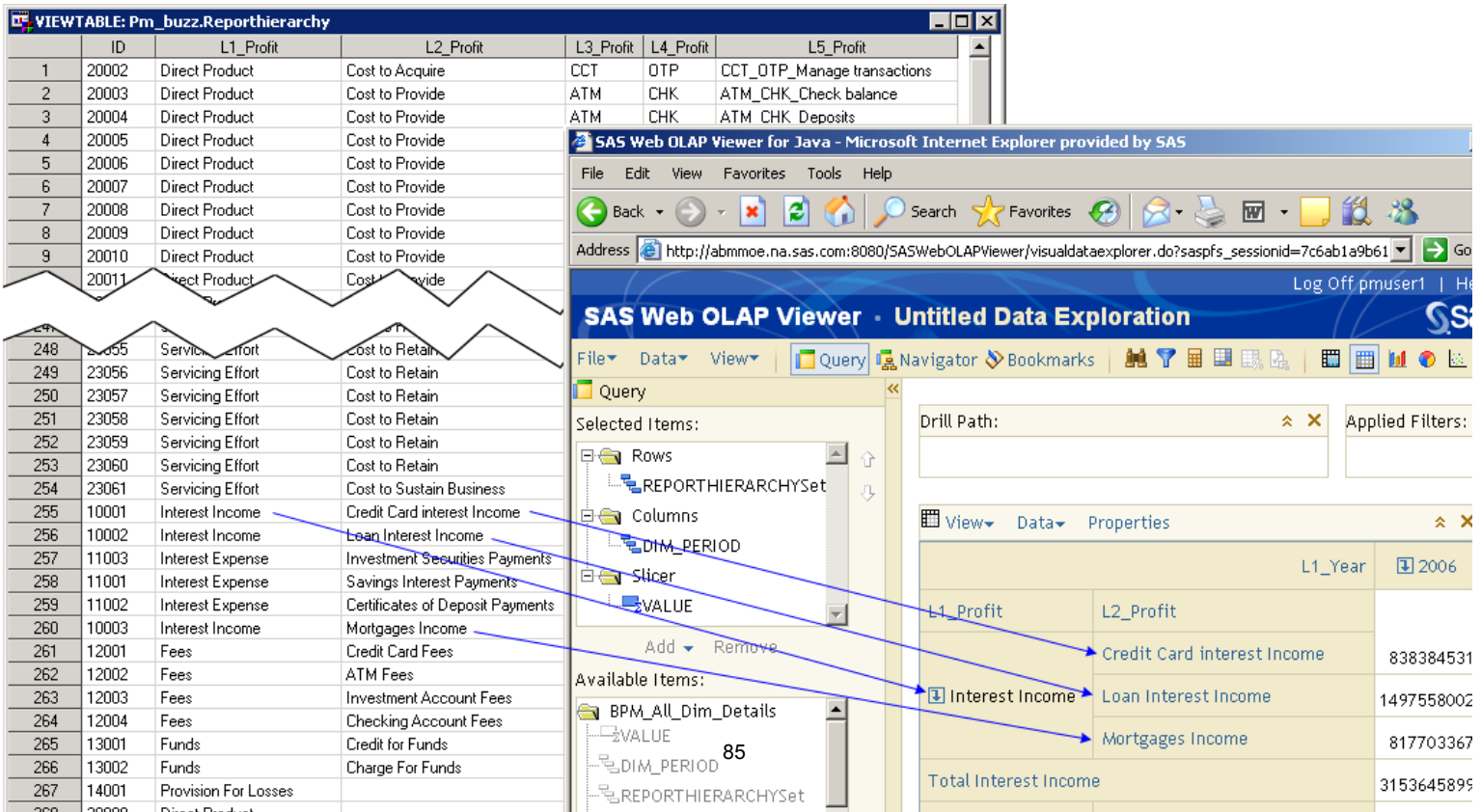
VIEWTABLE: Pm_buzz.Reporthierarchy

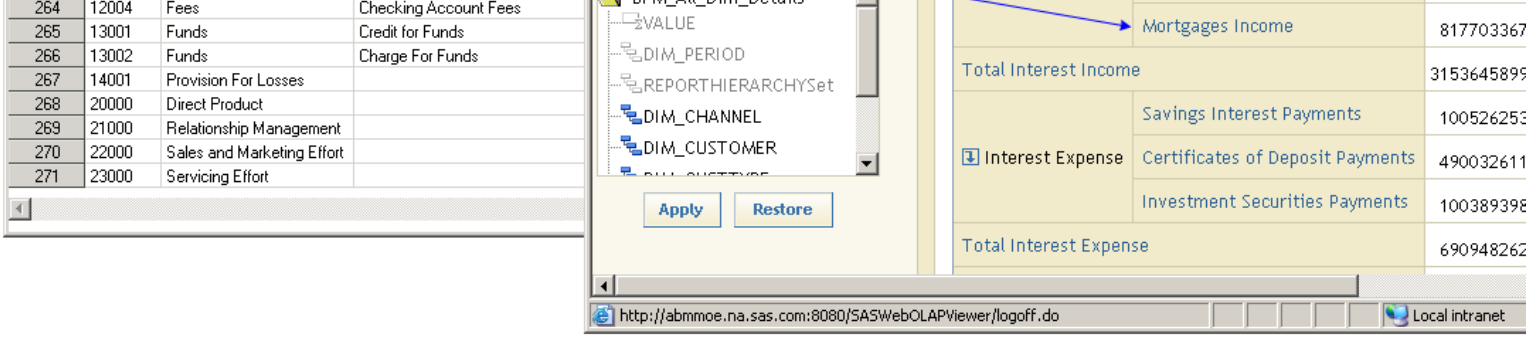
	ID	L1_Profit	L2_Profit	L3_Profit	L4_Profit	L5_Profit
1	20002	Direct Product	Cost to Acquire	CCT	OTP	CCT_OTP_Manage transactions
2	20003	Direct Product	Cost to Provide	ATM	CHK	ATM_CHK_Check balance
3	20004	Direct Product	Cost to Provide	ATM	CHK	ATM_CHK_Deposits
4	20005	Direct Product	Cost to Provide	ATM	CHK	ATM_CHK_Fund Transfer
5	20006	Direct Product	Cost to Provide	ATM	CHK	ATM_CHK_Withdrawals
6	20007	Direct Product	Cost to Provide	ATM	CRC	ATM_CRC_Withdrawals
7	20008	Direct Product	Cost to Provide	ATM	OTP	ATM_OTP_Manage transactions
8	20009	Direct Product	Cost to Provide	ATM	REC	ATM_REC_Deposits
9	20010	Direct Product	Cost to Provide	ATM	SAV	ATM_SAV_Check balance
	20011	Direct Product	Cost to Provide	ATM	SAV	ATM_SAV_Deposits

Note: Do not include calculated rows from the report layout table, such as the following row, in the report hierarchy table:

	ID	Name	Formula
4	TOT-INT-INC	Total Interest Income	[10001]+[10002]+[10003]

The following picture shows the relationship between this sample report hierarchy table and the resulting profit-and-loss report:




264 12004 Fees Checking Account Fees
265 13001 Funds Credit for Funds
266 13002 Funds Charge For Funds
267 14001 Provision For Losses
268 20000 Direct Product
269 21000 Relationship Management
270 22000 Sales and Marketing Effort
271 23000 Servicing Effort
VALUE
DIM_PERIOD
REPORTHIERARCHYSet
DIM_CHANNEL
DIM_CUSTOMER
Apply
Restore
Mortgages Income 817703367
Total Interest Income 3153645899
Interest Expense
Savings Interest Payments 100526253
Certificates of Deposit Payments 490032611
Investment Securities Payments 100389398
Total Interest Expense 690948262
http://abmmoe.na.sas.com:8080/SASWebOLAPViewer/logoff.do
Local intranet

Report Layout Table

The report layout table defines the calculation formula for the profit-and-loss report. A report layout table contains the following columns:

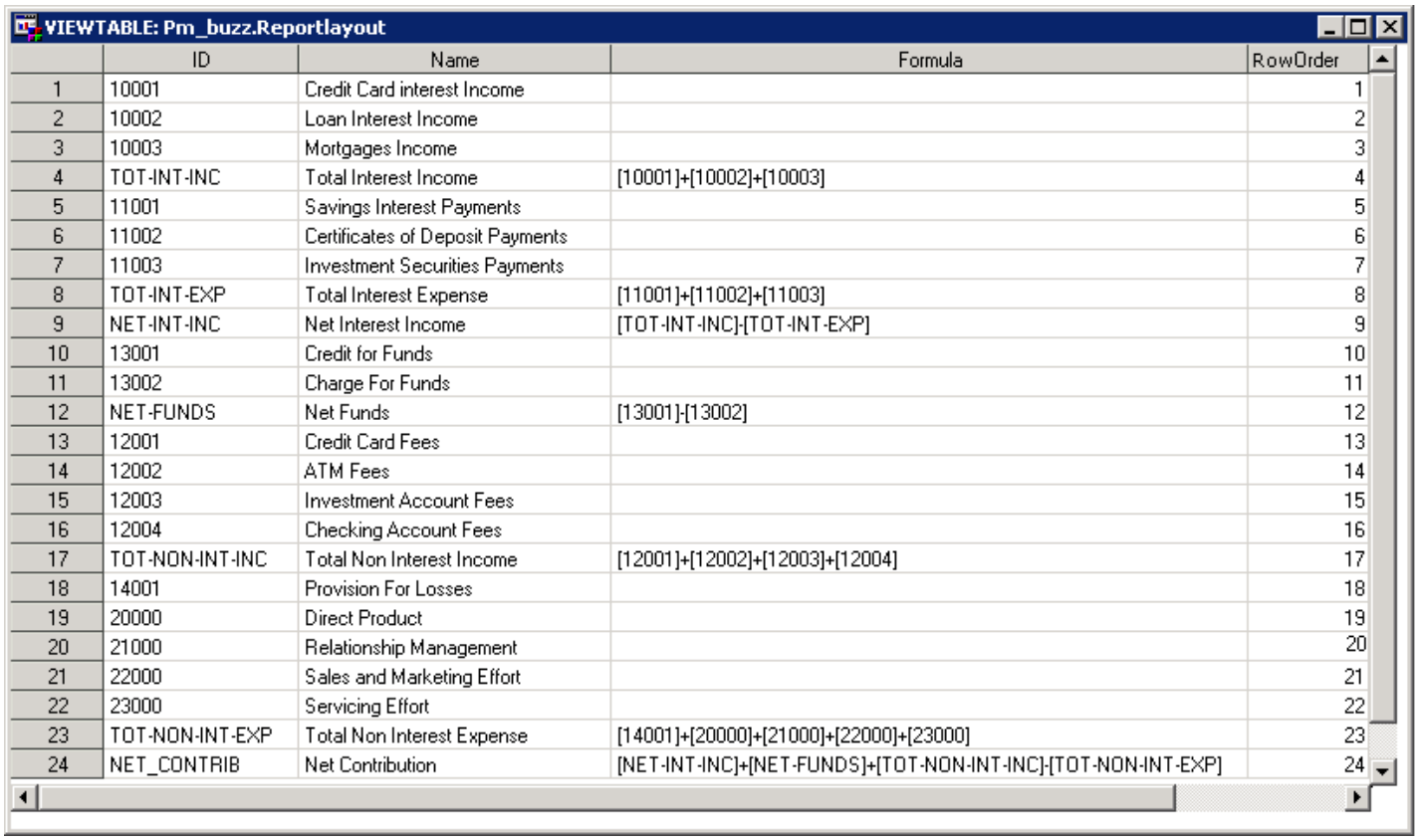
Position	Name	Maximum Length	Description
1	ID	Char 32	The unique identifying reference for the item • IDs for source costs are based on the behavior IDs • IDs for calculated values are defined here
2	Name	Char 32	The name of the behavior
3	Formula	Char 255	For calculated rows, the formula for the calculation is based on the IDs
4	RowOrder	Numeric 8	The position of the row in the profit-and-loss report

In a report layout table, consider the following rules:

- The columns must appear in the order that is shown.
- Each column must have the length that is shown.
- The column names must be exactly as shown.

Note: You can add labels to a report.

The following picture shows a sample report layout table:



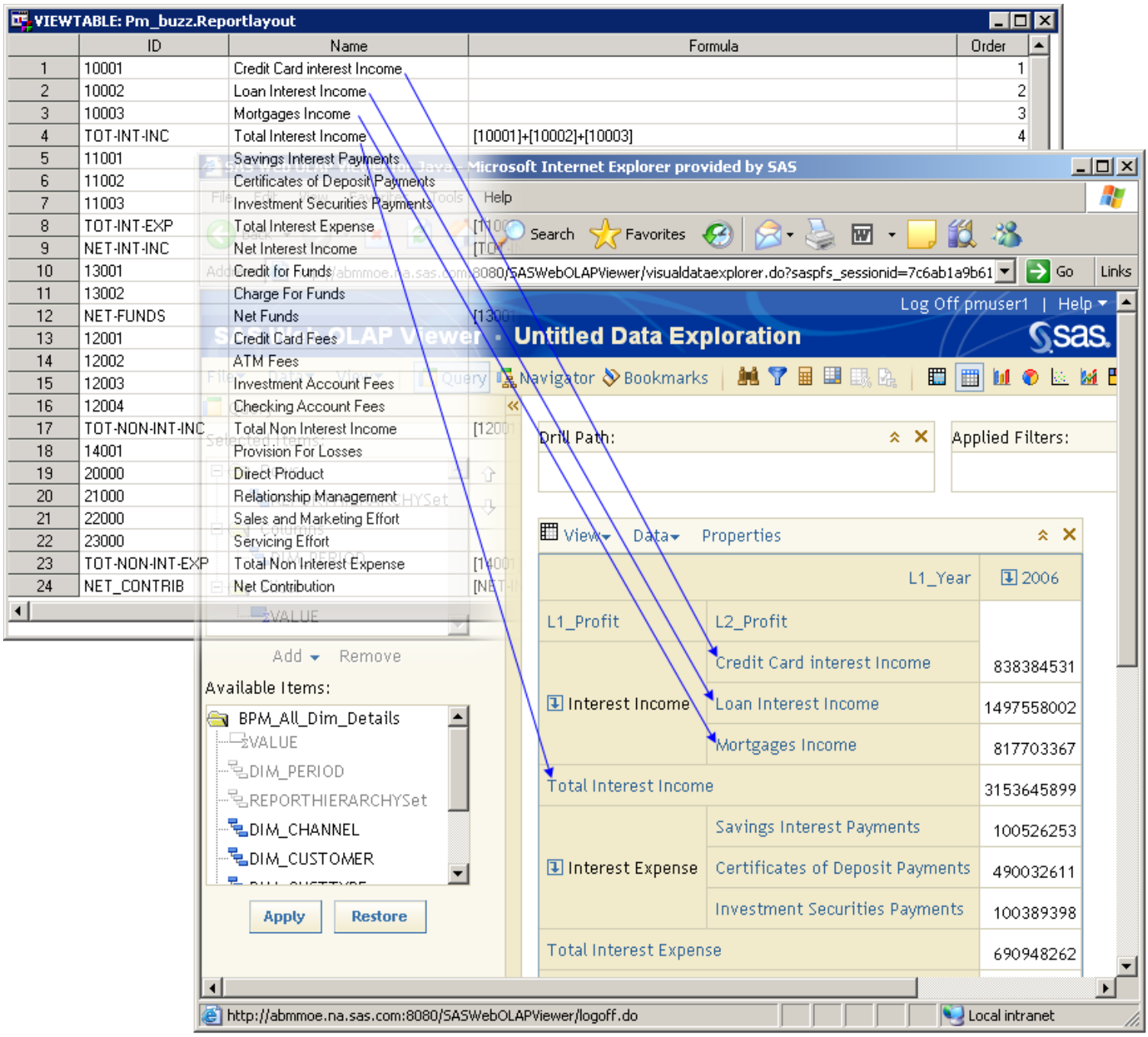
VIEWTABLE: Pm_buzz.Reportlayout

	ID	Name	Formula	RowOrder
1	10001	Credit Card interest Income		1
2	10002	Loan Interest Income		2
3	10003	Mortgages Income		3
4	TOT-INT-INC	Total Interest Income	[10001]+[10002]+[10003]	4
5	11001	Savings Interest Payments		5
6	11002	Certificates of Deposit Payments		6
7	11003	Investment Securities Payments		7
8	TOT-INT-EXP	Total Interest Expense	[11001]+[11002]+[11003]	8
9	NET-INT-INC	Net Interest Income	[TOT-INT-INC]-[TOT-INT-EXP]	9
10	13001	Credit for Funds		10
11	13002	Charge For Funds		11
12	NET-FUNDS	Net Funds	[13001]-[13002]	12
13	12001	Credit Card Fees		13
14	12002	ATM Fees		14
15	12003	Investment Account Fees		15
16	12004	Checking Account Fees		16
17	TOT-NON-INT-INC	Total Non Interest Income	[12001]+[12002]+[12003]+[12004]	17
18	14001	Provision For Losses		18
19	20000	Direct Product		19
20	21000	Relationship Management		20
21	22000	Sales and Marketing Effort		21
22	23000	Servicing Effort		22
23	TOT-NON-INT-EXP	Total Non Interest Expense	[14001]+[20000]+[21000]+[22000]+[23000]	23
24	NET_CONTRIB	Net Contribution	[NET-INT-INC]+[NET-FUNDS]+[TOT-NON-INT-INC]-[TOT-NON-INT-EXP]	24

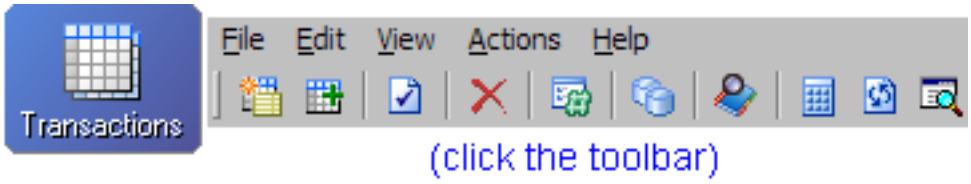
Note: Do not include calculated rows, such as the following row, in the report hierarchy table:

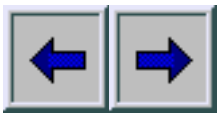
	ID	Name	Formula
4	TOT-INT-INC	Total Interest Income	[10001]+[10002]+[10003]

The following picture shows the relationship between this sample report layout table and the resulting profit-and-loss report:


VIEWTABLE: Pm_buzz.Reportlayout
ID
Name
Formula
Order
1 10001 Credit Card interest Income 1
2 10002 Loan Interest Income 2
3 10003 Mortgages Income 3
4 TOT-INT-INC Total Interest Income [10001]+[10002]+[10003] 4
5 11001 Savings Interest Payments
6 11002 Certificates of Deposit Payments
7 11003 Investment Securities Payments
8 TOT-INT-EXP Total Interest Expense
9 NET-INT-INC Net Interest Income
10 13001 Credit for Funds
11 13002 Charge For Funds
12 NET-FUNDS Net Funds
13 12001 Credit Card Fees
14 12002 ATM Fees
15 12003 Investment Account Fees
16 12004 Checking Account Fees
17 TOT-NON-INT-INC Total Non Interest Income
18 14001 Provision For Losses
19 20000 Direct Product
20 21000 Relationship Management
21 22000 Sales and Marketing Effort
22 23000 Servicing Effort
23 TOT-NON-INT-EXP Total Non Interest Expense
24 NET_CONTRIB Net Contribution
Microsoft Internet Explorer provided by SAS
Search
Favorites
Go
Links
Log Off pmuser1 | Help
Untitled Data Exploration
Navigator
Bookmarks
Drill Path:
Applied Filters:
View
Data
Properties
L1_Year
2006
L1_Profit
L2_Profit
Credit Card interest Income 838384531
Interest Income
Loan Interest Income 1497558002
Mortgages Income 817703367
Total Interest Income 3153645899
Savings Interest Payments 100526253
Interest Expense
Certificates of Deposit Payments 490032611
Investment Securities Payments 100389398
Total Interest Expense 690948262
Add
Remove
Available Items:
BPM_All_Dim_Details
VALUE
DIM_PERIOD
REPORTHIERARCHYSet
DIM_CHANNEL
DIM_CUSTOMER
Apply
Restore
http://abmmoe.na.sas.com:8080/SASWebOLAPViewer/logoff.do
Local intranet

Reports-Workspace Toolbar





7. Prepare Reports

- Define a summary report
- Define a detail report

Define a Summary Report Show me

A summary report is a cube that is generated from the SAS Profitability Management client for later viewing in the SAS Web OLAP Viewer.

1. Activate the **Reports** workspace, and then select a model.
2. Click **New summary report definition**.

   The New Summary Report Definition wizard opens.
3. On the Information page, name the summary report, and then click **Next**.
4. On the Dimensions and levels page, select the dimensions and levels, and then click **Next**.

   Note: The fewer dimensions and drill-down levels that you select, the smaller the summary cube will be. Smaller summary cubes have better response time.
5. On the Measures page, select the measures.

   VALUE is included by default. All numeric properties are available.
6. Click **Finish**.

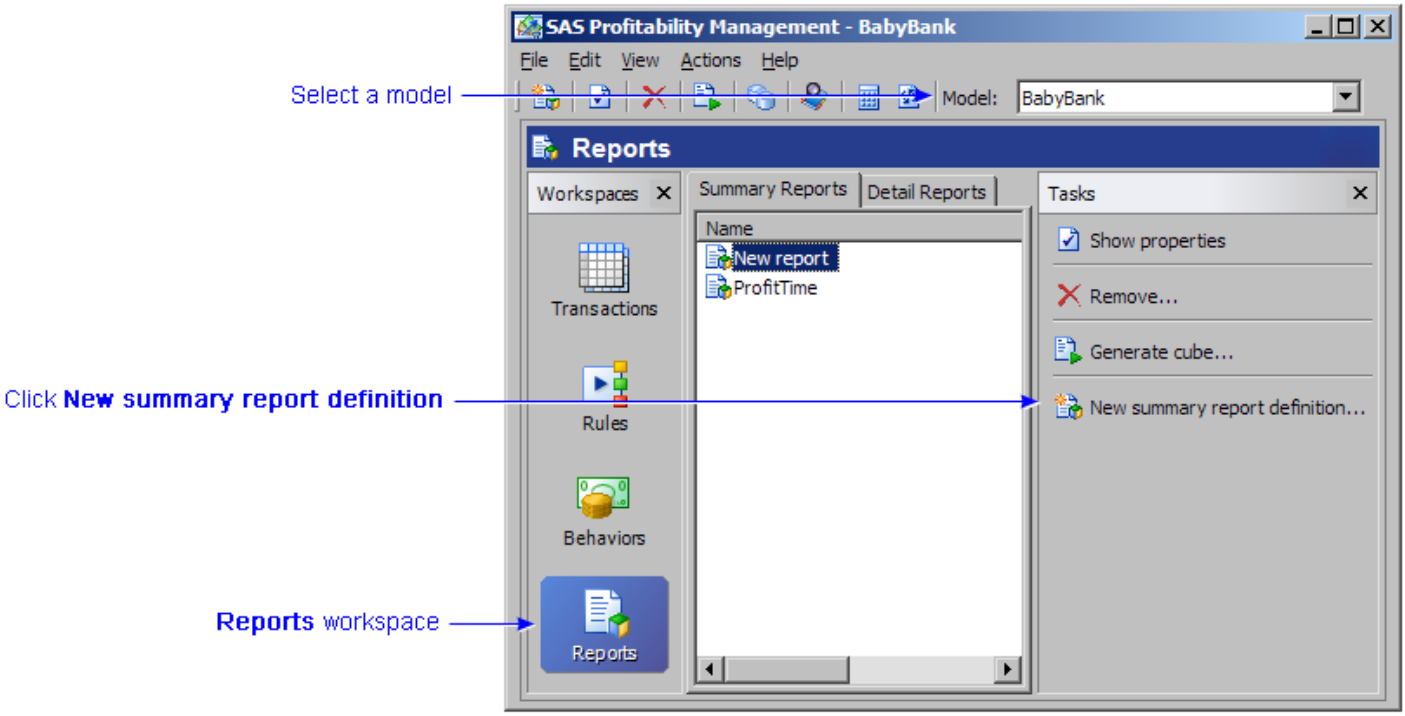
   The new report is added to the list of summary reports.
7. Select the new report in the list of summary reports, and then click **Generate cube**.

   The cube is generated.
8. Click **Details** to view the message log.

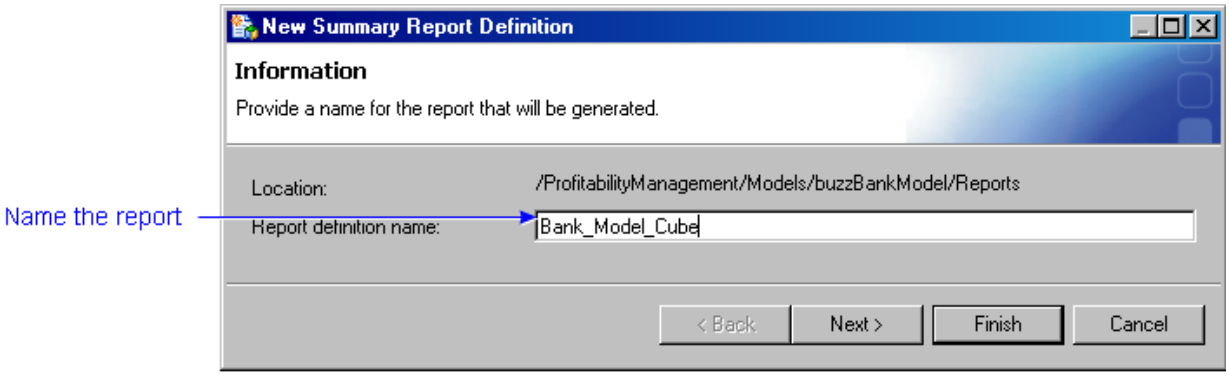
Define a Summary Report

1. Activate the **Reports** workspace, and then select a model.
2. Click **New summary report definition**.

   The New Summary Report Definition wizard opens.

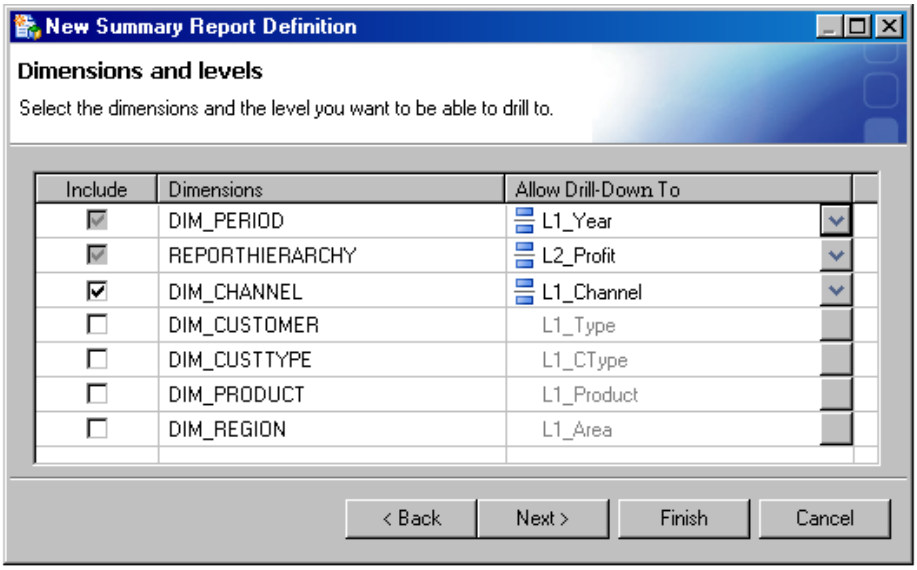


3. On the Information page, name the summary report, and then click **Next**.



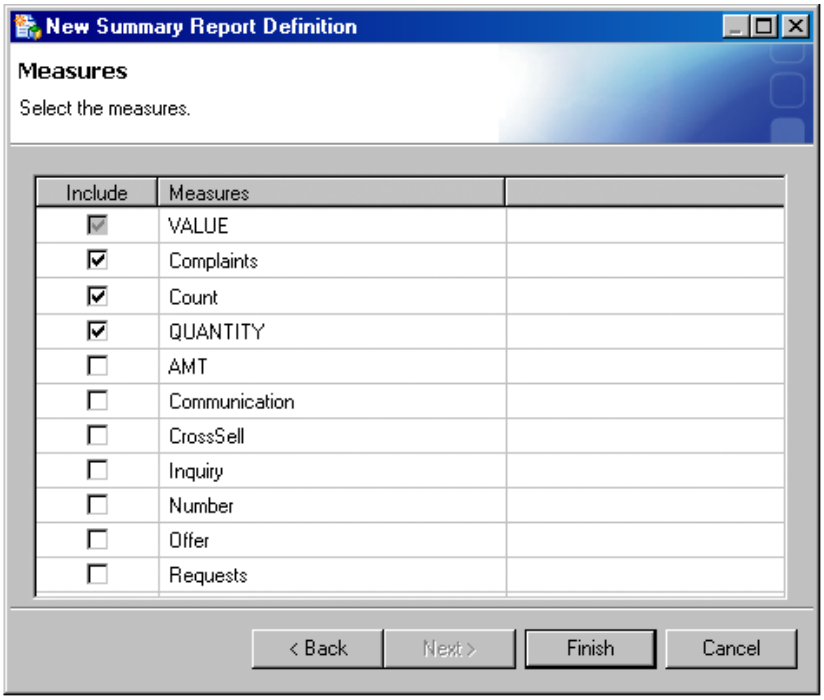
4. On the Dimensions and levels page, select the dimensions and levels, and then click **Next**.

   Note: The fewer dimensions and drill-down levels that you select, the smaller the summary cube will be. Smaller summary cubes have better response time.



5. On the Measures page, select the measures.

   VALUE is included by default. All numeric properties are available.

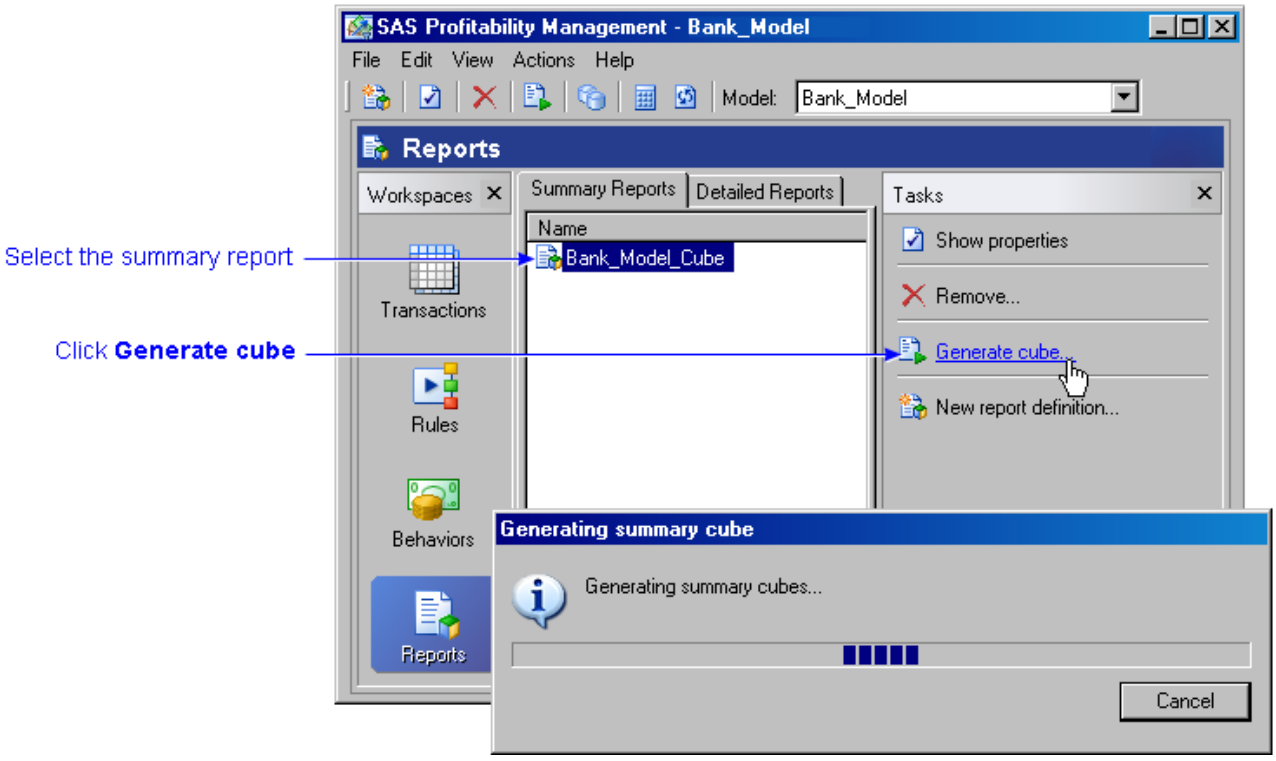


6. Click **Finish**.

   The new report is added to the list of summary reports.

7. Select the new report in the list of summary reports, and then click **Generate cube**.

   The cube is generated.



8. Click **Details** to view the message log.

Add an Assignment Rule to a Transaction Table Group Show me

1. Activate the **Rules** workspace, and then select a model.
2. Select **File ▸ Add Assignment Rule** (or click the **Add Assignment Rule** icon ).

   The **Add Assignment Rule** window appears.
3. Name the rule.
4. Select the transaction table group to which you want to assign the rule.
5. Click **Define** to specify selection criteria.

   The **Selection Criteria** window opens.
6. Select the columns in a transaction table group to include in a calculation.

   You can specify three types of selection criteria:

   - filter by text value
   - filter by the value of one or more dimensions
   - filter by numeric value
   - filter by matching a field in the behavior table

   a. Select one or more columns in the transaction table group.

   b. Select an operator to apply to the selected columns.

      - Text value operators: =, not =, match Behavior
      - Numeric value operators: =, not =, <, <=, >, >= , match Behavior
      - Dimension value operator: is child of

   c. Select a value to compare the columns to.

   d. Click **Add New Row** to add another condition to the selection criteria.

Note: If you are using the **match Behavior** operator, then each condition must be joined with the **And** operator.

e. Click **OK**.

7. After building the selection criteria, modify the conditions manually, as necessary.

8. Select a numeric column to use in the driver formula.

   Note: You are not restricted to a single field.

9. Click **OK**.

   The assignment rule appears in the **Rules** workspace under the transaction table group to which the rule belongs.

Import a Rule Definition Table Show me

1. Activate the **Rules** workspace, and then select the model to which you want to add the rule definitions.
2. Select **Actions** ▸ **Import Assignment Rules**.

   The **Import Rules** window opens.
3. Click **Select** to select a rule definition table.

   The Select Table window opens. Select a rule definition table, and then click **OK**.
4. To preview the data in the rule definition table, click **Preview**.

   The Preview window opens and the rule definition table is displayed.
5. Click **OK**.
6. For each required column in a rule definition table, identify the corresponding column in the table that is being imported, and then click **OK**.

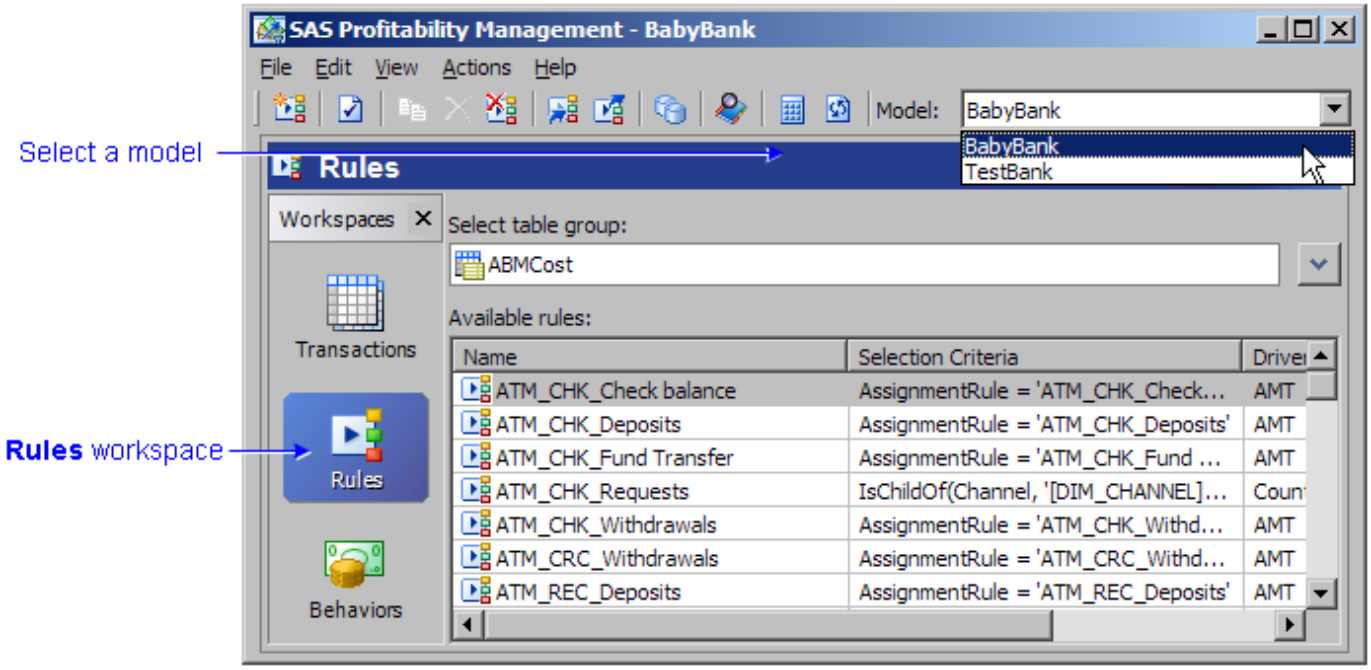
   A window with the message **Import assignment rules complete** appears.
7. Click **Details** to verify that the import succeeded, and then click **OK**.

Related Topics:

- Export a rule definition table

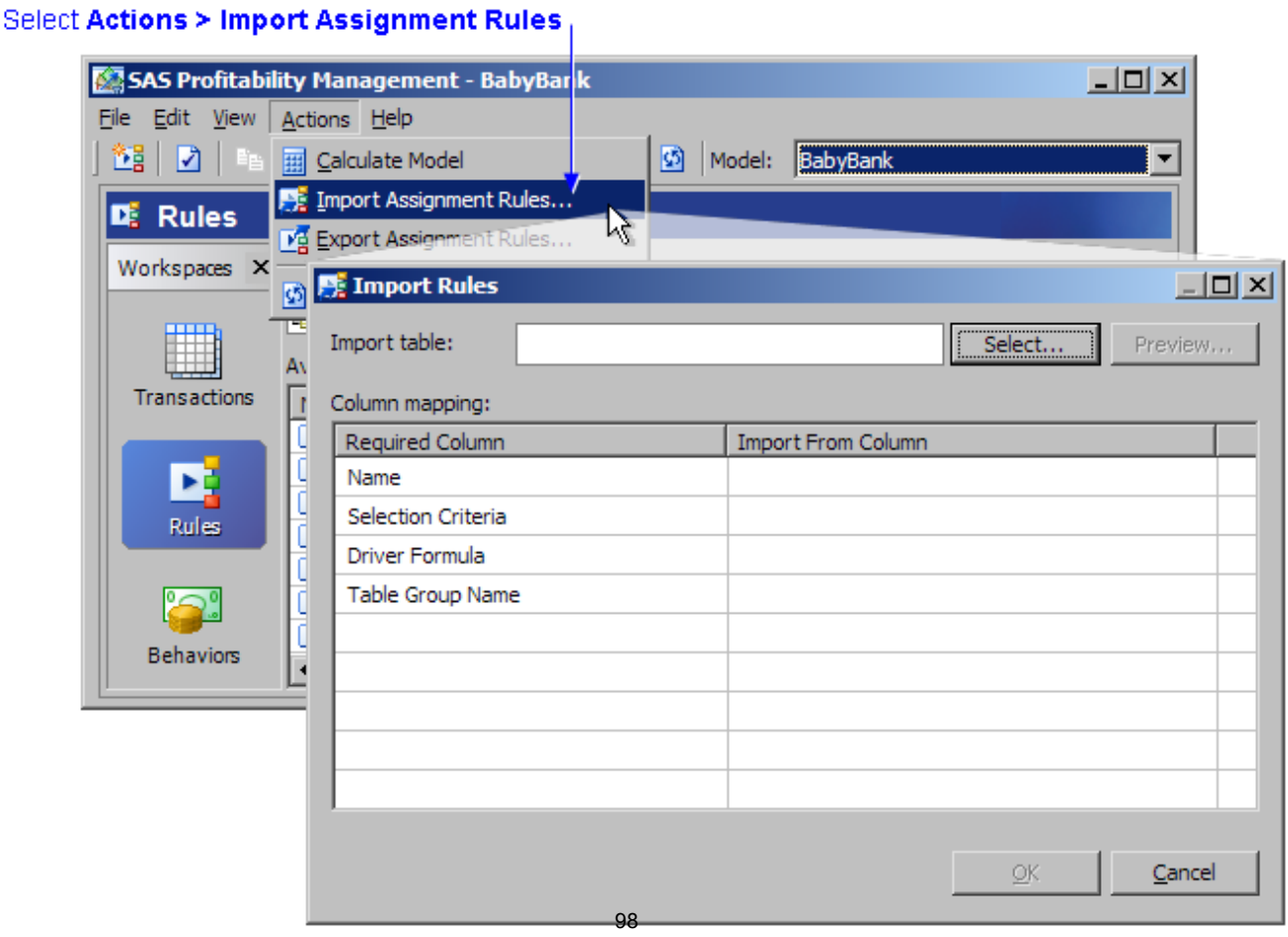
Import a Rule Definition Table

1. Activate the **Rules** workspace, and then select the model in which the rule definitions will be added.



2. Select **Actions** ▸ **Import Assignment Rules**.

   The **Import Rules** window opens.



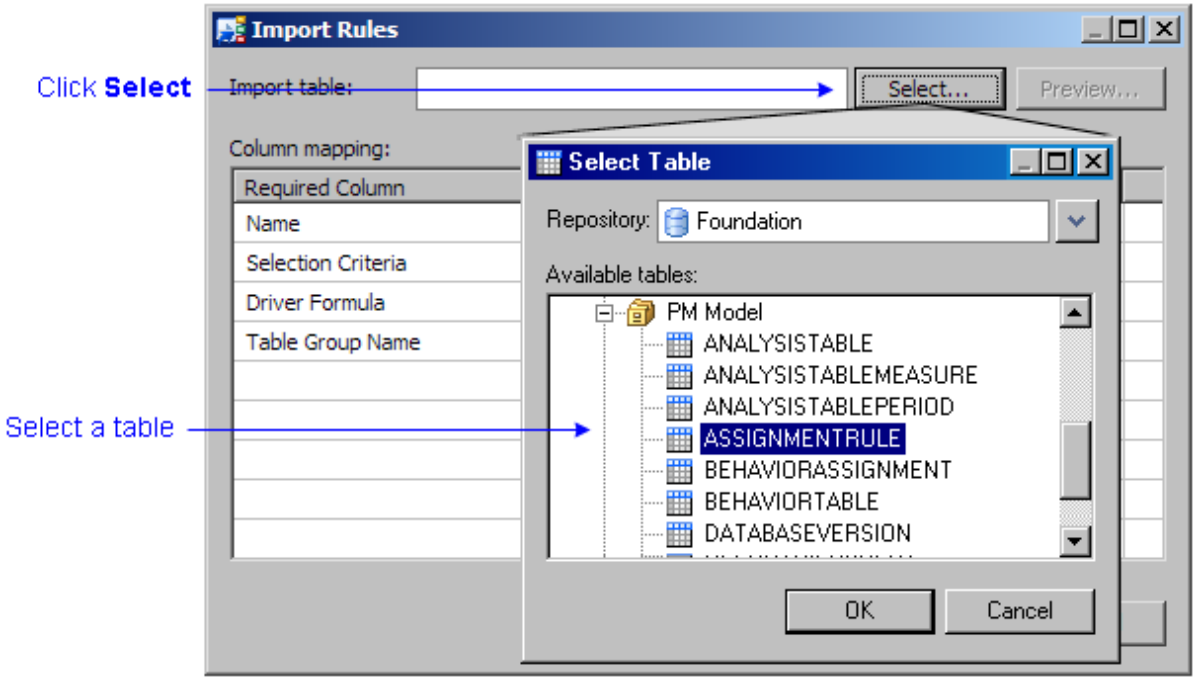
3. Click **Select** to select a rule definition table.

   The Select Table window opens. Select a rule definition table, and then click **OK**.

4. To preview the data in the rule definition table, click **Preview**.

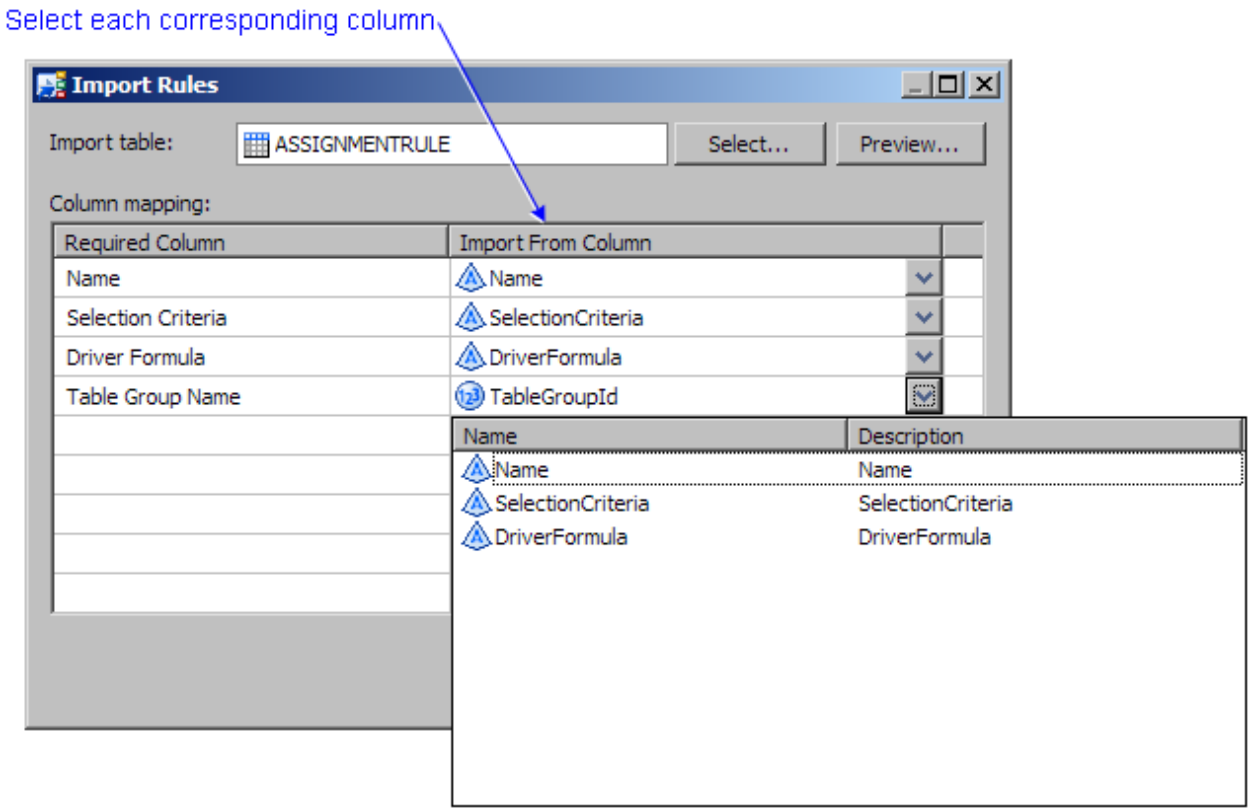
   The Preview window opens and the rule definition table is displayed.

5. Click **OK**.

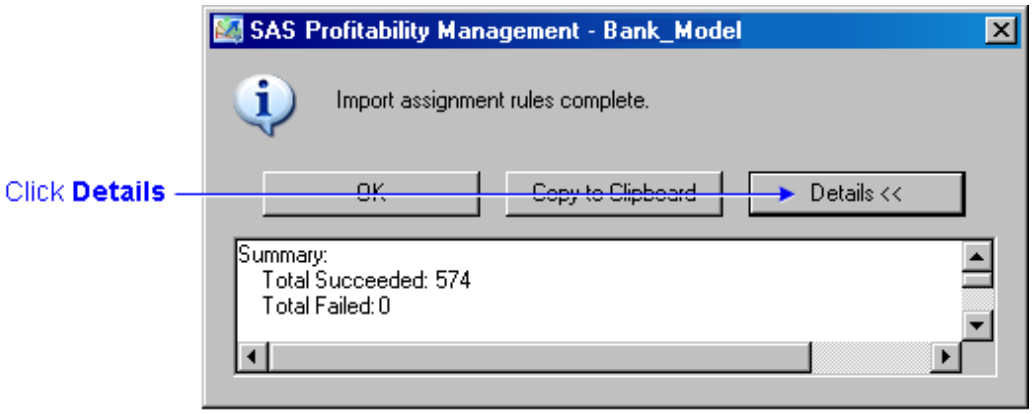


6. For each required column in a rule definition table, identify the corresponding column in the table that is being imported, and then click **OK**.

   A window with the message **Import assignment rules complete** appears.



7. Click **Details** to verify that the import succeeded, and then click **OK**.

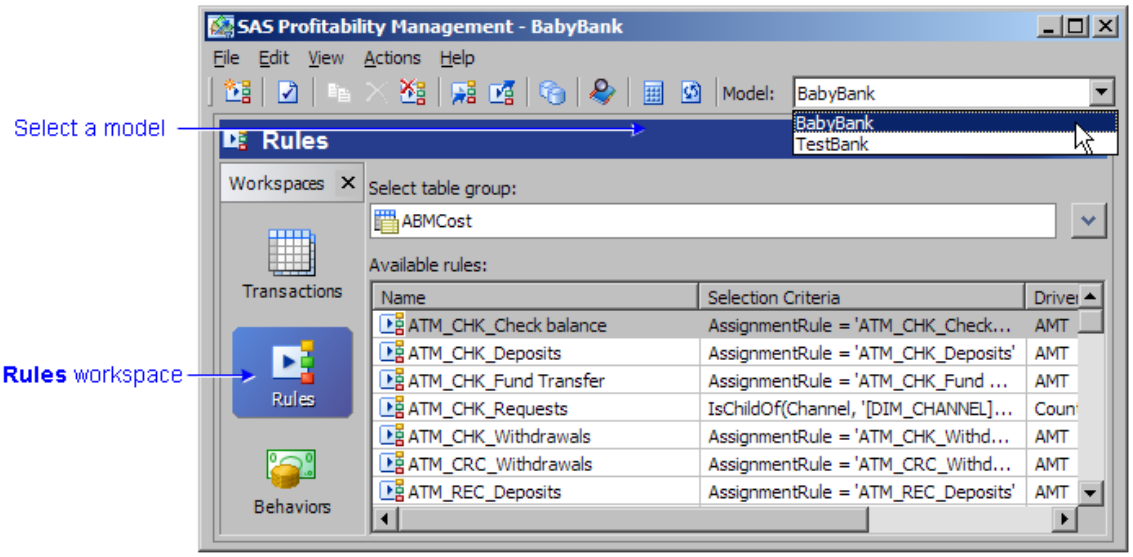


Related Topics:

- Export a rule definition table

Add an Assignment Rule to a Transaction Table Group

1. Activate the **Rules** workspace, and then select a model.



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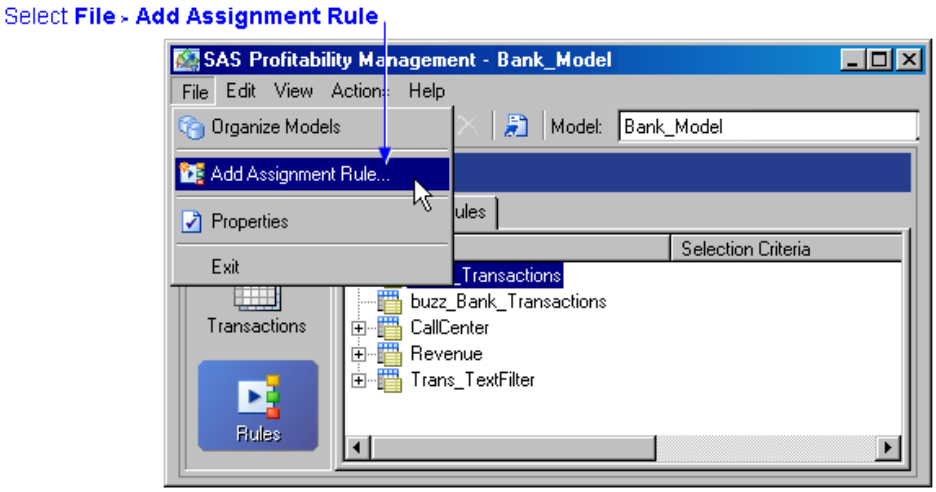
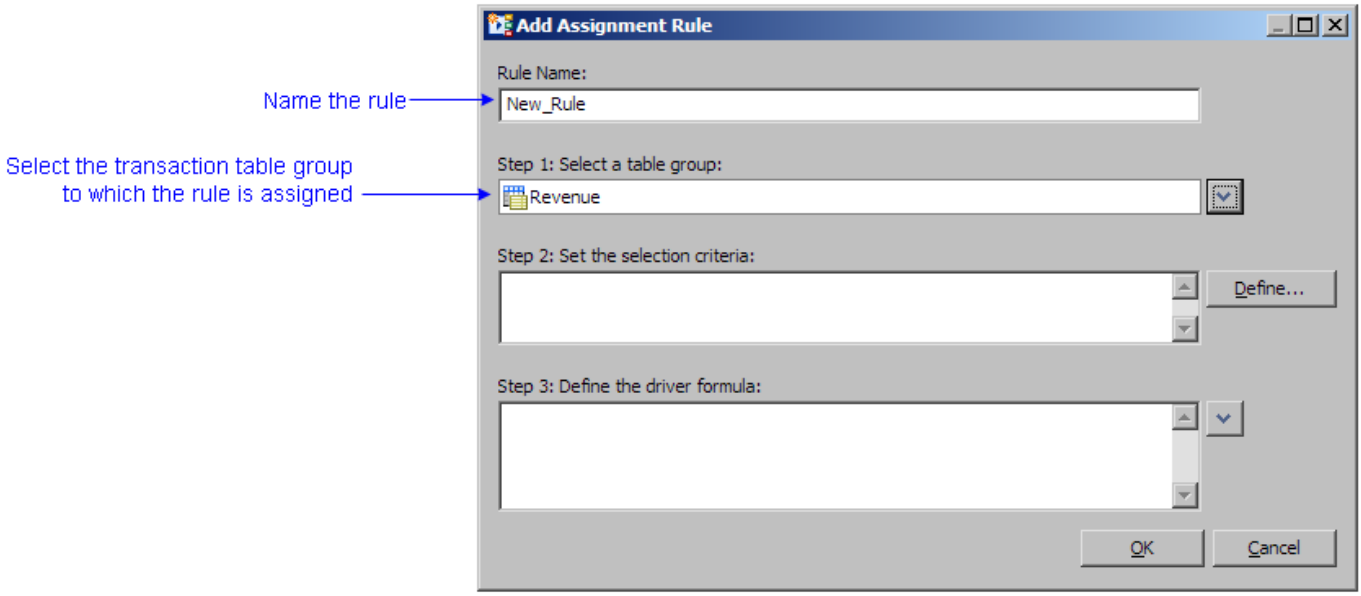
2. Select **File** ▸ **Add Assignment Rule** (or click the **Add Assignment Rule** icon).

   The **Add Assignment Rule** window appears.



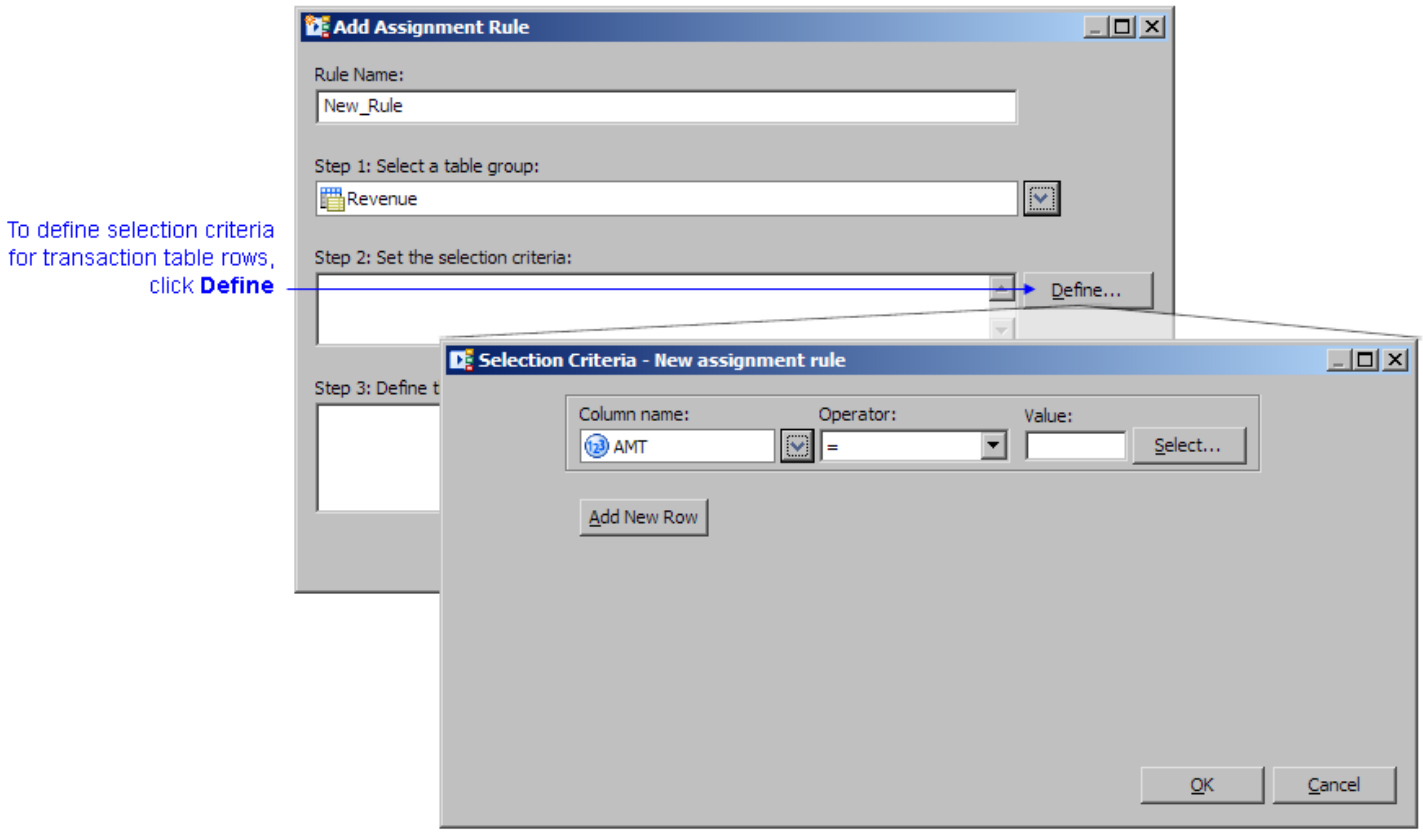
---

3. Name the rule.
4. Select the transaction table group to which you want to assign the rule.



5. Click **Define** to specify selection criteria.

   The **Selection Criteria** window opens.



6. Select the columns in a transaction table group to include in a calculation.

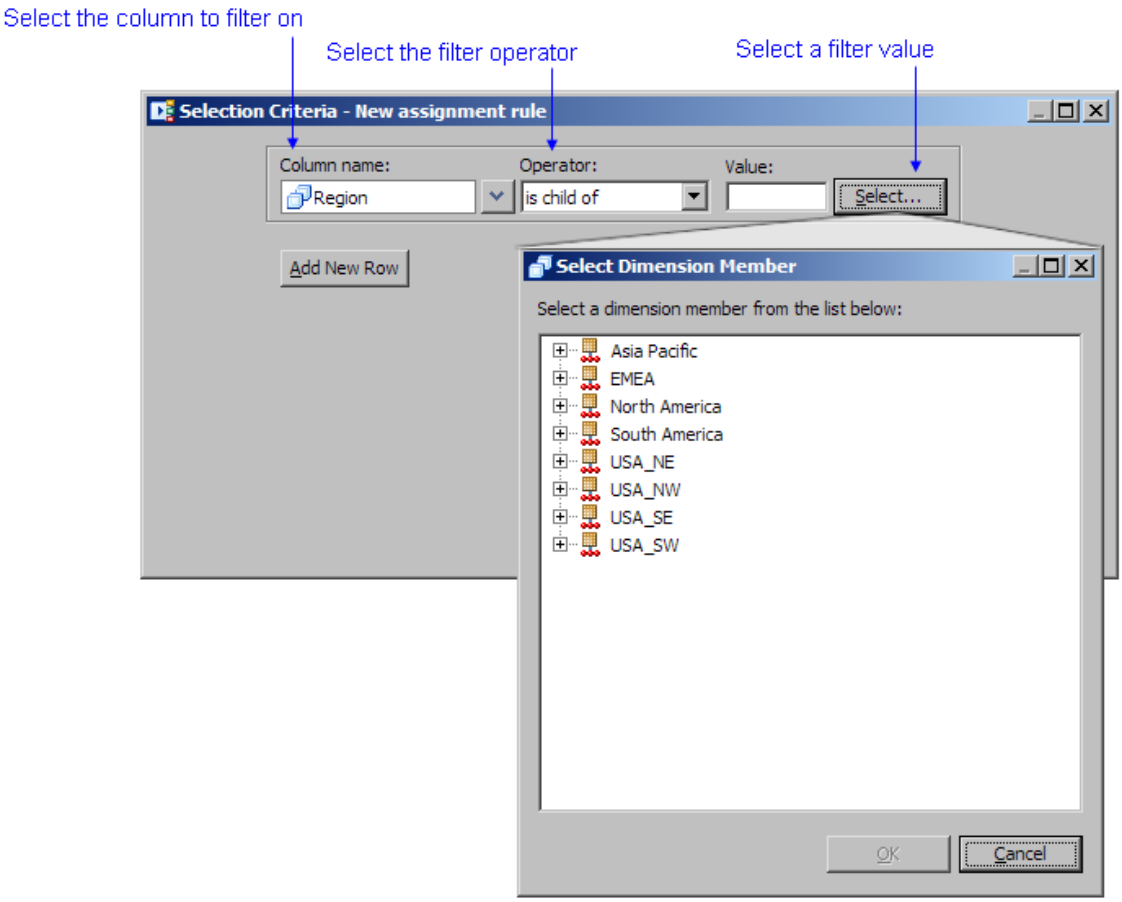
   You can specify three types of selection criteria:

   - filter by text value
   - filter by the value of one or more dimensions
   - filter by numeric value
   - filter by matching a field in the behavior table

   a. Select one or more columns in the transaction table group.

b. Select an operator to apply to the selected columns.

- Text value operators: =, not =, match Behavior
- Numeric value operators: =, not =, <, <=, >, >= , match Behavior
- Dimension value operator: is child of



c. Select a value to compare the columns to.

d. Click **Add New Row** to add another condition to the selection criteria.

Note: If you are using the **match Behavior** operator, then each condition must be joined with the **And** operator.

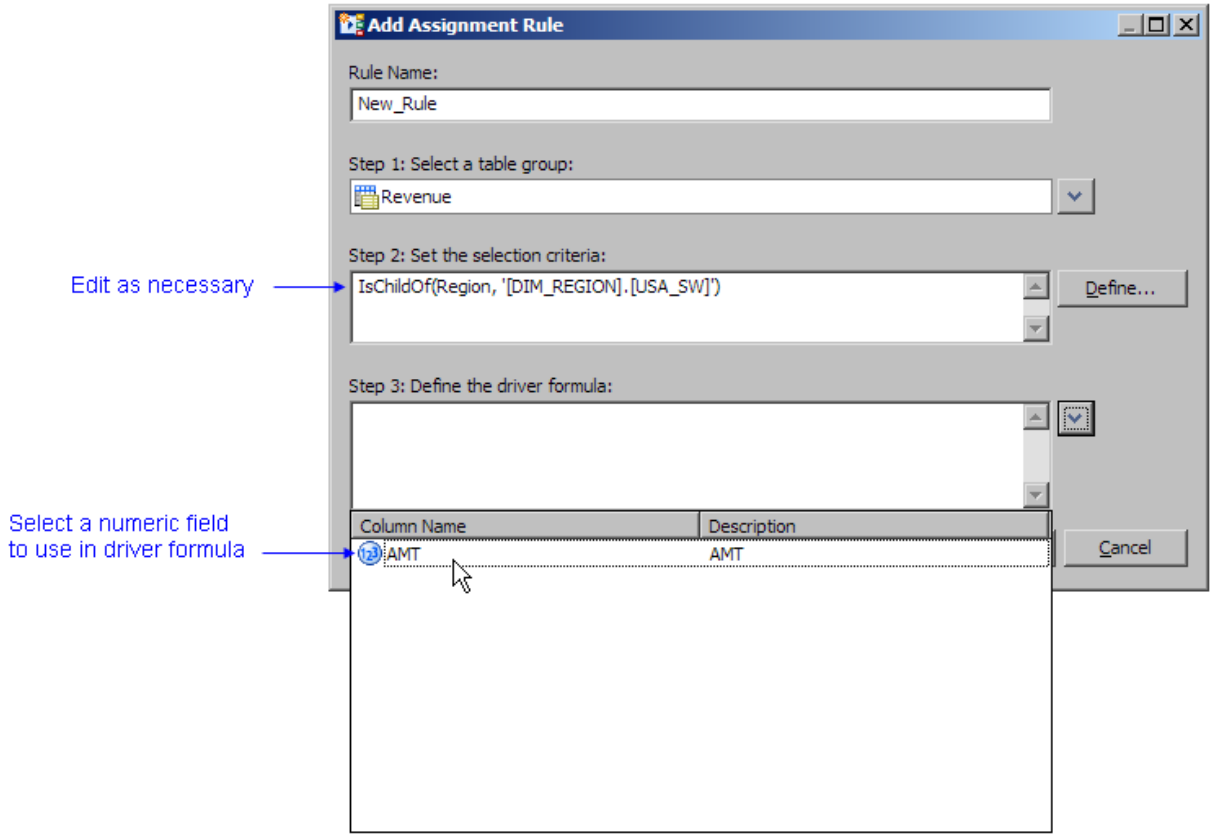
e. Click **OK**.

---

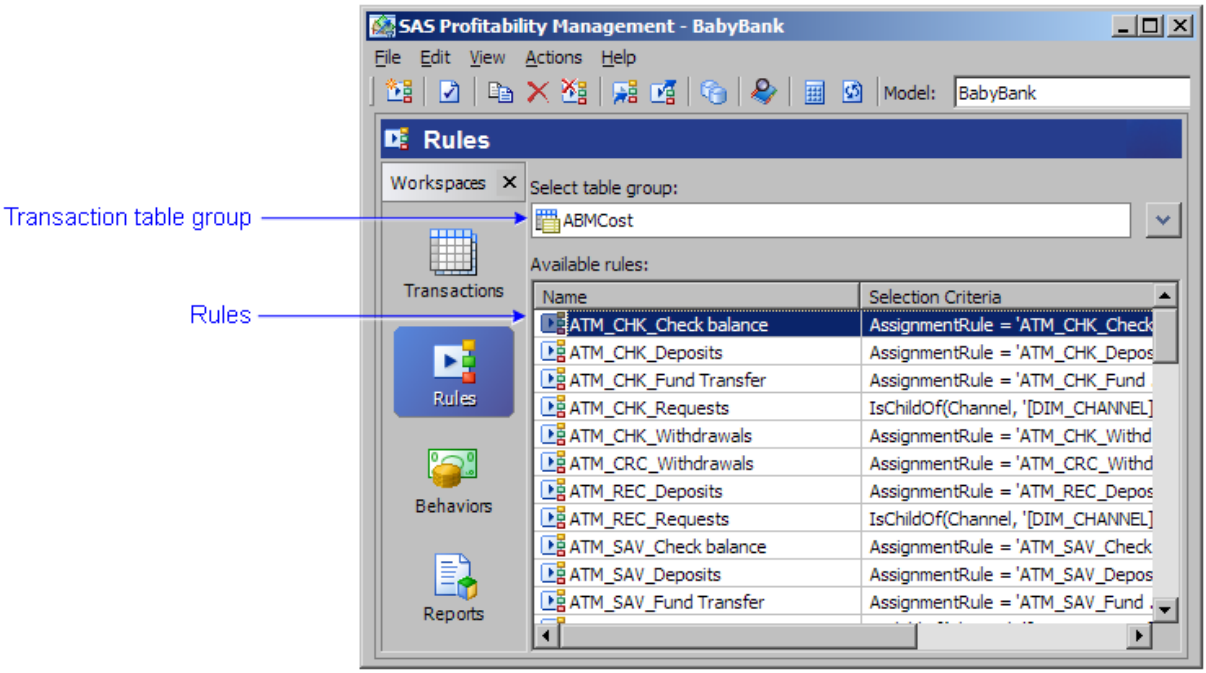
7. After building the selection criteria, modify the conditions manually, as necessary.
8. Select a numeric column to use in the driver formula.

Note: You are not restricted to a single field.

9. Click **OK**.



The added assignment rule displays in the **Rules** workspace under the transaction table group to which the rule belongs.



Associate an Assignment Rule with a Behavior Show me

Because an assignment rule selects rows from a group of transaction tables, the effect of associating an assignment rule with a behavior is associating the behavior with a set of transaction table rows.

1. Activate the **Behaviors** workspace, and then select a model.
2. Select a behavior.
3. Click **Create a new association** (or click the **Create a New Association** icon, or select **File ▸ Create a New Association**).

   The Associate Rules window opens.
4. Select a table group.
5. Select additional behaviors to associate with a rule.
   - Every behavior must be associated with a rule.
   - A rule can be associated with multiple behaviors.
6. Select a rule to apply to the selected behaviors.
7. Click **OK**.

   The new assignment rule displays in the **Behaviors** workspace.

Import a Rule Association Table Show me

1. Activate the **Behaviors** workspace, and then select a model to which you want to import the rule associations.
2. Select **Actions ▸ Import Associations**.

   The **Import Associations** window opens.
3. Click **Select** to select a rule association table.

   The Select Table window opens. Select a rule association table, and then click **OK**.
4. To preview the data in the rule association table, click **Preview**.

   The Preview window opens and the rule association table is displayed.
5. Click **OK**.
6. For each required column in a rule association table, identify the corresponding column in the table that is being imported, and then click **OK**.

   A window with the message **Import associations complete** appears.
7. Click **Details** to verify that the import succeeded, and then click **OK**.

Notes:

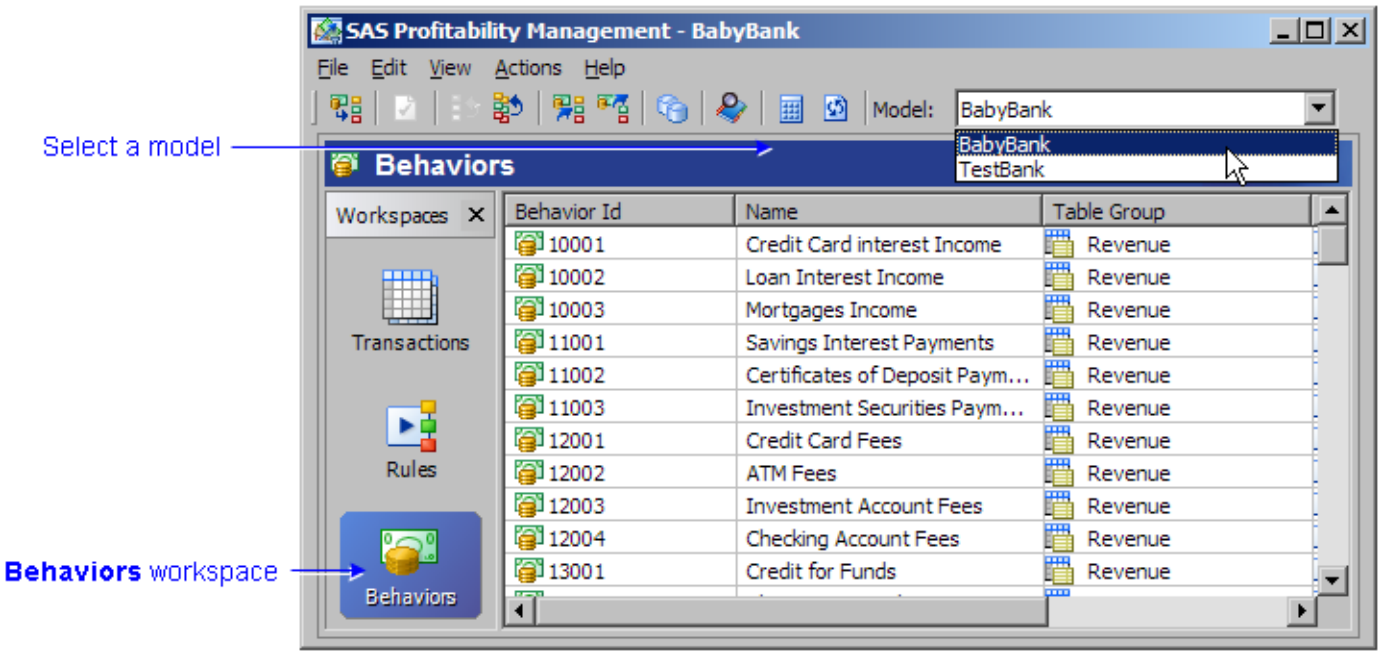
- If a column in the import table is blank, it is an error and the row is not imported.
- If the assignment rule name in the import table is not found, it is an error and the row is not imported.
- If the table group name in the import table is not found, it is an error and the row is not imported.
- If an association already exists for a behavior, the new association in the import table replaces the existing association.

Related Topics:

- Export a rule association table

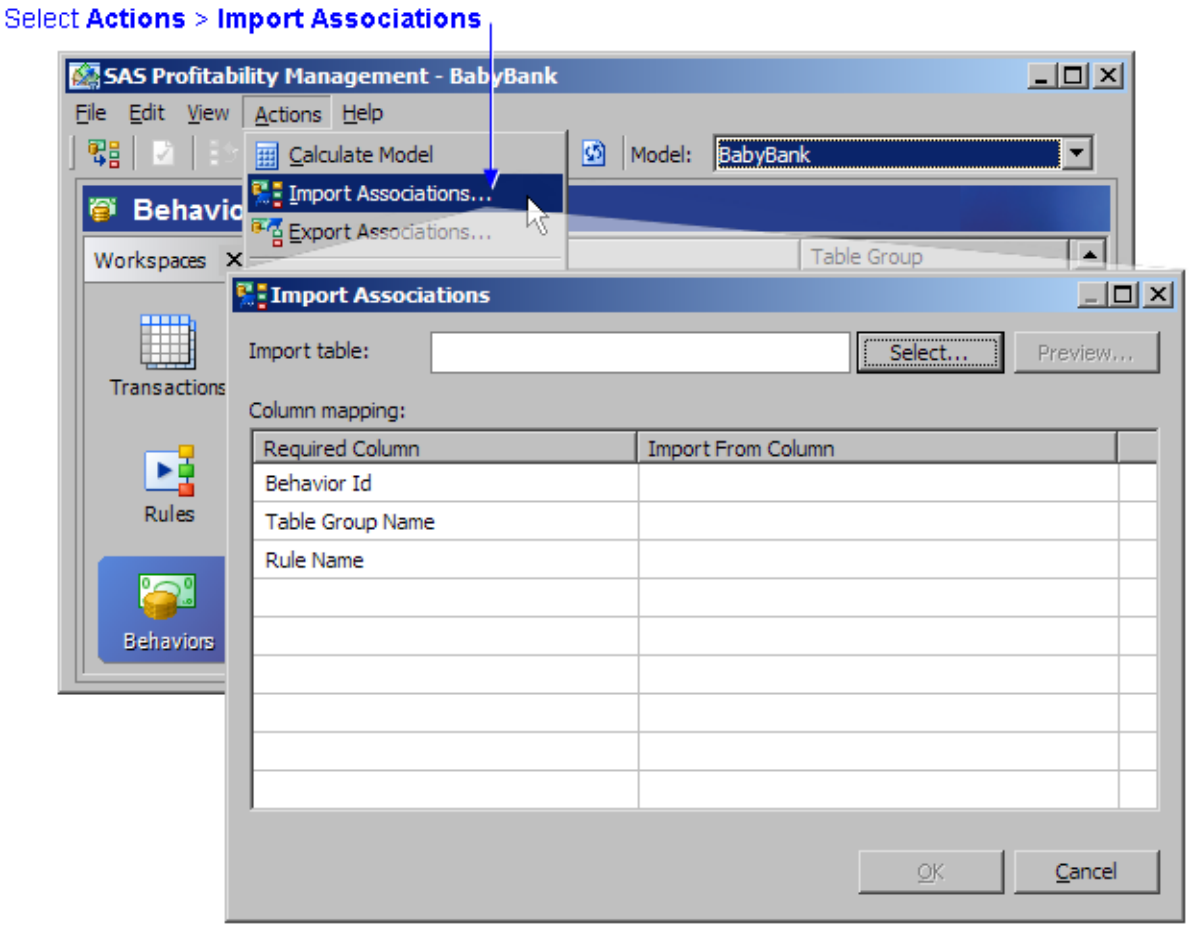
Import a Rule Association Table

1. Activate the **Behaviors** workspace, and then select a model to which you want to import the rule associations.



2. Select **Actions** ▸ **Import Associations**.

   The **Import Associations** window opens.



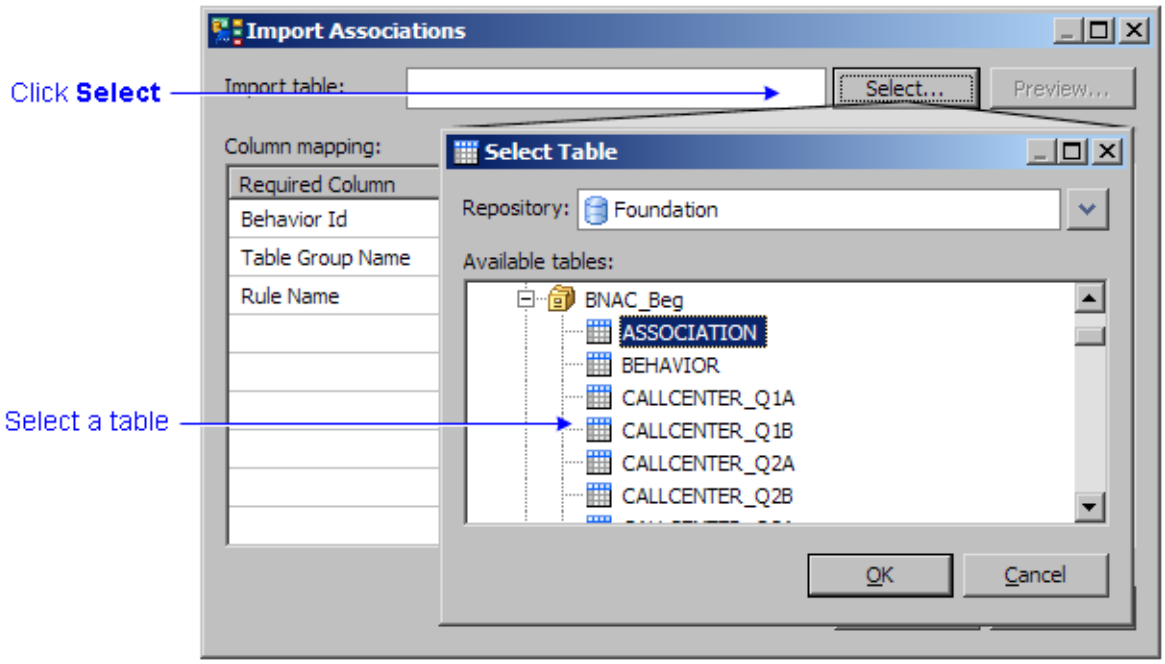
3. Click **Select** to select a rule association table.

   The Select Table window opens. Select a rule association table, and then click **OK**.

4. To preview the data in the rule association table, click **Preview**.

   The Preview window opens and the rule association table is displayed.

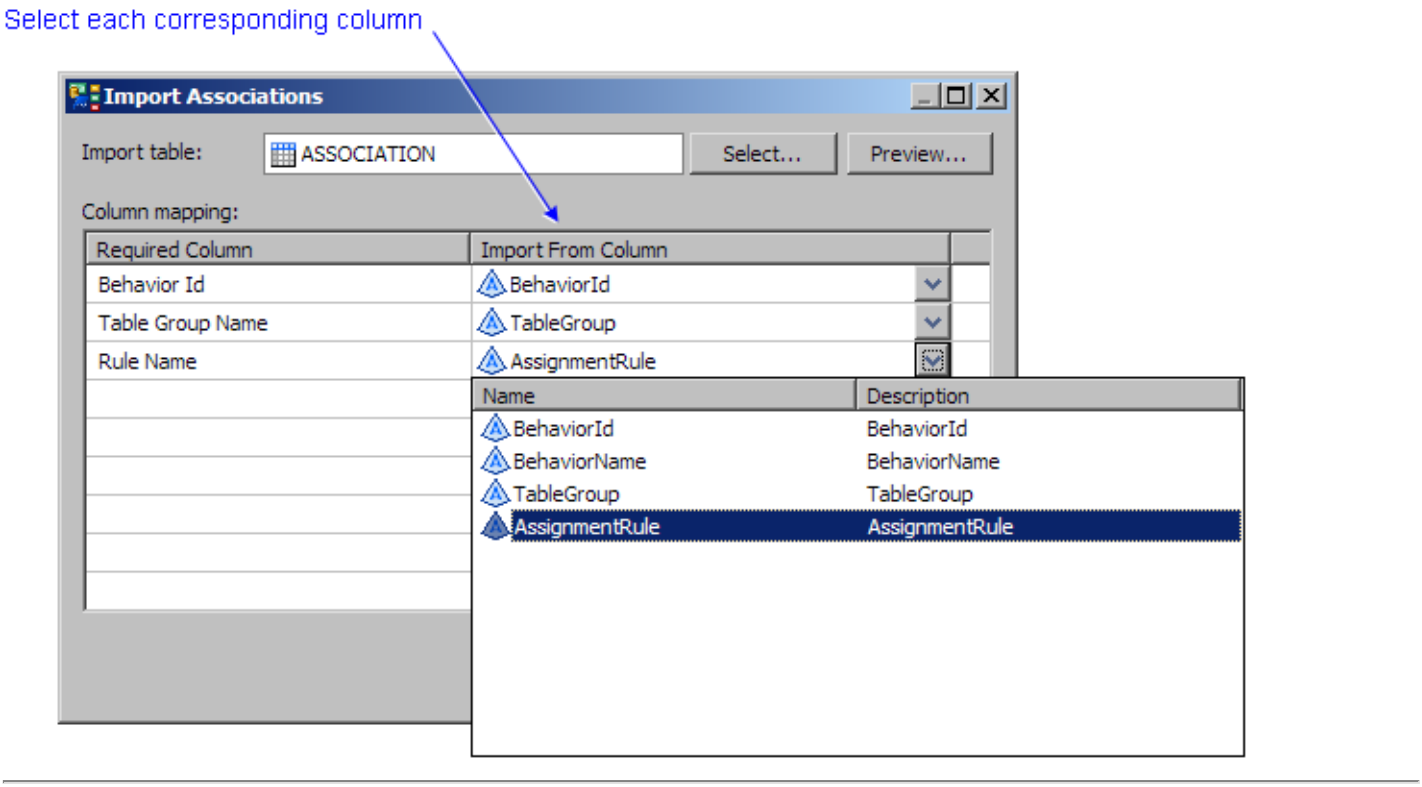
5. Click **OK**.



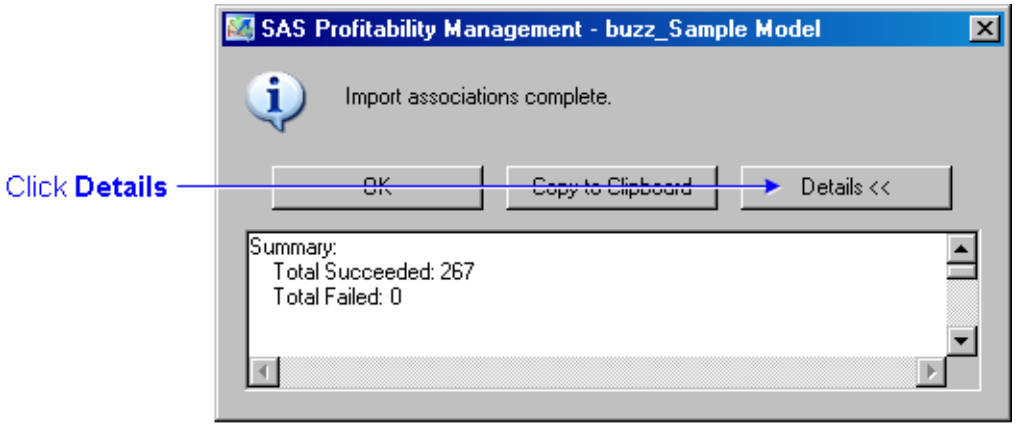
---

6. For each required column in a rule association table, identify the corresponding column in the table being imported, and then click **OK**.

   A window with the message **Import associations complete** appears.



7. Click **Details** to verify that the import succeeded, and then click **OK**.



Notes:

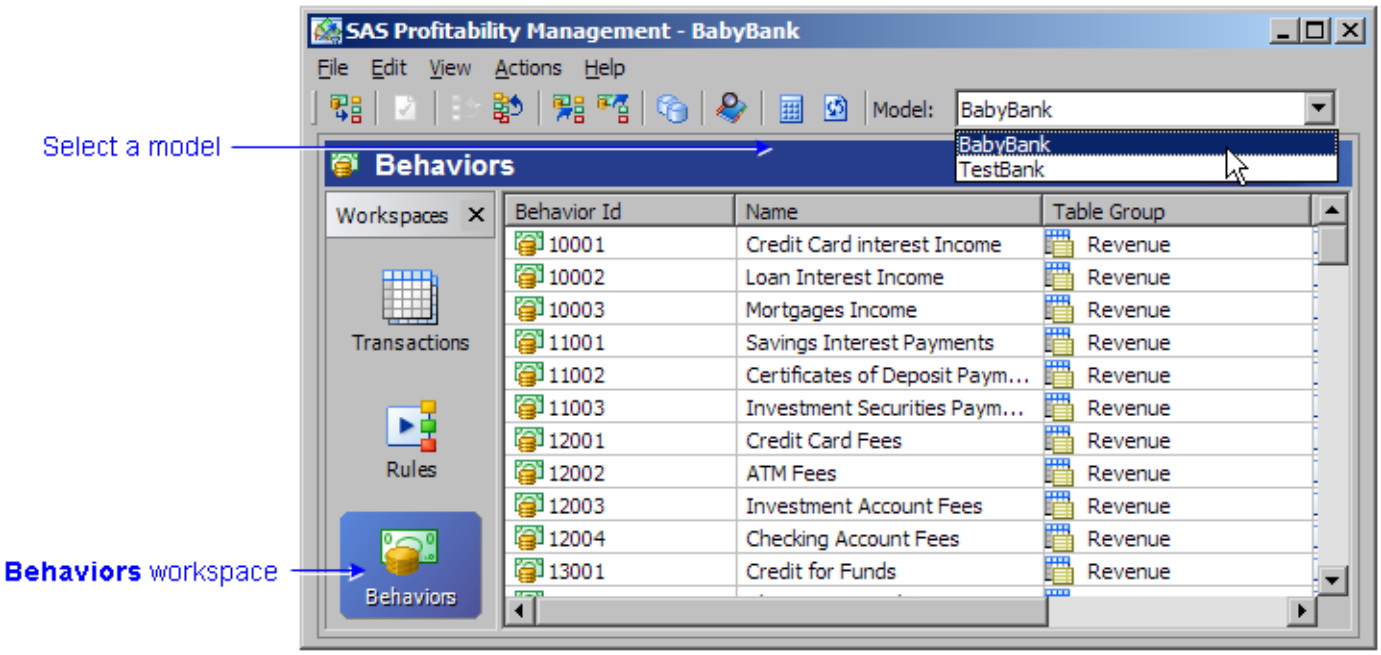
- If a column in the import table is blank, it is an error and the row is not imported.
- If the assignment rule name in the import table is not found, it is an error and the row is not imported.
- If the table group name in the import table is not found, it is an error and the row is not imported.
- If an association already exists for a behavior, the new association in the import table replaces the existing association.

Related Topics:

- Export a rule association table

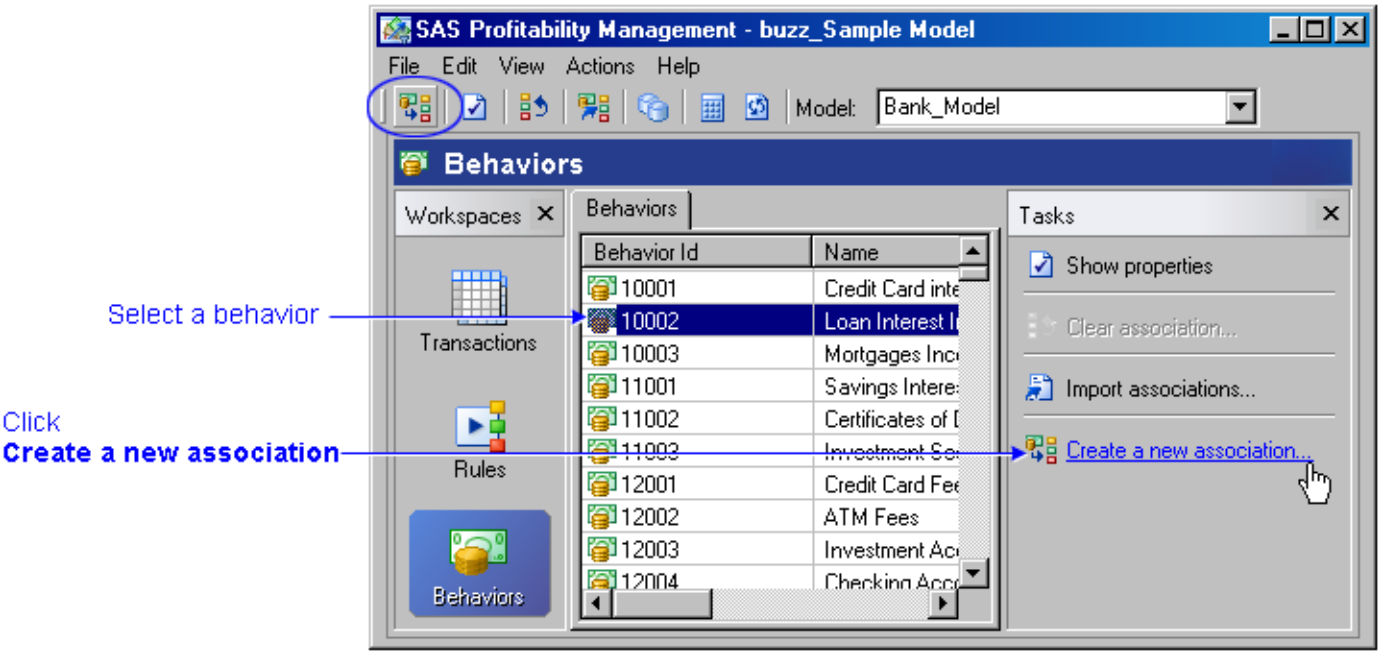
Associate an Assignment Rule with a Behavior

1. Activate the **Behaviors** workspace, and then select a model.



2. Select a behavior.
3. Click **Create a new association** (or click the **Create a New Association** icon, or select **File ▸ Create a New Association**).

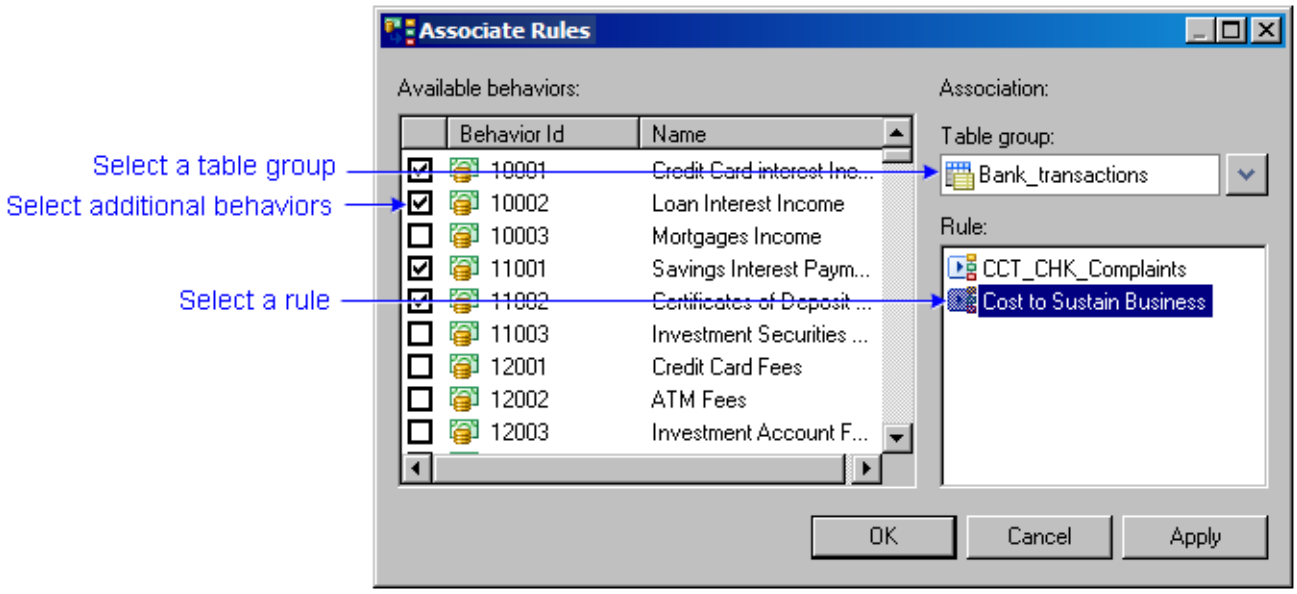
   The Associate Rules window opens.



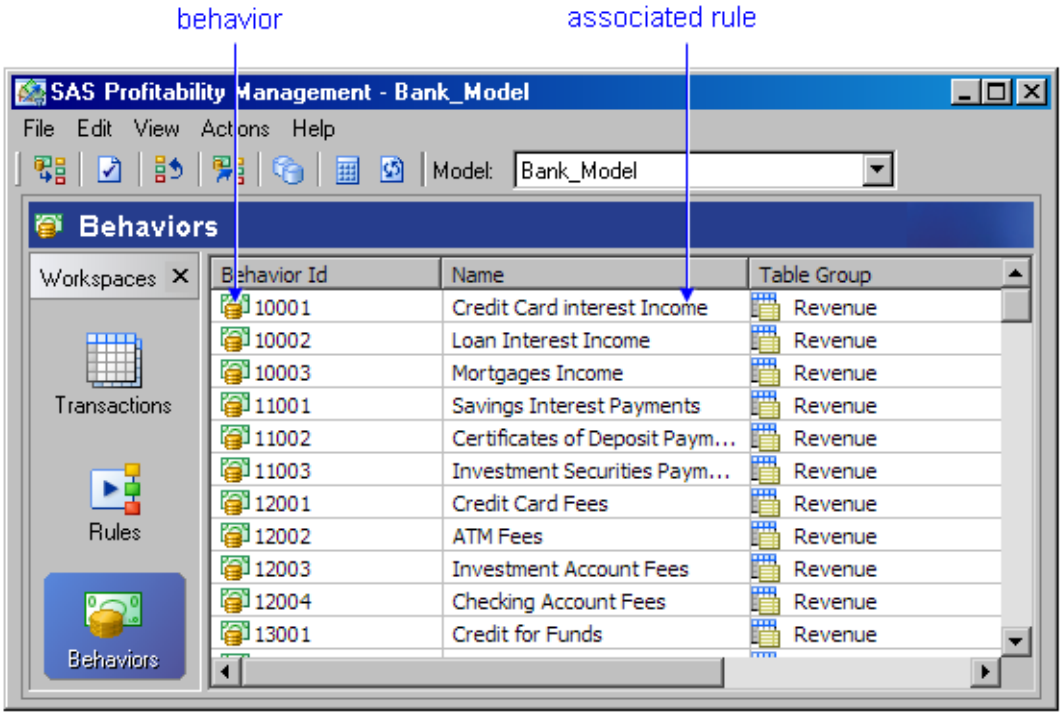
4. Select a table group.
5. Select additional behaviors to associate with a rule.
   - Every behavior must be associated with a rule.

- A rule can be associated with multiple behaviors.

6. Select a rule to apply to the selected behaviors.
7. Click **OK**.



The new assignment rule displays in the **Behaviors** workspace.

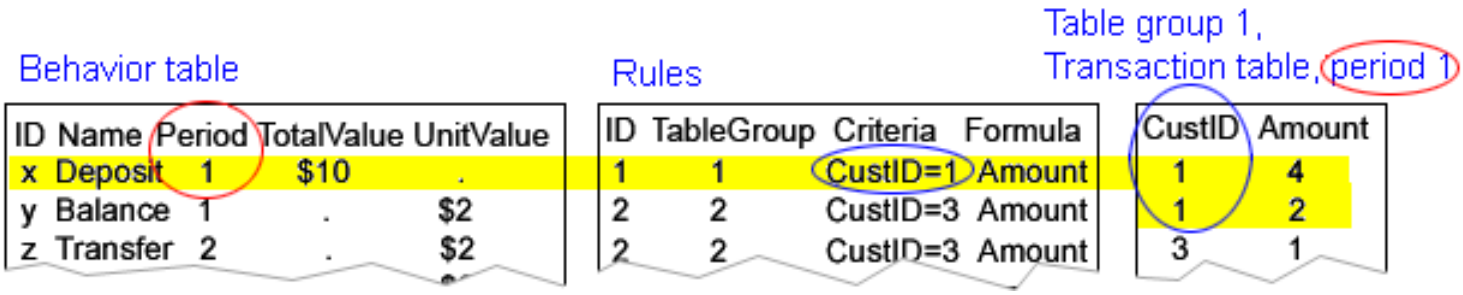


5. Define Rules

An assignment rule associates rows in a transaction table with a behavior. An assignment rule:

- Is associated with one or more rows in a behavior table.
- Specifies which rows in a transaction table group to include in a calculation.
- Specifies what quantity to include in the calculation.

An assignment rule is implicitly associated with a single transaction table in a table group — namely, the transaction table whose period is specified in the behavior table row with which the assignment rule is associated.



Defining an assignment rule and associating it with a behavior is a two-step process.

1. Add an assignment rule to a transaction table group.
    - One at a time
    - By importing a rule definition table
2. Associate an assignment rule with a behavior.
    - One at a time
    - By importing a rule association table

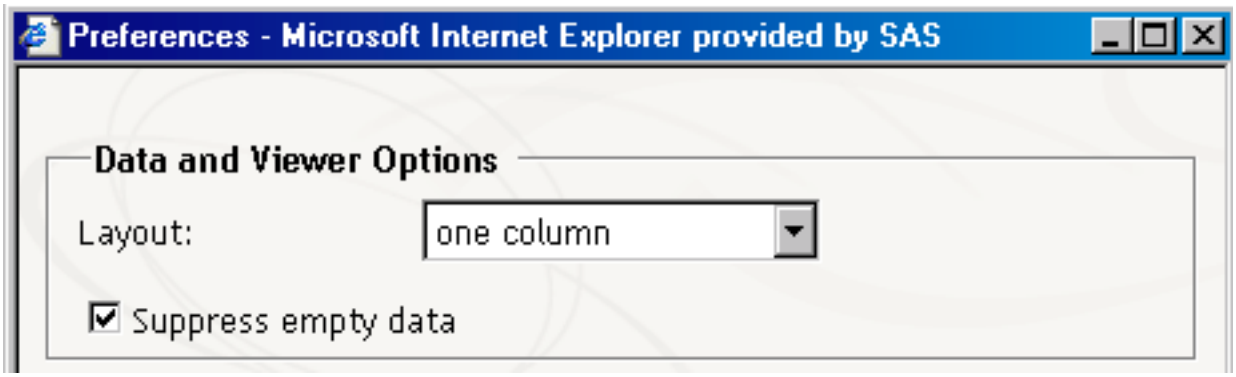
Related Topics:

- Copy an assignment rule to a new name
- Clear an association between a behavior and an assignment rule

Suppress the Display of Blank Content

To suppress blank content, perform the following steps:

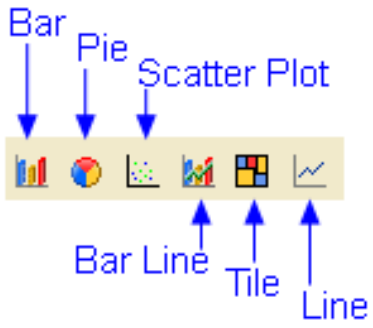
1. Log on to the SAS Web OLAP Viewer.
2. Select **View** ▸ **Preferences**.
3. Select **Suppress empty data**.



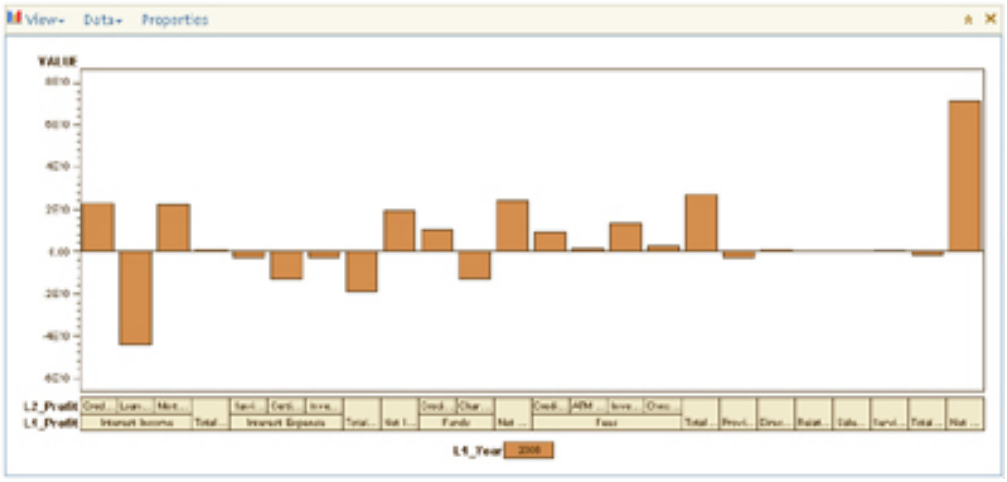
Insert a Graph into a Report

To insert a graph into a report, perform the following steps:

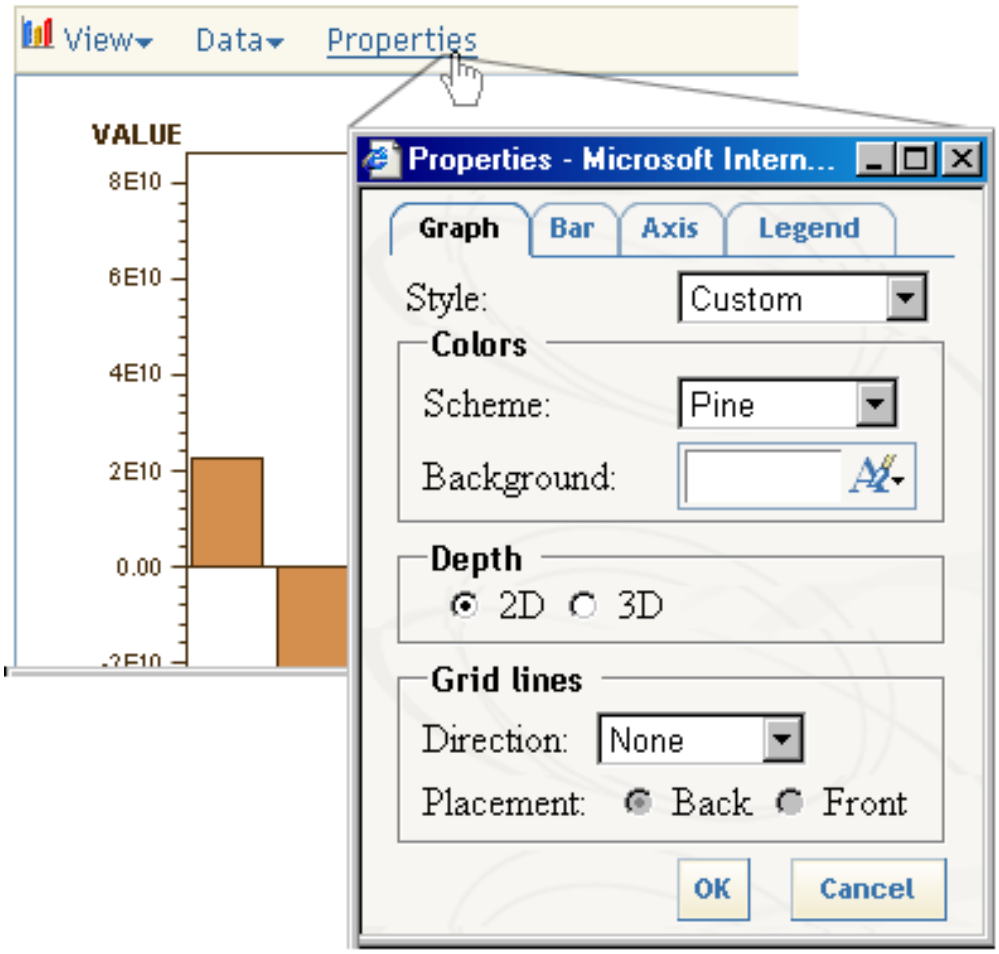
1. Log on to the SAS Web OLAP Viewer.
2. Select a graph icon from the toolbar.



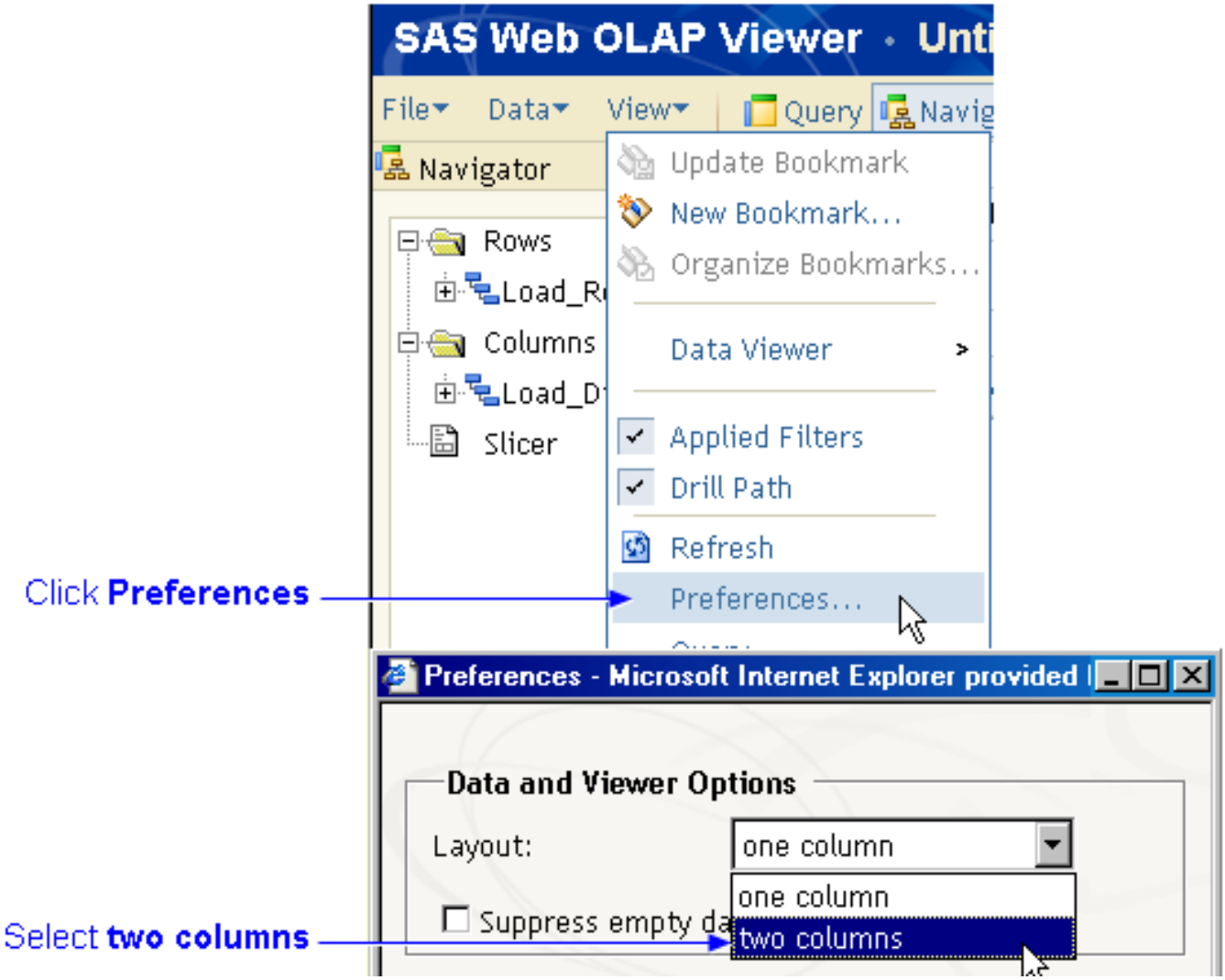
   The graph is inserted into the report.



3. To change the formatting of the graph, click **Properties**, make changes, and then click **OK**.



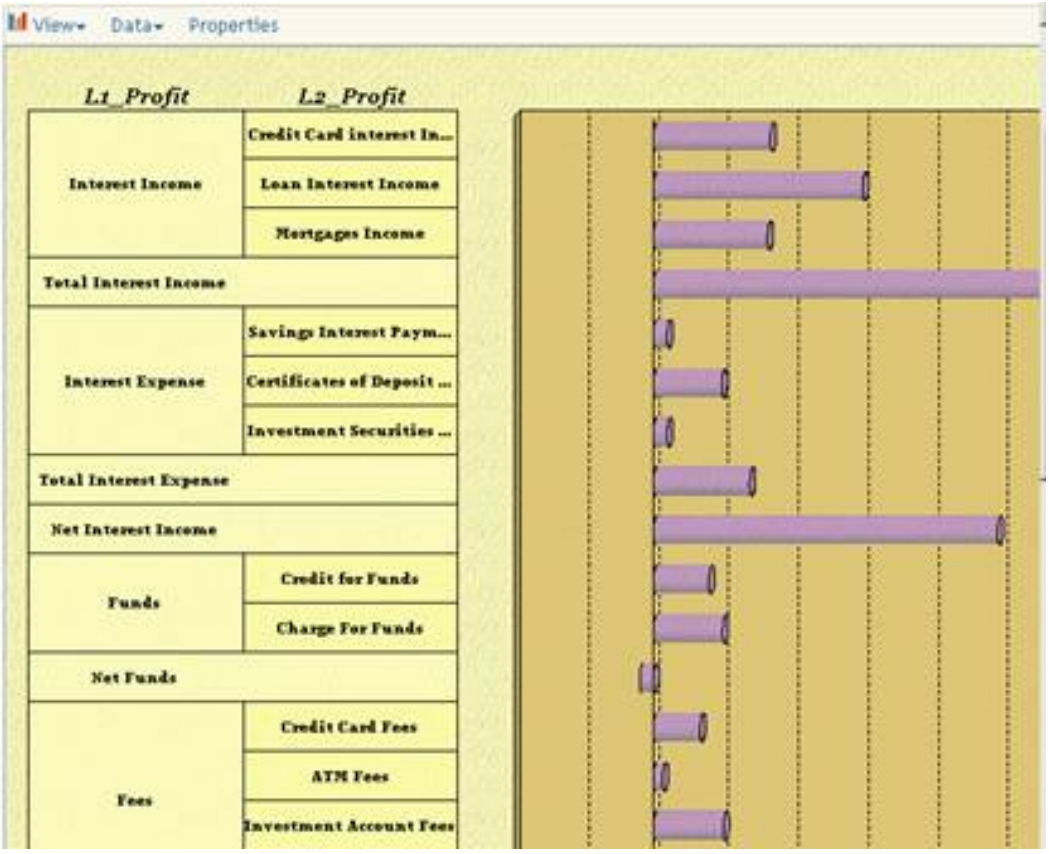
4. You can display the table and graph next to each other by selecting **View ▸ Preferences** and selecting **two columns** for the layout.



The following picture shows the table and graph.

View Data Properties

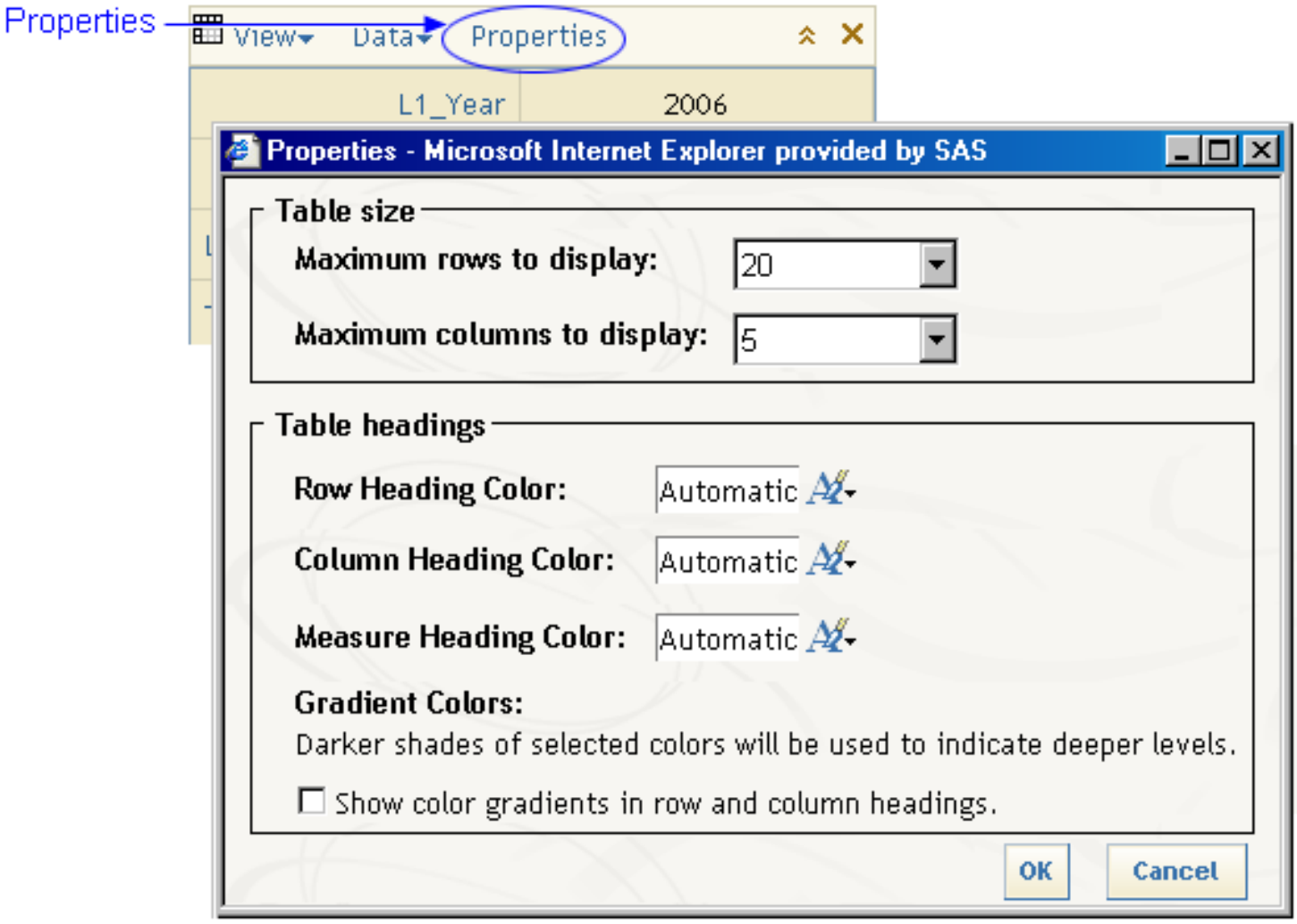
L1_Year	2006
L1_Profit	L2_Profit
Interest Income	Credit Card Interest Income	$838,384,531
	Loan Interest Income	$1497558002
	Mortgages Income	$817,703,367
Total Interest Income		$3153645899
Interest Expense	Savings Interest Payments	$100,526,253
	Certificates of Deposit Payments	$490,032,611
	Investment Securities Payments	$100,389,398
Total Interest Expense		$690,948,262
Net Interest Income		$2462697637



Change Heading Colors

To change the color of headings that are displayed in the SAS Web OLAP Viewer, perform the following steps:

1. Log on to the SAS Web OLAP Viewer.
2. Click **Properties** in the report header.
3. Select the row, column, and measure heading colors.

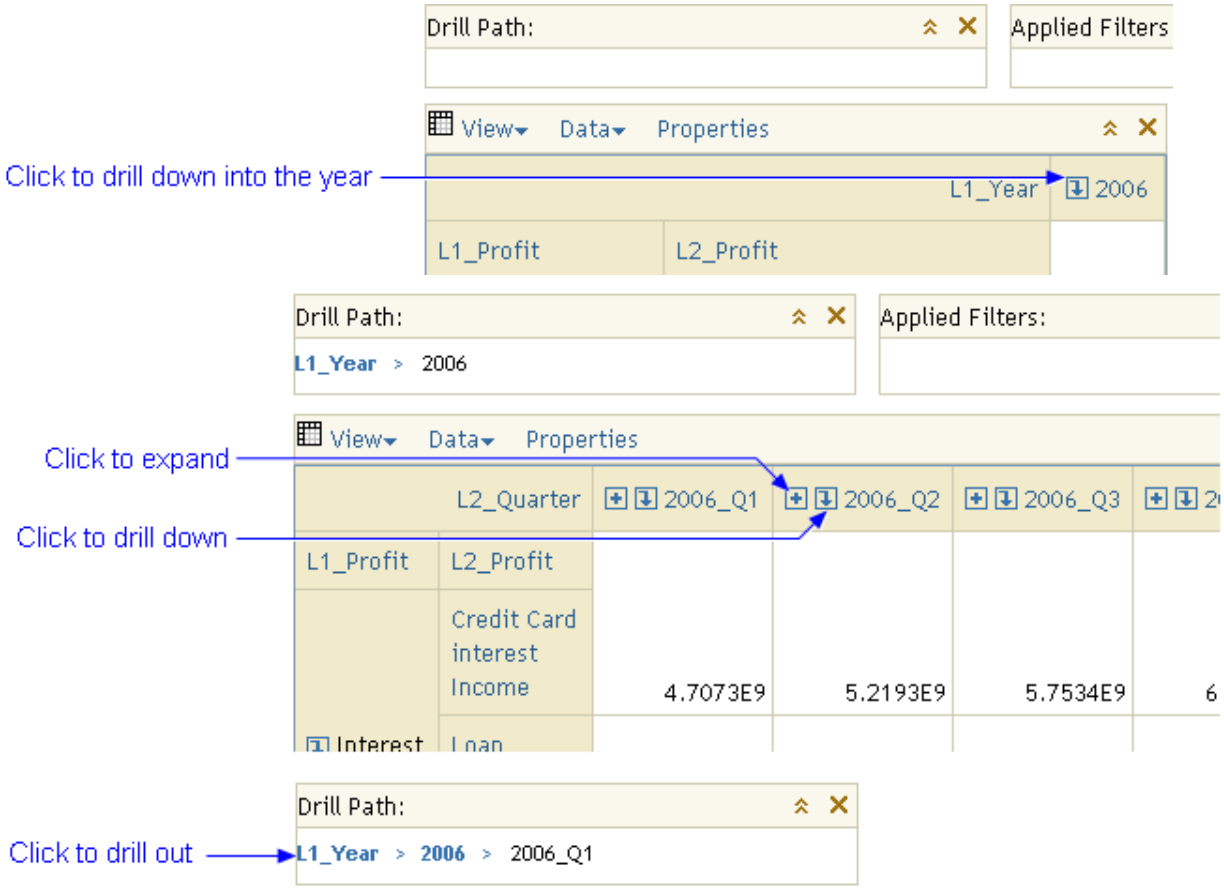


Drill into a Summary Report

- Drill by columns
- Drill by rows

Drill by Columns

Drill by columns to see more detail in the time dimension.



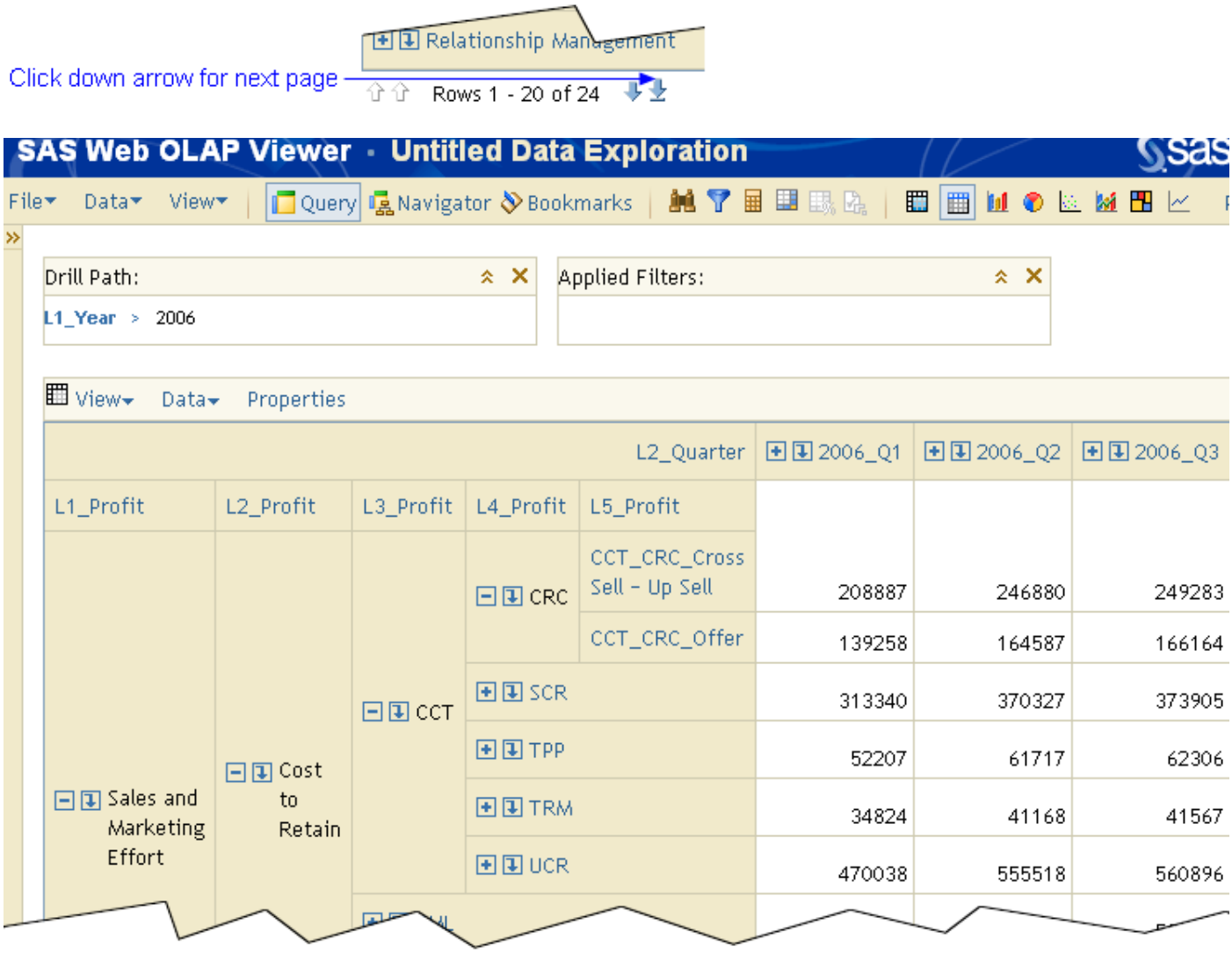
Drill by Rows

Drill by rows to see more detail in the contributing costs dimensions.

The levels that are available to drill down into for additional detail in the cube depend on the number of dimensions levels that are selected in the definition of the summary cube. The available depth to drill down into is limited by the model's report hierarchy. In the following summary report, there are five levels of contributing costs:

1. L1_Profit = Sales and Marketing Effort
2. L2_Profit = Cost to Retain
3. L3_Profit = CCT
4. L4_Profit = CRC
5. L5_Profit = CCT_CRC_Cross Sell - Up Sell

Click the down arrow at the bottom of the report to see the next page.


Relationship Management
Click down arrow for next page
Rows 1 - 20 of 24
SAS Web OLAP Viewer · Untitled Data Exploration
File
Data
View
Query
Navigator
Bookmarks
Drill Path:
L1_Year > 2006
Applied Filters:
View
Data
Properties
L2_Quarter
2006_Q1
2006_Q2
2006_Q3
L1_Profit
L2_Profit
L3_Profit
L4_Profit
L5_Profit
Sales and Marketing Effort
Cost to Retain
CCT
CRC
CCT_CRC_Cross Sell - Up Sell
208887
246880
249283
CCT_CRC_Offer
139258
164587
166164
SCR
313340
370327
373905
TPP
52207
61717
62306
TRM
34824
41168
41567
UCR
470038
555518
560896

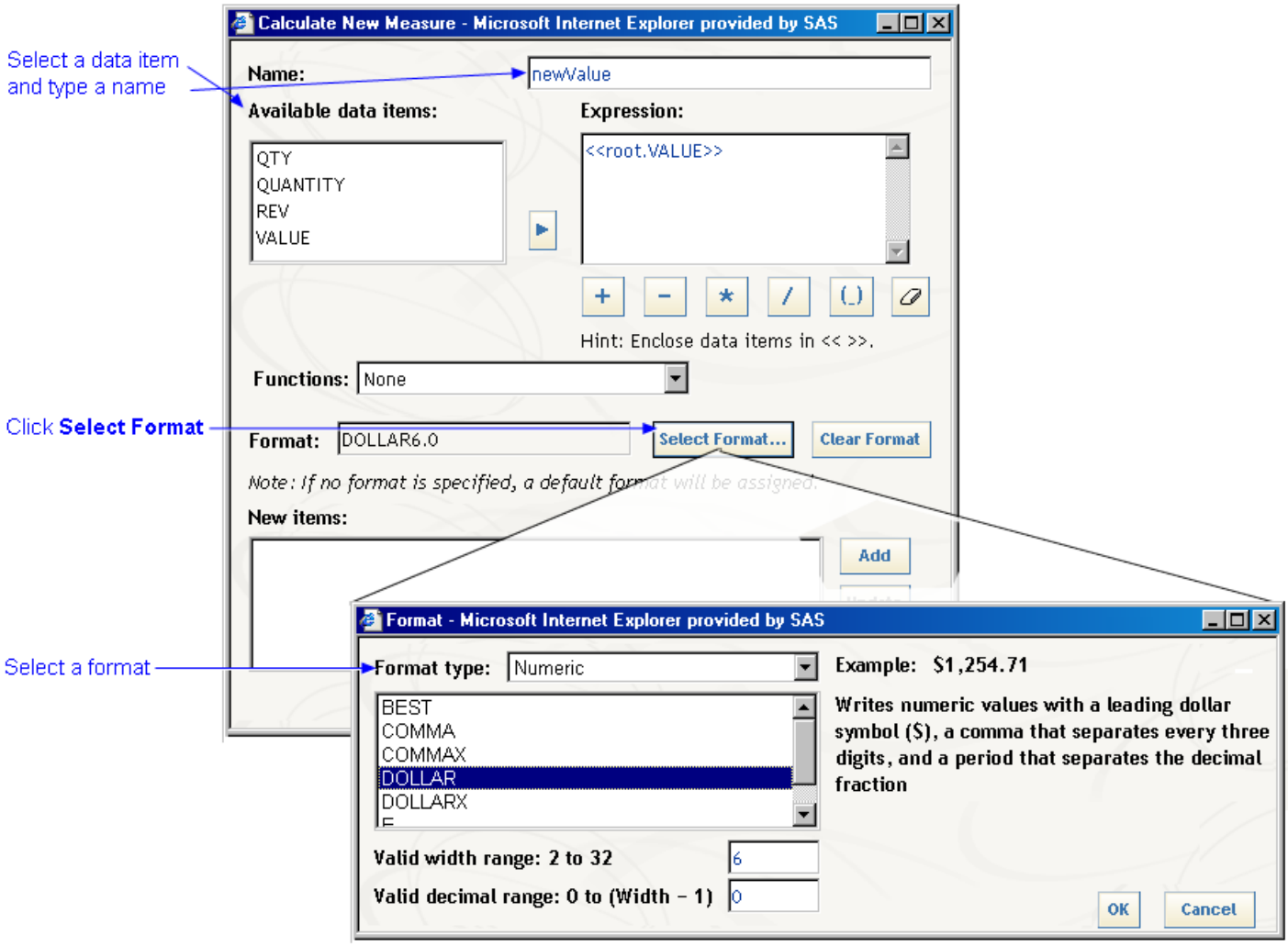
Format Displayed Numbers

You can define the display format for numbers to be used by default in SAS Profitability Management. To create a custom format for your numbers in the SAS Web OLAP Viewer:

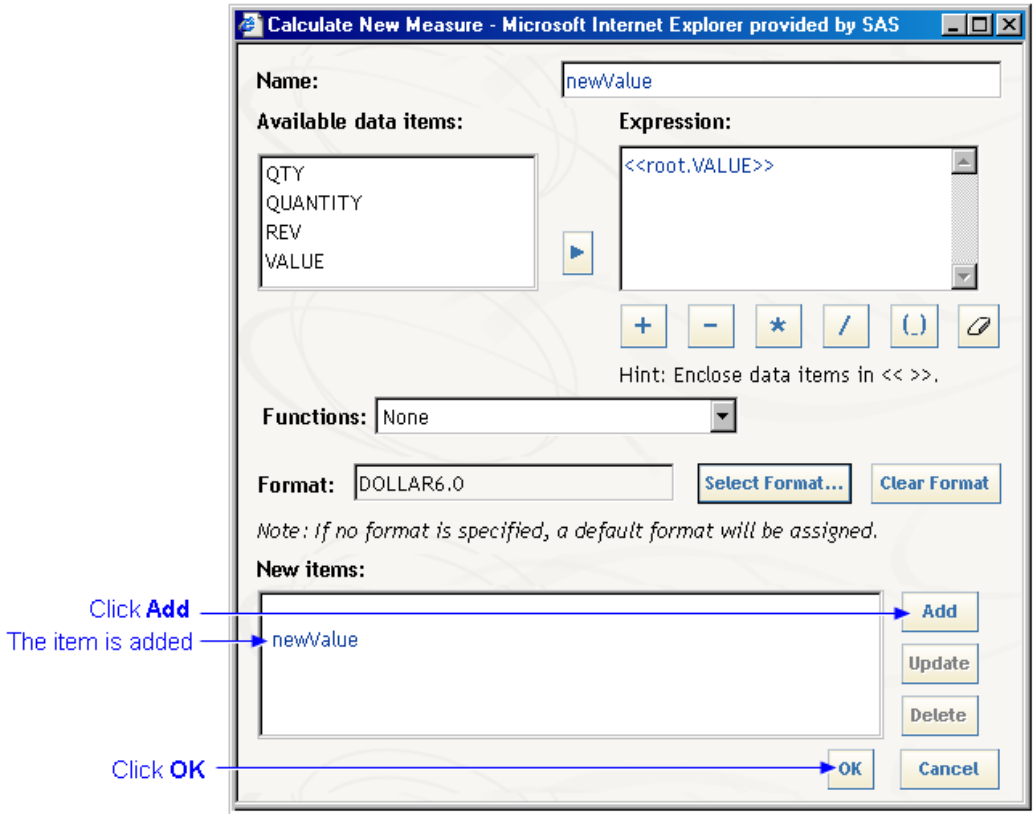
1. Open a summary report.
2. Select **Data** ▸ **Calculate New Measure**.

   The Calculate New Measure window opens.
3. Select the data item to be formatted, and then type a new name.
4. Click **Select Format**.

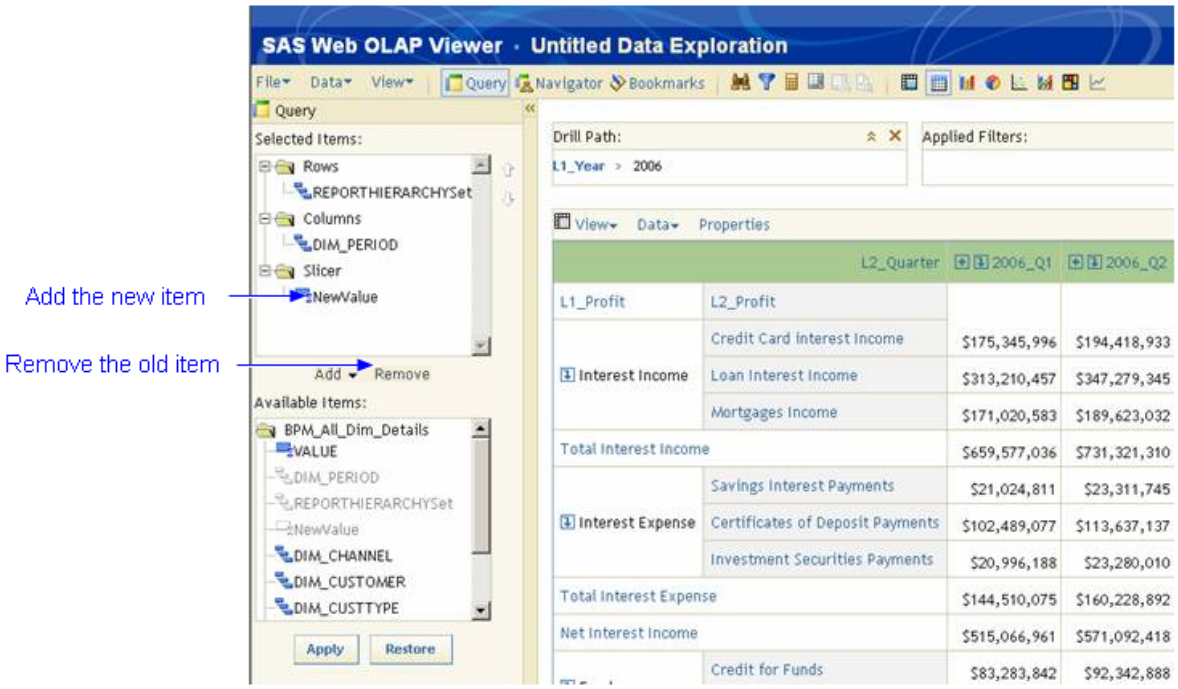
   The Format window opens.



5. Select a format to be applied, and then click **OK**.
6. Click **Add** to add the new item.



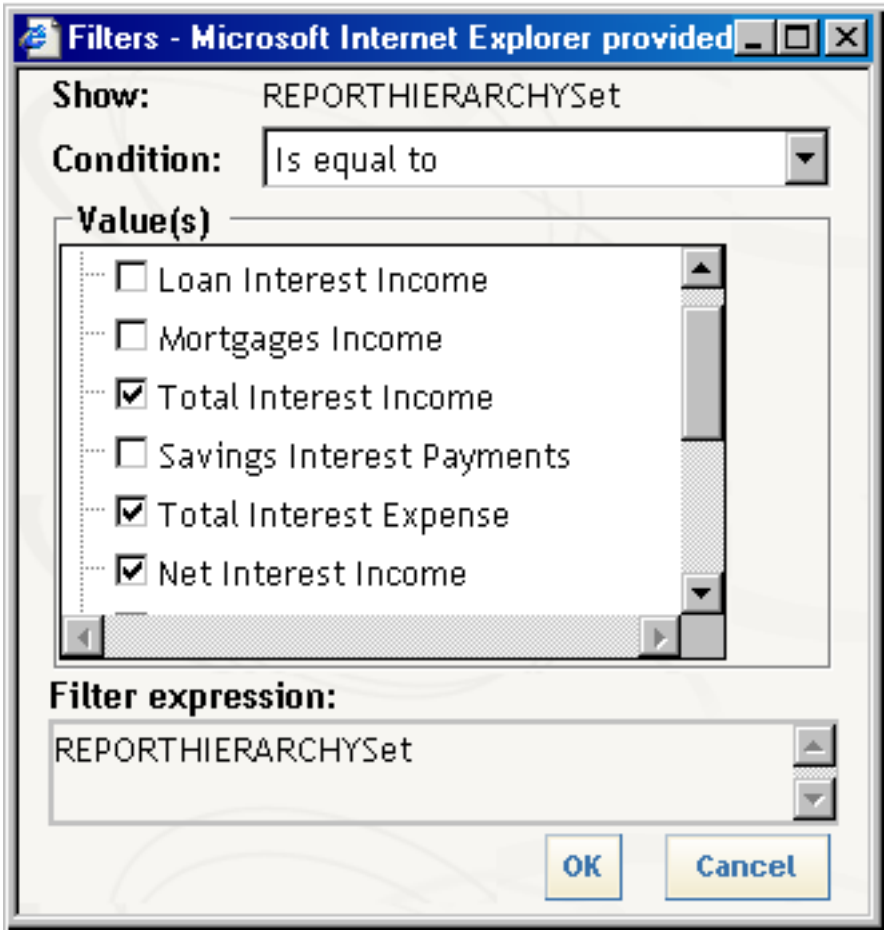
7. Add the new item where you want to, and then remove the old item.



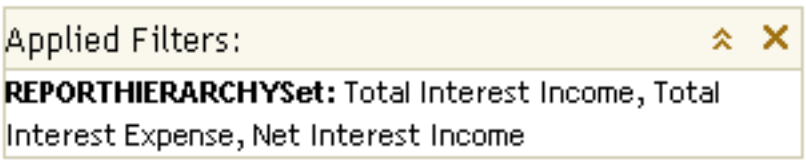
Select Specific Values to Display

To filter by value, perform the following steps:

1. Log on to the SAS Web OLAP Viewer.
2. Click the filter icon on the toolbar, or select **Data** ▸ **Filters**.
3. Select the dimension to filter by (row or column).
4. Select the values to include in the report, and then click **OK**.



5. The resulting report lists the applied filters in the header of the report and applies the filters.

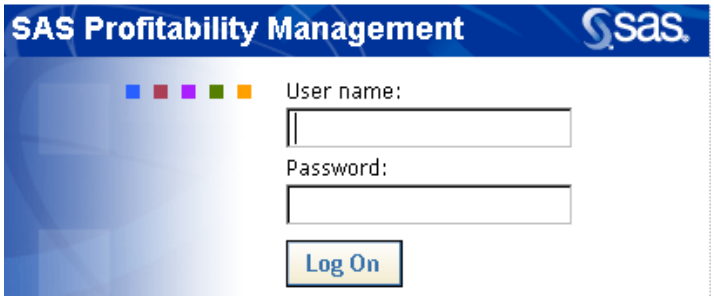


Open a Summary Report

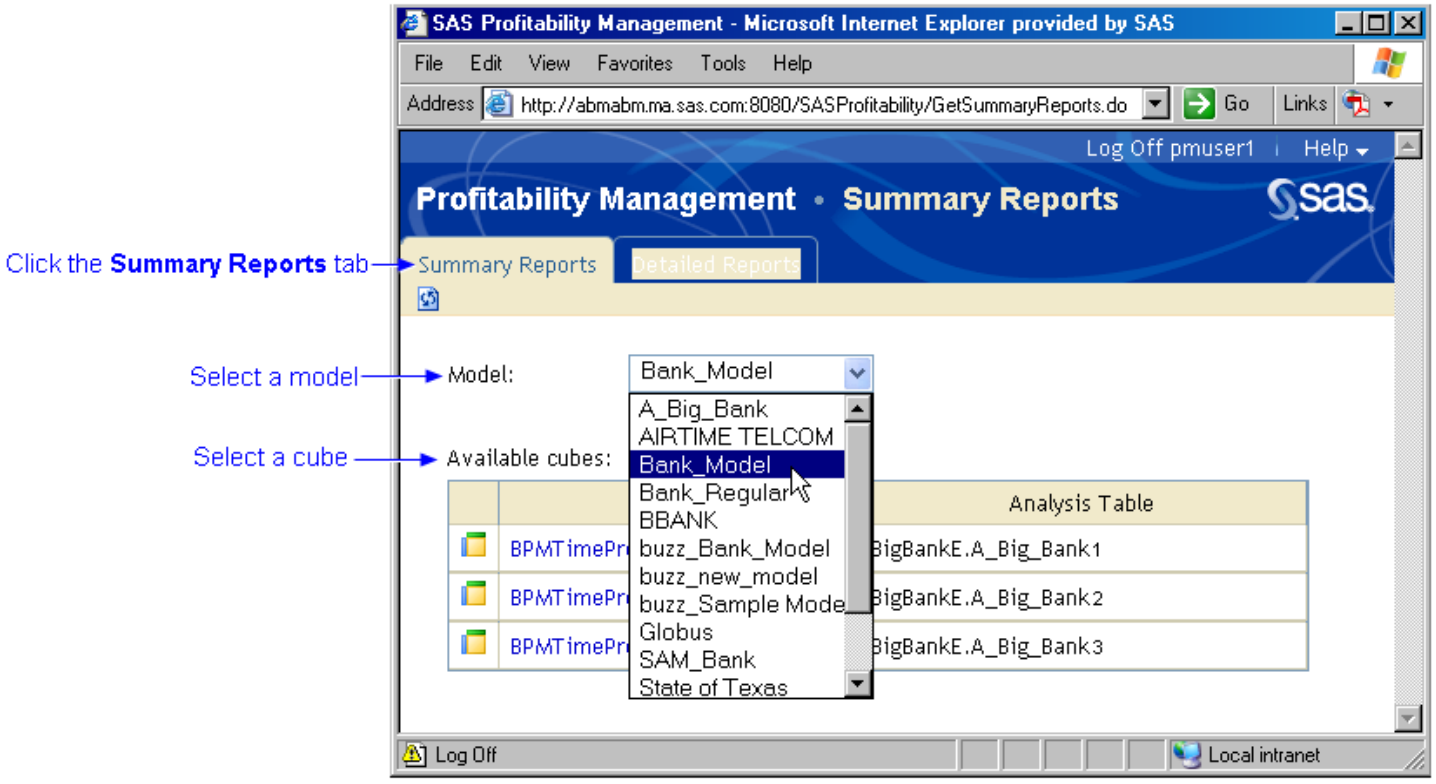
Use the SAS Profitability Management Web Reporting Client to select a summary report for viewing. The report is viewed with the SAS Web OLAP Viewer. To view a summary report, perform the following steps:

1. Log on to the SAS Profitability Management Web Reporting Client. User IDs and passwords were established during installation. The exact URL to use depends on your server installation. A sample URL is the following:

   http://profitmgmt:8080/SASProfitability/LogonCreate.do



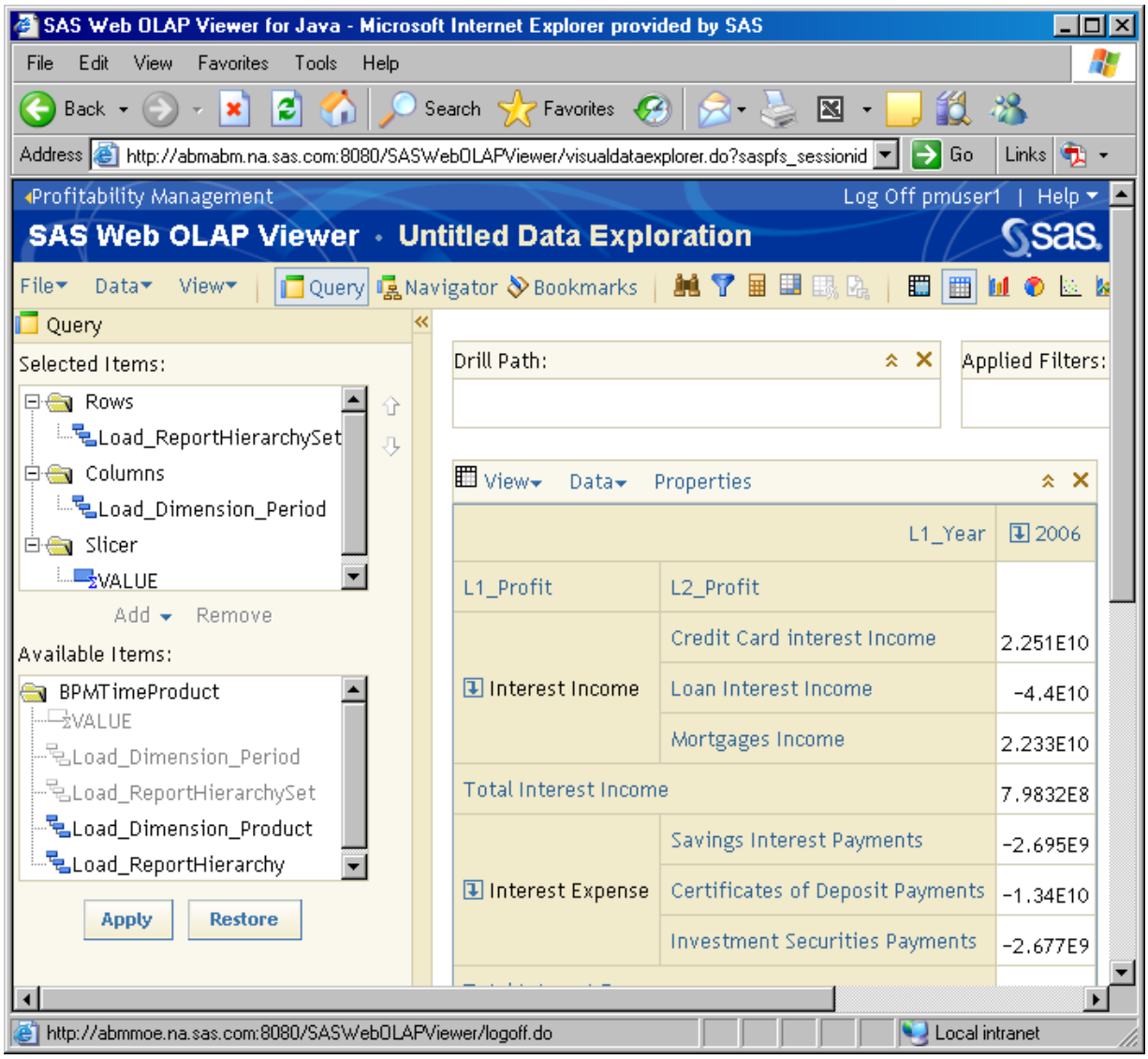
2. Click the **Summary Reports** tab.
3. Select a model.
4. Select a cube.



The selected cube opens in the SAS Web OLAP Viewer. The SAS Web OLAP Viewer displays the profit-and-loss report. The default configuration for the report is the following:

Rows	Report hierarchy dimension from SAS Profitability Management
Columns	Period dimension from SAS Profitability Management
Slicer	Value - the cost and revenue properties from SAS Profitability Management

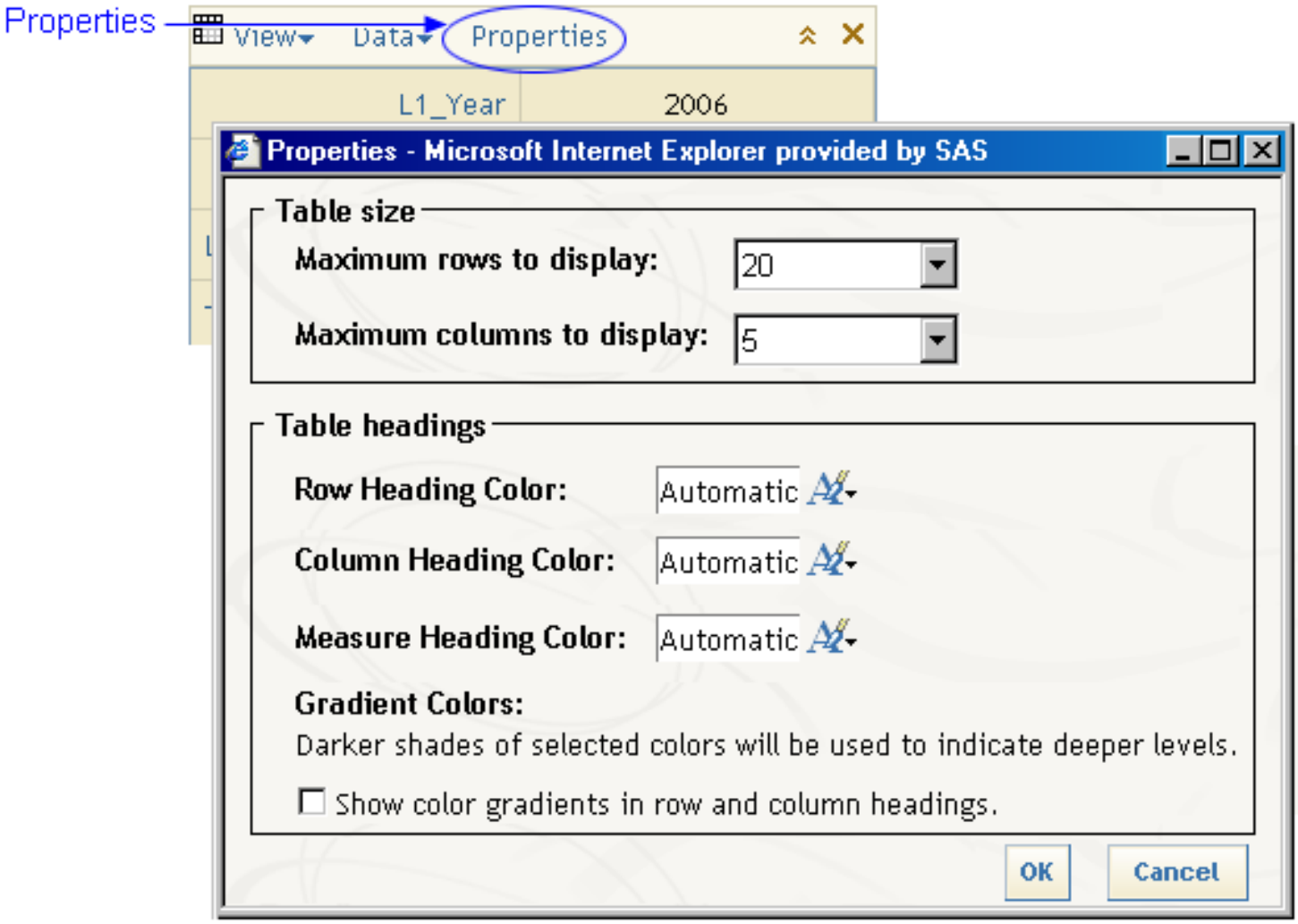
For additional information about customizing profit-and-loss report in the SAS Web OLAP Viewer, see its online Help.


SAS Web OLAP Viewer for Java - Microsoft Internet Explorer provided by SAS
File Edit View Favorites Tools Help
Back Search Favorites
Address http://abmabm.na.sas.com:8080/SASWebOLAPViewer/visualdataexplorer.do?saspfs_sessionid
Go Links
Profitability Management
Log Off pmuser1 | Help
SAS Web OLAP Viewer · Untitled Data Exploration
File Data View Query Navigator Bookmarks
Query
Selected Items:
Rows
Load_ReportHierarchySet
Columns
Load_Dimension_Period
Slicer
VALUE
Add Remove
Available Items:
BPMTimeProduct
VALUE
Load_Dimension_Period
Load_ReportHierarchySet
Load_Dimension_Product
Load_ReportHierarchy
Apply
Restore
Drill Path:
Applied Filters:
View Data Properties
L1_Year
2006
L1_Profit
L2_Profit
Interest Income
Credit Card interest Income
2.251E10
Loan Interest Income
-4.4E10
Mortgages Income
2.233E10
Total Interest Income
7.9832E8
Interest Expense
Savings Interest Payments
-2.695E9
Certificates of Deposit Payments
-1.34E10
Investment Securities Payments
-2.677E9
http://abmmoe.na.sas.com:8080/SASWebOLAPViewer/logoff.do
Local intranet

Change the Number of Rows or Columns That Are Displayed

To change the number of rows or columns that are displayed in the SAS Web OLAP Viewer, perform the following steps:

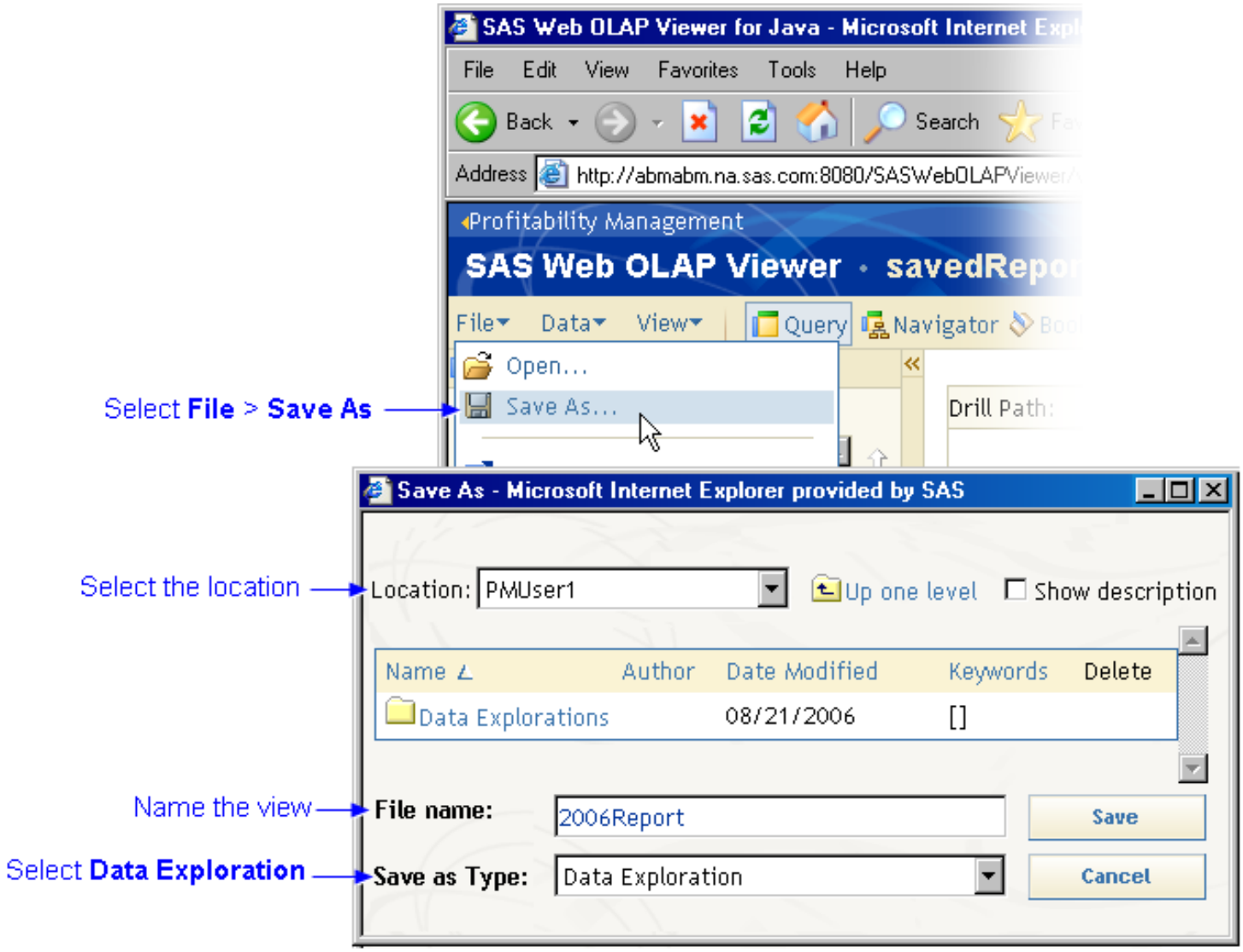
1. Log on to the SAS Web OLAP Viewer.
2. Click **Properties** in the report header.
3. Select the maximum number of rows and columns to display.



Save a View of a Report

To save a view of a report, including its data and layout, perform the following steps:

1. Select **File** ▸ **Save As**.
2. Select the location where you want to save the view.
3. Name the view.
4. Select **Data Exploration** as the type, and then click **Save**.

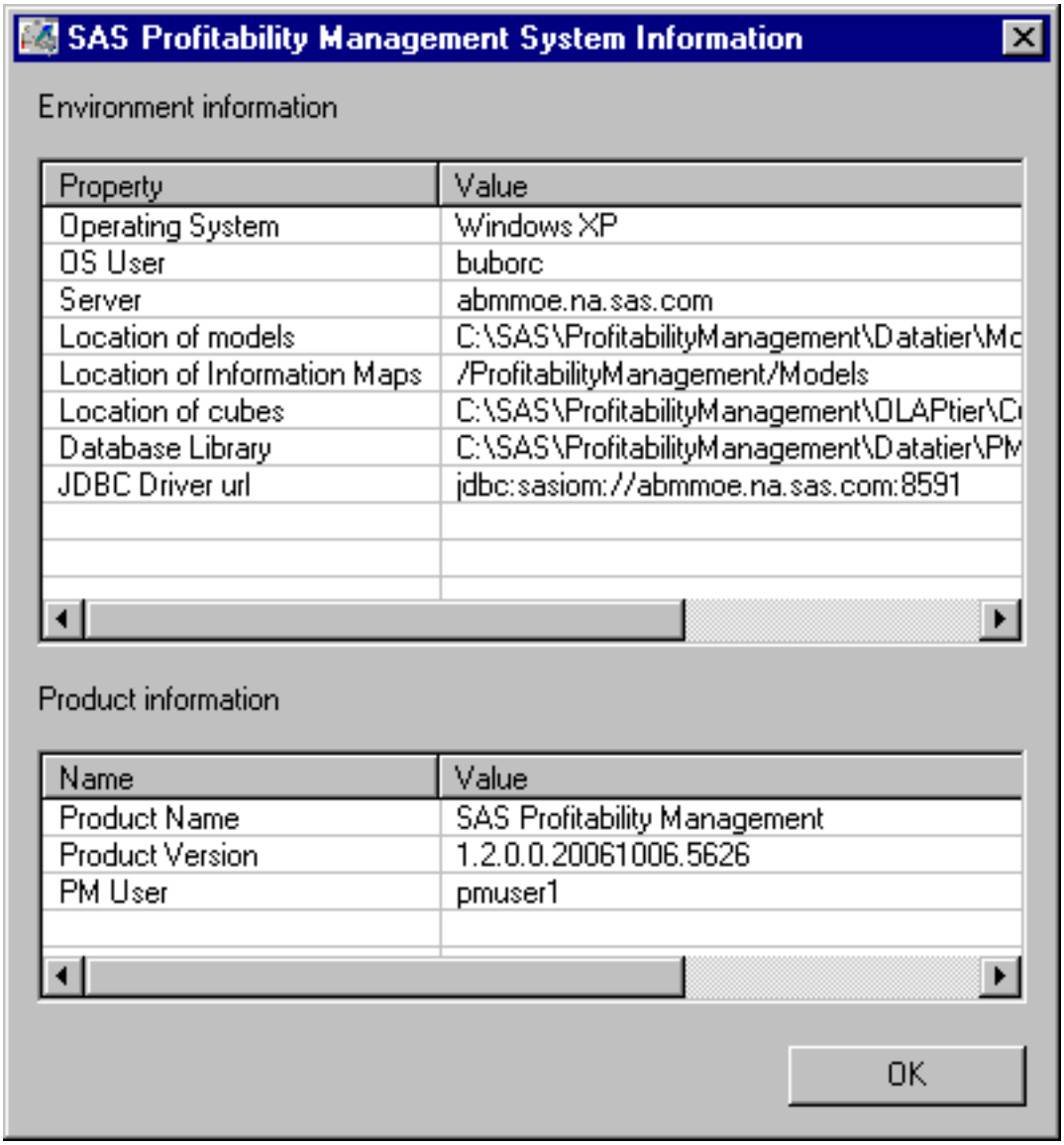


View System Information

To view system information, such as storage locations, perform the following steps:

1. Select **Help ▸ About**.
2. Click **System Information**.

   The System Information window opens.



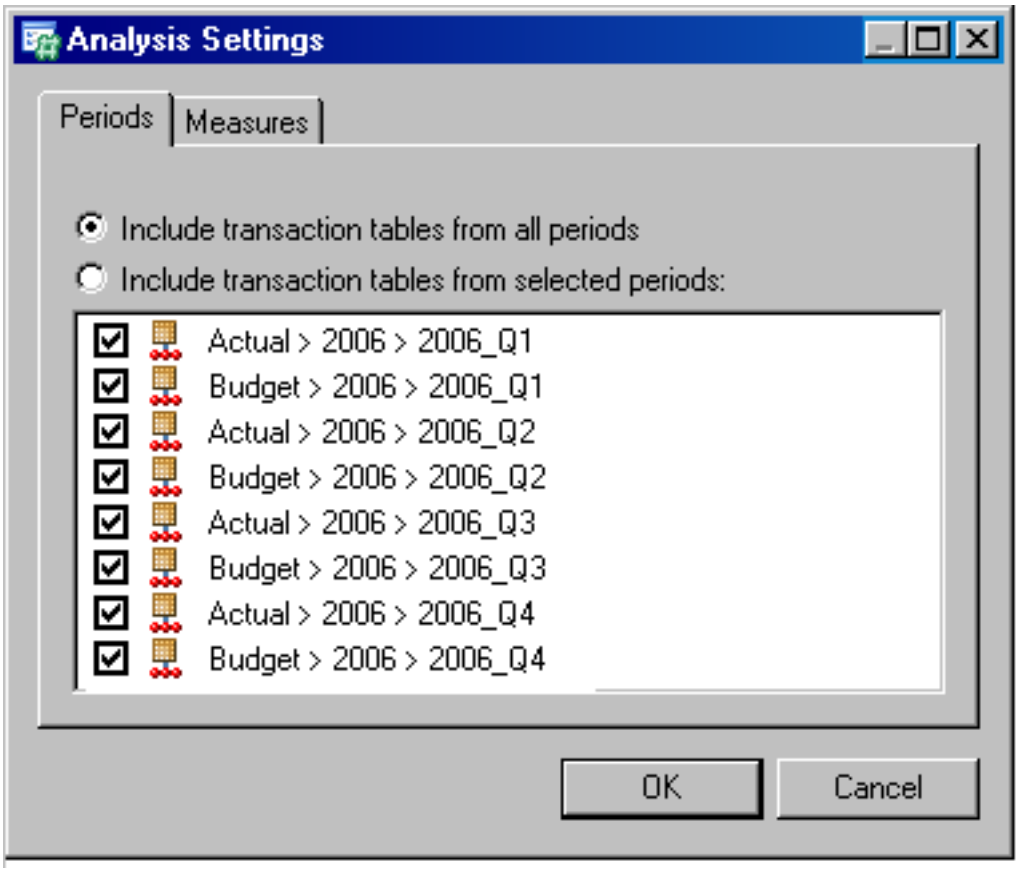
Select the Periods Whose Transaction Tables Are Included in Cubes

Each transaction table is associated with only one period. To select the periods whose transaction tables are to be included in any cube that is generated from the model, perform the following steps:

1. Activate the **Transactions** workspace, and then select a model.
2. Click **Change analysis settings**, or select **Edit ▸ Analysis Settings**.

   The Analysis Settings window opens.
3. Click the **Periods** tab.
4. Select the periods whose transaction tables are to be included in a cube.

   Note: Any period that is to be included in a cube must have been selected for calculation when you calculated the model.



Clear Associations

To clear an association between an assignment rule and a behavior, perform the following steps:

1. Activate the **Behaviors** workspace, and select a model.
2. Select a behavior.
3. Click **Clear association**, or select **Edit ▸ Clear Association**.
4. Click **Yes**.

Copy an Assignment Rule to a New Name

To copy an assignment rule to a new name, perform the following steps:

1. Activate the **Rules** workspace, and then select a model.
2. Select the assignment rule to be copied.
3. Click **Copy assignment rule**, or select **Edit ▸ Copy Assignment Rule**.

   The Copy Assignment Rule window opens.
4. Type the new name of the assignment rule.
5. Select the transaction table group to which the assignment rule applies.
6. Click **OK**.

Delete All Assignment Rules

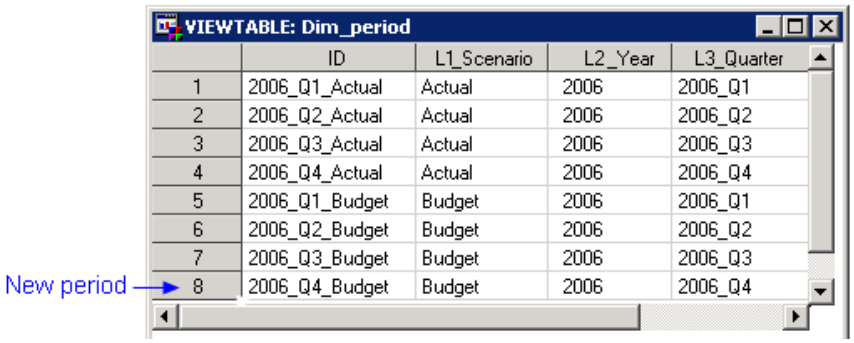
To delete all assignment rules, perform the following steps:

1. Activate the **Rules** workspace, and select a table group.
2. Click **Delete all assignment rules**, or select **Edit ▸ Delete all assignment rules**.

Add a New Period to the Period Dimensions Table

1. Use SAS Table Editor, SAS Enterprise Guide, or another editor to add the period to the dimension table.

   Note: After modifying the table, you must use SAS Management Console to re-import it into your input directory. Importing does not copy the file itself — it updates the metadata maintained by the SAS Management Console.



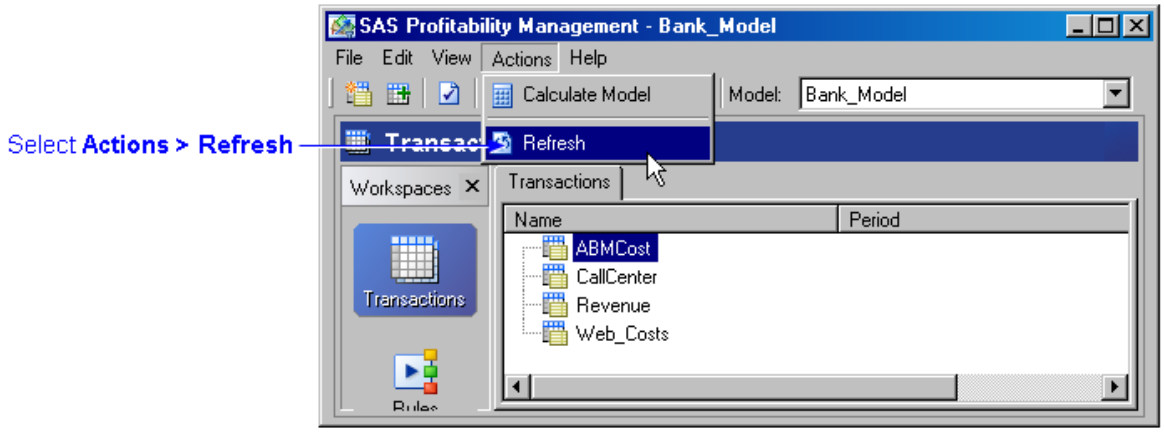
	ID	L1_Scenario	L2_Year	L3_Quarter
1	2006_Q1_Actual	Actual	2006	2006_Q1
2	2006_Q2_Actual	Actual	2006	2006_Q2
3	2006_Q3_Actual	Actual	2006	2006_Q3
4	2006_Q4_Actual	Actual	2006	2006_Q4
5	2006_Q1_Budget	Budget	2006	2006_Q1
6	2006_Q2_Budget	Budget	2006	2006_Q2
7	2006_Q3_Budget	Budget	2006	2006_Q3
8	2006_Q4_Budget	Budget	2006	2006_Q4

---

2. Activate the **Transactions** workspace.
3. Select the model that contains the period dimension table.

---

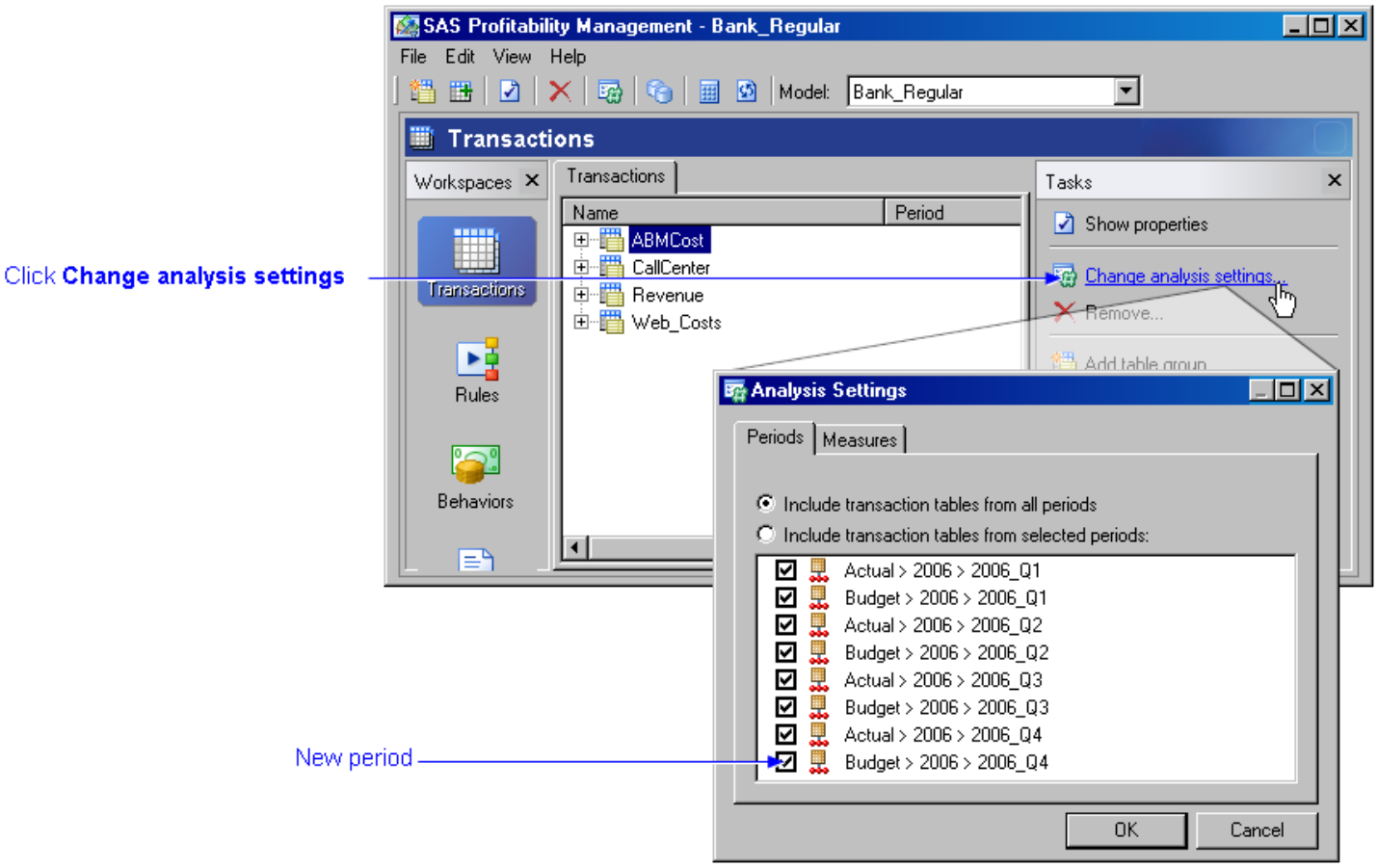
4. Select **Actions** ▸ **Refresh** to add the period to the list.



---

5. Click **Change analysis settings** and verify that the new period is listed in the Analysis Settings window.

   Note: The periods listed under **analysis settings** are the periods that are to be included in a cube. Any period that is selected for inclusion in a cube must have been selected at some point when you calculate the model (see step 8 below).



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6. Add rows for the new period to the behavior table.

	Time	ID	Name	AssignmentRule	TotalValue	UnitValue
1787	2006_Q4_Budget	20010	ATM_SAV_Check balance	ATM_SAV_Check balance	0	2.279572
1788	2006_Q4_Budget	20011	ATM_SAV_Deposits	ATM_SAV_Deposits	0	0.312031
1789	2006_Q4_Budget	20012	ATM_SAV_Fund Transfer	ATM_SAV_Fund Transfer	0	1.260127
1790	2006_Q4_Budget	20013	ATM_SAV_Withdrawals	ATM_SAV_Withdrawals	0	6.172056
1791	2006_Q4_Budget	20014	ATM_TRM_Deposits	ATM_TRM_Deposits	0	0.064873
1792	2006_Q4_Budget	20015	ATM_TRM_Withdrawals	ATM_TRM_Withdrawals	0	1.39023
1793	2006_Q4_Budget	20016	BRH_CHK_Check balance	BRH_CHK_Check balance	0	12.71627
1794	2006_Q4_Budget	20017	BRH_CHK_Deposits	BRH_CHK_Deposits	0	3.72385
1795	2006_Q4_Budget	20018	BRH_CHK_Fund Transfer	BRH_CHK_Fund Transfer	0	6.029322
1796	2006_Q4_Budget	20019	BRH_CHK_Other Transactions	BRH_CHK_Other Transactions	63643.8	0
1797	2006_Q4_Budget	20020	BRH_CHK_Withdrawals	BRH_CHK_Withdrawals	0	19.99921
1798	2006_Q4_Budget	20021	BRH_CRC_Overdue payment	BRH_CRC_Overdue payment	0	31.1021
1799	2006_Q4_Budget	20022	BRH_CRC_Repayment	BRH_CRC_Repayment	0	46.48266
1800	2006_Q4_Budget	20023	BRH_FBP_Manage transactions	BRH_FBP_Manage transactions	1.351E7	0
1801	2006_Q4_Budget	20024	BRH_OTP_Manage transactions	BRH_OTP_Manage transactions	6.357E7	0
1802	2006_Q4_Budget	20025	BRH_OVD_Repayment	BRH_OVD_Repayment	0	101.8948
1803	2006_Q4_Budget	20026	BRH_REC_Deposits	BRH_REC_Deposits	0	1.797712
1804	2006_Q4_Budget	20027	BRH_REC_Withdrawals	BRH_REC_Withdrawals	0	0.905413
1805	2006_Q4_Budget	20028	BRH_SAV_Check balance	BRH_SAV_Check balance	0	30.02252

---

7. Add transaction tables to all of the table groups.

   When you add a transaction table to a transaction table group, you must assign a period to each transaction table.

   Note: Each transaction table in a model can have only one period. And, each period in a model can have only one transaction table. (If you encounter the error **Several transaction tables are assigned to the same period**, it is because a transaction table exists in the table group that is assigned to that period.)

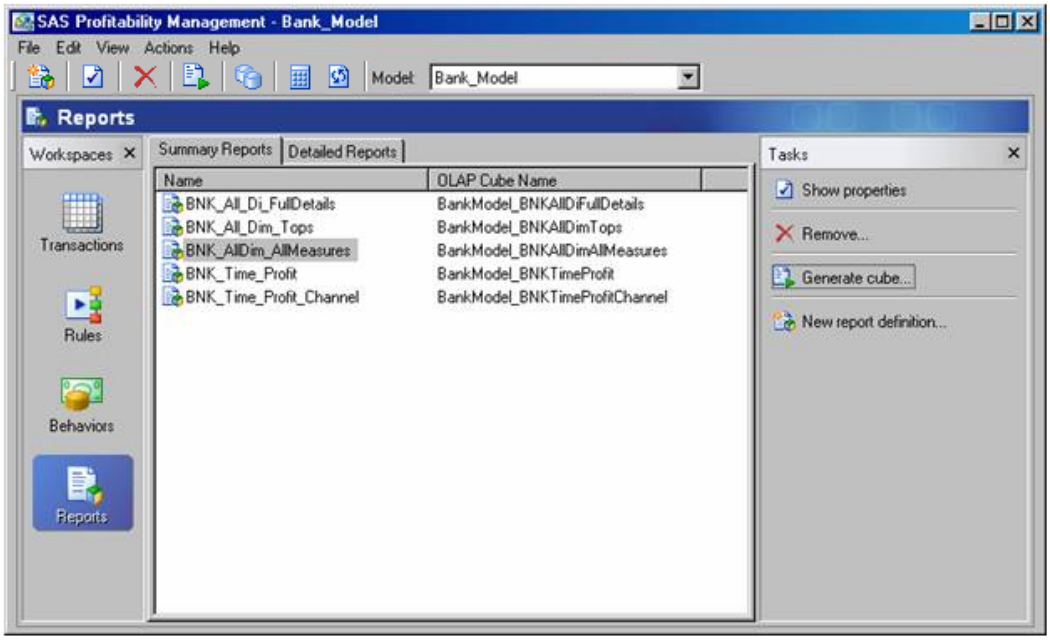
8. Calculate the model.

   Only new periods need to be calculated.

---

9. Calculate the summary cubes.

   Clicking **Generate cube** will process all periods because the cubes are made across multiple periods.



Working with Behaviors

- Clear an association
- Associate an assignment rule with a behavior
- Import a rule association table
- Copy an assignment rule to a new name

Working with Cubes

- Generate a cube
- Edit the properties of a cube
- Select the periods whose transaction tables are included in cubes
- Define the display format for numbers
- View a cube (summary report)
- Format displayed numbers

Define Reports

- Define a summary report
- Define a detail report
- Add labels to a report
- Define the display format for numbers

View a Detail Report

Use the SAS Profitability Management Web Reporting Client to select a detail report for viewing. The report is viewed with the SAS Web OLAP Viewer.

- Open a detail report
- Drill into a detail report
- Suppress the display of blank content

Working with Dimensions

- Add a new period to the period dimensions table

Working with Models

- Create a new profitability model
- Calculate a model
- Edit a model

Working with Reports

Define Reports

- Define a summary report
- Define a detail report
- Add labels to a report
- Define the display format for numbers

View Summary Reports

- Open a summary report
- Drill into a summary report
- Suppress the display of blank content
- Select specific values to display
- Change the number of rows or columns that are displayed
- Change heading colors
- Format displayed numbers
- Insert a graph into a report
- Save a view of a report

View Detail Reports

- Open a detail report
- Drill into a detail report
- Suppress the display of blank content

Working with Rules

- Add an assignment rule to a transaction table group
- Import a rule definition table
- Export a rule definition table
- Associate an assignment rule with a behavior
- Import a rule association table
- Export a rule association table
- Copy an assignment rule to a new name
- Clear an association

Set Up the Environment

- Populate the input directory
- Identify input and output directories to SAS Profitability Management
- Import tables into the input directory
- Add users
- Configure the server
- View system information

View a Summary Report

Use the SAS Profitability Management Web Reporting Client to select a summary report for viewing. The report is viewed with the SAS Web OLAP Viewer.

- Open a summary report
- Drill into a summary report
- Suppress the display of blank content
- Select specific values to display
- Change the number of rows or columns displayed
- Change heading colors.
- Format displayed numbers.
- Insert a graph
- Save a view of a report

Working with Transactions

- Define a transaction table group
- Select the periods whose transaction tables are included in cubes
- Define the display format for numbers

Tasks

- Set up the environment
- Working with behaviors
- Working with cubes
- Working with dimensions
- Working with models
- Working with rules
- Working with transactions
- Working with reports

Define the Display Format for Numbers

The format of a numeric field determines how it is displayed in a report. To define the format of a numeric field, perform the following steps:

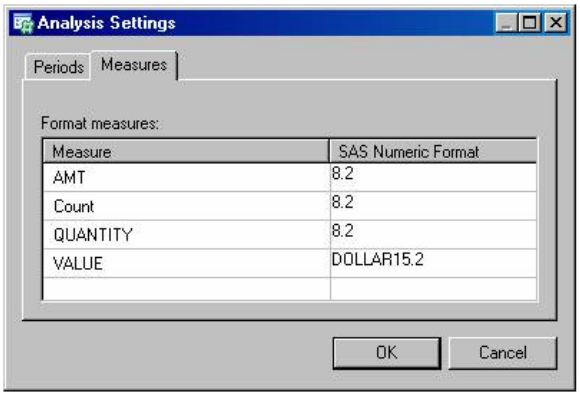
1. Activate the **Transactions** workspace, and then select a model.
2. Click **Change analysis settings**, or select **Edit ▸ Analysis Settings**.

   The Analysis Settings window opens.
3. Click the **Measures** tab.

   All available numeric fields in the model are listed.

   Note: Two numeric fields with the same name in different transaction table groups are considered to be the same field and are joined in the same data column in the final analysis view.
4. Specify a SAS numeric format.

BESTw	Best available format with width=w
COMMAw.d	Comma and decimal points with width=w and decimal=d
COMMAXw.d	Comma and decimal points with width=w and decimal=d (switches the role of comma and decimal points)
DOLLARw.d	Dollar signs, comma, and decimal points with width=w and decimal=d
DOLLARXw.d	Dollar signs, comma, and decimal points with width=w and decimal=d (switches the role of comma and decimal points)
EUROw.d	Euro signs, comma, and decimal points with width=w and decimal=d
EUROXw.d	Euro signs, comma, and decimal points with width=w and decimal=d (switches the role of comma and decimal points)
PERCENTw.d	Percentage with width=w and decimal=d and a percentage sign
Zw.d	Prefixed with zero to get width=w and decimal=d
w.d	width=w and decimal=d



5. Click **OK.**

Toolbar for Behaviors

Create a New Association

Opens the Associate Rules window.

Available behaviors - The list of behaviors

Select table group - The list of table groups for the rule source

Apply rule - The list of rules

OK - Apply the selections and close the window

Cancel - Cancel the selections and close the window

Associate -

Disassociate -

Properties

Displays the properties for the selected items.

General tab

Name - The name of the behavior

Reference - The ID for the behavior

Association -

 **Clear Association**

Clears the assignment rule association from the behavior.

 **Clear all associations**

Clears all assignment rule associations from all behaviors.

 **Import Associations**

Opens the Import Associations window.

Import table - The source table in which you have created your associations

Select -

Preview -

Column mapping

Behavior Id - The text property that defines the behavior

Table Group Name - The table group for the rule source

Rule Name - The name of the rule to map to the behavior

OK - Accept changes and close the window

Cancel - Cancel changes and close the window

 Export Associations

Opens the Export Associations window.

Table Name -

Save in -

Select -

OK -

Cancel -

 Organize Models

Opens the Organize Models window.

Models - Select the model from the list

New Model - Start the Add Model wizard

Properties - Display the properties for the selected model

General tab

Name -

Description -

Time dimension -

Select -

Preview -

Analysis tab

Analysis view name - The name for the model

Analysis view library -

Select -

Output table library -

Select -

Data Location tab

Server folder -

Metadata folder -

Behavior Table tab

Behavior table -

Select -

Preview -

Column mapping

Id - The key that will be used to map cost to reporting

Name - The description for the field

Unit Value - The source unit cost amount that is used in calculations

Total Value - The source total cost amount that is used in calculations

Period -

Dimensions tab

Name - Each dimension in the SAS Profitability Management model

Levels - Each layer in each dimension

Preview -

Add -

Remove -

Reports tab

Report hierarchy - The source table that is used to define the drill-down hierarchy in the contributing cost dimensions for reporting

Select -

Preview -

Report layout - The source table that is used to define the calculation for the profit and loss statement

Select -

Preview -

OK -

Cancel -

Delete - Remove the selected model

Close - Close the window

 Audit Log

Opens the Audit Log window.

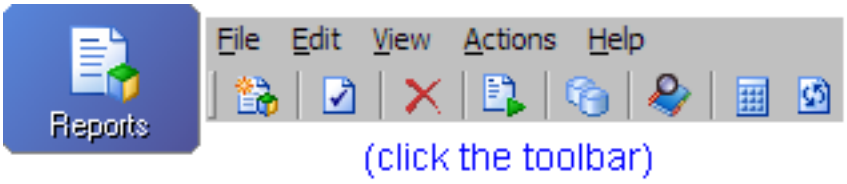
 Calculate Model

Opens the Calculate wizard.

 Refresh

Refreshes the screen to display the current table source data. When you change the underlying SAS tables, you should always refresh before you continue editing the content in SAS Profitability Management.

Toolbar for Reports



New Summary Report Definition

Opens the New Summary Report Definition wizard.

Properties

Displays the properties for the selected items.

General tab

Location - The location of the summary report; the default location is /ProfitabilityManagement/models/<*Your Model*>/Reports

Report definition name - The name of the summary report

Dimensions and levels tab

Include - Select to include dimensions in the model

Dimensions - The dimensions in the model

Allow Drill Down To - Select a level to view for each dimensional hierarchy in the summary report; the default is level 1 for period and level 2 for report hierarchy

Measures tab

Include - Select to include which numeric values are displayed in the summary report

Measures - All available numeric properties

 **Remove**

Deletes the selected items.

 **Generate Cube**

Generates a cube. After the cube is generated, a dialog box is displayed.

OK -

Copy to Clipboard -

Details -

 **Organize Models**

Opens the Organize Models window.

Models - Select the model from the list

New Model - Start the Add Model wizard

Properties - Display the properties for the selected model

General tab

Name -

Description -

Time dimension -

Select -

Preview -

Analysis tab

Analysis view name - The name for the model

Analysis view library -

Select -

Output table library -

Select -

Data Location tab

Server folder -

Metadata folder -

Behavior Table tab

Behavior table -

Select -

Preview -

Column mapping

Id - The key that will be used to map cost to reporting

Name - The description for the field

Unit Value - The source unit cost amount that is used in calculations

Total Value - The source total cost amount that is used in calculations

Period -

Dimensions tab

Name - Each dimension in the SAS Profitability Management model

Levels - Each layer in each dimension

Preview -

Add -

Remove -

Reports tab

Report hierarchy - The source table that is used to define the drill-down hierarchy in the contributing cost dimensions for reporting

Select -

Preview -

Report layout - The source table that is used to define the calculation for the profit and loss statement

Select -

Preview -

OK -

Cancel -

Delete - Remove the selected model

Close - Close the window

 **Audit Log**

Opens the Audit Log window.

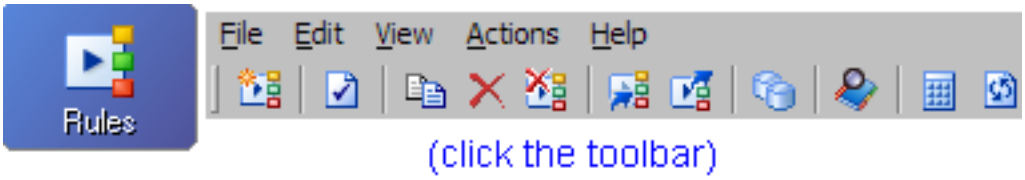
 **Calculate Model**

Opens the Calculate wizard.

 **Refresh**

Refreshes the screen to display the current table source data. When you change the underlying SAS tables, you should always refresh before you continue editing the content in SAS Profitability Management.

Toolbar for Rules



Add Assignment Rule

Rule Name - The name of the assignment rule

Step 1: Select a table group - The assignment rule will be assigned to all transactions in this group

Step 2: Set the selection criteria - The selection criteria defines which records in the source transaction tables will receive assigned costs from a specific source account

Define - Opens the Selection Criteria window

Column name - Column to filter from source table

Operator - Filter

Text Fields Operators: =, not =

Numeric Fields Operators: =, not =, <, <=, >, >=

Dimension Fields Operator: is child of

Value -

Select -

Text Field: List of all text values in the source table

Numeric Field: List of all numeric values in the source table

Dimensional Fields: Dimension member from dimensional

hierarchy; the **is child of** operator includes a member in the hierarchy and all children of the selected member in the filter

Add New Row -

Compound Filter Options - And or Or

Step 3: Define the driver formula - The driver formula defines how much of a source account is assigned to a destination account that has been selected by the filter; this definition is based on the source transactional table quantities and values

---

 **Properties**

Transaction Table - General tab

Table group name

Description

Transaction Table - Columns tab

Include

Source column

Description

Category

Assignment Rule - General tab

Rule Name - The name of the rule

Step 1: Select a table group

Step 2: Set the selection criteria

Step 3: Define the driver formula

 **Copy Assignment Rule**

Opens the Copy Assignment Rule window.

Name - The name of the copied assignment rule

Location - The table group in which to place the assignment rule in

---

 **Remove**

Deletes the selected items.

 **Delete All Assignment Rules**

Deletes all assignment rules.

 **Import Assignment Rules**

Opens the Import Rules window.

Import table - Source table in which rules are defined

Select -

Preview -

Column mapping

Name - The name of the rule that is being defined

Selection Criteria - The filter criteria for the rule definition

Driver Formula - The numeric properties that are defined for the driver formula

Table Group Name - The table group in which the rule will be applied

OK - Accept changes and close the window

Cancel - Cancel changes and close the window

 **Export Assignment Rules**

Opens the Export Rules window.

Table Name -

Save in -

Select -

 **Organize Models**

Opens the Organize Models window.

Models - Select the model from the list

New Model - Start the Add Model wizard

Properties - Display the properties for the selected model

General tab

Name -

Description -

Time dimension -

Select -

Preview -

Analysis tab

Analysis view name - The name for the model

Analysis view library -

Select -

Output table library -

Select -

Data Location tab

Server folder -

Metadata folder -

Behavior Table tab

Behavior table -

Select -

Preview -

Column mapping

Id - The key that will be used to map cost to reporting

Name - The description for the field

Unit Value - The source unit cost amount that is used in calculations

Total Value - The source total cost amount that is used in calculations

Period -

Dimensions tab

Name - Each dimension in the SAS Profitability Management model

Levels - Each layer in each dimension

Preview -

Add -

Remove -

Reports tab

Report hierarchy - The source table that is used to define the drill-down hierarchy in the contributing cost dimensions for reporting

Select -

Preview -

Report layout - The source table that is used to define the calculation for the profit and loss statement

Select -

Preview -

OK -

Cancel -

Delete - Remove the selected model

Close - Close the window

 **Audit Log**

Opens the Audit Log window.

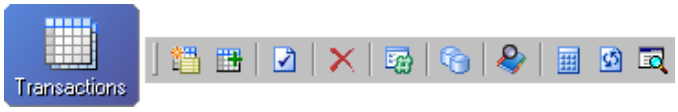
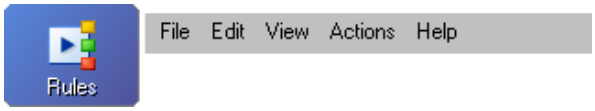
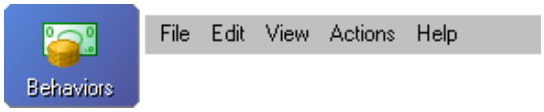
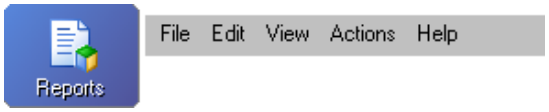
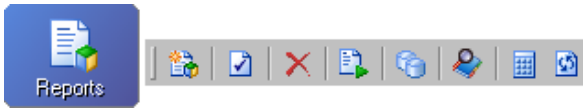
 **Calculate Model**

Opens the Calculate wizard.

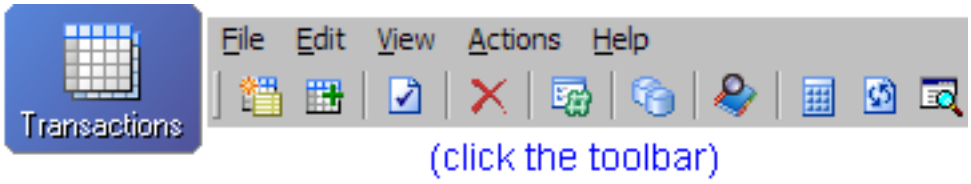
 **Refresh**

Refreshes the screen to display the current table source data. When you change the underlying SAS tables, you should always refresh before you continue editing the content in SAS Profitability Management.

Menus and Toolbars

Menus	Toolbars
Menus for Transactions	Toolbar for Transactions
	
Menus for Rules	Toolbar for Rules
	
Menus for Behaviors	Toolbar for Behaviors
	
Menus for Reports	Toolbar for Reports
	

Toolbar for Transactions



Add Table Group

Opens the Add Table Group wizard.

Add Transaction Tables

Opens the Add Transaction Tables wizard.

Properties

Transaction Table - General tab

Table group name

Description

Transaction Table - Columns tab

Include

Source column

Description

Category

Transaction Table: General tab

Name - The name of the source table

Repository - The source table repository

SAS libref - The source table SAS libname

Table name - The name of the source table

Period - The correct period for this source table

 **Remove**

Deletes the selected items.

 **Analysis Settings**

Opens the Analysis Settings window.

Period tab

Include transaction tables from all periods

Include transaction tables from selected periods

Measures tab

Format measures

Measure

SAS Numeric Format - The display format for the reporting

OK - Accept any changes and close the window

Cancel - Cancel changes and close the window

 **Audit Log**

Opens the Audit Log window.

 **Organize Models**

Opens the Organize Models window.

Models - Select the model from the list

New Model - Start the Add Model wizard

Properties - Display the properties for the selected model

General tab

Name -

Description -

Time dimension -

Select -

Preview -

Analysis tab

Analysis view name - The name for the model

Analysis view library -

Select -

Output table library -

Select -

Data Location tab

Server folder -

Metadata folder -

Behavior Table tab

Behavior table -

Select -

Preview -

Column mapping

Id - The key that will be used to map cost to reporting

Name - The description for the field

Unit Value - The source unit cost amount that is used in calculations

Total Value - The source total cost amount that is used in calculations

Period -

Dimensions tab

Name - Each dimension in the SAS Profitability Management model

Levels - Each layer in each dimension

Preview -

Add -

Remove -

Reports tab

Report hierarchy - The source table that is used to define the drill-down hierarchy in the contributing cost dimensions for reporting

Select -

Preview -

Report layout - The source table that is used to define the calculation for the profit and loss statement

Select -

Preview -

OK -

Cancel -

Delete - Remove the selected model

Close - Close the window

 **Calculate Model**

Opens the Calculate wizard.

 **Refresh**

Refreshes the screen to display the current table source data. When you change the

underlying SAS tables, you should always refresh before you continue editing the content in SAS Profitability Management.

 Preview Data

Opens the Preview window.

Add Transaction Tables to a Table Group Show me

To add transaction tables to a table group, perform the following steps:

1. Activate the **Transactions** workspace, and then select a model.
2. Select a transaction table group to which you want to add transaction tables.
3. Click **Add transaction tables**, or select **File ▸ Add Transaction Tables**.

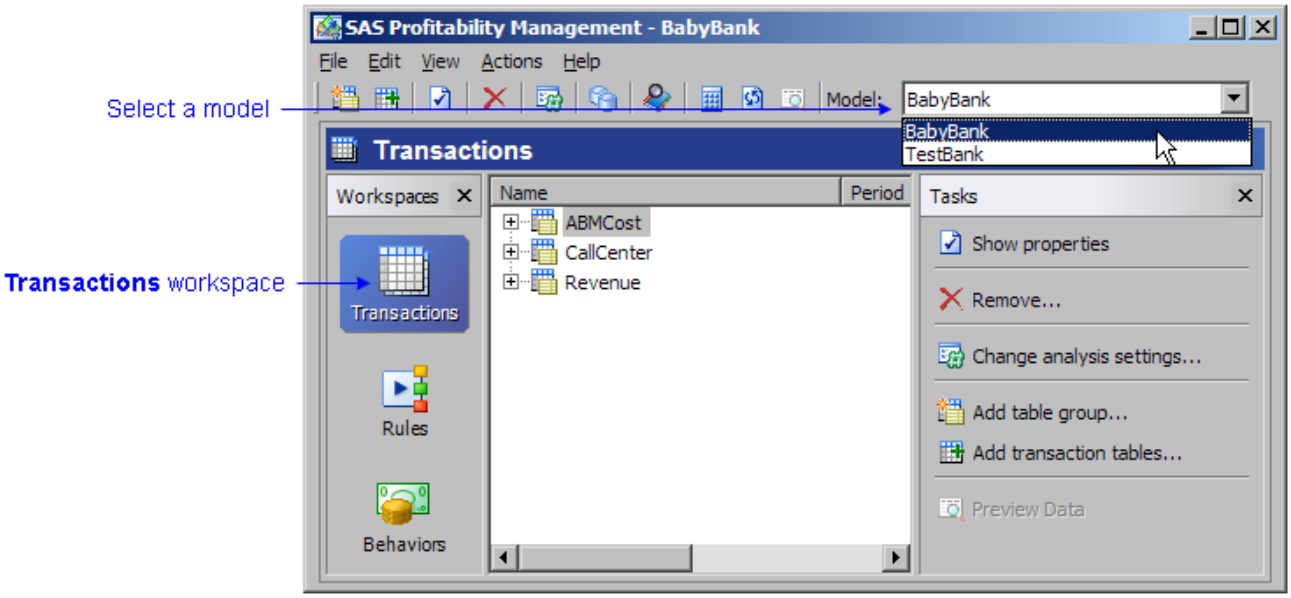
   The Add Transaction Tables wizard opens.
4. On the Transaction Tables page, select the transaction tables to add to the table group.
5. Click **Add**.
6. Repeat steps 4 and 5 as necessary.
7. To preview the data in a transaction table, select a table from either list, and then click **Preview**.

   The Preview window opens and the transaction table is displayed.
8. Click **OK**, and then click **Next**.
9. On the Period page, assign a period to each transaction table.

   Note: Each transaction table in a model can have only one period. And, each period in a model can have only one transaction table. (If you encounter the error **Several transaction tables are assigned to the same period**, it is because a transaction table exists in the table group that is assigned to that period.)
10. Click **Finish**.
11. Transaction tables that have been added to a table group are displayed under the table group name in the **Transactions** workspace.

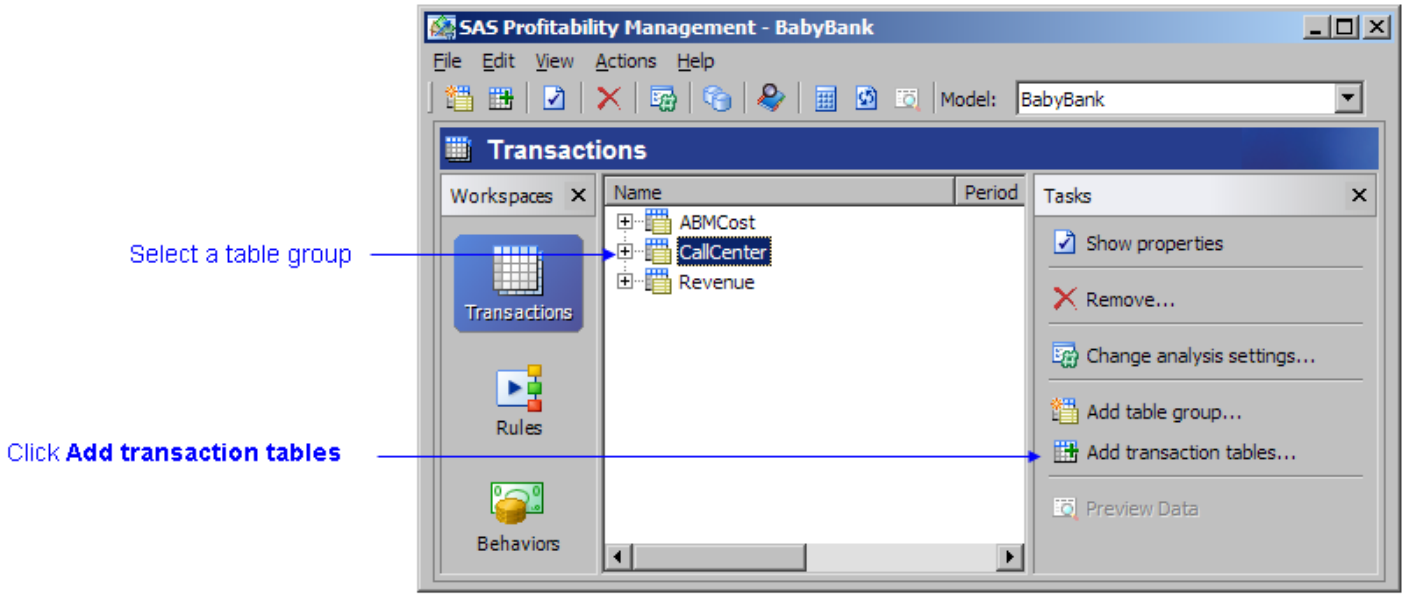
Add Transaction Tables to a Group

1. Activate the **Transactions** workspace, and then select a model.

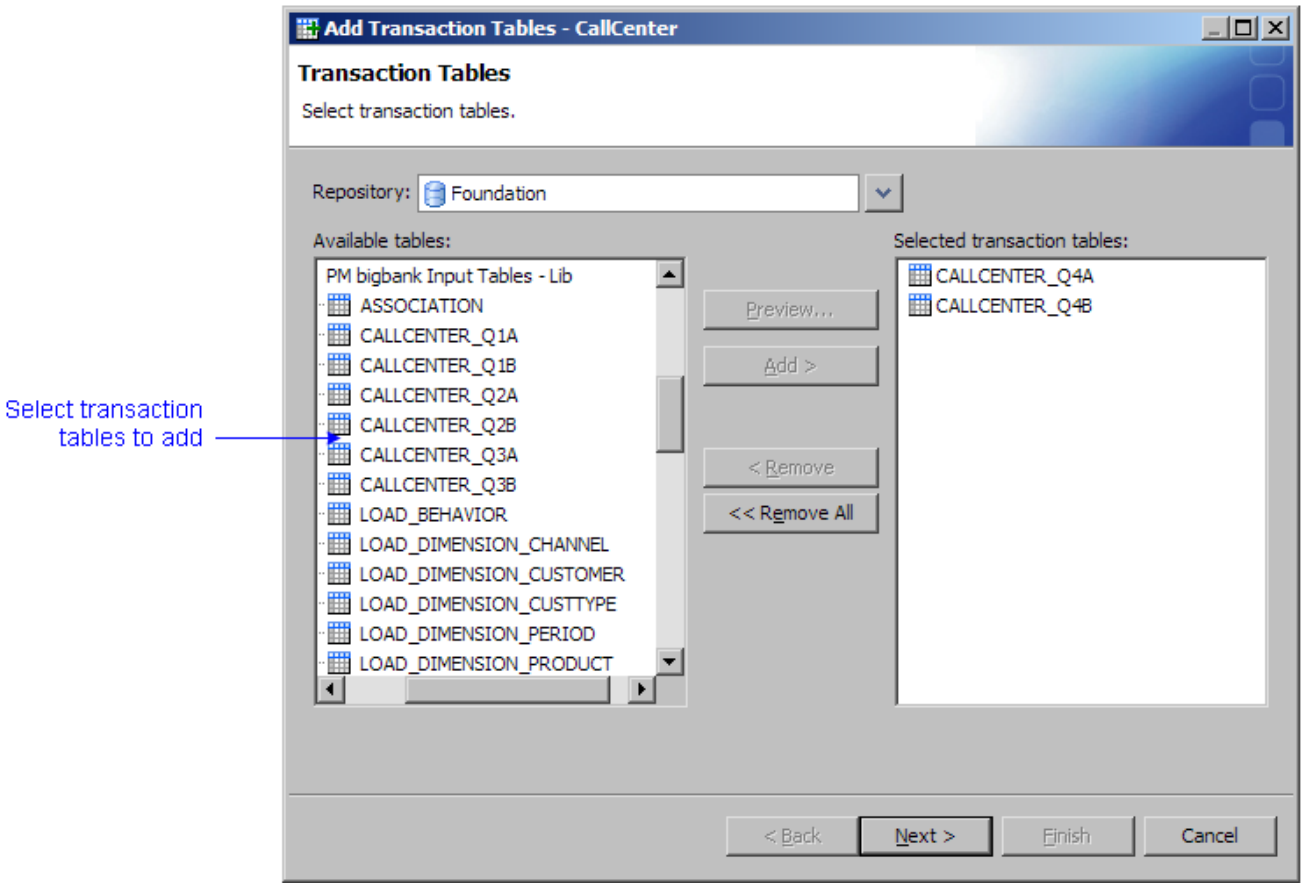


2. Select a transaction table group to which you want to add transaction tables.
3. Click **Add transaction tables**, or select **File ▸ Add Transaction Tables**.

   The Add Transaction Tables wizard opens.



4. On the Transaction Tables page, select the transaction tables to add to the table group.
5. Click **Add**.
6. Repeat steps 4 and 5 as necessary.



7. To preview the data in a transaction table, select a table from either list, and then click **Preview**.

   The Preview window opens and the transaction table is displayed.

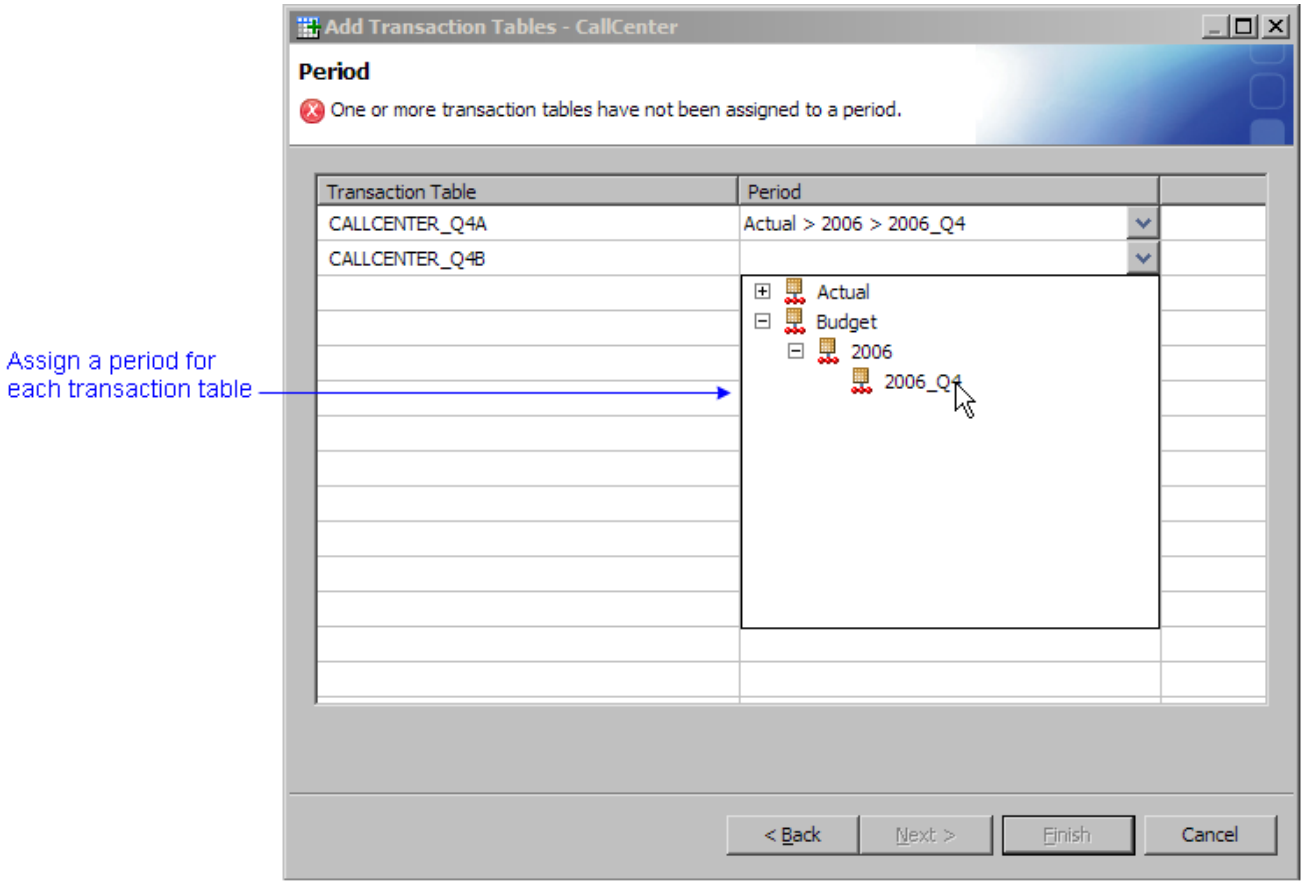
8. Click **OK**, and then click **Next**.

---

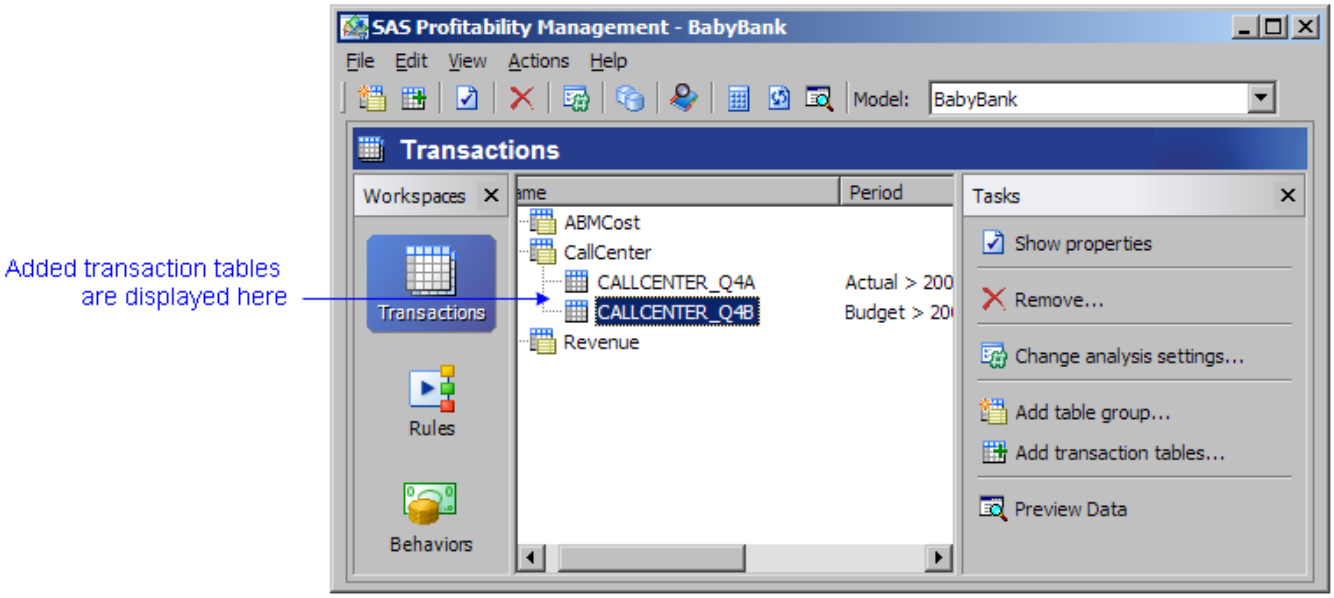
9. On the Period page, assign a period to each transaction table.

   Note: Each transaction table in a model can have only one period. And, each period in a model can have only one transaction table. (If you encounter the error **Several transaction tables are assigned to the same period**, it is because a transaction table exists in the table group that is assigned to that period.)

10. Click **Finish**.



11. Transaction tables that have been added to a table group are displayed under the table group name in the **Transactions** workspace.



Define a Transaction Table Group Show me

To define a transaction table group, perform the following steps:

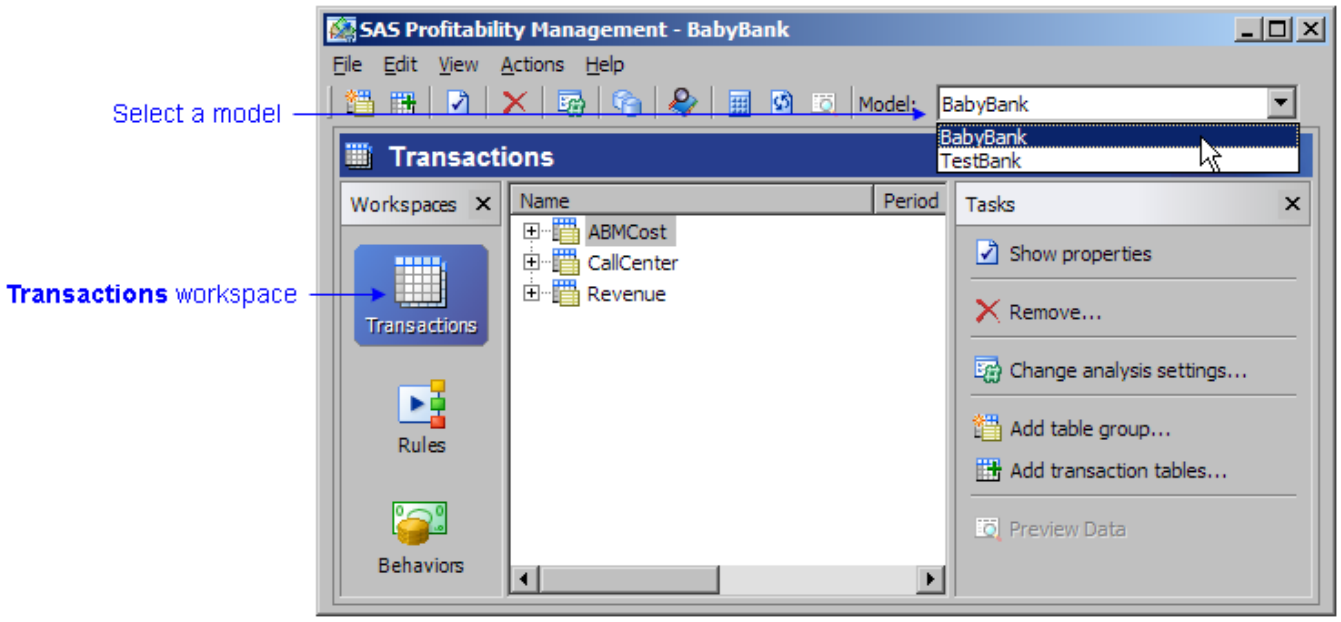
1. Activate the **Transactions** workspace, and then select a model.
2. Click the **Add Table Group** icon  .

   The **Add Table Group** wizaard opens.
3. On the Information page, name the table group, and then click **Next**.
4. On the Transaction Table page, select the transaction table whose layout defines the layout (the required fields) for this group.
5. Click **Next**.
6. On the Categorize Columns page, associate each source column (in the transaction table) with its corresponding dimension table.

   Note: Clear the time dimension. Because each transaction table is matched to a single time dimension, you do not have to associate each transaction table with the entire time-dimension table.
7. Click **Finish**.
8. The transaction table group is added to the model.

Define a Transaction Table Group

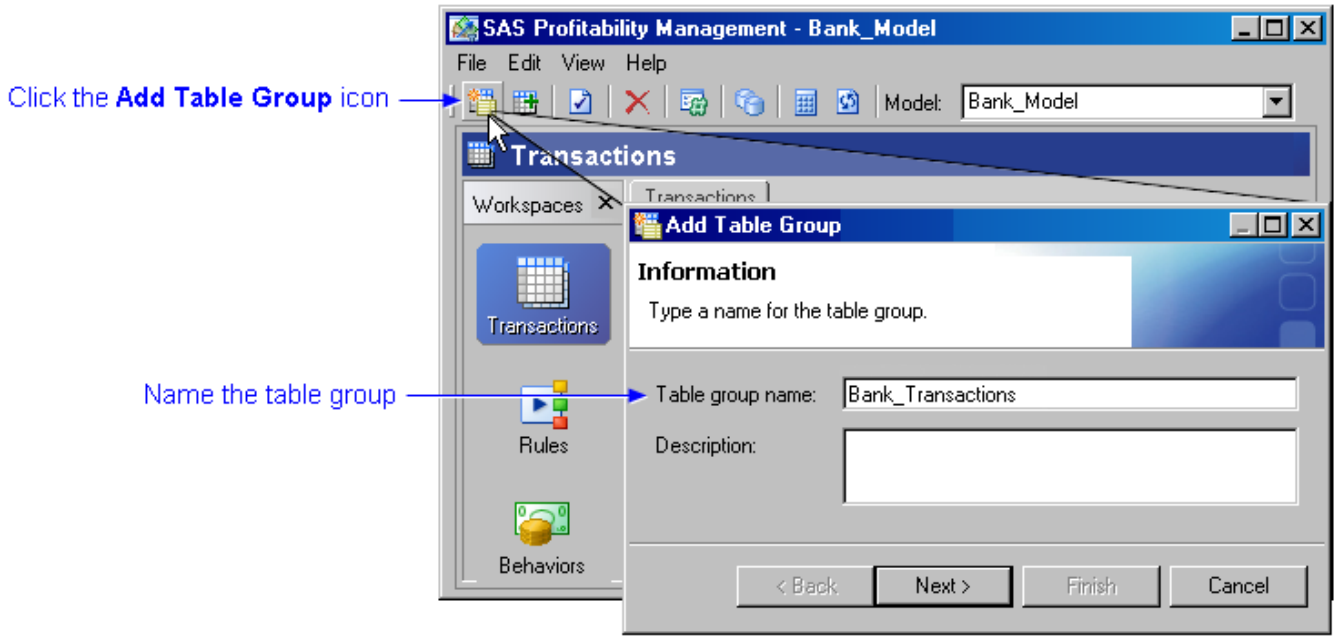
1. Activate the **Transactions** workspace, and then select a model.



2. Click the **Add Table Group** icon  .

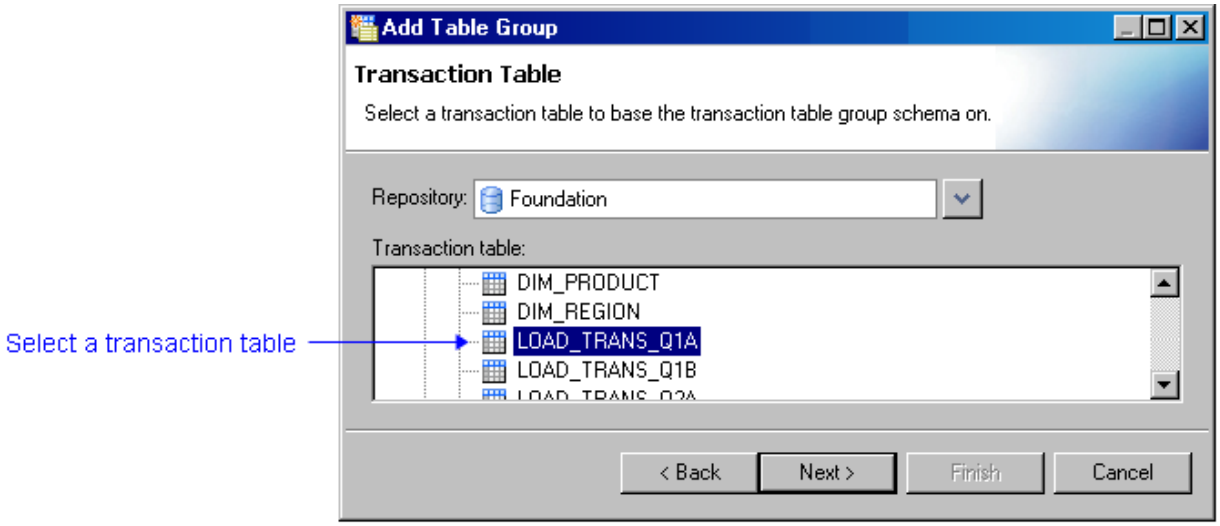
   The **Add Table Group** wizard opens.

3. On the Information page, name the table group, and then click **Next**.



4. On the Transaction Table page, select the transaction table whose layout defines the layout (the required fields) for this group.

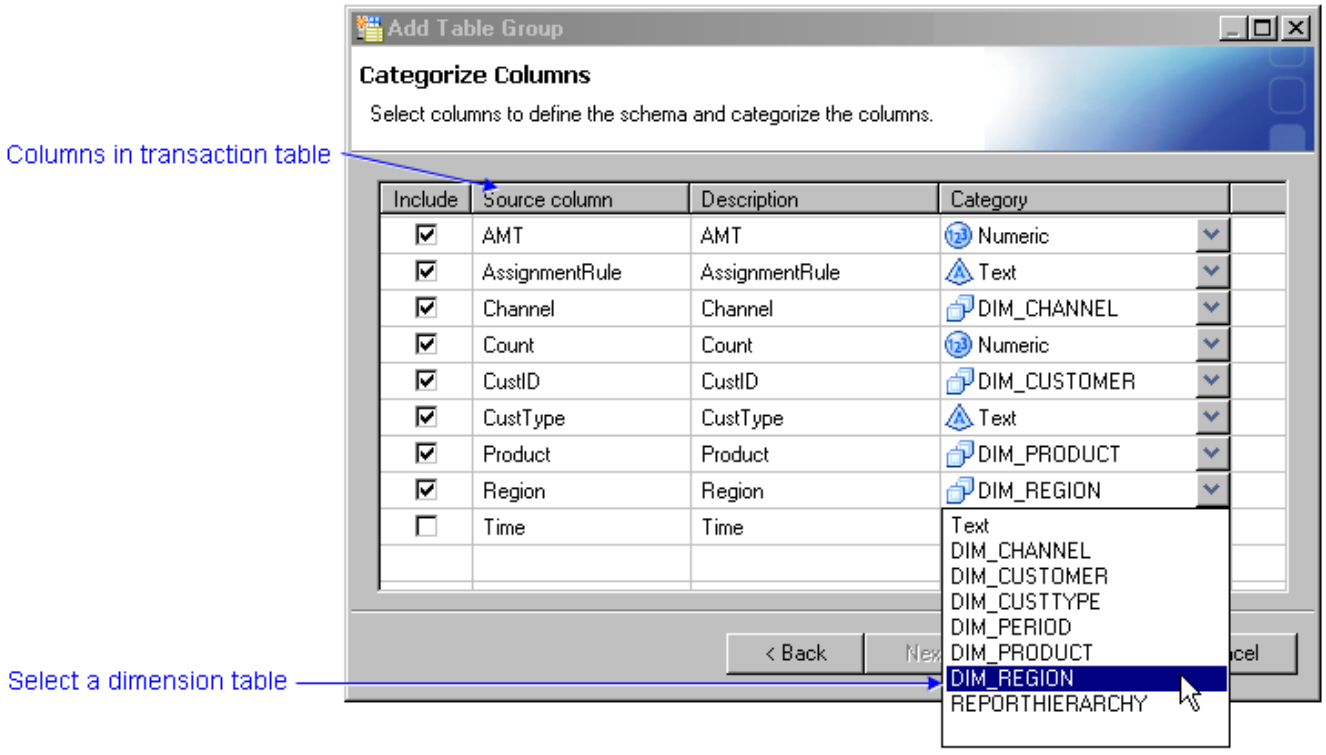
5. Click **Next**.



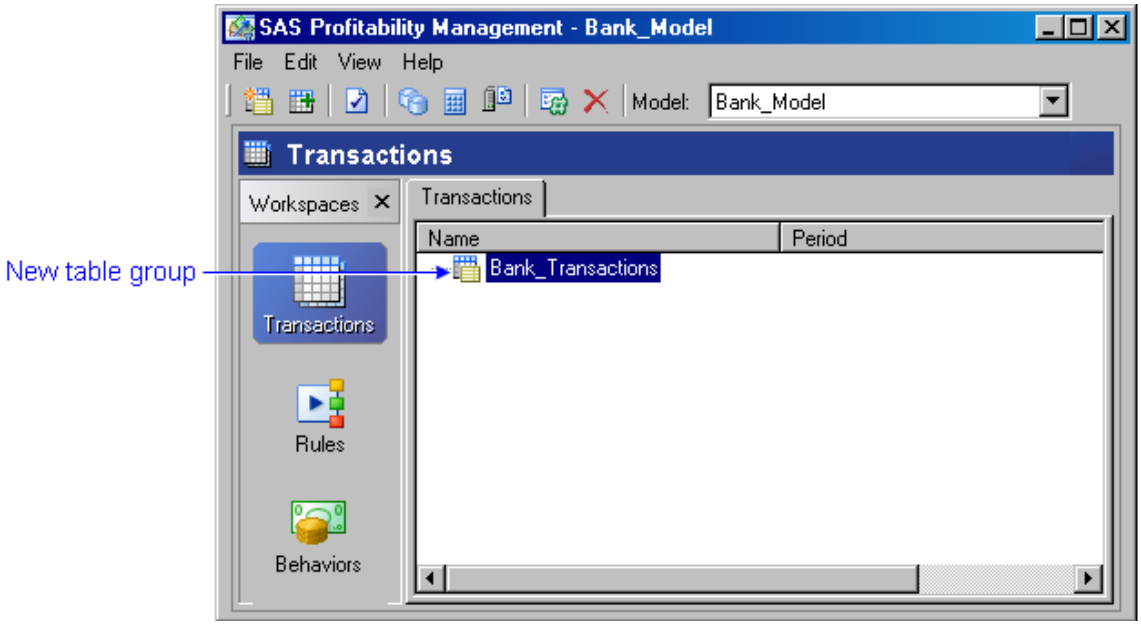
6. On the Categorize Columns page, associate each source column (in the transaction table) with its corresponding dimension table.

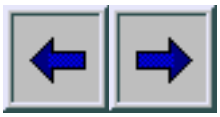
   Note: Clear the time dimension. Because each transaction table is matched to a single time dimension, you do not have to associate each transaction table with the entire time-dimension table.

7. Click **Finish**.



8. The transaction table group is added to the model.


SAS Profitability Management - Bank_Model
File Edit View Help
Model: Bank_Model
Transactions
Workspaces
Transactions
Name
Period
Bank_Transactions
Transactions
Rules
Behaviors
New table group



4. Define Transaction Table Groups

Transaction tables that have the same columns defined are organized into a table group. A single SAS Profitability Management model is likely to have multiple table groups. Multiple rules will likely use the same source table group. There must be one transaction table for each period in a model.

Defining and populating groups of transaction tables is a two-part process:

1. Define a transaction table group.
2. Add transaction tables to a table group (and associate each transaction table with a time period).

Related Topics:

- Select the periods whose transaction tables are included in cubes
- Define the display format for numbers
- Add a new period to the period dimensions table

Transaction Table

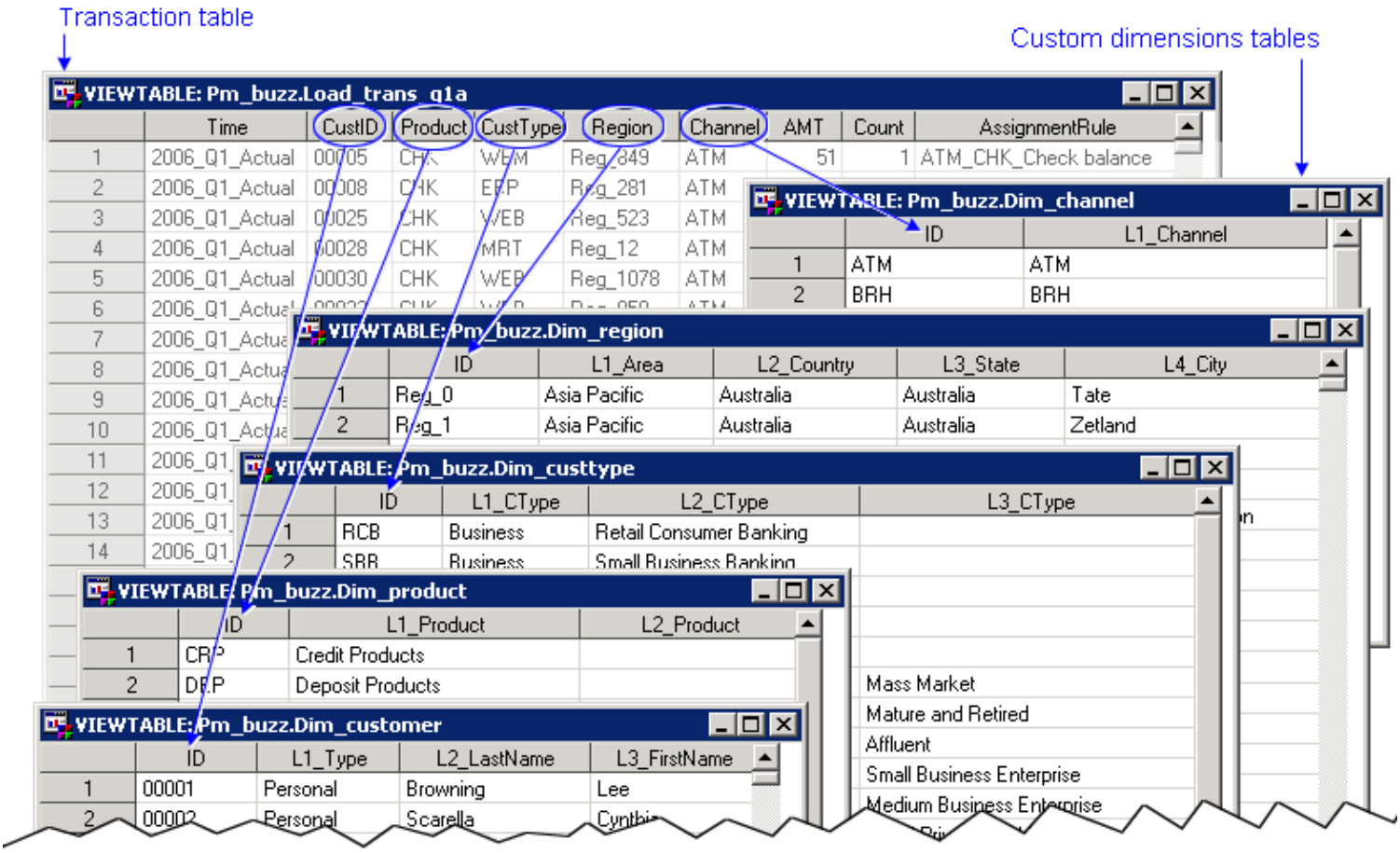
There must be one transaction table for each period in a SAS Profitability Management model. For each table group, the transaction tables must have the same columns defined. A single model is likely to have multiple table groups. Multiple rules will likely use the same source table group. Transaction table layout is affected by the rule definition process (filter logic and driver logic). A transaction table contains the following columns:

Name	Maximum Length	Description
Dimension_1	Char 32	Identifies the row (in a custom dimensions table) for this transaction
Dimension_2	Char 32	Identifies the row (in a custom dimensions table) for this transaction
Dimension_n	Char 32	The number of dimensions referred to by a transaction table is optional
DriverQuantity_1	Numeric 8	Numeric value that is used in a rule's driver formula to calculate the driver quantity for a transaction
DriverQuantity_2	Numeric 8	Numeric value that is used in a rule's driver formula to calculate the driver quantity for a transaction
DriverQuantity_3	Numeric 8	The number of columns that are used to calculate the driver quantity for a transaction is optional

In a transaction table, consider the following rules:

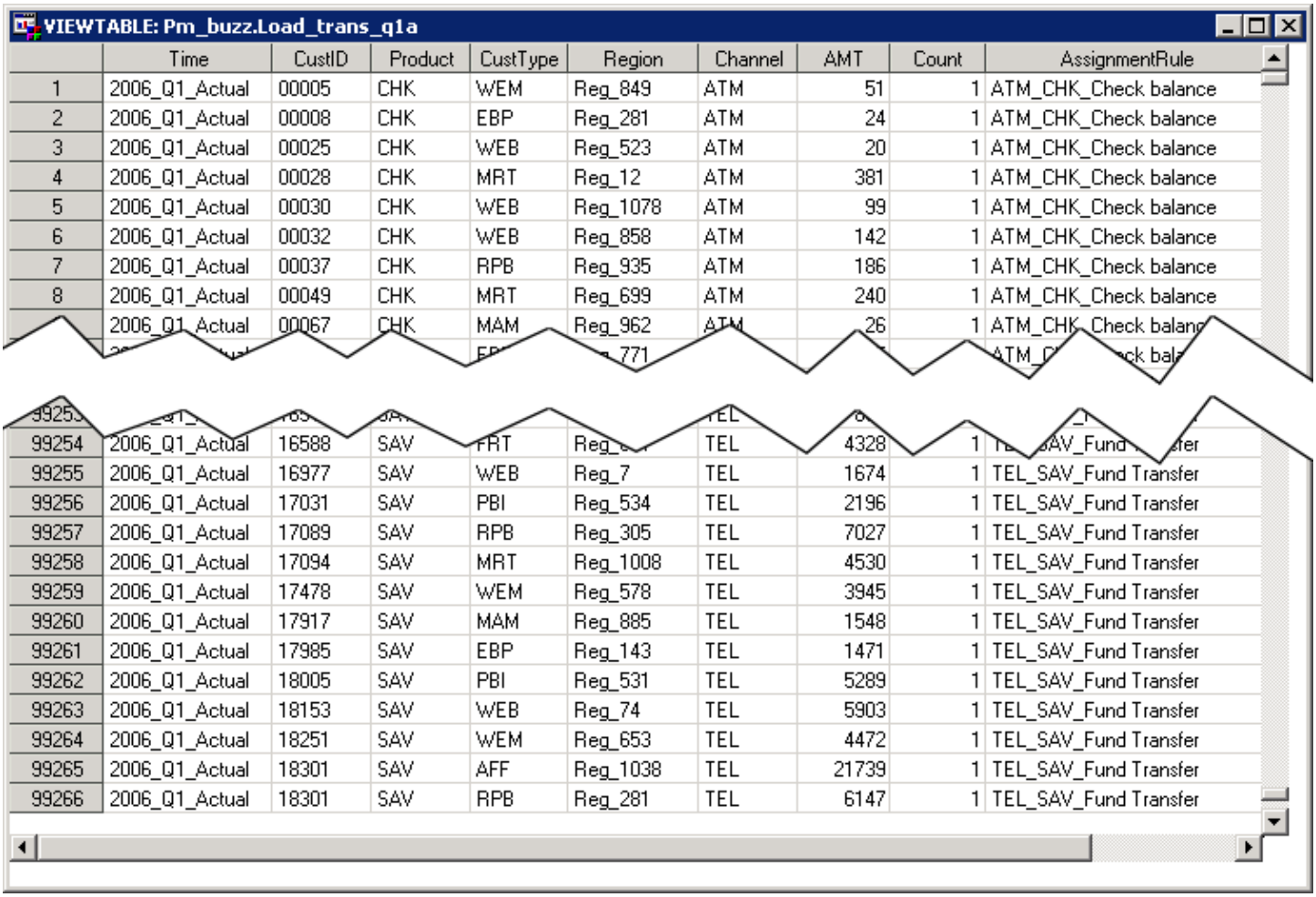
- Each column must have the length that is shown.
- The position of columns is arbitrary.
- The name of the column is arbitrary.
- The number of columns in a transaction table is arbitrary.
- A transaction table can contain other columns not specifically used by SAS Profitability Management.

The dimensions of a transaction are specified in custom dimensions tables. The following picture shows the mapping from a sample transaction table to different custom dimensions tables:



Note: When transaction tables in different transaction table groups map to the same custom dimensions table, the column names in the transaction tables must match. Otherwise, the table joins to create the OLAP cube will fail.

The following is a sample transaction table:



VIEWTABLE: Pm_buzz.Load_trans_q1a

	Time	CustID	Product	CustType	Region	Channel	AMT	Count	AssignmentRule
1	2006_Q1_Actual	00005	CHK	WEM	Reg_849	ATM	51	1	ATM_CHK_Check balance
2	2006_Q1_Actual	00008	CHK	EBP	Reg_281	ATM	24	1	ATM_CHK_Check balance
3	2006_Q1_Actual	00025	CHK	WEB	Reg_523	ATM	20	1	ATM_CHK_Check balance
4	2006_Q1_Actual	00028	CHK	MRT	Reg_12	ATM	381	1	ATM_CHK_Check balance
5	2006_Q1_Actual	00030	CHK	WEB	Reg_1078	ATM	99	1	ATM_CHK_Check balance
6	2006_Q1_Actual	00032	CHK	WEB	Reg_858	ATM	142	1	ATM_CHK_Check balance
7	2006_Q1_Actual	00037	CHK	RPB	Reg_935	ATM	186	1	ATM_CHK_Check balance
8	2006_Q1_Actual	00049	CHK	MRT	Reg_699	ATM	240	1	ATM_CHK_Check balance
	2006_Q1_Actual	00067	CHK	MAM	Reg_962	ATM	26	1	ATM_CHK_Check balanc
					Reg_771				ATM_C ck bal
99254	2006_Q1_Actual	16588	SAV	FRT	Reg_	TEL	4328	1	SAV_Fund fer
99255	2006_Q1_Actual	16977	SAV	WEB	Reg_7	TEL	1674	1	TEL_SAV_Fund Transfer
99256	2006_Q1_Actual	17031	SAV	PBI	Reg_534	TEL	2196	1	TEL_SAV_Fund Transfer
99257	2006_Q1_Actual	17089	SAV	RPB	Reg_305	TEL	7027	1	TEL_SAV_Fund Transfer
99258	2006_Q1_Actual	17094	SAV	MRT	Reg_1008	TEL	4530	1	TEL_SAV_Fund Transfer
99259	2006_Q1_Actual	17478	SAV	WEM	Reg_578	TEL	3945	1	TEL_SAV_Fund Transfer
99260	2006_Q1_Actual	17917	SAV	MAM	Reg_885	TEL	1548	1	TEL_SAV_Fund Transfer
99261	2006_Q1_Actual	17985	SAV	EBP	Reg_143	TEL	1471	1	TEL_SAV_Fund Transfer
99262	2006_Q1_Actual	18005	SAV	PBI	Reg_531	TEL	5289	1	TEL_SAV_Fund Transfer
99263	2006_Q1_Actual	18153	SAV	WEB	Reg_74	TEL	5903	1	TEL_SAV_Fund Transfer
99264	2006_Q1_Actual	18251	SAV	WEM	Reg_653	TEL	4472	1	TEL_SAV_Fund Transfer
99265	2006_Q1_Actual	18301	SAV	AFF	Reg_1038	TEL	21739	1	TEL_SAV_Fund Transfer
99266	2006_Q1_Actual	18301	SAV	RPB	Reg_281	TEL	6147	1	TEL_SAV_Fund Transfer

Related Topics:

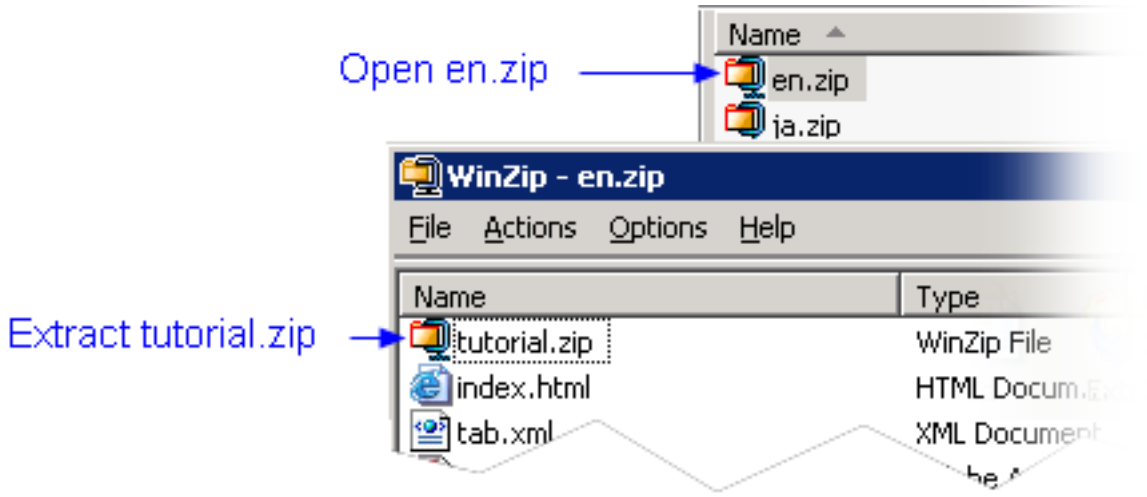
- Define a transaction table group
- Add transaction tables to a group (and associate each transaction table with a period)
- Select the periods whose transaction tables are included in cubes
- Define the display format for numbers

SAS Profitability Management Tutorial

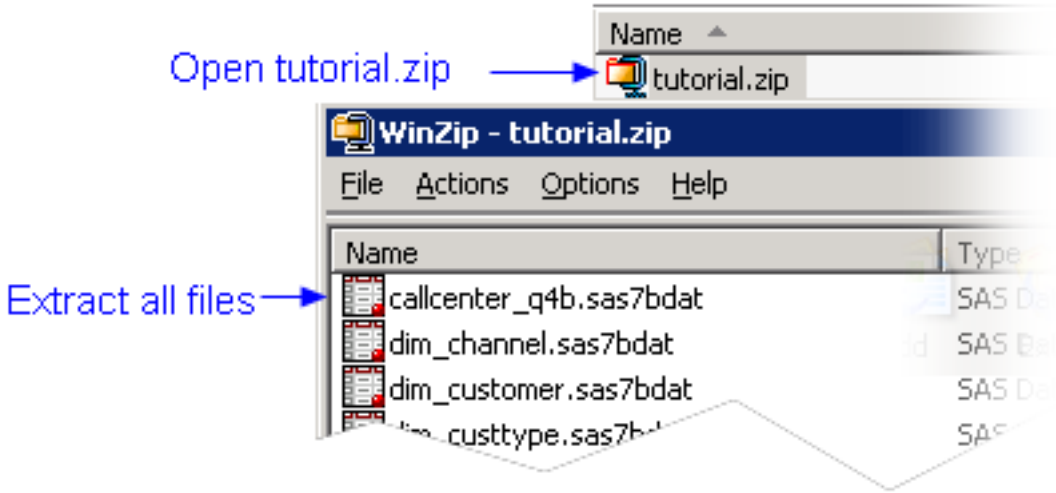
The SAS Profitability Management Tutorial will familiarize you with the basic business profitability modeling concepts that are used in SAS Profitability Management. To install the tutorial, perform the following steps:

1. Navigate to the following location: << *Customer Install Depot Location*>> \abmprof1cd\abmprof1cd_doc.

2. Open en.zip and extract the file tutorial.zip to your local machine at the following location:
   C:\ <<*Your Location*>> \abmprofclnt.



3. Open tutorial.zip, and then extract its contents.



4. View the file SAS Profitability Management_Tutorial.pdf to begin the tutorial.

Use the supplied SAS tables as the source content for the tutorial.

Add Users Show me

To define SAS Profitability Management users in the SAS Management Console, perform the following steps:

1. Log on to the SAS Management Console as an administrator.

   The main window opens.

2. Select the **Foundation** repository.

3. Select **Environment Management**.

4. Right-click **User Manager**, and then select **New ▸ User**.

5. Name the new user, and then enter other user information on the **General** tab.

6. Click the **Groups** tab, and then select the group to which the user is to be added.

7. Click the **Logins** tab, and then click **New**.

8. Enter the new user's user ID on the network.

   The New Login Properties window opens.

9. Leave the **Password** field blank (it comes from the network).

10. Leave the **Confirm Password** field blank (it comes from the network).

11. Select **DefaultAuth** for the authentication domain.

12. Click **OK**.

Note: You can leave the **Authorization** tab blank.

Add Users

To define SAS Profitability Management users in the SAS Management Console, perform the following steps:

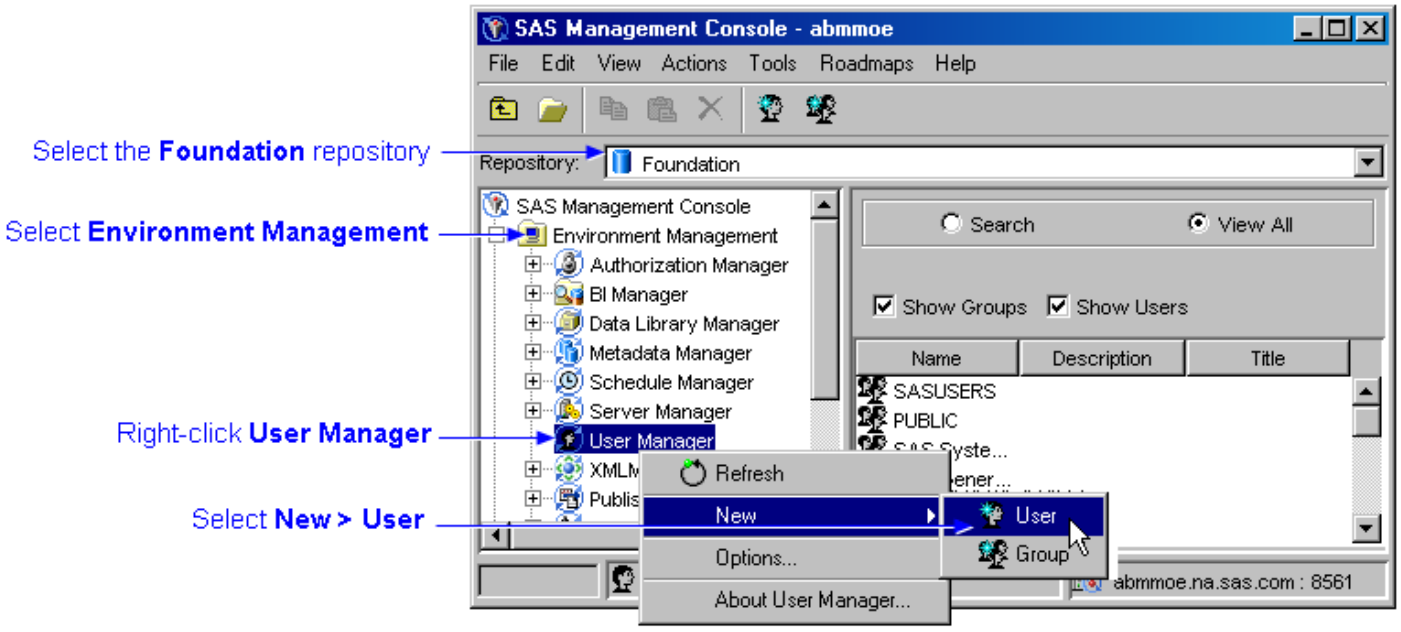
1. Log on to the SAS Management Console as an administrator.

   The main window opens.

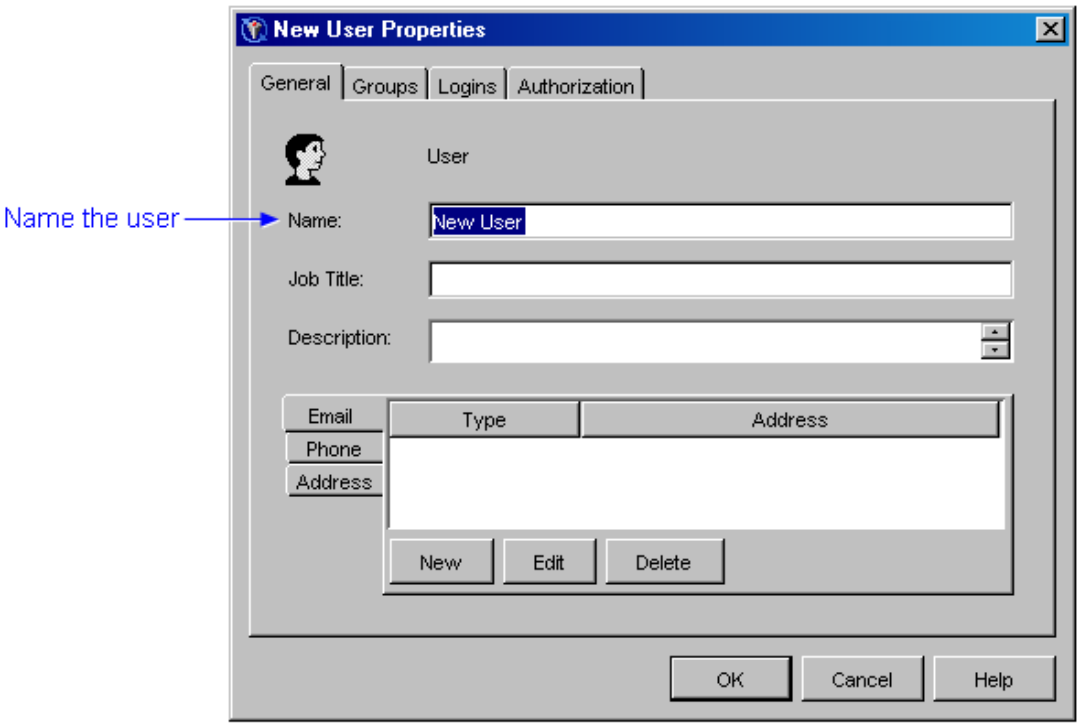
2. Select the **Foundation** repository.

3. Select **Environment Management**.

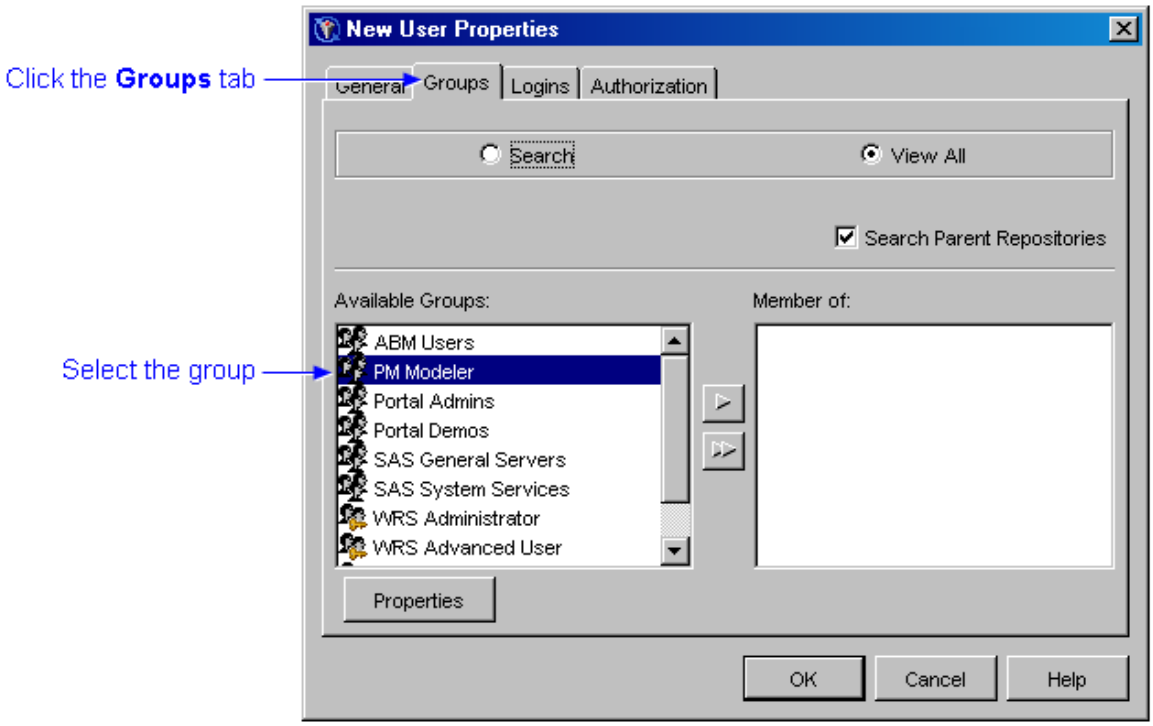
4. Right-click **User Manager**, and then select **New ▸ User**.



5. Name the new user, and then enter other user information on the **General** tab.



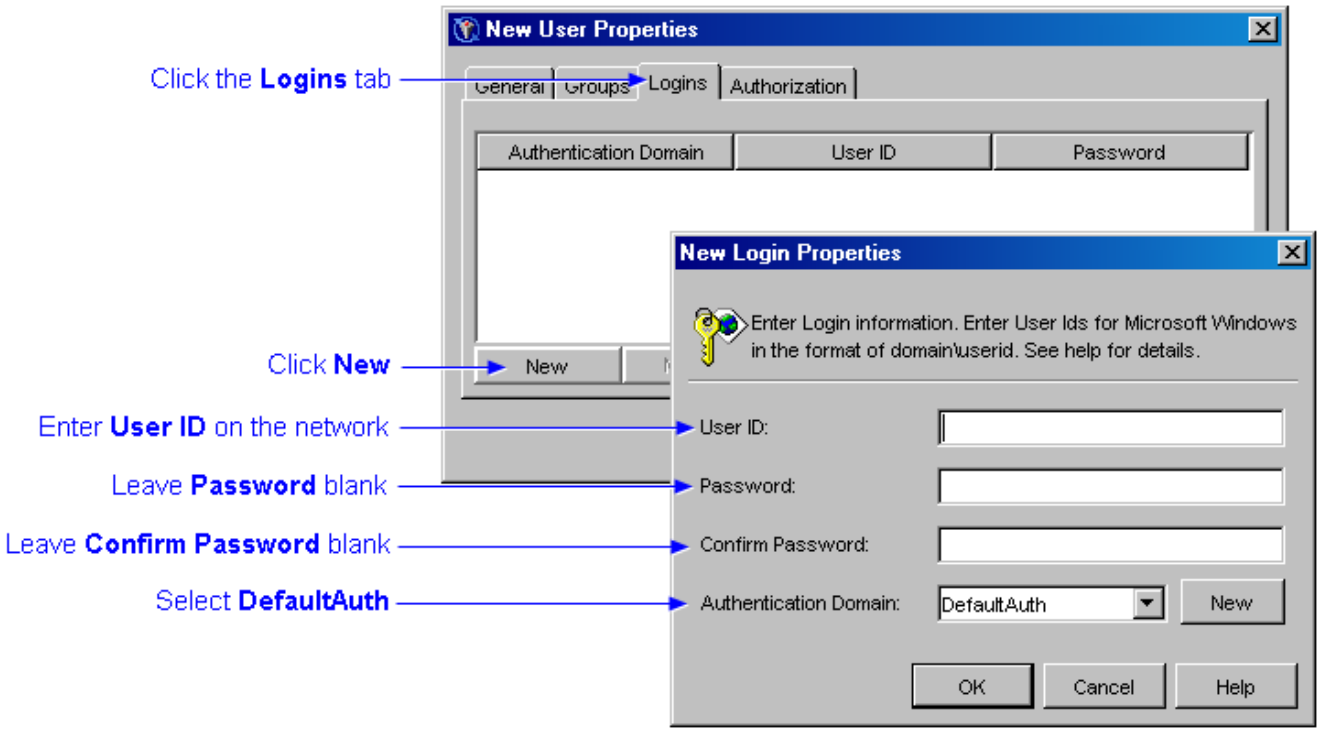
6. Click the **Groups** tab, and then select the group to which the user is to be added.



7. Click the **Logins** tab, and then click **New**.
8. Enter the new user's user ID on the network.

   The New Login Properties window opens.
9. Leave the **Password** field blank (it comes from the network).
10. Leave the **Confirm Password** field blank (it comes from the network).
11. Select **DefaultAuth** for the authentication domain.
12. Click **OK**.

    Note: You can leave the **Authorization** tab blank.


Click the **Logins** tab
Click **New**
Enter **User ID** on the network
Leave **Password** blank
Leave **Confirm Password** blank
Select **DefaultAuth**
New User Properties
General
Groups
Logins
Authorization
Authentication Domain
User ID
Password
New
New Login Properties
Enter Login information. Enter User Ids for Microsoft Windows in the format of domain\userid. See help for details.
User ID:
Password:
Confirm Password:
Authentication Domain:
DefaultAuth
New
OK
Cancel
Help

Value

Value is the calculated cost per transaction. The calculation is based on whether the behavior table row that is accessed by an assignment rule contains a unit value or a total value.

Unit Value

When a row in a behavior table contains a unit value, the driver formula calculates the number of units that are involved in each transaction that is selected by the selection criteria. Then, the cost per transaction (value) is determined by multiplying the number of units by the unit cost (in the behavior table) of the transaction.

Show an example

Total Value

When a row in a behavior table contains a total value, the driver formula calculates the number of units that are involved in each transaction that is selected by the selection criteria. Then, the cost per transaction is determined in the following way:

1. The total number of units for all transactions (selected by the selection criteria) is calculated by adding the number of units (as determined by the driver formula) for each transaction (selected by the selection criteria).

2. The cost per unit is calculated by dividing the total value (in the row in the behavior table) by the total number of units.

3. The cost for each transaction (value) is calculated by multiplying the cost per unit by the number of units (as determined by the driver formula) for that transaction.

Show an example

View the Audit Log

1. Select **View ▸ Audit Log**.

   The **Audit Log** window opens.

2. To filter the audit log items, select a user, model, and operation from the drop-down lists.

3. To view more detailed information, select one or more items, and then click **Details**.

   Another **Audit Log** window opens. If you selected more than one item, you can move through the items by clicking **Previous** and **Next**. Click **OK**.

4. To print items, select one or more items, and then click **Print**.

   The Print window opens. Click **Print**.

5. To copy items to the Microsoft Windows clipboard, select one or more items, and then click **Copy**.

6. Click **OK**.

8. View Reports

A summary report is a generated cube. A detail report is a cube that is generated on the fly when you request to view it in the SAS Profitability Management Web Reporting Client.

View a Summary Report

- Open a summary report
- Drill into a summary report
- Suppress the display of blank content
- Select specific values to display
- Change the number of rows or columns displayed
- Change heading colors
- Format displayed numbers
- Insert a graph
- Save a view of a report

View a Detail Report

- Open a detail report
- Drill into a detail report
- Suppress the display of blank content

Your Turn

We want your feedback.

- If you have comments about this book, please send them to **yourturn@sas.com**. Include the full title and page numbers (if applicable).
- If you have comments about the software, please send them to **suggest@sas.com**.