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Activity-Based Management Adapter 6.1 for SAP R/3

User's Guide

The Power to Know®

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SAS® Activity-Based Management Adapter 6.1 for SAP R/3: User's Guide

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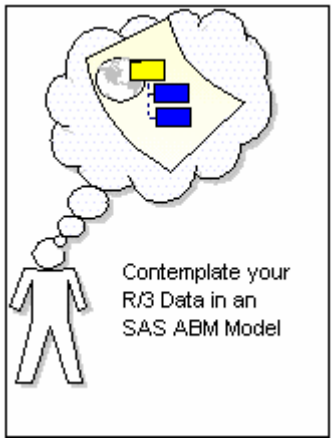
CHAPTER 1

Introduction to the SAS Activity-Based Management Adapter for SAP R/3

The SAS Activity-Based Management Adapter for SAP R/3 was developed to facilitate the sharing of ABC/M data between SAP R/3 and SAS Activity-Based Management software. This adapter accomplishes the complex movement of data between SAP Controlling module components and SAS Activity-Based Management software modules. To facilitate the sharing of ABC/M data between R/3 and SAS Activity-Based Management, an interface, referred to as SAS Activity-Based Management Adapter for SAP R/3 (the adapter), has been developed by SAS to support those who wish to develop R/3 and SAS Activity-Based Management compatible ABC/M models.



1. Determine the model design for the SAS Activity-Based Management model.
2. Determine the data sources necessary to feed your model: general ledger expenses, business process information, dimensions for profitability analysis, and driver quantities.
3. Begin your ABM project by designing your cost flow concepts in SAS Activity-Based Management to meet your management's informational needs.
4. Use the adapter to download data from R/3. Any process re-engineering or other types of simulations you make in SAS Activity-Based Management are now more accurate because the data you use is in real-time based upon interaction with the R/3 transactional data.

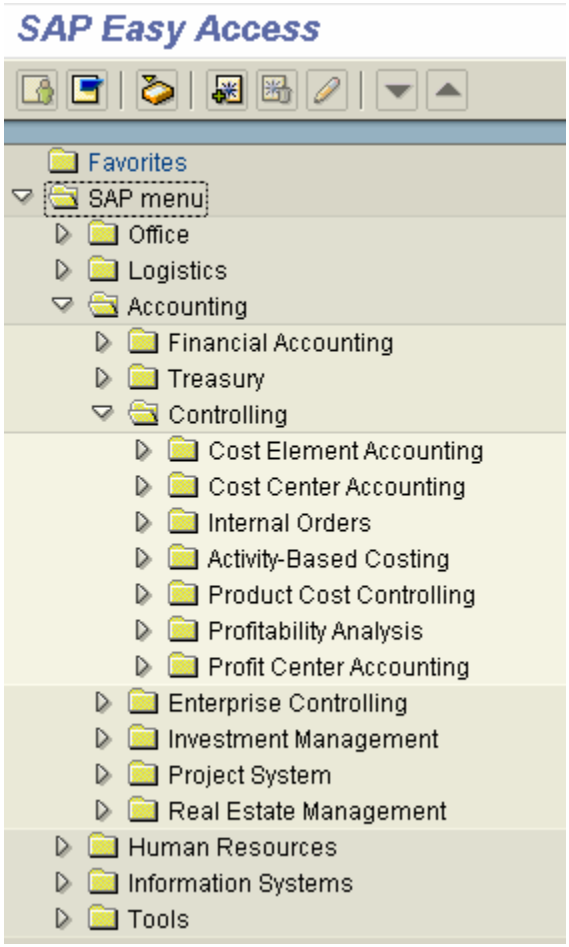
Knowing what information you have, and the type of analysis you want to do, impacts how you use the adapter to build each of the modules in a SAS Activity-Based Management model, and how you assign costs.

The adapter process requires that the team of people using the adapter and R/3 CO are in communication with one another and that some cross-training has occurred. If you have an existing SAS Activity-Based Management model, you'll need to understand what needs to be done in order to prepare the model. If you have existing information in R/3 CO you'll need to understand what can be downloaded. In all cases, a general understanding and recognition of each application's strengths is an important ingredient for a successful project.

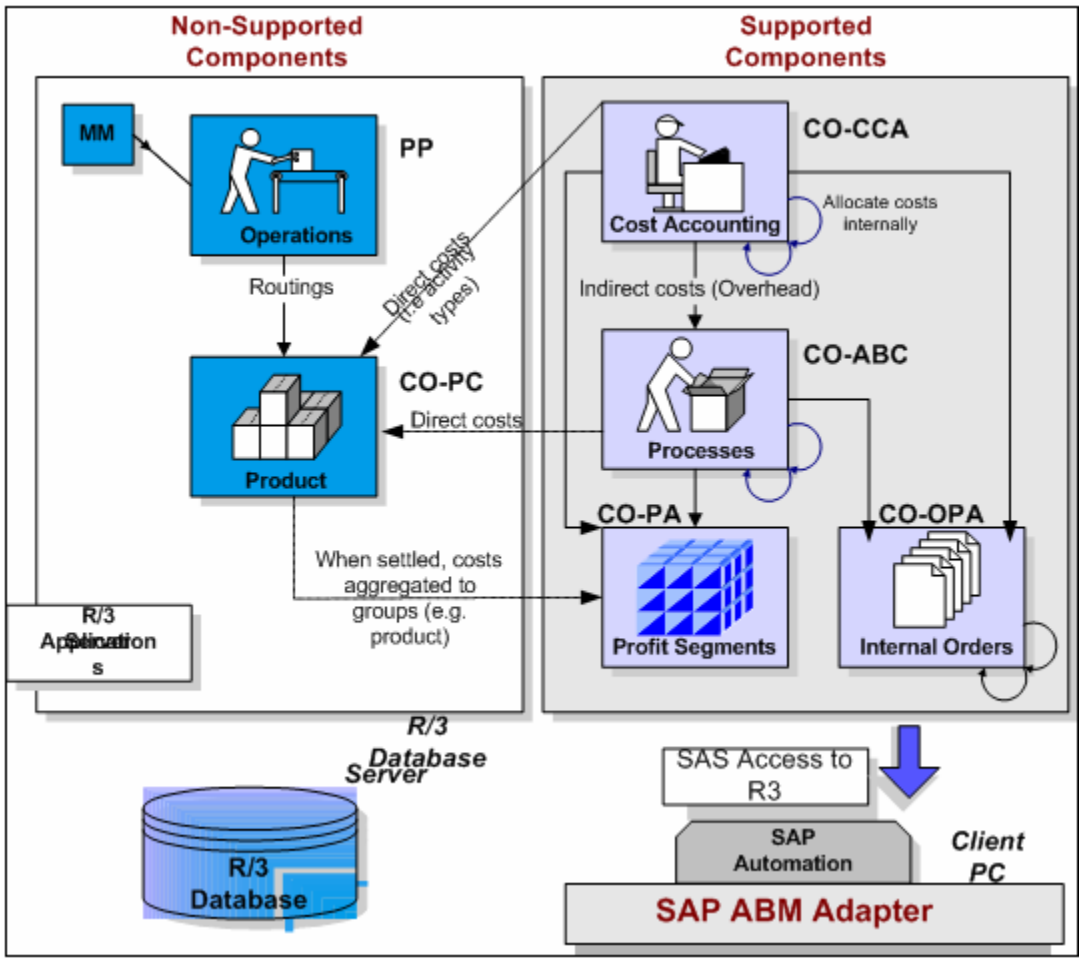
Overview of SAP – Sources to Feed the Adapter

Currently, the adapter only communicates with the following SAP R/3 Controlling components:

- CO-CCA (Cost Center Accounting)
- CO-ABC (Activity-Based Costing)
- CO-PA (Profitability Analysis)
- CO-OPA (Internal Orders)



Which R/3 CO Components Does the Adapter Work With?



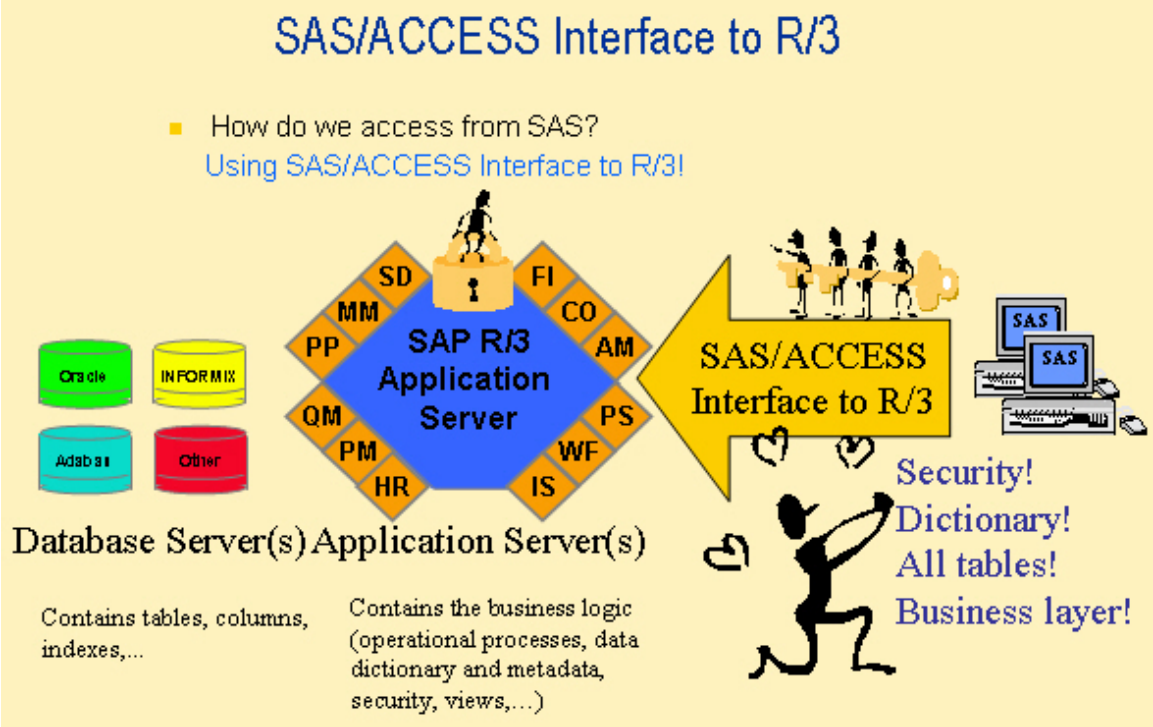
The Adapter supports extraction from the following SAP Functions in the Controlling Module (CO):

- Cost Center Accounting (CO-CCA)
- Internal Orders (CO-OPA)
- Activity-Based Costing (CO-ABC)
- Profitability Analysis (CO-PA)

Integration with these other modules in SAP can be implemented using SAS/ACCESS Interface to R/3:

- Materials Management (MM)
- Production Planning (PP)
- Production Costing (CO-PC)

The adapter product includes a copy of SAS/ACCESS Interface to R/3 and thus additional customization to the SAP integration can be developed. All data tables and fields are available to SAS/ACCESS Interface to R/3. See the graphic below for an overall view of the SAS/ACCESS Interface to R/3 Functionality. For more information see the user's documentation for SAS/ACCESS Interface to R/3.



What Benefits Does the Adapter Provide?

This list reflects the benefits of using both systems together facilitated by the adapter:

- More readily identifies reporting requirements providing project management with needed information to better allocate resources.
- Provides standardized integration between the software packages guaranteed to be supported by future releases eliminating custom interface design and construction costs.
- Facilitates the spread of the activity-based costing/budgeting/management philosophies throughout the organization to support more accurate decision-making.
- Enables simulation of the transaction-based operational model for process improvement and enhancement without impacting the validity or stability of the operational system.
- Creates key master data structures between the software packages.

Important Differences between SAS Activity-Based Management and SAP R/3

In both SAS Activity-Based Management and SAP R/3, each module or component consists of a hierarchy. These hierarchical groupings not only help you define relationships between objects, they also allow costs to roll-up, the creation of cost pools, and reporting.

Cost elements, whether in SAS Activity-Based Management or R/3, represent a cost. In SAS Activity-Based Management, resource costs are usually derived from the general ledger and are directly entered into accounts as cost elements in the resource module and maintained there. Account costs are made up of the individual costs of the cost elements. Cost elements in the controlling module cost center accounting (CO-CCA), on the other hand, are directly derived from the Financial Intelligence module (FI) and can be grouped by different object types—cost centers and cost element groups.

When working between R/3 controlling module (CO) and SAS Activity-Based Management, care must be taken to group cost elements in R/3 correctly if you want to download from SAP the correct representation of hierarchy and cost elements to SAS Activity-Based Management.
Assignments (referred to as allocations in the R/3 System) are used to map the relationships between a "source account (sender)" and its "destination accounts (receivers)." The source (sender) represents where the cost originates, and the destination (receiver) represents who receives the "assigned costs."
Although the assignment procedures used in SAS Activity-Based Management and R/3 CO differ, they all have the "assignment of cost" in common. It is important to understand the different types of assignment (allocation) methods in both SAS Activity-Based Management and R/3 CO, because this affects how objects need to be built in SAS Activity-Based Management.
In SAS Activity-Based Management, there are two ways to assign costs:

- Assignments
- Bills of Costs

R/3 Controlling Module (CO) has a number of different ways to allocate costs. The ones that are compatible with the adapter are as follows:

- direct activity allocation
- indirect activity allocation
- assessment allocation

The two different business assignment methodologies that you can employ are **value-based** or **quantity-based**. The methodology you decide to implement impacts the types of objects required in R/3 CO, which in turn affects what you need to build in SAS Activity-Based Management. This directly affects what you can download from SAP.

Note: You can use a mixture of the assignment methods to get the most accurate business model.

In R/3 controlling module cost center accounting (CO-CCA), "assessment" and "indirect activity allocation" are available for the assignment of costs. The ***tracing factor*** in an assessment cycle and an indirect allocation cycle is, in both cases, the ***statistical key figure***. If you are assigning to profitability segments in the Profitability Analysis component (CO-PA), the ***value fields*** (activity driver) in the operating concern serve as the ***sole tracing factors*** in addition to percentages. Value fields and statistical key figures translate to drivers in SAS Activity-Based Management.

Secondary Cost Elements

Unlike SAS Activity-Based Management, when you assign costs in R/3 via assessments or indirect activity allocations, you use allocation cost elements (also known as secondary cost elements). This is useful in highlighting for which purposes the costs assigned via assessment or indirect allocation were used. Indirect allocation takes place using an ***internal activity allocation secondary cost element*** that is specific to an activity type or a business process. Assessment takes place using an ***assessment secondary cost element*** that is specific to a cost center resource or a business process.

Overview — Modeling Direct Activity Allocation

What it means in R/3. In direct activity allocation, the resource driver represents an activity type that illustrates the activity produced by a cost center resource (such as employee hours or kilowatt-hours). Direct activity allocation is the most exact method, but at the same time the most time-consuming, because you must measure and enter the exact quantities of activities and processes consumed. This usually occurs as manual verification of quantities on both the sender and the receiver sides.

How to model in SAS Activity-Based Management. You make the necessary settings for direct activity allocation of costs from cost centers and processes by:

- Creating assignments from activity type resource accounts or business process activity accounts using a user-defined, non calculated, unique driver

Overview — Modeling Indirect Activity Allocation

What it means in R/3. In indirect activity allocation in plan and actual, the resource driver is represented by the tracing factor of the corresponding cycle, similar to the way it is represented in the value-based assignment approach. The difference, however, lies in the fact that the resource driver is not used for cost distribution, but rather as the basis for allocations of activity or process quantities. Indirect activity allocation appears in two variations.

- In manual indirect allocation, you assign the known activity quantities on the cost center to the business processes in relation to the resource drivers (tracing factors).
- In inverse indirect allocation, you multiply the resource drivers (such as the number of orders) by a standard quantity (such as two minutes per order).

This thereby determines the activity quantity of a given resource consumed by a business process. The total of all activity quantities consumed by business processes equals the total activity output of the resource by the cost center. If you use a statistical key figure as a resource driver, this results in purely fixed costs on the business process. If, on the other hand, the process output serves as the resource driver, this results in purely variable costs instead.
Additionally, you can identify idle **capacity** or **under capacity** of cost center resources early enough to take steps to redistribute these overhead resources if necessary.
How to model it in SAS Activity-Based Management. You make the necessary settings for indirect activity allocation of costs from cost centers and processes by:

- Creating assignments from activity type resource accounts or business process activity accounts using a shared driver

Overview — Modeling Assessment Allocation

What it means in R/3. Assessment is a method of allocating primary and secondary costs in Cost Center Accounting (CO-CCA) and in Activity-Based Costing (CO-ABC). Allocation through assessment is useful when the composition of the costs is unimportant for the receiver. For example, the assessment of shipping costs to a cost center need not be broken down further. You can assign individual cost elements, cost element groups, or intervals to an assessment cost element.

Assessment is available for the assignment of cost centers to other cost centers, business processes, internal orders, and CO-PA, and from business processes to other business processes, internal orders, and CO-PA. Statistical key figures are used in an assessment cycle as allocation bases when allocating to cost centers, business processes, and internal orders. Value fields are used when allocating to CO-PA. These are used to calculate the debit on a receiver object the resource driver quantity. Thus cost will flow from the source account (Resource) to the destination account (Cost Object) based upon the driver value.

Note: Consumption quantities **cannot** be allocated in assessment. You need to use ***quantity-based*** assignment methods. You can, however, use a mixture of all allocation methods to get the most accurate business model.

Some allocations use what is called a cycle to run the calculations and post costs. Assessments are defined using cycles. This is what takes place when an assessment cycle is run:

- Sender cost centers are credited with a special secondary cost element (assessment cost element).
- Receiver cost centers are debited with the same assessment cost element.
- Information on senders and receivers is contained in the document.
- The list of origins is not maintained in the cost accounting document. The original cost element is lost during the allocation procedure.

How to model it in SAS Activity-Based Management. You make the necessary settings for allocating costs from cost centers and processes by creating assignments from cost element group resource accounts or business process activity accounts using a shared driver.

Modeling Assignments

What it means in SAS Activity-Based Management versus SAP. In SAS Activity-Based Management, you create assignments between accounts in the same module or between accounts in different modules. This is referred to as creating an "assignment" and there is only one way to create one. A source account is assigned to a destination account. Assignments use drivers and driver quantities to assign costs between accounts. A driver controls the assignment of costs by using driver quantities. In most cases, 100% of an account's costs are assigned to other accounts. Resource drivers are used to assign costs from resources to activities, and activity drivers are used to assign costs from activities to activities and activities to cost objects. Drivers are what drive the cost and driver quantities are used to calculate the rate.

When you create assignments in SAS Activity-Based Management to dimension accounts (CO-PA profitability segments), you can use either quantity or currency value fields as the driver to assign driver quantities.

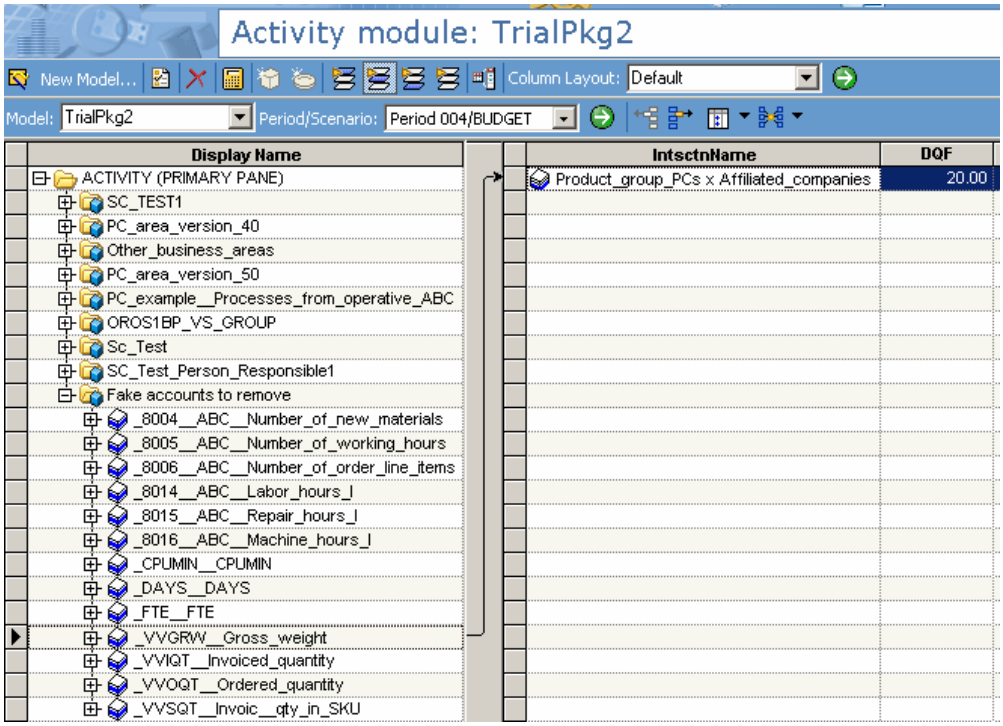
Assignments You Can Make

Except for direct activity allocation, the assignment path itself is not built by the ABM adapter. Some activity assignments are built in the model to hold the driver values. These activity accounts are placed in a folder called 'Fake' and the name of the driver from the SAP source is used as the name for the SAS Activity-Based Management account. This enables the adapter to import driver quantities from SAP without having the assignment path already built in SAS Activity-Based Management. The assignment path must be build by hand, or another ETL Process by the user. Once the path is built and the driver selected quantity values will appear automatically in the model

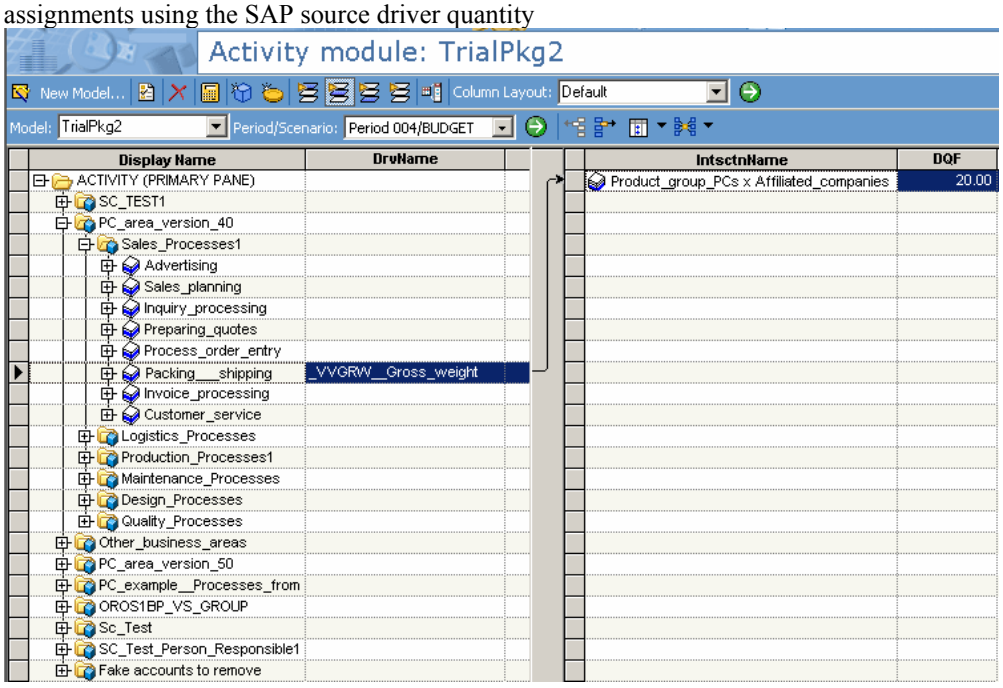
The process of building a completed model in SAS Activity-Based Management requires the following:

1. The driver quantities to be extracted from SAP
2. The driver quantities transformed in the ABM Adapter
3. An assignment path from a source account to a destination account using that defined driver. Defined in SAS Activity-Based Management – either interactively or through additional data transformations and imported from staging tables.

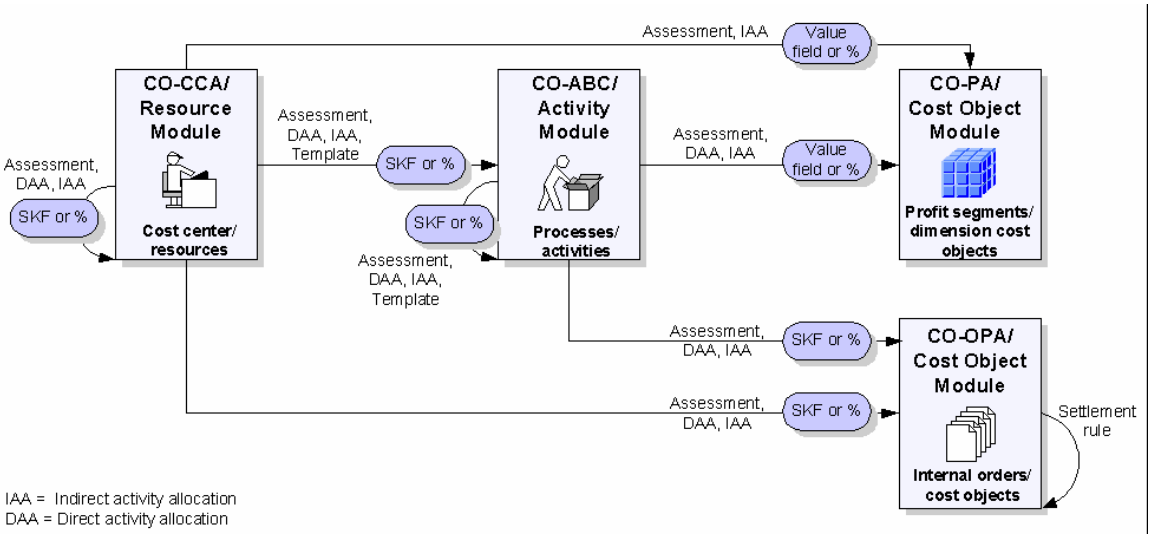
Only then (with both the SAP driver quantities and the SAS Activity-Based Management assignment paths built) will the costs flow from the source account to the destination account. The cost flow in SAS Activity-Based Management is thus based upon the assignment path using the SAP sourced driver quantity. Until you build the assignment path in SAS Activity-Based Management, the driver quantities loaded from SAP into SAS Activity-Based Management will do nothing to flow the cost.
Fake assignment flow in the SAS Activity-Based Management model: with only SAP source



Assignment flow in the SAS Activity-Based Management model; With SAP source and interactively built assignments using the SAP source driver quantity



The following driver quantity extraction from SAP for use in SAS Activity-Based Management assignments are currently supported with the adapter:

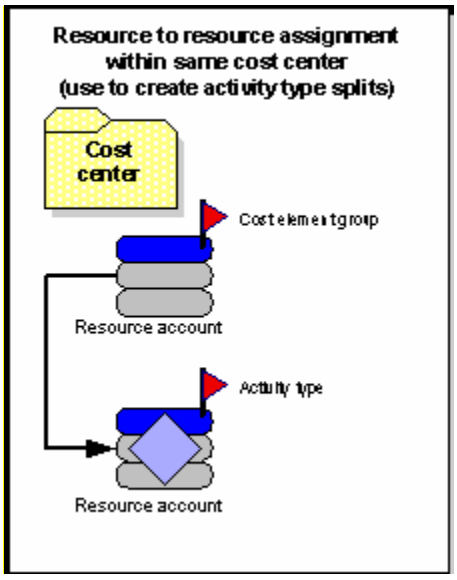


- Resource to resource assessments – using Statistical Key Figures (SKF)
- Resource to activity assessments – using Statistical Key Figures (SKF)
- Resource to Cost Object (Profitability Intersections) – using Value Fields
- Resource to Cost Objects (Internal Orders) – Using Statistical Key Figures (SKF)
- Activity to activity assessments – Using Statistical Key Figures (SKF)
- Activity to Cost Object (Profitability Intersections) – using Value Fields
- Activity to Cost Objects (Internal Orders) – Using Statistical Key Figures (SKF)
- Activity to Activity (Direct Activity Allocation) – Using unique driver.
- Activity Type to Activity (Direct Activity Allocation) – Using unique driver
- Activity to Cost Objects (Internal Orders)(DAA) – Using unique driver
- Activity Type to Cost Objects (internal Orders)(DAA) – Using unique driver

Creating Resource to Resource Assignments

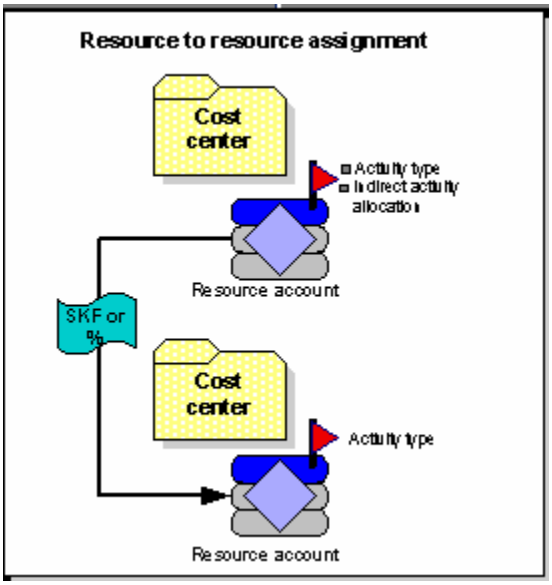
The following are the only ways that you can use resource-to-resource assignments:

Assignments to Create Cost Center/Activity Types and Plan Splits



- Assignment takes place within the same resource center that represents a cost center.
- Source (sender) is a resource (cost element group) account; destination (receiver) is a resource (activity type) account.

Quantity-Based Assignments from Resources to Resources (CO-CCA to CO-CCA)

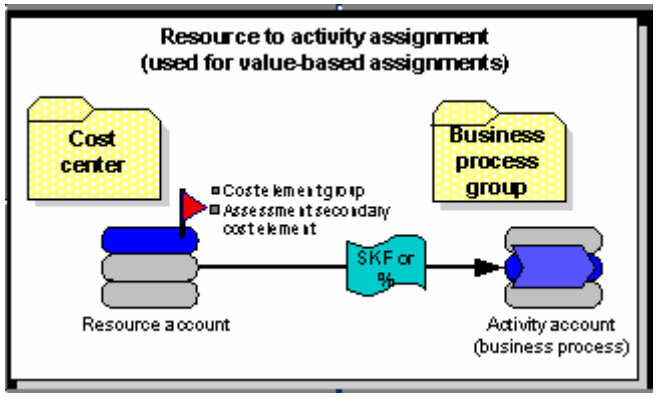


- Assignment takes place across different resource centers that represent cost centers.
- Source (sender) is a resource (activity type) account in one center; destination (receiver) is a resource (activity type) account in another center.
- Source (sender) is attached with an internal activity allocation secondary cost element attribute or provided via the allocation cost element selection in the adapter. This provides the secondary cost element information used to allocate costs.

Creating Resource to Activity Assignments

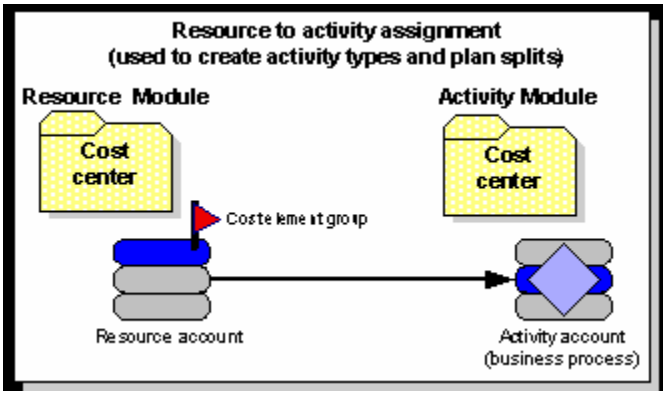
The following are the only ways that you can use resource to activity assignments:

Value-Based Assignments from Resources to Activities (CO-CCA to CO-ABC)



- Source (sender) is a resource (cost element group) account; destination (receiver) is an activity (business process) account.

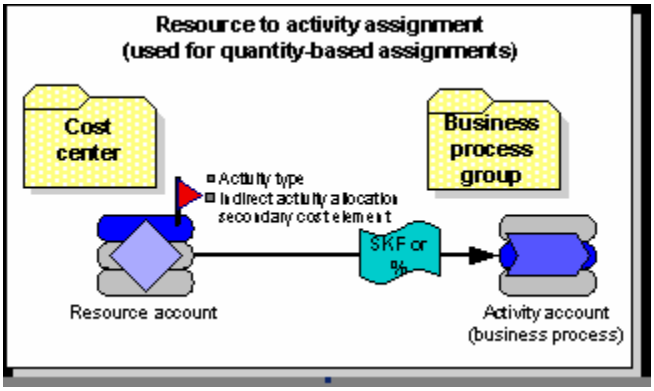
Assignments to Perform Activity Type Plan Splits Using Activity Module



- Assignment takes place from a resource (cost element group) account in the Resource Module to an activity (activity type) account in the Activity Module.

- Source (sender) is a resource (cost element group) account; destination (receiver) is an activity (activity type) account.
- Driver information is only used to create the splits.
- Note: You cannot define splits across cost centers.

Quantity-Based Assignments from Resources to Activities (CO-CCA to CO-ABC)

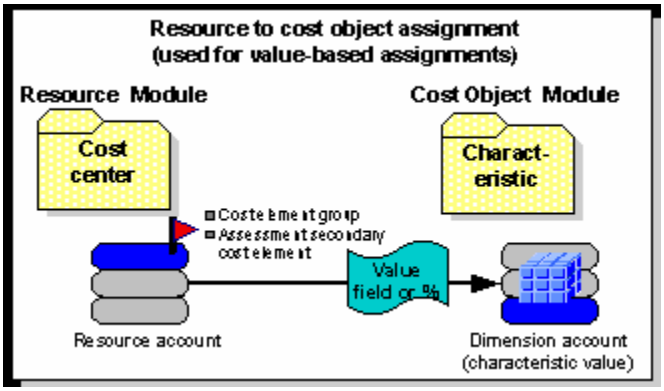


- Source (sender) is a resource (activity type) account; destination (receiver) is an activity (business process) account.
- An activity type attribute is associated with the resource account that represents an activity type. This determines that an indirect activity allocation cycle is created.
- Source (sender) is attached with an internal activity allocation secondary cost element attribute or provided via the allocation cost element selection in the adapter. This provides the secondary cost element information used to allocate costs.

Creating Resource to Cost Object Assignments

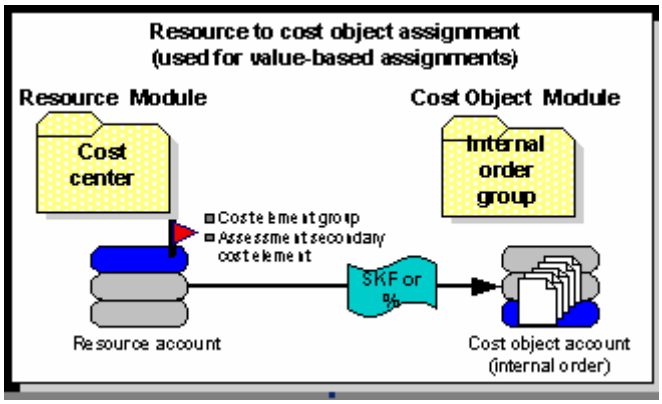
The following are the only ways that you can use resource to cost object assignments:

Value-Based Assignments from Resources to Dimension Accounts (CO-CCA to CO-PA)



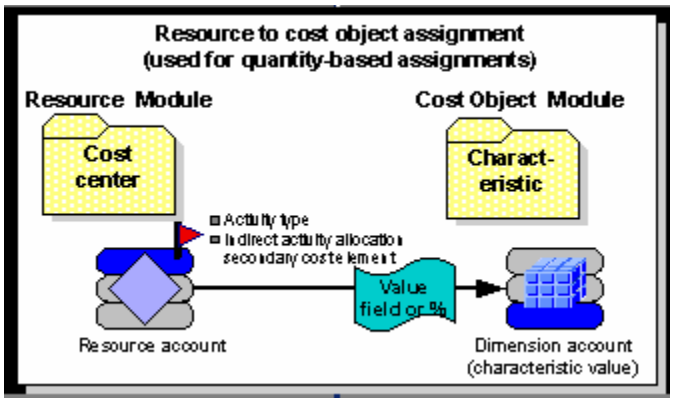
- Source (sender) is a resource (cost element group) account; destination (receiver) is a dimension (characteristic value) account.
- Driver must be a value field that you have downloaded from CO-PA.

Value-Based Assignments from Resources to Internal Order Accounts (CO-CCA to CO-OPA)



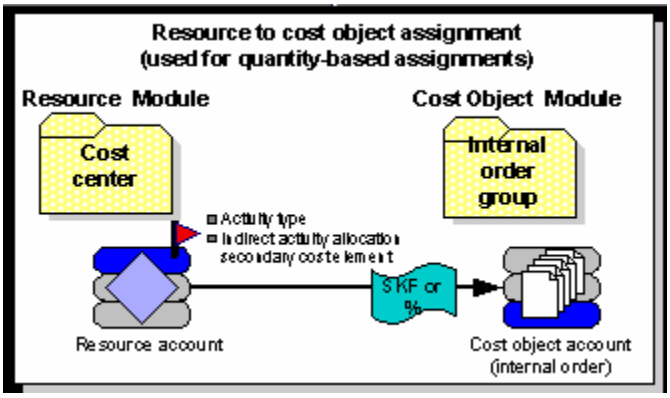
- Source (sender) is a resource (cost element group) account; destination (receiver) is a cost object (internal order) account.
- Driver is a Statistical Key Figure (SKF) or a percentage value (%).

Quantity-Based Assignments from Resources to Dimension Accounts (CO-CCA to CO-PA)



- Source (sender) is a resource (activity type) account; destination (receiver) is a dimension (characteristic value) account.
- Driver must be a value field that you have downloaded from CO-PA.

Quantity-Based Assignments from Resources to Internal Order Accounts (CO-CCA to CO-OPA)

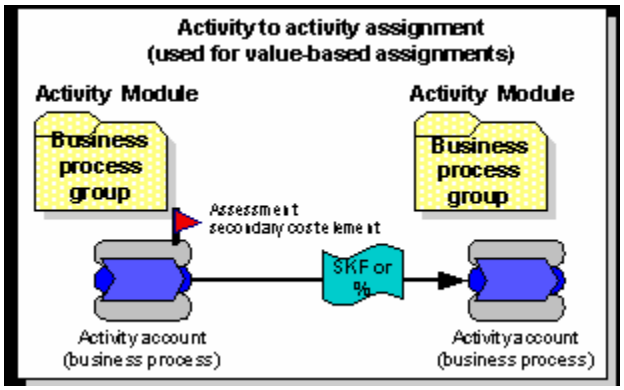


- Source (sender) is a resource (activity type) account; destination (receiver) is a cost object (internal order) account.
- Driver is an SKF or %.

Creating Activity to Activity Assignments

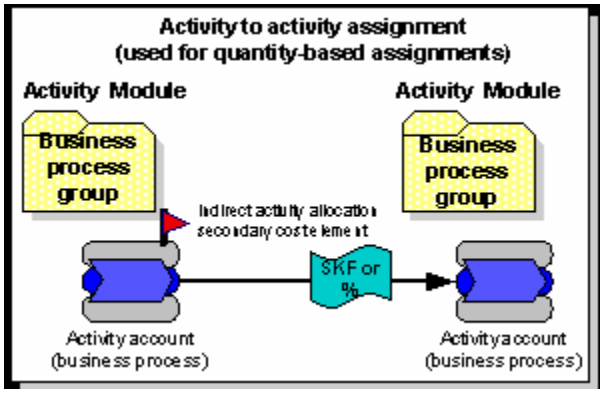
The following are the only ways that you can use activity to activity assignments:

Value-Based Assignments from Activities to Activities (CO-ABC to CO-ABC)



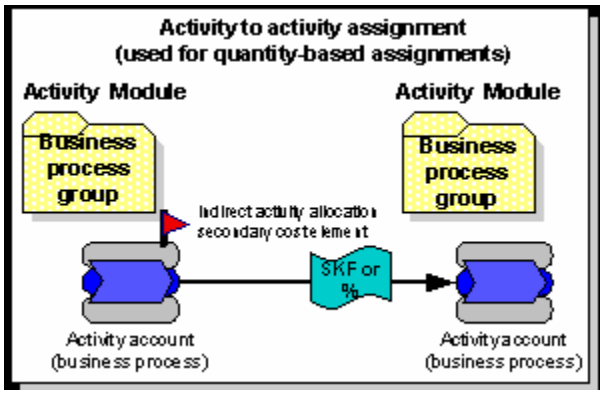
- Source (sender) is an activity (business process) account; destination (receiver) is an activity (business process) account.
- Driver is an SKF or %.

Quantity-Based Assignments from Activities to Activities (CO-ABC to CO-ABC)



- Only used if using Activity Module to model activity types.
- Source (sender) is an activity (activity type) account; destination (receiver) is an activity (activity type) account.
- Driver is an SKF or %.

Quantity-Based Assignments from Activities to Activities (CO-ABC to CO-ABC)

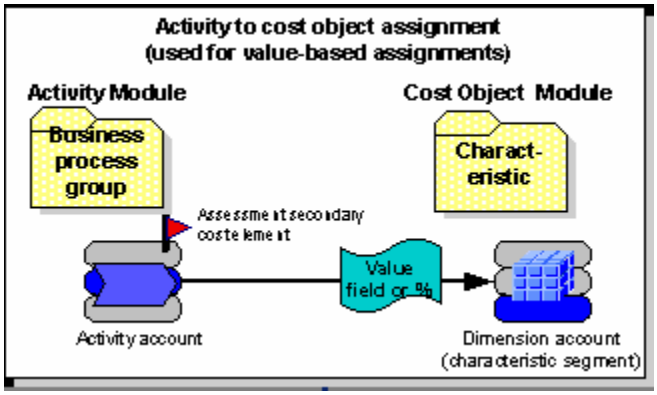


- Source (sender) is an activity (business process) account; destination (receiver) is an activity (business process) account.
- Driver is an SKF or %.

Creating Activity to Cost Object Assignments

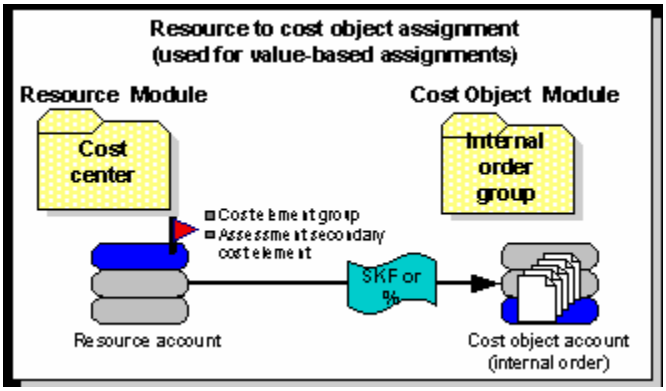
The following are the only ways that you can use activity to cost object assignments:

Value-Based Assignments from Activities to Dimension Accounts (CO-ABC to CO-PA)



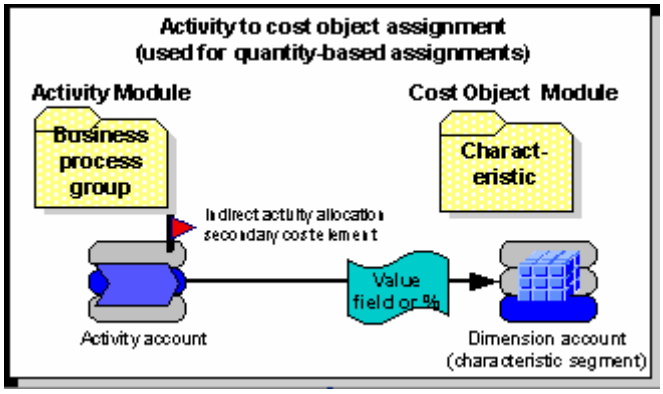
- Source (sender) is an activity (business process) account; destination (receiver) is a dimension (characteristic value) account.
- Driver must be a value field that you have downloaded from CO-PA.

Value-Based Assignments from Activities to Internal Order Accounts (CO-ABC to CO-OPA)



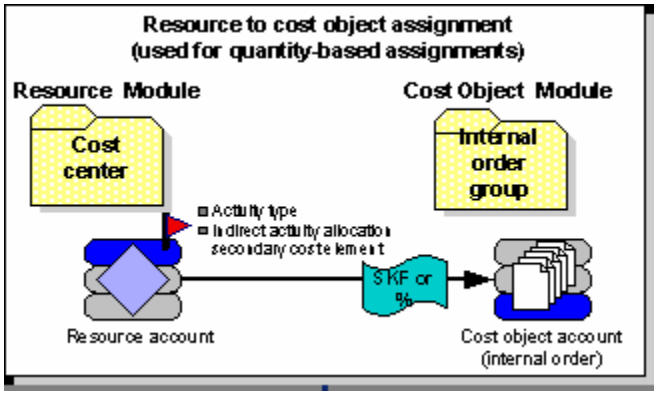
- Source (sender) is an activity (business process) account; destination (receiver) is a cost object (internal order) account.
- Driver is an SKF or %.

Quantity-Based Assignments from Activities to Dimension Accounts (CO-ABC to CO-PA)



- Source (sender) is an activity (business process) account; destination (receiver) is a dimension (characteristic value) account.
- Driver must be a value field that you have downloaded from CO-PA.

Quantity-Based Assignments from Activities to Internal Order Accounts (CO-ABC to CO-OPA)

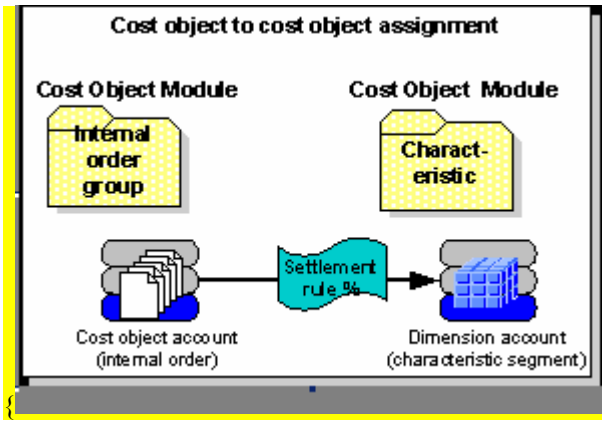


- Source (sender) is an activity (business process) account; destination (receiver) is a cost object (internal order) account.
- Driver is an SKF or %.

Creating Cost Object to Cost Object Assignments

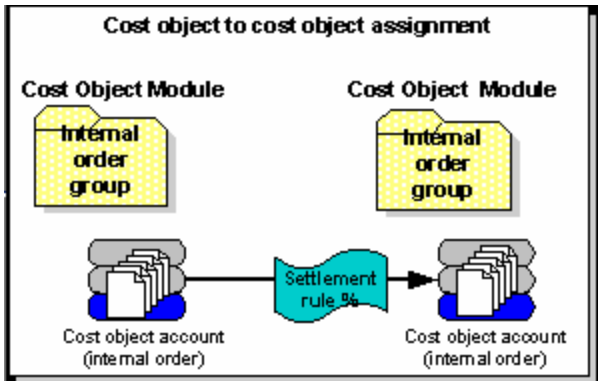
The following are the only ways that you can use cost object to cost object assignments:

Assignments to Dimension Accounts (CO-OPA to CO-PA)



- Source (sender) is a cost object (internal order) account; destination (receiver) is a dimension (characteristic value) account.
- You can use any driver type.
- For assignments to internal orders that use PERCENTAGES or EVENLY ASSIGNED drivers, you need to make sure that you've set up the order type correctly in R/3. The order type needs to have the **integrated planning** control indicator enabled.

Assignments to Dimension Accounts (CO-OPA to CO-OPA)



- Source (sender) is a cost object (internal order) account; destination (receiver) is a cost object (internal order) account.
- You can use any driver type.
- For assignments to internal orders that use PERCENTAGES or EVENLY ASSIGNED drivers, you need to make sure that you've set up the order type correctly in R/3. The order type needs to have the **integrated planning** control indicator enabled.

Value-Based vs. Quantity-Based Assignment of Costs

The primary difference between quantity-based consumption ("Pull") and value-based ("Push") methods is that quantity-based consumption is based on allocation of activity type and business process quantities, whereas value-based consumption is based on use of resources. The quantity-based consumption is calculated on the fly based upon the demand of the business process quantities. If additional demand for a particular resource is calculated based upon the business process quantities, then additional resource costs will be pulled and added to the business process cost.

What Does the Value-Based Approach Allow You to Do?

To associate costs with products and services, Activity Based Costing (ABC) assigns costs to activities based on their use of resources. It then assigns costs to cost objects, such as products or customers, based on their use of activities. In this model, all costs are assigned from the resources to activities to cost objects. Each cost is distributed based on its driver and proportion of its driver quantity. All of the costs are eventually re-aggregated into the final cost objects. This is a very simple method of assigning costs.

Value-Based Cost Assignments

The value-based assignment methods in the SAP System are:

Methods to Support Value Allocations in R/3	Extracted in the Adapter?
Assessment in planning and in period-end closing	Yes, the R/3 Assessments are used in the following way in the SAS Activity-Based Management model: • Assignments from resource accounts (cost element groups) or activity accounts • Assessment secondary cost element on source accounts • Shared drivers (non-calculated and calculated (only if Total Driver Qty is not in equation))
Distribution in planning and in period-end closing	No, these are not extracted in the adapter

What Does the Quantity-Based Approach Allow You to Do?

In quantity-based assignments, you use quantities to calculate values. You can directly post quantities as transactions and then R/3 uses that quantity to calculate the value. You can also post quantities and then have the costs and rates calculated via back flushing. This method assumes that you know the driver quantities consumed (relationship quantities), that is, how much of an activity is required for the output of a cost object and how much of a resource is required for the output of an activity.

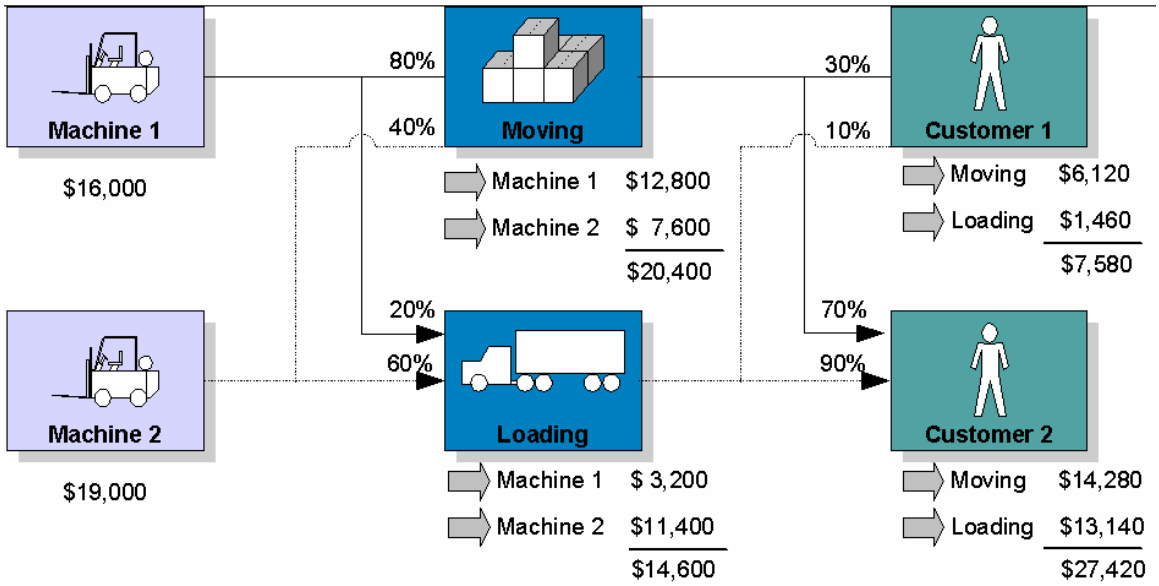
Quantity-Based Consumption Assignments

The quantity-based consumption assignment methods in the SAP System are:

Methods to Support Quantity Allocations in R/3	Extracted in the adapter?
Direct activity allocation	Yes, the R/3 Direct Activity Allocations are used in the following way in the SAS Activity-Based Management model: • Assignments from resource accounts (activity types) or activity accounts • User-defined unique drivers
Indirect activity allocation in plan and actual	Yes, the R/3 indirect Activity Allocations are used in the following way in the SAS Activity-Based Management model: • Assignments from resource accounts (activity types) or activity accounts • Shared drivers (non-calculated and calculated (only if Total Driver Qty is not in equation)) • SAP R/3 version 4.5B+
Indirect activity allocation with Inverse Qty Calculation in plan and actual	Yes, the R/3 indirect Activity Allocations are used in the following way in the SAS Activity-Based Management model: • Assignments from resource accounts (activity types) or activity accounts • SAP R/3 version 4.5B+
Target=actual allocation	No, these are not extracted by the adapter
Template Allocation in Plan and in the actual in Cost Object or Profitability Segment	No, these are not extracted by the adapter
Template Allocation in Processes/Cost Centers in Plan and in Actual	No, these are not extracted by the adapter

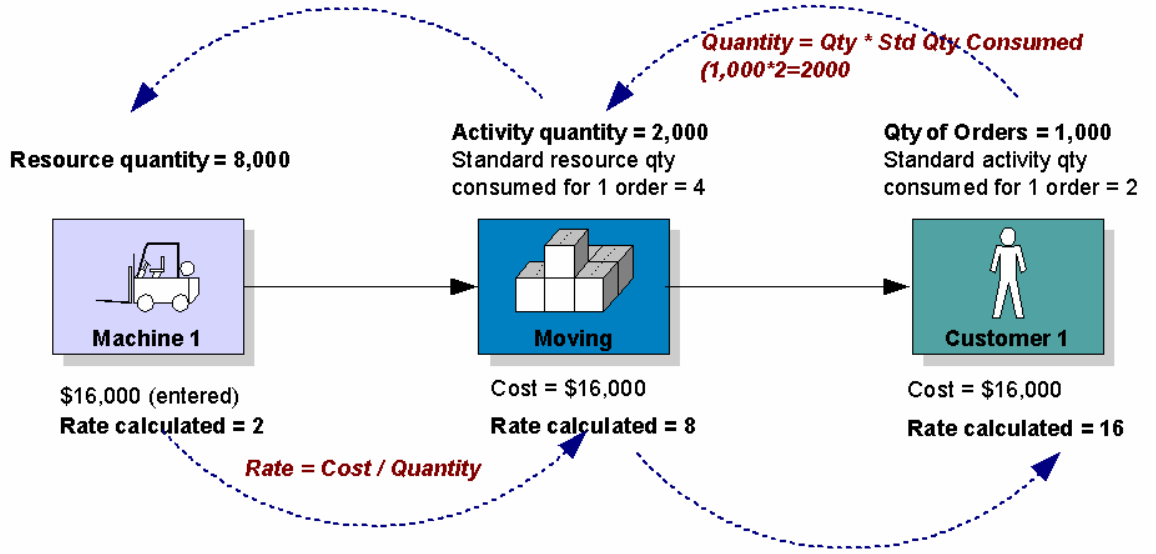
Value-based Example

First, the resources consumed by activities (business processes) are assigned according to the true origins of the costs. The unit of measure for this assignment is known as the resource driver. In the second step, the activities (business processes) are assigned to the assorted receiver objects based on their actual utilization of resources. The assignment of activities (business processes) takes place via "activity (process) drivers", which represent reasonable measurements of activity consumption. Destination (receiver) objects can be products, customers, sales channels, and other types of profitability segment. This method is easy and straight forward to implement and makes it possible to create the appropriate assignment of costs to their originating activities and cost objects.


Machine 1
$16,000
Machine 2
$19,000
80%
40%
20%
60%
Moving
Machine 1 $12,800
Machine 2 $ 7,600
$20,400
Loading
Machine 1 $ 3,200
Machine 2 $11,400
$14,600
30%
10%
70%
90%
Customer 1
Moving $6,120
Loading $1,460
$7,580
Customer 2
Moving $14,280
Loading $13,140
$27,420

Quantity-Based Example

This method uses the output quantity (Qty of Orders = 1000) placed on a cost object (Customer 1) and the standard activity quantity consumed for each order (2 units) to calculate and back flush activity quantities (2000). Similarly, the back flushed activity quantities and the resource quantity consumed for each activity (4 hours) are used to calculate a resource quantity (8000) for Machine 1. Therefore, 8000 hours of Machine 1 is needed to move 2000 times. If Machine 1 requires $16,000 to operate, then its rate per hour is $2 (*Rate = Cost / Quantity (2 = 16,000/8000)*). This rate is used to calculate the Moving activity's costs (*Cost = (Rate * Standard Qty Consumed) * Quantity*) and rate per activity. The rate for the activity is then used to calculate a rate per order and a total cost for the 1000 orders to be produced for Customer 1.



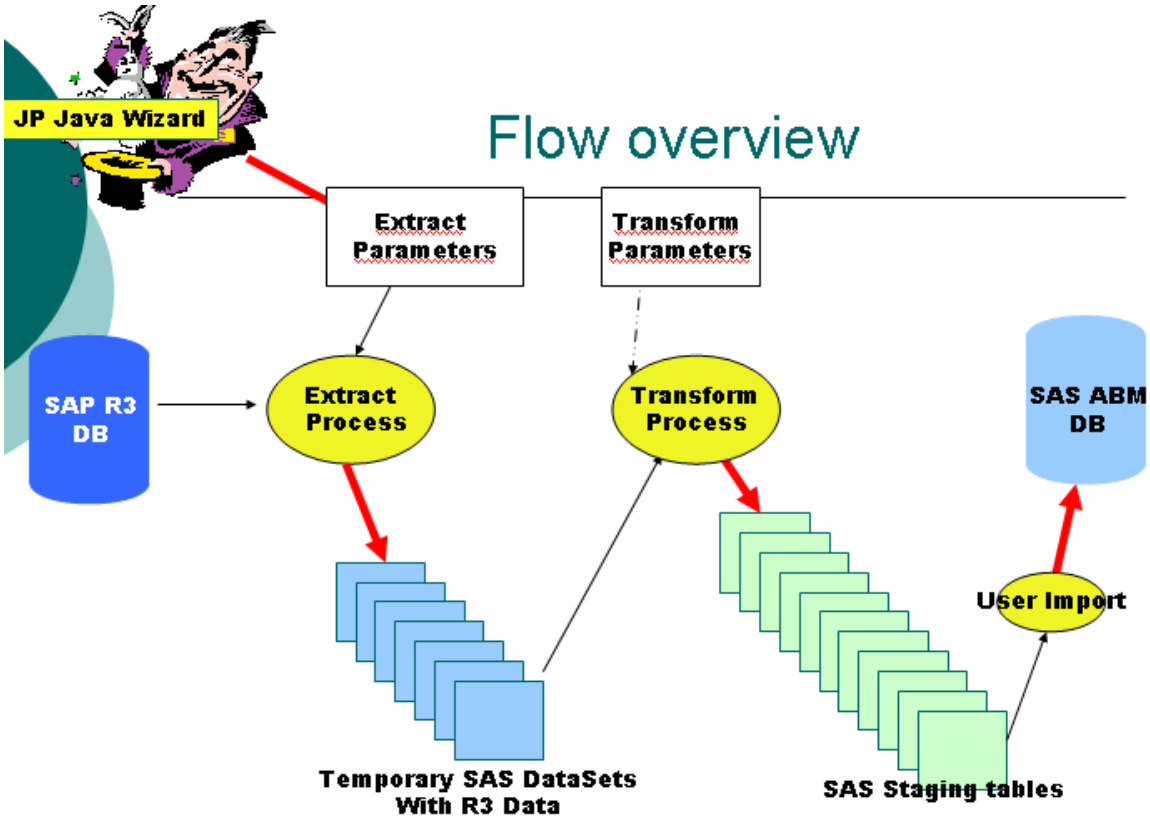
CHAPTER 2

Setting Up the SAS Activity-Based Management Adapter for SAP R/3 Environment

Before you can successfully work with the adapter and SAP R/3 you need to successfully complete the installation instructions for SAS Activity-Based Management Adapter for SAP R/3:
To begin using the adapter the following software must be installed:

- The SAS System, Release 8.2
- SAS/ACCESS Interface to R/3
- SAS Activity-Based Management
- Java Run-time Environment
- SAS Activity-Based Management Adapter for SAP R/3.

Launching the SAS Activity-Based Management Adapter for SAP R/3



Overview — Using the SAS Activity-Based Management Adapter for SAP R/3

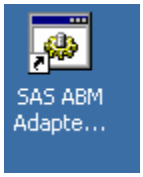
The process for implementing a SAS Activity-Based Management Adapter for SAP R/3 solution is shown in the graphic above.

The process must be completed in the following sequence:

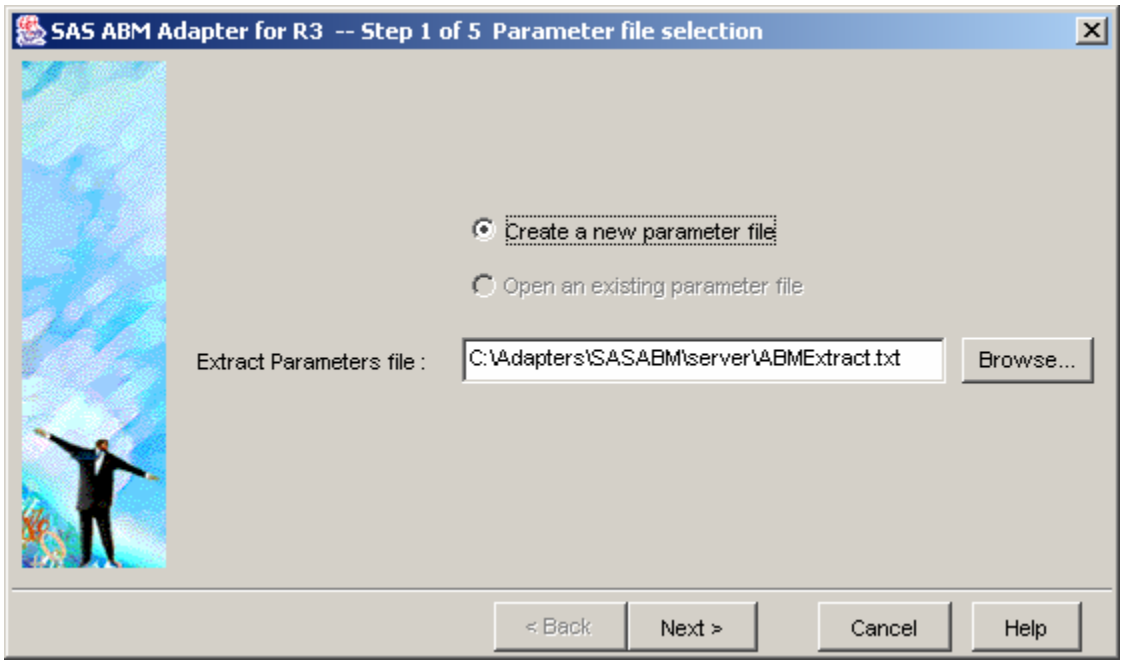
1. SAP R3 DB – Build connections to the SAP System by installing SAS/ACCESS Interface to R/3 and running the SAP Metadata Extract.
2. Extract Parameters – Run the Java Wizard and the SAS ABM Adapter Extraction Wizard to define the tables to extract from SAP.
3. Extract Process – Run the SAS program and the extract R3 Master Data to extract the Master Tables Detail from SAP into SAS.
4. Extract Process – Run the SAS Program and the extract R3 Periodic Data to extract the Periodic Data Tables from SAP into SAS.
5. Transform Parameters – Run the Java Wizard and the SAS ABM Transform Wizard to define the SAS Activity-Based Management Model Design Layout used in defining the transformation process.
6. Transform Process – Run the SAS Program and the Transform DW to ABM staging tables – this takes the extracted SAP data and transforms it into data layouts for SAS Activity-Based Management.
7. User Import – Run the SAS Activity-Based Management Program to import the staging tables from SAS data sets– You can also optionally Export SAS Activity-Based Management Staging Tables to Microsoft Access– this takes the data from the SAS data tables into a Microsoft Access database to be imported into SAS Activity-Based Management.
8. SAS Activity-Based Management Database – Import the SAP Data into the SAS Activity-Based Management Model.

Overview — Using the Adapter – Extraction Wizard

1. Select the SAS ABM Adapter Extraction Wizard Icon on your Desktop.



2. Walk through the steps in the Wizard. Step 1: Define where the parameter file will be saved.

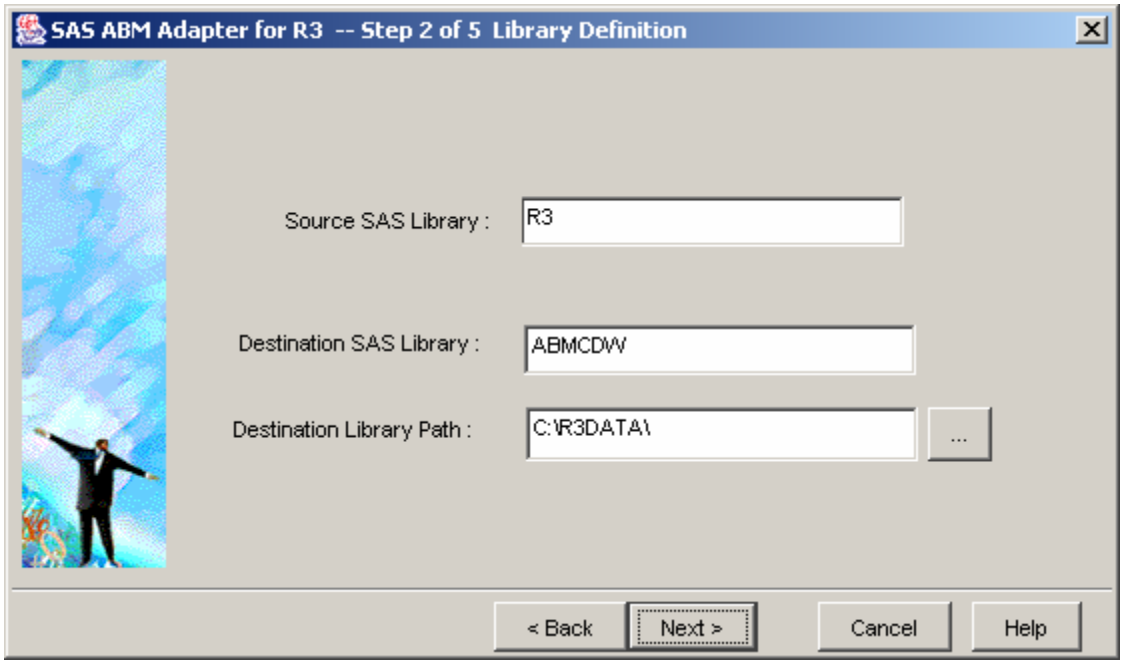


The radio button **Create a new parameter file** is the only option for the original adapter release. The parameter file will be created holding the information necessary to define what parts of the SAP source data will be extracted into SAS. This also defines where the extracted data will be stored on your hard drive. Once all of the steps from the ABM Adapter Extraction wizard have been completed, the parameter file is created.

Step 1: Browse to the location where you want your parameter file stored. The default location is noted in the screen shot above. If you do not choose to save the parameter file in the default location, you will need to do additional customization of the adapter. For the detailed process of customization please see the adapter installation instructions.

The file must be called `ABMExtract.txt`.

3. Define where the SAP Extract will save the files in SAS.



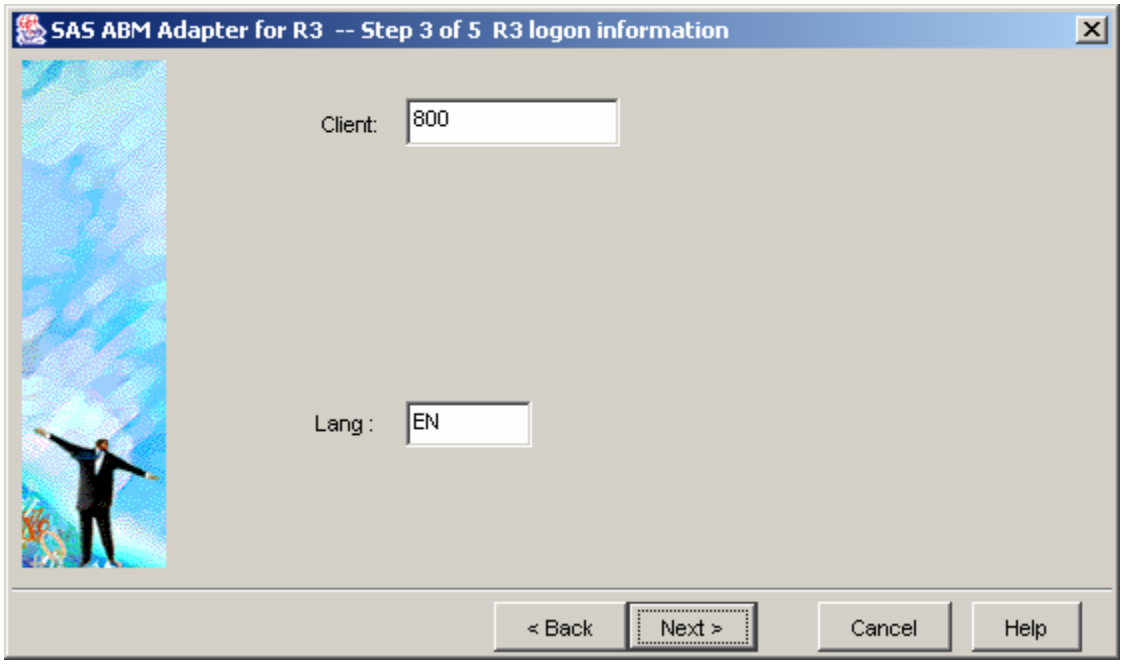
Step 2: Define the Locations for Library definitions in SAS.

a) **Source SAS Library** – Where the Metadata for SAP has been extracted.

b) **Destination SAS Library** – Library name – default name is `ABMCDW`. If you choose to define your own name, you will need to customize the adapter. Please see the installation instructions for this process.

c) **Destination Library Path** – This is the physical location on your hard drive where you want to store the extracted SAP data in SAS DATA SETS.

4. Define SAP logon system parameters for this extraction.

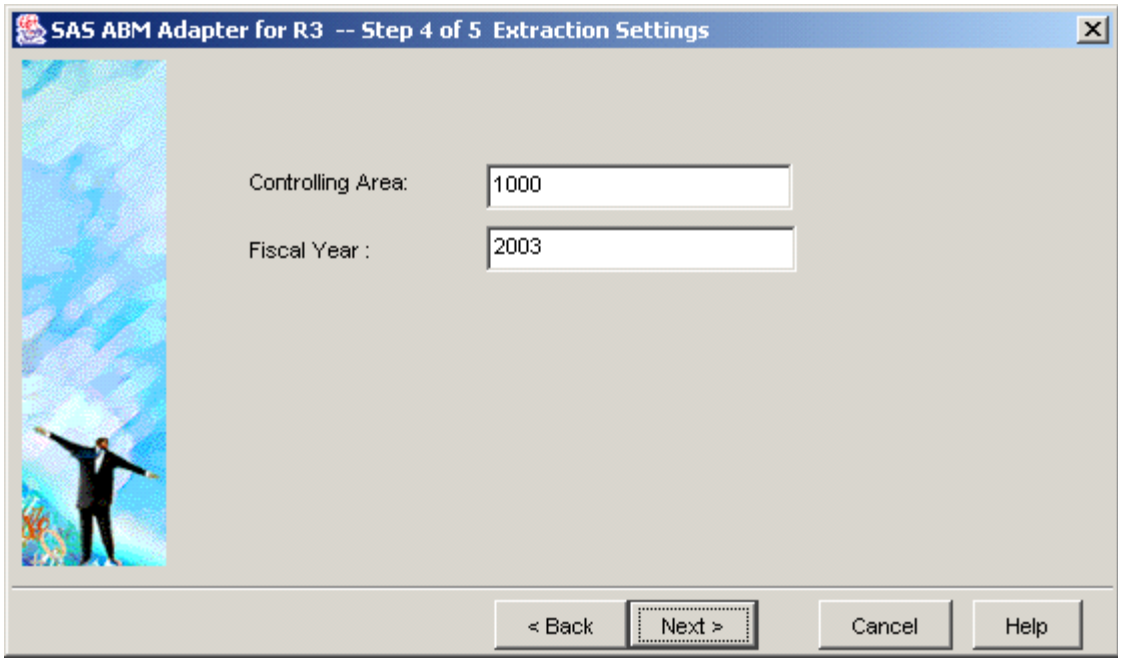


Step 3: This is where you define the connection parameters to the SAP System.

a) **Client** – This is your SAP Site Client Number – Please see your SAP Administrator to get the correct number for your SAP installation.

b) **Lang** – This is the Language to be used for the SAP System – EN=English

5. Define which data to extract from the SAP: Controlling Area (which set of books), Fiscal Year (time period for the extract). The time period is always a full year, to ensure that the complete extracted data will be available for transformation and loading.

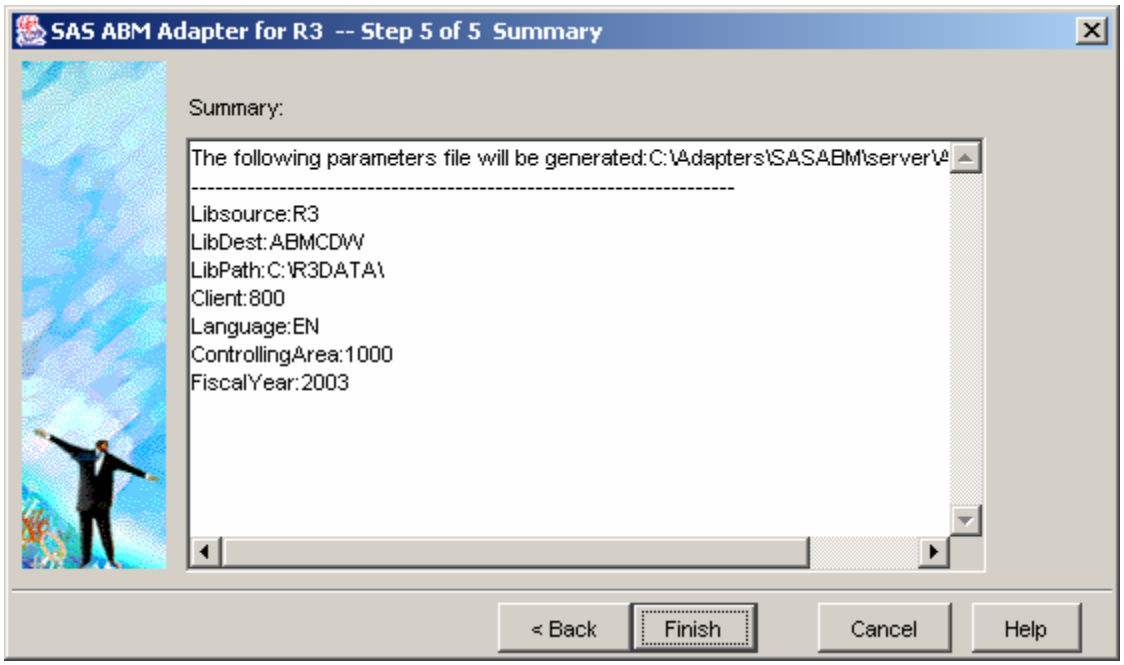


Step 4: This is where you define the specific data to extract from the SAP System.

a. **Controlling Area** – This is the specific controlling area as defined in the SAP Controlling Module to be extracted for use in SAS Activity-Based Management. A SAP R/3 system may be set up with multiple controlling areas; however, only one may be extracted by the adapter at a time.

b. **Fiscal Year** – The year for the data to be extracted.

Resulting Parameter File created from the Wizard – this will be used in SAS Extract Program.

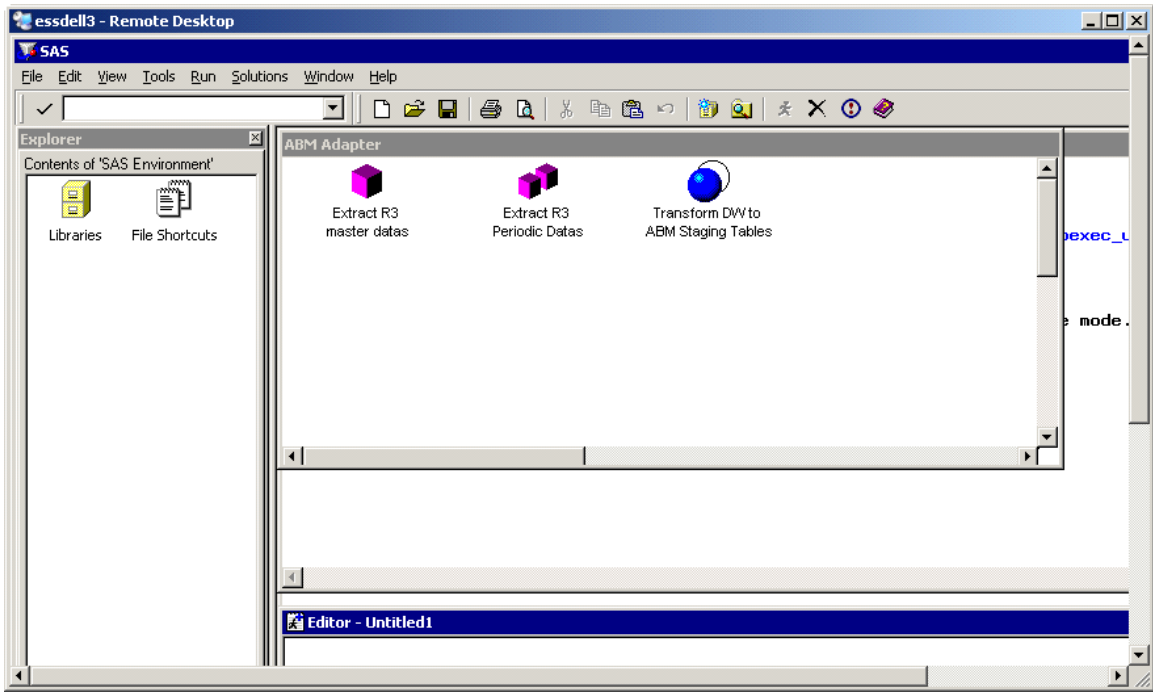


Step 5: This is where you can review the parameter file that you have created using the Wizard process.

Overview — Using the Adapter – SAS Extract Programs

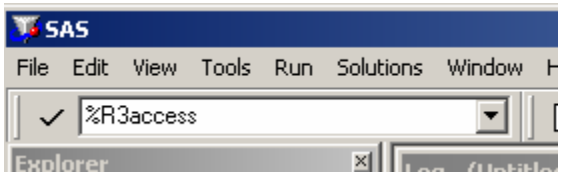
1. Log on to the adapter by selecting the **SAS ABM Adapter UI** icon.

2. This will open a SAS session with the ABM Adapter icons.
   a. Extract R3 Master Data
   b. Extract R3 Periodic Data
   c. Transform DW to ABM Staging Tables

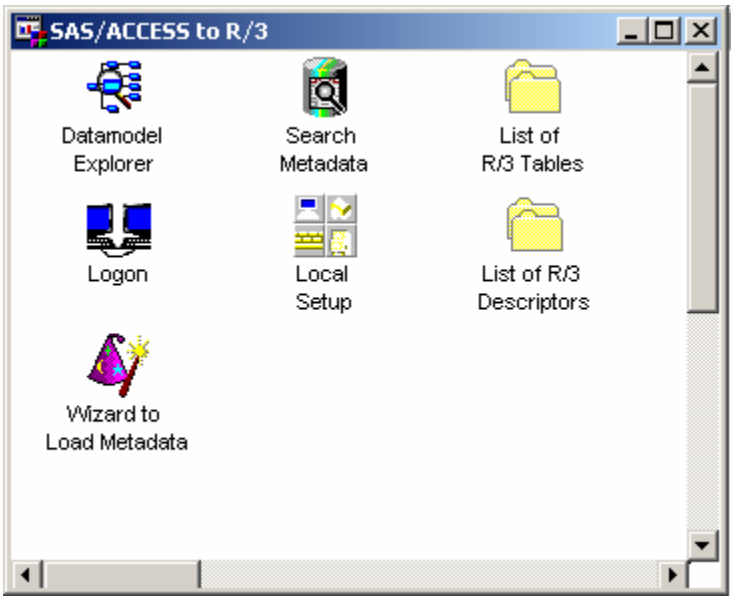


3. Before you can use the adapter extraction process to take data from SAP, you must bring up the SAS/ACCESS Interface to R/3 functionality in your open SAS session.

4. Start SAS/ACCESS Interface to R/3 – run the **%R3access** command in the command string window.



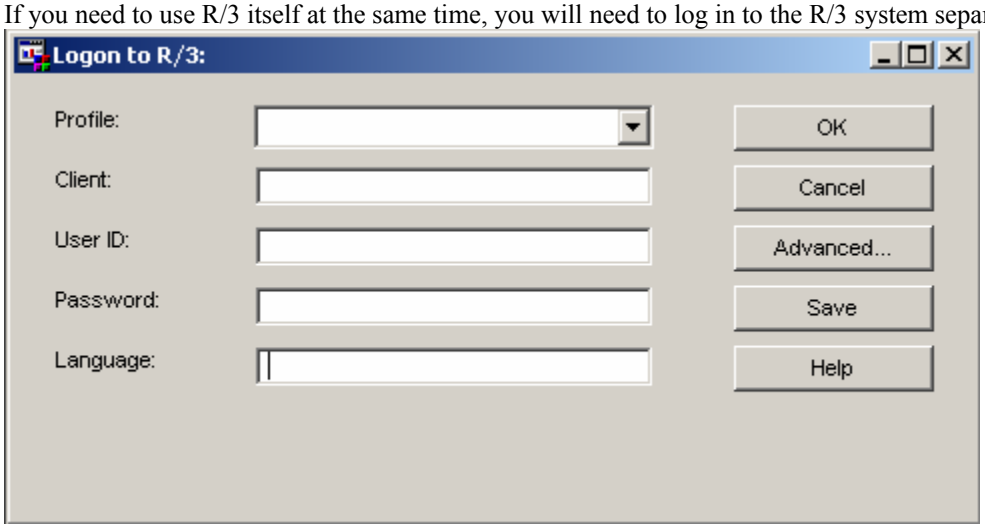
5. Select the **Logon** icon and the Logon Screen will appear.



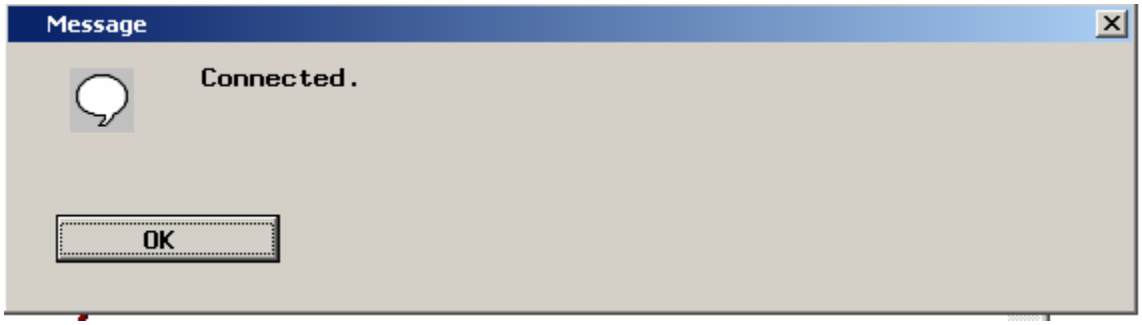
6. Log in to SAP R/3.

To Connect to SAP R/3 from Within SAS

If you're familiar with logging in to R/3, you will be somewhat familiar with the log in requirements. They are the same as if you were logging directly in to R/3.
If you need to use R/3 itself at the same time, you will need to log in to the R/3 system separately.



You should get the message below when SAS/ACCESS Interface to R/3 is correctly connected to SAP.



User Settings

Profile	Saved setup you use to log in to R/3.
Client	Specific number the System Administrator gives you.
User ID	The name you use to log in to R/3.
Password	The password you use to log in to R/3.
Language	Determines the language that displays. Use UPPERCASE letters only.

Advanced Settings

General	Connection Information
	Connection id: Specific Connection for R/3
	Remote: Local
	Description: The Description for this Logon
TCP/IP	Specific Host and Port Information
	Host: localhost
	Port: Defined by the SAP administrator – Default 6991(local), 6992(Batch)
RFC	The Parameters for the use of the remote Function Call for SAP interaction
	Host: The host – Name for the SAP Server
	Destination: Can Be Left Blank
	Gateway Host: From your SAP Administrator
	Gateway Service: From your SAP Administrator – example (Sapgw03)
	System Number: From your SAP Administrator – Example (03)
	Function: Can be left Blank

CPIC This is the System Security logon needed for Extraction

Client:	Client Number from your SAP Administrator
User:	CPIC
Password:	The password assigned by your SAP Administrator
Language:	Can be Left Blank
Destination:	Can be Left Blank

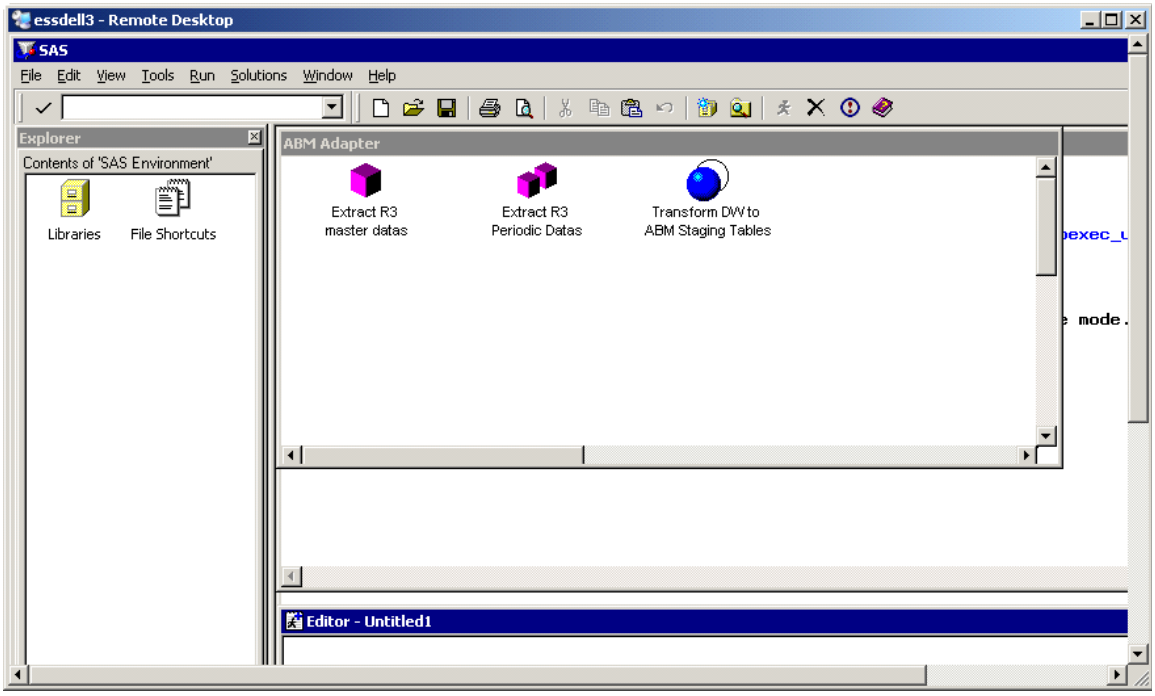
Define Library names in SAS – All of these have been set with default values during the product installation. You may customize them if you wish. Please see the adapter installation instructions for the process of customizing the paths to be used by the adapter and defining the libnames.
Note the following locations:

`R3lib` The defined location for the SAP Metadata you have already downloaded. This library was defined during the installation of the adapter.
Default Location: `C:\adapters\SASABM\server\r3lib`

`Abmcdw` The extract location to hold the raw SAP data files. This library is defined based upon your feedback and selections in the adapter Extraction Wizard.
Default Location: `C:\R3DATA`

`Stage3` The location for the Transformed Tables in SAS, ready to be loaded into SAS Activity-Based Management. This library is defined based upon your feedback and selection in the adapter Transform Wizard.
Default Location: `C:\Stage3`

7. Run the Extract Process.



- Double-click the icon noted above to Extract the R/3 Master Data – Structure.
- Double-click the icon note above to Extract the R/3 Periodic Data – Period.

These steps can be embedded in a batch file rather than having to use the icons directly. The entire process can be run in Batch mode. The batch files can be simply triggered from the Windows Explorer view. Either use the interactive mode in the adapter with the icons or Batch mode. Do **not** use both processes.

Alternative Procedure Using the Batch Mode Script

In addition to the using the interactive mode, you can use scripts in batch mode to automate the process. Using batch mode allows the jobs to be run in the background without user interaction.

To run the batch scripts:

1. Create a SAS/ACCESS Interface to R/3 Profile "ABM_SAP_PROFILE".
2. Run through the Extract Wizard to make selections.
3. Open Windows Explorer.
4. Browse to the install for the adapter – `C:\adapters\SASABM\Server\.`
5. Double-click on the specific batch file to run it – the order makes a difference.
    a. `B_ExtractMaster.bat` – to extract the Master SAP data.
    b. `B_ExtractPeriod.bat` – to extract the Periodic SAP data.
6. Run through the Transformation Wizard to make selections.
    a. `B_Transform.bat` – transforms data for SAS Activity-Based Management.
    b. `B_ExportToAccess.bat` – exports SAS tables to Microsoft Access.
7. Review all logs for errors – saved in `C:\Adapters\SASABM\Server.`
    a. `Abmadapt_initial.log` – for the Metadata extraction.
    b. `Abmadapt_Extract_Master_Data` – for the master data.
    c. `Abmadapt_Extract_Periodic_Data` – for the Periodic data.
    d. `Abmadapt_Transform` – for the transform to Staging tables.
    e. `Abmadapt_export_to_Access.`

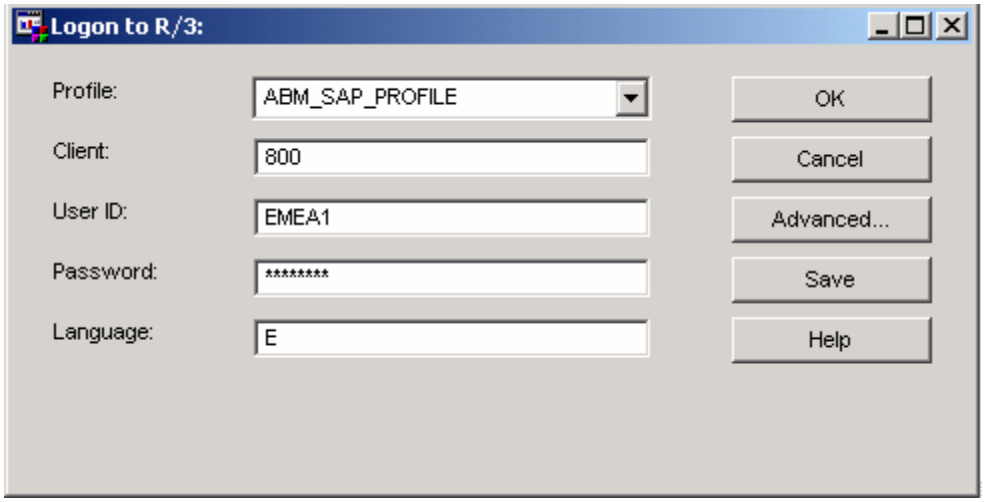
Batch Mode Requirements

In order to use the scripts, a few prerequisites must be met:

1. The default configuration assumes that `sas.exe` is located in
   `C:\Program Files\SAS Institute\SAS\V8`
   If you need to change this location, edit the file `setenv.bat`.

2. You need a valid logon profile in SAS/ACCESS Interface to R/3 named **ABM_SAP_PROFILE**. Alternatively, you can use a different profile name by editing `autoexec.sas` to include the following statement:

   `%let sap_profile=<`*`your profile name`*`>.`



Please see the SAS/ACCESS Interface to R/3 documentation and your SAP system administrator for the parameters required to define the **ABM_SAP_Profile** (define all advanced tabs for Profile – general, TCP/IP, RFC, CPI-C). You should define two Profiles: (1) an **ABM_SAP_Profile** for basic access using Remote Function Calls, and (2) an **ABM_SAP_Profile_Batch** for remote access using the Batch Remote Function Calls. A different port number will be used for each of the two profiles.

3. Your SAP Metadata should be located (by default) in `C:\Adapters\SASABM\server\r3lib`. If you need to change this location, edit `autoexec.sas`. For example, if your Metadata resides in `C:\metadata`, then adjust the line `libname r3lib…` in `autoexec.sas` to `libname r3lib 'C:\metadata';`

4. If you intend to use the script `B_Extract_Meta_Data.bat` to extract Metadata from an SAP system, please make sure that the directory specified in the **`LIBNAME`** statement already exists in the file system.

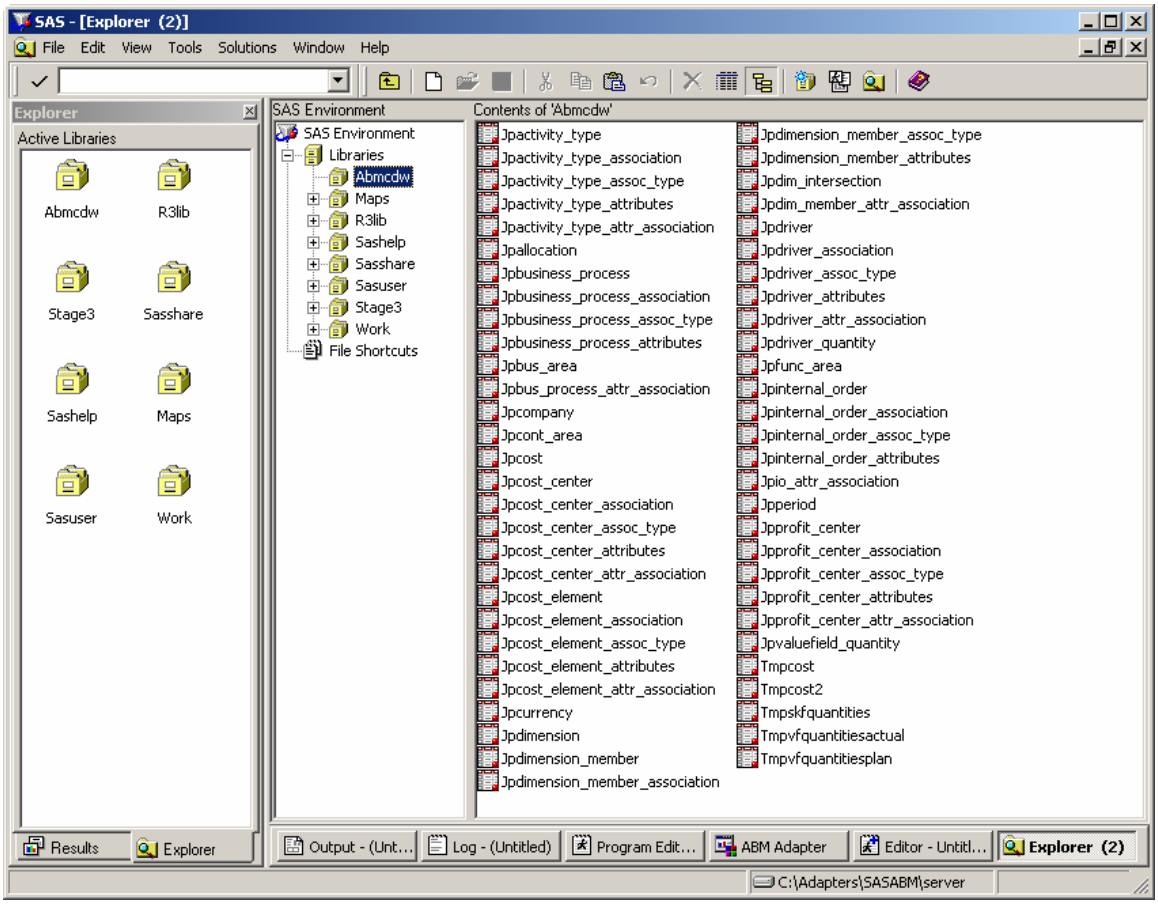
5. The scripts rely on existing configuration files created by the Extraction Wizard and the Transformation Wizard (default locations `C:\Adapters\SASABM\server\ABMExtract.txt` and `C:\Adapters\SASABM\server\ABMTransform.txt`), and that the specified directories exist in the file system (for example, the **Destination Library Path** default is `C:\R3DATA\`).

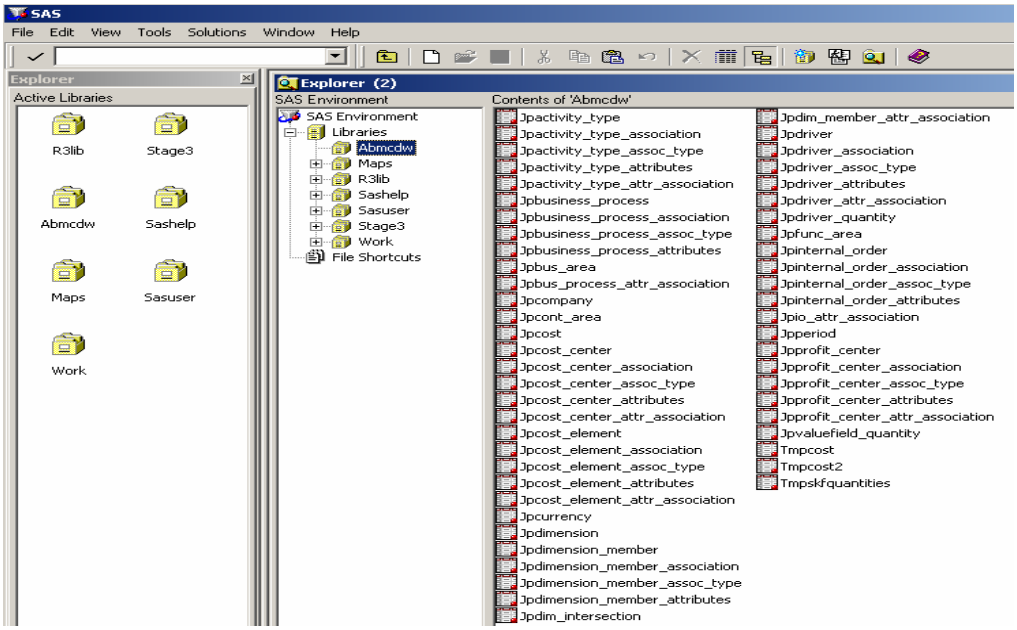
8. For your reference you can review the SAP Extract Files in SAS to be sure the Extracts (Master and Periodic) are complete.
Tables to be extracted:

Table name	Contents	Extract Type
`JpActivity_Type`	Dimension Defined	Master
`JpActivity_Type_Association`	Dimension Hierarchy (Parent/Child) Defined (ID#)	Master
`JpActivity_Type_Assoc_Type`	Dimension Members Defined (Names & ID#)	Master
`JpActivity_Type_Attributes`	Attributes Defined	Master
`JpActivity_Type_Attr_Association`	Attribute Numeric / Text Values	Master
`JpBusiness_Process`	Dimension Defined	Master
`JpBusiness_Process_Association`	Dimension Hierarchy	Master

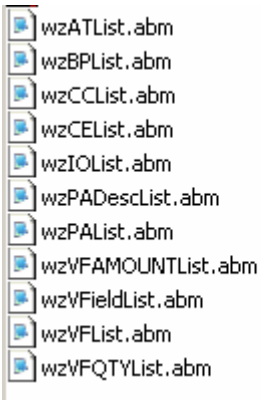
Table name	Contents	Extract Type
	(Parent/Child) Defined (ID#)	
JpBusiness_Process_Assoc_Type	Dimension Members Defined (Names & ID#)	Master
JpBusiness_Process_Attributes	Attributes Defined	Master
JpBus_area	Business Area in SAP Defined	Master
JpBus_Process_Attr_Association	Attribute Numeric / Text Values	Master
JpCompany	Company Name in SAP Defined	Master
JpCont_Area	Controlling Area Name in SAP Defined	Master
JpCost	Cost Elements Defined with Cost Values	Periodic
JpCost_Center	Dimension Defined – Multiple Dimensions	Master
JpCost_Center_Association	Dimension Hierarchy (Parent/Child) Defined (ID#)	Master
JpCost_Center_Assoc_Type	Dimension Members Defined (Names & ID#)	Master
JpCost_Center_Attributes	Attributes Defined	Master
JpCost_Center_attr_Association	Attribute Numeric / Text Values	Master
JpCost_Element	Dimension Defined	Master
JpCost_Element_Association	Dimension Hierarchy (Parent/Child) Defined (ID#)	Master
JpCost_Element_Assoc_Type	Dimension Members Defined (Names & ID#)	Master
JpCost_Element_Attributes	Attributes Defined	Master
JpCost_Element_attr_Association	Attribute Numeric / Text Values	Master
JpCurrency	Currency Defined	Master
JpDimension	Dimension Defined	Master
JpDimension_Member	Dimension Members Defined (Names & ID#)	Master
JpDimension_Member_Association	Dimension Hierarchy (Parent/Child) Defined (ID#)	Master
JpDimension_Member_Assoc_Type	Dimension Members Defined (Names & ID#)	Master
JpDimension_Member_Attributes	Attributes Defined	Master
JpDim_Intersection	Define ID for a Intersection – Single Dimension	Periodic
JpDim_Member_Attr_Association	Attribute Numeric / Text Values	Master
JpDriver	Drivers Defined Cd# and Name	Master
JpDriver_Association	Dimension Hierarchy (Parent/Child) Defined (ID#)	Master
JpDriver_Assoc_Type	Dimension Members Defined (Names & ID#)	Master
JpDriver_Attributes	Attributes Defined	Master
JpDriver_Attr_Association	Attribute Numeric / Text Values	Master
JpDriver_Quantity	Destination Defined and Statistical Key Figure – CO-	Periodic

Table name	Contents	Extract Type
	ABC Module	
JpFunc_area	Dimension Defined	Master
JpInternal_Order	Intersection Account Defined	Master
JpInternal_Order_Association	Internal Order Hierarchy Defined	Master
JpInternal_Order_Assoc_Type	Internal Order Name Defined	Master
JpInternal_Order_attributes	Attributes Defined	Master
JpIo_Attr_Association	Attribute Numeric / Text Values	Master
JpPeriod	Period Defined	Periodic
JpProfit_Center	Dimension Defined	Master
JpProfit_Center_Association	Dimension Hierarchy Defined	Master
JpProfit_Center_Assoc_Type	Dimension members Defined (Names & ID#)	Master
JpProfit_Center_Attributes	Attributes Defined	Master
JpProfit_Center_Attr_Association	Attribute Numeric / Text Values	Master
JpValueField_Quantity	Driver Quantity – For Value Fields from the CO-PA Module	Periodic



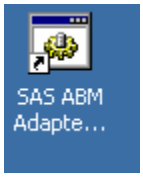


Once the ABM Extract Process has completed, some final processing is done by the Adapter to create the necessary parameter files to be used in the ABM Transformation Wizard. These parameter files are stored in the same directory where the ABMCDW LIBNAME is stored, and these file names end with `.abm`. Upon a successful extraction completion the files listed below should be in this directory. Each file represents the options for one of the drop down lists in the ABM Transformation Wizard.



Overview — Using the Adapter – Transformation Wizard

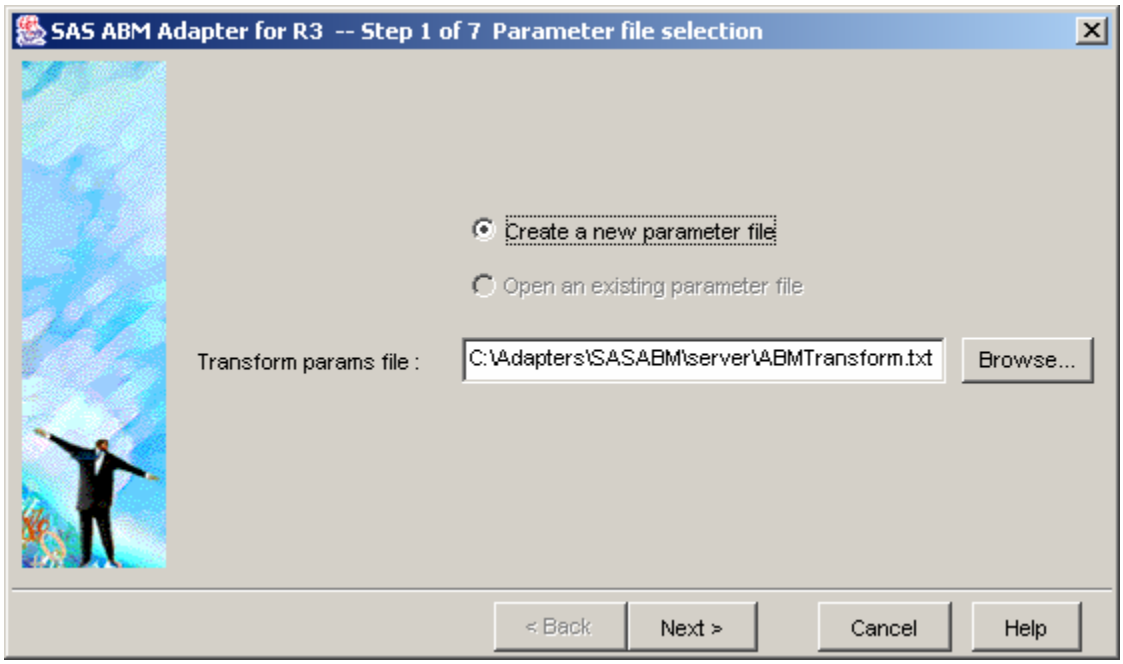
1. Select the **SAS ABM Adapter Transform Wizard** icon on your Desktop.



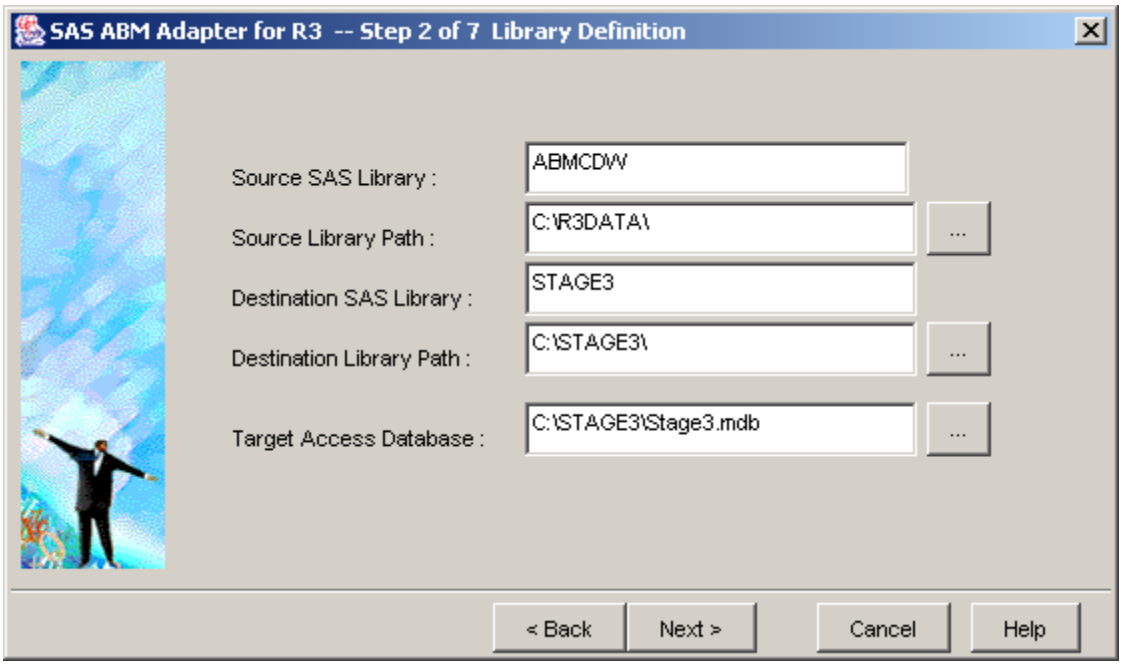
2. Step 1: Walk through the steps in the Wizard. Step 1: Define the location for the transformation parameter file.

    a. The radio button **Create a new parameter file** is the only option for the original adapter release. The parameter file will be created holding the information necessary to define how the data that has been extracted from SAP will be transformed into loadable data to be fed into SAS Activity-Based Management.

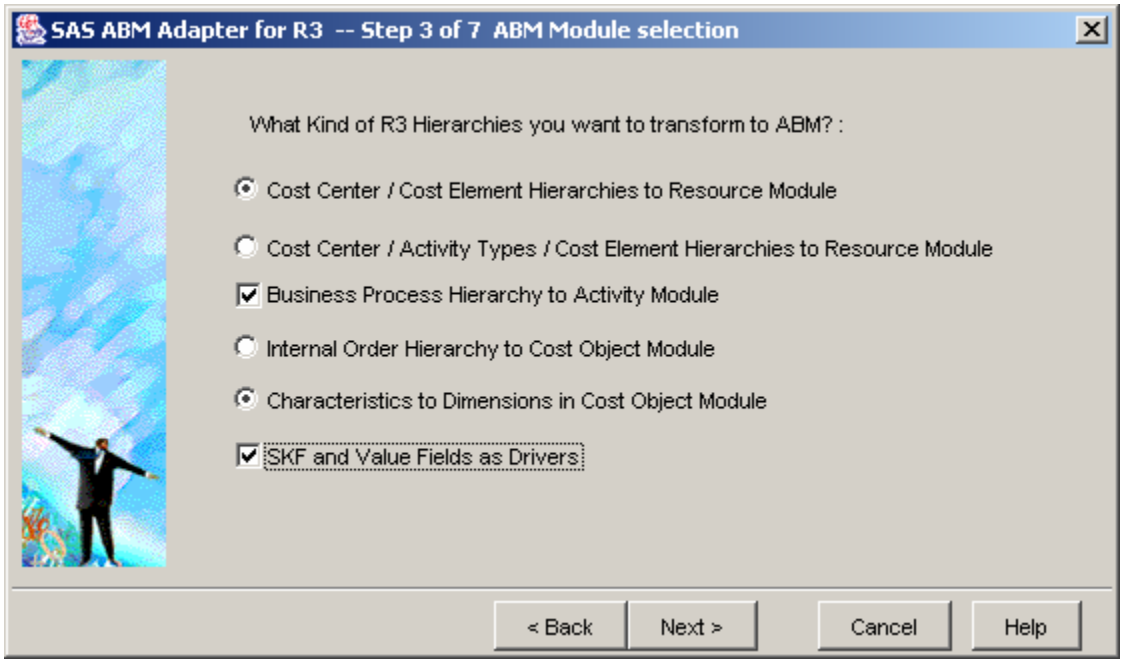
    b. Browse to where you want your parameter file to be stored. The default location is noted in the screen shot above. If you do not choose to save the parameter file in the default location, you will need to perform additional customization of the adapter. For the detailed process of customization please see the adapter installation instructions. The file must be called **`ABMTransform.txt`.**



3. Step 2: Define SAS directories to hold SAP Extract: Source Files
    a. Source SAS Library: the library name where Extracted Data from SAP resides in SAS.
    b. Source Library Path: physical location of the Extracted Data on your hard drive.
    c. Destination SAS Library: the library name where the tables will be saved after they are transformed into a loadable format prepared for SAS Activity-Based Management.
    d. Destination Library Path: physical location of final tables ready to load into SAS Activity-Based Management.
    e. Target Access Database: Optional – Location for the Microsoft Access Database to hold the tables before they are loaded into SAS Activity-Based Management. Data can be directly loaded from SAS data tables into SAS Activity-Based Management, or you can use Microsoft Access as an intermediary for storing the tables.



4. Step 3: Define hierarchies to be built in SAS Activity-Based Management based upon the extracted SAP Data.
    a. Resource Module Choice 1 or 2 – These choices are based upon your understanding of your existing SAP System and the Model Design you are planning to have in the SAS Activity-Based Management Model. To load the Actual Expenses Data from SAP you must include the Cost Elements Dimensional Values from SAP.
        i. Choice One – Cost Center / Cost Elements builds a SAS Activity-Based Management model with 2 Dimensions in the Resource Module.
        ii. Choice Two – Cost Center / Activity Type / Cost Elements builds a SAS Activity-Based Management model with 3 Dimension in the Resource Module.
    b. Activity Module – If available, business processes are loaded into SAP in the Controlling Module in the Activity-Based Costing section (CO-ABC). If CO-ABC has not been implemented in SAP then there will be no information to extract from SAP. In this case you would not check the box, and no Business Processes (activities) would be extracted from SAP to load into SAS Activity-Based Management.
    c. Cost Object Module – There are two different basic options in the transformation of data from the SAP Extract to define how it will be used in the SAS Activity-Based Management model:
        i. One builds the cost object structure based upon the internal orders in the SAP source system (CO-OPA)
        ii. One builds the cost object structure based upon the characteristics in the SAP source system. (CO-PA)
    d. Select Drivers to be extracted – Statistical Key Figures (SKF) and Value Drivers – Without checking this box no driver quantities will be extracted from SAP to populate SAS Activity-Based Management.



5. Step 4: Structure specific selections – The SAP Extract will download all available structure from the source SAP System based upon the Controlling area and Fiscal year selected. In this step in the Transformation Wizard you further refine the specific portions of the SAP extraction that will be used to populate a SAS Activity-Based Management Model.

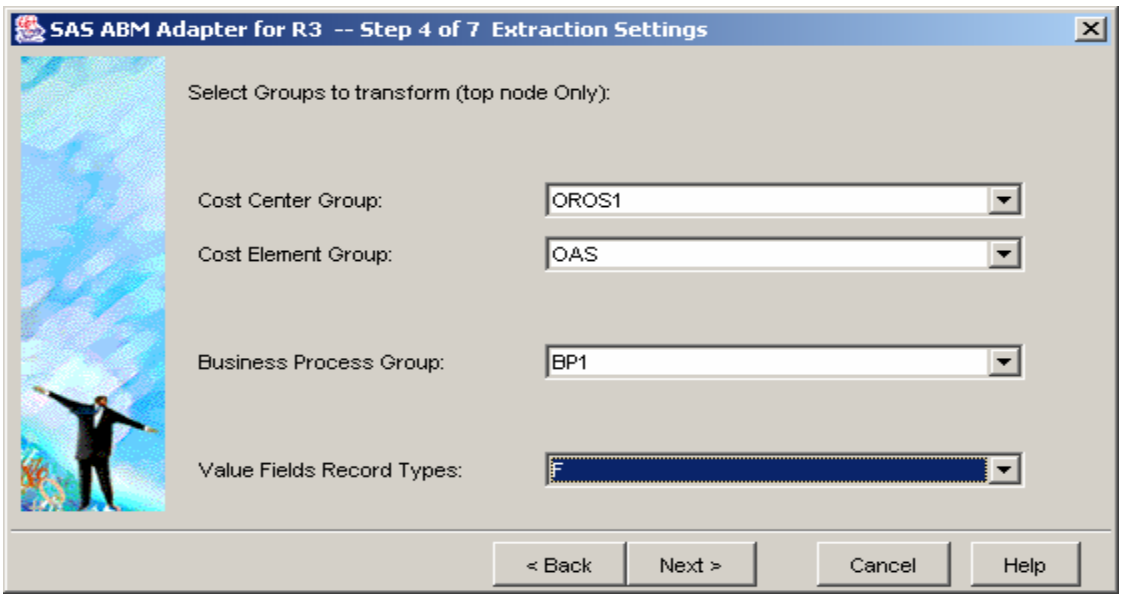
    a. Choice affects the dialog box process. If you select characteristics CO_PA as the source for the SAS Activity-Based Management cost object module, then you need to choose these characteristics.

    b. Cost Center Group – to be used from SAP – Resource Module.

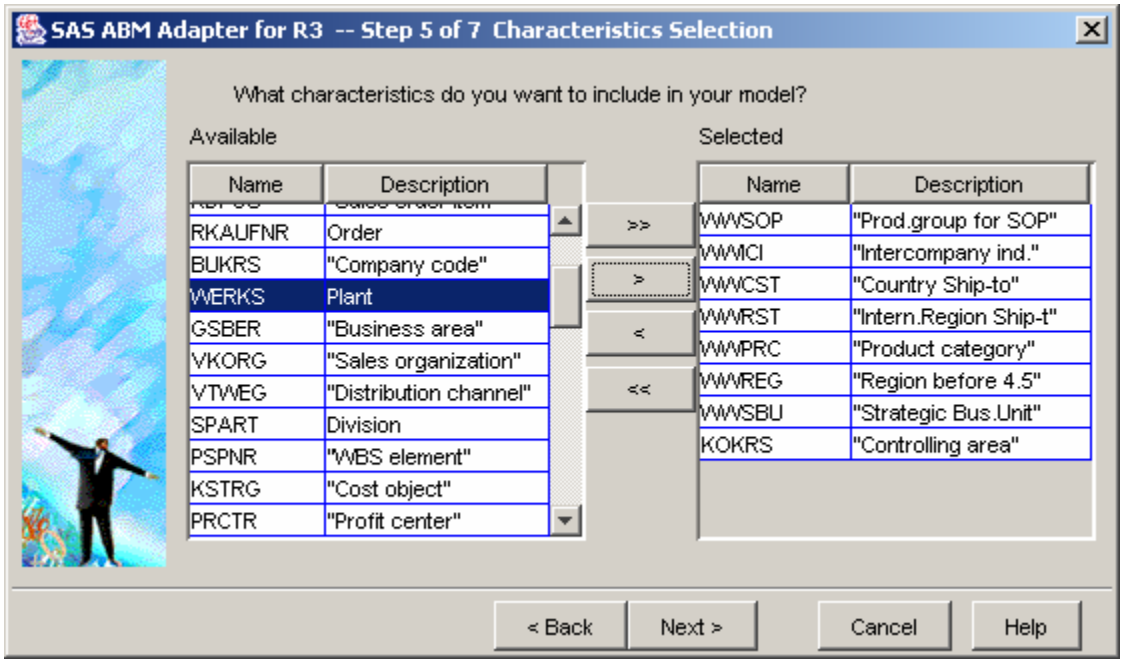
    c. Cost Element group – to be used from SAP – Resource Module.

    d. Business process Group – Activity Module.

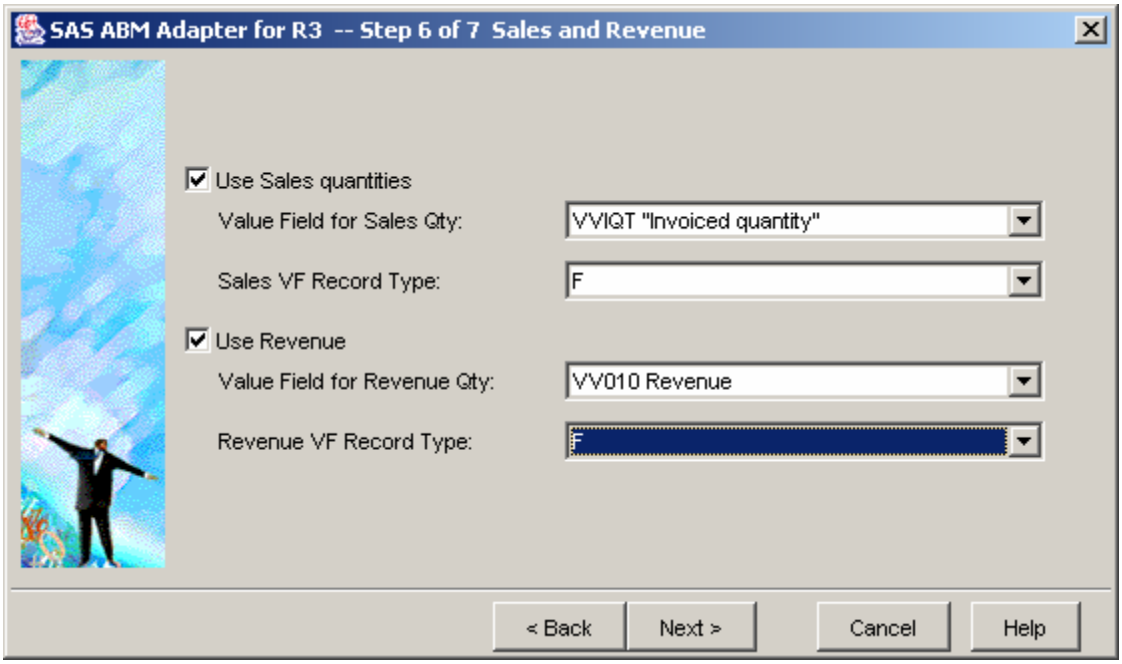
    e. Value Fields Record Types – this defines the characteristics to use in building the SAS Activity-Based Management Cost Object Module. The Choices are 1, A. or F; the correct choice is F.



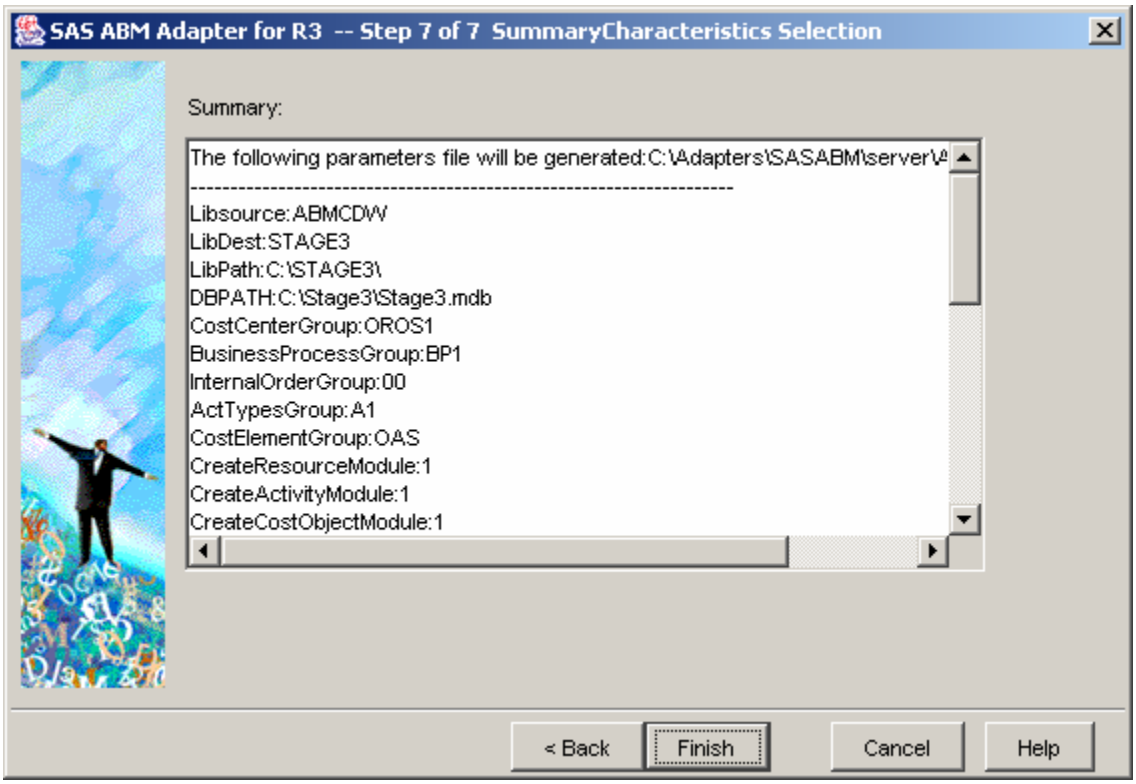
6. Step 5: Define the cost object module – and select drivers to be extracted into the SAS Activity-Based Management Model. The list on the left is all of the available dimensions from the Controlling Profitability Analysis Module (CO-PA) from the Extract from SAP. As you select items from the list on the left and add them to the list on the right, you are defining the order for the dimensions to be displayed in SAS Activity-Based Management. This order will become the visualization for the Cost object module hierarchy in SAS Activity-Based Management.



7. Step 6: Extract the sales and revenue information.
    a. Check box – Use Sales Quantities to define sold quantity in the SAS Activity-Based Management Model
    b. By selecting a value field you are defining which values from the SAP Extract will be used in the Sold Quantity Calculations in the SAS Activity-Based Management Model
    c. The sales record types are 1, A, or F – for loading into SAS Activity-Based Management you should choose F to get the correct values loaded
    d. Check box – Use Revenue to define the revenue in the SAS Activity-Based Management Model
    e. By selecting a value field you are defining which values from the SAP Extract will be used in the revenue calculations in the SAS Activity-Based Management Model
    f. The sales record types are 1, A, or F – For loading into SAS Activity-Based Management you should choose F to get the correct values loaded



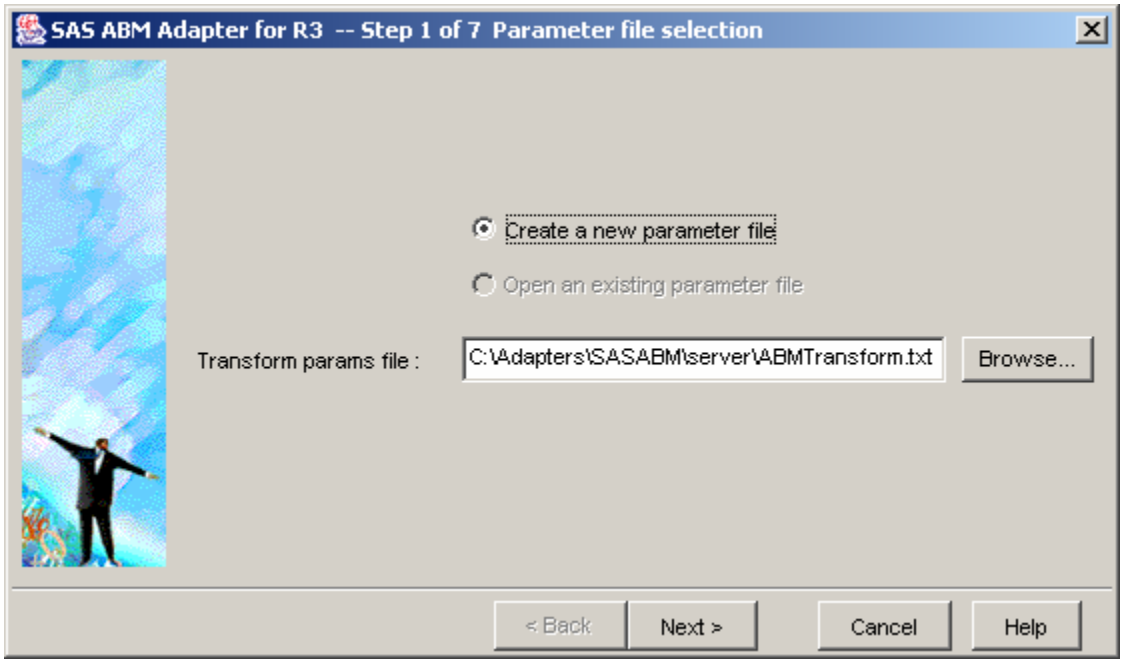
8. Step 7: Review the parameter file: This parameter file will be used in the options controlling the SAS code that will be run to create the transformation from the SAP extract to the loadable SAS Activity-Based Management files.



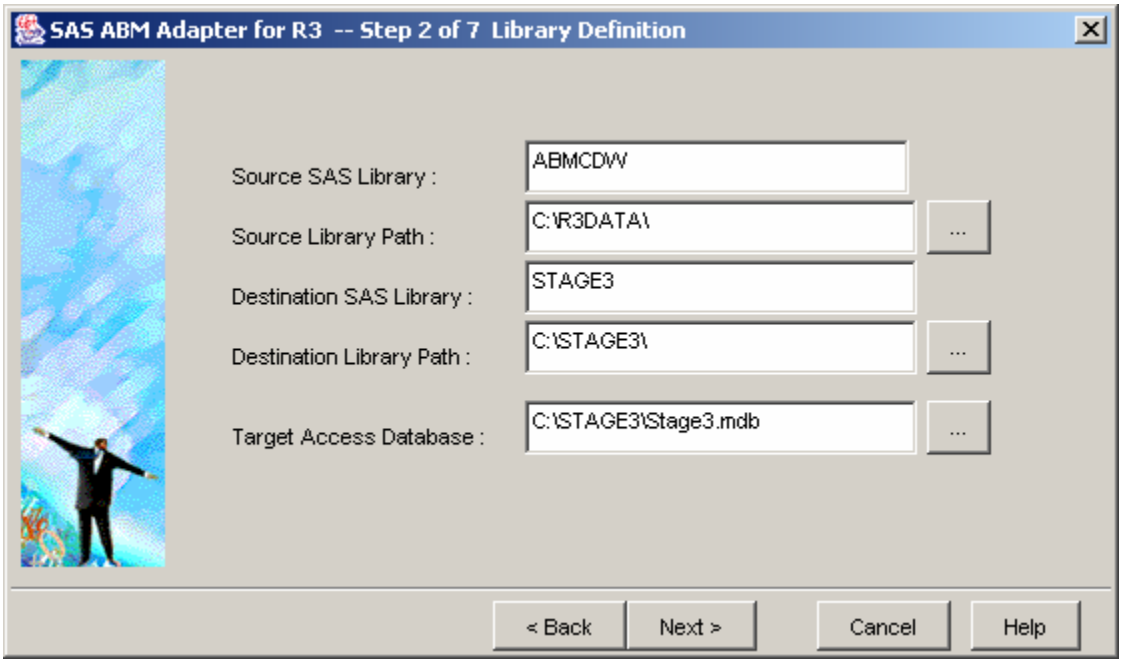
Transformation Wizard — Cost Object Based upon Internal Orders in SAP

This is the second process for running through the Transformational Wizard. You must choose one process or the other; do **not** perform the Transformation Wizard process twice.

1. Step1: Define the location for the transformation parameter file
    a. The radio button **Create a new parameter file** is the only option for the original adapter release. The parameter file will be created holding the information necessary to define how the data that has been extracted from SAP will be transformed into loadable data to be fed into SAS Activity-Based Management.
    b. Browse to the location where you want your parameter file to be stored. The default location is noted in the screenshot below. If you do not choose to save the parameter file in the default location, you will need to perform additional customization of the adapter. For the details of the customization process, please see the adapter installation instructions. The file must be called **`ABMTransform.txt`.**



2. Step 2: Define SAS directories that hold SAP Extract : Source Files
    a. Source SAS Library: The library name where extracted data from SAP Resides in SAS.
    b. Source Library Path: physical location of the extracted data on your hard drive.
    c. Destination SAS Library: The library name where the tables will be saved after they are transformed into a loadable formant prepared for SAS Activity-Based Management.
    d. Destination Library Path: The physical location of final tables ready to load into SAS Activity-Based Management.
    e. Target Access Database (optional): The location for the Microsoft Access Database to hold the tables before they are loaded into SAS Activity-Based Management. Data can be directly loaded from SAS Data tables into SAS Activity-Based Management, or you can use Microsoft Access as an intermediary for storing the tables.



3. Step 3: Define Hierarchies to Build

    a. Resource Module Choice 1 or 2 – These choices are based upon your understanding of your existing SAP System and the Model Design you are planning to have in the SAS Activity-Based Management Model. To load the Actual Expenses Data from SAP you must include the Cost Elements Dimensional Values from SAP.

        1) Choice One – Cost Center / Cost Elements builds an SAS Activity-Based Management model with 2 Dimensions in the Resource Module.

        2) Choice Two – Cost Center / Activity Type / Cost Elements builds an SAS Activity-Based Management model with three dimensions in the Resource Module.

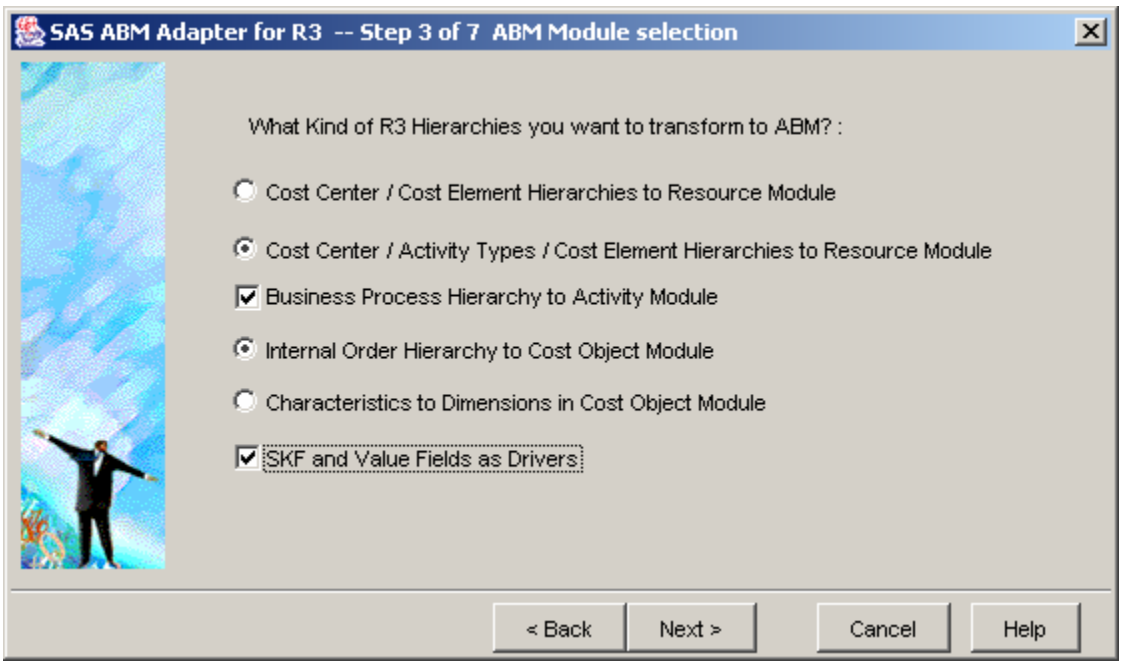
    b. Activity Module – If available, Business processes are loaded into SAP in the Controlling Module in the Activity-Based Costing section (CO-ABC). If CO-ABC has not been implemented in SAP then there will be no information to extract from SAP; therefore you would not check the box, and no Business Processes (activities) would be extracted from SAP to load into SAS Activity-Based Management.

    c. Cost Object Module – There are two different basic options in the transformation of data from the SAP Extract to define how it will be used in the SAS Activity-Based Management model:

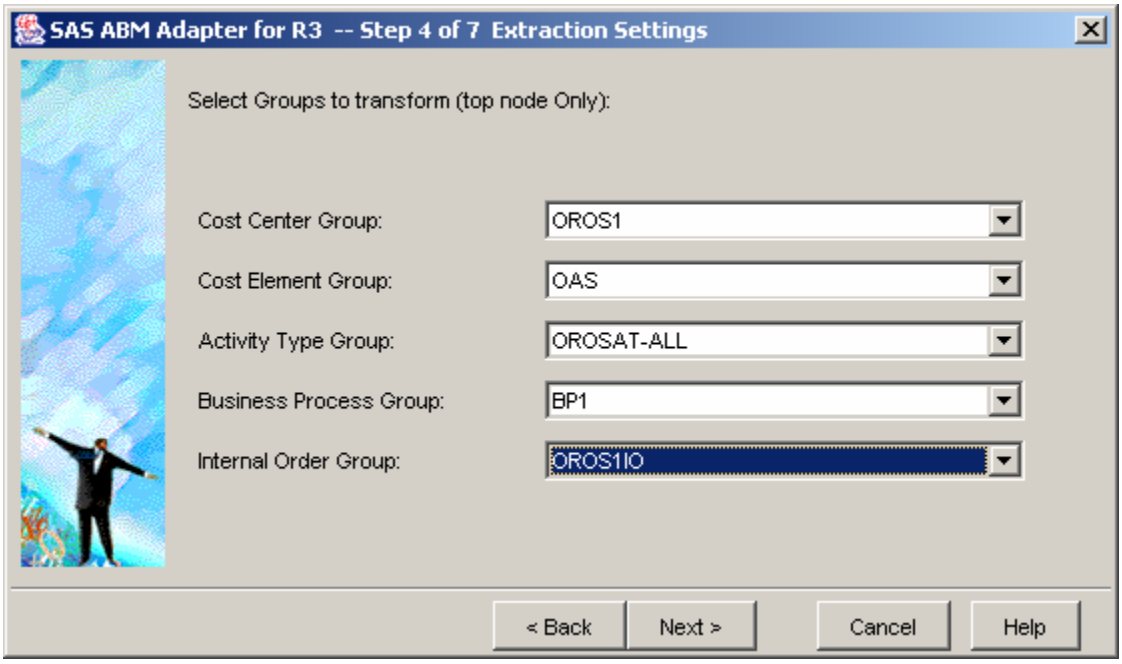
        i. One builds the cost object structure based upon the internal orders in the SAP source system (CO-OPA)

        ii. One builds the cost object structure based upon the characteristics in the SAP source system. (CO-PA)

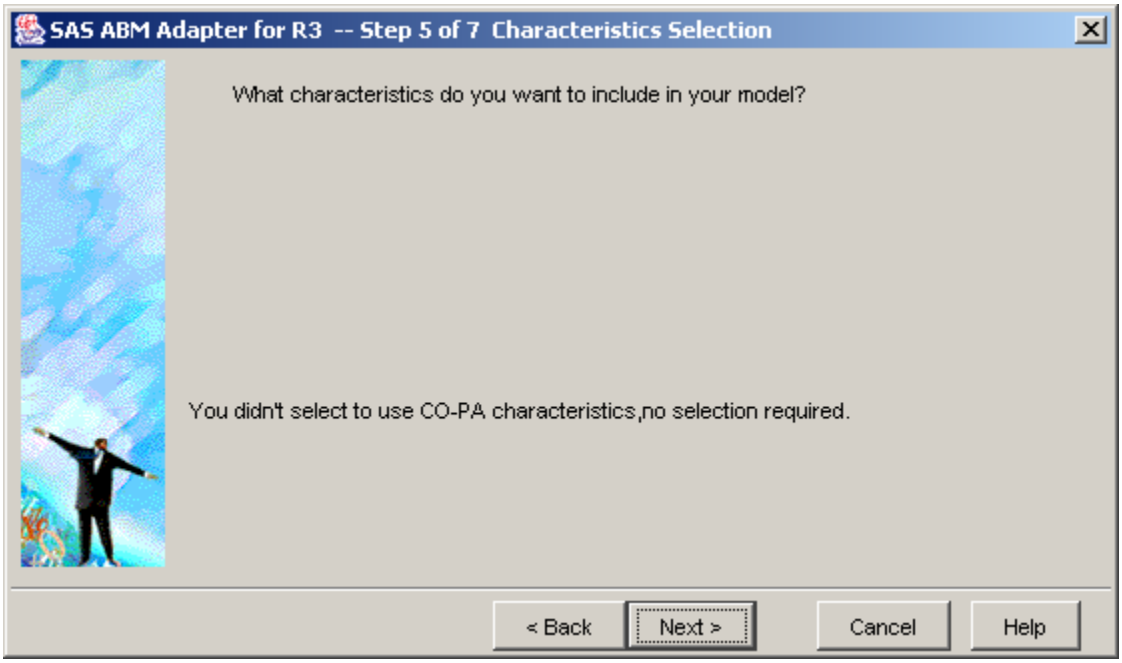
    Select drivers to be extracted – Statistical Key Figures (SKF) and Value Drivers – Without Checking this box no driver quantities will be extracted from SAP to populate SAS Activity-Based Management.



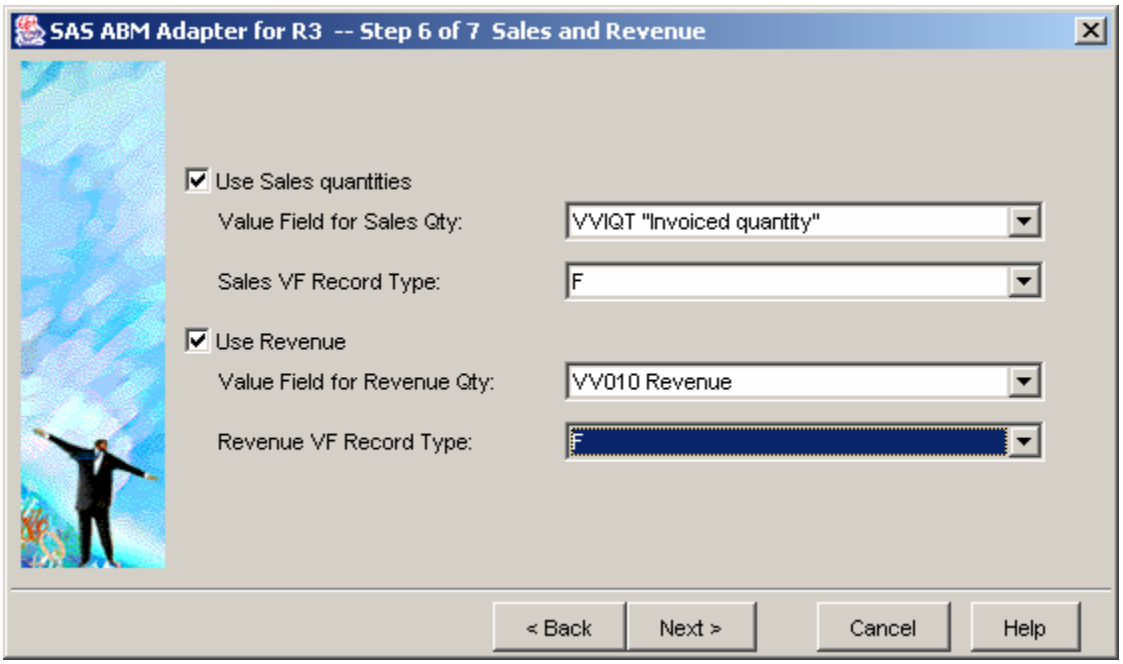
4. Step 4: Structure specific selections – The SAP Extract will download all available structure from the source SAP system based upon the controlling area and fiscal year selected. In this step in the Transformation Wizard you further refine the specific portions of the SAP extraction that will be used to populate a SAS Activity-Based Management Model.
    a. Choice affects the dialog box process. If you select characteristics CO_PA as the source for the SAS Activity-Based Management cost object module, then you need to choose these characteristics.
    b. Cost center group – to be used from SAP – Resource Module.
    c. Cost element group – to be used from SAP – Resource Module.
    d. Business process group – Activity Module.
    e. Value fields record types – this defines the characteristics to use in building the SAS Activity-Based Management Cost Object Module. The Choices are 1, A, or F; the correct choice is F.
5. Step 5: Based upon the other choices from step 3 – Internal Orders – the resulting dialog box is different in the step 4 of 7 Extraction Settings for an internal order option.
    a. Cost Center Group – Select a specific cost center group from the SAP Extract.
    b. Cost Element group – Select a specific cost element group from the SAP Extract.
    c. Business process group – Select a specific business group from the SAP Extract.
    d. Internal Order Group – Select a specific internal order group from the SAP Extract.



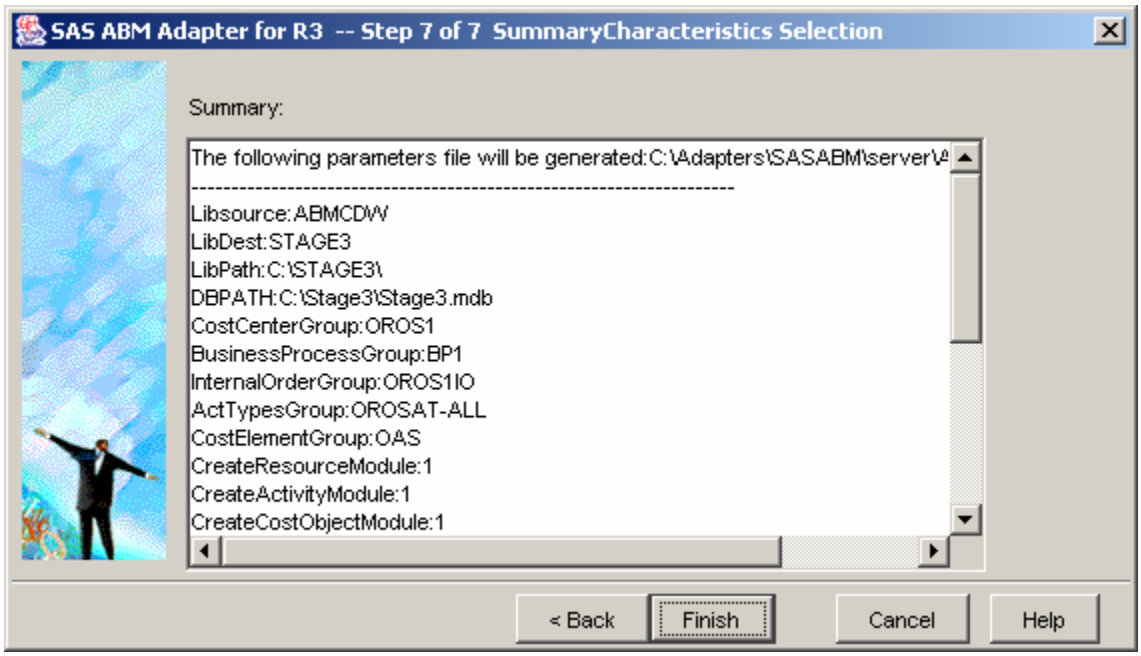
5. Step 6: Define the cost object module – and select drivers to be extracted into the SAS Activity-Based Management Model. When building a model based upon internal orders, there is no dimensional data from the Controlling Module Profitability Analysis (CO-PA) in SAP, so there is no data to select from to define the cost object hierarchy in the SAS Activity-Based Management Model.



6. Step 7: Extract the sales and revenue information
    a. Check box – Use Sales quantities to define sold quantity in the SAS Activity-Based Management Model.
    b. By selecting a Value field you are defining which values from the SAP Extract will be used in the sold quantity calculations in the SAS Activity-Based Management Model.
    c. The sales record types are 1, A, or F – For loading into SAS Activity-Based Management you should choose F to get the correct values loaded.
    d. Check box – Use Revenue to define the revenue in the SAS Activity-Based Management Model.
    e. By selecting a Value field you are defining which values from the SAP Extract will be used in the revenue calculations in the SAS Activity-Based Management Model.
    f. The sales record types are 1, A, or F – For loading into SAS Activity-Based Management you should choose F to get the correct values loaded.

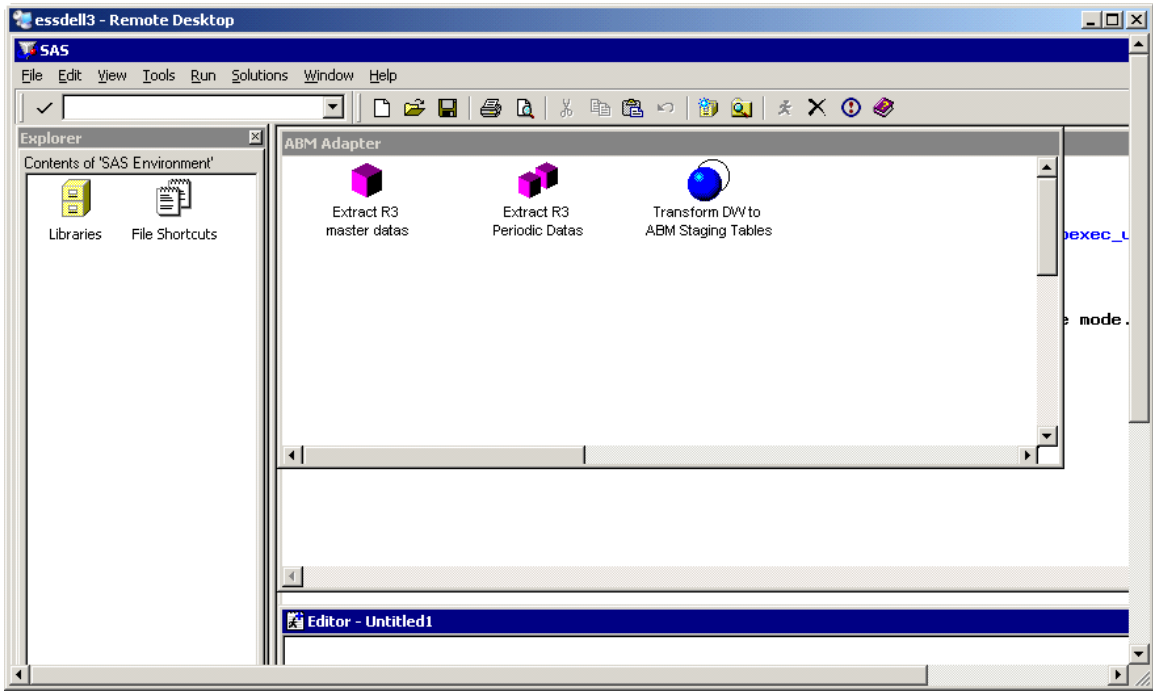


7. Step 8: Review the parameter file. This parameter file will be used in the options controlling the SAS code that will be run to create the transformation from the SAP extract to the loadable SAS Activity-Based Management files.

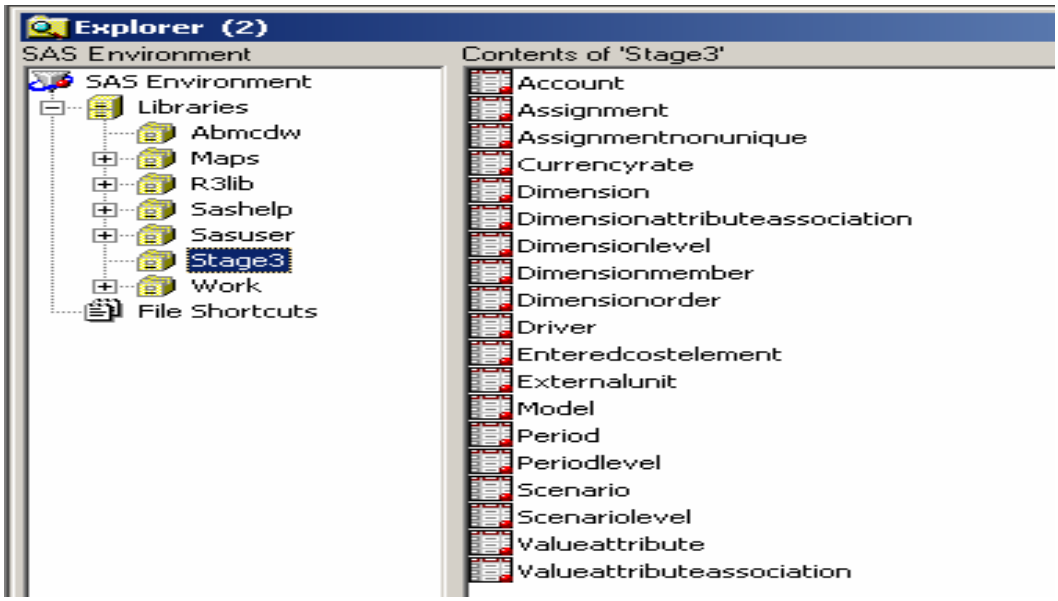


Overview — Using the Adapter – SAS Transform Programs

- Run Transform DW to ABM Staging Tables

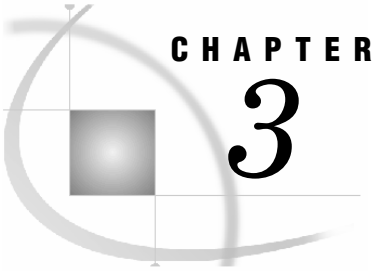


- **Review the resulting tables in SAS – ready to load into SAS Activity-Based Management**



Import the Model into SAS Activity-Based Management

To import SAS data sets into SAS Activity-Based Management, you must have a SAS/SHARE server running on your system referring to the location where you have stored your staging tables. By default, the staging tables are located in `C:\Stage3`. Please refer to the document entitled *Using SAS/SHARE to Import and Export SAS ABM Datasets* (which may be found on the Web at http://www.abctech.com/clientservices/esupport/Docs/SimpleShareOleDb.doc) for information about setting up a SAS/SHARE server and importing the staging tables into SAS Activity-Based Management.



CHAPTER 3

Downloading from the SAP R/3 System

This table describes what is Extracted and Transformed with the adapter. Extracted "Yes" means data is extracted from R/3 to SAS Activity-Based Management CDW as SAS table. Transformed "Yes" means data is transformed from the SAS Activity-Based Management CDW and it is usable in SAS Activity-Based Management.

SAP R/3 source	SAS Activity-Based Management	Extracted	Transformed
Cost Center Hierarchy	Dimensions in Resource module	Yes	Yes
Business Process Hierarchy	Dimensions in Activity module	Yes	Yes
Internal Order Hierarchy	Dimensions in cost object module	Yes	Yes
CO PA Characteristics Hierarchies	Dimensions in cost object module	Yes	Yes
Cost Element Groups (Primary and secondary)	Dimensions in resource module	Yes	Yes
Activity Types Groups	Dimensions in resource module	Yes	Yes
Statistical Key figures	Drivers	Yes	Yes
Value Fields	Drivers	Yes	Yes
Statistical Key figures quantities	Drivers quantities	Yes	Yes
Value Fields quantities	Drivers quantities	Yes	Yes
Cost Element costs for Cost Centers	Entered Cost Element in Resource module	Yes	Yes
Cost Element Costs for Business Process	Entered Cost Element in Activity module	Yes	Yes
Cost Element Costs For Internal Orders	Entered Cost Element in Cost Object module	Yes	Yes
Sales quantities Value Field	Sold quantity column of an account	Yes	Yes
Revenue amount Value Field	Revenue column of an account	Yes	Yes
Company codes	Attributes attached to account	Yes	No
Profit Centers	Attributes attached to account	Yes	No
Business Areas	Attributes attached to account	Yes	No
Functional Areas	Attributes attached to account	Yes	No
Currencies	Attributes attached to account	Yes	No

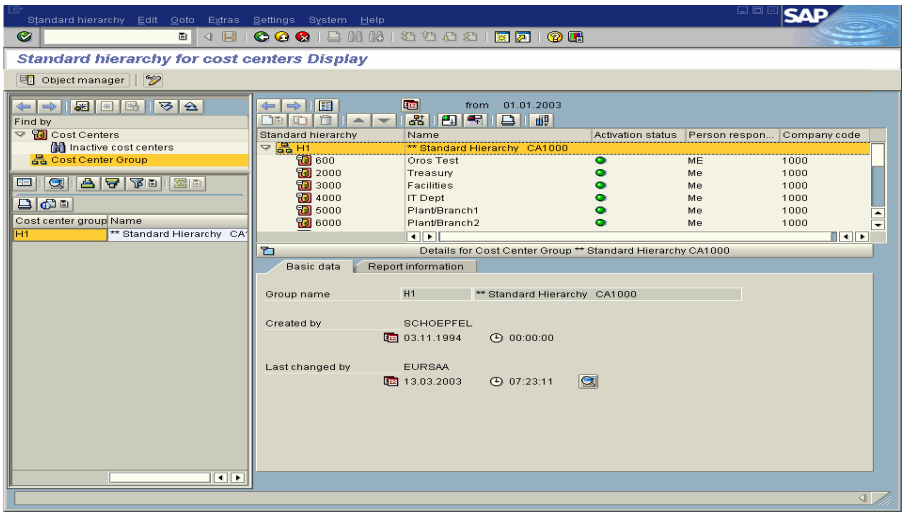
SAP R/3 source	SAS Activity-Based Management	Extracted	Transformed
Allocation categories	Attributes attached to account	No	No
Price Indicator	Attributes attached to account	No	No
Actual Price Indicator	Attributes attached to account	No	No
Cost Center Categories	Attributes attached to account	No	No

SAP R/3 System – CO Source Data

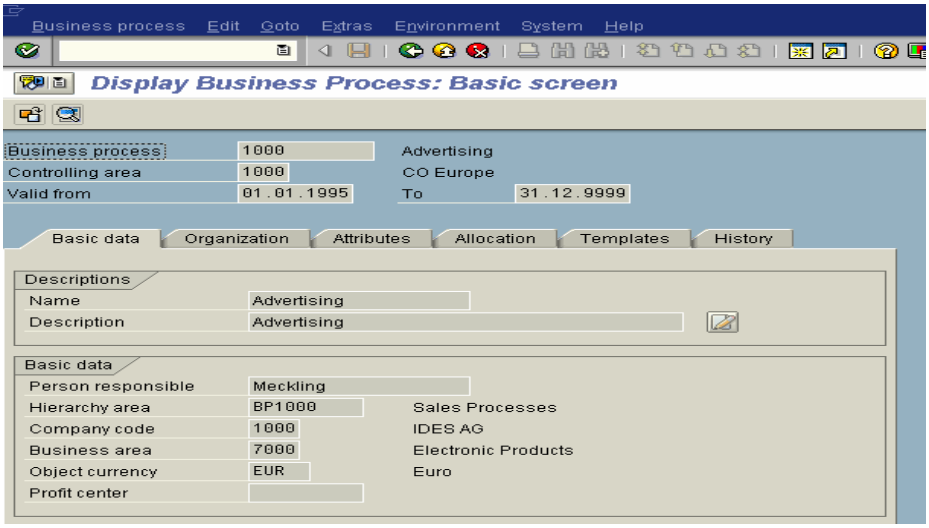
This table describes which R/3 tables are involved in the extraction process. "Via BAPI", means a BAPI function call is used to extract data, and it is difficult to know exactly which tables are involved (one BAPI call can involve dozens of tables.)

SAP R/3 source	SAS Activity-Based Management	Extracted	R/3 Table
Cost Center Hierarchy	Dimensions in Resource module	Yes	CSKS
Business Process Hierarchy	Dimensions in Activity module	Yes	CBPR
Internal Order Hierarchy	Dimensions in cost object module	Yes	AUFK
CO PA Characteristics Hierarchies	Dimensions in cost object module	Yes	Via BAPI
Cost Element Groups (Primary and secondary)	Dimensions in resource module	Yes	CSKB
Activity Types Groups	Dimensions in resource module	Yes	CSLA
Statistical Key figures	Drivers	Yes	TKA03
Value Fields	Drivers	Yes	Via BAPI
Statistical Key figures quantities	Drivers quantities	Yes	COSR
Value Fields quantities	Drivers quantities	Yes	Via BAPI
Cost Element costs for Cost Centers	Entered Cost Element in Resource module	Yes	COSP COSS
Cost Element Costs for Business Process	Entered Cost Element in Activity module	Yes	COSP COSS
Cost Element Costs For Internal Orders	Entered Cost Element in Cost Object module	Yes	COSP COSS
Sales quantities Value Field	Sold quantity column of an account	Yes	Via BAPI
Revenue amount Value Field	Revenue column of an account	Yes	Via BAPI
Company codes	Attributes attached to account	Yes	T001
Profit Centers	Attributes attached to account	Yes	CEPC
Business Areas	Attributes attached to account	Yes	TGSBT
Functional Areas	Attributes attached to account	Yes	TFKBT
Currencies	Attributes attached to account	Yes	TCURT
Allocation categories	Attributes attached to account	No	N/A
Price Indicator	Attributes attached to account	No	N/A
Actual Price Indicator	Attributes attached to account	No	N/A
Cost Center Categories	Attributes attached to account	No	N/A

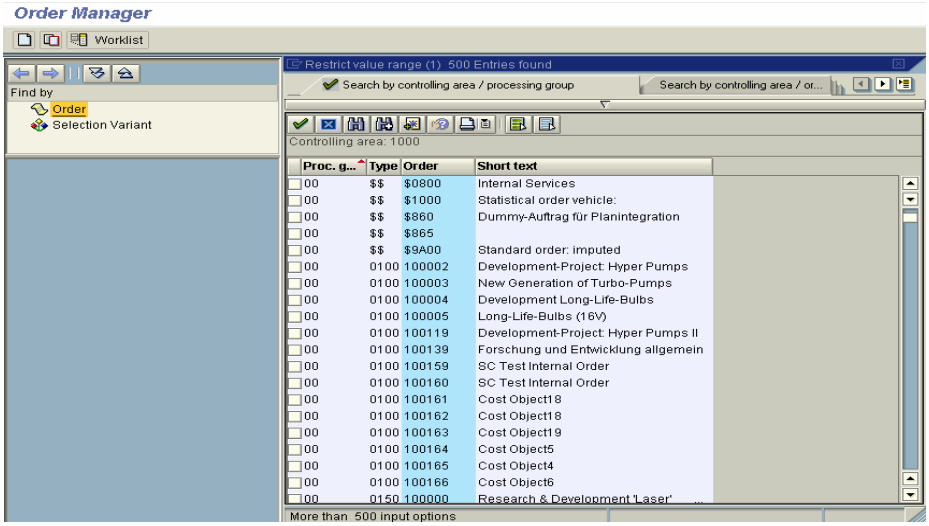
R/3 Resources



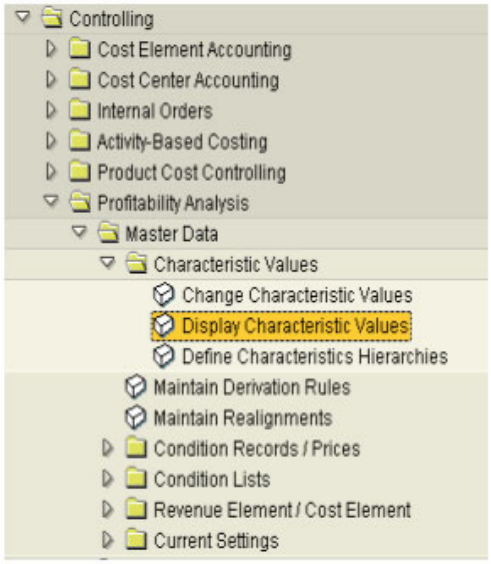
R/3 Business Processes

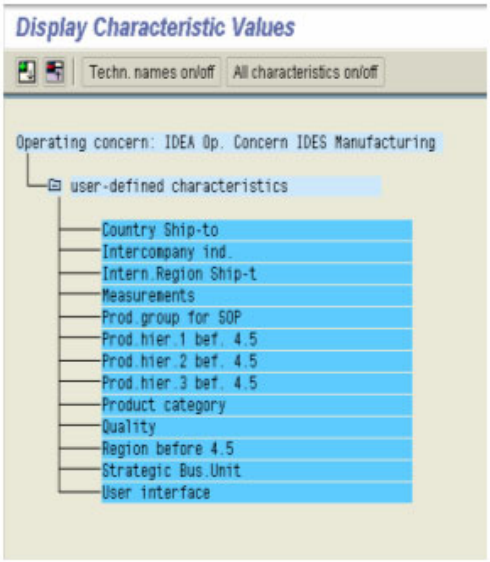


R/3 Internal Order

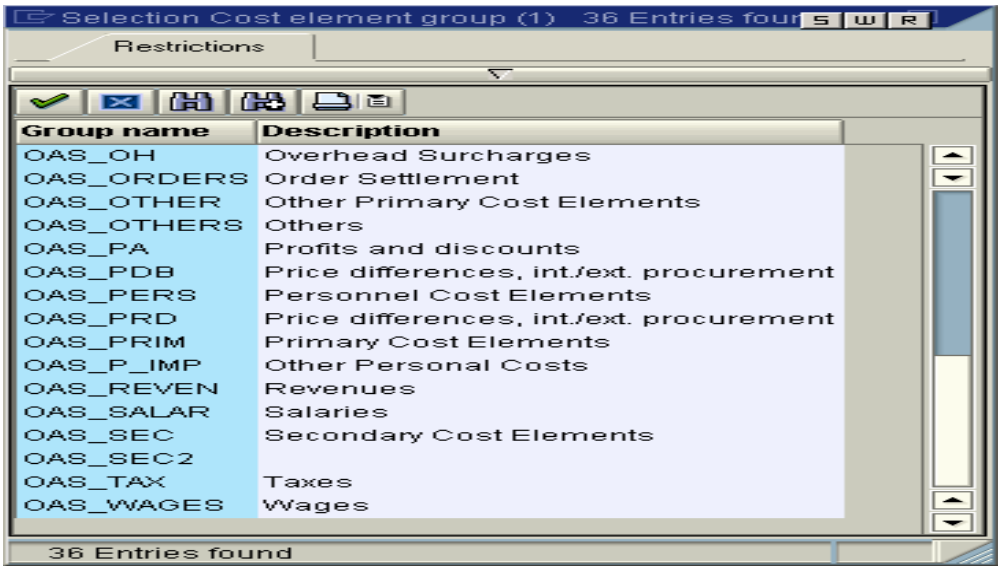


R/3 – CO PA - Characteristics

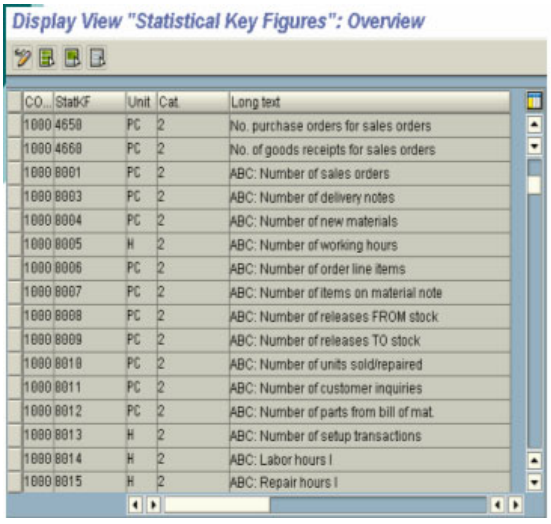


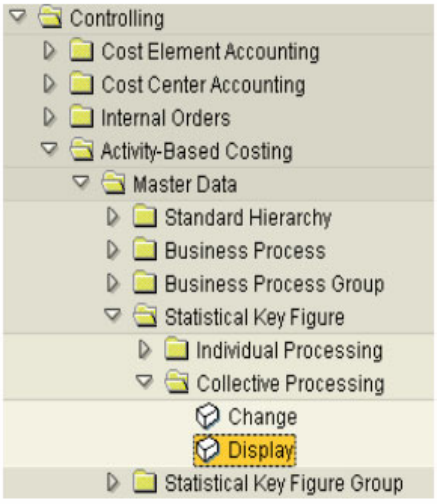


Cost Element Groups

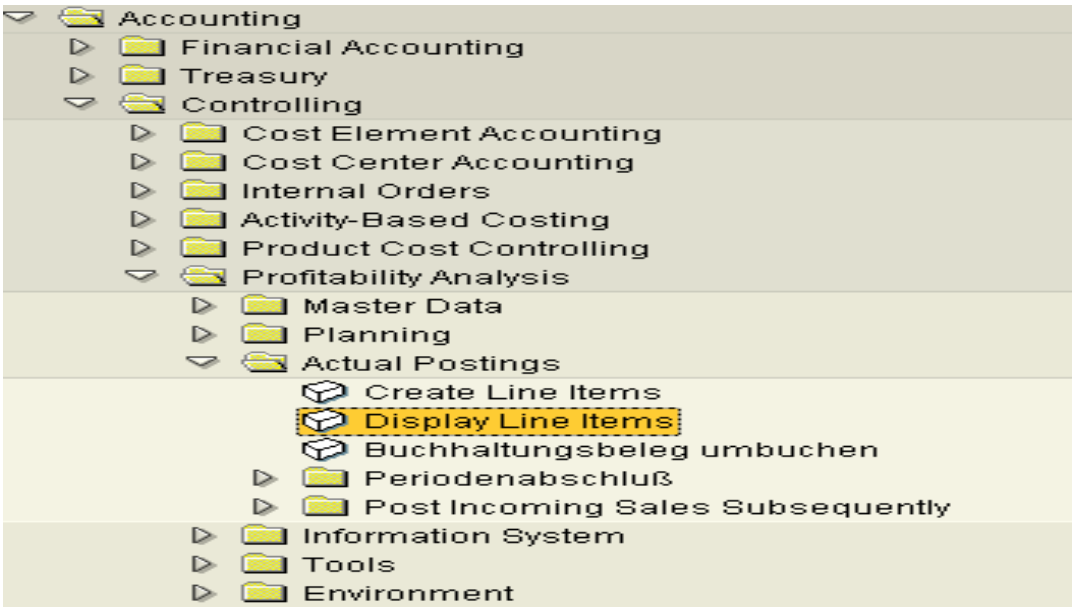


Statistical Key Figures





CO-PA Value Fields

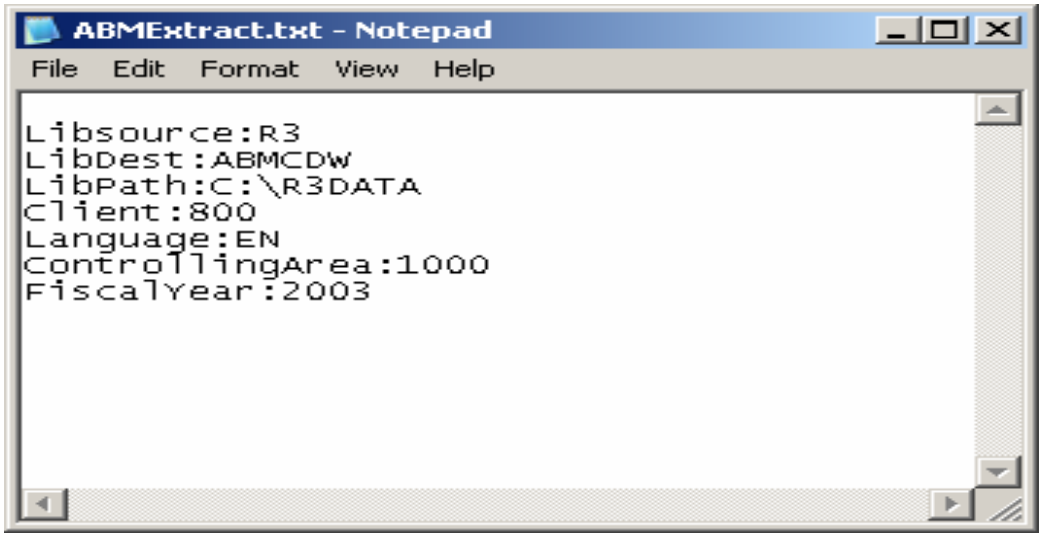


Overview — Table Extraction from SAP to SAS

R/3 Objects	SAS Activity-Based Management Objects	Download
Cost Center Groups	Resource Centers	Yes
Cost Centers	Resource Centers	Yes
Activity Types	Resource or Activity Accounts	Yes
Cost Element Groups	Resource Accounts	Yes
Cost Elements	Entered Cost Elements	Yes
Business Process Groups	Activity Centers	Yes
Business Processes	Activity Accounts	Yes
Characteristics	Dimension Centers	Yes
Characteristic Hierarchy	Dimension Centers	Yes
Characteristic Values	Dimension Accounts	Yes
Internal Order Groups	Cost Object Centers	Yes
Internal Orders	Cost Object Accounts	Yes
Statistical Key Figures	Shared drivers (not used for assignments to dimension accounts)	Yes
Value Fields	Shared drivers (only used for assignments to dimension accounts)	Yes
Cost Element Costs	Entered Cost Elements Costs	Yes Actual and plan
Statistical Key Figure Quantities	Resource and Activity Driver Quantities	Yes
Value Field Quantities	Activity Driver Quantities	Yes Actual and plan

The adapter has far fewer decisions for specific extracts. Once you go through the wizard to note the specific R/3 client, the model language, the controlling area, and the fiscal year, all data that can be extracted from the SAP systems will be extracted into SAS. This single extraction is more efficient than incremental extractions for each additional feed file and data requirement. The constraint to the process is only limited by what data is available in R/3 in the CO module.

Results – Sample Parameter File for the SAS Extraction Process



Overview: CO-CCA and the Resource Module

The Resource Module in SAS Activity-Based Management and the CO-CCA component in R/3 contain information about the resources (cost centers) of an organization. If you have already enabled the CO-CCA component in R/3 and built the hierarchy you want, then you can download it to the SAS Activity-Based Management Resource Module.

R/3 CO-CCA. CO-CCA contains one "standard hierarchy" that is a tree structure containing all the cost centers in a controlling area. Cost center groups can group these cost centers as well as contain other cost center groups to create a hierarchy. Cost center groups and cost centers are defined by their position or node in the hierarchy. You can then create "alternative" groups from these groups by combining the cost centers according to decision-making area, area of responsibility, or management area. Cost elements (primary) can be grouped by cost centers and cost element groups.

Representing CO-CCA in SAS Activity-Based Management. A hierarchy in the Resource Module consists of groupings of resource centers and accounts, with accounts being used to combine entered cost elements. R/3 cost center groups are mapped to SAS Activity-Based Management resource centers while R/3 cost centers are also mapped to resource centers, but are placed at the lowest level in the center hierarchy. Resource accounts are either mapped to R/3 activity types and R/3 cost element groups. R/3 cost elements (primary) are mapped to entered cost elements.

To Download Cost Element Groups

In R/3 CO-CCA, cost element groups are an organizational unit that combines cost elements of the same type. They can serve various purposes. They can be used to create reports or to process several cost elements in one business transaction, for example, in cost center assessment.

The adapter requires that all cost elements to be downloaded be grouped by cost element groups, even if activity types use them. The adapter only downloads cost element groups and activity types based on the existence of posted cost elements. If you have an empty cost element group, it is not downloaded.

To Download Activity Types

In R/3, you can assign activity types to a cost center. These activity types define the specific activities that can be produced in a cost center. Typically, you specify in a cost center the activity types used to manufacture a product.

Activity types can be downloaded to either the Resource Module or the Activity Module.

In R/3, any cost elements used by Activity Types must be grouped by at least one cost element group.

The adapter requires that all cost elements to be downloaded be grouped by cost element groups, even if activity types use them.

To Download Cost Elements

Primary Cost Elements (Entered)

Any primary cost element that you want to download to SAS Activity-Based Management must be posted to and grouped by a cost element group, whether or not activity types use them. Cost element groups are used to determine the cost elements you're interested in and also to create the cost element hierarchy.

Cost elements are only downloaded when you download period data.

Secondary Cost Elements

Any **secondary cost elements of categories** also being used in allocations need to be grouped by at least one cost element group. Secondary cost elements are considered assignments in the SAS ABM Model, in a "Pull" based model these are loaded based upon variable driver quantities. In a "Push" based model these are loaded based upon fixed driver quantities.

Overview — CO-ABC and the Activity Module

The Activity Module in SAS Activity-Based Management and the CO-ABC component in SAP R/3 both contain information about the major business processes/activities of an organization. If you have already enabled the CO-ABC component in SAP R/3 and built the hierarchy you want, you can download it to the Activity Module.

R/3 CO-ABC. In SAP R/3 CO-ABC, a hierarchy consists of business process groups and business processes. Before you can create business processes in SAP R/3, you must define a standard hierarchy. The standard

hierarchy is a tree structure used to organize all business processes of a controlling area. The highest node of the standard hierarchy is normally the first business process group created. The groups created thereafter make up the remaining nodes of the standard hierarchy. You can structure your processes based on groups (for example, reflecting the sequence of event in your firm). A business process group can include additional business process groups or multiple business processes. In addition to business process groups, which are subordinate nodes to standard hierarchies, you can also create alternative business process groups that do not belong to standard hierarchies.

Representing CO-ABC in SAS Activity-Based Management. In SAS Activity-Based Management, you can have multiple dimensional hierarchies per module. A hierarchy in the Activity Module consists of activity centers and activity accounts.

The adapter uses the business process groups and business processes to create the activity hierarchy in SAS Activity-Based Management. Business process groups are mapped to activity centers and business processes are mapped to activity accounts.

Downloading Business Processes as Activity Accounts

In R/3 CO-ABC, business process groups aggregate business processes. Business processes are controlling objects in R/3's Activity-Based Costing (CO-ABC) component that consumes costs of resources and can be assigned to other controlling objects, such as other business processes, multi-dimensional profitability segments, internal orders. In SAS Activity-Based Management terms, you can assign resource accounts and activity accounts to activity accounts, and also assign activity accounts to internal order cost object accounts and dimension accounts. You cannot assign from activity accounts back to resource accounts.

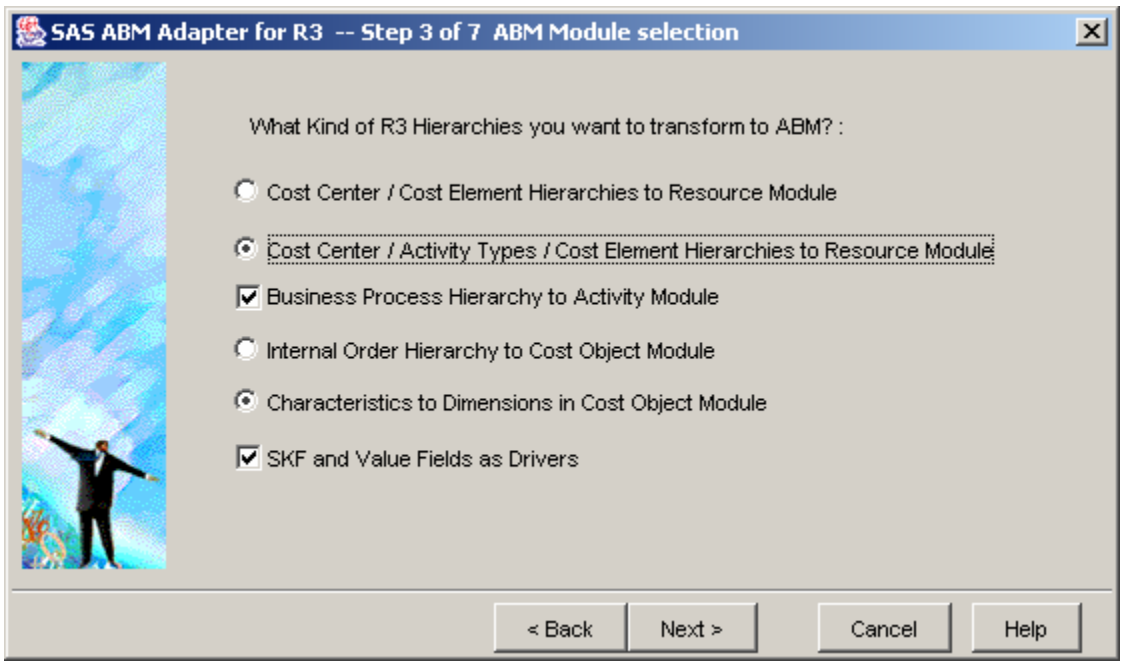
You cannot download only business processes (activity accounts). You need to download the entire hierarchy.

Downloading the Business Processes

1. Determine the data to be extracted from SAP R/3.
2. Make the selections in the Extraction Wizard
3. Run the Extract from R/3
4. Make selections in the Transformation Wizard
5. Run the transformation
6. Load the data into SAS ABM.

To download business processes as activity accounts simply select the Business Process Hierarchy to Activity Module option in the transformation wizard. This will extract the business processes from SAP into the following SAS Tables:

- Business Process : Contains all of the dimensional members in the business process
- Business_Process_Assoc_type: Defines types of hierarchies – Default(Assoc_Type1)
- Business_Process_Association: Defines the Dimensional Hierarchy (Parent / Child)
- Business_Process_Attributes: Defines other dimensional attributes – Default (Person Responsible).


SAS ABM Adapter for R3 -- Step 3 of 7 ABM Module selection
What Kind of R3 Hierarchies you want to transform to ABM? :
Cost Center / Cost Element Hierarchies to Resource Module
Cost Center / Activity Types / Cost Element Hierarchies to Resource Module
Business Process Hierarchy to Activity Module
Internal Order Hierarchy to Cost Object Module
Characteristics to Dimensions in Cost Object Module
SKF and Value Fields as Drivers
< Back
Next >
Cancel
Help

Overview — CO-PA and the Cost Object Module

R/3 CO-PA. Profitability Analysis (CO-PA) enables you to evaluate market segments, which can be classified according to products, customers, orders and other dimensions or any combination of these.
Two forms of Profitability Analysis are supported in CO-PA:

- Costing-based Profitability Analysis (the adapter supports this method)
- Account-based Profitability Analysis (the adapter does not support this method)

In CO-PA, you need to define the operating concern as well as the characteristics and value fields belonging to the operating concern. Value fields are only required in costing-based Profitability Analysis. These fields contain the currency amounts and quantities that you want to analyze in CO-PA. They represent the structure of your costs and revenues. The combination of characteristic values forms a multi-dimensional profitability segment, for which you can analyze profitability by comparing its costs and revenues. The master data is created when individual values are assigned to the characteristics and value fields.
You can assign cost center/activity types to profitability segments, assess cost center costs and business process costs to profitability segments, as well as settle orders to profitability segments.

Representing CO-PA in SAS Activity-Based Management. Dimension accounts represent the intersections of characteristic values in the CO-PA module; text attributes are used to define the intersections.

Downloading the Dimension Cost Object Hierarchy - Characteristics

1. Determine the data to be extracted from SAP R/3.
2. Make the selections in the Extraction Wizard
3. Run the extract from R/3
4. Make selections in the Transformation Wizard
5. Run the transformation
6. Load the data into SAS ABM.

Downloading Intersection Accounts

In R/3 CO-PA, the combination of characteristic values forms a *multi-dimensional profitability segment*, for which you can analyze profitability by comparing its costs and revenues. The adapter maps the characteristic value profit segments to intersection accounts.

Before you can do this step you need to extract the data from SAP. You also need to have quantities associated with value fields (drivers) in R/3 before you can download dimension accounts. This is because the multidimensional profitability segment master data is created when individual values (value field quantities) are assigned to the characteristics and value fields.

Downloading Value Fields

In R/3, value fields are the fields that contain the currency amounts and quantities that you want to analyze in CO-PA. These value fields represent the highest level of detail at which you can analyze quantities, revenues, sales deductions, and costs for profitability segments in profitability analysis.

The adapter downloads and converts selected R/3 value fields to SAS Activity-Based Management drivers. The only drivers that you can use to assign costs to dimension intersection accounts in SAS Activity-Based Management are the value fields downloaded from R/3 to SAS Activity-Based Management, as well as the SAS Activity-Based Management system defined Evenly Assigned and Percentages drivers. Once the value fields are drivers in SAS Activity-Based Management, you can use them in assignments to dimension accounts. You can apply a calculation to them.

Overview — CO-OPA and the Cost Object Module

Internal orders in R/3. An internal order is usually used as an interim collector of costs. In cost center accounting allocations, the system allocates plan costs from sender cost centers or business processes to internal orders.

- You can allocate to internal orders using cost center/activity type indirect activity allocation.
- You can allocate overhead costs to internal orders using cost center assessment. As part of plan assessment, you can use an assessment cost element to allocate costs from a sender cost center to internal orders, according to assessment keys defined by the user.
- Statistical key figures on internal orders are used as the driver in cycles.

Downloading CO-OPA to the Cost Object Module

The CO-OPA component in R/3 is generally used to plan, collect, and settle the costs of internal jobs and tasks.

The R/3 internal order group hierarchy is converted to a similar cost object hierarchy in SAS Activity-Based Management. Internal order groups are mapped to cost object centers. Internal orders are mapped to cost object accounts. The adapter enables you to select the internal order group to download to SAS Activity-Based Management. This enables you to limit the set of internal orders converted to cost object accounts.
So how is all this information downloaded to SAS Activity-Based Management?

- Internal order groups are mapped to uni-dimension cost object centers.
- Internal orders are mapped to uni-dimension cost object accounts.
- Names are derived from their R/3 descriptions (master data).
- Reference numbers are derived from their R/3 names (master data).
- Internal order groups (cost object centers) are downloaded based on their node or position in the hierarchy; the same hierarchy in R/3 is maintained in SAS Activity-Based Management.

Internal orders (cost object accounts) are downloaded to the internal order group to which they belong.

Loading Driver Quantities and Destinations Without Sources

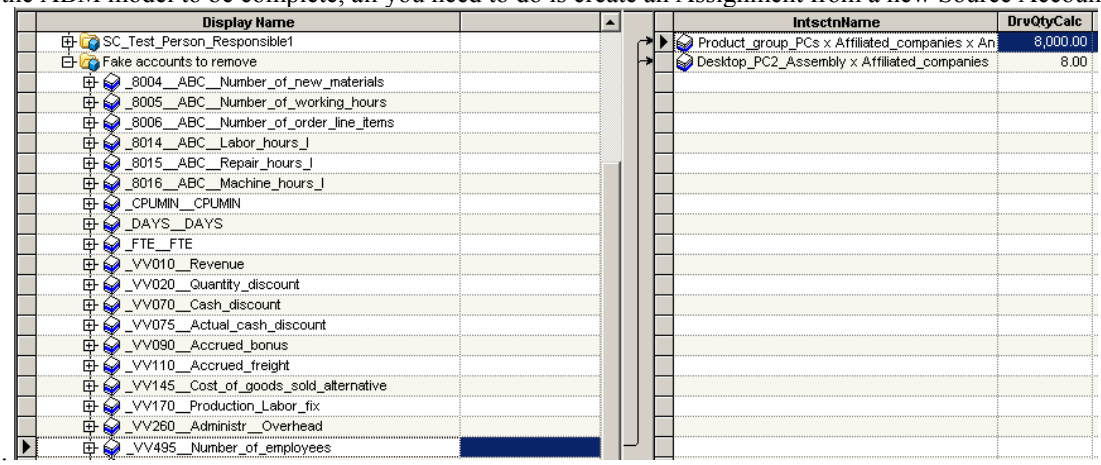
In a SAS Activity-Based Management model, to create an assignment and define a Cost Flow Method, you need two sets of information:

- The driver to be used to assign costs. This is the Defined Transaction Value or Numeric that will be used to Split Source Accounts costs between multiple destination accounts.
- Which source accounts will be assigned to which destination accounts in the model. Since the adapter is intended to extract data from a functioning ERP system, transaction data (# of Shipments, # of Lbs Produced, # of Unit Sold, # of Orders, # of…X) is usually easily available to trace cost to particular Cost objects multi-dimensional intersections (Products or Customers or Intersections of a Particular product to a specific Customer). So the Extract from SAP will hold the Driver Quantities mated to the destination intersection for the assignment.

However, ERP systems rarely have the ability to note activities which will be used as the source accounts for theses assignments. So while the ERP Extract has the destinations for the assignments, the Source Accounts will be based upon human input, or other non-ERP Source Systems. To facilitate the Model Build, all assignments out of the Activity Module will be loaded into a center containing accounts for all of the driver quantities.

Display Name	DrvName	TDQCalc
ACTIVITY (PRIMARY PANE)		
SC_TEST1		
PC_area_version_40		
Other_business_areas		
PC_area_version_50		
PC_example__Processes_from_operative_ABC		
OROS1BP_VS_GROUP		
Sc_Test		
SC_Test_Person_Responsible1		
Fake accounts to remove		
_8004__ABC__Number_of_new_materials	_8004__ABC__Number_of_new_materials	
_8005__ABC__Number_of_working_hours	_8005__ABC__Number_of_working_hours	
_8006__ABC__Number_of_order_line_items	_8006__ABC__Number_of_order_line_items	
_8014__ABC__Labor_hours_I	_8014__ABC__Labor_hours_I	25.00
_8015__ABC__Repair_hours_I	_8015__ABC__Repair_hours_I	96.00
_8016__ABC__Machine_hours_I	_8016__ABC__Machine_hours_I	888.00
_CPUMIN__CPUMIN	_CPUMIN__CPUMIN	222.00
_DAYS__DAYS	_DAYS__DAYS	10.00
_FTE__FTE	_FTE__FTE	62.00
_VV010__Revenue	_VV010__Revenue	
_VV020__Quantity_discount	_VV020__Quantity_discount	
_VV070__Cash_discount	_VV070__Cash_discount	15.00
_VV075__Actual_cash_discount	_VV075__Actual_cash_discount	12.00
_VV090__Accrued_bonus	_VV090__Accrued_bonus	252.00
_VV110__Accrued_freight	_VV110__Accrued_freight	12.00
_VV145__Cost_of_goods_sold_alternative	_VV145__Cost_of_goods_sold_alternative	14.00
_VV170__Production_Labor_fix	_VV170__Production_Labor_fix	
_VV260__Administr__Overhead	_VV260__Administr__Overhead	13.00
_VV495__Number_of_employees	_VV495__Number_of_employees	8,008.00
_VV550__Number_of_sales_order_items	_VV550__Number_of_sales_order_items	70,007.00
_VV560__Number_of_payment_problems	_VV560__Number_of_payment_problems	50,000,005.00

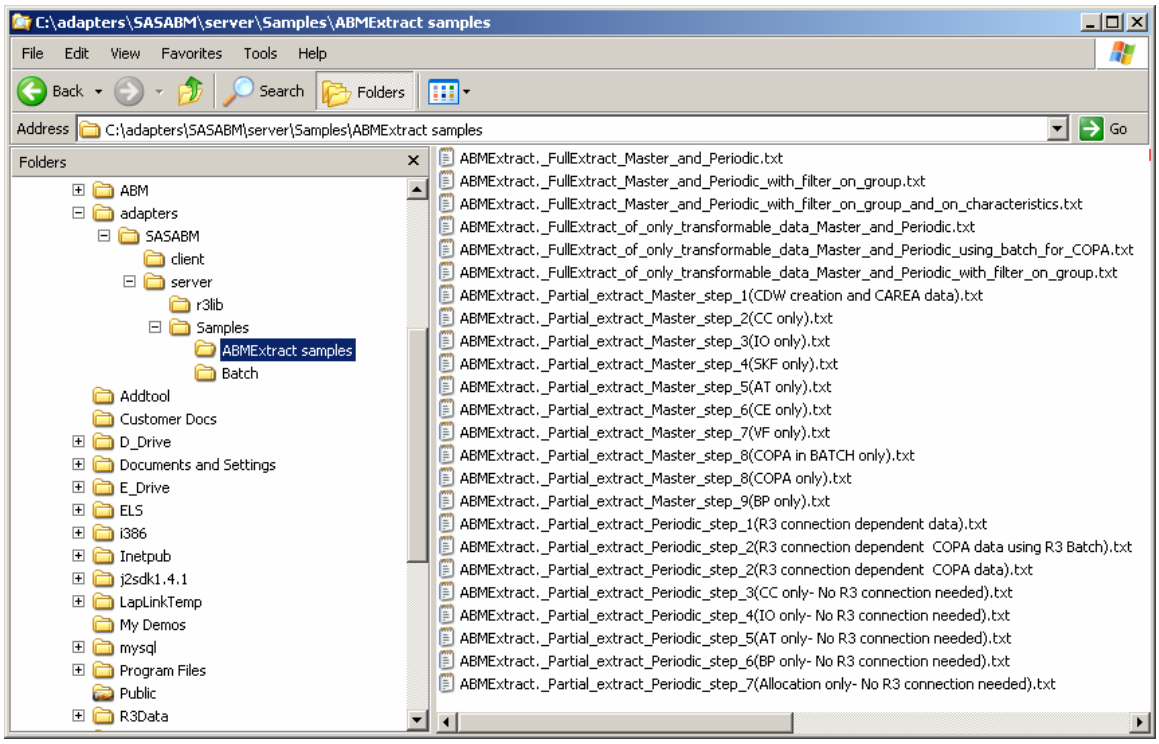
All drivers are loaded with their driver quantities and the assignment paths to the appropriate destinations. For the ABM model to be complete, all you need to do is create an Assignment from a new Source Account.



Overview Options in ABMExtract.txt File

In a SAS Activity-Based Management Extract, the ABM Extract Wizard process creates the `ABMExtract.txt` file with the default options. Further customization can be done to the `ABMExtract.txt` file to add additional filters for the SAP Extraction.

- During the installation of the adapter on the server, a set of sample extract files are noted.



Standard Parameters (Generated by the Extraction Wizard)

Name	Description
LibSource	Source SAS Library (not used in SAS 8.2 mode)
LibDest	SAS Destination Library where the ABM Adapter Data Warehouse is located.
LibPath	Physical path for the LibDest
Client	Client number for R3 Connection
Language	R3 Language to use for extraction
ControllingArea	Controlling Area to extract
FiscalYear	Fiscal Year to extract for periodic data

Advanced Parameters (Not Generated by the Extraction Wizard)

Name	Description
CostCenterGroup	If this parameter is specified, the extraction process will only extract the specified group and not all.
BusinessProcessGroup	If this parameter is specified, the extraction process will only extract the specified group and not all.
ActTypesGroup	If this parameter is specified, the extraction process will only extract the specified group and not all.
CostElementGroup	If this parameter is specified, the extraction process will only extract the specified group and not all.
InternalOrderGroup	If this parameter is specified, the extraction process will only extract the specified group and not all.
RunPFC	If this parameter is set to 0, the extraction process won't extract Profit centers
RunCC	If this parameter is set to 0, the extraction process won't extract Cost centers
RunBP	If this parameter is set to 0, the extraction process won't extract Business Processes
RunIO	If this parameter is set to 0, the extraction process won't extract Internal Orders
RunCOPA	If this parameter is set to 0, the extraction process won't extract Characteristics
RunCOMPCODE	If this parameter is set to 0, the extraction process won't extract company code
RunFUNCAREA	If this parameter is set to 0, the extraction process won't extract functional area
RunBUSAREA	If this parameter is set to 0, the extraction process won't extract Business Area
RunCURRENCY	If this parameter is set to 0, the extraction process won't extract Currency
RunAT	If this parameter is set to 0, the extraction process won't extract Activity types
RunCE	If this parameter is set to 0, the extraction process won't extract Cost Elements
RunVF	If this parameter is set to 0, the extraction process won't extract Value Fields
RunSKF	If this parameter is set to 0, the extraction process won't extract Statistical Key Figures

Name	Description
CHARSELECTION: CHARCODE1:Description_of_char1 CHARCODE2:Description_of_char2 CHARCODE3:Description_of_char3 ... ENDCHARSELECTION:	If you add this kind of section in the file, you can choose what characteristic you want extract from R/3. If you don't specify this section all characteristics will be extracted.
FullLog	If this parameter is set to 1, full log is activated.

Optimization Tips

In order to reduce the time consumed by the extraction of Master data, you can modify the `ABMExtract.txt` parameters file as described in this section.

Since the current version of the ABM adapter does not use all extracted data, you do not need to extract the following: Profit Center, Company Code, Functional Area, Business Area, and Currency.

Use the wizard to generate the `ABMExtract.txt` file, then edit it with Notepad and add these lines:

```
runPFC=0
runCOMPCODE=0
runFUNCAREA=0
runBUSAREA=0
runCURRENCY=0
```

If you always work on the same groups, you can specify that only those groups are extracted by adding them in the parameter file as in the following example:

```
CostCenterGroup:MyCCGroupID
BusinessProcessGroup:MyBPGroupID
ActTypesGroup:MyATGroupID
CostElementGroup:MyCEGroupID
InternalOrderGroup=MyIOGRoupID
```

In the case where you never use internal order but always usecharacteristics, you can add:

```
RunIO=0;
```

If you always use the same characteristics, specify them at extraction time as follows:

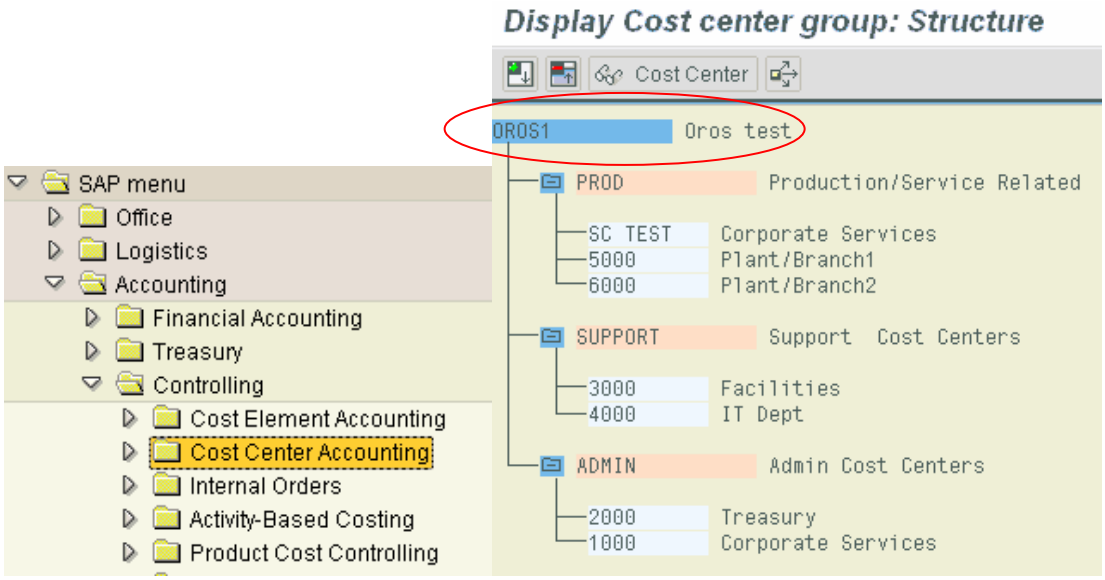
```
CHARSELECTION:
CHARID1:Description_of_char_1
CHARID2:Description_of_char_2
CHARID3:Description_of_char_3
ENDCHARSELECTION:
```

CHAPTER 4

Explaining the Cost Flow from SAP R/3, through SAS Extract, through SAS Transformation, and into SAS Activity-Based Management

1. SAP R/3 / Cost Center Groups

Cost Center accounting information is used to build the Resource Module in SAS Activity-Based Management. The master data extraction for Cost Center consists of extracting the Cost Center hierarchy.



STAGE3 TABLES

Dimension

In the Dimension table we can find the Cost Center Group we selected from the wizard.

VIEWTABLE: Stage3.Dimension

	Reference	Name
1	ExternalUnits	External_Units
2	OAS	Total_costs
3	BP1	Business_Process_Groups___1000
4	OROS1	Oros_test
5	OROS1IO	Oros_Test_IO

Dimension Order

In the Dimension Order table we find one record with the cost center group selected. The cost center group will be available in the Resource module in SAS Activity-Based Management.

VIEWTABLE: Stage3.Dimensionorder

	ModuleType	SequenceNumber	Di
1	ExternalUnit	1	ExternalUnits
2	Resource	1	OROS1
3	Activity	1	BP1
4	Resource	2	OAS
5	CostObject	1	OROS1IO

Dimension Member

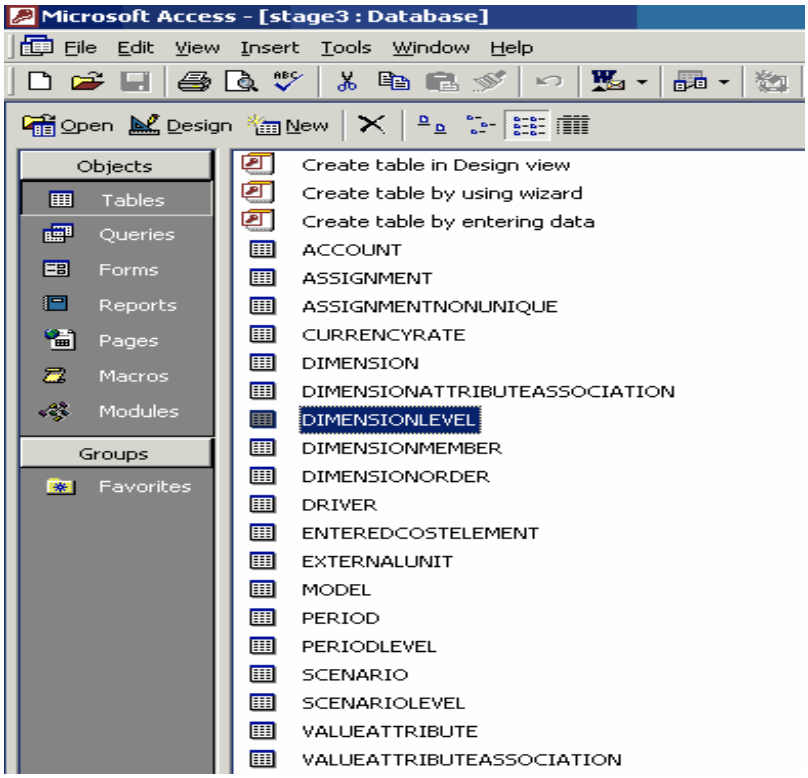
In the Dimension Member table we can find the cost center hierarchy defined in SAP R/3.

VIEWTABLE: Stage3.Dimensionmember

	DimRef	Reference	Name	ParentRefere
313	BP1	SCA1	Activity1	SC1
314	BP1	SCTEST28	SC_TEST1	
315	BP1	2	Activity_Center2	SCTEST28
316	BP1	000000000003	Activity3	2
317	BP1	1	Activity_Center1	SCTEST28
318	BP1	000000000001	Activity1	1
319	BP1	000000000002	Activity2	1
320	BP1	3	Activity_Center3	SCTEST28
321	BP1	000000000004	Activity4	3
322	OROS1	PROD	Production_Service_Related	
323	OROS1	0000005000	Plant_Branch1	PROD
324	OROS1	0000006000	Plant_Branch2	PROD
325	OROS1	SC_TEST	Corporate_Services	PROD
326	OROS1	SUPPORT	Support__Cost_Centers	
327	OROS1	0000003000	Facilities	SUPPORT
328	OROS1	0000004000	IT_Dept	SUPPORT
329	OROS1	ADMIN	Admin_Cost_Centers	
330	OROS1	0000001000	Corporate_Services	ADMIN
331	OROS1	0000002000	Treasury	ADMIN

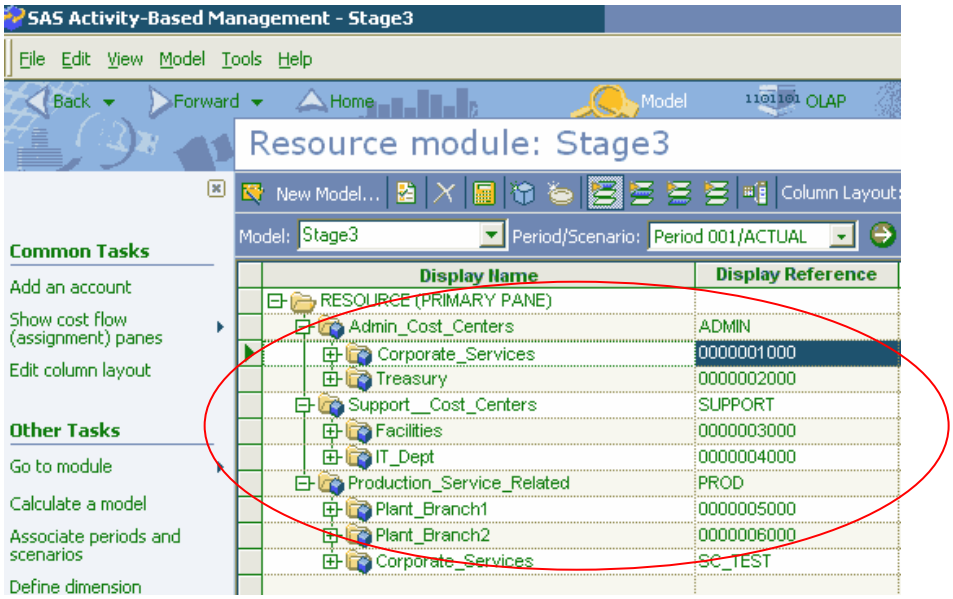
Microsoft Access

The STAGE3 Tables can optionally be converted into Microsoft Access tables.
We should find the same table names and contents in SAS, STAGE3 than in Microsoft Access. The last step in the adapter is to take the SAS tables and import them into Microsoft Access. To simplify the import process into SAS Activity-Based Management, all transformed data tables in SAS are imported into Microsoft Access. The use of Microsoft Access as a transfer medium provides easy portability of the SAP source data to the target SAS Activity-Based Management Server. It also provides easy archiving of the data in a single MDB database.



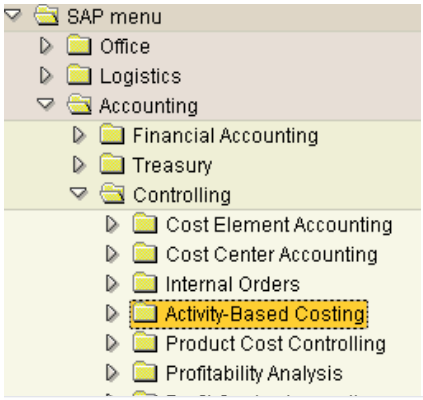
SAS Activity-Based Management / Resource Module

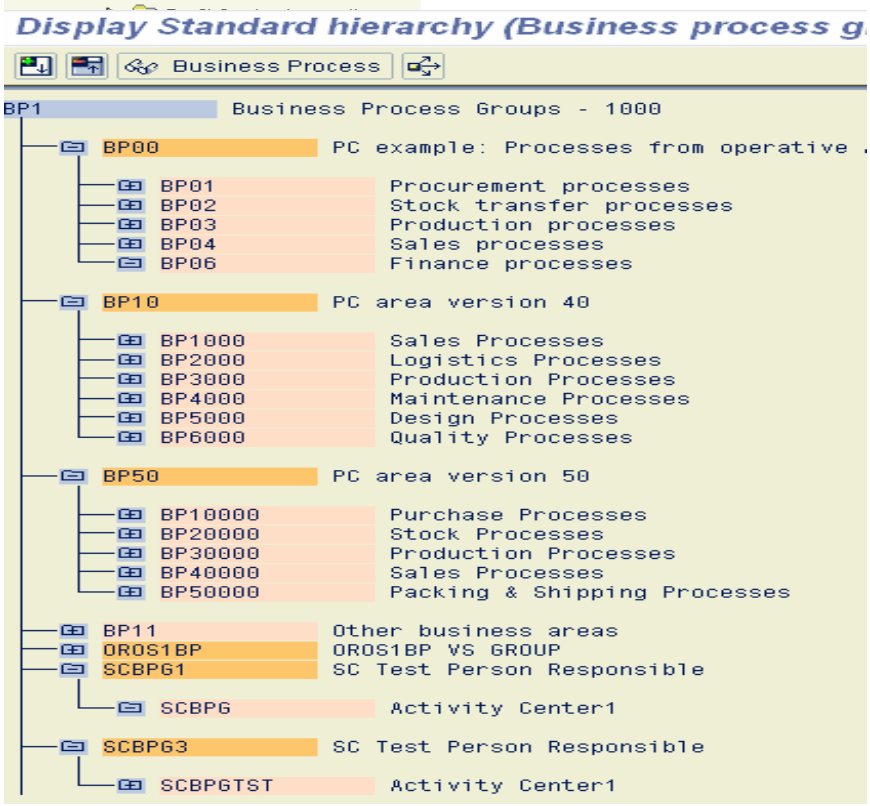
In the Resource Module, we find the same Cost Center hierarchy we extracted from SAP R/3.



2. SAP R/3 / Business Process

The Business processes in SAP R/3 are available in Activity-Based Costing.





STAGE3 Tables

Dimension

In the Dimension Table, the Business Group we selected in the wizard should appear.

VIEWTABLE: Stage3.Dimension

	Reference	Name
1	ExternalUnits	External_Units
2	OAS	Total_costs
3	BP1	Business_Process_Groups___1000
4	OROS1	Oros_test
5	OROS1IO	Oros_Test_IO

Dimension Order

In the Dimension Order table, a module type Activity is created.

VIEWTABLE: Stage3.Dimensionorder

	ModuleType	SequenceNumber	Di
1	ExternalUnit	1	ExternalUnits
2	Resource	1	OROS1
3	Activity	1	BP1
4	Resource	2	OAS
5	CostObject	1	OROS1IO

Dimension Member

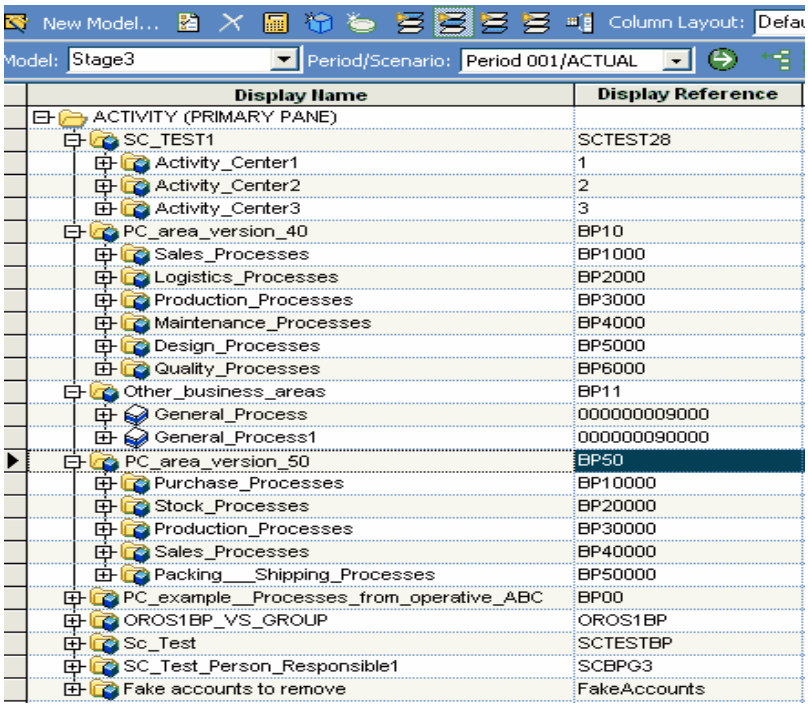
In the Dimension Member table, the Business Group Hierarchy should appear.

VIEWTABLE: Stage3.Dimensionmember

	DimRef	Reference	Name	ParentReference
210	BP1	BP00	PC_example__Processes_from_operativ	
211	BP1	BP01	Procurement_processes	BP00
212	BP1	000000200000	Purchasing__sls_ord_	BP01
213	BP1	000000200100	Goods_receipt	BP01
214	BP1	BP02	Stock_transfer_processes	BP00
215	BP1	000000300200	Pallet_movements1200	BP02
216	BP1	000000300300	Pallet_movements1000	BP02
217	BP1	BP03	Production_processes	BP00
218	BP1	000000300000	Painting	BP03
219	BP1	000000300100	Machine_drying	BP03
220	BP1	000000300900	Work_scheduling	BP03
221	BP1	000000300910	Order_scheduling	BP03
222	BP1	BP04	Sales_processes	BP00
223	BP1	000000400000	Loan_problem_solutio	BP04
224	BP1	000000400900	Sales_order_proc_	BP04
225	BP1	000000400910	PC_Configuration	BP04
226	BP1	BP06	Finance_processes	BP00
227	BP1	BP10	PC_area_version_40	
228	BP1	BP1000	Sales_Processes	BP10

SAS Activity-Based Management / Activity Module

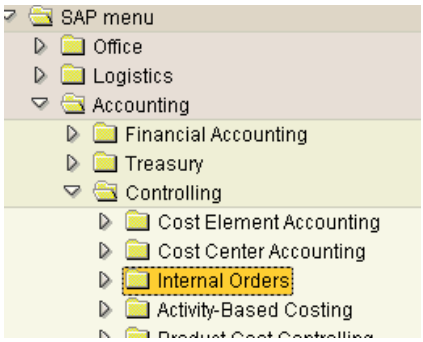
SAP R/3 Business Process Group Hierarchy is imported into the Activity Module.

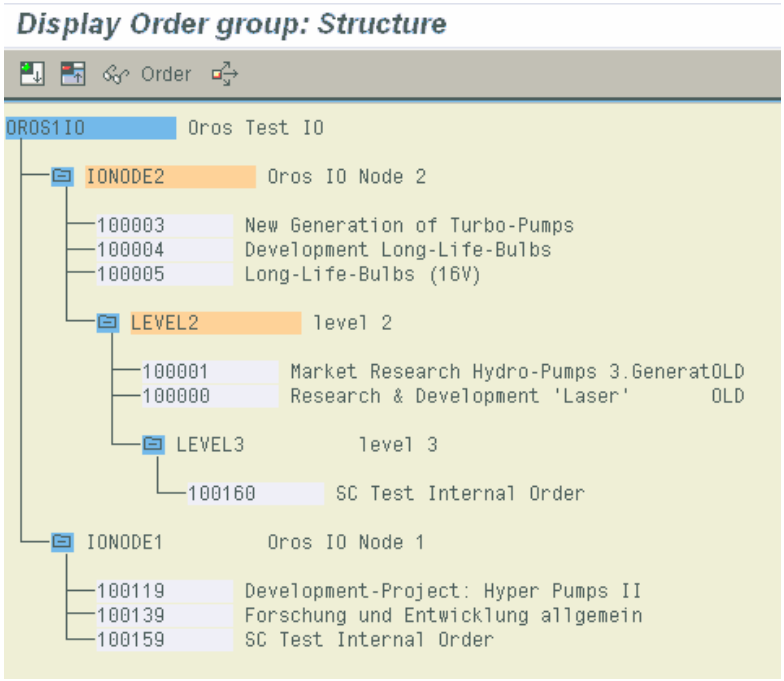


Display Name	Display Reference
ACTIVITY (PRIMARY PANE)	
SC_TEST1	SCTEST28
Activity_Center1	1
Activity_Center2	2
Activity_Center3	3
PC_area_version_40	BP10
Sales_Processes	BP1000
Logistics_Processes	BP2000
Production_Processes	BP3000
Maintenance_Processes	BP4000
Design_Processes	BP5000
Quality_Processes	BP6000
Other_business_areas	BP11
General_Process	000000009000
General_Process1	000000090000
PC_area_version_50	BP50
Purchase_Processes	BP10000
Stock_Processes	BP20000
Production_Processes	BP30000
Sales_Processes	BP40000
Packing___Shipping_Processes	BP50000
PC_example__Processes_from_operative_ABC	BP00
OROS1BP_VS_GROUP	OROS1BP
Sc_Test	SCTESTBP
SC_Test_Person_Responsible1	SCBPG3
Fake accounts to remove	FakeAccounts

3. SAP R/3 / Internal Orders

Internal orders are available in SAP R/3 Controlling module. Internal Orders are available in the Cost Object Module in SAS Activity-Based Management.





STAGE3 Tables

Dimension

Internal Order Group selected in the Wizard will appear in The Dimension table.

VIEWTABLE: Stage3.Dimension

	Reference	Name
1	ExternalUnits	External_Units
2	OAS	Total_costs
3	BP1	Business_Process_Groups___1000
4	OROS1	Oros_test
5	OROS1IO	Oros_Test_IO

Dimension Order

Internal Order group will show in the Cost Object Module.

VIEWTABLE: Stage3.Dimensionorder

	ModuleType	SequenceNumber	Di
1	ExternalUnit	1	ExternalUnits
2	Resource	1	OROS1
3	Activity	1	BP1
4	Resource	2	OAS
5	CostObject	1	OROS1IO

Dimension member

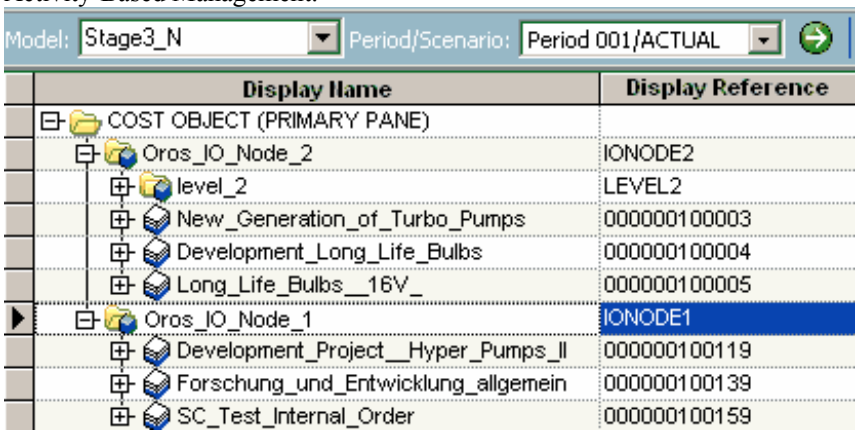
In the Dimension Member table, we will find the Internal Order hierarchy.

VIEWTABLE: Stage3.Dimensionmember

	DimRef	Reference	Name	ParentRe
326	OROS1	SUPPORT	Support__Cost_Centers	
327	OROS1	0000003000	Facilities	SUPPORT
328	OROS1	0000004000	IT_Dept	SUPPORT
329	OROS1	ADMIN	Admin_Cost_Centers	
330	OROS1	0000001000	Corporate_Services	ADMIN
331	OROS1	0000002000	Treasury	ADMIN
332	OROS1IO	IONODE2	Oros_IO_Node_2	
333	OROS1IO	000000100003	New_Generation_of_Turbo_Pumps	IONODE2
334	OROS1IO	000000100004	Development_Long_Life_Bulbs	IONODE2
335	OROS1IO	000000100005	Long_Life_Bulbs__16V_	IONODE2
336	OROS1IO	LEVEL2	level_2	IONODE2
337	OROS1IO	000000100000	Research___Development__Laser_____	LEVEL2
338	OROS1IO	000000100001	Market_Research_Hydro_Pumps_3_Gen	LEVEL2
339	OROS1IO	LEVEL3	level_3	LEVEL2
340	OROS1IO	000000100160	SC_Test_Internal_Order	LEVEL3
341	OROS1IO	IONODE1	Oros_IO_Node_1	
342	OROS1IO	000000100119	Development_Project__Hyper_Pumps_II	IONODE1
343	OROS1IO	000000100139	Forschung_und_Entwicklung_allgemein	IONODE1
344	OROS1IO	000000100159	SC_Test_Internal_Order	IONODE1

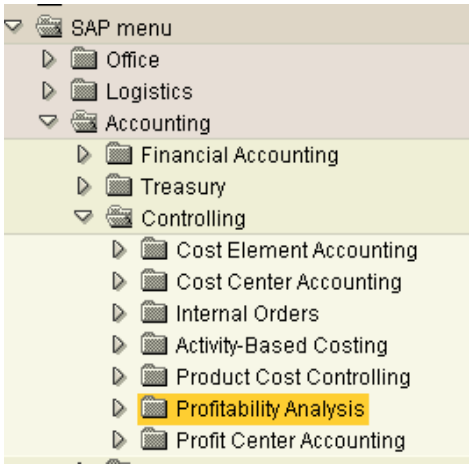
SAS Activity-Based Management / Cost Object Module

The Internal Order group hierarchy extracted from SAP R/3 is available in the Cost Object Module of SAS Activity-Based Management.



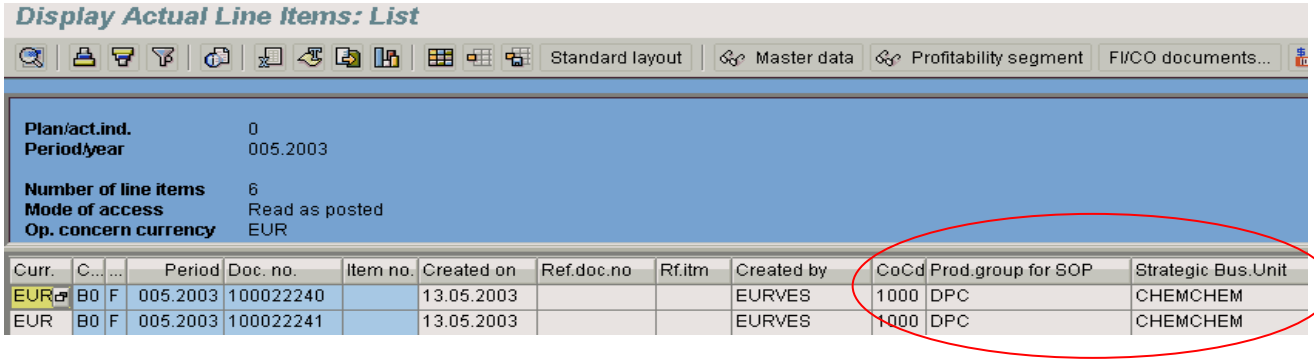
4. SAP R/3 / COPA

In SAP R/3, characteristics and value field are available in Controlling Module/Profitability Analysis.



Intersections between different characteristics give value field numbers (quantities or revenue). In the example below, an intersection between three characteristics has been created. Characteristics are Controlling Area, Product group for SOP and Strategic Business Unit.

The Value Field Numbers will be treated in the Periodic data section.



STAGE3 Tables

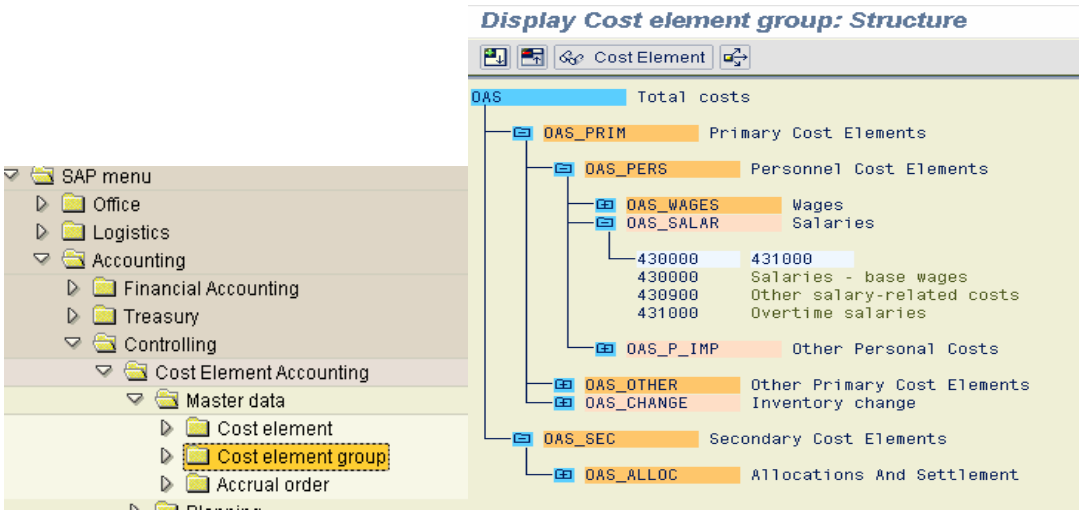
SAS Activity-Based Management / Cost Object Module

In SAS Activity-Based Management, Characteristics appear in Cost Object Module in SAS Activity-Based Management.

Display Name	Display Reference
COST OBJECT (PRIMARY PANE)	
controlling_area	CO
CO_Europe	1000
No <Prod_group_for_SOP>	No <WWSOP>
product_category	L1
Product_group_PCs	DPC
product_category	L1
Chemicals	CHEMCHEM

5. SAP R/3 Cost Center Hierarchy

In SAP R/3, we need to extract the hierarchy of Cost Center, Business Process, Internal Order and Characteristics. Then to look at periodic data (cost for a given period), we need to use cost element. Cost elements can be aggregated in a Cost Element Group. The Cost Element group hierarchy can be displayed in Controlling Module\Cost Element Accounting\Master Data\Cost Element Group.
Cost Element Group will be one dimension used in the resource module of SAS Activity-Based Management. The top of the Resource Module Hierarchy in SAS Activity-Based Management will be defined by the Cost Centers Dimension from SAP. The bottom of the resource Module Hierarchy in SAS Activity-Based Management will be defined by the Cost elements Dimension from SAP. Thus the Accounts defined in SAS Activity-Based Management will be based upon an Intersection of the two Dimensions Cost center and Cost Element from SAP. In SAS Activity-Based Management the Detailed Expenses will be loaded as entered Cost Elements (SAS Activity-Based Management Term) on the defined intersection accounts.



STAGE3 Tables

Dimension

Cost Element Group is represented in the Dimension table.

VIEWTABLE: Stage3.Dimension

	Reference	Name
1	ExternalUnits	External_Units
2	OAS	Total_costs
3	BP1	Business_Process_Groups___1000
4	OROS1	Oros_test
5	OROS1IO	Oros_Test_IO

Dimension Order

Cost Element Group is one Dimension used in the Resource Module. This is why we need to see one record defining the Cost Element Group as Resource.

VIEWTABLE: Stage3.Dimensionorder

	ModuleType	SequenceNumber	Di
1	ExternalUnit	1	ExternalUnits
2	Resource	1	OROS1
3	Activity	1	BP1
4	Resource	2	OAS
5	CostObject	1	OROS1IO

Dimension Member

The Cost Element hierarchy is represented in the Dimension Member Table.

VIEWTABLE: Stage3.Dimensionmember

	DimRef	Reference	Name	ParentRefere
1	OAS	OAS_PRIM	Primary_Cost_Elements	
2	OAS	OAS_PERS	Personnel_Cost_Elements	OAS_PRIM
3	OAS	OAS_WAGES	Wages	OAS_PERS
4	OAS	0000420000	Direct_labor_costs	OAS_WAGES
5	OAS	0000421000	Indirect_labor_costs	OAS_WAGES
6	OAS	422100	_EMPTY_	OAS_WAGES
7	OAS	OAS_SALAR	Salaries	OAS_PERS
8	OAS	0000430000	Salaries	OAS_SALAR
9	OAS	0000430900	Other_sal__expenses	OAS_SALAR
10	OAS	0000431000	Overtime_salaries	OAS_SALAR
11	OAS	OAS_P_IMP	Other_Personal_Costs	OAS_PERS
12	OAS	0000422000	Idle_time_pay	OAS_P_IMP
13	OAS	0000432000	Downtime_salaries	OAS_P_IMP
14	OAS	0000434000	Vacation_bonus	OAS_P_IMP
15	OAS	0000435000	Annual_Bonus	OAS_P_IMP
16	OAS	0000440000	Legal_social_expense	OAS_P_IMP
17	OAS	0000440100	Soc__secur___salary	OAS_P_IMP
18	OAS	0000445000	Pension_Scheme_Contr	OAS_P_IMP
19	OAS	0000446000	Employers_liability	OAS_P_IMP
20	OAS	0000447000	Employee_Health_Insu	OAS_P_IMP
21	OAS	0000449000	Other_pers__costs	OAS_P_IMP

Dimension Level

The Dimension Level Table represents the hierarchy (level number) of the Cost Element Group.

VIEWTABLE: Stage3.Dimensionlevel

	DimRef	LevelNo	Name
1	ExternalUnits	1	External Units L1
2	OAS	1	Resource Level 1
3	OAS	2	Resource Level 2
4	OAS	3	Resource Level 3
5	OAS	4	Resource Level 4
6	OAS	5	Resource Level 5
7	OAS	6	Resource Level 6
8	OAS	7	Resource Level 7
9	OAS	8	Resource Level 8
10	OAS	9	Resource Level 9
11	OAS	10	Resource Level 10
12	OAS	11	Resource Level 11
13	OAS	12	Resource Level 12
14	OAS	13	Resource Level 13
15	OAS	14	Resource Level 14
16	OAS	15	Resource Level 15
17	OAS	16	Resource Level 16
18	OAS	17	Resource Level 17
19	OAS	18	Resource Level 18
20	OAS	19	Resource Level 19

SAP R/3 Periodic Data to Extract

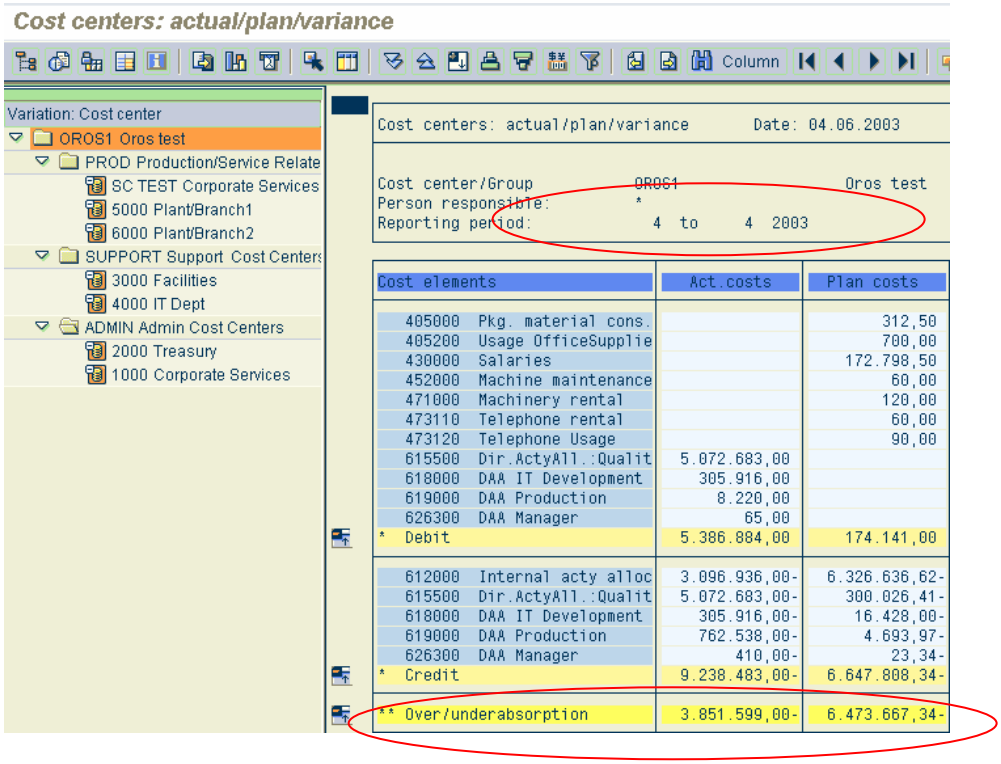
Periodic data are costs, driver quantities (SKF and Value Field). For each period actual numbers and budget (planned) data are available.

In SAS Activity-Based Management, the dimensional intersections

- Cost Center X Cost Element – For Resource Accounts
- Customer X Product X Region – For Cost Object Accounts

are defined and are considered periodic values as well. So as far as SAS Activity-Based Management is concerned, the module hierarchies themselves are considered periodic values and can change month to month, while in SAP R/3 these values do not change each period. So to be consistent with the SAS R/3 Structure the ABM Adapter process has been broken down into two extract aspects the Master structural items and the Periodic numerical values.

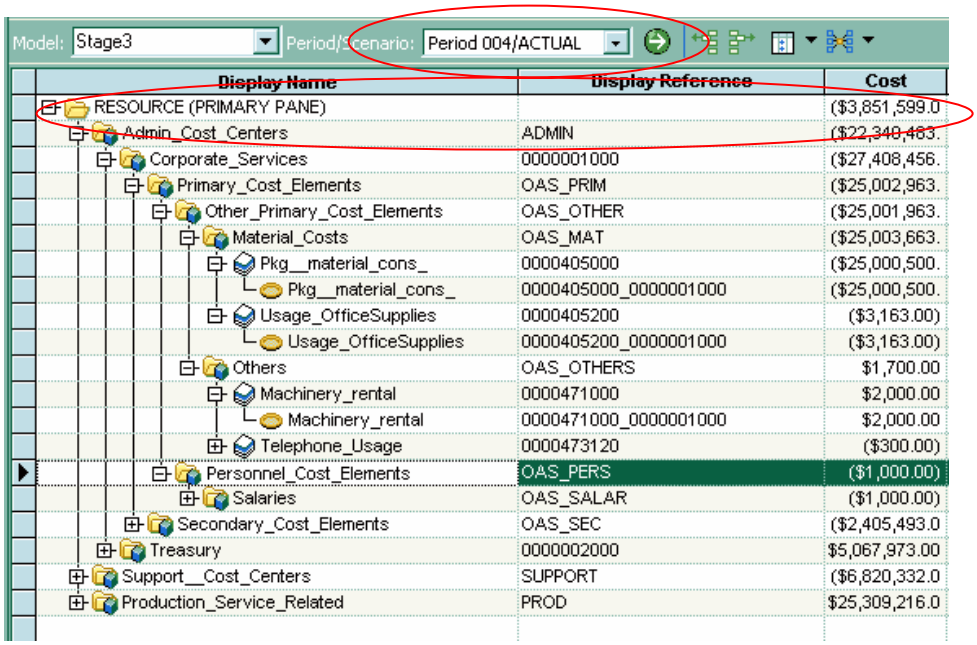
6. SAP R/3 Data – Cost Center Actual / Plan Cost



STAGE3 Tables
Account Table
SAS Activity-Based Management

In SAS Activity-Based Management, the Resource Module show the cost center hierarchy extracted with the corresponding costs for the selected period.

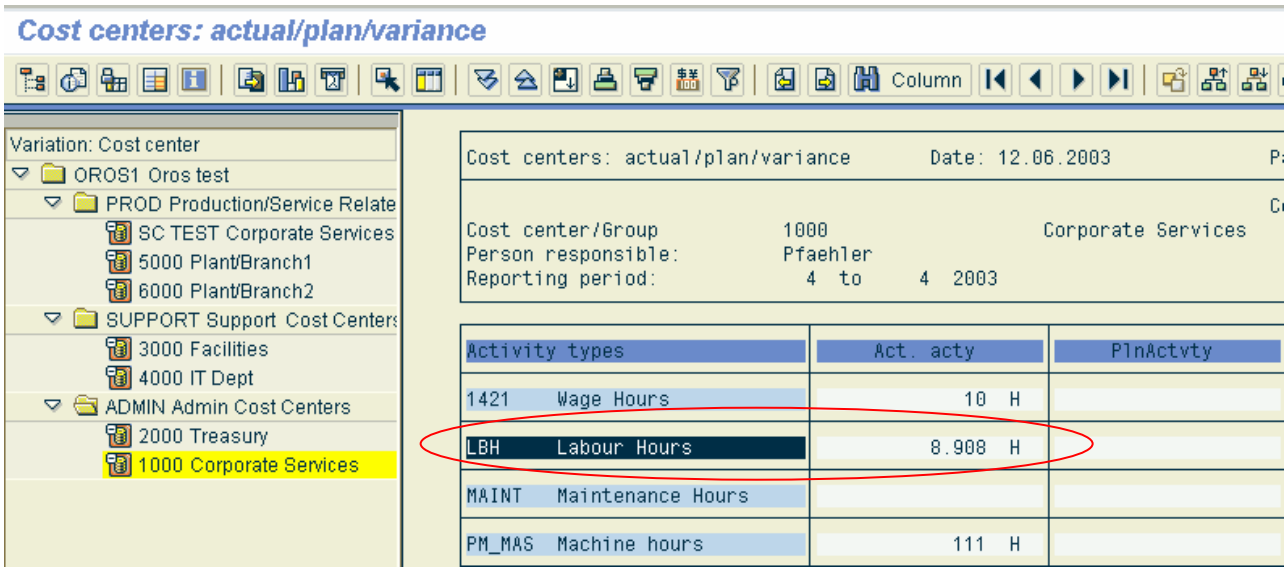
The Hierarchy shows Cost Center group, Cost element group and cost element.



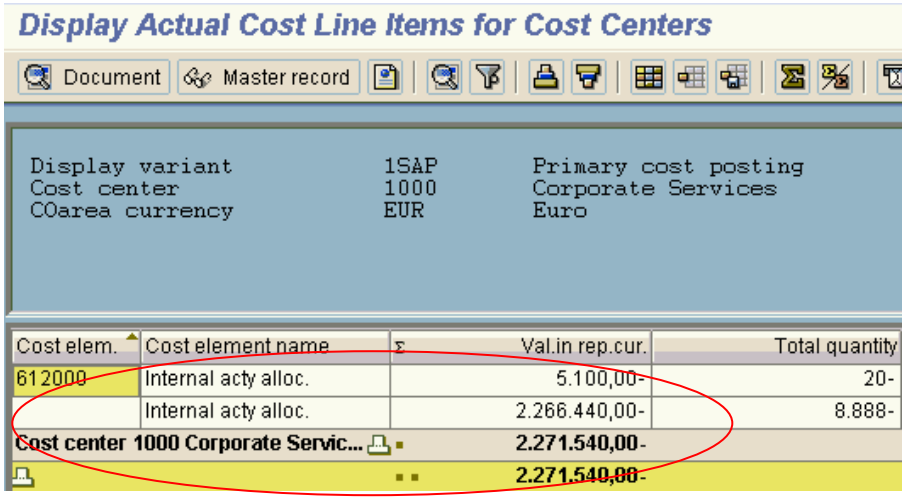
Display Name	Display Reference	Cost
RESOURCE (PRIMARY PANE)		($3,851,599.0
Admin_Cost_Centers	ADMIN	($22,340,463.
Corporate_Services	0000001000	($27,408,456.
Primary_Cost_Elements	OAS_PRIM	($25,002,963.
Other_Primary_Cost_Elements	OAS_OTHER	($25,001,963.
Material_Costs	OAS_MAT	($25,003,663.
Pkg__material_cons_	0000405000	($25,000,500.
Pkg__material_cons_	0000405000_0000001000	($25,000,500.
Usage_OfficeSupplies	0000405200	($3,163.00)
Usage_OfficeSupplies	0000405200_0000001000	($3,163.00)
Others	OAS_OTHERS	$1,700.00
Machinery_rental	0000471000	$2,000.00
Machinery_rental	0000471000_0000001000	$2,000.00
Telephone_Usage	0000473120	($300.00)
Personnel_Cost_Elements	OAS_PERS	($1,000.00)
Salaries	OAS_SALAR	($1,000.00)
Secondary_Cost_Elements	OAS_SEC	($2,405,493.0
Treasury	0000002000	$5,067,973.00
Support__Cost_Centers	SUPPORT	($6,820,332.0
Production_Service_Related	PROD	$25,309,216.0

7. SAP R/3 Activity Type for Cost Center

Activity Type can be used to allocate costs. In the example here below, for the cost center 1000, activity type “Labor Hours” has been used to allocate costs.



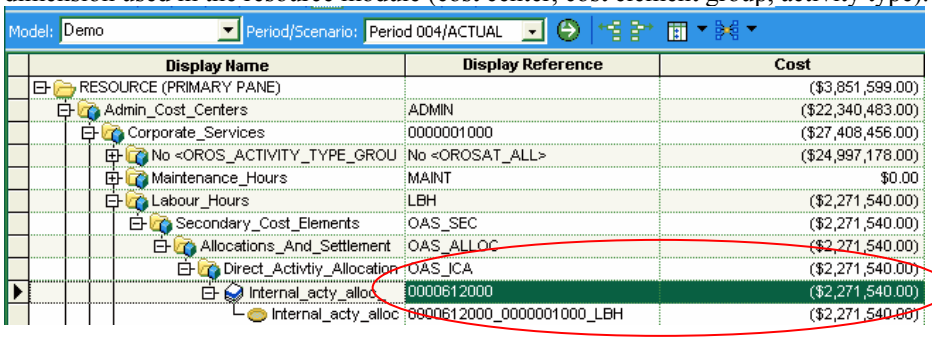
Details of cost allocation for one specific activity type can be displayed.



STAGE3 Tables

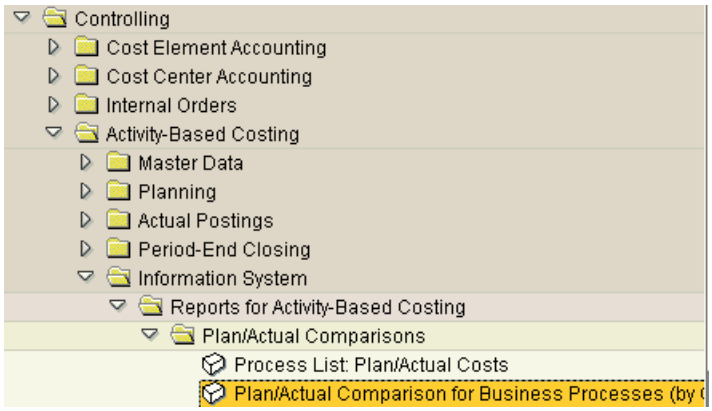
SAS Activity-Based Management

Activity type amount posted in SAP R/3 is imported in the resource module. Activity type is o of the 3 dimension used in the resource module (cost center, cost element group, activity type).

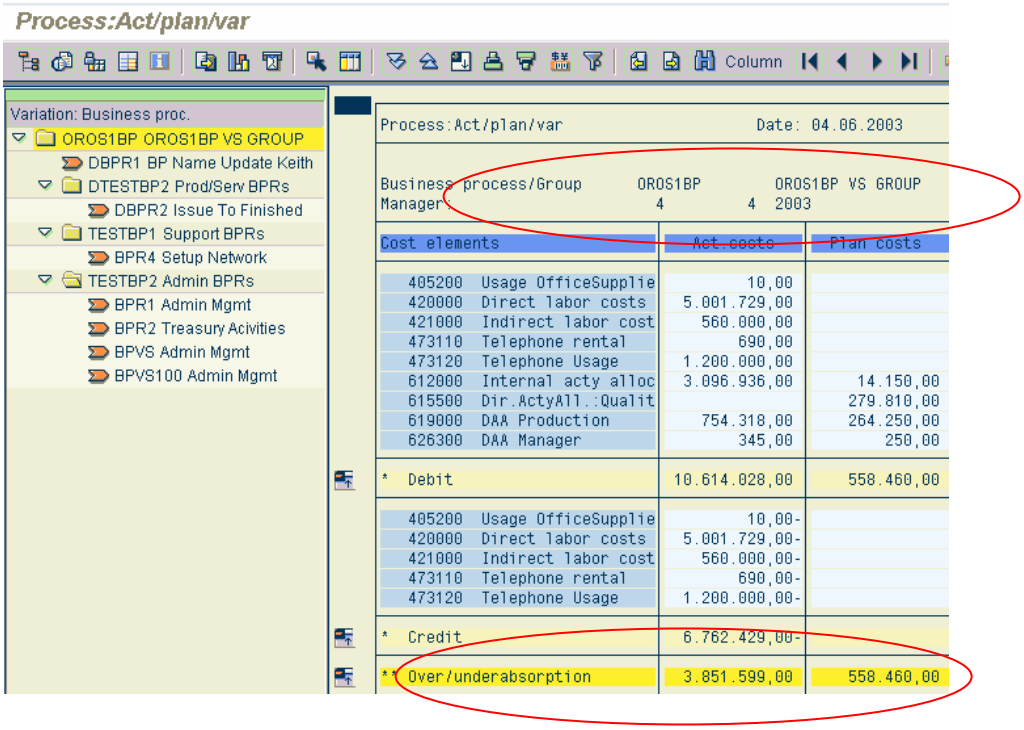


8. SAP R/3 Business Process Actual / Plan Cost

Cost (Actual / Plan) for Business Process can be found in a standard report in Controlling\Activity-Based Costing\Information System\Reports for Activity-Based Costing\Plan/Actual Comparisons\Plan\Actual Comparison for Business Process (by cost element).

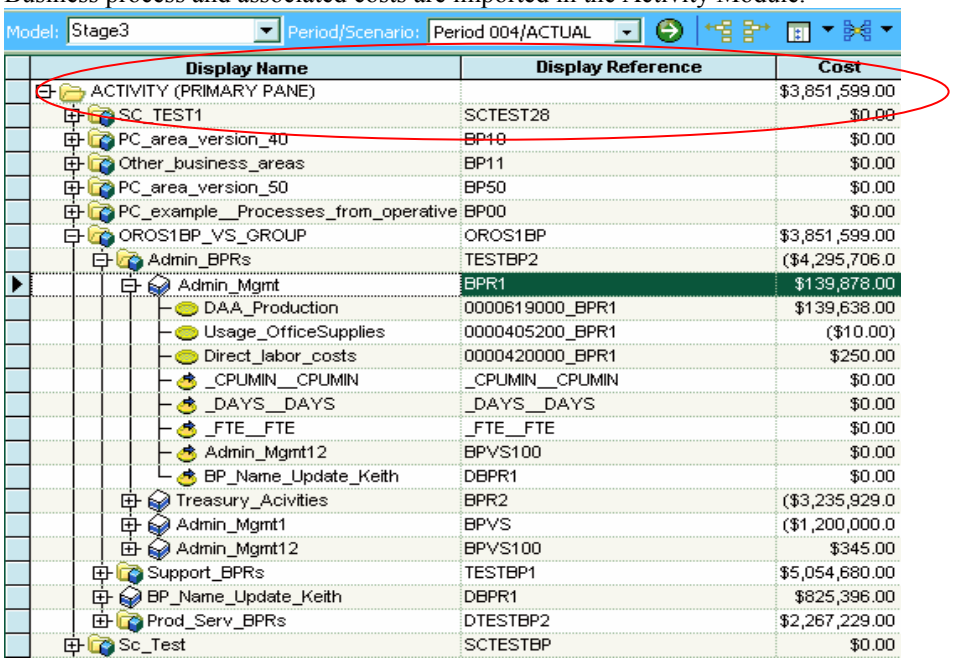


Business Process costs are displayed for period 4 year 2003. The hierarchy can be seen on the right hand of the screen.



SAS Activity-Based Management / Activity Module

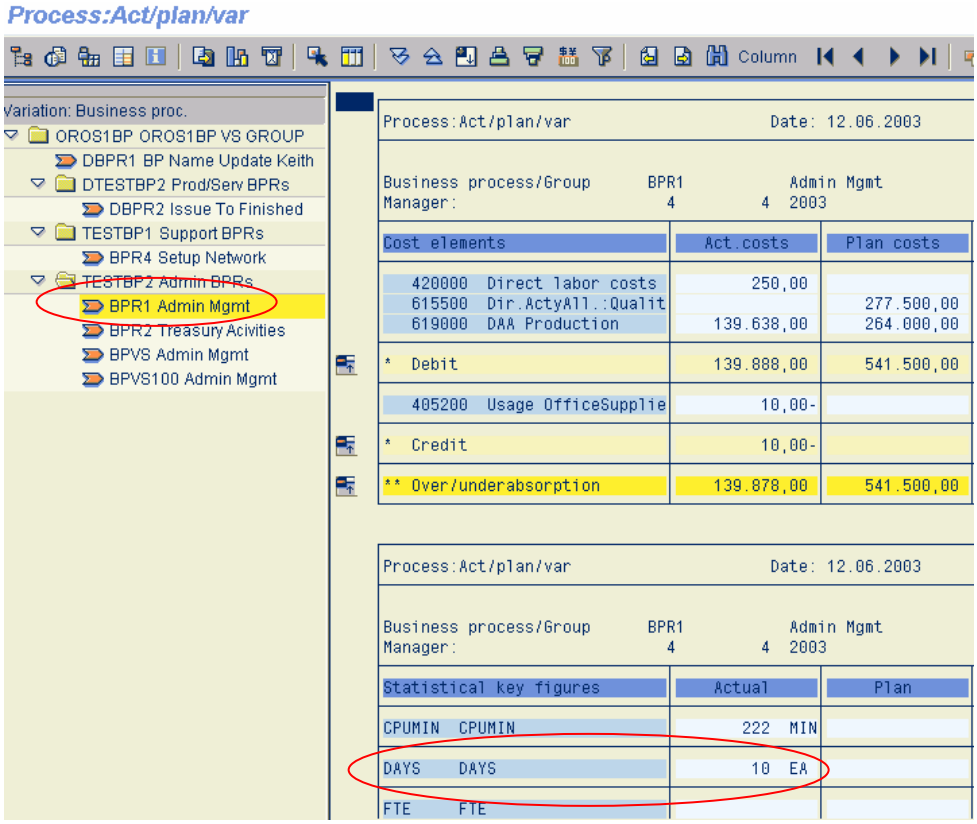
Business process and associated costs are imported in the Activity Module.



Display Name	Display Reference	Cost
ACTIVITY (PRIMARY PANE)		$3,851,599.00
SC_TEST1	SCTEST28	$0.00
PC_area_version_40	BP40	$0.00
Other_business_areas	BP11	$0.00
PC_area_version_50	BP50	$0.00
PC_example__Processes_from_operative	BP00	$0.00
OROS1BP_VS_GROUP	OROS1BP	$3,851,599.00
Admin_BPRs	TESTBP2	($4,295,706.0
Admin_Mgmt	BPR1	$139,878.00
DAA_Production	0000619000_BPR1	$139,638.00
Usage_OfficeSupplies	0000405200_BPR1	($10.00)
Direct_labor_costs	0000420000_BPR1	$250.00
_CPUMIN__CPUMIN	_CPUMIN__CPUMIN	$0.00
_DAYS__DAYS	_DAYS__DAYS	$0.00
_FTE__FTE	_FTE__FTE	$0.00
Admin_Mgmt12	BPVS100	$0.00
BP_Name_Update_Keith	DBPR1	$0.00
Treasury_Acivities	BPR2	($3,235,929.0
Admin_Mgmt1	BPVS	($1,200,000.0
Admin_Mgmt12	BPVS100	$345.00
Support_BPRs	TESTBP1	$5,054,680.00
BP_Name_Update_Keith	DBPR1	$825,396.00
Prod_Serv_BPRs	DTESTBP2	$2,267,229.00
Sc_Test	SCTESTBP	$0.00

9. SAP R/3 Business Process – Statistical Key Figure

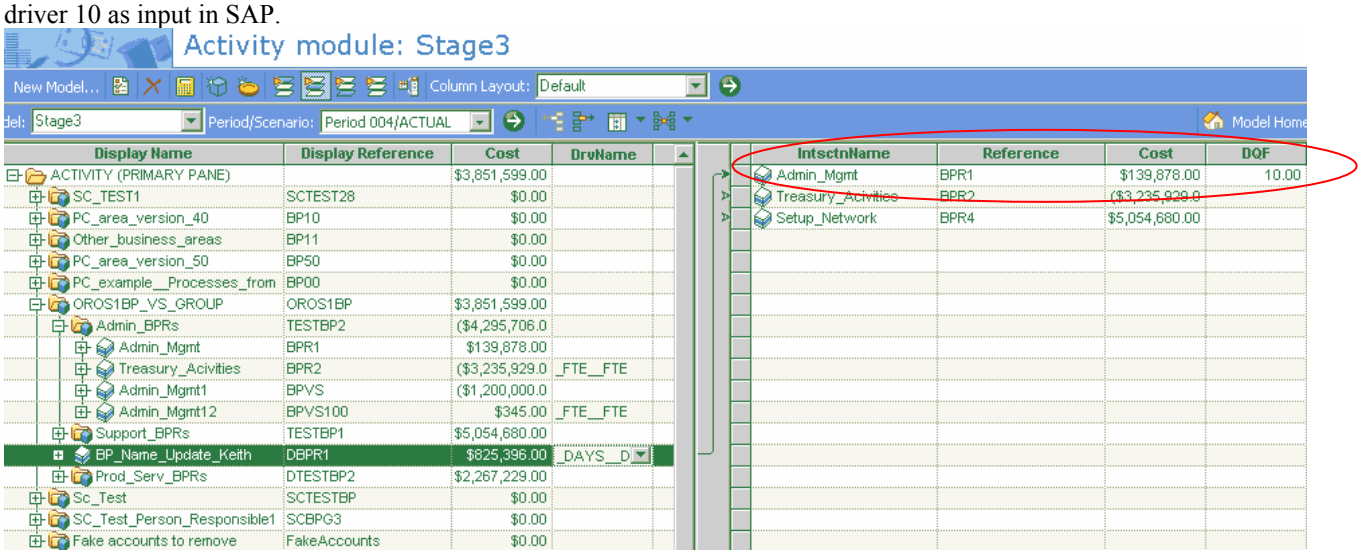
SKF are used to get one activity done. SKF can be number of minutes of CPU (CPUMIN), number of days (DAYS), number of full time employees (FTE)…



STAGE3 Tables

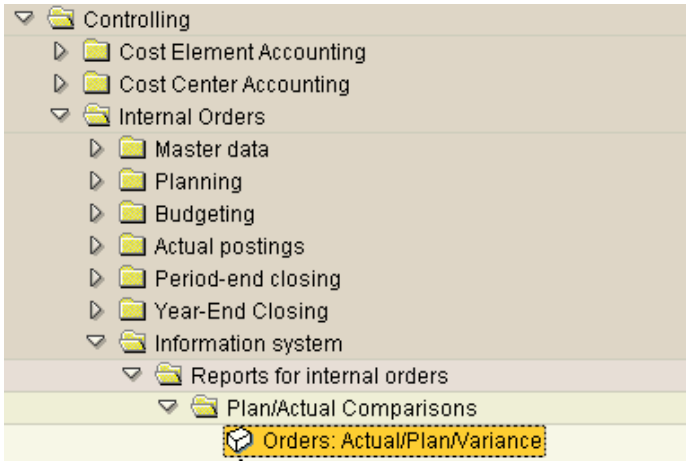
SAS Activity-Based Management – Driver Quantity for Activity

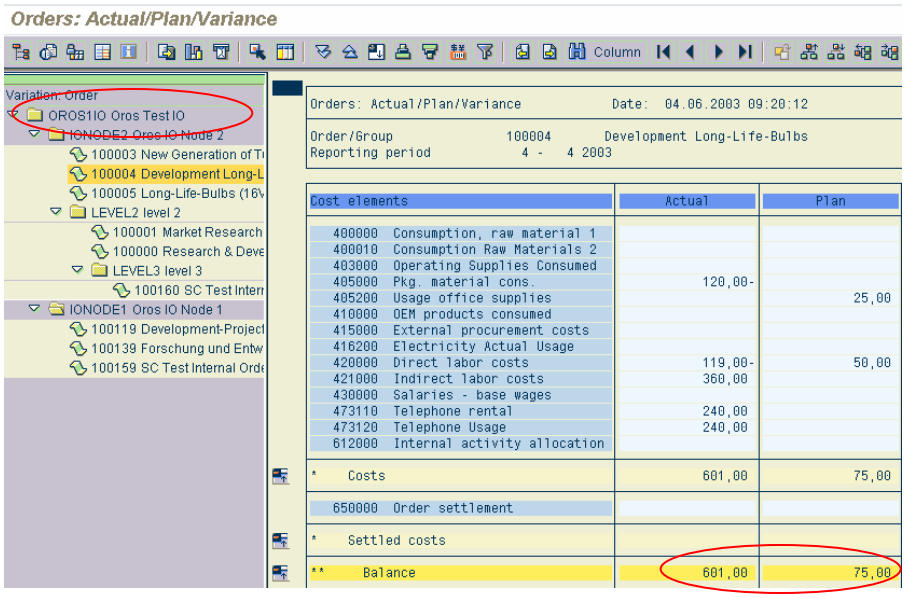
Creating an assignment using the SKF (driver) DAYS, and destination Activity BPR1 should show quantity driver 10 as input in SAP.



10. SAP R/3 Internal Order Cost

Costs for Internal Orders can be displayed using one SAP standard report on Internal Order.



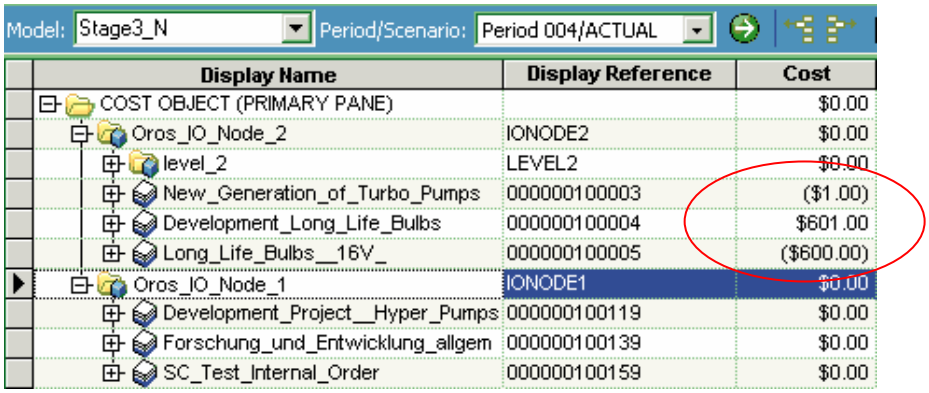


STAGE3 Tables

Account Table

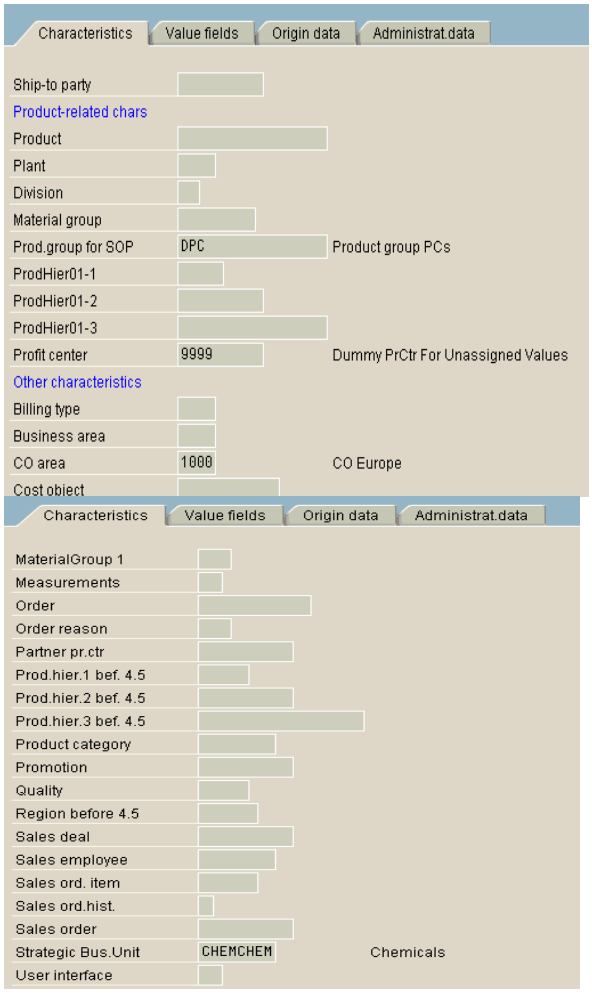
SAS Activity-Based Management Cost Object Module

Costs and Internal Orders are imported in the Cost Object Module.

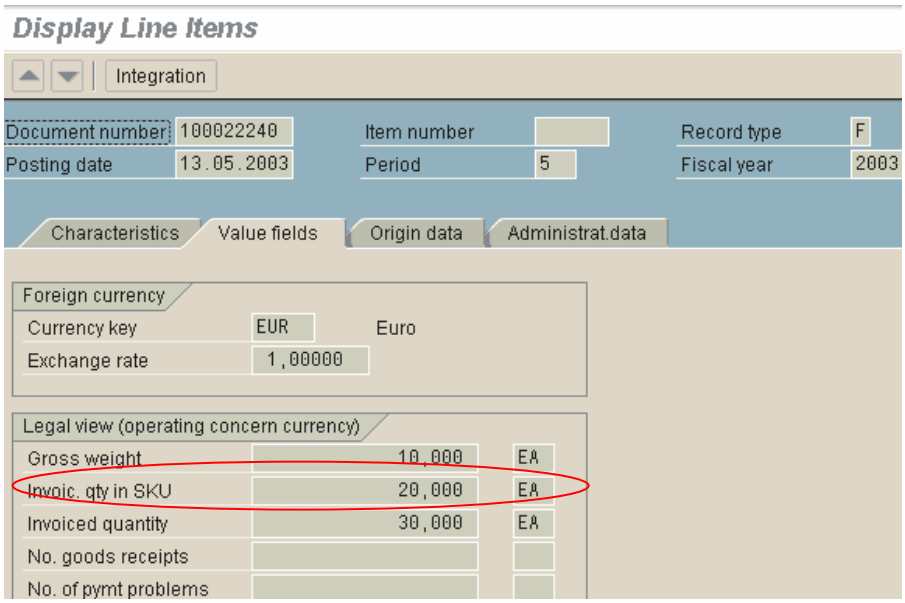


11. SAP R/3 – COPA Value Field Quantities

Value Field quantities are available in the COPA module. Value Field quantities are attached to characteristics intersection. Intersection between characteristics Prod Group for SOP / Strategic Bus Unit / Controlling Area (DPC / CHEMCHEM /1000) has been created in SAP R/3.



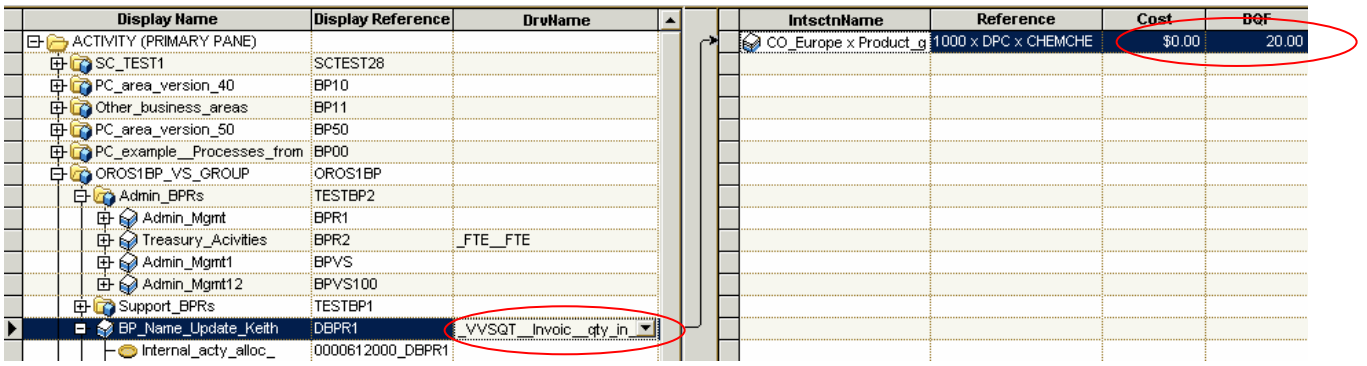
Value Field quantities posted for the above intersection can be displayed when selecting Value Fields tab.



STAGE3 Tables

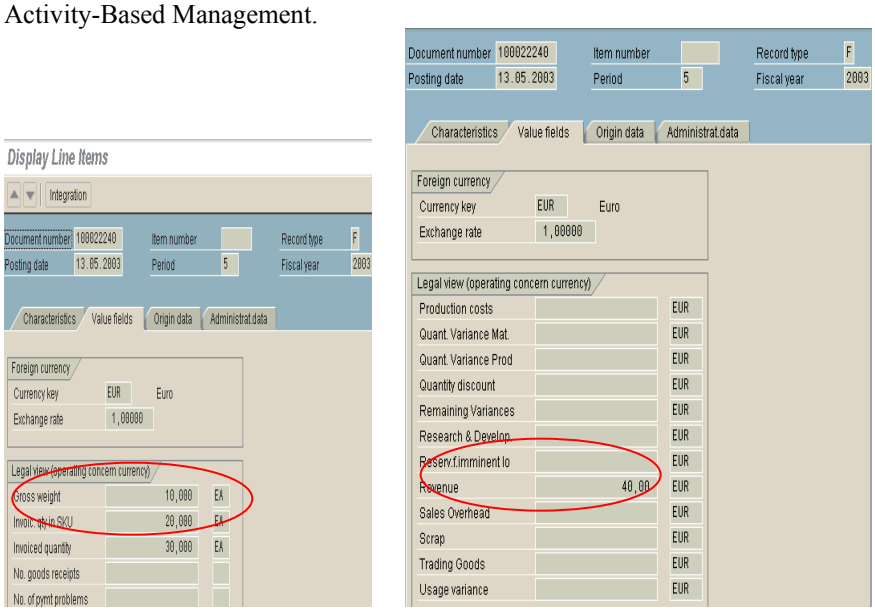
SAS Activity-Based Management – Cost Object Module – Value Field Quantities

Value Field Quantities appear in creating assignment using COPA intersection as destination. Value Field quantity posted in SAP R/3 on Invoice-Qty-In-SKU appears when using the value field in the assignment.



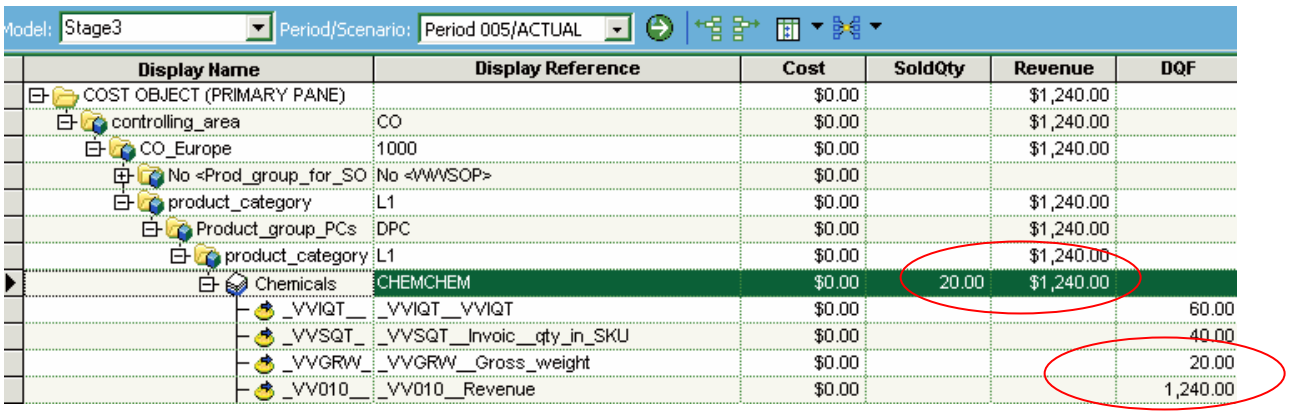
12. SAP R/3 COPA Value Field Quantities for Sales Quantities and Revenue

Value fields for sales are quantities-based value fields, and revenue value fields are amount-based value field. If several values are posted for the same period, the total for the period will be shown in SAS Activity-Based Management.



SAS Activity-Based Management Cost Object Module – Value Field Quantities for Sales and Revenue

Revenue and sales quantities posted in SAP R/3 are displayed in SAS Activity-Based Management in the cost object module.



Display Name	Display Reference	Cost	SoldQty	Revenue	DQF
COST OBJECT (PRIMARY PANE)		$0.00		$1,240.00	
controlling_area	CO	$0.00		$1,240.00	
CO_Europe	1000	$0.00		$1,240.00	
No <Prod_group_for_SO	No <VWSOP>	$0.00			
product_category	L1	$0.00		$1,240.00	
Product_group_PCs	DPC	$0.00		$1,240.00	
product_category	L1	$0.00		$1,240.00	
Chemicals	CHEMCHEM	$0.00	20.00	$1,240.00	
_VVIQT__	_VVIQT__VVIQT	$0.00			60.00
VVSQT	_VVSQT__Invoic__qty_in_SKU	$0.00			40.00
VVGRW	_VVGRW__Gross_weight	$0.00			20.00
_VV010__	_VV010__Revenue	$0.00			1,240.00

Overview Options in the ABMTransform.txt File

In a SAS Activity-Based Management Extract, the ABM Transform Wizard process creates the `ABMTransform.txt` file with the default options. Further customization can be done to the `ABMTransform.txt` file to add additional Data Transformation options.

Transform Parameter File Description

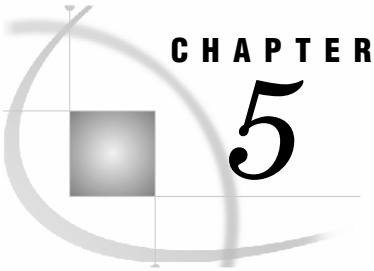
Standard Parameters (Generated by the Transformation Wizard)

Name	Description
`Libsource`	SAS Source library (should point to the libdest of Extraction param file)
`LibDest`	SAS Target Library where you want to place the SAS Stage3 tables
`LibPath`	Physical path of the target SAS Library
`DBPATH`	Physical path and file name of the target access (`.MDB`) file
`CostCenterGroup`	Cost Center Group ID to transform
`BusinessProcessGroup`	Business process Group ID to transform
`InternalOrderGroup`	Internal Order Group ID to transform
`ActTypesGroup`	Activity Type group ID to transform
`CostElementGroup`	Cost Element Group ID to transform
`CreateResourceModule`	Set to 1 if the resource module has to be filled in SAS Activity-Based Management
`CreateActivityModule`	Set to 1 if the activity module has to be filled in SAS Activity-Based Management
`CreateCostObjectModule`	Set to 1 if the Cost Object module has to be filled in SAS Activity-Based Management
`ImportDriver`	Set to 1 if Driver has to be transformed
`UseCOPAforCostObjectModule`	Set to 1 if the cost object module has to be filled with characteristics (multidim) or set to 0 if the cost object module of SAS Activity-Based Management has to be filled with Internal Order
`IncludeActivityTypeforResourceModule`	Set to 1 if the resource module has the include Activity Type as third dimension
`VFRecordType`	Value Field Record type to transform
`ValueFieldForSalesQty`	Value Field ID to use for Sales Quantities
`ValueFieldForRevenue`	Value Field ID to use for Revenue
`VFRecordTypeForSalesQty`	Record Type for Sales Quantities
`VFRecordTypeForRevenue`	Record Type for Revenue
`TransformSalesQty`	Set to 1 if Sales quantities has to be transformed
`TransformRevenue`	Set to 1 if Revenue has to be transformed

`CHARSELECTION:`
`CHARCODE1:XXX`
`CHARCODE2:XXX`
`CHARCODE3:XXX`
`...`
 	
`ENDCHARSELECTION:`
	List of characteristic you selected to transform

Advanced Parameters (Not Generated by the Extraction Wizard)

Name	Description
MAXDIM	Specify the maximum number of dimensions you want to manage. By default, the tool computes this number by counting dimensions between the CHARSELECTION and ENDCHARSELECTION tag. You can force it to a specific value. This number will determine the number of DimRef / DimMemberRef columns in Stage3 tables. If you set this param to 2 (and ForceMaxDim to 1), Stage3 tables will have only DimRef1, DimRef2, DimMemberRef1, and DimMemberRef2 columns. This parameter can be useful if too many dimensions are selected that can cause a failure in the importation in SAS Activity-Based Management. If you select 99 dimensions the tool will generate DimRef1 to DimRef99 columns in Stage3 tables in order to manage an intersection between all dimensions. In practice this kind of intersection will not occur. For example, if we only have 15 different dimensions involved in an intersection, we can set MAXDIM=15 and ForceMaxDim=1.Only DimRef1 to DimRef15 columns will be created in Stage 3 tables.
ForceMaxDIM	Set to 1 to force abmadapter to take care of the MAXDIM parameter.
FullLog	Set to 1 to activate the full log.



CHAPTER 5 SAP R/3 Extraction Table Details

Tables to be extracted:

Table name	Contents
JpActivity_Type	Dimension Defined
JpActivity_Type_Association	Dimension Hierarchy (Parent/Child) Defined (ID#)
JpActivity_Type_Assoc_Type	Dimension Members Defined (Names & ID#)
JpActivity_Type_Attributes	Attributes Defined
JpActivity_Type_Attr_Association	Attribute Numeric / Text Values
JpBusiness_Process	Dimension Defined
JpBusiness_Process_Association	Dimension Hierarchy (Parent/Child) Defined (ID#)
JpBusiness_Process_Assoc_Type	Dimension Members Defined (Names & ID#)
JpBusiness_Process_Attributes	Attributes Defined
JpBus_area	Business Area in SAP Defined
JpBus_Process_Attr_Association	Attribute Numeric / Text Values
JpCompany	Company Name in SAP Defined
JpCont_Area	Controlling Area Name in SAP Defined
JpCost	Cost Elements Defined with Cost Values
JpCost_Center	Dimension Defined – Multiple Dimensions
JpCost_Center_Association	Dimension Hierarchy (Parent/Child) Defined (ID#)
JpCost_Center_Assoc_Type	Dimension Members Defined (Names & ID#)
JpCost_Center_Attributes	Attributes Defined
JpCost_Center_attr_Association	Attribute Numeric / Text Values
JpCost_Element	Dimension Defined
JpCost_Element_Association	Dimension Hierarchy (Parent/Child) Defined (ID#)
JpCost_Element_Assoc_Type	Dimension Members Defined (Names & ID#)
JpCost_Element_Attributes	Attributes Defined
JpCost_Element_attr_Association	Attribute Numeric / Text Values
JpCurrency	Currency Defined
JpDimension	Dimension Defined
JpDimension_Member	Dimension Members Defined (Names & ID#)
JpDimension_Member_Association	Dimension Hierarchy (Parent/Child) Defined (ID#)
JpDimension_Member_Assoc_Type	Dimension Members Defined (Names & ID#)
JpDimension_Member_Attributes	Attributes Defined
JpDim_Intersection	Define ID for a Intersection – Single Dimension
JpDim_Member_Attr_Association	Attribute Numeric / Text Values
JpDriver	Drivers Defined Cd# and Name
JpDriver_Association	Dimension Hierarchy (Parent/Child) Defined (ID#)
JpDriver_Assoc_Type	Dimension Members Defined (Names & ID#)
JpDriver_Attributes	Attributes Defined
JpDriver_Attr_Association	Attribute Numeric / Text Values
JpDriver_Quantity	Destination Defined and Statistical Key Figure – CO-ABC Module
JpFunc_area	Dimension Defined
JpInternal_Order	Intersection Account Defined
JpInternal_Order_Association	Internal Order Hierarchy Defined

Table name	Contents
JpInternal_Order_Assoc_Type	Internal Order Name Defined
JpInternal_Order_attributes	Attributes Defined
JpIo_Attr_Association	Attribute Numeric / Text Values
JpPeriod	Period Defined
JpProfit_Center	Dimension Defined
JpProfit_Center_Association	Dimension Hierarchy Defined
JpProfit_Center_Assoc_Type	Dimension members Defined (Names & ID#)
JpProfit_Center_Attributes	Attributes Defined
JpProfit_Center_Attr_Association	Attribute Numeric / Text Values
JpValueField_Quantity	Driver Quantity – For Value Fields from the CO-PA Module

Extraction – Table Detail

JpActivity_Type

FieldName	Sample Data
ACTIVITY_TYPE_ID	1000
VALID_FROM_DT	12419
VALID_TO_DT	2936547
ACTIVITY_TYPE_NM	Internal Transport
CONT_AREA_CD	1000
TYPE	
UNIT_CD	10
ACTIVITY_TYPE_CAT_CD	1
COST_CENTER_CAT_CD	
PRICE_INDICATOR_CD	
ACTUAL_PRICE_INDICATOR_CD	
ALLOC_COST_ELEMENT_ID	614000

JpActivity_Type_Association

FieldName	Sample Value
ACTIVITY_TYPE_ASSOC_TYPE_CD	1
ACTIVITY_TYPE_ASSOC_TYPE_DESC	ASSOC_TYPE_1
VALID_TO_DT	
LANGUAGE_CD	*

JpActivity_Type_Assoc_Type

Fieldname	Sample Value
ACTIVITY_TYPE_ID	A1
PARENT_ACTIVITY_TYPE_ID	
ACTIVITY_TYPE_ASSOC_TYPE_CD	1
VALID_FROM_DT	
VALID_TO_DT	

JpActivity_Type_Attributes

Fieldname	Sample Value
ACTIVITY_TYPE_ID	
AT_ATTRIBUTE_ID	
AT_ATTRIBUTE_VALUE	
FROM_TABLE	

JpActivity_Type_Attr_Association

FieldName	Sample Value
AT_ATTRIBUTE_ID	
AT_ATTRIBUTE_NM	
TYPE	

JpBusiness_Process

Fieldname	Sample Value
BUSINESS_PROCESS_ID	1
VALID_FROM_DT	14610
VALID_TO_DT	2936547
BUSINESS_PROCESS_NM	Activity1
CONT_AREA_CD	1000
BUS_AREA_CD	1000
COMPANY_CD	1000
CURRENCY_CD	EUR
ALLOCATION_CAT_CD	
ACTUAL_ALLOCATION_CAT_CD	
PRICE_INDICATOR_CD	
ACTUAL_PRICE_INDICATOR_CD	
ALLOC_COST_ELEMENT_ID	
TYPE	

JpBusiness_Process_Association

Fieldname	Sample Value
BUSINESS_PROCESS_ID	4
PARENT_BUSINESS_PROCESS_ID	
BUSINESS_PROCESS_ASSOC_TYPE_CD	1
VALID_FROM_DT	
VALID_TO_DT	

JpBusiness_Process_Assoc_Type

Fieldname	Sample Value
BUSINESS_PROCESS_ASSOC_TYPE_CD	1
BUSINESS_PROCESS_ASSOC_TYPE_DESC	ASSOC_TYPE_1
VALID_TO_DT	
LANGUAGE_CD	*

JpBusiness_Process_Attributes

Fieldname	Sample Value
BP_ATTRIBUTE_ID	1
BP_ATTRIBUTE_NM	PERSON_RESPONSIBLE
TYPE	C

JpBus_area

Fieldname	Sample Value
BUS_AREA_CD	1
BUS_AREA_NM	Business area 0001

JpBus_Process_Attri_Association

Fieldname	Sample Value
BUSINESS_PROCESS_ID	1
BP_ATTRIBUTE_ID	1
BP_ATTRIBUTE_VALUE	Smith
FROM_TABLE	

JpCompany

Fieldname	Sample Value
COMPANY_CD	1
COMPANY_NM	SAP A.G.

JpCont_Area

Fieldname	Sample Value
CONT_AREA_CD	1
CONT_AREA_NM	Kostenrechnungskreis 0001
OPERATING_CONCERN	S001
CHART_OF_ACCOUNT	INT

JpCost

Fieldname	Sample Value
COST_ID	1
FISCAL_YEAR	2003
PERIOD_CD	1
VALUE_TYPE	BUDGET
COST_ELEMENT_ID	405200
OBJECT_ID	1000
AT_ID	
OBJECT_TYPE	CC
CONT_AREA_CD	1000
COST_VALUE	175
VERSION	0

JpCost_Center

Fieldname	Sample Value
COST_CENTER_ID	600
VALID_FROM_DT	14610
VALID_TO_DT	2936547
COST_CENTER_NM	Plant/Branc2
CONT_AREA_CD	1000
BUS_AREA_CD	1000
COMPANY_CD	1000
CURRENCY_CD	EUR
FUNC_AREA_CD	
PROFIT_CENTER_ID	1000
TYPE	

JpCost_Center_Association

Fieldname	Sample Value
COST_CENTER_ID	BUS_AREAS
PARENT_COST_CENTER_ID	

Fieldname	Sample Value
COST_CENTER_ASSOC_TYPE_CD	1
VALID_FROM_DT	
VALID_TO_DT	

JpCost_Center_Assoc_Type

Fieldname	Sample Value
COST_CENTER_ASSOC_TYPE_CD	1
COST_CENTER_ASSOC_TYPE_DESC	ASSOC_TYPE_1
VALID_TO_DT	
LANGUAGE_CD	*

JpCost_Center_Attributes

Fieldname	Sample value
CC_ATTRIBUTE_ID	1
CC_ATTRIBUTE_NM	PERSON_RESPONSIBLE
TYPE	C

JpCost_Center_attr_Association

Fieldname	Sample Value
COST_CENTER_ID	600
CC_ATTRIBUTE_ID	1
CC_ATTRIBUTE_VALUE	ME
FROM_TABLE	

JpCost_Element

Fieldname	Sample Value
COST_ELEMENT_ID	AD_CO_ALL
VALID_FROM_DT	
VALID_TO_DT	
COST_ELEMENT_NM	A&D Controlling Group
CONT_AREA_CD	
TYPE	B
UNIT_CD	
COST_ELEMENT_CAT_CD	
DEF_COST_CENTER_ID	
DEF_INTERNAL_ORDER_ID	

JpCost_Element_Association

Fieldname	Sample Value
COST_ELEMENT_ID	AD_CO_ALL
PARENT_COST_ELEMENT_ID	
COST_ELEMENT_ASSOC_TYPE_CD	1
VALID_FROM_DT	
VALID_TO_DT	

JpCost_Element_Assoc_Type

Fieldname	Sample Value
COST_ELEMENT_ASSOC_TYPE_CD	1
COST_ELEMENT_ASSOC_TYPE_DESC	ASSOC_TYPE_1
VALID_TO_DT	
LANGUAGE_CD	*

JpCost_Element_Attributes

Fieldname	Sample Value
CE_ATTRIBUTE_ID	
CE_ATTRIBUTE_NM	
TYPE	

JpCost_Element_attr_Association

Fieldname	Sample Value
COST_ELEMENT_ID	
CE_ATTRIBUTE_ID	
CE_ATTRIBUTE_VALUE	
FROM_TABLE	

JpCurrency

Fieldname	Sample Value
CURRENCY_CD	ADH
CURRENCY_NM	Dirham

JpDimension

Fieldname	Sample Value
DIMENSION_ID	KNDNR
DIMENSION_NM	Customer

JpDimension_Member

Fieldname	Sample Value
DIMENSION_MEMBER_ID	CUSTOMER
DIMENSION_ID	KNDNR
VALID_FROM_DT	
VALID_TO_DT	
DIMENSION_MEMBER_NM	Customer
CONT_AREA_CD	
TYPE	B

JpDimension_Member_Association

Fieldname	Sample Data
DIMENSION_MEMBER_ID	
DIMENSION_ID	KNDNR
PARENT_DIMENSION_MEMBER_ID	
DIMENSION_MEMBER_ASSOC_TYPE_CD	1
VALID_FROM_DT	
VALID_TO_DT	

JpDimension_Member_Assoc_Type

Fieldname	Sample Value
DIMENSION_MEMBER_ASSOC_TYPE_CD	1
DIMENSION_MEMBER_ASSOC_TYPE_DESC	ASSOC_TYPE_1
VALID_TO_DT	
LANGUAGE_CD	*

JpDimension_Member_Attributes

Fieldname	Sample value
DIM_MEMBER_ATTRIBUTE_ID	
DIM_MEMBER_ATTRIBUTE_NM	
TYPE	

JpDim_Intersection

Fieldname	Sample Value
DIM_INTERSECTION_ID	1
DIMENSION_ID	KOKRS
DIMENSION_MEMBER_ID	1000

JpDim_Member_Attr_Association

Fieldname	Sample Value
DIMENSION_MEMBER_ID	
DIM_MEMBER_ATTRIBUTE_ID	
DIM_MEMBER_ATTRIBUTE_VALUE	
FROM_TABLE	

JpDriver

Fieldname	Sample Value
DRIVER_CD	1301
VALID_FROM_DT	
VALID_TO_DT	
DRIVER_NM	Earned value non-aggregated
CONT_AREA_CD	1000
UNIT_CD	%
TYPE	

JpDriver_Association

Fieldname	Sample Value
DRIVER_CD	SKFROOT
PARENT_DRIVER_CD	
DRIVER_ASSOC_TYPE_CD	1
VALID_FROM_DT	
VALID_TO_DT	

JpDriver_Assoc_Type

Fieldname	Sample Value
DRIVER_ASSOC_TYPE_CD	
DRIVER_ASSOC_TYPE_DESC	
VALID_TO_DT	
LANGUAGE_CD	

JpDriver_Attributes

Fieldname	Sample Value
DRIVER_ATTRIBUTE_ID	1
DRIVER_ATTRIBUTE_NM	IS_AMOUNT
TYPE	C

JpDriver_Attr_Association

Fieldname	Sample Value
DRIVER_CD	VVOQT
DRIVER_ATTRIBUTE_ID	1
DRIVER_ATTRIBUTE_VALUE	
FROM_TABLE	

JpDriver_Quantity

Fieldname	Sample Value
DRIVER_QUANTITY_ID	1
FISCAL_YEAR	2003
PERIOD_CD	1
QUANTITY_TYPE	ACTUAL
DRIVER_CD	8006
OBJECT_ID	1000
OBJECT_TYPE	CC
CONT_AREA_CD	1000
QUANTITY_VALUE	0
VERSION	0

JpFunc_area

Fieldname	Sample Value
FUNC_AREA_CD	1
FUNC_AREA_NM	Functional area 0001

Jpinternal_Order

Fieldname	Sample Value	
INTERNAL_ORDER_ID		100000
VALID_FROM_DT		
VALID_TO_DT		
INTERNAL_ORDER_NM	Research & Development 'Laser'	OLD
CONT_AREA_CD		1000
BUS_AREA_CD		2000
COMPANY_CD		1000
CURRENCY_CD	EUR	
PROFIT_CENTER_ID		
TYPE		
RESP_COST_CENTER_ID		4500

JpInternal_Order_Association

Fieldname	Sample Value
INTERNAL_ORDER_ID	100119
PARENT_INTERNAL_ORDER_ID	
INTERNAL_ORDER_ASSOC_TYPE_CD	1
VALID_FROM_DT	
VALID_TO_DT	

JpInternal_Order_Assoc_Type

Fieldname	Sample Value
INTERNAL_ORDER_ASSOC_TYPE_CD	1
INTERNAL_ORDER_ASSOC_TYPE_DESC	ASSOC_TYPE_1
VALID_TO_DT	
LANGUAGE_CD	*

JpInternal_Order_attributes

Fieldname	Sample Value
IO_ATTRIBUTE_ID	1
IO_ATTRIBUTE_NM	PERSON_RESPONSIBLE
TYPE	C

JpIo_Attr_Association

Fieldname	Sample Value
INTERNAL_ORDER_ID	$$-WF01
IO_ATTRIBUTE_ID	1
IO_ATTRIBUTE_VALUE	
FROM_TABLE	

JpPeriod

Fieldname	Sample Value
PERIOD_CD	1
PERIOD_NM	Period 001
FROM_DT	15706
TO_DT	15736

JpProfit_Center

Fieldname	Sample Value
PROFIT_CENTER_ID	EU-ADMIN
VALID_FROM_DT	
VALID_TO_DT	
PROFIT_CENTER_NM	Admin & Services Europe
TYPE	S

JpProfit_Center_Association

Fieldname	Sample Value
PROFIT_CENTER_ID	EU-ADMIN
PARENT_PROFIT_CENTER_ID	
PROFIT_CENTER_ASSOC_TYPE_CD	1
VALID_FROM_DT	
VALID_TO_DT	

JpProfit_Center_Assoc_Type

Fieldname	Sample Value
PROFIT_CENTER_ASSOC_TYPE_CD	1
PROFIT_CENTER_ASSOC_TYPE_DESC	ASSOC_TYPE_1
VALID_TO_DT	
LANGUAGE_CD	*

JpProfit_Center_Attributes

Fieldname	Sample Value
PFC_ATTRIBUTE_ID	
PFC_ATTRIBUTE_NM	
TYPE	

JpProfit_Center_Attr_Association

Fieldname	Sample Value
PROFIT_CENTER_ID	
PFC_ATTRIBUTE_ID	
PFC_ATTRIBUTE_VALUE	
FROM_TABLE	

JpValueField_Quantity

Fieldname	Sample Value
VALUEFIELD_QUANTITY_ID	1
FISCAL_YEAR	2003
PERIOD_CD	2
QUANTITY_TYPE	ACTUAL
DRIVER_CD	VVOQT
DIM_INTERSECTION_ID	1
CONT_AREA_CD	1000
QUANTITY_VALUE	12
VERSION	
MEASURE	
RECORD_TYPE	1

SAS Activity-Based Management – Staging Tables

Transformation Result Table to Load to the Model:

Table Name	Table Use
Account	All Modules – Defines Intersection Accounts (Dim1 x Dim2 x ...x DimN)
Assignment	Define all source and Destination Assignment Paths, and Loads all Unique Driver Quantities
AssignmentNonUnique	Defines Destinations and Loads Shared Driver Quantities
CurrencyRate	Defines the Currency Rate for the Model Versus the Database Base Currency
Dimension	All model Dimensions Defined
DimensionAttributeAssociation	Attributes Attached to Dimensional Intersections
DimensionLevel	Dimensions Levels Defined and named
DimensionMember	Dimensions Hierarchy Defined (Parent / Child)
DimensionOrder	Dimension Order to Define each Module
Driver	Driver Defined : Name and Type
EnteredCostElement	Entered Cost Element Defined with Cost
ExternalUnit	External Units Defined with Cost
Model	Model Name Defined
Period	Periods Defined – Hierarchy and begin / End Dates
PeriodLevel	Period Dimension Level defined (Year, Qtr, Month)
Scenario	Scenarios Defined – Hierarchy
ScenarioLevel	Scenario Dimension Level Defined

`ValueAttribute`	Value Attribute Defined (Name # of Ftes)
`ValueAttributeAssociation`	Value Attribute Attachment to Intersection and Periodic Value (3)

For a complete data schema for the tables to load into SAS Activity-Based Management, see the Online Help.

Glossary

This glossary defines terms that are used in this documentation and terms that you might encounter during installation of the SAS Activity-Based Management Adapter for R/3. The terms are listed in alphabetic order.

- ## Account

  R/3 CO. A structure that records value transactions within an accounting unit (in this case a company code) as regards an element from a value grouping. The account can refer to an object to which the value transactions are assigned. The account contains transaction figures, which contain the changes to the values in a summarized form per company code.
  SAS Activity-Based Management. A structure that holds the cost elements and costs related to it. Accounts are used to allocate costs. Compare source account and destination account. Types of accounts in SAS Activity-Based Management are resource accounts in the Resource Module, activity accounts in the Activity Module, cost object accounts in the Cost Object Module, and dimension accounts in the Cost Object Module.
  SAS Activity-Based Management Adapter for SAP R/3. Downloads cost element groups, activity types, business processes, characteristic values, and internal orders as different types of accounts.

- ## Activity

  R/3 CO. A business process that reflects the flow of activities throughout an organization.
  SAS Activity-Based Management. Work performed within an organization. An example of an activity is entering the details of a customer order at a computer terminal. In SAS Activity-Based Management, activities are represented by accounts in the Activity Module. How you define activities affects later steps in the model. Activities defined in too much detail may complicate the overall analysis without adding useful information and require more maintenance in the future.
  Examples:

  - Developing a product
  - Drawing up a customer quotation
  - Purchasing a material
  - Processing an order.

- ## Activity account

  R/3 CO. A business process that reflects the flow of activities throughout an organization.
  SAS Activity-Based Management. Activities are represented by accounts in the Activity Module.
  SAS Activity-Based Management Adapter for SAP R/3. Downloads activity types or business processes as activity accounts.

- ## Activity-based costing (ABC)

  A methodology that uses activity information to measure the cost and performance of resources, activities, and cost objects. Resources are typically assigned to activities, then activities are assigned to cost objects based on their use.

- ## Activity-based management (ABM)
  A discipline that focuses on managing activities as a method for improving the value received by the customer and the profit achieved by providing this value. This discipline includes cost driver analysis, activity analysis, and performance measurement. Activity-based management draws on activity-based costing as its major source of information.

- ## Activity driver
  SAS Activity-Based Management. An activity driver is the basis used to assign costs from activities to activities and/or to cost objects.
  SAS Activity-Based Management Adapter for SAP R/3. Downloads statistical key figures and value fields as drivers. If assigning activity costs (business process costs) to other activities (business processes) you use activity drivers (statistical key figures). On the other hand, if you assign costs to dimension accounts (characteristic values) you need to use an activity driver but it must be a "value field" in R/3.

- ## Activity Module
  SAS Activity-Based Management. A window that organizes information about centers, activities, and their related costs. These activities can be grouped into centers, and each center can contain any number of other centers or activities. The Activity Module contains the activities or work performed within an organization. Each activity takes the departmental expenses and groups them based upon what functions resources are performing. Assign all resources performing the same activity to the activity regardless of the departmental boundaries, creating a total expense for the company to perform a specific activity.
  SAS Activity-Based Management Adapter for SAP R/3. Interfaces objects in the Activity Module with objects in CO-ABC.

- ## Activity type
  R/3 CO-CCA. Activity types are used primarily to control the quantities on the cost centers. This enables you to measure the operating rate or the rate of capacity utilization of a cost center. Each cost center usually contributes a portion of the total corporate activity (cost centers created exclusively for allocation purposes are an exception). This portion can be quantified into one or more activity types, depending on the cost center category. Activity types are used to determine the quantity-based output of a cost center.
  For example, some typical activity types used in routings for production are machine hours or labor hours. Activity types are also used to assign support overhead costs, for example CPUMIN from the IT Dept. or LABHR from the Maintenance Dept.
  When the activities produced by a cost center are used by other cost centers, orders, processes, and so on, this means that the resources of the sending cost center are being used by the other objects.
  SAS Activity-Based Management. Activity types correspond to either resource or activity accounts in SAS Activity-Based Management depending on your SAS Activity-Based Management Adapter for SAP R/3 selections.
  SAS Activity-Based Management Adapter for SAP R/3. Download activity types as either accounts to the Resource or Activity Modules. Attributes are used on resource or activity accounts to identify them as activity types.

- ## Activity type category

  R/3 CO-CCA. An activity type category lets you determine whether, and how, an activity type is allocated. It is an indicator that determines the method of activity quantity planning and activity allocation.
  SAS Activity-Based Management. No equivalent.
  SAS Activity-Based Management Adapter for SAP R/3. The default is merely a suggested value that you can change during activity type planning for each version and fiscal year. You can change the default value within R/3 CO planning to a different allocation activity type category or allocation category if you are planning for the first time.

- ## Activity unit

  R/3. Either a time or quantity unit (feet, percentages) used to post the consumed activity quantities. The unit is stored in the activity type master data.
  SAS Activity-Based Management. No equivalent.
  SAS Activity-Based Management Adapter for SAP R/3. Downloads the activity type's unit as part of the attribute syntax. If you create a new activity type in SAS Activity-Based Management you need to add the syntactically correct attribute to it. Part of the activity type attribute syntax is to indicate the activity unit. This is optional. If you do decide to indicate the unit then it must first exist in R/3.

- ## Allocation

  R/3 CO. Measure for the cause of costs. Allocation bases are used in the R/3 System whenever output is measured, recorded, and allocated. There are multiple methods of allocating costs in R/3—assessments, indirect activity allocation, distribution, overhead—depending on what costs you want calculated.
  SAS Activity-Based Management Adapter for SAP R/3. Only supports the following R/3 allocation methods:

  - Direct activity allocation (equivalent to assignments using unique drivers)
  - Assessments (equivalent to assignments)
  - Indirect activity allocation (equivalent to assignments)
  - Template (structured business process) (equivalent to bills of costs)

- ## Alternative group

  R/3 CO. While there must be at least one group that represents the entire business organization—described as the standard hierarchy—you can also create any number of alternative groups. You can structure these, for example, according to organizational and/or functional viewpoints. The alternative groups can contain parts of the standard hierarchy.
  SAS Activity-Based Management. Only one hierarchy per module is allowed.
  SAS Activity-Based Management Adapter for SAP R/3 The hierarchy node you select to download from one of the R/3 CO components creates the hierarchy.

- ## Assessment

  R/3 CO. Allocation of primary and secondary costs in Cost Center Accounting (CO-CCA) and in Activity-Based Costing (CO-ABC). A method of internal cost allocation by which you allocate (assign) costs from sender cost center, cost element groups, or business processes using an assessment secondary cost element. The costs are apportioned according to a tracing factor (driver) defined by the user. Allocation through assessment is useful when the composition of the costs is unimportant for the receiver.
  Assessment can be run for both plan and actual values. Note. You cannot allocate consumption quantities using assessment. To allocate activity quantities, you must use indirect activity allocation.
  SAS Activity-Based Management. The R/3 assessment allocation method is equivalent to making assignments from resource (cost element group) accounts or activity (business process) accounts to other supported account types.
  You need to specify the assessment secondary cost element attribute to the correct type of source account (cost center group resource account or business process activity account) and specify a default assessment secondary cost element using SAS Activity-Based Management Adapter for SAP R/3. Assessment cycles are not downloaded to SAS Activity-Based Management Adapter for SAP R/3. You can, however, download all the assessment secondary cost elements as attributes to use in assignments.

- ## Assignment

  SAS Activity-Based Management. (1) An apportionment, distribution, or allocation. (2) A process of assigning cost to an activity or cost object when a direct measure doesn't exist. You can only assign costs from one account to another account, not to or from a center; that is a center cannot be a source or a destination.
  You can only make assignments within a module or to the next module in the sequence, not to a previous module. For example, you can make an assignment from the Resource Module to the Activity Module. But, you cannot make an assignment from the Activity Module back to the Resource Module.

- ## Assignment path

  R/3 CO. No visual equivalent.
  SAS Activity-Based Management. Path that visually symbolizes the assignment (allocation) of costs from a source account to a destination account. Using drivers, you can build assignment paths using source and destination accounts from any of the three modules (Resource, Activity, or Cost Object). You can assign costs between accounts in the same module or between accounts in different modules.
  SAS Activity-Based Management Adapter for SAP R/3. Uses the assignment path, source and destination account, and attributes to determine the allocation cycle created in R/3 CO.

- ## Attribute

  SAS Activity-Based Management. A word or phrase added to a center, account, or entered cost element. The attribute conveys information about the item to which it is attached. SAS Activity-Based Management supports four types of attributes:

  - Text (used by SAS Activity-Based Management Adapter for SAP R/3)
  - Numeric (not used by SAS Activity-Based Management Adapter for SAP R/3)
  - Center (used by SAS Activity-Based Management Adapter for SAP R/3)
  - Calculated (not used by SAS Activity-Based Management Adapter for SAP R/3)

  You can generate reports using attributes to select only those items that share an attribute. For instance, you can use attributes to analyze activity levels, the cost of quality enhancement, suppliers, value-added versus non-value-added activities, time management, and so on.
  SAS Activity-Based Management Adapter for SAP R/3. Used to represent an R/3 object's master data that are not available in SAS Activity-Based Management. For example, when you define an activity type in R/3 you need to specify the allocation cost element it will use to allocate costs. The secondary cost element is defined in the master data of the activity type. In SAS Activity-Based Management, attaching an attribute that defines the secondary cost element to the SAS Activity-Based Management object provides required R/3 master data information. Some master data are downloaded as attributes for you automatically, some

you can define in SAS Activity-Based Management by creating the syntactically correct attributes and attaching them to appropriate objects, and some you can choose to download.

- ## Bill of costs (BOC)

  SAS Activity-Based Management. A list of internal and external units added to any account. Use a bill of costs to complete the cost structure of an account. Used in SAS Activity-Based Management to define the back flush from resources, activities or cost objects to cost elements, resources, activities, or cost objects. With bill of costs information SAS Activity-Based Management can calculate the cost of all the materials or components contributing to a product. In addition, you can show total costs in views and reports, with or without the costs in the bills of costs. You can also choose to assign source accounts with or without bills of costs' cost included.
  The bill of costs feature doesn't check or manage inventory levels of units. That is, SAS Activity-Based Management doesn't verify the number of units used during the period with the number produced and in inventory. But the unit usage report lists all of the items that use each unit and the number used during the period. You can use this report in conjunction with your inventory control system.

- ## Budget

  R/3. The budget is the approved cost structure for an action or project in a particular period. Budgeting differs from cost planning in that it is binding. While you must estimate costs as accurately as possible during the planning phase, it is in the approval phase that you prescribe your funds, in the form of a budget.
  SAS Activity-Based Management. Cost entered in a column used to contain budgeted costs.
  SAS Activity-Based Management Adapter for SAP R/3. Because the two terms differ between the two applications, budgeted costs in SAS Activity-Based Management are similar to planned costs in R/3. Typically, you should download plan costs from R/3 to the budgeted costs column in SAS Activity-Based Management. This is not a hard and fast rule, because you can decide to download plan costs as actual costs, and vice versa.

- ## Business area

  R/3 CO. An organizational unit in external accounting. It corresponds to a separate operational or responsibility area in the organization and value flows recorded in Financial Accounting can be assigned to it. When defining a business area, you enter a four-character alphanumeric key and the name of the business area. You define business areas if you wish to create a balance sheet and a profit and loss statement for internal areas in addition to company codes.
  If you want to create business area balance sheets for internal reporting purposes, you must maintain the business area within Controlling as well. This means that when you create cost center master records you must specify the business area. CO objects (such as, cost centers and internal orders) aid account assignment, as the business area can be derived from the master data records. When you post primary costs to a cost center, the system determines the business area automatically from the cost center master data. This enables the costs to be assigned to the correct business area. Therefore, you do not need to manually set the business area in the posting document, as it can be set automatically by the system This reduces the number of incorrect assignments to a minimum.
  If a balance sheet or P&L is to be created for each business area for the company code used, you have to enter a business area.
  SAS Activity-Based Management. No equivalent. Business area attributes provide a way to supply required master data definitions on objects.
  SAS Activity-Based Management Adapter for SAP R/3. If a business area has not been defined in R/3 then you don't need to concern yourself with this. Business area master data is downloaded from R/3 as business area attributes. The business area attributes needs to be attached to a resource (cost center) center and an activity (business process) center in SAS Activity-Based Management.

- ## Business process

  R/3 CO-ABC. Controlling objects in R/3's Activity-Based Costing (CO-ABC) component that consumes costs of resources and can be allocated to other controlling objects with quantity and price. Business procedure within an enterprise that uses resources and can involve activities from a number of different cost centers in a controlling area. The structures and values of business processes depend on the purposes and methods of cost accounting in your organization.

The business process demands various resources. These are made available from the cost center/activity types or cost centers using allocation methods. You can also use a template to assign other business processes and cost center activities to a business process.
SAS Activity-Based Management. Equivalent to an activity account.

- ## Business process group

R/3 CO-ABC. The SAP System makes it possible to group business processes. These groups can contain business processes or other groups.
When you create a business process, you must assign it to a group, which can be either the Standard Hierarchy itself or a business process group that belongs to the standard hierarchy. The standard hierarchy is the business process group that you create before you define the first business process. You can create additional business process groups as subordinate nodes under the standard hierarchy.
In addition to business process groups, which are subordinate nodes to standard hierarchies, you can also create alternative business process groups that do not belong to standard hierarchies. A business process can be assigned to only one hierarchy group, but to any number of alternative business process groups.
SAS Activity-Based Management. Equivalent to an activity center.
SAS Activity-Based Management Adapter for SAP R/3. You select a business process group node in the hierarchy and download it as a hierarchy in the Activity Module. Business process groups are downloaded as activity centers. The hierarchy structure is maintained.

- ## Capacity (planned)

R/3 -CO. Field receiving a monthly value of plan capacity for an activity type in a cost center area. Reflects the output of a cost center and activity type that is possible during a period. Use to plan the maximum possible output of a cost center with full use of all the available resources. Note. This field group is posted only in planning.
SAS Activity-Based Management. An output quantity on an account can be either system calculated or user entered.

- ## Center

R/3 CO. Equivalent to groups.
SAS Activity-Based Management. The term Center relates to a higher level in the dimensional hierarchy. Each dimension can have hierarchy therefore all non-leaf nodes would be considered centers**.** You can organize or group accounts within centers in order to view them more easily or facilitate reporting needs. A center can also contain other centers as well as accounts.
Centers do not hold costs; they are simply there to group accounts and hold the totals. You cannot make assignments between centers.
SAS Activity-Based Management Adapter for SAP R/3. A center is equivalent to those elements that provide the means to define a hierarchy—cost center groups, cost center, business process groups, characteristics, and internal order groups. When downloaded the hierarchy is maintained.

- ## Characteristic

R/3 CO-PA. Criteria according to which you can analyze your operating results and perform differentiated sales and profit planning. The combination of the values for the characteristics in an operating concern is called a profitability segment.
You can use characteristics that already exist in the R/3 System, such as "Customer" and "Sales organization." In addition, you can manually define your own characteristics when you customize your system.
SAS Activity-Based Management. Equivalent to dimension centers in the Cost Object Module.
SAS Activity-Based Management Adapter for SAP R/3. Downloads as dimension centers in the Cost Object Module.

- ## Characteristic hierarchy

R/3 CO-PA. You can define hierarchical structures for characteristics in Profitability Analysis (CO-PA). This means you can, for example, structure your products or customers in a hierarchy. In a characteristic hierarchy, you place the characteristic values for a single characteristic into a hierarchical relationship. A characteristic hierarchy is made up of nodes that can be posted to. These nodes are the characteristic values.

Note that only the characteristic values for *one* characteristic are grouped hierarchically for each hierarchy. In addition, each characteristic value can occur only once in the hierarchy. Thus each value is unique within the entire hierarchy.
A characteristics hierarchy is made up of nodes that can be posted to. These nodes are the characteristic values.
SAS Activity-Based Management. Equivalent to dimension centers in the Cost Object Module.
SAS Activity-Based Management Adapter for SAP R/3. Downloads as dimension centers in the Cost Object Module.

- ## Characteristic value

R/3 CO-PA. Master data is created when individual values are assigned to the characteristics. Master data consists of the individual values that the characteristics can take. The combination of particular characteristic values forms the actual analysis object, called the profitability segment.
SAS Activity-Based Management. Equivalent to dimension accounts in the Cost Object Module.
SAS Activity-Based Management Adapter for SAP R/3. Can download the definition of the characteristic value as a center or an account. The combination of characteristic values is downloaded as dimension accounts with the profitability segments being defined with attributes.

- ## Chart of account

R/3. An organizational structure, defined using accounting principles that records values and value flows for orderly account management. Financial accounting and cost accounting use the operational chart of accounts. The items in a chart of accounts can be expense or revenue accounts in FI and cost or revenue elements in cost accounting. You need to assign each company code to a chart of accounts.
SAS Activity-Based Management. Not used as a function. In theory, a systematically organized list of accounts representing the names and account numbers of an organization's expenses. If the chart of accounts is available, it can be used as an aid in developing the Resource Module's centers, accounts, and cost elements.
SAS Activity-Based Management Adapter for SAP R/3. No use, except as information.

- ## Company code

R/3. The smallest organizational unit for which a complete self-contained set of accounts can be drawn up for external reporting. This involves recording all relevant transactions and generating all supporting documents for financial statements, such as balance sheets and profit and loss statements. You can set up more than one company code for each client. This enables you to manage the accounts for more than one independent company at the same time. However, you need to set up at least one company code.
In financial accounting, business transactions are always entered on the company code level and processed further. The costs are also managed on the company code level. By using internal organizational structures, it is possible to divide this up even further. All company-specific specifications are made on the company code level.
SAS Activity-Based Management. No equivalent. Added to an SAS Activity-Based Management object using attributes.
SAS Activity-Based Management Adapter for SAP R/3. R/3 master data that is represented in SAS Activity-Based Management by attaching a company code attribute to a resource center (cost center) and an activity (business process) account.

- ## CO-ABC (Activity-Based Costing)

R/3. You can use the Activity-Based Costing component (CO-ABC) of the Controlling module to provide a process-oriented, cross-functional view of overhead in addition to the traditional, location-oriented view provided by the Cost Center Accounting component (CO-CCA). The Activity-Based Costing component thus enhances the Cost Center Accounting component.
The Activity-Based Costing component allocates process quantities based on resource and process drivers, allowing you to define cost allocation more exactly along the Value Added Chain that is possible with overhead rates. Activity-Based Costing (ABC) likewise enhances product costing by assigning the sources of costs to their originating business processes. Cost center resources can allocate to business processes based on their true utilization of activities.
SAS Activity-Based Management. CO-ABC is equivalent to the Activity Module.

- ## CO-CCA (Cost Center Accounting)

  R/3 CO-CCA. Cost Center Accounting (CO-CCA) is a component of the Controlling module. CO-CCA is often used in the first phase of an R/3 implementation, together with the main areas of Financial Accounting (General Ledger (FI-GL), Assets Payable (FI-AP), Assets Receivable (FI-AR), and Overhead Orders (CO-OPA)). You can also implement Cost Center Accounting without Financial Accounting. Some settings, however, such as chart of accounts, company code, must be made in Financial Accounting.
  SAS Activity-Based Management. CO-CCA is equivalent to the Resource Module.
  SAS Activity-Based Management Adapter for SAP R/3. Elements within CO-CCA are typically used to communicate with the Resource Module. You have the option of downloading Activity Types to the Activity Module.

- ## CO-OPA (Internal Orders)

  R/3. An internal order is used to monitor parts of the costs, and under certain circumstances, the revenues of the organization. Internal orders are generally used to plan, collect and settle the costs of internal jobs and tasks. The SAP R/3 System enables you to monitor your internal orders throughout their entire life cycle; from initial creation, through the planning and posting of all the actual costs, right up to final settlement and archiving.
  The management of internal orders represents the most detailed operational level of cost and activity accounting.
  Internal orders can be used to do the following:

  - Monitor the costs of short-term measures.
  - Monitor the costs and revenues related to a specific service.
  - Monitor ongoing costs.

  SAS Activity-Based Management. CO-OPA is equivalent to the Cost Object Module.
  SAS Activity-Based Management Adapter for SAP R/3. Objects within CO-OPA are typically used to communicate with the Cost Object Module.

- ## CO-PA (Profitability Analysis)

  R/3. Profitability Analysis (CO-PA) is a component of the Controlling module. The application CO-PA lets you analyze the profitability of segments of your market structured according to products, customers, orders, and summarizations of these and other characteristics and organizational units such as company codes or business areas. The aim is to provide your sales, marketing, planning, and management organizations with decision-support from a market-oriented viewpoint.
  In the application component CO-PA, you can define your master data; the basic structures of this form of profitability analysis. This includes both units you want to evaluate (characteristics) and the categories in which you analyze values. In costing-based CO-PA, you define so-called "value fields" in which to store your data for analysis. In account-based CO-PA, the values are structured by account. The combination of characteristic values forms a multidimensional profitability segment, for which you can analyze profitability by comparing its costs and revenues. The master data is created when individual values are assigned to the characteristics and value fields.
  SAS Activity-Based Management. CO-PA is equivalent to the Cost Object Module. The revenue information is not allocated to individual dimensions, but to dimension combinations. For example, instead of calculating the profit on customers alone or products alone, you calculate profit on the customer-product combination or the product-customer-region-transportation combination. This is a multidimensional approach to profitability and cost. You can explore any combination of data across multiple dimensions, provided your company gathers the data, to find more about what's happening in your business.
  SAS Activity-Based Management Adapter for SAP R/3. Objects within CO-PA are typically used to communicate with the Cost Object Module.

- ## Controlling (CO)

  R/3 CO. Controlling module and part of accounting in the R/3 system. Controlling (CO) and Financial Accounting (FI) are independent components in the SAP system. The data flow between the two components takes place on a regular basis. Therefore, all cost relevant data flows automatically to

Controlling from Financial Accounting. At the same time, the system assigns the costs and revenues to different CO account assignment objects, such as cost centers, business processes, projects or orders. Controlling provides you with information for management decision-making. It facilitates coordination, monitoring and optimization of all processes in an organization. This involves recording both the consumption of production factors and the services provided by an organization.
SAS Activity-Based Management. No equivalent.
SAS Activity-Based Management Adapter for SAP R/3. Components of the Controlling module that SAS Activity-Based Management Adapter for SAP R/3 interfaces with are CO-CCA, CO-ABC, CO-PA, and CO-OPA. Controlling areas are displayed when you first log on to R/3 using SAS Activity-Based Management Adapter for SAP R/3. You must select the controlling area that you are going to work in.

- ## Controlling area

R/3. Controlling area may contain one or more company codes, which can operate in different currencies, if required. The company codes within a controlling area must all use the same operational chart of accounts. When you create master data, the system always assigns the Controlling objects to a controlling area and a company code.
All internal allocations refer exclusively to objects in the same controlling area.
SAS Activity-Based Management. No equivalent.
SAS Activity-Based Management Adapter for SAP R/3. The only selections available to you are those objects that belong to the controlling area you used to log in with.

- ## Controlling indicators

R/3. Use control indicators to activate or deactivate certain cost accounting functions by fiscal year. The control indicators are valid as of the selected fiscal year, up to the fiscal year in which you maintain new indicators.

- ## Controlling object

R/3 CO. Objects in an R/3 CO module from which costs can be allocated, for example, cost centers, business processes, or profitability segments.
SAS Activity-Based Management. Objects in SAS Activity-Based Management models that remain the same for a long period, such as centers and accounts.

- ## Cost center

R/3 CO-CCA. Controlling objects in R/3 where the costs of resources are planned and posted. Cost centers are grouped together by cost center groups into decision, control, and responsibility units. Before you create cost centers, you define a hierarchical cost center structure. Cost center structures and characteristics depend on the accounting objective you are following and the cost accounting system you decide to employ. You can assign activity types to a cost center. These activity types divide the specific activities that can be produced in a cost center.
SAS Activity-Based Management. Equivalent to a resource center.
SAS Activity-Based Management Adapter for SAP R/3. Cost centers are typically downloaded to SAS Activity-Based Management as resource centers based on the cost center group selected. Only those cost centers with cost elements posted to them will be downloaded.

- ## Cost center category

R/3 CO-CCA. Indicator determining for which cost center types an activity type is allowed for planning and as a sender in internal activity allocation.
Cost center types: P, S. If you enter “PS” in this field, the activity type can be planned only for cost centers of types P (production cost center) and S (service cost center) and can be drawn upon for use in actual activity allocation.
If the activity type is to be valid for all cost center types, enter an asterisk “*”, which is the default for all cost center types.
SAS Activity-Based Management. No equivalent.
SAS Activity-Based Management Adapter for SAP R/3. When a cost center is created using SAS Activity-Based Management Adapter for SAP R/3, the default is an asterisk “*”.

- ## Cost center group

  R/3 CO-CCA. You can collect cost centers according to various criteria into groups. You can use the groups to build cost center hierarchies, which summarize the decision-making, responsibility, and control areas according to the particular requirements of the organization. This enables you to use cost centers to depict the structure of the organization in the R/3 System. There must be at least one group that contains all cost centers and represents the entire business organization. This cost center group is described as the standard hierarchy. Each level or node of the standard hierarchy is a cost center group.
  You can create any number of cost center groups, independently of the standard hierarchy. You can group cost center groups into further cost center groups and create a cost center hierarchy. You can also create any number of alternative groups. You can structure these, for example, according to organizational and/or functional viewpoints.
  SAS Activity-Based Management. Equivalent to resource centers.
  SAS Activity-Based Management Adapter for SAP R/3. Cost center group selection determines the cost centers and cost elements downloaded to SAS Activity-Based Management. Cost center groups are downloaded to SAS Activity-Based Management as resource centers.

- ## Cost center planning

  R/3 CO-CCA. Cost center planning involves entering plan figures for costs, activity types, prices or statistical key figures for a particular cost center and a particular planning period. Cost center planning is divided into the following planning areas:

  - Cost elements/activity input
    - Primary costs
    - Secondary costs
    - Revenues.
  - Activity type planning/price planning.
  - Statistical key figure planning

  Statistical key figures can be planned for different purposes, for example, as a basis for distribution, assessment, or creating key figures in the information system. You can plan statistical key figures on cost centers or on the activity types of the cost centers.
  In activity type planning, you plan the activity produced by a cost center. This represents the quantity-based output of a cost center. During planning you can manually set the price with which the SAP system valuates the activity during allocations. You can choose to retain this price or have the system overwrite it during plan price calculation. You can also plan the capacity required for providing the activity type. The SAP system determines the activity quantities according to the receiver tracing factors.
  SAS Activity-Based Management. Equivalent to entering data (in budget column) in the Resource Module, including assignment data.

- ## Cost driver

  R/3. Cost drivers are the main causal factor in the incurrence of overhead, determining the process quantity used by a cost object. They often appear in the form of statistical key figures or are determined dynamically from various parameters.

- ## Cost element

  R/3 CO. A primary cost element is a cost relevant item in the chart of accounts, for which a corresponding general ledger (G/L) account exists in Financial Accounting (FI). You can only create the cost element if you have first defined it as a G/L account in the chart of accounts and created it as an account in Financial Accounting. The SAP System checks whether a corresponding account exists in Financial Accounting.
  Cost element characteristics depend on the controlling area and the allocation methods used in your organization.

R/3 distinguishes between the following:

- Primary cost elements (used in SAS Activity-Based Management Adapter for SAP R/3)
- Revenue cost elements (not used in SAS Activity-Based Management Adapter for SAP R/3)
- Secondary cost elements (allocation category type 42 and 43 used in SAS Activity-Based Management Adapter for SAP R/3).

Cost elements document which costs (differentiated by category) are incurred within a period, and in which amount. They provide information concerning the value flow and the value consumption within the organization.

SAS Activity-Based Management. A cost element is a cost category that maintains actual and budgeted dollars for an account. The account cost is the sum of its cost elements. In SAS Activity-Based Management an "entered" cost element is used to debit an account with costs directly or from other accounts. SAS Activity-Based Management has many different types of cost elements. The source account is where a cost originates. The destination account receives the assigned costs. Within the destination account, the system creates a new cost element, called an assigned cost element, to contain the costs assigned to the account.

SAS Activity-Based Management Adapter for SAP R/3. In R/3, cost element groups must contain cost elements with posted costs before cost elements can be downloaded to SAS Activity-Based Management. Even if you are using activity types in R/3 CO-CCA, all cost elements you're interested in must belong to a cost element group. You can also use SAS Activity-Based Management Adapter for SAP R/3 to specify whether you want to roll-up cost element information or maintain the cost element detail on the download to SAS Activity-Based Management. Those R/3 cost elements that are downloaded to different locations:

- Cost element groups are downloaded to the appropriate resource accounts.
- Both cost element groups that are the result of the split using cost center/activity types are downloaded to the appropriate resource accounts or activity accounts.

• Cost element category

R/3. Number identifying a cost element category; used only in the Controlling (CO) component.

The cost element category determines which cost elements can be used for which business transactions. The R/3 System distinguishes between:

- Primary cost element categories
- Secondary cost element categories

SAS Activity-Based Management. This can be loaded as an Additional dimension in the resource module of SAS Activity-Based Management.

SAS Activity-Based Management Adapter for SAP R/3. SAS Activity-Based Management Adapter for SAP R/3 only supports the use of the following cost element categories.

- Cost element category 01: Primary cost element: It determines whether you can post to a cost element directly or indirectly. SAS Activity-Based Management Adapter for SAP R/3 downloads these as entered cost elements.
- Direct posting. You post a fixed amount to an account by specifying the account number. You can post directly to all primary cost elements.
    - Indirect posting. The R/3 System determines the account automatically at the time of posting. You cannot enter the account number with the posting transaction. You can only post indirectly to secondary cost elements.

• Cost element group

R/3. Organizational entity that combines cost elements of the same type. Cost element groups can serve various purposes. For example, they can be used to create reports or to process several cost elements in one business transaction. You can also arrange cost element groups in further groups, creating a cost element hierarchy.

SAS Activity-Based Management. They are modeled as resource accounts.

SAS Activity-Based Management Adapter for SAP R/3. Downloaded as resource accounts. Cost element group selected determines the cost elements downloaded to the accounts. All cost elements in R/3 CO-CCA must be designated a cost element group before they can be downloaded to SAS Activity-Based Management.

- ## Cost Object Module

SAS Activity-Based Management. The Cost Object module contains information about a product, customer, channel, or a service. Since cost objects require different amounts of activities, ABC is important for assigning costs accurately to the cost objects. To use cost objects, you need to complete the following steps:

1. Define the cost objects.
2. Use activity drivers to trace costs from resources to activities or cost objects, activity costs to other activities or to cost objects.
3. Calculate costs.

In the Cost Object Module you can group products into a product family, represented by a center. Or, you can organize centers and products to represent products and components or product lines and products.
As with the other modules, the level of detail depends on the goals for the module. If you want to determine the cost of a product line and don't want individual product costs, you can represent a product line with one account. However, if you want to calculate unit costs for each product, you must create an account for each product.
Grouping accounts into centers simplifies your view of the model by letting you view one group of accounts at a time in single-level view. In addition, this technique provides a total cost for a particular center for the period.
Within the Cost Object Module, you create dimensions that provide you with the ability to view a slice of your model's activity and cost information. By viewing the intersection of one or more of these dimensions, you can evaluate how profitable processes, products, channels, or customers are within your model.
SAS Activity-Based Management Adapter for SAP R/3. Interfaces objects in the Cost Object Module with objects in CO-PA and CO-OPA.

- ## Currency

R/3. A medium of exchange in current use within a particular country.
SAS Activity-Based Management. You can view your model's costs in more than one currency simultaneously. But, first you must define the currencies and their exchange rates. You can determine the native (or base) currency used by your model. Your version of Microsoft Windows determines which currencies are available. You can also do the following:

- Create and save a model using one currency (such as US dollars, French francs, Euros), and view that model using a different currency (such as pesos).
- Easily share models in a global organization using native currencies.
- Choose to convert costs to a new model currency based on periodic exchange rates.
- For each defined currency, set a different exchange rate (both actual and budget) for each period.
- Use columns to view multiple currencies simultaneously.

SAS Activity-Based Management Adapter for SAP R/3. Displays currency based on selected Controlling area.

- ## Cycle

R/3. Collection of rules for cost allocation in CO. Periodic repostings, assessment, distribution, and indirect activity allocation are defined using cycles. The individual key for a cycle is made up of its name and the initial date. All the relevant cycle information about the senders, receivers, sender rules, receiver rules and tracing factors is contained in segments. A cycle contains one or several segments describing combinations of senders and receivers that are to be processed together.

SAS Activity-Based Management. Is similar to assignments between source and destination accounts.
SAS Activity-Based Management Adapter for SAP R/3. Supports the cycles used to allocate cost center costs or process costs using assessment or indirect activity allocation to other CO controlling objects. The Summary View in SAS Activity-Based Management Adapter for SAP R/3 provides the names of the cycles created in R/3. Cycles or segments cannot be downloaded as assignments to SAS Activity-Based Management.

- ## Cycle type

R/3. Defines a cycle according to its usage. The cycle type shows for which posting or allocation the cycle was defined. Cycles can be defined in the plan and in the actual for the following:

- Periodic reposting (not supported in SAS Activity-Based Management Adapter for SAP R/3)
- Distribution (not supported in SAS Activity-Based Management Adapter for SAP R/3)
- Assessment (supported in SAS Activity-Based Management Adapter for SAP R/3)
- Indirect activity allocation (supported in SAS Activity-Based Management Adapter for SAP R/3)

SAS Activity-Based Management. No equivalent.

- ## Destination account

SAS Activity-Based Management. An assignment is the assignment of costs between accounts. The destination account is the receiver of the assignment of cost where an assigned cost element is used to contain the cost assigned to the account. An assignment can have any number of destination accounts, but it can have only one driver.

- ## Dimension

SAS Activity-Based Management. A slice, or "dimension," of your model's activity and cost information. A dimension in a model is a group of accounts within a specific center in the Cost Object module hierarchy. By viewing the intersection of one or more of these dimensions, you can evaluate how profitable processes, products, channels, or customers are within your model.
SAS Activity-Based Management Adapter for SAP R/3. Creates dimension intersections based on the multidimensional profitability segments formed from the combination of characteristic values in R/3 CO-PA.

- ## Dimension attribute

SAS Activity-Based Management. You can use either account reference numbers or text attributes in an attribute center to track and group dimensional costs. To group account costs in a dimension, you must use text attributes.
You can define a dimension using attributes, enabling you to consolidate costs and increase the readability of the dimensional view. To define a dimension by attribute, you must first associate the cost center with an attribute center. Then, attach the appropriate text or numeric attributes from that attribute center to the accounts.
SAS Activity-Based Management Adapter for SAP R/3. When downloading profitability segments formed from the combination of characteristic values in CO-PA, dimensional attributes are used to define the intersections in the Cost Object Module.

- ## Direct activity allocation

R/3 CO. Direct internal activity allocation is a method of tracing valued activities from cost centers to receivers responsible for the costs.
SAS Activity-Based Management. Modeled as assignments using user-defined unique drivers.

- ## Distribution

R/3 CO. *Not supported by SAS Activity-Based Management Adapter for SAP R/3.* Business transaction that allocates primary costs. The original cost element is retained in the receiver cost center. Distribution is used to allocate the primary costs of a cost center.

- ## Driver

  SAS Activity-Based Management. A driver controls the flow of costs from one account to another. It measures the frequency and intensity of the demands placed on resources or activities by products. Drivers endeavor to measure consumption of an activity accurately or to assign cost to an activity.
  You build assignments that define these relationships in terms of their source and destination accounts. Every source account has one driver with its related driver quantities, which ultimately determines how the source account costs flow to its destination accounts.
  When you create a driver, it can be defined as basic or weighted and you can also define how the driver quantities will be assigned; unique or shared.
  SAS Activity-Based Management Adapter for SAP R/3. Downloads statistical key figures and value fields as drivers.

- ## Driver quantity

  SAS Activity-Based Management. Driver quantities determine how much of the cost should flow to the destination account. SAS Activity-Based Management totals the driver quantities for the destination accounts or uses the total driver quantities you entered, and then calculates the percentage for each destination account. To determine the assigned cost for each destination account, SAS Activity-Based Management multiplies the total cost of the source account by the percentage for each destination account. When you define a driver you also indicate how the driver quantities will be assigned; unique or shared.
  SAS Activity-Based Management Adapter for SAP R/3. Downloads planned or actual statistical key figure and value field quantities as budget or actual driver quantities.

- ## Driver type

  SAS Activity-Based Management. The relationship between how the destination accounts consume the source account can be represented reasonably by only one factor or variable (like the number of hours, number of full time equivalents or FTEs, and so on).
  You define the type of driver when you create a driver. The possible values include basic, weighted and calculated. SAS Activity-Based Management has two pre-defined basic drivers: Evenly Assigned and Percentages. Evenly Assigned assigns equal percentages of the source account costs to each destination account. Percentages assign a defined percentage of costs to each destination account. Contains only one numeric field into which you can enter variable data.
  SAS Activity-Based Management Adapter for SAP R/3. Only basic and calculated drivers are supported. Statistical key figures and value fields are downloaded as basic drivers. A driver definition is also determined by its quantity type; shared or unique.

- ## Entered cost element

  SAS Activity-Based Management. A cost element directly added to an account. You enter its cost interactively or by importing costs; the costs are not derived from calculations. For example, if the cost of supplies is captured in the accounting system, you can directly enter that cost as an entered cost element of the account. An entered cost element is represented by the local currency symbol.
  SAS Activity-Based Management Adapter for SAP R/3. Cost elements (primary) from R/3 CO-CCA are downloaded as entered cost elements. Cost element groups must combine cost elements before they can be downloaded to SAS Activity-Based Management. Even if you use activity types all cost elements you're interested in must belong to a cost element group. You can also use SAS Activity-Based Management Adapter for SAP R/3 to roll-up cost element information or maintain the cost element detail on the download to SAS Activity-Based Management.

- ## Fixed characteristics

  R/3. A number of fundamental characteristics are automatically predefined in every operating concern. These include the product number, company code, billing type, business area, sales order, customer, and the controlling area, to name a few.
  SAS Activity-Based Management. No equivalent.
  SAS Activity-Based Management Adapter for SAP R/3. When selecting characteristics to download, you can distinguish between fixed and user-defined in the selection dialog box. User-defined characteristics have a WWW value.

- ## Hierarchy

  R/3 CO. Lets you group objects together into a hierarchical structure. Hierarchies (for example, cost center hierarchies) have the following characteristics: These Hierarchies are defined for each dimension in the R/3 source, General Ledger, Business process, product, and customer.

  - All nodes other than end nodes are used purely for summarization purposes.
  - The values being structured (for example, the individual cost centers) are called single values and can only be assigned to the end nodes (in other words, at the lowest level of the hierarchy).

  For example, you can group cost elements together according to personnel costs, material costs, administrative costs, and so on, and then differentiate them within each of these categories by dividing personnel costs into wages, salaries and additional personnel costs, and so on. The group "Wages" might then contain direct labor costs, labor overhead, compensation for time lost, overtime and miscellaneous costs.

  SAS Activity-Based Management. A hierarchical structure is based on different objects defined at different levels of the hierarchy.

  SAS Activity-Based Management Adapter for SAP R/3. Maintains hierarchy when downloading.

- ## Indirect activity allocation

  R/3 CO. Indirect activity allocation is used for the automatic allocation of actual and plan quantities. Designed for the assignment of primary and secondary cost elements from a sender cost center/activity type to receiver. Controlling objects, such as other cost centers, internal orders, business processes, and cost objects. Enables you to enter capacity or quantities or both. SAP must use an internal activity allocation cost element (category = 43) to allocate costs.

  Senders in both plan and actual indirect activity allocation are always business processes or cost center/activity type, whereby you can use only activity types of category 2 (indirect entry, indirect allocation) or 3 (manual entry, indirect allocation) in a segment.

  Receivers for indirect activity allocation are business processes and cost objects. Consumption quantities **cannot** be allocated in assessment.

  SAS Activity-Based Management. Similar to assignments.

- ## Internal activity allocation secondary cost element

  R/3 CO. Secondary cost element for costs that are indirectly allocated between controlling objects (category 43).

  SAS Activity-Based Management. No equivalent. Provided by using attributes.

  SAS Activity-Based Management Adapter for SAP R/3. You can download all the internal activity allocation secondary cost elements as attributes to use in assignments. You need to specify the internal activity allocation secondary cost element attribute to the correct type of source account (cost center group resource account or business process activity account) and specify a default internal activity allocation secondary cost element using SAS Activity-Based Management Adapter for SAP R/3.

- ## Indirect posting

  R/3 CO. The R/3 System determines the account automatically at the time of posting. You cannot enter the account number with the posting transaction. You can only post indirectly to secondary cost elements.

- ## Internal order group

  R/3 CO-OPA. Several internal orders are grouped into one order group to display a certain structure. You can set up order groups using as many levels as you wish. The orders themselves are always at the lowest level of the group. An order may be assigned to different groups at the same time. Groups are client-dependent so you may only use a group name once.

  SAS Activity-Based Management. Equivalent to uni-dimensional cost objects in the Cost Object Module.

  SAS Activity-Based Management Adapter for SAP R/3. You select an internal order group node in the hierarchy and download it as a hierarchy in the Cost Object Module. Internal order groups are downloaded as centers in the Cost Object Module. The hierarchy structure is maintained.

- ## Logistics Information System (LIS)
  R/3. Data warehouse in the R/3 system where operational key figures from logistic modules are stored.

- ## Master data
  R/3 CO. Master data determines the structure of the components in the R/3 System and remains essentially unchanged in the current period. Master data contains information that is needed often and in the same form. For example, the master data of a cost center contains the name of the cost center, the person responsible for the cost center, the corresponding hierarchy area, and so on.
  SAS Activity-Based Management. Structural data does not stay the same over time. In SAS Activity-Based Management all data structural and periodic is loaded for every period. Even if the values are simply carried forward from the prior period.
  SAS Activity-Based Management Adapter for SAP R/3. Provides for some master data properties in the form of attributes. For example, when it downloads a cost center to SAS Activity-Based Management, its name becomes the center's name; the person responsible becomes an attribute attached to the center. Only the required properties of an object's master data are needed.

- ## Model
  R/3 CO. A stand-alone model is not possible in the R/3 system due to its integrated nature. But, a model from SAS Activity-Based Management can be used to provide the information to certain R/3 Co components.
  SAS Activity-Based Management. A representation of certain key features of an activity-based management project. A model has a particular scope of resource expenses, activities, and cost objects that are being considered. You can create different models for different departments or different sets of cost objects. A model maintains information about the modules, their interconnections, and other relevant data needed to process costs.
  SAS Activity-Based Management Adapter for SAP R/3. Adapters the information in an SAS Activity-Based Management model with the information in certain R/3 CO components.

- ## Module
  SAS Activity-Based Management. SAS Activity-Based Management organizes information into a structure that makes it easy for you to manipulate and view that information. An SAS Activity-Based Management model has up to three modules:

  - Resource Module
  - Activity Module
  - Cost Object Module.

  You build each of the three modules individually, and you use the same procedure each time.
  Each of the modules works exactly the same way, even though they contain different types of information. That is, you open each module by choosing the module name from the Modules menu, or from the toolbar. SAS Activity-Based Management opens one window for each module. You view, add, change, and delete items in each module by using the same procedures.
  You can choose to use only one or two modules for your model. You can, for example, enter costs directly into activities, assign those to products, and then calculate costs.
  SAS Activity-Based Management Adapter for SAP R/3. Interfaces the information in each of the SAS Activity-Based Management modules with the information in certain R/3 CO components.

- **Operating concern**

  R/3 CO. Represents the reporting level in Profitability Analysis (CO-PA). By setting off the costs against the revenues, you can calculate an operating profit for the individual market segments, which are defined by a combination of classifying characteristics (such as product group, customer group, country, or distribution channel). The market segments are called profitability segments.
  You structure an operating concern by selecting:

  - Characteristics (supported in SAS Activity-Based Management Adapter for SAP R/3).

    You should ask yourself at what level your analyses should be performed, such as the sales organization, region, product, or customer level.

  - Value fields (only in costing-based Profitability Analysis and supported in SAS Activity-Based Management Adapter for SAP R/3).

    You should ask yourself which values and key figures should be analyzed, such as revenues, sales deductions, costs, or quantities.

  - G/L accounts (only in account-based Profitability Analysis and not supported in SAS Activity-Based Management Adapter for SAP R/3).

  This structure may vary greatly from one company to the next. For example, the structure of total production costs in a manufacturing company differs from that in a wholesale or retail company. Consequently, you need to "model" CO-PA by defining the characteristics and value fields that you want to analyze.
  You can assign multiple controlling areas to one operating concern.
  SAS Activity-Based Management. No equivalent.
  SAS Activity-Based Management Adapter for SAP R/3. The operating concern is based on the controlling area selected when you first log in to R/3 using SAS Activity-Based Management Adapter for SAP R/3. You cannot change it with SAS Activity-Based Management Adapter for SAP R/3.

- **Order type**

  R/3 CO-OPA. Key that differentiates orders according to their purpose. The order type contains a range of parameters that affect the way the order is processed. For example, using the order type, you can specify the following:

  - the number ranges to be used for the orders

  - which criteria are used when selecting a routing.

  SAS Activity-Based Management. No equivalent.
  SAS Activity-Based Management Adapter for SAP R/3. For assignments to internal orders that use PERCENTAGES or EVENLY ASSIGNED drivers, you need to make sure that you've set up the order type correctly in R/3. The order type needs to have the **integrated planning** control indicator enabled. The order type can be set using attributes or selection in SAS Activity-Based Management Adapter for SAP R/3.

- **Period**

  R/3 CO. Unit that subdivides a fiscal year. Company data can be called up on a particular date in each period and analyzed. In accounting, the fiscal year is divided into a maximum of 16 periods. The fiscal year itself represents a period.
  SAS Activity-Based Management. One of the factors you must consider when you first start your ABC project is the period of time to analyze. When choosing a period of study, you must pick a period for which all the necessary data is available. All the data must be from the same period. You should not mix the departmental expenses from one time period with the output from another time period.
  In SAS Activity-Based Management, the model you create can hold data for different periods, but you only look at one period at a time. For example, you can enter costs into a model on a month-by-month basis. Then you can look at January's costs to see the change in a period of time and look at February's costs. Or, you can decide to structure your data so that you can view it in a quarterly or yearly period.

You use the model structure of accounts, cost elements, drivers, and assignment paths, bills of costs, numeric attributes, and unit and bundle definitions for every period of data that you enter. If you need to change the structure, you can change the structure or copy the model and preserve the data in the original model. You can change the structure of a model at any time, but you can lose data in the process. As an example, if you delete a center and all of its contents, the costs associated with that center and its contents are also deleted.

SAS Activity-Based Management Adapter for SAP R/3. Select the R/3 period to download data to and from, and also select the SAS Activity-Based Management period to download data to and from.

- ## Period-end closing

R/3 CO. The period-end closing process includes periodic transactions such as the following:

- Periodic transfer postings
- Distribution
- Assessment
- Calculation of imputed costs.

These transactions are performed at the end of the period after the primary cost postings for the period have been made.

- ## Periodic reposting

R/3 CO. Function that lets you correct postings to cost centers. Periodic reposting is an allocation method that uses rules defined in the form of cycles to credit allocation cost centers. These allocation cost centers are used to collect the postings relevant for cost accounting.

- ## Plan cost splitting

R/3 CO. Distribution of the planned costs of a cost center to the activity types of that cost center. During plan cost splitting, the R/3 System splits the plan costs of a cost center among the activity types of this cost center.

The costs planned on a cost center are split on the activity types according to the splitting structure that you defined during Customizing and assigned to this cost center. A splitting structure contains one or more assignments in which you store splitting rules for the corresponding cost element(s) or cost element groups. You can restrict the selection of cost elements or cost element groups, as well the activity types on which the costs are split.

Splitting methods are assigned to the splitting rules. These methods specify how the costs are split. Based on the splitting methods, which are set as fixed in the SAP R/3 System, you can split plan costs according to the following criteria:

- Activity quantity
- Equivalence number
- Capacity
- Output
- Scheduled activity
- Statistical key figure (quantity)
- Statistical key figure (maximum quantity)
- No splitting is executed.

You can also use weighting indicators to control whether tracing factors are to be weighted for the cost splitting. Set the indicator if the individual tracing factor values use different units of measure. If the Conversion indicator is active, the values are multiplied with the equivalence numbers of the activity types. This enables you to compare the different units of measure of the tracing factor values.

SAS Activity-Based Management. Similar to making assignments.

SAS Activity-Based Management Adapter for SAP R/3. Can use SAS Activity-Based Management to create the activity types and the cost splits. Actual cost splitting is not supported.

- ## Profit center

R/3 CO. Key that uniquely identifies the profit center in the current controlling area. Only used in R/3 if CO-PCA is being used. A profit center is an organizational unit in accounting that reflects a management-oriented structure of the organization for the purpose of internal control. You can analyze operating results for profit centers using either the cost-of-sales or the period accounting approach. By calculating the fixed capital as well, you can use your profit centers as investment centers.
Profit Center accounting at the profit center level is based on costs and revenues. These are assigned statistically by multiple parallel updating to all logistical activities and other allocations of relevance for a profit center. Every profit center is assigned to the organizational unit controlling area. This assignment is necessary because Profit Center Accounting displays values in G/L accounts. The system transfers all the data to Profit Center Accounting together with the G/L account to which the data was originally posted.
SAS Activity-Based Management. No equivalent.
SAS Activity-Based Management Adapter for SAP R/3. Profit center properties are downloaded as attributes and attached to any objects that have a profit center as a property.

- ## Profitability

SAS Activity-Based Management. Profitability is revenue less cost. In SAS Activity-Based Management the revenue information is not allocated to individual dimensions, but to dimension combinations. For example, instead of calculating the profit on customers alone or products alone, you calculate profit on the customer-product combination or the product-customer-region-transportation combination. This is a multidimensional approach to profitability and cost. You can explore any combination of data, provided your company gathers the data, across multiple dimensions to find more about what's happening in your business.

- ## Profitability segment

R/3 CO-PA. Object within Profitability Analysis to which costs and revenues are assigned. A profitability segment corresponds to a market segment. You can calculate the profitability of a profitability segment by setting off its sales revenues against its costs.
A profitability segment in an operating concern is defined by a combination of characteristic values. Characteristics can be concepts that already exist in the R/3 System (customer, product, sales organization, and so on), or you can define your own concepts (such as "order size class").
Example:
Profitability segment 1: Product "Prod-1132"/ Customer "100267"
Profitability segment 2: Industry "Chemicals"/ Country "USA"/ Product group "Laboratory instruments"
SAS Activity-Based Management. No equivalent, although a profit segment can be defined using multiple attributes on a dimension account.
SAS Activity-Based Management Adapter for SAP R/3. When downloaded, the profitability segment is defined using attributes.

- ## Resource driver

R/3 CO. Equivalent to a statistical key figure.
SAS Activity-Based Management. Once you define activities, you must define the resource drivers. A resource driver is a measure you use to assign costs from the general ledger to other resource and/or to activities. The key to assigning resource costs is to find a way to reflect how the resources are being consumed.

- ## Resource Module

R/3 CO. Equivalent to CO-CCA.
SAS Activity-Based Management. The Resource Module contains a company's resources. Resources are the costs involved in activities such as, planning, presentations, introducing new line items, advertising, or promoting products. Activities consume a company's resources as activities are performed. To understand and manage resources, focus on activities and how they consume resources. Your company's general ledger contains most of your initial resources.

Most often the Resource Module organizes some, or all, of the expenses in your general ledger.
SAS Activity-Based Management Adapter for SAP R/3. Interfaces objects in the Resource Module with objects in CO-CCA.

- ## Revenue

R/3 CO. The operational output, valued at market price in the corresponding currency and sales quantity unit (quantity x revenue = sales).
SAS Activity-Based Management. Displays the calculated revenue that is generated in your Profit Dimension.
The system calculates revenue by multiplying the sale quantity with the sale amount. The sale data for revenue is determined based on the information you enter into the Dimensional Data dialog.
The Revenue property is read-only and only applies to dimensional centers and accounts of a profit dimension. It is blank for other structural elements of your model hierarchy. To modify the calculated revenue, change the sale data in the Dimensional Data dialog. The Profit calculation depends on the revenue. The system calculates profits by subtracting costs from revenue.
SAS Activity-Based Management Adapter for SAP R/3. Downloads revenue value field as a driver and revenue value field quantities as revenue data to the sales table.

- ## Secondary cost elements

R/3 CO. The secondary cost element is the central characteristic used in all CO postings. The allocation cost element is a secondary cost element, under which the cost element, activity type, or business process is allocated (assigned).
The secondary cost elements supported by SAS Activity-Based Management Adapter for SAP R/3 are:

- Assessment secondary cost elements (category 42)
- Indirect activity allocation secondary cost elements (category 43)

They are only created and administrated in cost accounting (CO). They portray internal value flows, such as those found in internal activity allocation, overhead calculations and settlement transactions. Secondary cost elements do not correspond to any G/L account in Financial Accounting. They are only used in Controlling and consequently cannot be defined in FI as an account.
SAS Activity-Based Management. No equivalent. Secondary cost element attributes on source accounts are used to provide the required secondary cost element information.
SAS Activity-Based Management Adapter for SAP R/3. Downloads allocation cost element information via attributes.

SAS Activity-Based Management Adapter for SAP R/3	Secondary (allocation) cost element attribute
Resource (cost element group) accounts	Assessment
Resource (activity type) accounts	Indirect activity allocation
Activity (business process) accounts	Assessment or indirect activity allocation
Activity (activity type) accounts	Indirect activity allocation

- ## Segment

R/3 CO. Summarization of allocation rules. You can define as many segments as desired in a cycle. Each segment denotes a group of senders and their respective receivers that are all processed according to the same distribution rule. A given cycle can contain a number of segments; a segment is part of a cycle. A segment consists of the following elements:

- Sender objects whose values to be allocated are computed using the same rules. Number of senders in a cycle or group. Note that all combinations count as senders. For example, not only is every cost center a sender, but also every combination of cost center and cost element.
- Receiver objects whose allocation bases are computed using the same rules. Number of receivers in the cycle/group. Note that only combinations, such as a cost center and a cost element, count as receivers. Also note that a receiver can receive values from more than one sender.

SAS Activity-Based Management. No equivalent, although assignments between source and destination accounts do create segments or relationships that describe the assignment.

- ## Source account

SAS Activity-Based Management. The account whose costs are assigned is called a source account. A source account is the sum of all the cost elements (the dollar values) within an account. When you assign the cost of a source account, you divide its cost among one or more destination accounts. Compare destination account.

SAS Activity-Based Management Adapter for SAP R/3. Requires correct allocation cost elements on source accounts in order to identify the type of allocation cycles to create in R/3.

- ## Standard hierarchy

R/3 CO-CCA. Tree structure representing all cost centers belonging to a controlling area from a Controlling perspective. You can combine cost centers into cost center groups. You can then create cost center hierarchies from these groups by combining the groups according to decision-making area, area of responsibility, or management area.

A cost center hierarchy comprises *all* cost centers for a given period and therefore represents the whole enterprise. This hierarchy is known as the *standard hierarchy*. You must assign each cost center you create to a group in the standard hierarchy. This ensures that the standard hierarchy contains all the cost centers in the controlling group.

When you define the controlling area, you specify the name of the top node of the standard hierarchy in that controlling area. You assign a cost center to an end node of the standard hierarchy in the master data maintenance of the cost center, or in the enterprise organization. This ensures that the standard hierarchy contains all the cost centers in that controlling area.

If you process the standard hierarchy from the enterprise organization, you can also generate alternative hierarchies in addition to the standard hierarchy. You may need these alternative groups for reporting processes. The alternative groups display the status of the standard hierarchy at a given moment.

R/3 CO-ABC. Tree structure for organizing the business processes belonging to a controlling area from the Controlling (CO) standpoint.

Before you create business processes, you must define a business process hierarchy. This structure is described in Activity-Based Costing as Standard Hierarchy. A business process is assigned to an end node of the standard hierarchy. This ensures that the standard hierarchy contains all business processes in the controlling area.

The standard hierarchy is the group containing all hierarchy business process groups and all business processes. The standard hierarchy is assigned directly to the controlling area and has itself a set of business process groups assigned to it. You can structure your processes based on groups (for example, reflecting the sequence of event in your firm). A business process group can include additional business process groups or multiple business processes. You can also create alternative business process groups that do not belong to standard hierarchies.

You must assign each business process to a group in the standard hierarchy when you create the process. This ensures that all business processes belonging to a controlling area are grouped together. You can subdivide individual groups further depending on the level of detail required in the hierarchy. A business process group can include additional business process groups or multiple business processes.

SAS Activity-Based Management.

SAS Activity-Based Management Adapter for SAP R/3. Downloads the hierarchy based on selections.

- ## Statistical key figure

R/3. Key that uniquely represents statistical values on cost centers, business processes, profit centers, or orders. They are measured in units of time or quantity. In CO, statistical key figures are used in assessment and distribution as allocation bases. These are used to calculate the debit on a receiver object.
Statistical key figures may be used for distribution, assessment, or creation of other statistical key figures. Unlike activity types, statistical key figures cannot be used to allocate internal activity.
Statistical key figures can be used:

- To determine business key figures on cost centers — for example, costs per employee.
- As a receiver base (key) for assessments and distributions. For example, you assess the cafeteria costs to individual cost centers within your organization, according to the number of employees. The telephone costs are distributed to the individual cost centers according to the number of telephones in each cost center. In this case, you plan the number of employees and the number of telephones on each cost center as a statistical key figure and enter them as actual values.

  An example of a statistical key figure is the number of employees in a cost center. Once you have created the statistical key figure EMPLOY, you can enter the plan and actual values on each cost center. These values can then be used for assessing cafeteria costs on all the other cost centers.

SAS Activity-Based Management Adapter for SAP R/3. Downloads statistical key figures as drivers.

- ## Template

R/3 CO. The use of Template allocations is one method to assign overhead costs. This method is unique for several reasons:

- Costs are not just allocated, the system also determines the quantities that the respective receiver objects consume or utilize; costs are calculated based on the quantities and prices, and therefore more accurately determined.
- You work with templates: the sender, quantities and activation time do not already exist, but are dynamically determined through the template at the time of the calculation.
- Template uses functions defined by the user or already provided in the system to determine the needed data; these functions pull information already in fields or carry out complex algorithms from the operative data in the SAP System; they are created and maintained in the environment maintenance.
- Sender objects can be business processes or cost centers/activity types.
- Possible receiver objects of the template allocation in plan can be:
  - Internal Orders
  - WBS Elements
  - Profitability segment of profit and market segment analysis
  - Business Processes (only one supported by SAS Activity-Based Management Adapter for SAP R/3)
  - Cost centers or cost centers/activity types.

Quantities are determined with the template, and then evaluated with a (unit) price. Costs calculated this way could be allocated to the receiver objects with the template:

- Cost objects (environments 001-002) in the area of cost object controlling for production, customers process order, and in product cost planning. The system assigns the template to a cost object.
- Business process, cost center, cost center/activity type (environment SBP, SCI, SCD): It allows you to record the cost and quantity flow under business processes and cost centers. The template is assigned to the process or to the cost center in the master data.

- Profitability segment (environment PAC), which can be used for administration, operation and other service activity processes, since with these many evaluations can be carried out. Here, the templates are assigned in the results and market segment calculations (CO-PA) to a profitability segment.

SAS Activity-Based Management Adapter for SAP R/3. Cannot download templates. Only supports structured business process templates.

- ## Transaction data

R/3 CO. Postings within Controlling (CO). These postings are made either:

- Using the original cost element (reposting, distribution)
- Using a secondary cost element (assessment, internal activity allocation)

- ## Transaction-based allocation

R/3 CO. Allocation method by which the costs incurred in a business transaction are calculated from the internal activities performed and then posted in real-time to the sender and receiver cost centers or orders. Allocations performed using these methods include:

- Real-time repostings
- Direct activity allocation.

- ## User-defined characteristics

R/3 CO-PA. You can manually create characteristics that are only required in Profitability Analysis. To define user-defined characteristics, you need to specify the technical name, a description, a short text, a title, and the data type and length of its values. The texts you enter for this characteristic are used to identify the characteristic on transaction screens and in lists. The name of new characteristics must begin with "WW" and consist of 4 or 5 characters.

- ## Value field

R/3 CO-PA. These are the fields that contain the currency amounts and quantities that you want to analyze in CO-PA. They represent the structure of your costs and revenues. Value fields contain values and quantities that were updated or planned for particular objects.
In costing-based profitability analysis, value fields represent the highest level of detail at which you can analyze quantities, revenues, sales deductions, and costs for profitability segments in profitability analysis or contribution margin accounting. You are free to define which revenues and costs go into which value fields for profitability reports or sales and profit planning when you set up your system.
There are two types of value fields:

- Value fields that contain amounts in currencies are also referred to as "amount fields". All amount fields in a single line item use the same currency.
- Value fields that contain quantities are referred to as "quantity fields".

Each quantity field is assigned a field containing a unit of measure. Consequently, each quantity field in a line item can use a different unit. Value fields are only required in costing-based Profitability Analysis.
Value fields can be categorized according to how and when they are defined:
Predefined value fields: Value fields that are used frequently are predefined in the standard R/3 System. These include fields such as revenue, sales quantity, incoming freight, outgoing freight, and others. You can select those predefined value fields that you wish to transfer into your own operating concern.
User-defined value fields: In addition to the predefined value fields, you can also define your own value fields. The definition of a value field consists of its name, texts, a rule defining how it is aggregated over characteristics of time, and whether it is an amount field or a quantity field. There are two texts for each value field—a "description" and a "short text". These texts are displayed on the screen to label the value field.

SAS Activity-Based Management Adapter for SAP R/3. Downloads value fields as drivers.

- ## Version

R/3 CO. Collection of fiscal-year-dependent indicators for plan and actual data for one controlling area. Versions enable you to carry parallel sets of planning data for the same object, such as optimistic plan data and pessimistic plan data.

There is a single specific version for actual and planned costs (Version 0) in each controlling area. The SAP System creates this version automatically during the definition of the controlling area. You need only to define the fiscal-year-dependent data for planning in Version 0.

In addition to Version 0, you can create any number of alternative planning versions that you can then post to with the planning functions.

When posting actual costs you do not have the option of entering a version. The actual values are automatically posted into Version 0.

Version 0 is unique in that activity prices from the version's activity types are used for allocating actual costs. This means that you should plan your prices within activity type planning in one of two ways:

- Only in Version 0
- Copy your alternative version into Version 0 before posting actual costs for the first time, if you want to use these prices for direct activity allocation.

SAS Activity-Based Management. No equivalent.

SAS Activity-Based Management Adapter for SAP R/3. Choose the R/3 plan version to download data from.

Your Turn

If you have comments or suggestions about *SAS Activity–Based Management Adapter 6.1 for SAP R/3: User's Guide*, please send them to us on a photocopy of this page, or send us electronic mail.

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